

**REVISED**  
**JOINT**  
**PUBLIC NOTICE**

**CHARLESTON DISTRICT, CORPS OF ENGINEERS**  
69-A Hagood Avenue  
Charleston, South Carolina 29403  
and  
**THE S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL**  
Office of Environmental Quality Control  
Water Quality Certification and Wetlands Programs Section  
2600 Bull Street Columbia, South Carolina 29201

REGULATORY DIVISION  
Refer to: PIN # SAC 1992-24122-4IA

April 9, 2013

Pursuant to Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1341), a revised application has been submitted to the Department of the Army and the South Carolina Department of Health and Environmental Control by

**HAILE GOLD MINE, INC.**  
**ATTN: DAVID THOMAS**  
**7283 HAILE GOLD MINE ROAD**  
**KERSHAW, SC 29067**

for a permit to construct and operate a gold mine in order to extract and process gold from the Haile ore body in

**HAILE GOLD MINE CREEK and CAMP BRANCH, both tributaries to the Little Lynches River**

at a location approximately 3 miles north of the Town of Kershaw near the intersection of US Highway 601 and Haile Gold Mine Road, Lancaster County, South Carolina (Latitude: 34.579810°N; Longitude -80.539554°W).

In order to give all interested parties an opportunity to express their views

**NOTICE**

is hereby given that written statements regarding the proposed work will be received by both of the above mentioned offices until

**noon on May 7, 2013,**

from those interested in the activity and whose interests may be affected by the proposed work.

**PLEASE NOTE:** A public notice was originally advertised for the proposed work on January 28, 2011. The proposed project has been revised. Haile Gold Mine, Inc. has obtained additional properties that have allowed a reconfiguration of project components to reduce permanent losses to wetlands and other waters of the U.S. This revised notice constitutes an advertisement of the revised proposed work. The original public notice issued January 28, 2011, is also available at <http://www.HaileGoldMineEIS.com>. The Corps of Engineers initiated preparation of an Environmental Impact Statement (EIS) on July 1, 2011. A Draft EIS is currently being prepared in compliance with the National Environmental Policy Act (NEPA) and Corps of Engineers regulations in cooperation with the U.S. Environmental Protection Agency (EPA), Catawba Indian Nation, and South Carolina Department of Health and Environmental Control (SC DHEC).

**Please be advised that comments submitted in response to this revised notice will be combined with the comments received in response to the original public notice and considered during the permit review process. Please address comments to the revised elements of the proposed project.**

The revised proposed work consists of the excavation and fill of 120.46 acres of wetlands and 26,460.54

linear feet of streams. The applicant has explored numerous site plan alternatives to demonstrate avoidance and minimization of aquatic resources impacts. The revised application reflects a twenty-five percent (25%) reduction in wetland impacts and a thirty-two percent (32%) reduction in stream impacts relative to the original application submitted in January 2011 which proposed a total of 161.81 acres of wetland impacts and 38,775 linear feet of stream impacts.

Consistent with the original public notice issued on January 28, 2011, the proposed work consists of the mechanized land clearing, grubbing, temporary stockpiling, filling, and excavation of 120.46 acres of jurisdictional, freshwater wetlands and 26,460.54 linear feet of streams. Mining will be phased over a 12-year period. Eight open mine pits will be excavated, ranging in depth from 110 to 840 feet. In each pit the surface layer, consisting of the existing seed bank and growth media, will be removed and stockpiled for use during reclamation activities. Next, overburden (waste rock) will be excavated and stockpiled for future backfilling of some pits. Once the overburden is removed, ore will be mined using 6-inch diameter bore holes, explosives and wheeled loading equipment to load 100-ton capacity off-road mining trucks. Following ore removal, some pits will be backfilled with overburden; others will be left to fill with water to become lakes. Ore will be milled and processed at a plant on site. Once the gold has been extracted, the remaining material, or tailings, will be pumped to a Tailing Storage Facility (TSF). Cyanide levels in the tailings will be maintained at 50 ppm or less of weak acid dissociable [WAD] cyanide, and the flow of tailings will be directed to cyanide destruction tanks, as necessary to maintain this level in the tailings. Once mining ceases, the TSF will be encapsulated with geosynthetic material and a minimum of 2' of growth media. Reclamation of mining area units will take place as mining progresses and reclamation will meet with then-current standards established in the South Carolina Mining Regulations. Any water leaching from the TSF will be monitored and treated prior to discharge into the Little Lynches River. Mining activities will take place seven days per week, 365 days per year.

Note that the plan drawings attached to this notice depict direct impacts to wetlands and other waters of the United States. The Corps of Engineers, with the applicant's cooperation, has been working to characterize the groundwater hydrology of the proposed mine site in order to define the extent of indirect impacts that may result from groundwater depressurization (drawdown) as mine pits are excavated. Since August 15, 2012, additional groundwater pumping and groundwater level observation wells have been installed for this purpose. Groundwater modeling using these new data is currently underway to predict any hydrologic impacts to surface water features, including wetlands and streams.

According to the applicant, the project purpose is to produce gold for sale from the mineralized gold bearing zones on the Haile property. The Corps of Engineers has determined that the overall project purpose is to open and operate an economically viable gold mining operation using gold-bearing mineral reserves in the Carolina slate belt region.

According to the applicant, extensive geological investigations, sampling and drilling have confirmed that the Haile Gold Mine has economically recoverable mineral resources located on its site. From these investigations, the owner has determined that the proposed facilities and operations cannot be moved to another site due to resource location, project economics and land ownership/availability. Four on-site alternatives have been investigated in development of the Least Environmentally Damaging Practicable Alternative including: 1) No-action alternative, 2) Twenty-one alternative site plans, 3) the preferred alternative, and 4) No-pit backfill alternative plan.

Mitigation is being proposed in the form of a permittee-responsible mitigation plan that includes restoration and enhancement of 64,486 linear feet of streams, preservation of 32,585 linear feet of streams, restoration and enhancement of 190.11 acres of wetlands and preservation of 17.6 acres of wetlands. Additionally, out-of-kind mitigation is being proposed in the form of preservation by transferring fee simple ownership of 642 acres (Parcel A - 590 acres and Parcel B - 52 acres) of conservation land adjacent to the Forty Acre Rock Heritage Preserve and Wildlife Management Area, designated as a National Natural Landmark. All proposed mitigation will take place in four areas within the same watershed as the impact site. The four subject areas are identified as Flat Creek Headwaters Mitigation Area, Little Lynches River Mitigation Area, Lynches River Headwaters Mitigation Area and Flat Creek Heritage Preserve Expansion Area. The Applicant has not changed its compensatory mitigation plan since the original public notice.

**NOTE: Plans depicting the work described in this notice are available and will be provided, upon receipt of a written request, to anyone that is interested in obtaining a copy of the plans for the specific project. The**

April 9, 2013

**request must identify the project of interest by public notice number and a self-addressed stamped envelope must also be provided for mailing the drawings to you. Your request for drawings should be addressed to the**

**U.S. Army Corps of Engineers  
ATTN: REGULATORY DIVISION  
69-A Hagood Avenue  
Charleston, South Carolina 29403**

The District Engineer has concluded that the discharges associated with this project, both direct and indirect, should be reviewed by the South Carolina Department of Health and Environmental Control in accordance with provisions of Section 401 of the Clean Water Act. As such, this notice constitutes a request, on behalf of the applicant, for certification that this project will comply with applicable effluent limitations and water quality standards. The District Engineer will not process this application to a conclusion until such certification is received. The applicant is hereby advised that supplemental information may be required by the State to facilitate the review. Persons wishing to comment or object to Water Quality Certification must submit all comments in writing to the S.C. Department of Health and Environmental Control at the above address within thirty (30) days of the date of this notice.

This notice maintains the Essential Fish Habitat (EFH) consultation requirements of the Magnuson Stevens Fishery Conservation and Management Act. Implementation of the proposed project would impact approximately 120.46 acres of freshwater wetland habitat and 26,460.54 linear feet of stream habitat and would be considered "non-fishing related activities that may adversely affect EFH" under the Magnuson-Stevens Act provisions. Our initial determination is that the proposed action would not have a substantial individual or cumulative adverse impact on EFH or fisheries managed by the South Atlantic Fishery Management Council and the National Marine Fisheries Service (NMFS). Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

Pursuant to Section 7(c) of the Endangered Species Act of 1973 (as amended), the applicant has provided protected species surveys for the property associated with the activity described above. Based upon this report, the District Engineer has determined that the project is not likely to adversely affect any federally endangered, threatened, or proposed species or result in the destruction or adverse modification of designated or proposed critical habitat. This notice maintains consultation requirements with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service regarding federally protected species.

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), this public notice also constitutes a request to Indian Tribes to notify the District Engineer of any historic properties of religious and cultural significance to them that may be affected by the proposed undertaking.

In accordance with the NHPA, the District Engineer has also consulted the latest published version of the National Register of Historic Places for the presence or absence of registered properties, or properties listed as being eligible for inclusion therein, and this worksite includes one historic structure, Site 0946, which is eligible for listing as well as several others that are either not eligible or require evaluation. Additionally, several sites labeled as Historic Areas are scattered throughout the site. The applicant has coordinated closely with the State Historic Preservation Office throughout site preparation work. To insure that other cultural resources that the District Engineer is not aware of are not overlooked, this public notice also serves as a request to the State Historic Preservation Office to provide any information it may have with regard to historic and cultural resources.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state, with particularity, the reasons for holding a public hearing.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the activity on the public interest and will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency (EPA), under authority of Section 404(b) of the Clean Water Act and, as appropriate, the criteria established under authority of Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended. That decision will reflect the national concern for both protection and

utilization of important resources. The benefit which reasonably may be expected to accrue from the project must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the project will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. A permit will be granted unless the District Engineer determines that it would be contrary to the public interest. In cases of conflicting property rights, the Corps of Engineers cannot undertake to adjudicate rival claims.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this project. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity.

If there are any questions concerning this public notice, please contact Richard Darden at 843-329-8043.



## **NOTES:**

1. NOTES apply to all Sheets.
2. The Haile Modified Alternative General Layout presents an updated modification to the 2011 Mine Plan submitted as part of the Permit Application (Revised January 11, 2011). The Modified Alternative General Layout (2012 Modified Plan), developed by AMEC dated May 2012, represents a mine plan that has addressed specific concerns received during the Permit Application review process to maximize avoidance and minimization measures associated with disturbance to waters of the US.
3. Maps herein depict the proposed mine facilities, major existing roadways for orientation and aquatic resources.
4. Property Boundary now includes approximately 4,552.25 acres of land. Exclusion Areas shown within the Property Boundary are not currently owned by Haile and therefore are not included in the total Property Boundary acreage.
5. Jurisdictional waters of the US, depicted as Aquatic Resources, are per the Ecological Resource Consultants, Inc. Jurisdictional Determination Request Wetland Delineation Report, Haile Gold Mine Project (SAC 1992-24122-4IA), Lancaster County, South Carolina, Revised – August 2012 (ERC 2012). The waters of the US mapping herein and that of ERC 2012 reflects the final field verification by the USACE Conway Office on July 24-25, 2012. All Aquatic Resource mapping, both wetlands and streams, is pending final USACE verification and subject to change.
6. All jurisdictional Aquatic Resources are depicted on the maps herein, however only identification labeling has been provided for those Aquatic Resources that are associated with direct impacts. Refer to ERC 2012 for complete Aquatic Resource identification. On this Detailed Plan, the Stream Reach ID does not designate the starting point of the direct stream impact; it only denotes the starting point of the entire stream reach as delineated in ERC 2012.
7. Direct impacts are assumed to be those activities which may result from excavation, fill, or physical loss of waters of the US. Potential indirect impacts to waters of the US are not considered as part of this analysis.
8. All direct impacts for this analysis have assumed an additional 50 foot disturbance area around all facilities beyond the planned “footprint” of the activity. The additional 50 foot disturbance area extends from the outermost edge of the activity or facility (i.e., daylight or last grade line). While this additional disturbance area may not be directly impacted as part of an activity (i.e., fill or excavation), it has been assumed as part of this analysis as a direct impact associated with potential incidental access, potential variation or modifications upon final construction design, construction implementation needs and/or BMP control measures that may be needed. A 450 foot direct disturbance area has been assumed around the outer edge of the proposed Champion Pit activity anticipated pit shell to allow for operational flexibility plus an additional 50 foot disturbance area extending 50 feet from the outermost edge of the activity has been assumed, for a total disturbance area of 500 feet around the outer edge of the proposed Champion Pit.

**SHEET TITLE (1 of 2)      Plan Sheet 1 of 43**

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

*Note: Refer to 2012 Revised Permit Application.*

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067

**NOTES (continued):**

9. A 50' wetland buffer area is maintained around all non-impacted wetlands and streams within the Project Boundary. This buffer area is intended as a "no-disturbance" area and will not be altered from the existing condition.

10. Table 1 - Aquatic Resource Direct Impact Summary provides a detailed analysis of determined direct impacts grouped within each Impact Area of the 2012 Modified Plan. Impact Areas have been designated based on each primary facility footprint and include the determined direct impacts of each Aquatic Resource. The Impact ID refers to a discrete impact within each Aquatic Resource and Reach corresponding to ERC 2012. Cowardin Classification refers to US Classification of Wetlands and Deep Water Habitats of the US (Cowardin et. al 1979) as determined in ERC 2012. Total Impact (acres) refers to the area of wetland and reservoir/open water calculated within each Impact ID area. Total Impact (linear feet) refers to the linear length of non-vegetated channel or stream calculated within each Impact ID area. Stream area has been excluded from total wetland area.

11. Schematic cross-sections are only intended as approximate visual representations.

**Detailed Plan Includes:**

- SHEET TITLE (1 of 2)
- SHEET TITLE (2 of 2)
- SHEET OVERALL SITE LAYOUT
- SHEET OVERVIEW (1 OF 3)
- SHEET OVERVIEW (2 OF 3)
- SHEET OVERVIEW (3 OF 3)
- SHEET TABLE 1 (PAGE 1 OF 4)
- SHEET TABLE 1 (PAGE 2 OF 4)
- SHEET TABLE 1 (PAGE 3 OF 4)
- SHEET TABLE 1 (PAGE 4 OF 4)
- SHEET KEY
- SHEET KEY (A)
- SHEET KEY (B)
- SHEET 1-15 (PLAN VIEWS)
- SHEET 16-30 (SCHEMATIC CROSS SECTIONS)

**SHEET TITLE (2 of 2)**      **Plan Sheet 2 of 43**

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

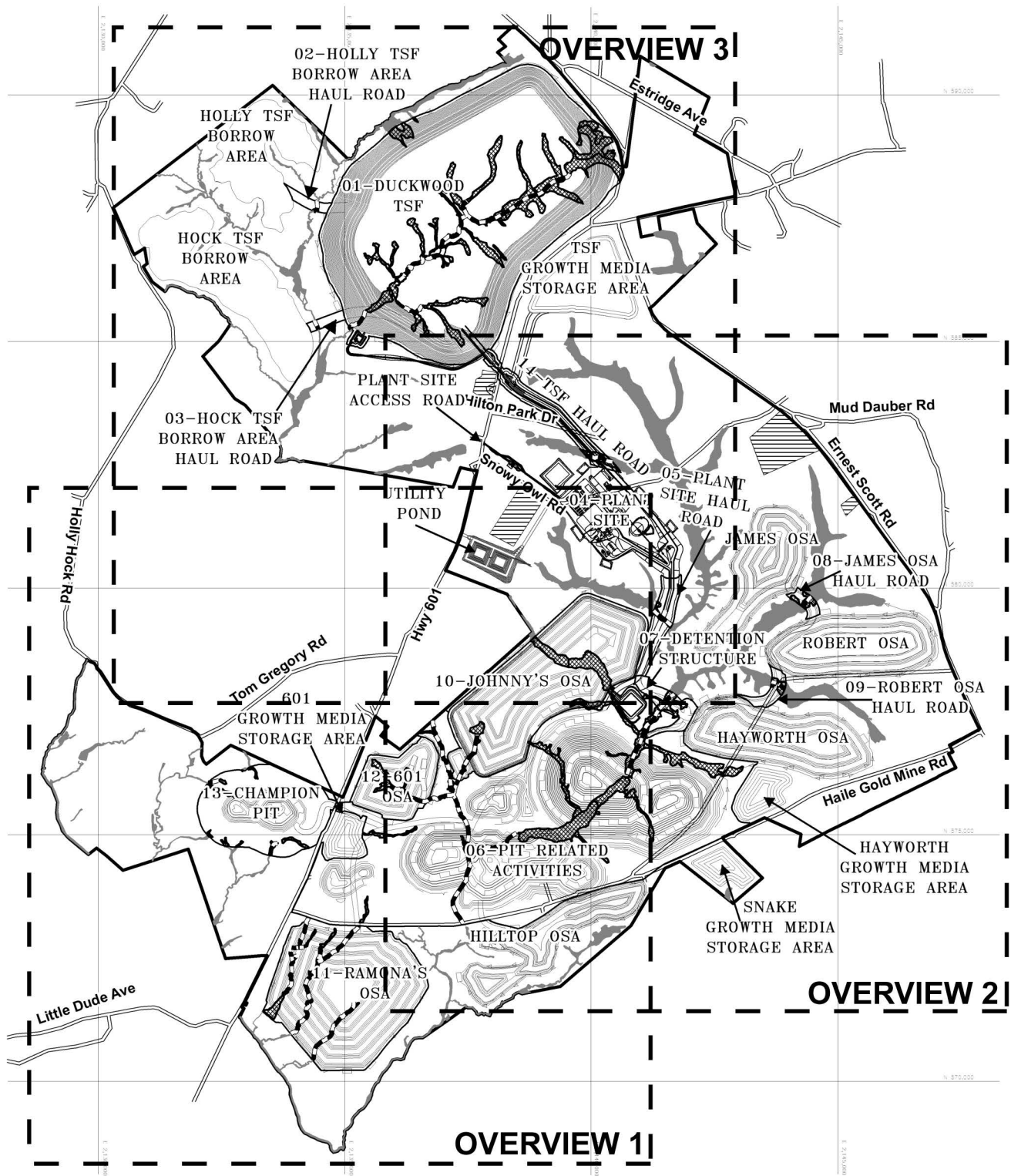
*Note: Refer to 2012 Revised Permit  
Application.*

**HAILE GOLD MINE PROJECT  
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**SHEET OVERALL SITE LAYOUT** Plan Sheet 3 of 43  
**Haile Modified Alternative General Layout**  
**Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

**Legend**

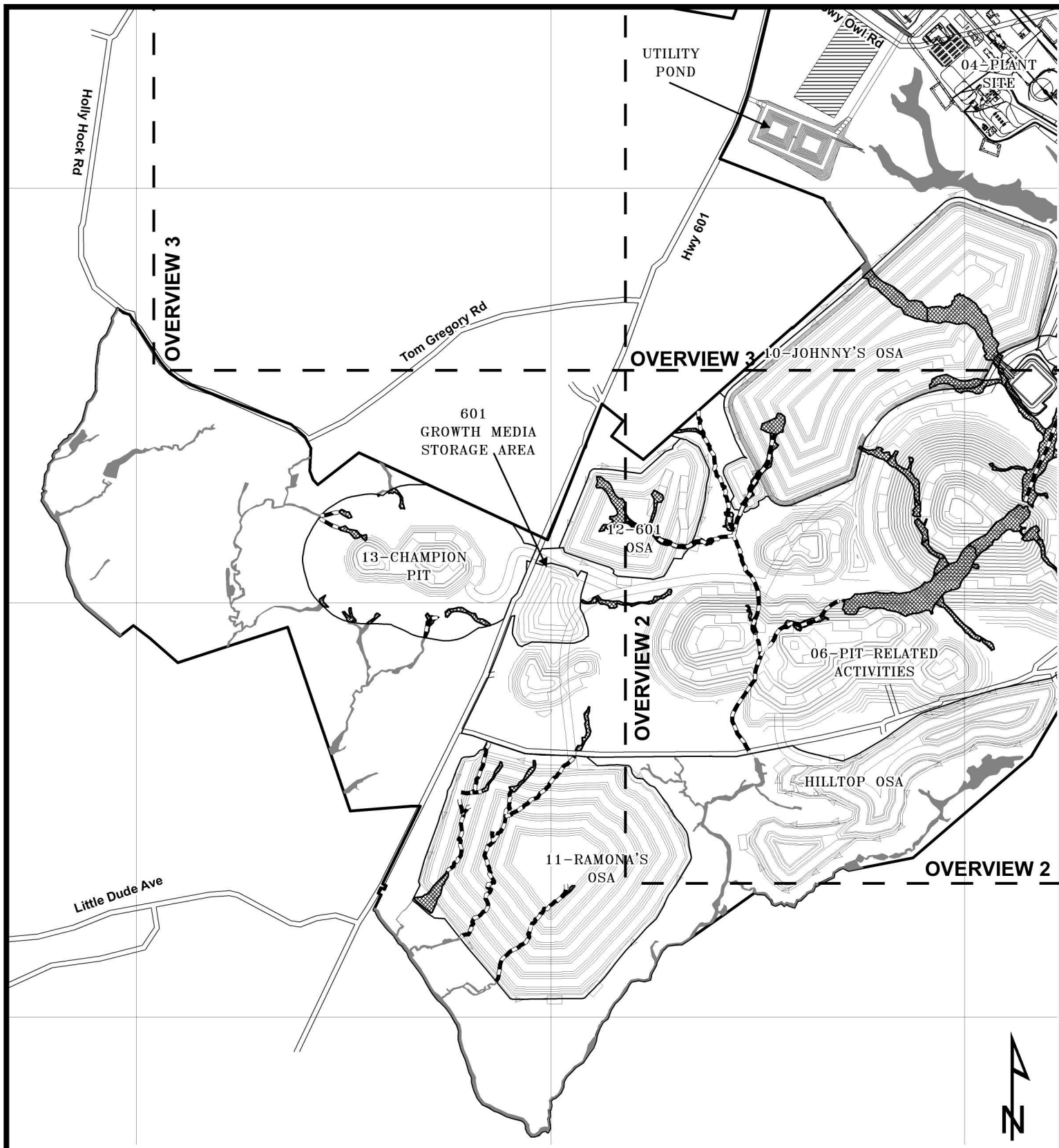
- Property Boundary
- Stream Impact
- Wetland Impact
- Exclusion Area
- Wetland/Stream No Impact
- Overview Sheet Match Line

0 1,500 3,000 Feet

**HAILE GOLD MINE PROJECT**  
**(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
 7283 Haile Gold Mine Road  
 P.O. Box 128  
 Kershaw, SC 29067



**SHEET OVERVIEW 1** Plan Sheet 4 of 43







**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

*Note: Refer to 2012 Revised Permit Application.*

**Legend**

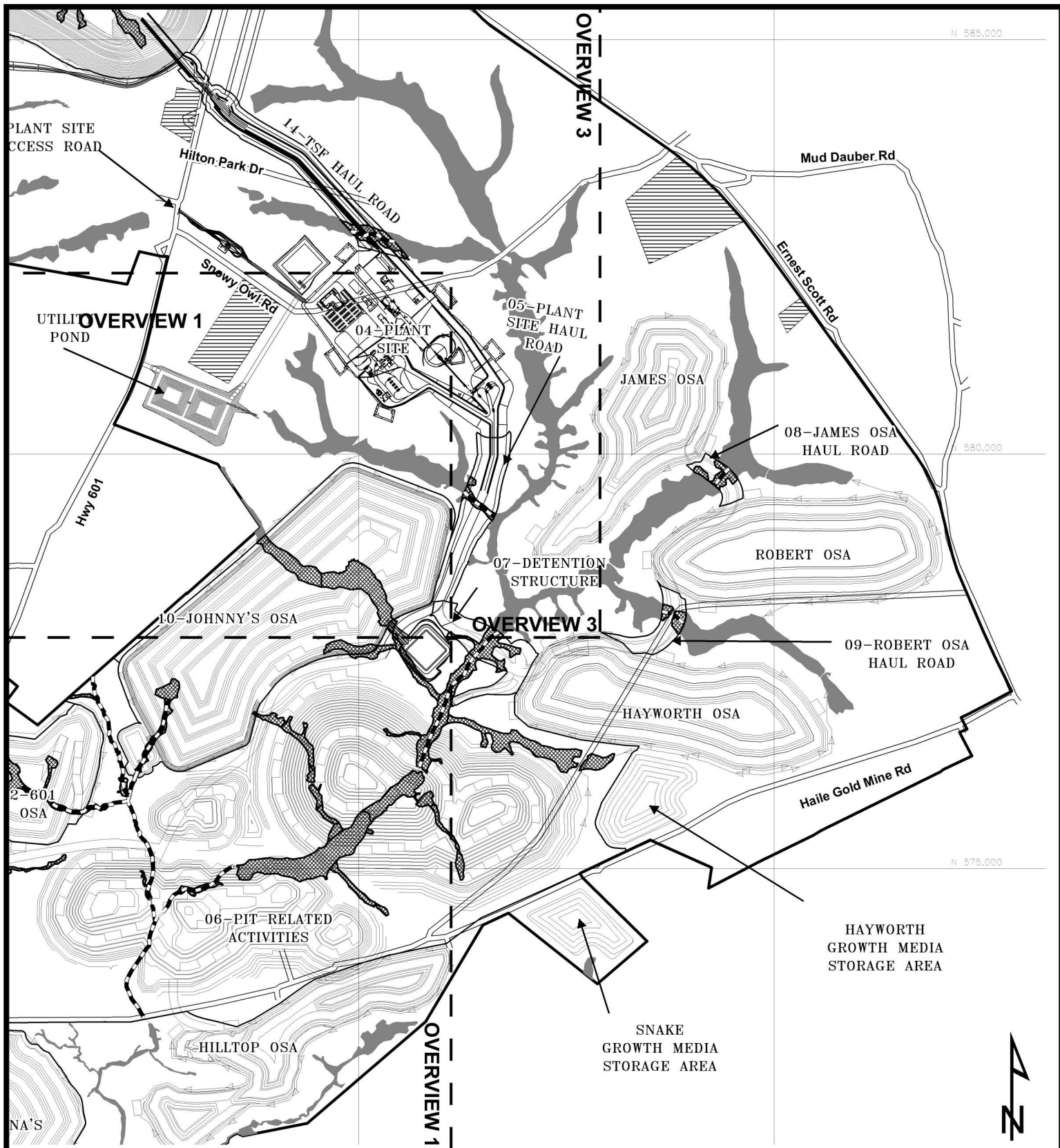
- |  |  |   |
|--|--|---|
|  Property Boundary |  Exclusion Area           |  Overview Sheet Match Line |
|  Stream Impact     |  Wetland/Stream No Impact |   |
|  Wetland Impact    | 0 800 1,600<br>Feet  |   |

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
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**SHEET OVERVIEW 2**

**Plan Sheet 5 of 43**

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

**Legend**

- |  |                   |  |                          |  |                           |
|--|-------------------|--|--------------------------|--|---------------------------|
|  | Property Boundary |  | Exclusion Area           |  | Overview Sheet Match Line |
|  | Stream Impact     |  | Wetland/Stream No Impact |  |                           |
|  | Wetland Impact    |  |                          |  |                           |
- 0 800 1,600 Feet

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
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TABLE 1. AQUATIC RESOURCE DIRECT IMPACT SUMMARY.

Impact Area	Impact ID	Total Impact (Acres)	Aquatic Resource		<sup>1</sup> Cowardin Classification	Stream Order	Total Impact (Linear Feet)
	AAA1	-	AAA	Reach AAA	R4SB4C	2nd Order	571.29
	AAA2	1.91		Wetland AAA	PSS1/POWHb		
	AAA3	1.05		Wetland AAA	PEM1/POWHb		
	AAA4	0.44		Wetland AAA	PFO1C		
		-		Reach AAA	R4SB4C	2nd Order	167.89
	AAA5	2.06		Wetland AAA	PFO1B		
	AAA6	-		Reach AAA	R4SB4C	2nd Order	707.91
	AAA7	4.91		Wetland AAA	PFO1B		
	AAA7	-		Reach AAA	R4SB4C	2nd Order	1,548.69
	AAA8	1.26		Wetland AAA	PFO1B		
	AAA9	0.28		Wetland AAA	PFO1B		
	AAA10	0.96		Wetland AAA	PFO1C		
	AAA11	0.77		Wetland AAA	PFO1C		
	BBB1	4.2	BBB	Wetland BBB	PFO1B		
		1.25		Wetland BBB	PFO1C		
		-		Reach BBB	R4SB4C	1st Order	450.67
	DDD1	2.34	DDD	Wetland DDD	PFO1B		
		3.41		Wetland DDD	PFO1C		
		-		Reach DDD	R4SB4C	1st Order	348.52
	EEE1	0.17	EEE	Wetland EEE	PEM1C		
		1.86		Wetland EEE	PFO1B		
		20.32		Wetland EEE	PFO1C		
		5.28		Wetland EEE	PSS1C		
		-		Reach EEE	R4SB4C	1st Order	2,419.18
	QQQ1	2.28	QQQ	Wetland QQQ	PFO1B		
01-DUCKWOOD TSF				TOTAL WETLAND IMPACT (acres) =		54.75	
				TOTAL STREAM IMPACT (linear feet) =		6,214.15	
	OOO1	-	OOO	Reach OOO	R4SB4C	2nd Order	277.96
02-HOLLY TSF BORROW AREA HAUL ROAD				TOTAL WETLAND IMPACT (acres) =		0	
				TOTAL STREAM IMPACT (linear feet) =		277.96	
	SS1	-	SS	Reach SS	R4SB4C	3rd Order	203.58
03-HOCK TSF BORROW AREA HAUL ROAD				TOTAL WETLAND IMPACT (acres) =		0	
				TOTAL STREAM IMPACT (linear feet) =		203.58	
	-	-	-				
04-PLANT SITE				TOTAL WETLAND IMPACT (acres) =		0	
				TOTAL STREAM IMPACT (linear feet) =		0	

SHEET TABLE 1 (PAGE 1 OF 4) Plan Sheet 7 of 43

Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

**HAILE GOLD MINE PROJECT  
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TABLE 1. AQUATIC RESOURCE DIRECT IMPACT SUMMARY.

Impact Area	Impact ID	Total Impact (Acres)	Aquatic Resource		<sup>1</sup> Cowardin Classification	Stream Order	Total Impact (Linear Feet)
	S1	1.02	S	Wetland S	PFO1B	1st Order	471.51
		-		Reach S	R4SB4C		
	R1	0	R	Wetland R	PFO1B		
05-PLANT SITE HAUL ROAD				TOTAL WETLAND IMPACT (acres) =		1.02	
				TOTAL STREAM IMPACT (linear feet) =		471.51	
	D2	0.51	D	Wetland D	PFO1C		
	F1	-	F	Reach F	R2UB2H	3rd Order	1,361.85
	F2	0.76		Wetland F	PFO1B		
		-		Reach F	R2UB2H	3rd Order	1,090.46
	F3	9.51		Wetland F	<sup>2</sup> POWHh		
	F4	1.07		Wetland F	PFO1B		
	F5	0.42		Wetland F	PSS1Hh		
	F6	0.48		Wetland F	PEM1C		
		0.36		Wetland F	PSS1C		
	F7	3.13		Wetland F	PEM1Hh		
		0.08		Wetland F	PFO1Hh		
	F8	0.61		Wetland F	PEM1H		
		1.06		Wetland F	PFO1B		
	F9	5.39		Wetland F	PFO1B		
		-		Reach F	R2UB2H	3rd Order	1,506.23
	F10	0.74		Wetland F	PFO1B		
		0.96		Wetland F	PFO1C		
	F11	6.48		Wetland F	PFO1B		
	F12	0.05		Wetland F	PFO1C		
	F18	0.28		Wetland F	PEM1C		
		0.6		Wetland F	PFO1C		
		1.21		Wetland F	PSS1C		
	J1	0.33	J	Wetland J	PFO1C		
		0.28		Wetland J	PSS1C		
		-		Reach J	R4SB4C	2nd Order	1,564.74
	J2	0.95		Wetland J	PFO1C		
	L1	0.31	L	Wetland L	PFO1C		
		-		Reach L	R4SB4C	1st Order	547.29
	M1	0.65	M	Wetland M	PFO1C		
		-		Reach M	R4SB4C	1st Order	1,608.36
	N1	0.16	N	Wetland N	PFO1C		
		-		Reach N	R4SB4C	1st Order	241.59
06-PIT RELATED ACTIVITIES				TOTAL WETLAND IMPACT (acres) =		36.38	
				TOTAL STREAM IMPACT (linear feet) =		7,920.52	

SHEET TABLE 1 (PAGE 2 OF 4) Plan Sheet 8 of 43

Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



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TABLE 1. AQUATIC RESOURCE DIRECT IMPACT SUMMARY.							
Impact Area	Impact ID	Total Impact (Acres)	Aquatic Resource		<sup>1</sup> Cowardin Classification	Stream Order	Total Impact (Linear Feet)
	F17	2.77	F	Wetland F	PFO1B	3rd Order	427.13
		-		Reach F	R2UB2H		
07-DETENTION STRUCTURE				TOTAL WETLAND IMPACT (acres) =		2.77	
				TOTAL STREAM IMPACT (linear feet) =		427.13	
	Q1	1.45	Q	Wetland Q	PFO1B	1st Order	269.17
		-		Reach Q	R4SB4C		
08-JAMES OSA HAUL ROAD				TOTAL WETLAND IMPACT (acres) =		1.45	
				TOTAL STREAM IMPACT (linear feet) =		269.17	
	P1	1.13	P	Wetland P	PFO1B	1st Order	261.01
		-		Reach P	R4SB4C		
09-ROBERT OSA HAUL ROAD				TOTAL WETLAND IMPACT (acres) =		1.13	
				TOTAL STREAM IMPACT (linear feet) =		261.01	
	F13	0.03	F	Wetland F	PFO1C		
	F14	1.38		Wetland F	PFO1B		
	F15	0.54		Wetland F	PFO1C		
	F16	3.09		Wetland F	PFO1B		
		5.66		Wetland F	PFO1C		
	N2	1.27	N	Wetland N	PFO1C		
		1.03		Wetland N	PFO1B		
		-		Reach N	R4SB4C	1st Order	1,011.80
10-JOHNNY'S OSA				TOTAL WETLAND IMPACT (acres) =		13.00	
				TOTAL STREAM IMPACT (linear feet) =		1,011.80	
	C1	0.07	C	Wetland C	PFO1B	1st Order	1,576.84
		-		Reach C	R4SB4C		
	D1	0.4	D	Wetland D	PFO1C	1st Order	3,532.55
		-		Reach D	R4SB4C		
	E1	0.27	E	Wetland E	PFO1C		
		1.48		Wetland E	<sup>2</sup> POWHh		
-		Reach E		R4SB4C	1st Order	2,001.83	
11-RAMONA'S OSA				TOTAL WETLAND IMPACT (acres) =		2.22	
				TOTAL STREAM IMPACT (linear feet) =		7,111.22	
	L2	3.27	L	Wetland L	PFO1C	1st Order	877.40
		0		Reach L	R4SB4C		
12-601 OSA				TOTAL WETLAND IMPACT (acres) =		3.27	
				TOTAL STREAM IMPACT (linear feet) =		877.40	

SHEET TABLE 1 (PAGE 3 OF 4) Plan Sheet 9 of 43

Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067

TABLE 1. AQUATIC RESOURCE DIRECT IMPACT SUMMARY.							
Impact Area	Impact ID	Total Impact (Acres)	Aquatic Resource		<sup>1</sup> Cowardin Classification	Stream Order	Total Impact (Linear Feet)
	BB1	0.34	BB	Wetland BB	PSS1C		
	CC1	0.33	CC	Wetland CC	PFO1B		
		0.51		Wetland CC	PFO1C		
		0.09		Wetland CC	PFO1H		
		-		Reach CC	R4SB4C	1st Order	320.71
	EE1	0.12	EE	Wetland EE	PSS1C		
	HH1	0.25	HH	Wetland HH	PFO1C		
	JJ1	0.42	JJ	Wetland JJ	PSS1C		
		-		Reach JJ	R4SB4C	1st Order	260.48
	KK1	0.17	KK	Wetland KK	PSS1C		
		-		Reach KK	R4SB4C	1st Order	219.26
	13-CHAMPION PIT				TOTAL WETLAND IMPACT (acres) =		2.23
				TOTAL STREAM IMPACT (linear feet) =		800.45	
	T1	1.13	T	NA	PFO1B*		
	T2	1.11		Wetland T	PFO1B		
		0		Reach T	R4SB4C	1st Order	614.64
14-TSF HAUL ROAD				TOTAL WETLAND IMPACT (acres) =		2.24	
				TOTAL STREAM IMPACT (linear feet) =		614.64	
<u>TOTAL WATERS OF THE US DIRECT IMPACT DIRECT IMPACT:</u>							
				TOTAL WETLAND IMPACT (acres) =		120.46	
				Subtotal Wetland =		109.47	
				Subtotal Reservoir/Open Water =		10.99	
				TOTAL STREAM IMPACT (linear feet) =		26,460.54	

Notes:

<sup>1</sup> Cowardin Classification based on: Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et. al 1979). Refer to the Jurisdictional Determination Request Wetland Delineation Report (REVISED – August 2012) for a detailed description of wetland habitat types.

<sup>2</sup> Cowardin Classification POWHh designates reservoir/open water habitat type.

\* = Approximate wetland area.

**SHEET TABLE 1 (PAGE 4 OF 4) Plan Sheet 10 of 43**

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

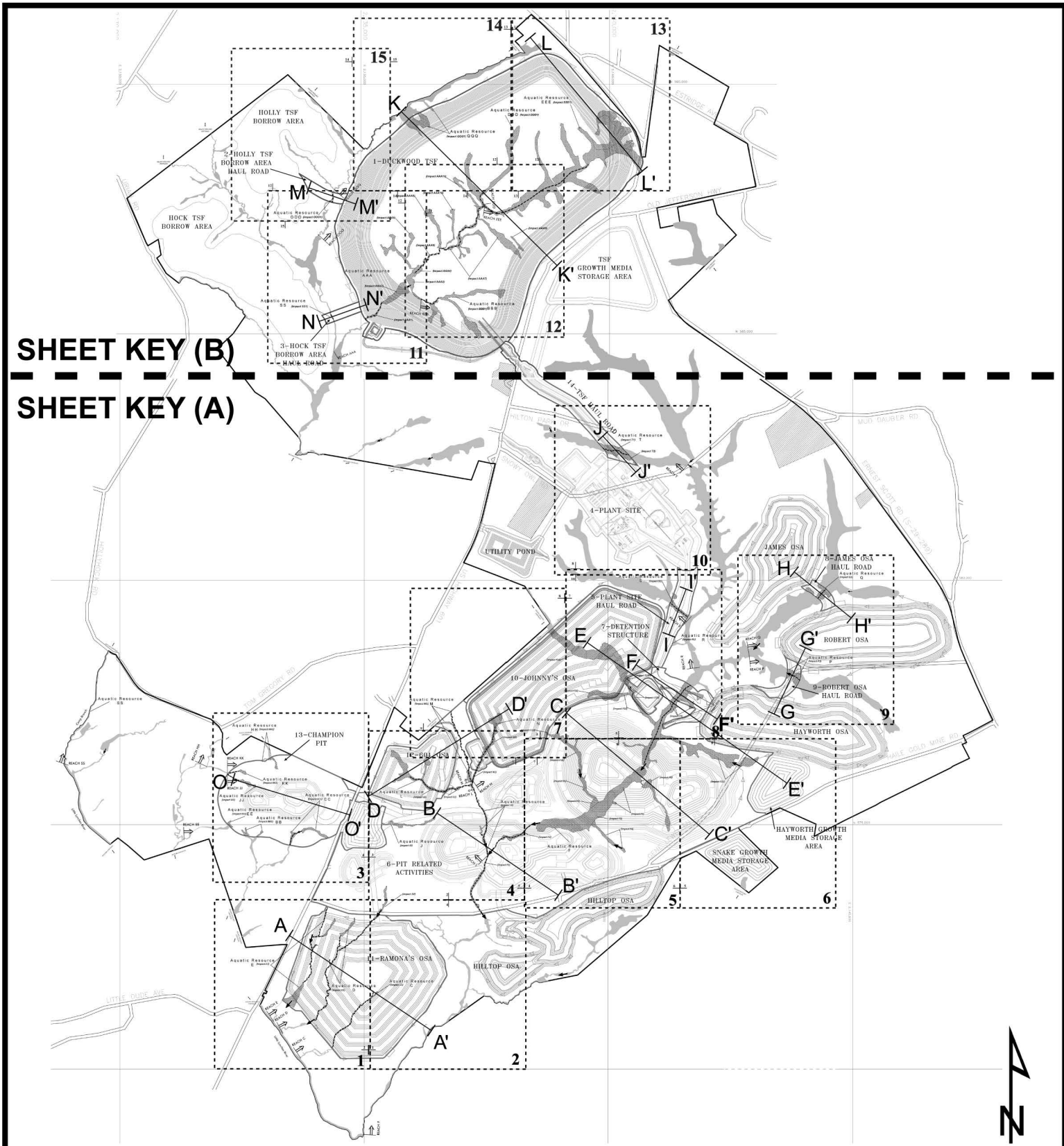
Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067



**SHEET KEY** Plan Sheet 11 of 43

**Haile Modified Alternative General Layout**

**Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

**Legend**

	Property Boundary		Exclusion Area		Sheet Key
	Stream Impact		Wetland/Stream No Impact		Schematic Cross-Section
	Wetland Impact		Existing Culvert		0 1,500 3,000 Feet
			Sheet Match Line		

**HAILE GOLD MINE PROJECT**

**(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067



# SHEET KEY (A)



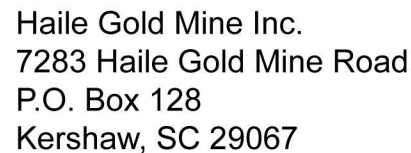
# HAILE GOLD MINE PROJECT (SAC 1992-24122-41A)

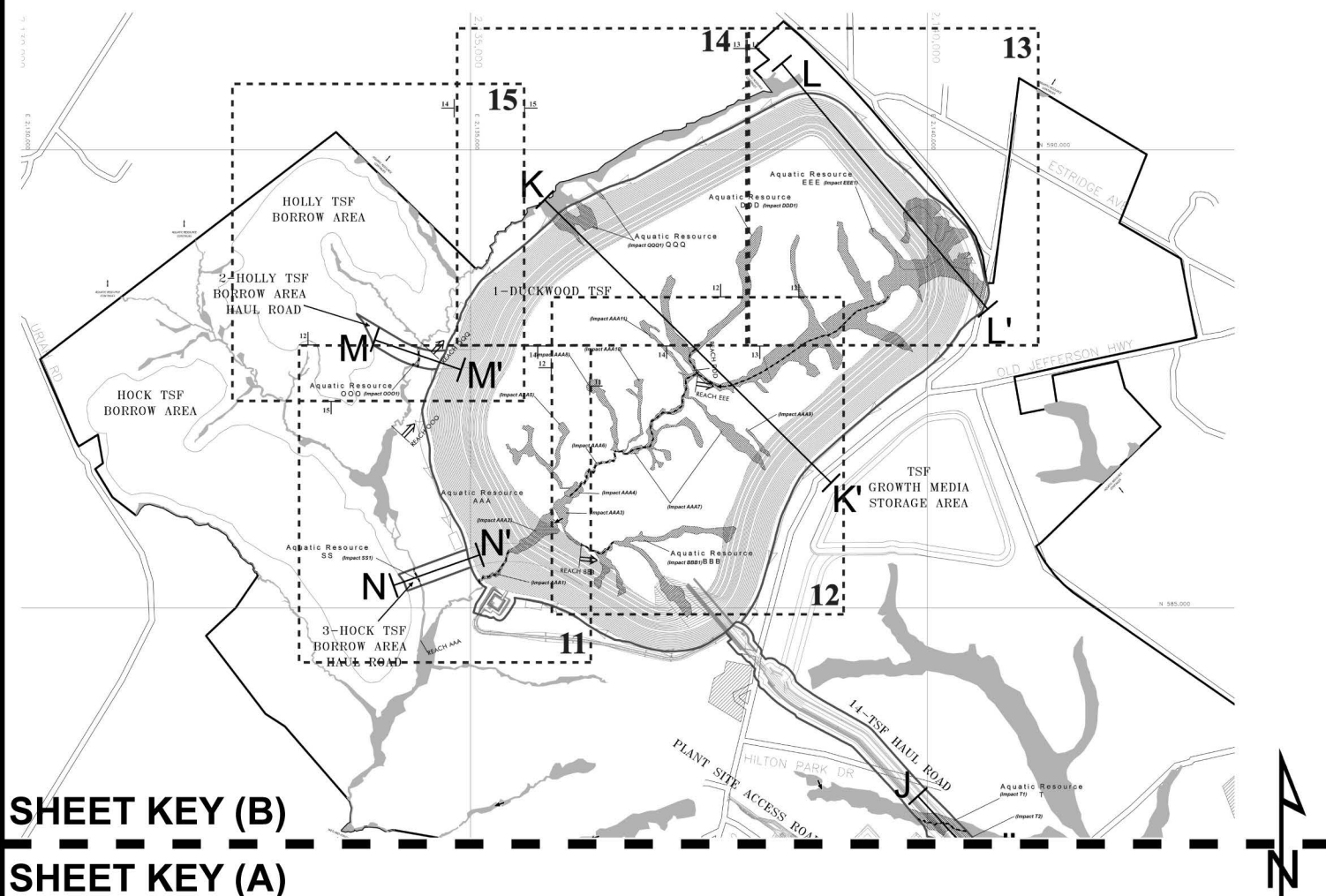
*Note: Refer to 2012 Revised Permit Application.*

 **Wetland Impact**

13 | Sheet Match Line

A horizontal number line is shown with tick marks at 0, 1,500, and 3,000. The word "Feet" is written at the right end of the line. The segment between 0 and 1,500 is shaded with a solid black fill, representing the distance from the start to the halfway point.



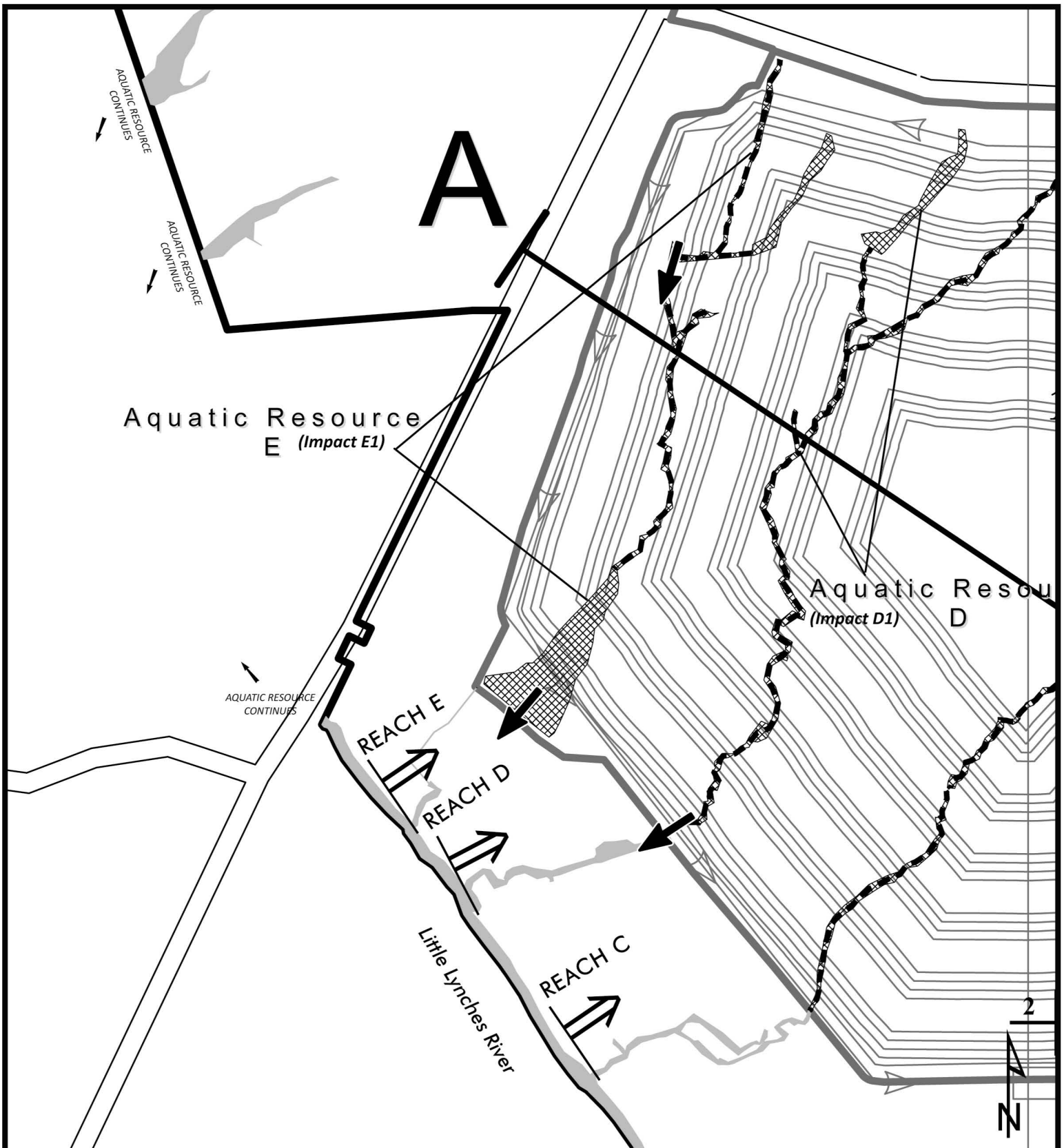


**SHEET KEY (B)**  
**SHEET KEY (A)**

<b>SHEET KEY (B)</b>		<b>Plan Sheet 13 of 43</b>
<b>Haile Modified Alternative General Layout</b>		
<b>Waters of the US Direct Impact Analysis Detailed Plan</b>		
Drawn by: ERC	Date: August 15, 2012	Note: Refer to 2012 Revised Permit Application.
<b>Legend</b> <div style="display: flex; justify-content: space-between;"> <div> <div style="border: 1px solid black; width: 20px; height: 10px; display: inline-block;"></div> Property Boundary  <div style="border-top: 1px dashed black; width: 20px; display: inline-block;"></div> Stream Impact  <div style="background-color: #cccccc; width: 20px; height: 10px; display: inline-block;"></div> Wetland Impact </div> <div> <div style="background-color: #cccccc; width: 20px; height: 10px; display: inline-block;"></div> Exclusion Area  <div style="border-bottom: 1px solid black; width: 20px; display: inline-block;"></div> Existing Culvert  <div style="border-left: 1px dashed black; width: 20px; height: 10px; display: inline-block;"></div> Sheet Match Line </div> <div> <div style="border: 1px solid black; width: 20px; height: 10px; display: inline-block;"></div> Sheet Key  <div style="border-left: 1px solid black; width: 20px; height: 10px; display: inline-block;"></div> Schematic Cross-Section  <div style="display: flex; align-items: center;"> <div style="width: 100px; border-bottom: 1px solid black;"></div> <div style="margin: 0 5px;">0      800      1,600</div> <div style="width: 50px; border-bottom: 1px solid black;"></div> </div> Feet </div> </div>		

<b>HAILE GOLD MINE PROJECT</b> <b>(SAC 1992-24122-4IA)</b>	
	Haile Gold Mine Inc. 7283 Haile Gold Mine Road P.O. Box 128 Kershaw, SC 29067





SHEET 1 of 30

Plan Sheet 14 of 43

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

**Legend**

Property Boundary

Stream Impact

Wetland Impact



Exclusion Area



Wetland/Stream No Impact



Existing Culvert



Sheet Match Line



Stream Reach ID



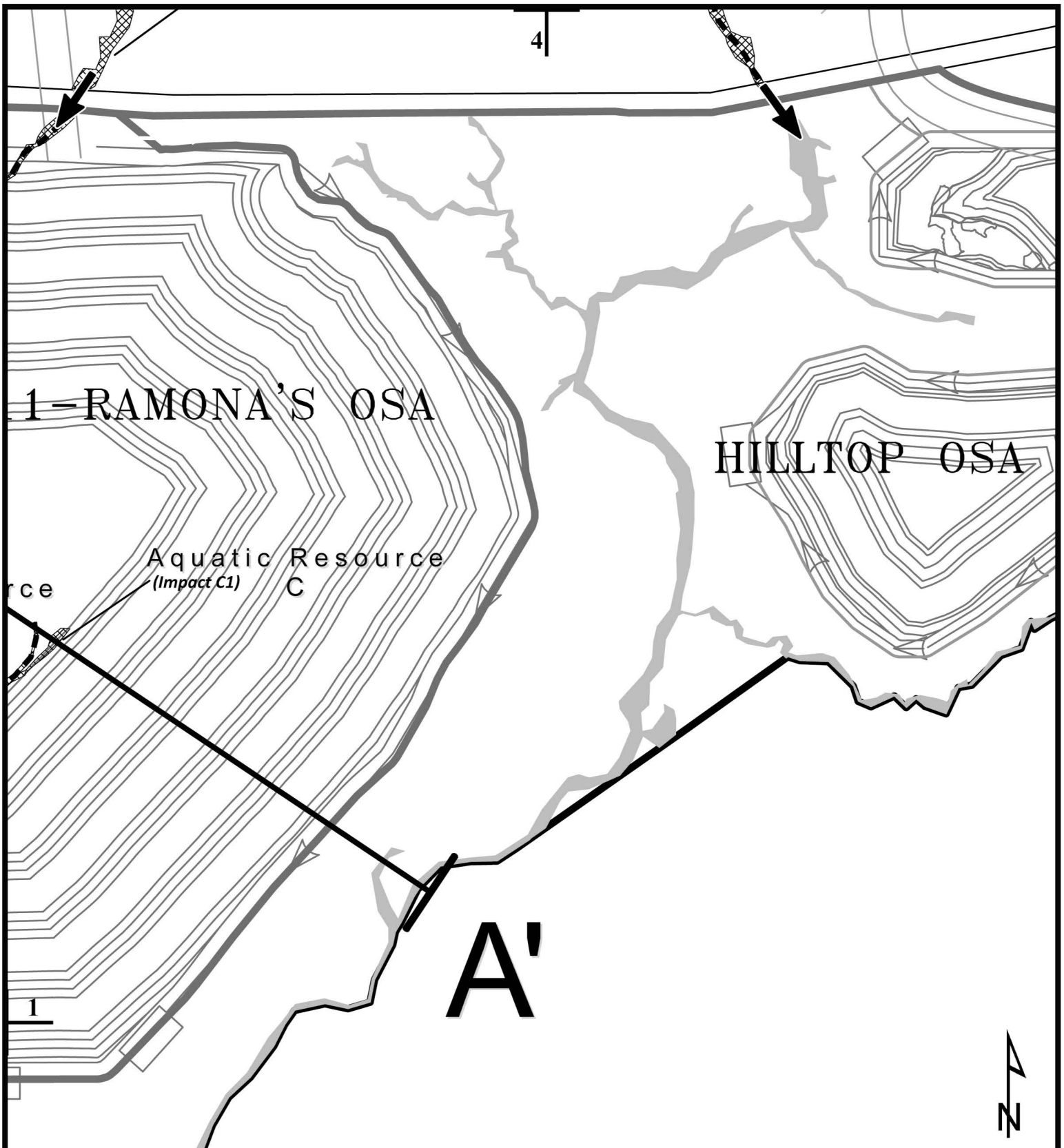
Schematic Cross-Section

0 200 400 Feet

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067



SHEET 2 of 30

Plan Sheet 15 of 43

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

*Note: Refer to 2012 Revised Permit Application.*

**Legend**

Property Boundary

Stream Impact

Wetland Impact



Exclusion Area



Wetland/Stream No Impact



Existing Culvert



Sheet Match Line



Stream Reach ID



Schematic Cross-Section

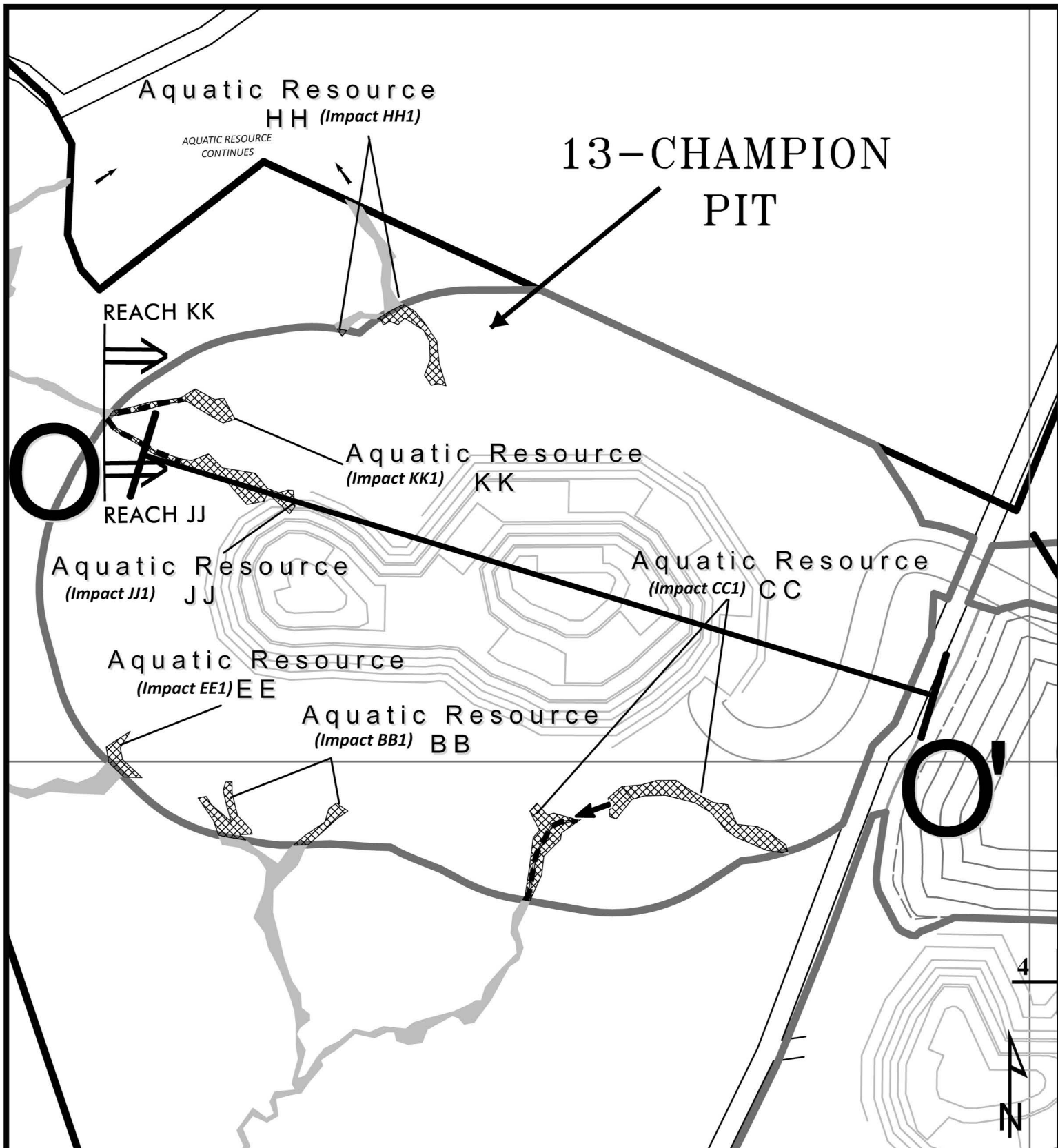
0 200 400 Feet

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067





SHEET 3 of 30

Plan Sheet 16 of 43

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

**Legend**

Property Boundary

Stream Impact

Wetland Impact



Exclusion Area



Wetland/Stream No Impact



Existing Culvert



Sheet Match Line



Stream Reach ID



Schematic Cross-Section

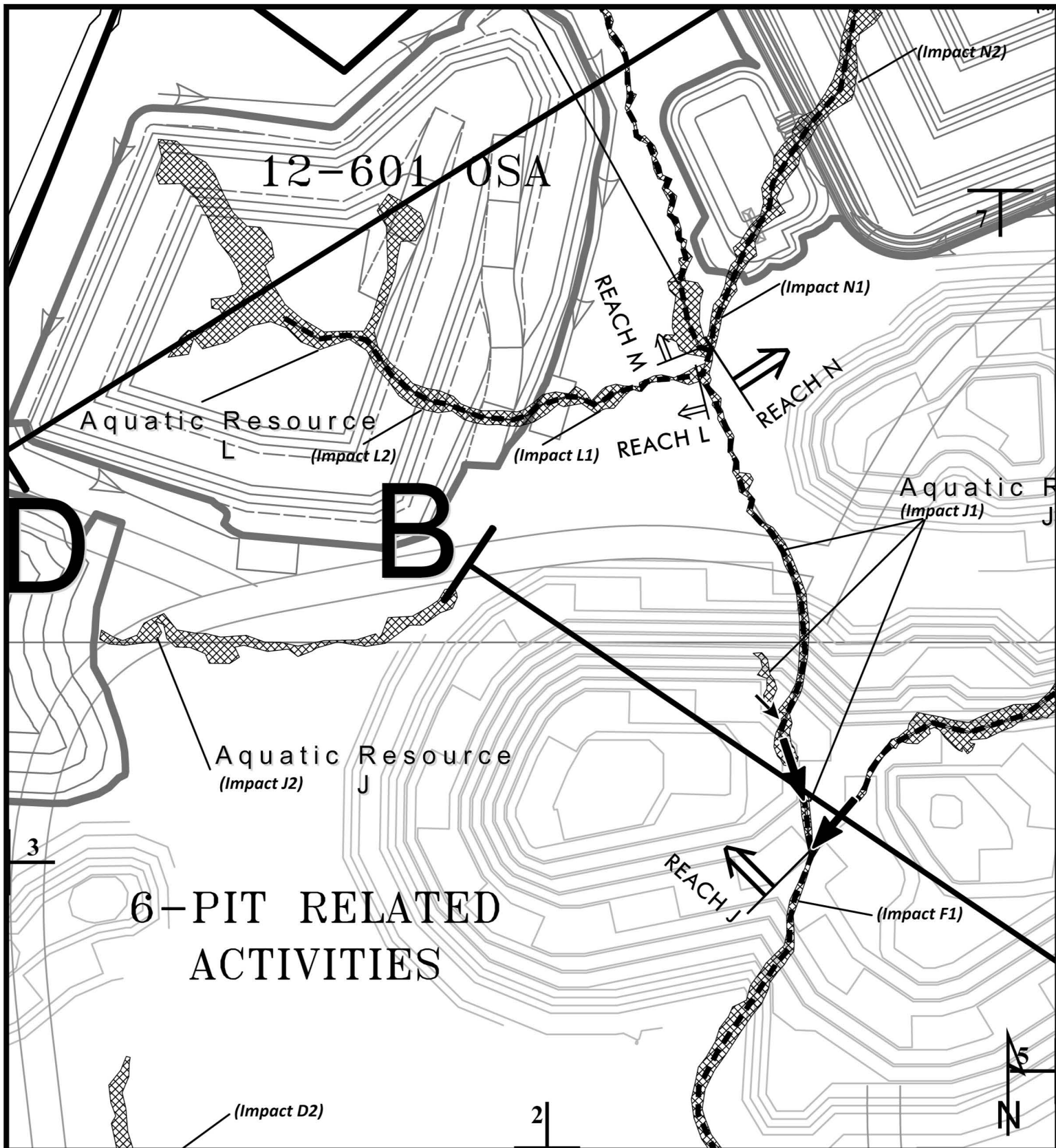
0 200 400 Feet

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067





SHEET 4 of 30 Plan Sheet 17 of 43

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC      Date: August 15, 2012      *Note: Refer to 2012 Revised Permit Application.*

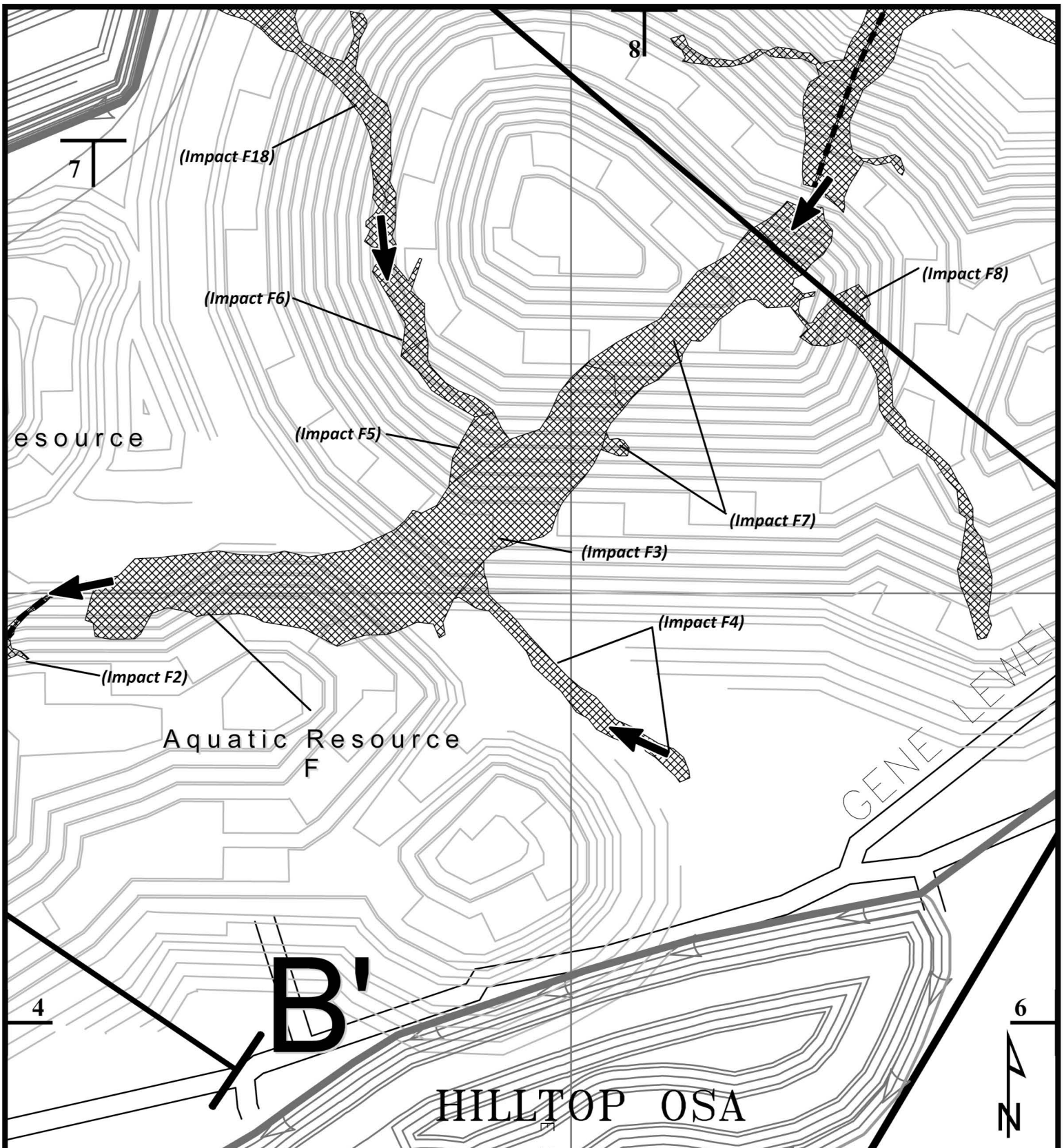
<b>Legend</b> <div style="display: flex; justify-content: space-between;"> <div> <div style="border: 1px solid black; width: 20px; height: 10px; display: inline-block;"></div> Property Boundary  <div style="border-top: 1px dashed black; width: 20px; display: inline-block;"></div> Stream Impact  <div style="background-color: #cccccc; width: 20px; height: 10px; display: inline-block;"></div> Wetland Impact </div> <div> <div style="background-color: #cccccc; width: 20px; height: 10px; display: inline-block;"></div> Exclusion Area  <div style="background-color: #cccccc; width: 20px; height: 10px; display: inline-block;"></div> Wetland/Stream No Impact  <div style="border-bottom: 1px solid black; width: 20px; display: inline-block;"></div> Existing Culvert  <div style="border-left: 1px solid black; width: 20px; height: 10px; display: inline-block;"></div> Sheet Match Line </div> <div> <div style="text-align: center;">↑</div> Stream Reach ID  <div style="text-align: center;"> </div> Schematic Cross-Section  <div style="text-align: center;">0      200      400</div> Feet </div> </div>	
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**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067





SHEET 5 of 30

Plan Sheet 18 of 43

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

**Legend**

Property Boundary

Stream Impact

Wetland Impact



Exclusion Area



Wetland/Stream No Impact



Existing Culvert



Sheet Match Line



Stream Reach ID



Schematic Cross-Section

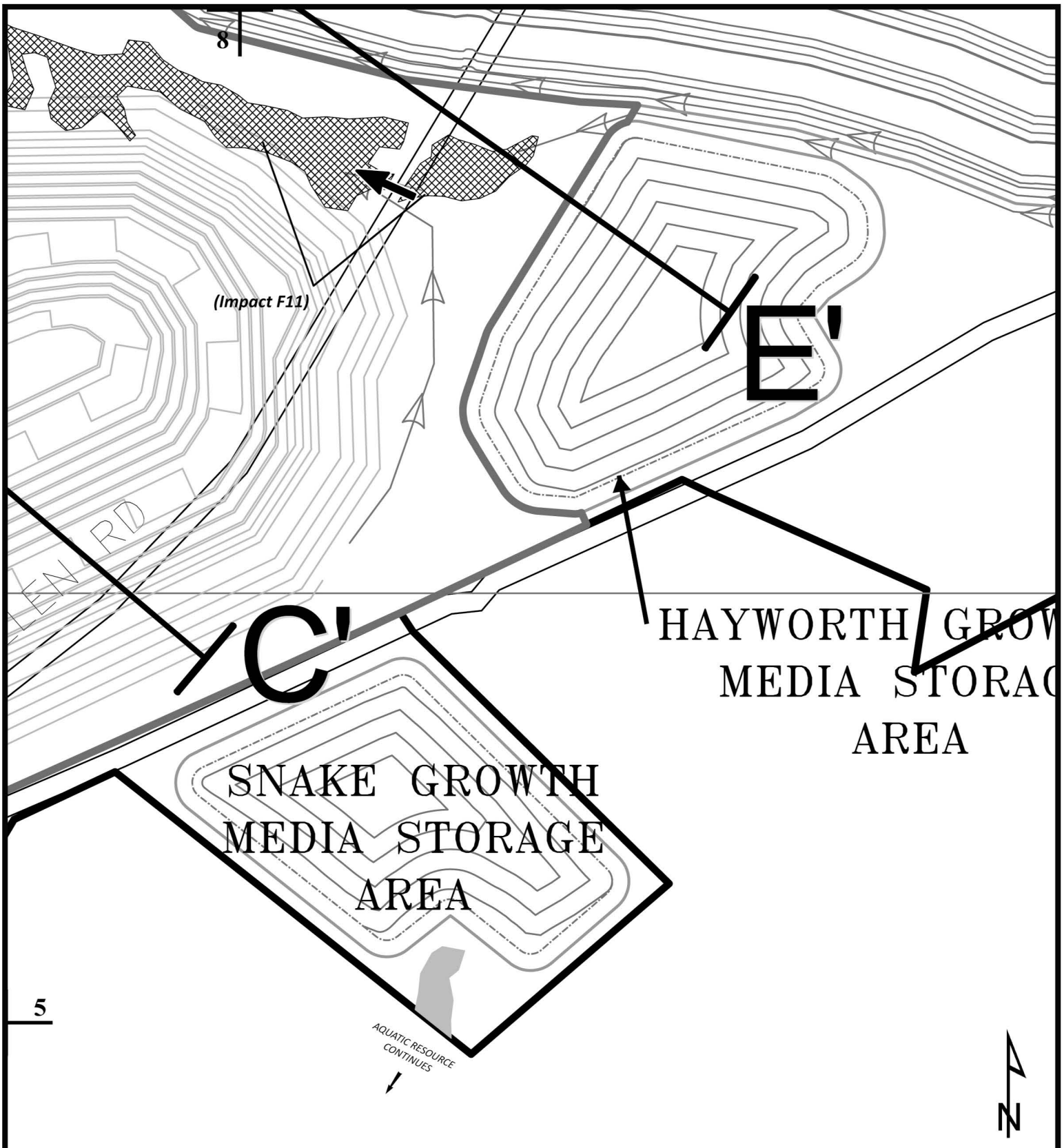
0 200 400 Feet

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067





SHEET 6 of 30

Plan Sheet 19 of 43

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

**Legend**

Property Boundary

Stream Impact

Wetland Impact



Exclusion Area



Wetland/Stream No Impact



Existing Culvert



Sheet Match Line



Stream Reach ID



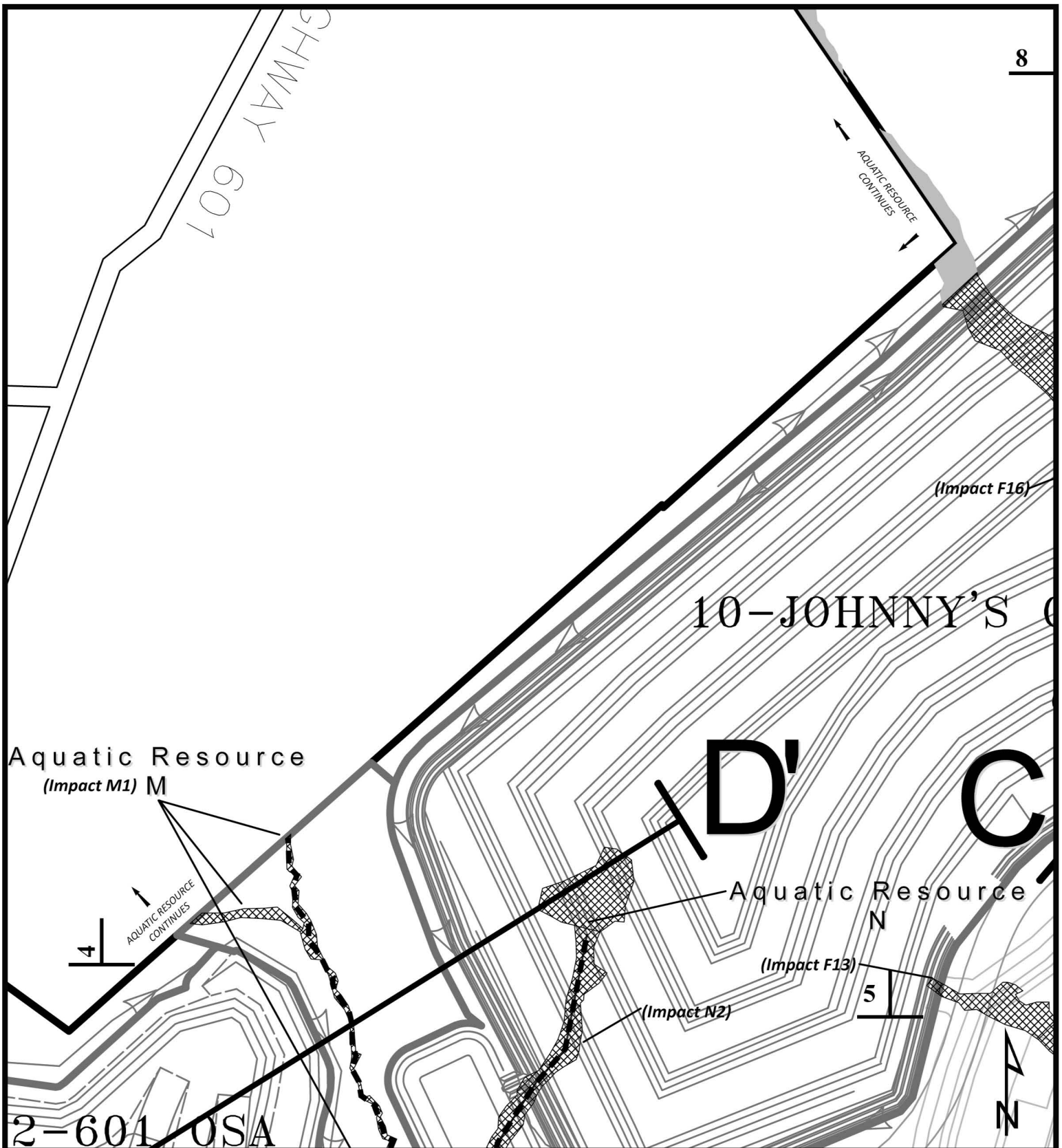
Schematic Cross-Section

0 200 400 Feet

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067



SHEET 7 of 30

Plan Sheet 20 of 43

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

**Legend**

Property Boundary

Stream Impact

Wetland Impact



Exclusion Area



Wetland/Stream No Impact



Existing Culvert



Sheet Match Line



Stream Reach ID



Schematic Cross-Section

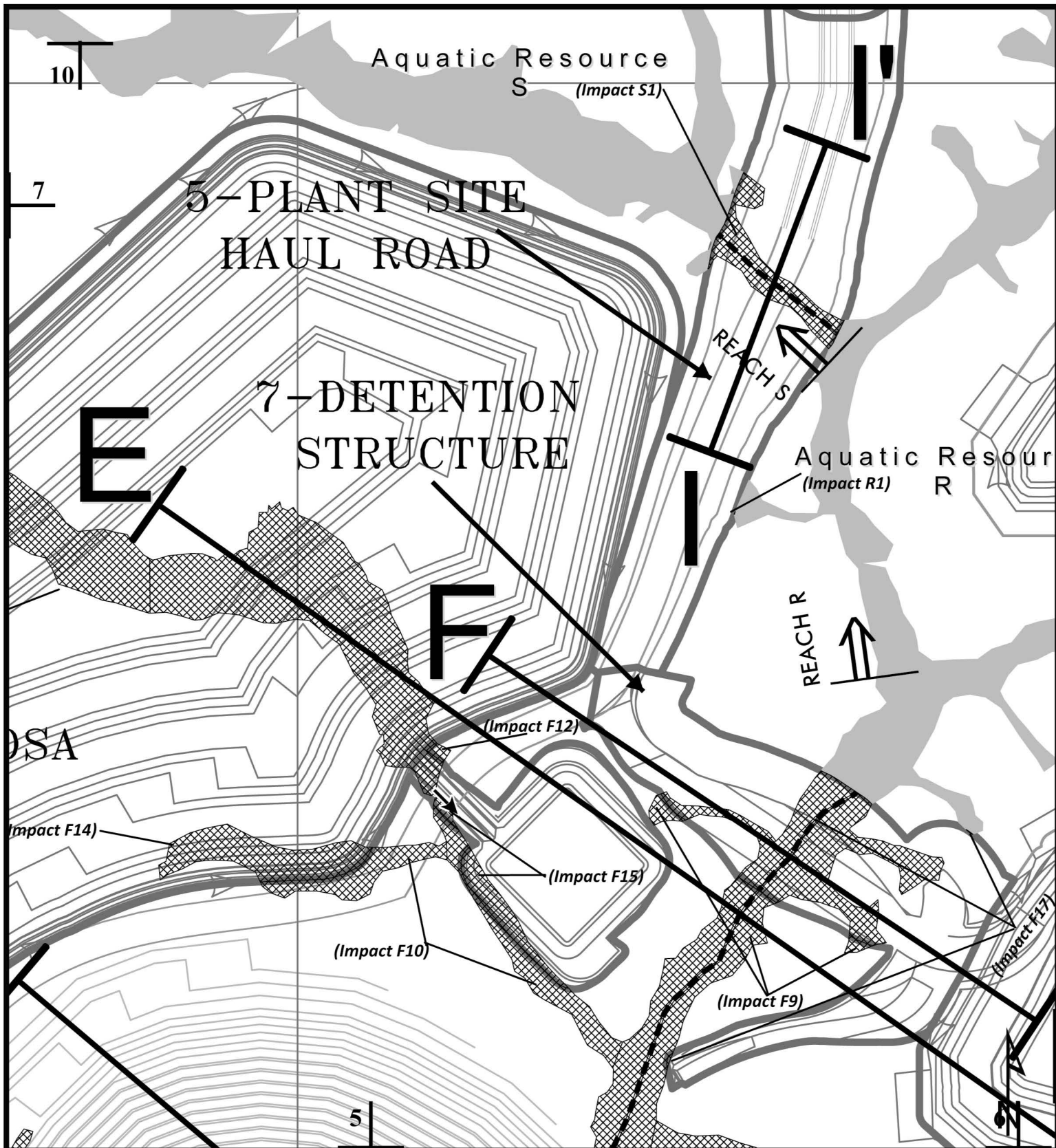
0 200 400 Feet

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067





SHEET 8 of 30

Plan Sheet 21 of 43

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

**Legend**

Property Boundary

Stream Impact

Wetland Impact



Exclusion Area



Wetland/Stream No Impact



Existing Culvert



Sheet Match Line



Stream Reach ID



Schematic Cross-Section

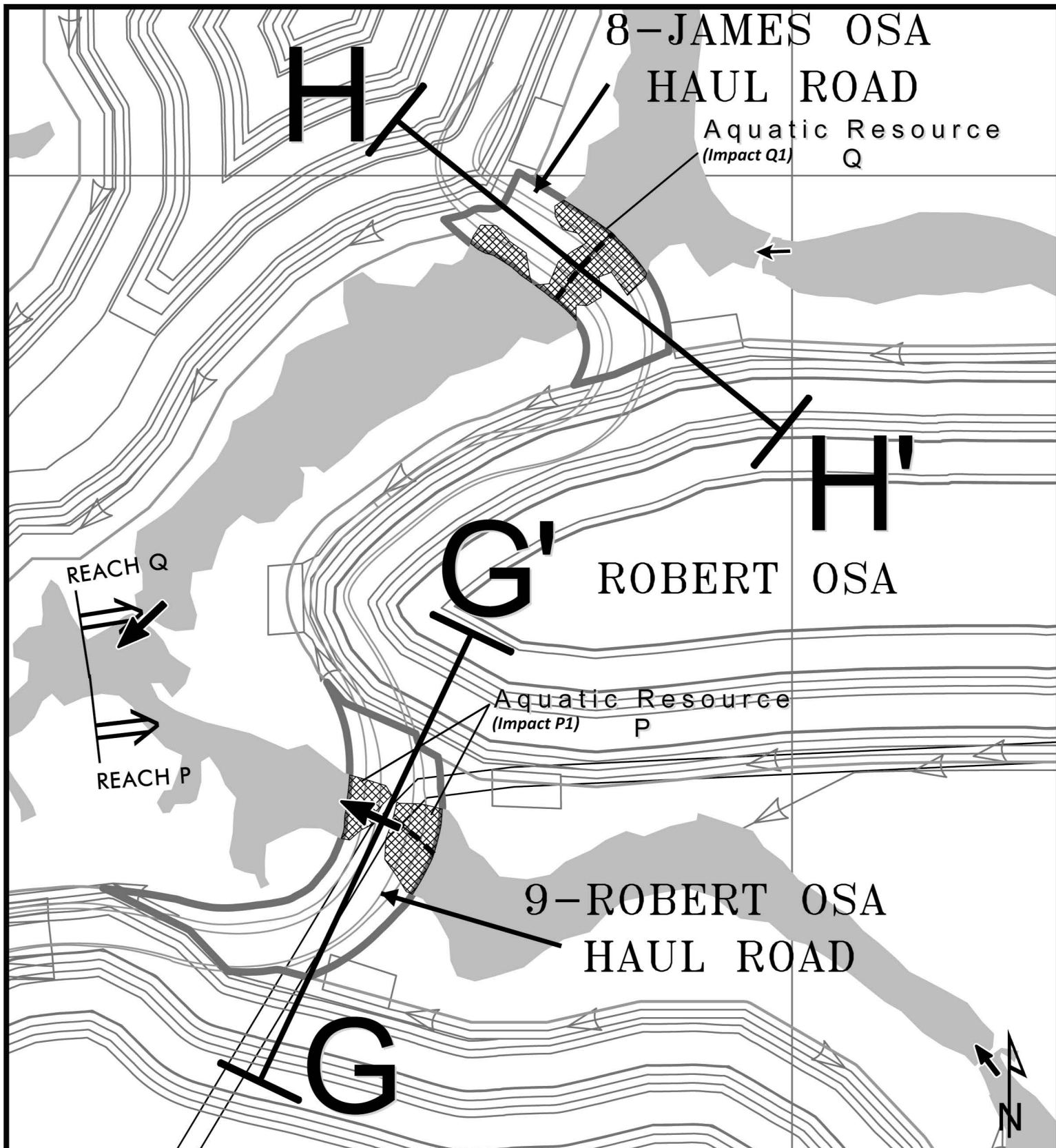
0 200 400 Feet

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067





SHEET 9 of 30

Plan Sheet 22 of 43

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

**Legend**

Property Boundary

Stream Impact

Wetland Impact



Exclusion Area



Wetland/Stream No Impact



Existing Culvert



Sheet Match Line



Stream Reach ID



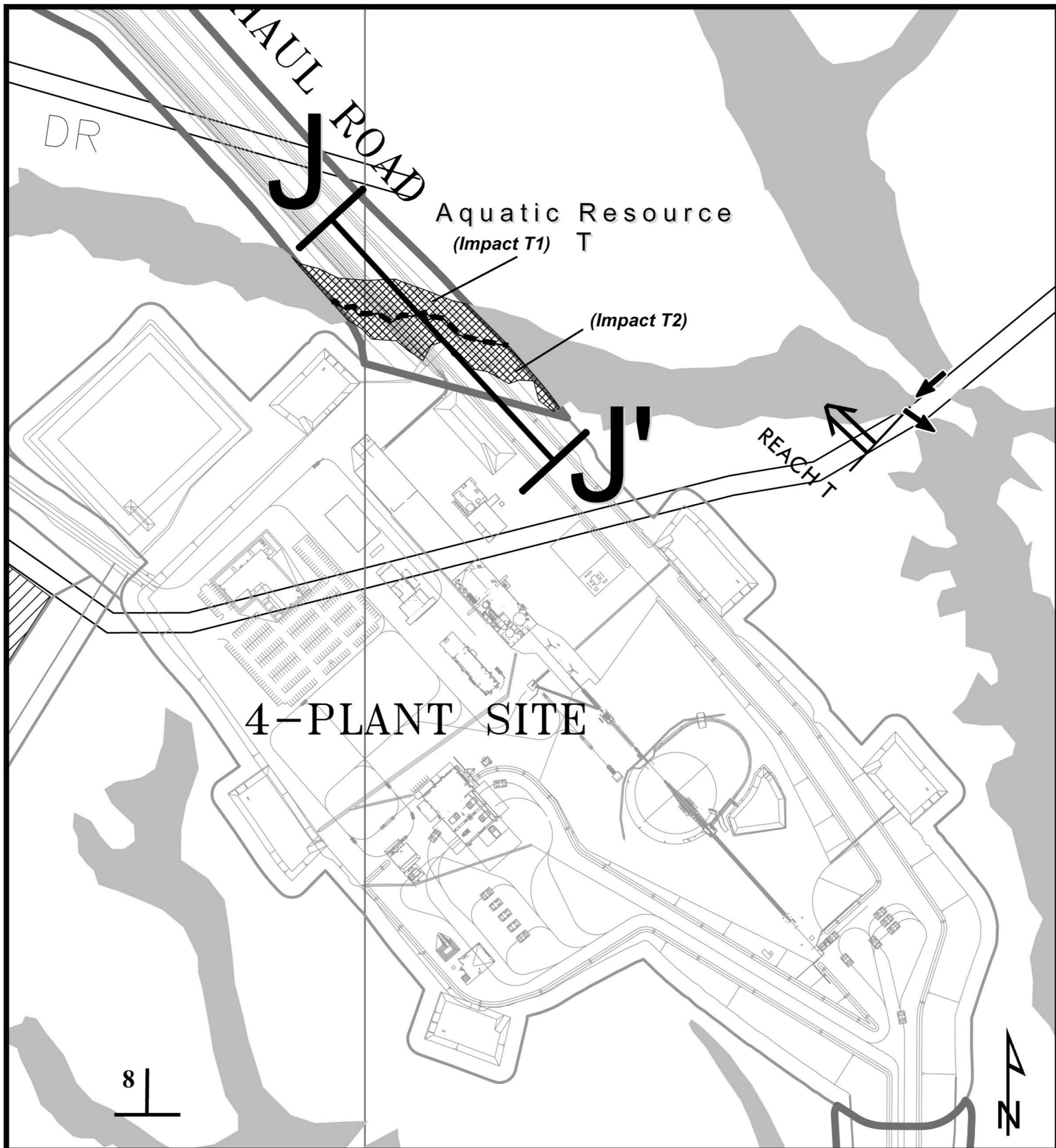
Schematic Cross-Section

0 200 400 Feet

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067



SHEET 10 of 30 **Plan Sheet 23 of 43**

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

*Note: Refer to 2012 Revised Permit Application.*

**Legend**

Property Boundary

Stream Impact

Wetland Impact



Exclusion Area



Wetland/Stream No Impact



Existing Culvert



Sheet Match Line



Stream Reach ID



Schematic Cross-Section

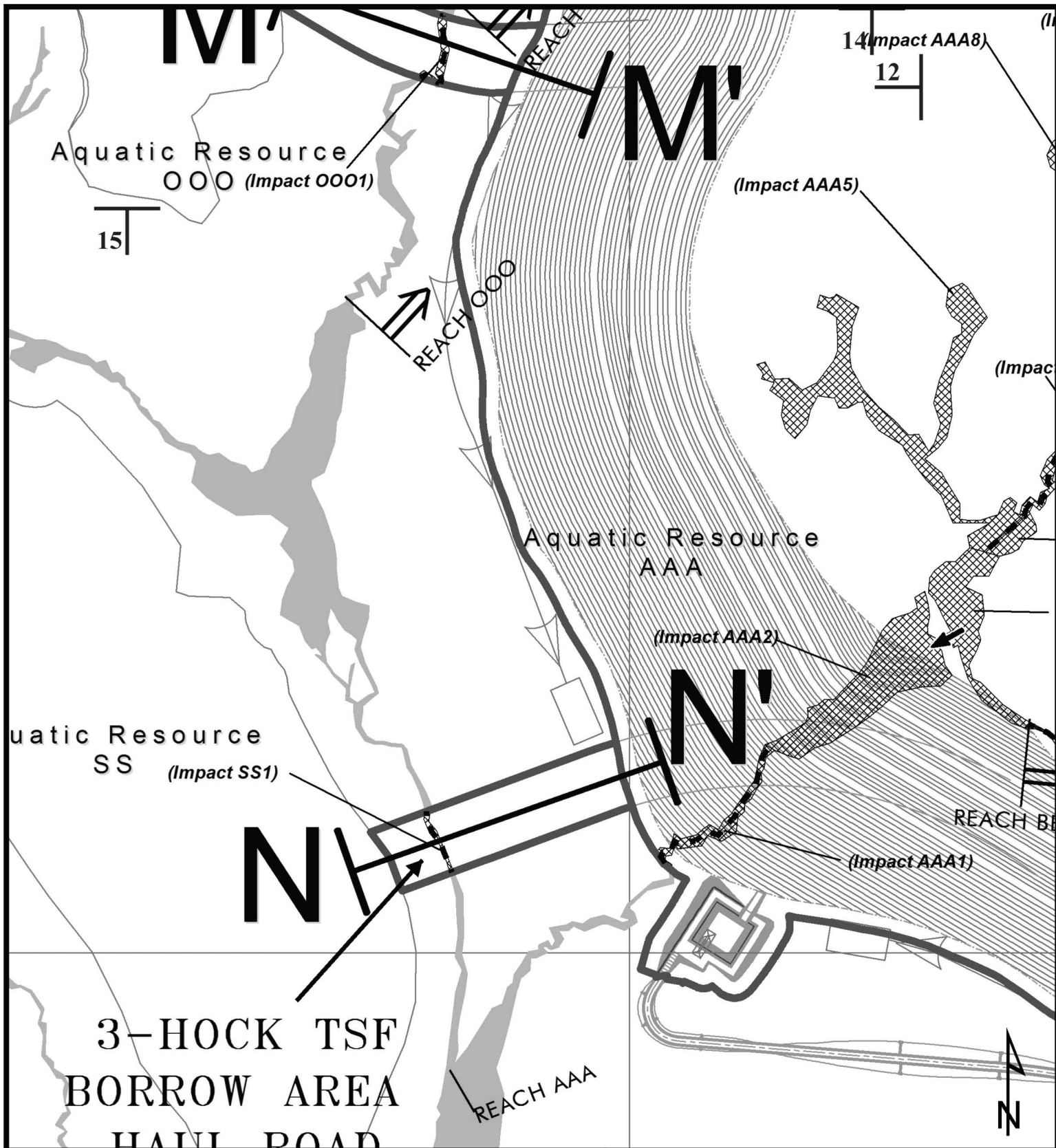
0 200 400 Feet

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067





SHEET 11 of 30 Plan Sheet 24 of 43

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

*Note: Refer to 2012 Revised Permit Application.*

**Legend**

Property Boundary

Stream Impact

Wetland Impact



Exclusion Area



Wetland/Stream No Impact



Existing Culvert



Sheet Match Line



Stream Reach ID



Schematic Cross-Section

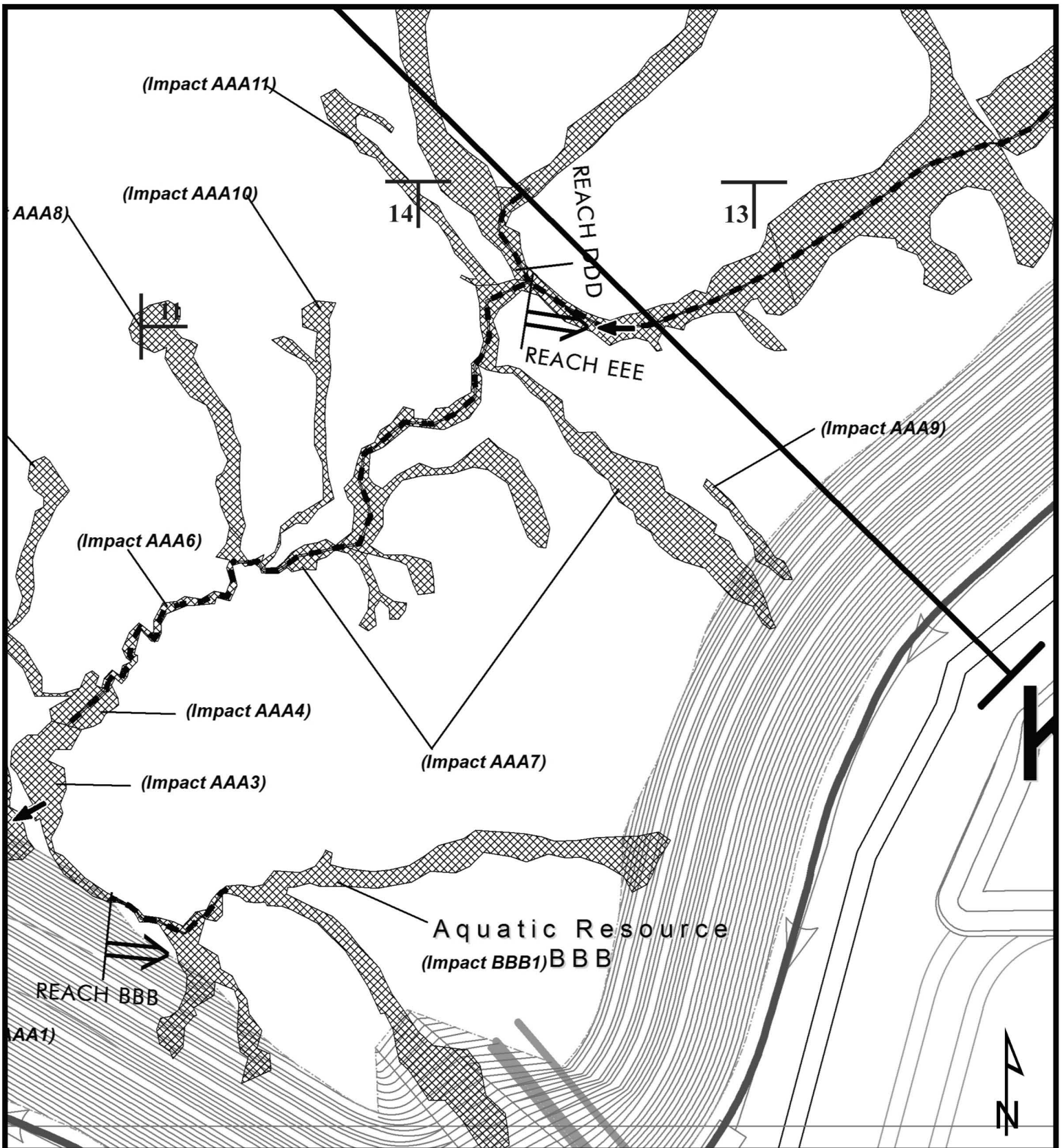
0 200 400 Feet

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067





SHEET 12 of 30

Plan Sheet 25 of 43

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

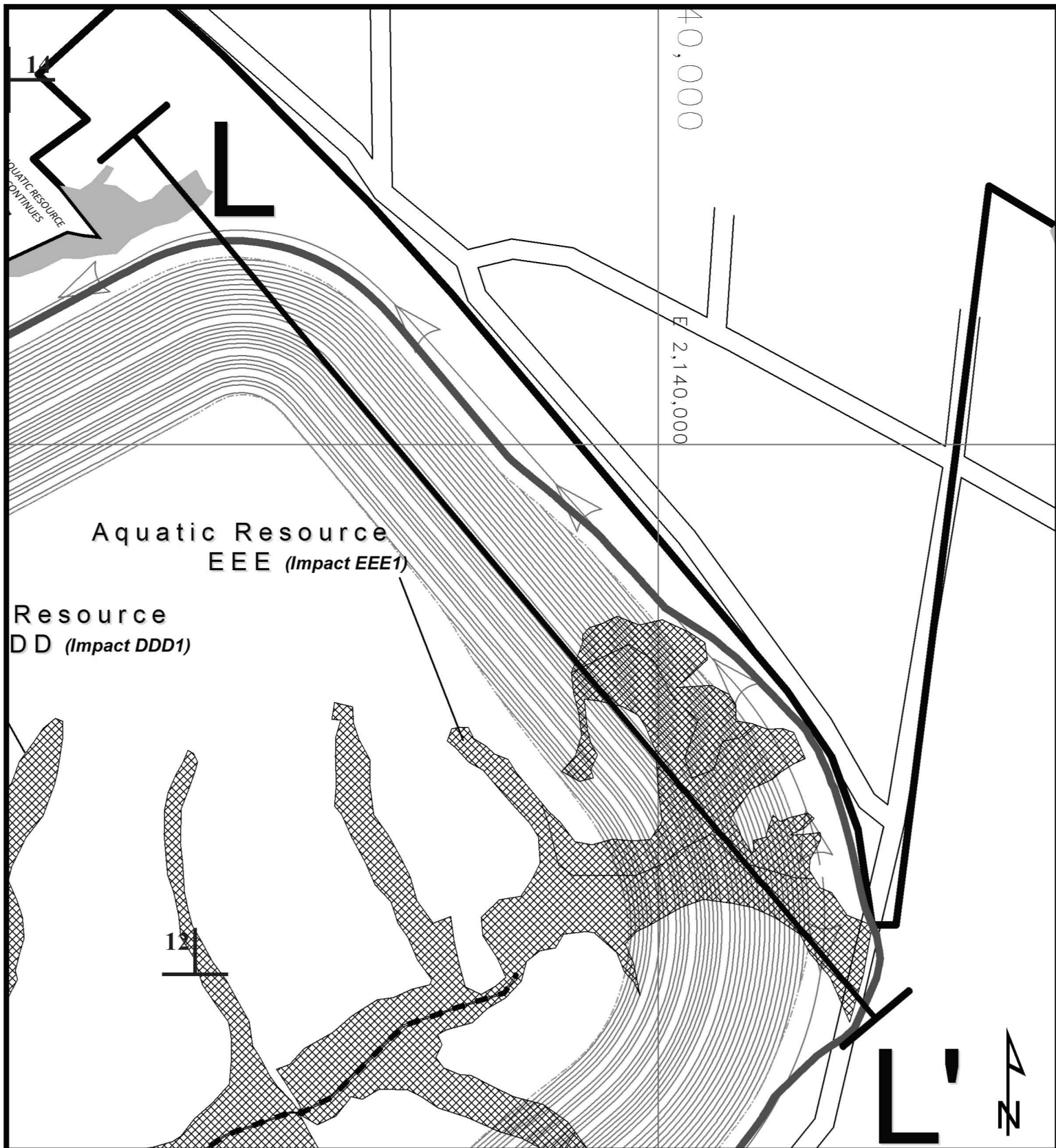
Note: Refer to 2012 Revised Permit Application.

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067





SHEET 13 of 30 Plan Sheet 26 of 43

Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)

Legend

Property Boundary

Stream Impact

Wetland Impact

Exclusion Area

Wetland/Stream No Impact

Existing Culvert

Sheet Match Line



Stream Reach ID

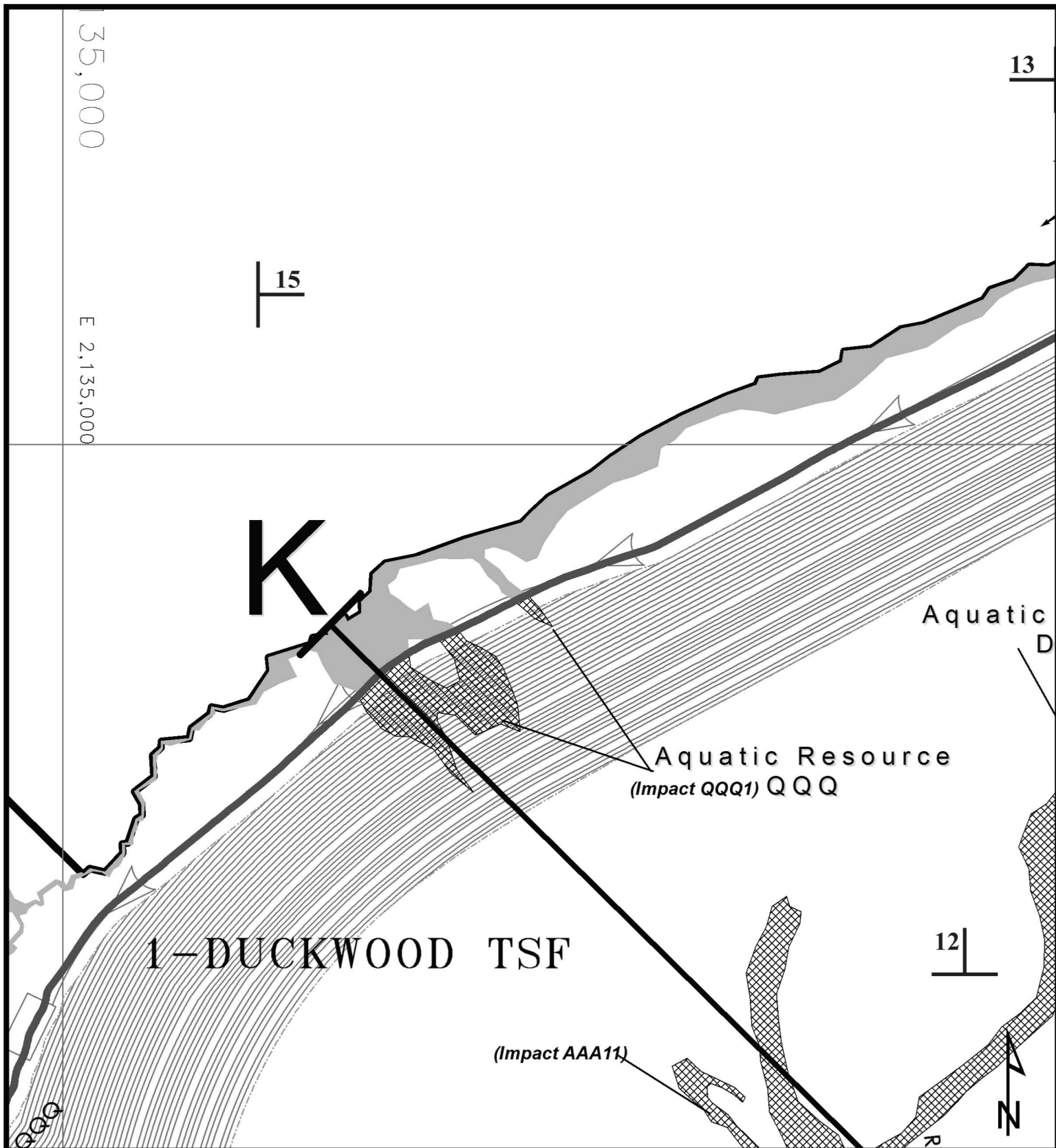


Schematic Cross-Section

0 200 400 Feet



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067



SHEET 14 of 30 Plan Sheet 27 of 43

Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

Legend

Property Boundary

Stream Impact

Wetland Impact



Exclusion Area



Wetland/Stream No Impact



Existing Culvert



Sheet Match Line



Stream Reach ID



Schematic Cross-Section

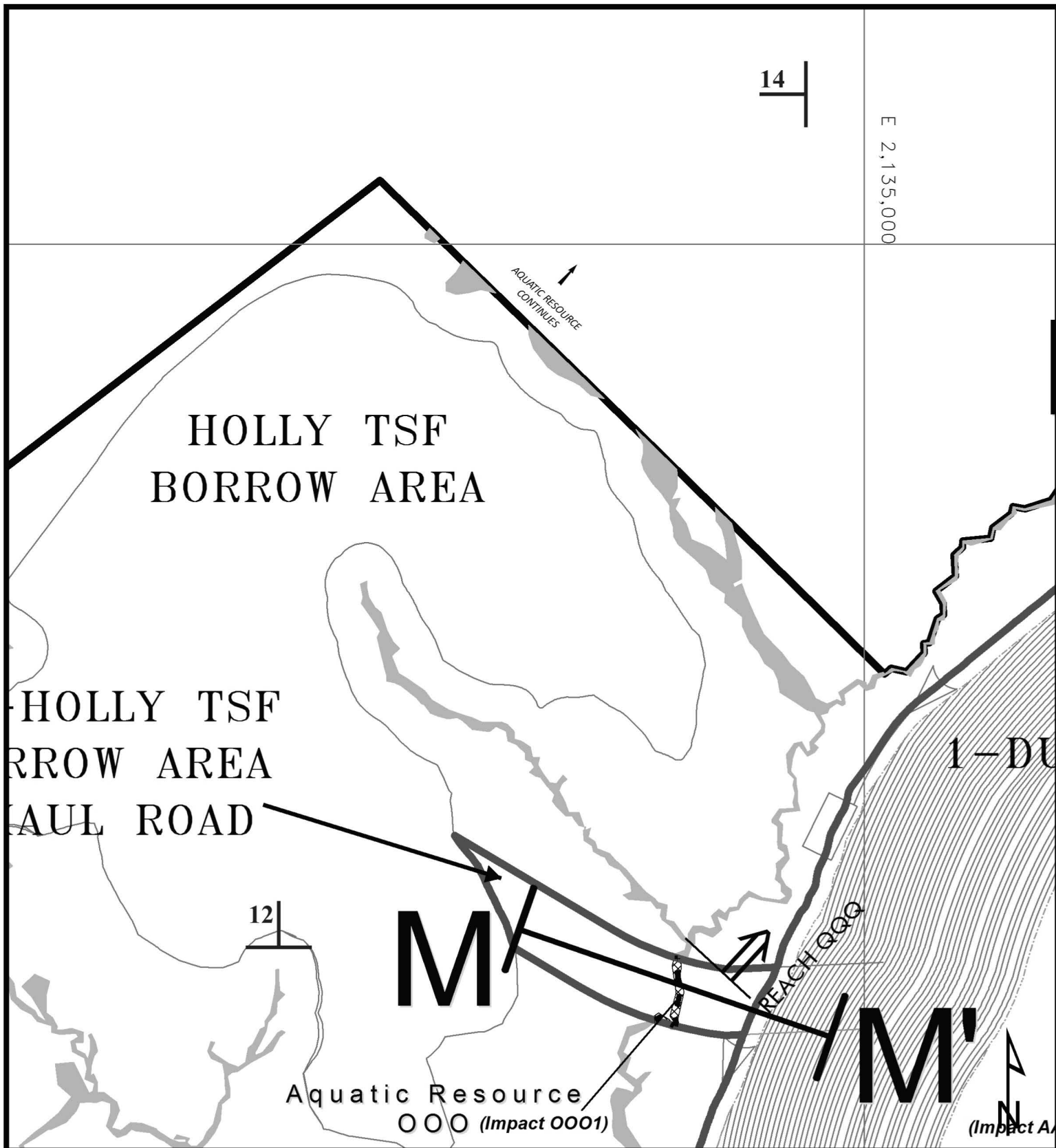
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HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067





SHEET 15 of 30

Plan Sheet 28 of 43

Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

Legend

Property Boundary

Stream Impact

Wetland Impact



Exclusion Area



Wetland/Stream No Impact



Existing Culvert



Sheet Match Line



Stream Reach ID



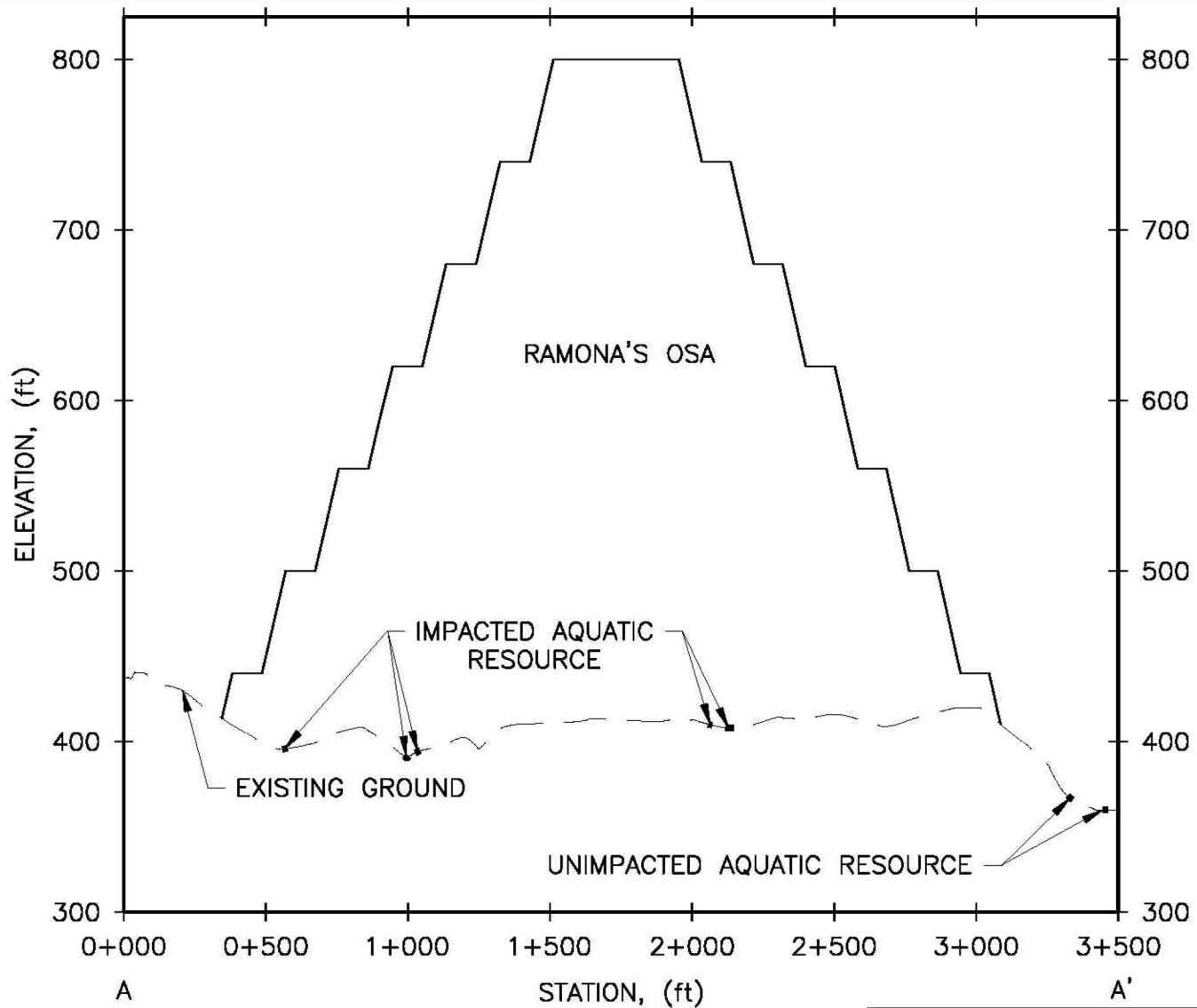
Schematic Cross-Section

0 200 400 Feet

HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067



SHEET 16 of 30

Plan Sheet 29 of 43

Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan

Drawn by: ERC

Date: August 15, 2012

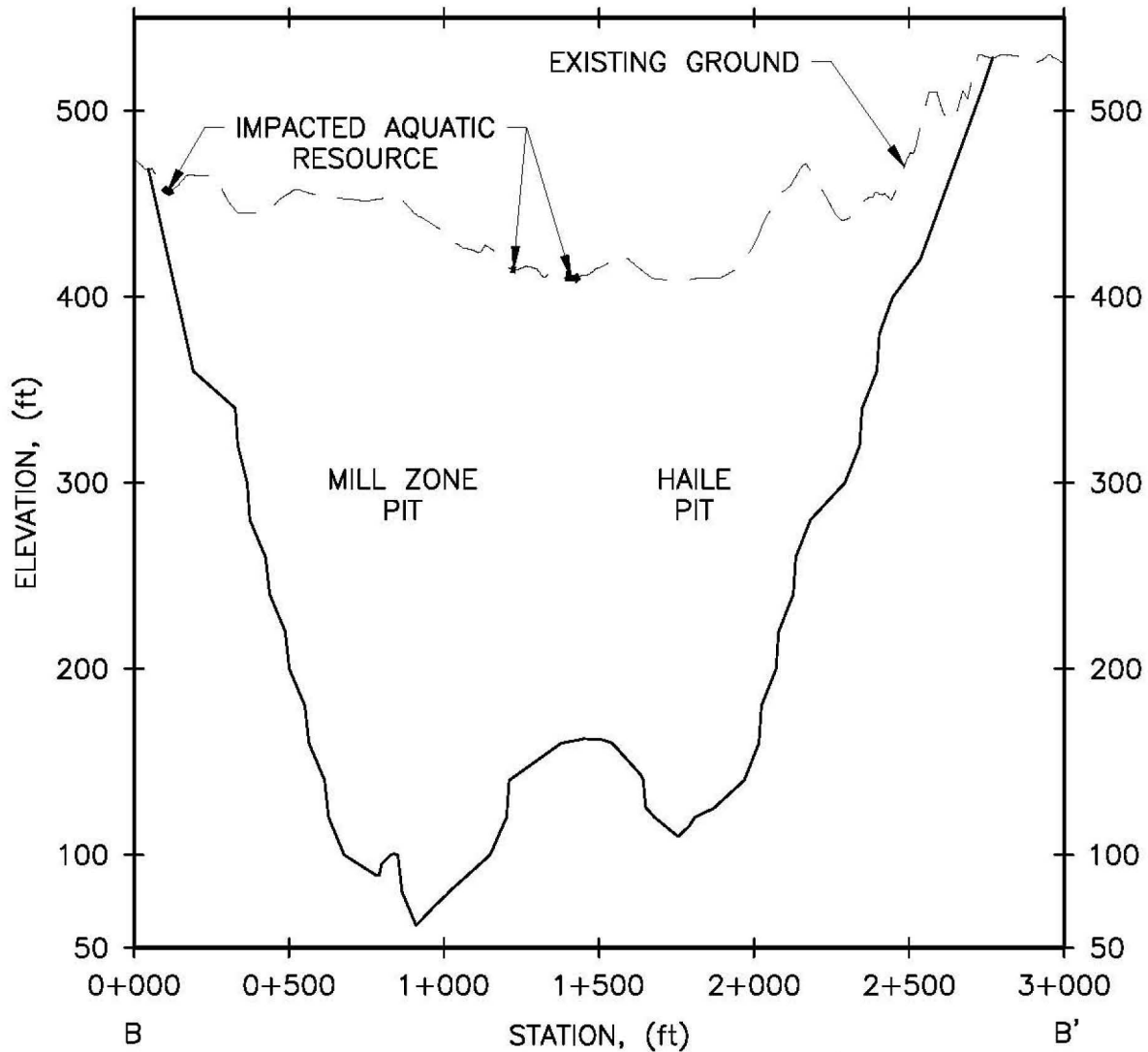
Note: Refer to 2012 Revised Permit Application.

Schematic Cross-Section

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067



SECTION B

SHEET 17 of 30

Plan Sheet 30 of 43

Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan

Drawn by: ERC

Date: August 15, 2012

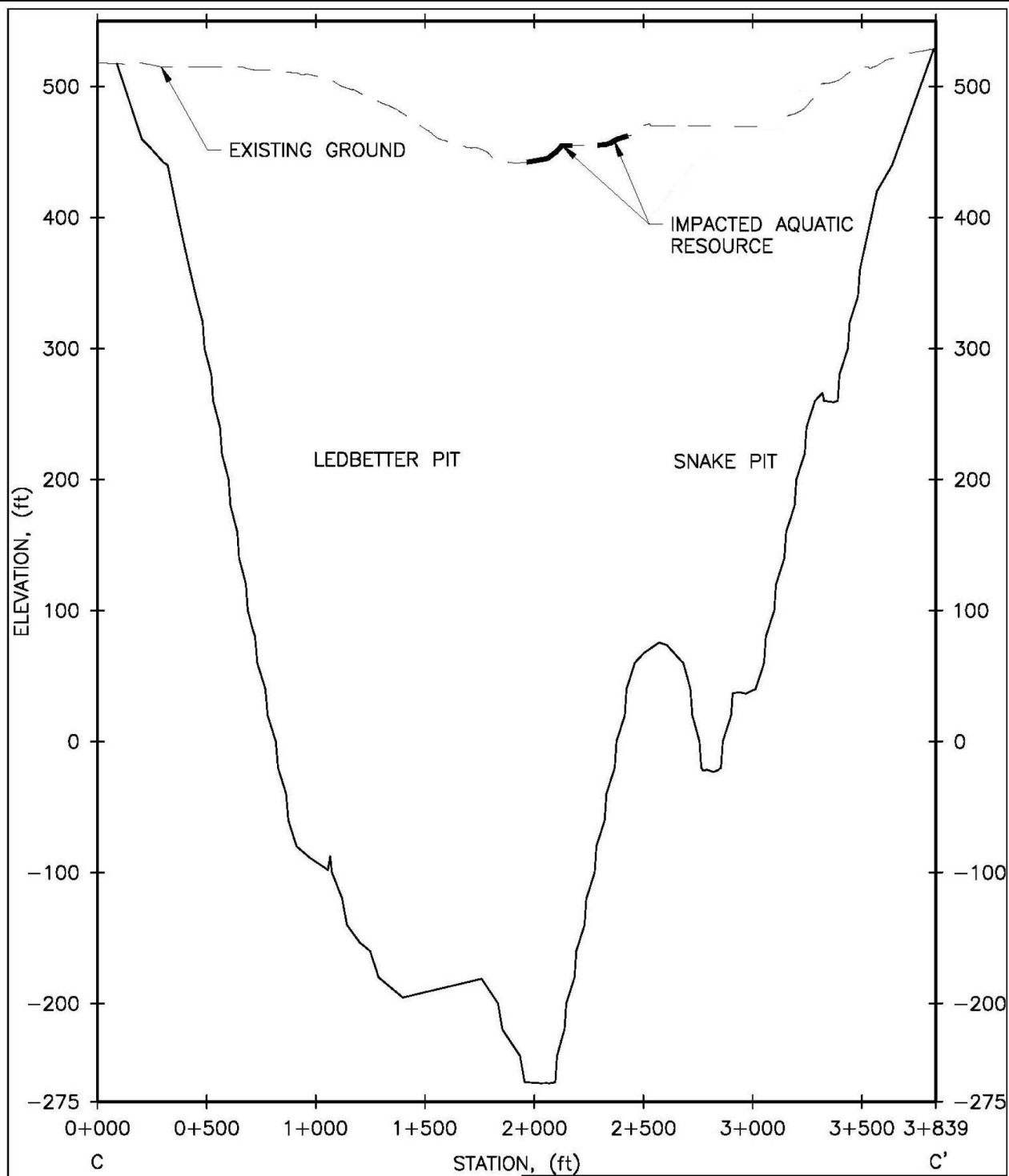
Note: Refer to 2012 Revised Permit Application.

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**

**Schematic Cross-Section**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067



SECTION C

SHEET 18 of 30 **Plan Sheet 31 of 43**

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

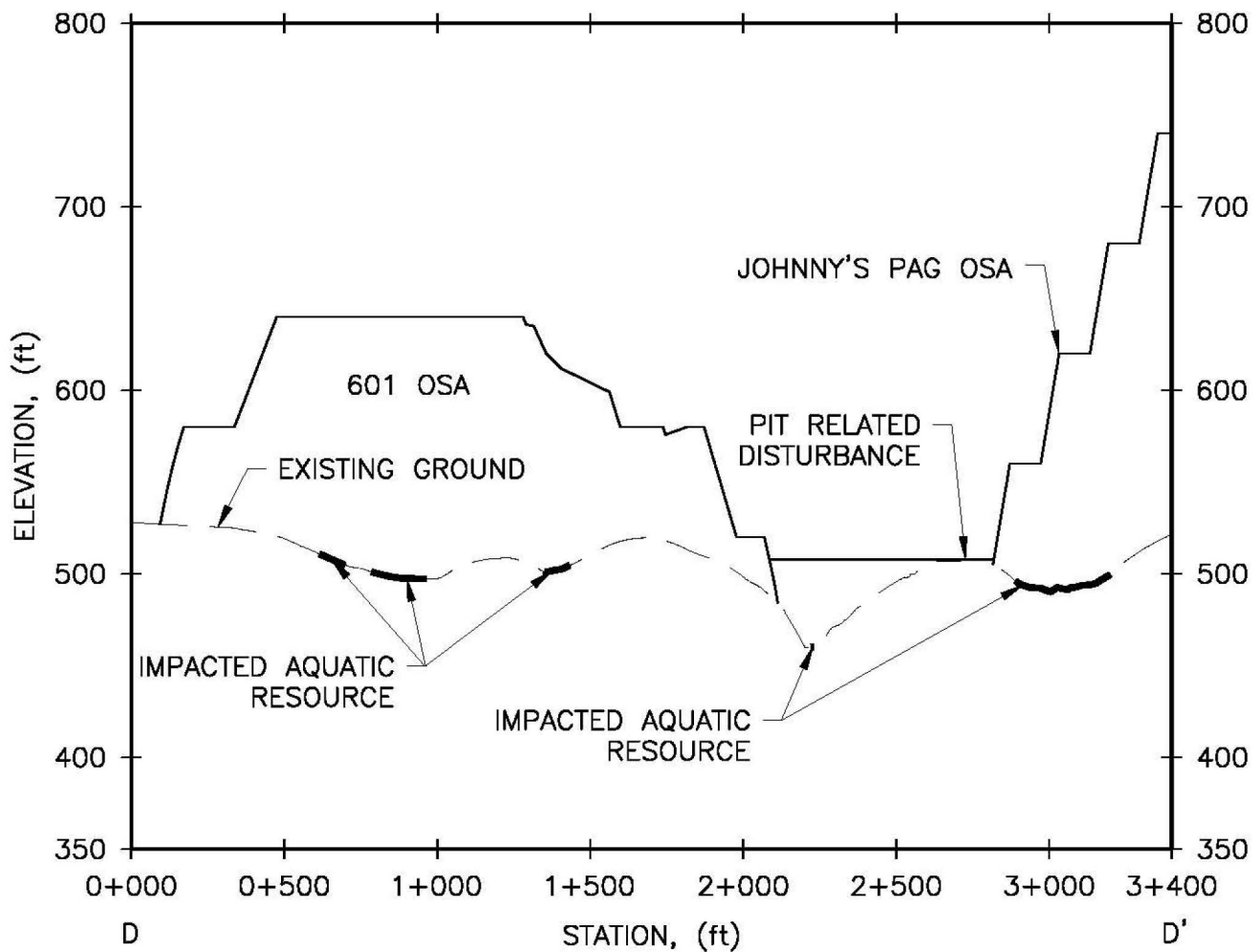
*Note: Refer to 2012 Revised Permit  
Application.*

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**

**Schematic Cross-Section**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067



SECTION D

SHEET 19 of 30

Plan Sheet 32 of 43

Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

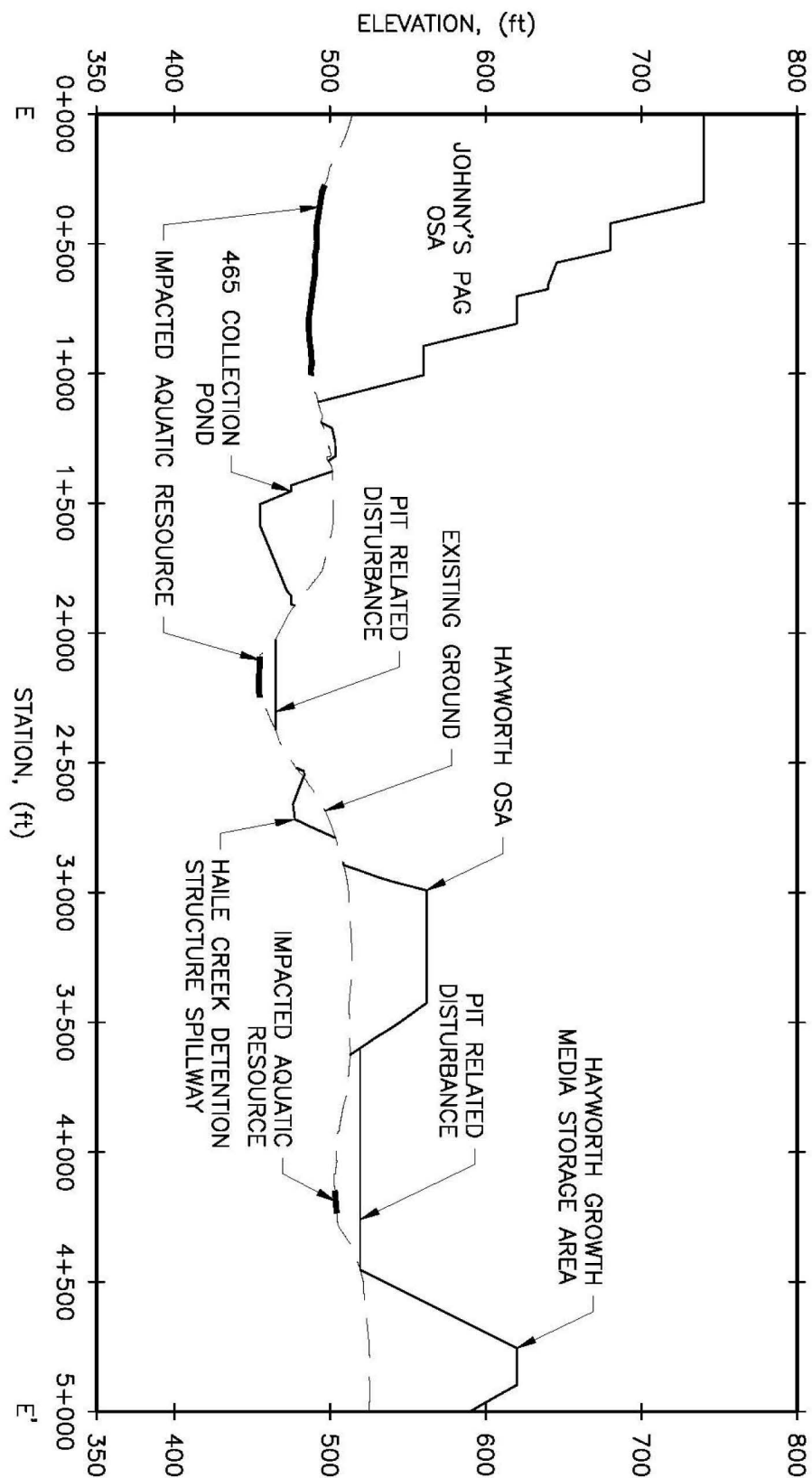
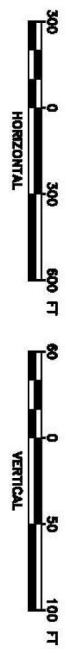
**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**

**Schematic Cross-Section**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067





SECTION E

SHEET 20 of 30 Plan Sheet 33 of 43

Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan

Drawn by: ERC

Date: August 15, 2012

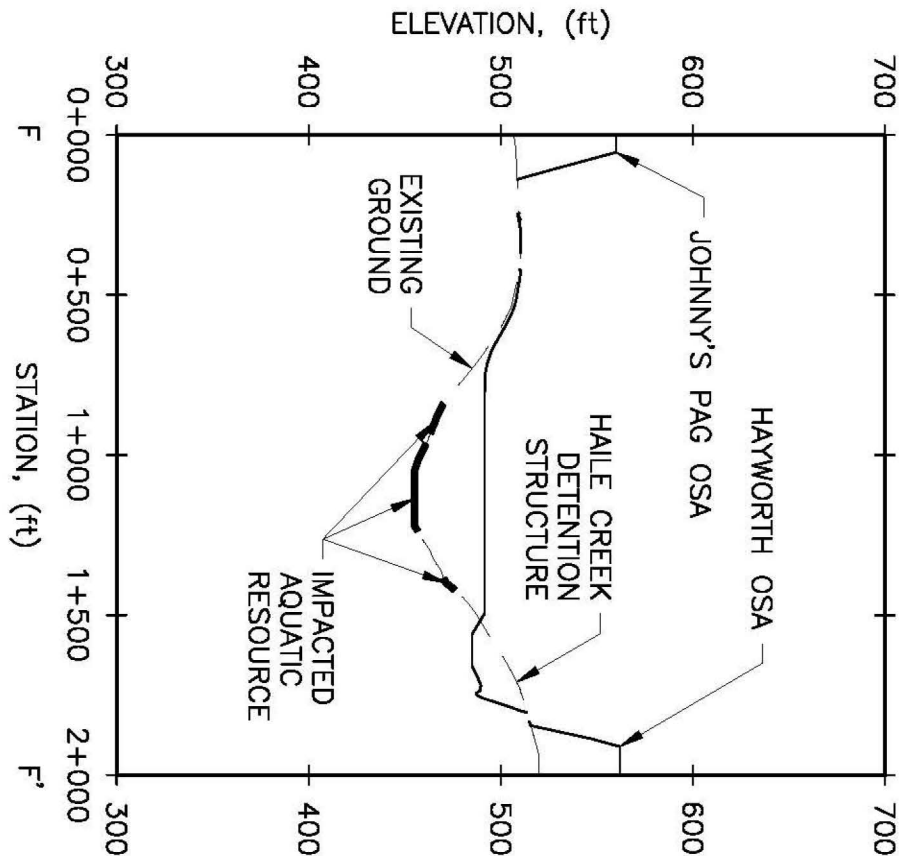
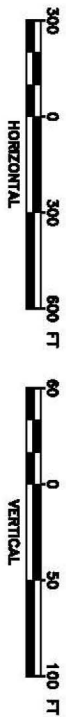
Note: Refer to 2012 Revised Permit Application.

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**

**Schematic Cross-Section**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067



SECTION F

SHEET 21 of 30

Plan Sheet 34 of 43

Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

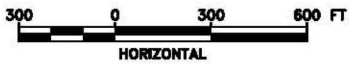
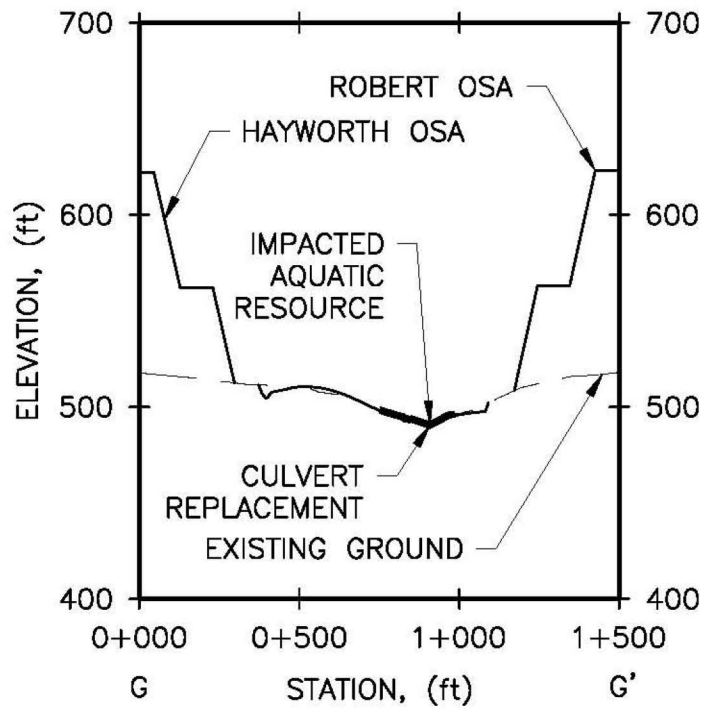
**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**

**Schematic Cross-Section**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067





SECTION G

SHEET 22 of 30

Plan Sheet 35 of 43

Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan

Drawn by: ERC

Date: August 15, 2012

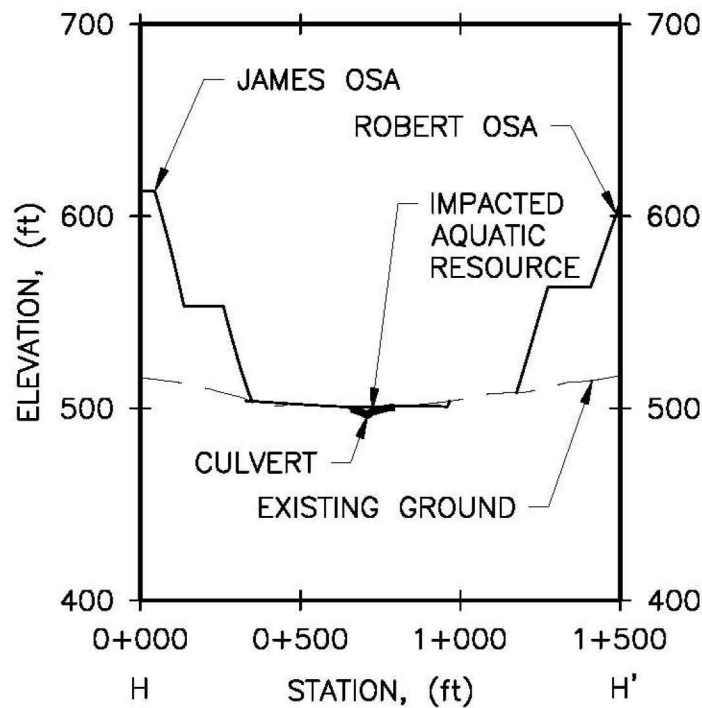
Note: Refer to 2012 Revised Permit Application.

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**

**Schematic Cross-Section**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067



SECTION H

SHEET 23 of 30 **Plan Sheet 36 of 43**

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

*Note: Refer to 2012 Revised Permit Application.*

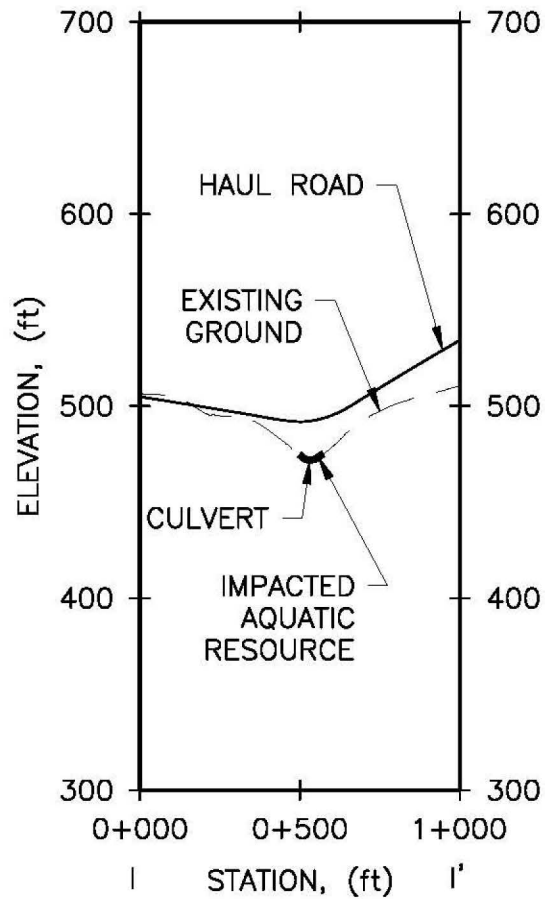
**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**

**Schematic Cross-Section**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067





SECTION I

SHEET 24 of 30

Plan Sheet 37 of 43

Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan

Drawn by: ERC

Date: August 15, 2012

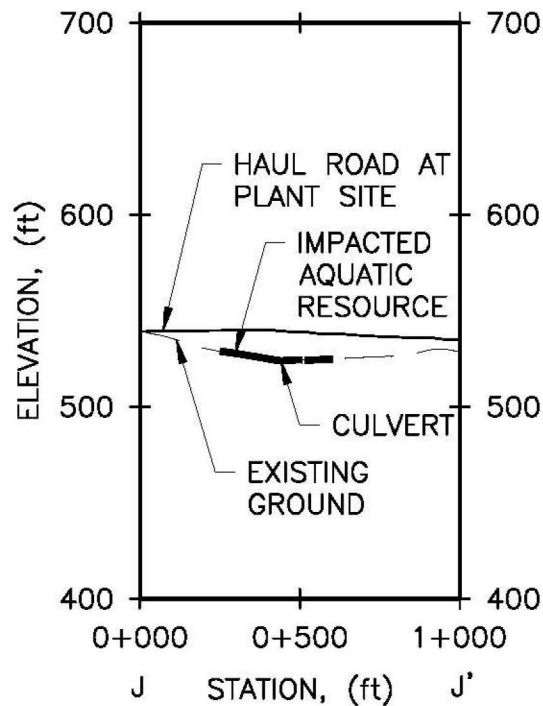
Note: Refer to 2012 Revised Permit Application.

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**

**Schematic Cross-Section**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067



SECTION J

SHEET 25 of 30 **Plan Sheet 38 of 43**

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

*Note: Refer to 2012 Revised Permit Application.*

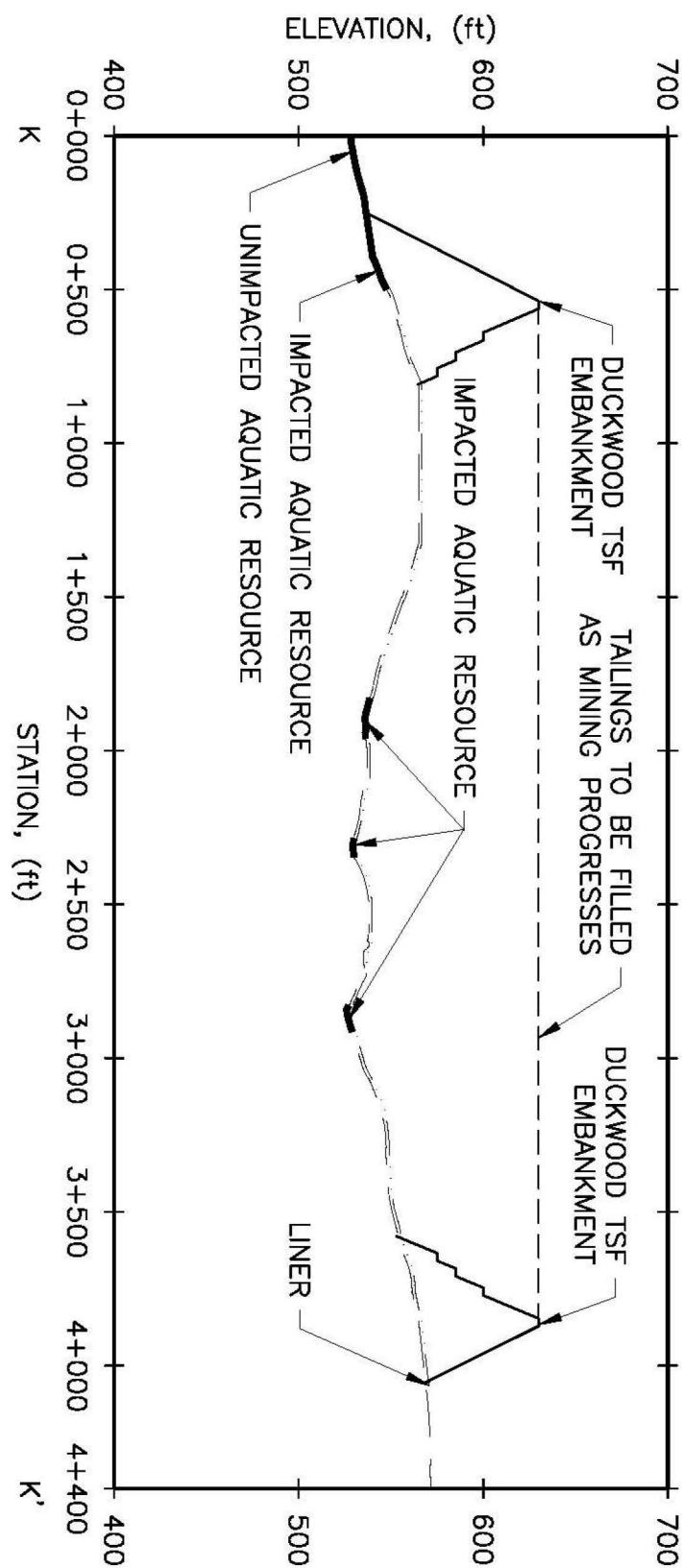
**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**

**Schematic Cross-Section**

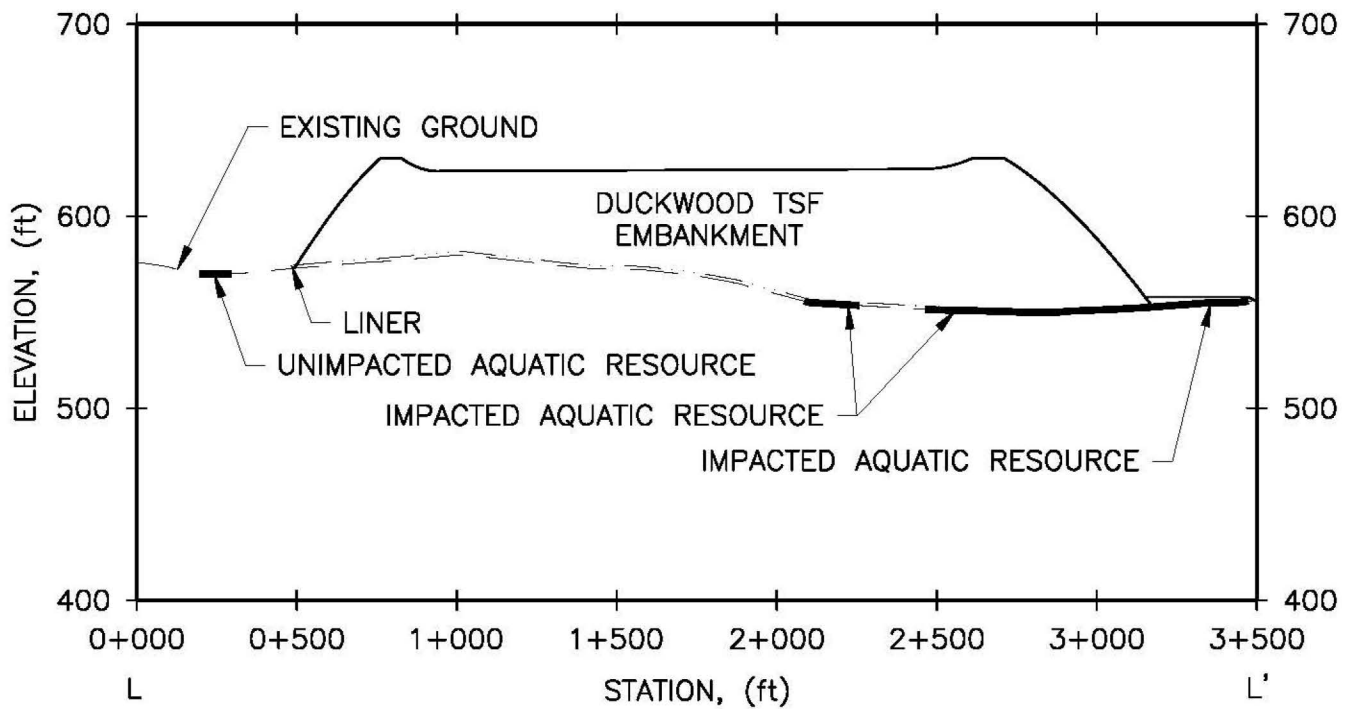


Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
P.O. Box 128  
Kershaw, SC 29067





### Schematic Cross-Section



SECTION L

SHEET 27 of 30

Plan Sheet 40 of 43

Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

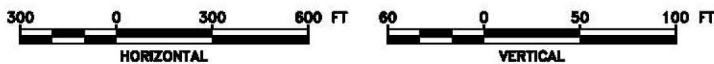
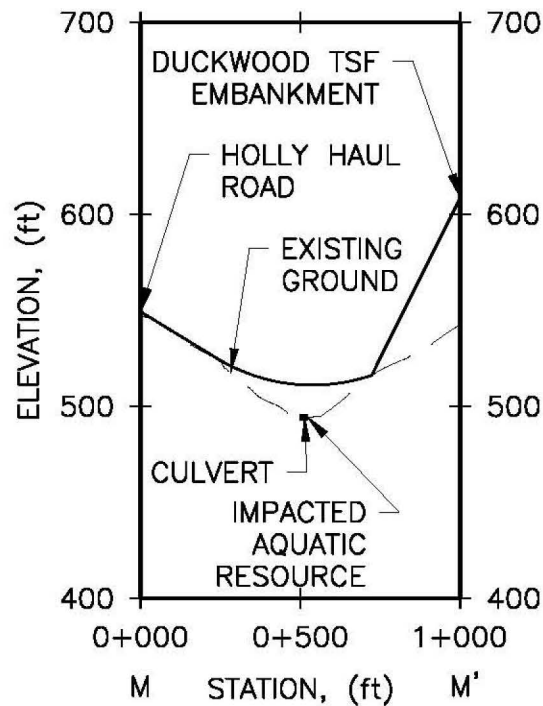
**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**

**Schematic Cross-Section**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
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Kershaw, SC 29067





SECTION M

SHEET 28 of 30 **Plan Sheet 41 of 43**

**Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan**

Drawn by: ERC

Date: August 15, 2012

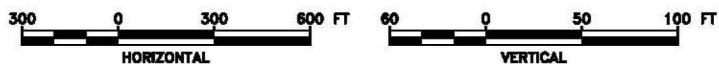
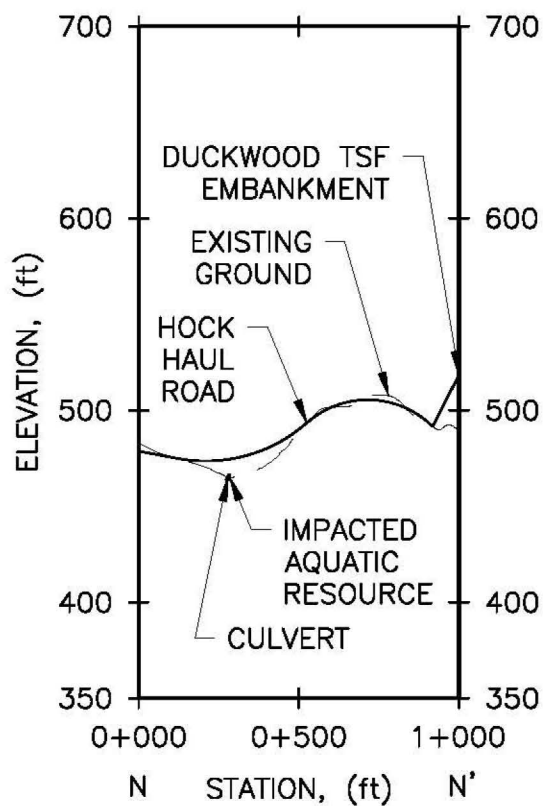
*Note: Refer to 2012 Revised Permit Application.*

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**

**Schematic Cross-Section**



Haile Gold Mine Inc.  
7283 Haile Gold Mine Road  
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Kershaw, SC 29067



SECTION N

SHEET 29 of 30

Plan Sheet 42 of 43

Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan

Drawn by: ERC

Date: August 15, 2012

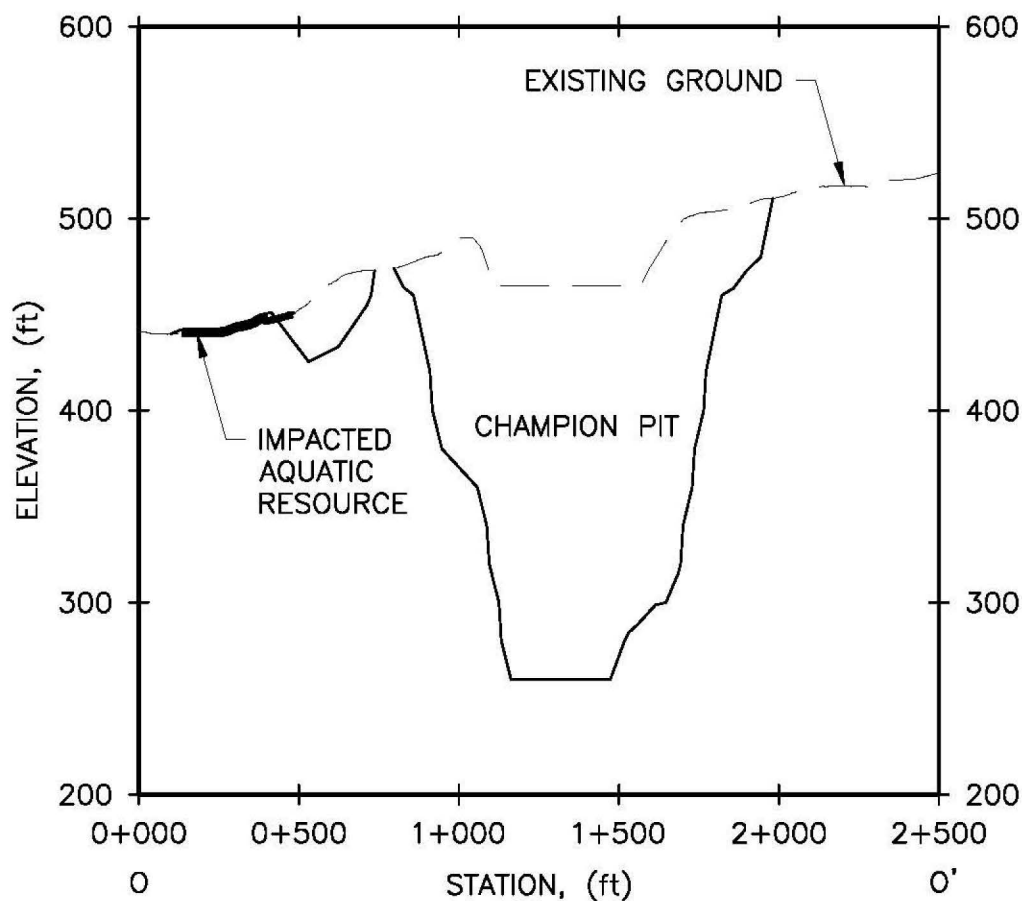
Note: Refer to 2012 Revised Permit Application.

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**

**Schematic Cross-Section**



Haile Gold Mine Inc.  
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SECTION 0

SHEET 30 of 30

Plan Sheet 43 of 43

Haile Modified Alternative General Layout  
Waters of the US Direct Impact Analysis Detailed Plan

Drawn by: ERC

Date: August 15, 2012

Note: Refer to 2012 Revised Permit Application.

**HAILE GOLD MINE PROJECT  
(SAC 1992-24122-4IA)**

**Schematic Cross-Section**



Haile Gold Mine Inc.  
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