



**US Army Corps
of Engineers**
Louisville District ®

Public Notice

Public Notice No.
LRL-2013-907-mad

Open Date:
2 Apr 2015

Close Date:
4 May 2015

Please address all comments and inquiries to:
U.S. Army Corps of Engineers, Louisville District
ATTN: Mr. Matt Dennis, CELRL-OPF-W
P.O. Box 59
Louisville, Kentucky 40201-0059

Phone: 502-315-6689

lrl.regulatorypubliccomment@usace.army.mil

This notice announces an application submitted for a Department of the Army (DA) Permit, subject to Section 404 of the Clean Water Act:

APPLICANT: Jim Camp
Lafarge North America
RR 1 Box 267
Cave in Rock, IL 62919

AGENT: Justin Hastie
JDH Enterprises Inc.
RR 1 Box 166
Cave In Rock, IL 62919

LOCATION: Unnamed tributaries to Anthony Creek east of Cave
In Rock, Hardin County, Illinois

PURPOSE: Expand an existing hard rock mine by opening
reserves of limestone and sandstone required to
meet customer needs for crushed stone.

Latitude: 37.4831 N
Longitude: 88.1156 W
7.5 Minute Quad: Repton, KY-IL and Cave-in-Rock,
KY-IL

DESCRIPTION OF WORK: The Lafarge Cave In Rock Quarry has been operating since 1963 supplying basic raw materials for the Lafarge Joppa Cement Plant located 65 miles downstream on the Ohio River. The existing footprint of the quarry has not changed significantly in the past 20 years. As a result, the 12 working benches of the pit are critically narrow and the foot print of the quarry must expand to access adequate reserves to insure uninterrupted supply of crushed stone to the cement plant. The applicant proposes a 30 year mine plan to increase the footprint of the quarry by approximately 150 acres.

The project would extract limestone and sandstone using typical open pit mining practices. After harvesting the timber, the soil is stripped away and stockpiled with earth moving equipment. Below the soil layer, sandstone is then drilled, blasted, loaded into trucks and

hauled away to permitted spoil area for disposal. Removing the upper most sandstone exposes the cement quality limestone and sandstone below. All stone used for cement or aggregate would be drilled, blasted, loaded and hauled from the pit to the processing plant where the stone is crushed, sized, and stored waiting for shipment. A reclaim conveyor would transport crushed stone onto barges on the Ohio River for transportation to the Joppa Cement Plant or to other customers on the Ohio and Mississippi Rivers.

The project would directly affect approximately 1,964 linear feet of intermittent stream, 3,609 linear feet of ephemeral stream, and 0.056 acres of open water with 0.08 acres of fringe palustrine forested wetland.

AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES: Due to the nature of open pit mining, and the size, magnitude, and time frame of the project, it is not practical to avoid all impacts to "Water of the U.S." In order to avoid/minimize impacts, an inventory of wetlands, streams, and open waters was performed in 2006, 2011, and 2014 on the surrounding property controlled by Lafarge. In order to reduce impacts to multiple watersheds, the design of the mine footprint was narrowed to reduce impacts to one intermittent stream and its tributaries, as well as an adjacent pond with adjacent wetlands. The mine footprint would also avoid direct impacts and leave a 150-foot buffer to a downstream perennial stream.

Mitigation would be performed off-site; focusing on the restoration of an intermittent stream and re-creation of ephemeral streams. The off-site mitigation would be located within the twelve-digit HUC Peter Creek-Ohio River (051402030306), which is to the west of the impact area located in the Camp Creek-Ohio River (051402030303). The proposed off-site mitigation would involve the restoration of 2,178 feet of intermittent stream and the re-creation of 2,272 feet of ephemeral stream. Off-site streams were assessed using the Environmental Protection Agency Rapid Bio-assessment Protocol (RBP). Streams with RBP scores in the poor and marginal range were identified for this mitigation proposal. This would provide an opportunity through mitigation to increase their function and provide an overall stream quality improvement over existing conditions. The goal of the stream mitigation is to provide in-stream habitat and to construct stable stream systems that convey the bankfull discharge and sediment supplied by the watershed. For the mitigation streams, the improvement in stream quality would result from addressing bank erosion, installing in-stream habitat structures, and creating flood prone areas to promote overbank flooding where streams are currently entrenched. The intermittent stream would have a riparian zone width of at least 100 feet through the planting and minimizing impacts to the existing canopy. Ephemeral streams would have a minimum riparian zone width of 50 feet.

It is noted that this proposed mitigation plan is open to comment and subject to change. The Corps will make a determination of appropriate mitigation, upon review of all submitted information.

REVIEW PROCEDURES: A DA Permit cannot be issued if any legally required Federal, State, or local authorization or certification is denied. A DA permit, if otherwise warranted, will not be issued until a State of Illinois Water Quality Certification or waiver is on file at this office. In order to comply with Section 401 of the Clean Water Act, the applicant, by this notice, hereby applies for State certification from the Illinois Environmental Protection Agency (ILEPA).

Copies of this notice are sent to the appropriate Federal and State Fish and Wildlife Agencies. Their views and comments are solicited in accordance with the Fish and Wildlife Coordination Act of 1956. Based on available information, the proposed activity will not destroy or endanger any Federally-listed threatened or endangered species or their critical habitats, as identified under the Endangered Species Act, and therefore, initiation of formal consultation procedures with the U.S. Fish and Wildlife Service is not planned at this time.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. A request for a public hearing must state the specific interest which might be damaged by issuance of the DA Permit.

The National Register of Historic Places has been examined, and it has been determined that there are no properties currently listed on the Register which would be directly affected by the proposed work. If we are made aware, as a result of comments received in response to this notice, or by other means, of specific archaeological, scientific, prehistorical, or historical sites or structures which might be affected by the proposed work, the District Engineer will immediately take the appropriate action necessary pursuant to the National Historic Preservation Act of 1966 - Public Law 89-665 as amended (including Public Law 96-515).

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered; among those are conservation, economics, aesthetic values, general environmental concerns, historic values, fish and wildlife values, flood damage prevention, land use, navigation, recreation, water supply, water quality, energy needs, safety, food production, and in general, the needs and welfare of the public. In addition, the evaluation of the

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impact of the activity on the public interest will include application of the guidelines (40 CFR Part 230) promulgated by the Administrator, United States Environmental Protection Agency, under authority of Section 404(b) of the CWA.

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 proposed activity. It is presumed that all interested parties and agencies will wish to respond; therefore, a lack of response will be interpreted as meaning that there is no objection to the proposed project. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. 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 proposed activity.

Written statements received in this office on or before the closing date will become a part of the official record and will be considered in the determination on this permit request. Any objections which are received during this period will be forwarded to the applicant for possible resolution before the determination is made whether to issue or deny the requested DA Permit. A permit will be granted unless its issuance is found to be contrary to the public interest.

Information pertaining to this application is available for public examination during normal business hours upon prior request. Drawings are available on Louisville District's Internet site at <http://www.lrl.usace.army.mil/Missions/Regulatory.aspx>. All comments regarding this proposal should be addressed to Mr. Matt Dennis, CELRL-OPF-W at the address noted above and should refer to the Public Notice Number LRL-2013-907-mad.

If you desire to submit your comments by email, you must comply with the following:

a) In the subject line of your email, type in **ONLY** the Public Notice ID No. LRL-2013-907-mad.

Example:

Subject: LRL-2013-907-mad

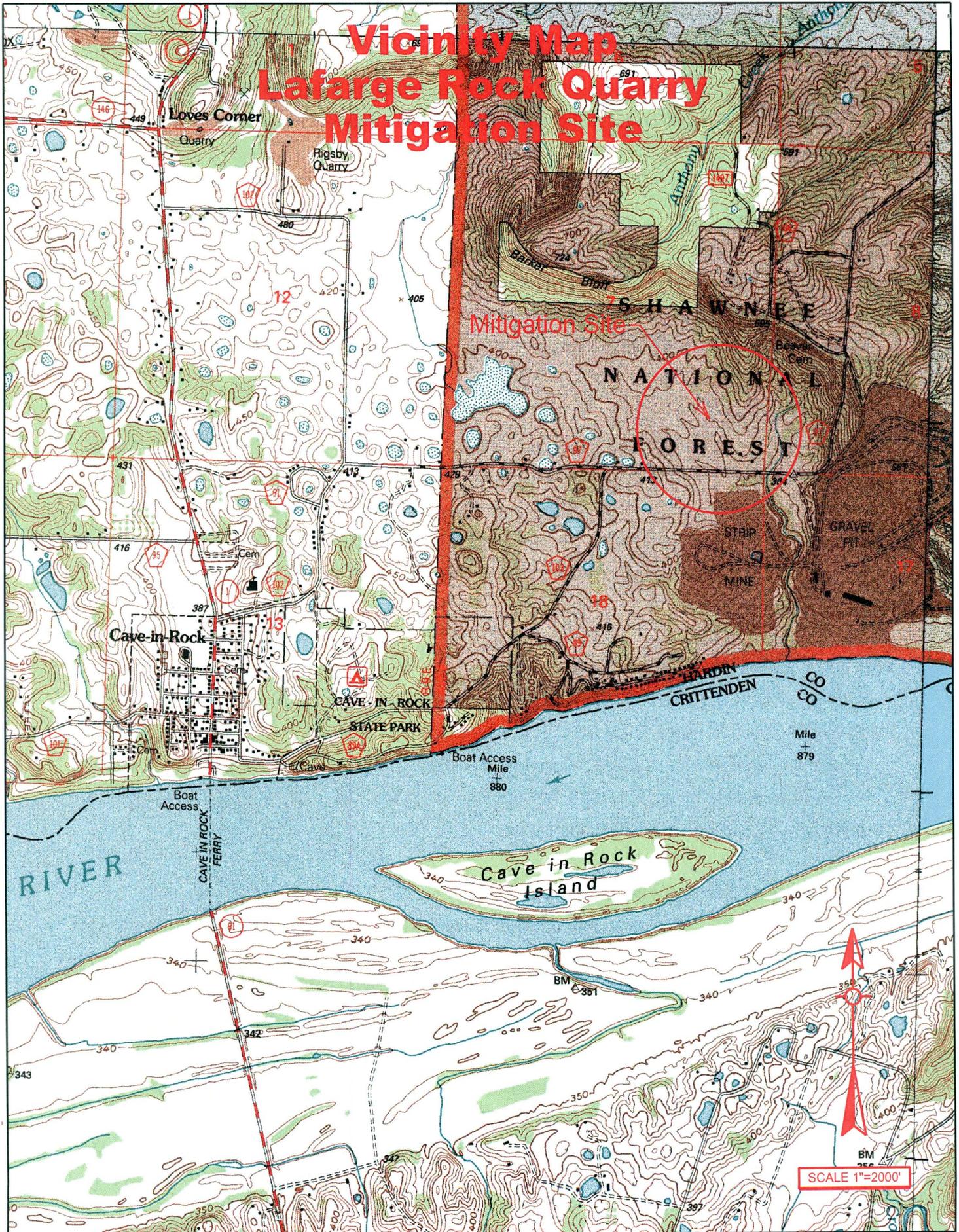
b) Provide your physical mailing address and telephone number.

c) Send your email to: lrl.regulatorypubliccomment@usace.army.mil.

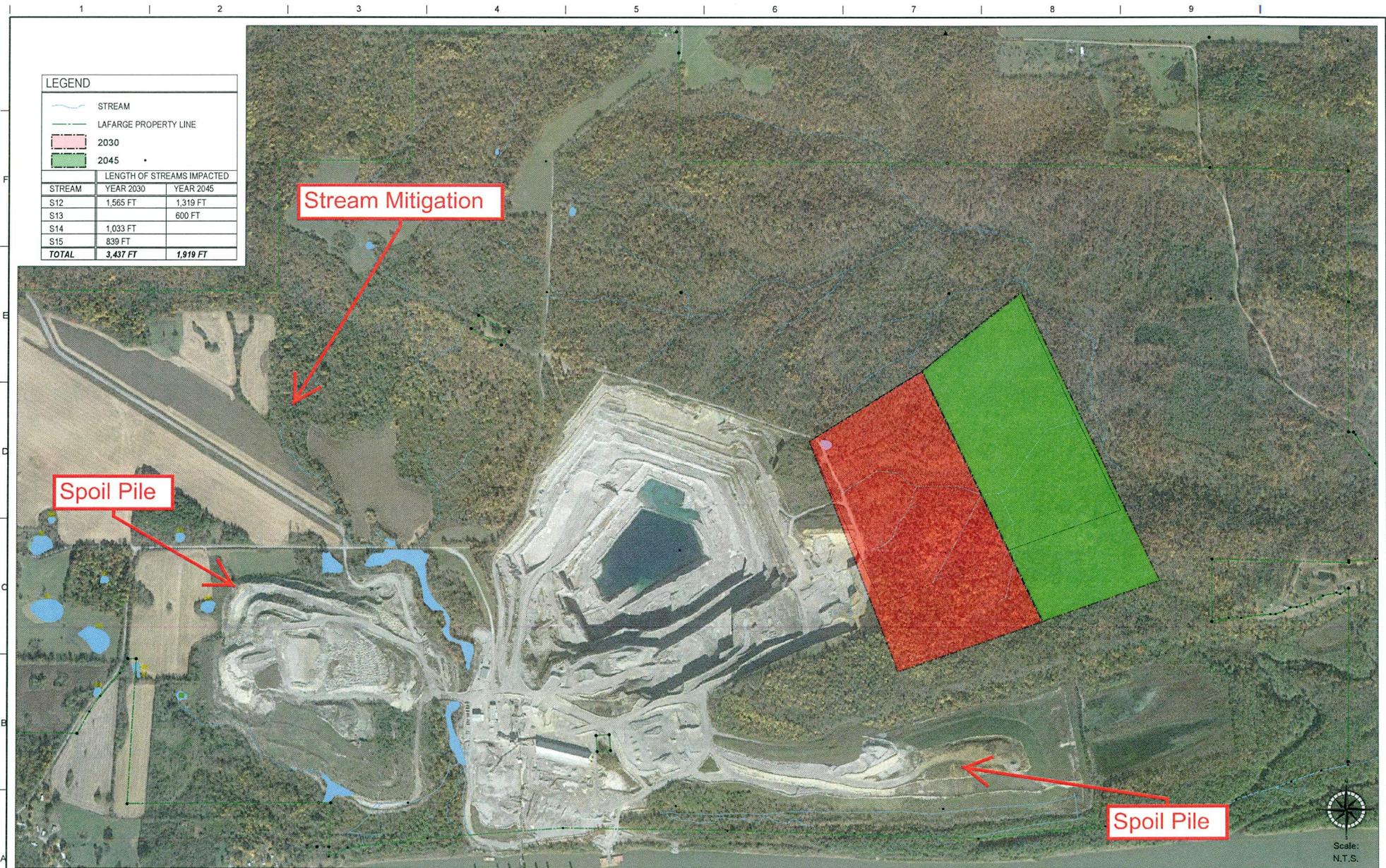
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d) If you are sending attachments greater than 1 Mb in size with your email, you must send a hard copy (CD or paper) to the Corps' physical address as well.

Vicinity Map Lafarge Rock Quarry Mitigation Site



T.H.E. Engineers, Inc.	PROJECT: LAFARGE ROCK QUARRY - OFF-SITE MITIGATION LOCATION COUNTY: HARDIN STATE: IL NEAR: CAVE IN ROCK	STREAMS: UT'S OF OHIO RIVER ITEM: VICINITY MAP EXHIBIT I
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LEGEND		
	STREAM	
	LAFARGE PROPERTY LINE	
	2030	
	2045	
LENGTH OF STREAMS IMPACTED		
STREAM	YEAR 2030	YEAR 2045
S12	1,565 FT	1,319 FT
S13		600 FT
S14	1,033 FT	
S15	839 FT	
TOTAL	3,437 FT	1,919 FT

Spoil Pile

Stream Mitigation

Spoil Pile



Scale:
N.T.S.

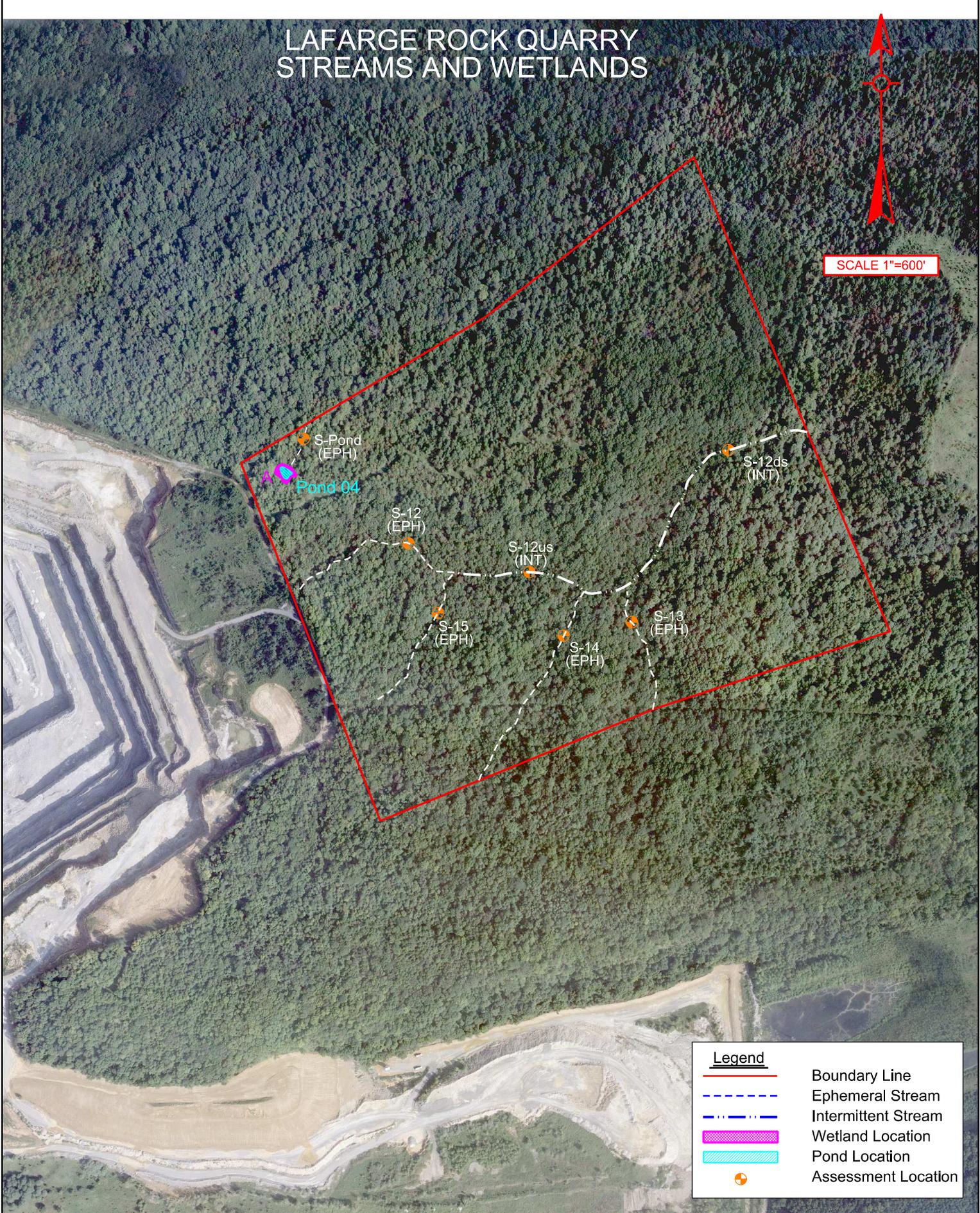
CONSULTANTS:		SEAL:	SHEET TITLE:		PROJECT TITLE: LAFARGE SITE PLAN - FUTURE MINING ZONES - 2030 & 2045	PROJECT NUMBER: JDH-0014	ENGINEER: JDH, Inc.
REVIEW:					LOCATION: CAVE-IN-ROCK, IL	DRAWING NUMBER:	R.R. 1 BOX 168 CAVE-IN-ROCK, IL 62919 PHONE: 317.374.3655
REVISIONS:	DATE: 03/04/14				DATE: MARCH 04, 2014	CHECKED: JDH	DRAWN: JDR

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LAFARGE ROCK QUARRY STREAMS AND WETLANDS



SCALE 1"=600'



Legend	
	Boundary Line
	Ephemeral Stream
	Intermittent Stream
	Wetland Location
	Pond Location
	Assessment Location

T.H.E. Engineers, Inc.	PROJECT: LAFARGE ROCK QUARRY		STREAMS: UT'S OF ANTHONY CREEK		
	COUNTY: HARDIN	STATE: IL	NEAR: CAVE IN ROCK	ITEM: AERIAL	EXHIBIT 2

**LAFARGE ROCK QUARRY SITE
SUMMARY OF IMPACTS**

Site number	Latitude	Longitude	Cowardin Class or Flow Regime	Drainage Area (ac.)	Impact Length or Acreage
S-12ds	37°29'4.1' N	88°6'42" W	Intermittent	117.42	1464 linear feet
S-12 us	37°28'57.8"N	88°7'0.3" W	Intermittent	34.22	500 linear feet
S-12	37°28'59.2"N	88°7'4.2" W	Ephemeral	14.43	920 linear feet
S-13	37°28'56.4"N	88°6'50.4" W	Ephemeral	32.48	600 linear feet
S-14	37°28'55.2"N	88°6'53.4" W	Ephemeral	21.61	1033 linear feet
S-15	37°28'53.8"N	88°7'3.2" W	Ephemeral	12.61	839 linear feet
S-Pond	37°29'6.2" N	88°7'10.6" W	Ephemeral	2.34	217 linear feet
Pond 04	37°29'07" N	88°7'12.1" W	Open water		0.056 acres
Wet A			PFO1E		0.080 acres

Totals:

Intermittent = 1964 ft.
 Ephemeral = 3609 ft.
 Wetlands = 0.080 ac.
 Open waters = 0.056 ac.

LaFarge Rock Quarry Site Proposed Stream Mitigation

Notes:

Existing Channel and Overbanks Areas for Channels 'E1 US', 'E1 DS', and 'E2' Shall be Completely Regraded to Blend in With the Adjacent Floodplain. Existing Trees, Shrubs and Vegetation Adjacent to the Streams Shall be Grubbed and Cleared. A Moderate Compactive Effort Should be Applied to Areas Where Existing Channel Beds are Filled. Once These are Sufficiently Compacted and Leveled the Proposed New Channel Can be Constructed According to the Plan Form and Geometry Shown on Typical Meander Patterns and Typical Riffle Cross Sections. Once the Channels are Constructed, Structures Shall be Placed in Accordance With the Typical Profile View.

Construct Rosgen Type 'B' Channel Between B and D. See Typical Cross Section for 'E1 US'. Construct Entire Channel Below Flood Prone Depth Shown on Cross Section.

Provide Smooth Transition for Channel and Flood Prone Areas Above and Below Confluence.

Newly Constructed Channel to Tie Into Existing Channel Bed Elevation With Smooth Transition for Banks and Channel. The Existing Stream Bed Elevation at This Location Shall Control Upstream Bed Elevations for Constructed Ephemeral Channels.

Create Minimum 2.5' Bench 1' Above Existing Streambed Between 'A' and 'X'. See Typical Cross Section 'C'.

Create Minimum 7.0' Bench 1' Above Existing Streambed Between 'X' and 'Y'. See Typical Cross Section 'B'.

Existing Location of Intermittent Stream Between Station 3+00 to Station 20+64.

See Notes for Station 0+00 to 3+00

Existing Stream Bed
Clean Out Existing Culvert
Minimum 90' Clear Area Between the Roadway and Near Top of Stream Bank

SCALE 1"=300'

Transition Tributary Channel into 'E1 US' with Smooth Transition Formed for Stream Bed and Banks. Place 20' of Rock Rip Rap/Boulders in Side Tributary Along Bank Slopes and Channel Bed.

Transition Existing Channel to Proposed Channel

Proposed 'E1 US'

Riparian Zone

Proposed 'E2'

Construct Rosgen Type 'E' Channel Between B and C. See Typical Cross Section for 'E2'. Construct Channel Below Bankfull Depth Shown on Cross Section.

Construct Rosgen Type 'E' Channel Between A and B. See Typical Cross Section for 'E1 DS'. Construct Channel Below Bankfull Depth Shown on Cross Section.

General Notes:

Work on the Intermittent Stream Shall be Limited to the Right Bank Where a Bench is Proposed. Access to the Stream May be Along the Corridor Cleared and Grubbed for the Bench Excavation. Otherwise, Access Should be Limited to Only That Needed to Place and Construct the Structures Shown. Existing Trees With DBH (Diameter at Breast Height) Greater Than 10" Shall be Left Undisturbed as Much as Possible. All Disturbed Areas Shall be Seeded and Trees Planted in Accordance With the Riparian Zone Planting Notes and Details.

To Facilitate the Placement of Structures in the Intermittent Channel, Existing Fallen Trees and Debris Should be Removed From the Stream.

Where Small Field Drains Enter the Main Intermittent Stream, Place Rock Rip Rap/Boulders From the Confluence to 20' Upstream in the Tributary. Boulders Shall be Placed to Armor the Banks to no More Than 2' Above the Existing Stream Bed and Allow Flow to Cascade Through the Boulders. Forming a Smooth Bed With Placed Boulders is not Desirable.

Notes:

Between Station 0+00 to Station 3+00 Relocate the Existing Stream as Shown. Refer to the Intermittent 1 Typical Riffle Cross Section for Dimension for the Relocated Stream.

Tie the Relocated Stream to the Existing Stream Bed at the Upstream Limit of the Relocated Stream Near Station 3+00. Tie the Downstream Relocated Stream Bed to the Bottom of the Existing Roadway Culvert Once Cleaned Out. Provide a Constant Bed Slope for the Relocated Channel Defined by the Stream Bed Elevations at Station 0+00 and Station 3+00 and the Distance From These Two Points Along the Centerline of the Relocated Stream.

For the Channel Relocation Below Station 3+00 Plant One Row of Trees Along the Right Bank. The Remainder of the 100' Riparian Zone Shall be Created Along the Left Bank.

**T.H.E.
Engineers, Inc.**

PROJECT: LAFARGE ROCK QUARRY-PROPOSED MITIGATION

ITEM: PROPOSED MITIGATION

COUNTY: HARDIN

STATE: IL

NEAR: CAVE IN ROCK

ITEM: AERIAL

EXHIBIT 3