

December 28, 2012

Mr. Kent Wilkins
Assistant Chief
Planning and Management Division
Oklahoma Water Resources Board
3800 N. Classen Boulevard
Oklahoma City, OK 73118

**Subject: Site Specific Water Management and Conservation Plan
Hanson Aggregates LLC - Davis Quarry, Murray County, OK**

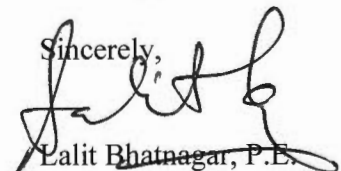
Dear Mr. Wilkins:

As per our December 27, 2012 consultation discussion with OWRB Staff (yourself, Mr. Christopher R. Neel and Ms. Maria A. Moreno) at OWRB's Office regarding the Site Specific Water Management and Conservation Plan (Management Plan) for Hanson Aggregates' Davis Quarry, enclosed please find the updated Management Plan.

Hanson is submitting this Management Plan after consultation with OWRB in complete conformance with the applicable 82 O.S. 1020.2 requirements and Proposed O.A.R 485:30-15 Rules. The Management Plan will be revised, as needed, pending OWRB's issuance for final O.A.R 485:30-15 rules and/or to accommodate changes at Davis Quarry during the life of the mine to affirmatively maintain "exempt mine" status and to update information as needed.

Also, as per our discussion, Davis Quarry, located in Sections 3, 10 & 11, T1S, R1W, has exclusively mined Rhyolite, a Precambrian-Cambrian Igneous Rock, and is located outside the Arbuckle-Simpson Aquifer Outcrop. A copy of the Circular 91 Map showing Davis Quarry location is enclosed as Figure 1. Further, there is no known contiguous aquifer from the Arbuckle-Simpson Aquifer Outcrop in this area of Davis Quarry (Figure 2). Therefore, **we would also like to submit for OWRB's Review and Approval that Davis Quarry is "exempt" from all 82 O.S. 1020.2 requirements.**

Please contact the undersigned at (972) 814-4122 or **Hanson Aggregates LLC, 8505 Freeport Parkway, Suite 500, Irving, TX 75063**, for any further assistance.

Sincerely,

Lalit Bhatnagar, P.E.
Environmental Manager

Enclosures



HANSON AGGREGATES LLC

“EXEMPT MINE” SITE SPECIFIC WATER MANAGEMENT & CONSERVATION PLAN (“Management Plan”)

Prepared For:

**Hanson Aggregates LLC & Predecessor Entities
Davis Quarry (ODOM Mining Permit: LE-1277-A)
2050 Woodland Road
Davis, Murray County, OK 73030**

Prepared By:

Lalit Bhatnagar, P.E.
Environmental Manager
Hanson Aggregates LLC
8505 Freeport Parkway, Suite 500
Irving, TX 75063 (972) 653-3735

**OWRB Consultation Date: 12/27/2012
Management Plan Submittal Date: 12/28/2012**

1.0 Introduction

The Hanson Aggregates LLC's Davis Quarry (hereinafter "Davis Quarry"), located in Murray County, Oklahoma, is an "exempt mine"¹ permitted by Oklahoma Department of Mines under Mining Permit LE-1277-A. Davis Quarry is located in the general area of Arbuckle Anticline (or "Western Lobe") of the Arbuckle-Simpson Aquifer. Davis Quarry, located in Sections 3, 10 & 11, T1S, R1W, has exclusively mined Rhyolite, a Precambrian-cambrian Igneous Rock, and is located outside the Arbuckle-Simpson Aquifer Outcrop². A copy of the Circular 91 Map showing Davis Quarry location is enclosed as Figure 1. Further, there is no known contiguous aquifer from the Arbuckle-Simpson Aquifer Outcrop in this area of Davis Quarry (Figure 2). Therefore, we would also like to submit for Oklahoma Water Resources Board (OWRB)'s Review and Approval that Davis Quarry is "exempt" from all 82 O.S. 1020.2 requirements³.

Hanson Aggregates' Staff has prepared this Site Specific Water Management & Conservation Plan ("Management Plan") upon consultation with OWRB on December 27, 2012. This Management Plan is prepared in complete conformance with the applicable 82 O.S. 1020.2 requirements and Proposed O.A.R 485:30-15 Rules. The Management Plan will be revised, as needed, pending OWRB's issuance for final O.A.R 485:30-15 rules and/or to accommodate changes at Davis Quarry during the life of the mine to affirmatively maintain "exempt mine" status and to update information as needed.

2.0 Characterization of Area, Plot Plan

Please refer to attached Figure 3 for further details regarding (A) Location of the current mining pit; (B) Location(s) of the processing facilities; and (C) Old Mined Out Pits are currently used for collection, settling and retention impoundments. Location(s) of these impoundments are shown.

3.0 Facility layout; water flow diagram

Davis Quarry utilizes diffuse stormwater by collecting it in the on-site impoundments for Dust Suppression and Rock Washing operations in a closed loop system. There is no groundwater in the Pit area and Pit area is dry. There are no plans for any groundwater wells and/or stream water diversion points. Please refer to attached Figure 3 for further details regarding (A) All water collection, settling and retention impoundments; (B) Direction of all major water flow between the impoundments; (C) Facility can augment stream water in Squirrel Creek via unnamed tributaries through Outfall 001 and is shown. Additional stream water augmentation points may be added in the future as needed; (D) Existing Impoundments PW01 and PW02 are old unlined quarry pits and could be potential groundwater recharge points; and (E) The water at the mine site could be consumptively used anywhere on the property. Please refer to Figures 3 and 4 for further details regarding approximate locations and quantities of consumptive use.

¹ Pursuant to 82 O.S. 1020.2.C.

² Oklahoma Geological Survey Circular 91, Plate 1 of 2.

³ Pursuant to 82 O.S. 1020.2.B.

4.0 Water Budget; anticipated flow of water into and out of mine site

Davis Quarry utilizes diffuse stormwater by collecting it in the on-site impoundments for Dust Suppression and Rock Washing operations in a closed loop system. There is no groundwater in the Pit area and Pit area is dry. There are no plans for any groundwater wells and/or stream water diversion points. Please refer to attached Figure 4 for further details regarding (A) Water flow entry and exit points; (B) Precipitation runoff; (C) Evaporation; and (D) Augmentation.

5.0 Water rights information

Davis Quarry utilizes diffuse stormwater by collecting it in the on-site impoundments for Dust Suppression and Rock Washing operations in a closed loop system. There is no groundwater in the Pit area and Pit area is dry. There are no plans for any groundwater wells and/or stream water diversion points. Therefore, there are no groundwater or stream water permits required. Given the long life of Davis Quarry, additional Water Rights may be added or other sources of water may be added during the life of mine.

Following is the additional information:

- (A) Permit or application number - NONE;
- (B) Entity name – Hanson Aggregates LLC and predecessor entities;
- (C) Permitted amount – Since Davis Quarry is an “exempt mine” per 82 O.S. 1020.2, Davis Quarry is entitled to consumptively use groundwater portion of the mine pit upto the amount equal to equal proportionate share of maximum annual yield of the groundwater basin or subbasin for the dedicated acres; and
- (D) Dedicated acres – 1975.9 Acres more or less.

6.0 Consumptive use of pit water

Davis Quarry utilizes diffuse stormwater by collecting it in the on-site impoundments for Dust Suppression and Rock Washing operations in a closed loop system. There is no groundwater in the Pit area and Pit area is dry. After the rain events, there may be incidental seeps in the exposed mined area for short duration. Existing Impoundments PW01 and PW02 are old unlined quarry pits and could be potential groundwater recharge points as well as sources of incidental seeps. Please refer to Figure 4 showing the estimate of consumptive use of water at Davis Quarry. This estimate is derived from the guidelines to estimate consumptive use of water set forth in OAR 485:30-15.

7.0 Determination of water amounts

Davis Quarry will monitor or make a reasonable estimate of various water inflow and outflows to develop a reasonable estimate of consumptive use at the facility. Methods used may change over time. Following are the additional details:

- (A) Groundwater that enters the pit – There is no groundwater in the Mining Pit at this time. In the event there is groundwater that enters the pit, any water pumped from the mine pit sump will be monitored periodically using a portable flow meter to develop the reasonable estimate of flow when the pump is running and pump run hours will be maintained to develop total amount of groundwater that enters the pit;
- (B) Surface water that enters the pit – On-site rain gage will be maintained on-site and

monitored. Hanson may choose to monitor precipitation from the nearest publically available Mesonet station. SCS or other engineering method will be used to estimate amount of surface water that enters the pit;

(C) Water that is diverted from the pit – Most of the water from the pit drains to the PW01 and PW02 impoundments at Davis Quarry. Any additional pumping of water from the Pit will be monitored or estimated using pump run hours and flow estimate using portable flow meter.

Once a reasonable flow estimate from a pump is available, only pump run hours will be used;

(D) Disposition of the water from the pit – Davis Quarry utilizes water in a closed loop system from impoundments PW01 and PW02 for dust suppression and rock washing;

(E) Consumptive use of the water from the pit - Davis Quarry utilizes water in a closed loop system from impoundments PW01 and PW02 for dust suppression and rock washing. Amount of water used for dust suppression, evaporation, groundwater recharge, stream augmentation; and rock washing will be monitored or reasonably estimated to develop Consumptive use of water from the pit;

(F) Water diverted from a stream or pond – None. Water diverted from Impoundments F01 and F02 is already accounted for as described above;

(G) Groundwater pumped from water wells - None;

(H) Water discharged to a stream – There is only one (1) stream augmentation location at Davis Quarry. Since the Davis Quarry uses water in a closed loop system, the amount of any water discharged to a stream is expected to be minimal. Stream augmentation, if deemed necessary by Hanson for credits against amount of consumptive use of pit water, will include that any water pumped to a stream will be monitored periodically using a portable flow meter to develop the reasonable estimate of flow when the pump is running and pump run hours will be maintained to develop total amount of water discharged to a stream. Since there are no stream gauges on Squirrel Creek StreamStats will be used to record creditable stream augmentation credits using calculations/methods similar to OAR 785:30-15-5(a);

(I) Water recharged to the aquifer – Impoundments PW01 and PW02 are the potential water recharge features to the aquifer. Recharge calculations, if deemed necessary by Hanson for credits against amount of consumptive use of pit water, will include use of a staff gage or other comparable measuring device and calculations similar to OAR 785:30-15-5(b)(4). One time water balance demonstration will be made prior to accrual of groundwater augmentation credits as per OAR 785:30-15-5(b)(2).

(J) Precipitation at the mine site – Rain gage or nearest publically available Mesonet data or other comparable method;

(K) Evaporation from all surface water – nearest publically available Mesonet data with lake or pan evaporation or other comparable method will be used; and

(L) Water obtained from other sources, such as municipalities, rural water districts, or other entities – Any water obtained from other sources will be monitored or estimated.

8.0 Implementation & Reporting

Initial Consultation Meeting with OWRB – 12/27/2012

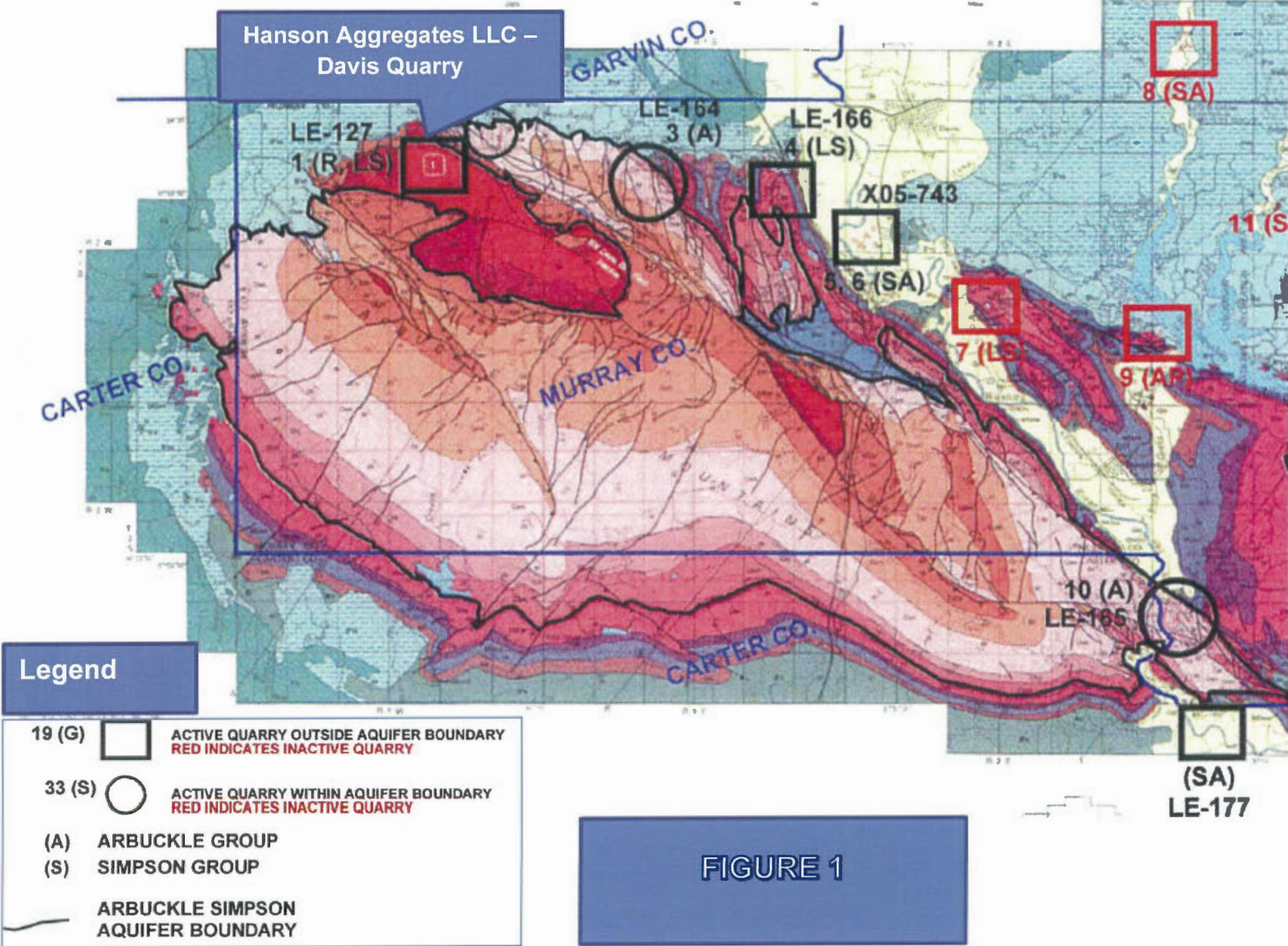
Submittal of Management Plan to OWRB – 12/28/2012

Implement the Management Plan at Davis Quarry – 1/1/2013

Quarterly Monitoring Reports – 6/30/2013 for Q1-2013; End of the following quarter.

Annual Monitoring Reports – March 31st of the following year.

ADAPTED FROM: Geologic Map and Section of Arbuckle Mountains of Oklahoma by William E. Ham, Myran E. McKinley and Others, 1954, Revised by Kenneth S. Johnson, 1990 (Oklahoma Geological Survey Circular 91 – Plate 1 of 2).



ADAPTED FROM: OWRB Arbuckle Simpson Map Viewer specifically excluding (hatched area) from the Arbuckle Simpson Aquifer Outcrop

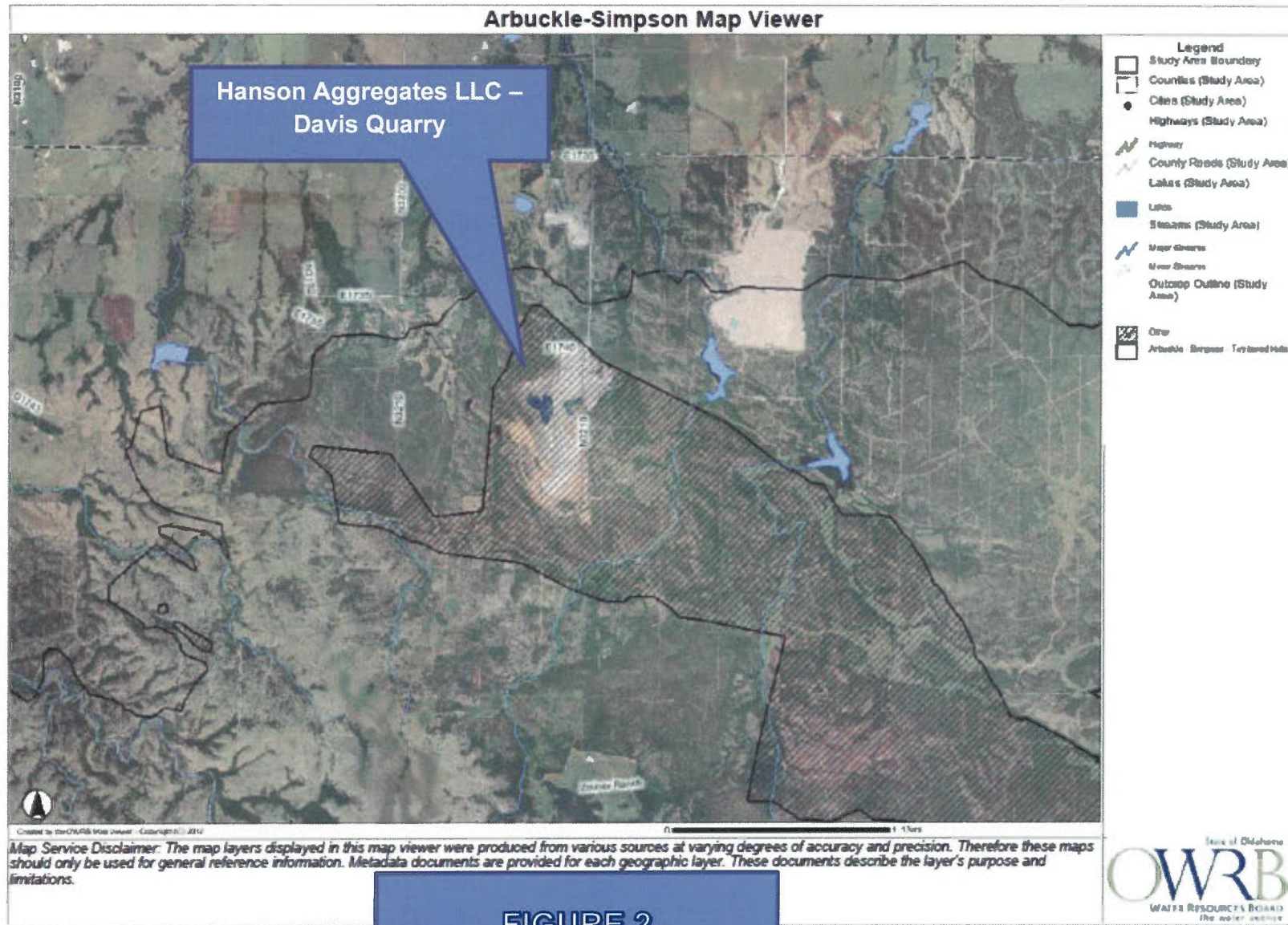
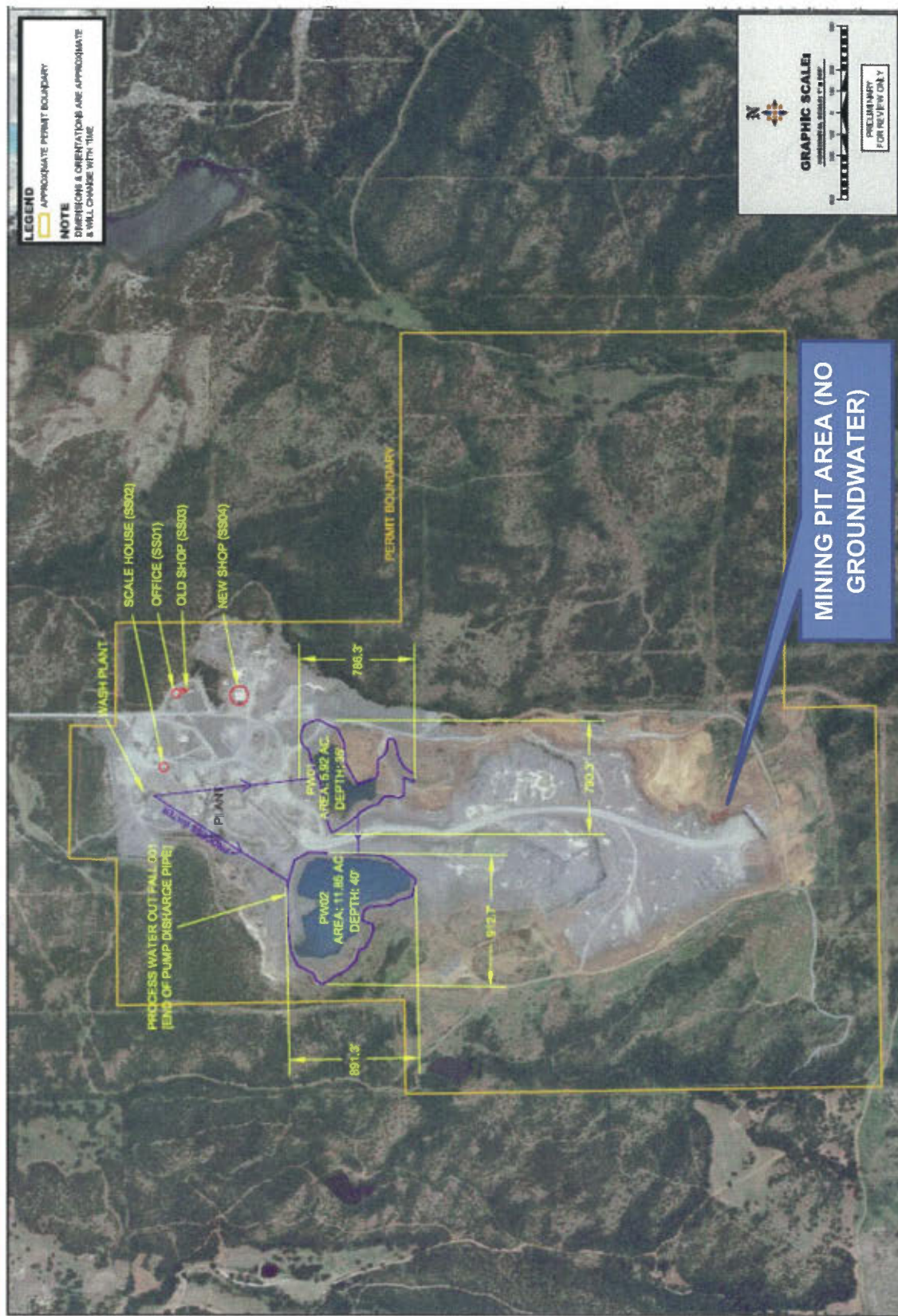
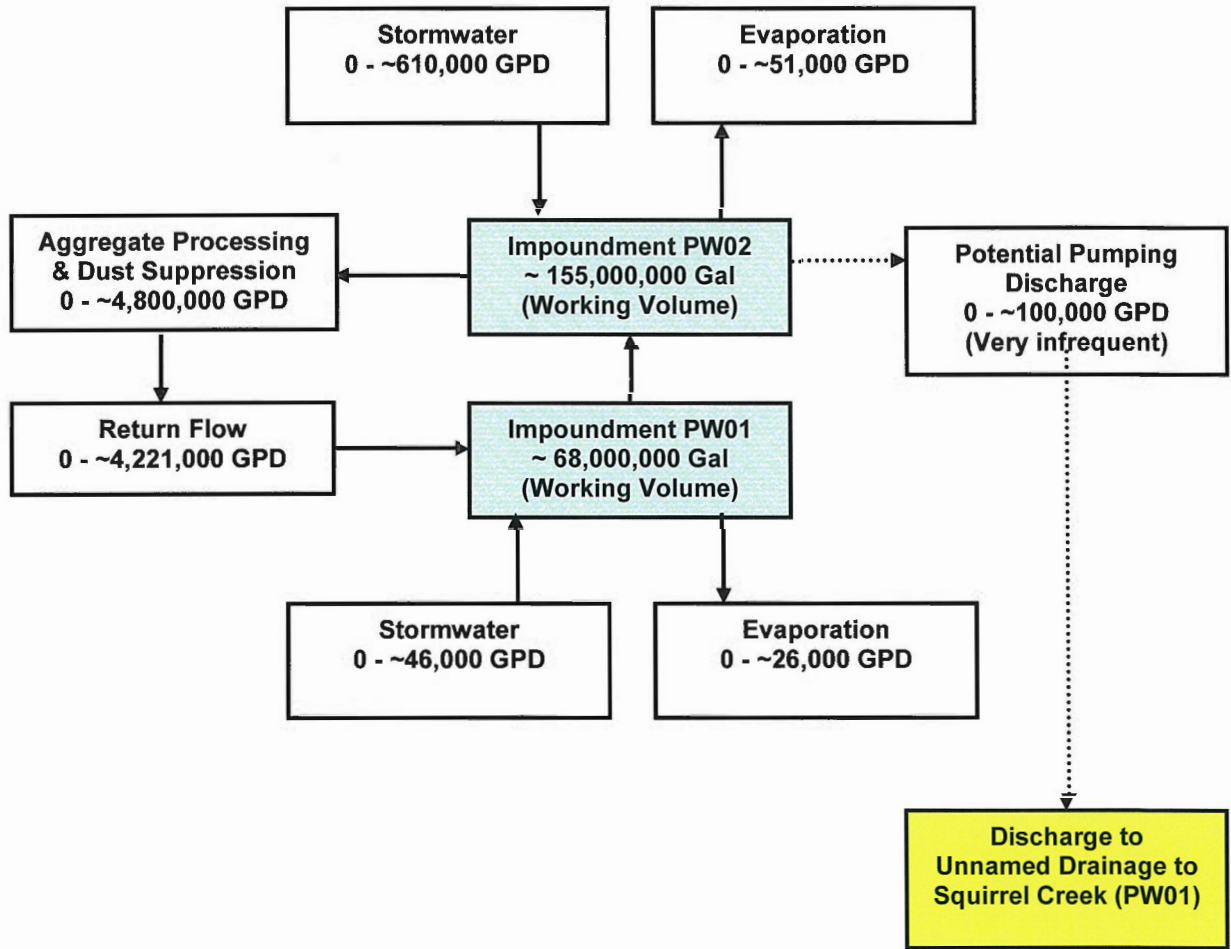


FIGURE 2

FIGURE 3





Potential pathway>
 Direct pathway ———>