

## Fee Schedule

Application & Recording Fees – Source Code 5671 - PCA - 13743  
Special Reclamation Fund Fees- Source Code 5671 – PCA - 13750

Check category (ies) on page for which application is made, fill in the blanks, and remit necessary fees.

## **ORIGINAL APPLICATION**

**Amount Remitted**

1) New Acreage Fee \$ 12 x \_\_\_\_\_ acres (\$1,000 Maximum) \_\_\_\_\_  
2) Special Reclamation Fund Fee: \$30 x \_\_\_\_\_ acres + \_\_\_\_\_  
3) Right of Entry Agreement Recording Fee: \$60.50 + \_\_\_\_\_  
TOTAL= \$ \_\_\_\_\_

**MODIFICATION APPLICATION- NO ADDITIONAL ACREAGE**

## **MODIFICATION APPLICATION- ADDING NEW ACREAGE**

1) Modification Fee: \$ 100.00	<u>\$100.00</u>
2) New Acreage: \$ 12.00 x <u>1.83</u> new acres (\$1,000 Maximum)	+ <u>\$21.96</u>
3) Reclamation Fee: \$ 30.00 x <u>1.83</u> new acres	+ <u>\$54.90</u>
4) New Right of Entry Agreement Recording Fee: \$60.50	+ _____
	TOTAL <u>\$ 176.86</u>

**TOTAL REMITTED= \$ 176.86**

Original Permit  Permit Modification

Permit No. 77-SP-0045

**APPLICATION AND MINING AND RECLAMATION PLAN  
FOR SURFACE MINING PERMIT**

**I. GENERAL INFORMATION AND FEES**

1. Name of applicant: **Laurel Sand & Gravel, Inc. T/A S.W. Barrick & Sons**
2. Current License Number: 14-SL-0005
3. Business Mailing Address: **P.O. Box 850  
Laurel, MD 20725**
4. Business Telephone Number: 410-792-7234  
Business Fax Number: 301-470-4075
5. Workers Compensation Insurance Number: WC626904
6. Name of Operation: (for example #1 pit or Smith Tract) **Barrick Quarry**
7. Location of Operation
  - a. County: **Frederick**
  - b. Travel Directions: **On Legore Bridge Road, 1/3 mile from the intersection with MD Route 194**
8. Name and address of surface land owner (s)  
**1111 19<sup>th</sup> St. Associates Ltd. Partnership  
P.O. Box 850  
Laurel, MD 20725**
9. Name and address of mineral owner(s) **Same as #8**
10. Email address: Tim@aggmgt.com  
Consultant Email: N/A

11. Commercial name of mined products and geological description of the mineral deposit:  
**Grove Limestone**

12. Starting date of mining operation: **1874**      Estimated closure date: **2100**

13. a) Acreage applied for in this application: **1.83**

b) Total acreage currently permitted: **280.58**

**Complete item 14 only if applying for a permit modification**

14. Reason for requesting modifications

<input type="checkbox"/> Change in planned land use	<input checked="" type="checkbox"/> Increased Land Area
<input type="checkbox"/> Change in schedule of reclamation	<input type="checkbox"/> Decreased land area
<input type="checkbox"/> Change in reclamation practices	<input type="checkbox"/> Other

Describe Reasons: **Adding 1.83 acres to allow quarry expansion in the northern corner. The area will be stripped in order to allow mineral extraction to extend to the limit of the limestone. We would also like to include the removal of two wash ponds in order to make additional room for stockpiles.**

## **II. SITE INFORMATION**

15) Present land use (s) of the affected acreage (check all that apply):

Agriculture     Pasture     Forest     Crops     Mining

Other (describe):

16) Existing land use (s) of all adjacent properties including any significant natural or man-made features  
(Check all that apply)

Agriculture     Pasture     Crops     Mining     Undeveloped Land

Forested Acres     Wetland Acres

Other (describe): **Roads (Steiner Smith Road and Legore Bridge Road)**

17) Proposed use(s) of the affected acreage following completion of mining  
(Check all that apply)

Vegetated Open Space       Agriculture       Forestry

Permanent Impoundment with Vegetated Side Slopes

Other: Describe thoroughly:

18) a) What is the existing zoning for the site? **Agriculture**

b) Is mineral extraction an accepted land use for this zoning classification?

Yes       No

c) Have all zoning approvals been obtained?  Yes       No

If No please explain:

19) Do the future intended uses given in question 17 comply with the present zoning?

Yes       No

If no Please explain:

20) Is the proposed mining site located in or within 200 feet of:

(a) The Critical Area

Yes       No

(b) Tidal Wetlands

Yes       No

(c) Nontidal wetlands

Yes       No

(d) The 100 year floodplain of nontidal streams

Yes       No

Will the proposed mining operation:

(e) Require the pumping of ground water or surface water?

Yes       No

\*For existing quarry, not for this modification area.

*If yes to any of the above other permits may be required*

21) List all permits and approvals required by State and local regulatory agencies with regard to air and water pollution, sediment control and zoning. Also **SUBMIT COPY** of sediment and erosion control plans and permits approved by the local Soil Conservation District and written confirmation of appropriate zoning.

Permit or Approval	Permit number	Date issued	Expiration Date
a. Soil Conservation District	N/A	10/22/2012	10/22/2017
b. Zoning	SP-86-40	10/08/1986	N/A
c. Water Appropriation Permits	FR-01-G001	10/01/2011	10/01/2023
d. Wetlands/ Waterway Construction Permit	90-WC-0522	06/18/1990	N/A
e. NPDES Discharge Permit	10-MM-1429	01/01/2011	04/30/2015
f. Other permits <b>Air Quality</b>	021-00001	01/01/2014	12/31/2018

22) Is there/ will there be any processing equipment or plants constructed within the permit area?

Yes       No

If Yes, explain the type and approximate location: Existing

23) Will a wash plant and/or wash water settling pond(s) be included in the permit area?

Yes       No

**Note:** If Yes, pond approval for all wash water ponds must be obtained before this permit is issued

If Yes, provide the following information for each impoundment:

- a) What is the drainage area contributing to each impoundment? **13.7 Acres to all ponds**
- b) Will the impoundment(s) be dugout or embankment type, or a combination of the two? **Dugout**
- c) What are the elevations of the principle spillway(s) and emergency spillway(s)  
Principle Spillway: 405  
Emergency Spillway: 406

d) What will the surface area, minimum and maximum depths of each impoundment be?

Surface Area: 22,500 ft<sup>2</sup>

Minimum Depth: 5 ft

Maximum Depth: 12 ft

\*Removed two ponds closest to plant area.

e) State the proposed water surface elevation, and how this elevation was determined.

≈405 ft as determined by overflow pipe directed to quarry

\*Pond overflow pipe that directs water to the unnamed tributary to Israel Creek has been capped.

f) Indicate the source of make-up water to the plant: **Pumped from Barrick and/or Legore Quarry to the two ponds.**

g) Indicate the clean out elevation of the pond(s). **½ Depth**

h) Where and how will he fines be disposed of? **Placed with stripped overburden or placed in Legore Quarry.**

i) Will the pond(s) remain at the completion of mining? If not how will they be reclaimed?  
**Ponds will be filled and vegetated**

### III. Site Preparation

24) Describe procedures for providing access to the mining area. Include length, width, construction materials, maintenance, etc. of entrance roads and haul roads.

**There will be no public access to the quarry since the processing plant is located within the permit boundaries. Haul roads are internal and will be maintained by grading.**

a) Indicate method(s) by which mud and dust will be controlled on haul and access roads:  
 Water Truck       Spray Bar       Power Broom & Scraper

Other: \_\_\_\_\_

**Note: Mud or dust tracked onto public roads shall only be cleared by broom or scraper. The material removed from the public roads shall be returned to the active pit. No material shall be washed from the public roads unless it is directed to an approved sediment control device.**

b) Indicate the methods for removal and disposal of trees and brush (check all that apply)

Taken to a MDE approved disposal site

Wind-rowed on-site within the permit boundary

Burned, after obtaining proper burning permits.

Other, describe: \_\_\_\_\_

c) State the number of acres cleared, grubbed and stripped of topsoil and overburden ahead of mining: **Topsoil and overburden is stripped to the extent necessary to expand the top bench. An area is stripped on the Steiner-Smith farm as it is used for reclamation. The topsoil is stockpiled for use to vegetate the incremental areas. If stockpiled for more than 14 days, it will be seeded.**

d) State the thickness (inches or feet) of topsoil/subsoil on site: **6 – 12 inches**

e) State the amount of topsoil (in cubic yards) to be conserved for reclamation and to be used in construction of visual/acoustical berms: **When topsoil is stripped it is placed on the finished grades of the farm reclamation. Any topsoil that is stockpiled is seeded within 14 days.**

f) Describe method of removal and storage location of the topsoil/subsoil on site. If there is little or no topsoil onsite, describe the alternative measures that will be used in lieu of topsoil during reclamation to provide a suitable growing medium. **Same as “e”**

g) State the thickness (inches or feet) of overburden on-site: **15-25 ft**

State the amount (in cubic yards) to be conserved for reclamation and used in visual/acoustical screening berms: **Berms are completed. Overburden is used to improve the Steiner-Smith farm.**

Briefly describe the material: **Clay, dirt, rock**

Describe method of removal and storage of overburden on-site: **Any stockpiled overburden is seeded within 14 days.**

25) Describe how the mining operation will be screened from public view: **Berms and vegetation**  
a) Will visual screening berms be constructed?  Yes  NO

If yes, provide the following information

Berm Dimensions:

Top Width: 30 ft Side Slope: 2:1 or flatter Height: 20 ft

Approximate Location: **Along MD Route 550 and a berm included in modification G, along Legore Bridge Road**

Sequence of Construction: **All berms have been completed.**

b) Buffer strip(s) - state width, whether there is existing vegetation or if additional vegetation will be planted. **Along Route 550 and Steiner Smith Road, 150'-175' wide and is vegetated**

c) Other methods of screening: **N/A**

26) Describe the methods proposed for protection of adjacent properties, including waters of the State, from runoff, sediment, and other conditions that would be hazardous to fish, plant, or animal life.  
**All added acreage will drain into the quarry which is used as a sediment basin. The reclamation of the Steiner-Smith farm has an approved sediment control plan and the traps will protect adjacent properties.**

27) Describe provisions for public safety and to adjoining property as mining progresses and how the site will be left at the end of each working day.

a) Provisions to prevent slumps, cave-offs, or landslides: **The highwalls will be sealed if necessary, but it is not likely to occur in this limestone. In addition, there will be benches every 50'-65'.**

b) Provisions to provide safety around the upper perimeter of all excavations or highwalls (i.e. fencing, warning signs, safety benches, etc.) **In addition to the berm, a 6' chain link fence has been installed around the quarry. NO TRESPASSING signs have been posted.**

c) Provisions to provide safety if site will have impounded water during mining.  
**Same as "b"**

#### IV. Mining Method

28) Indicate the type(s) of mining equipment to be used:

<input type="checkbox"/> Dredge	<input checked="" type="checkbox"/> Bulldozer	<input type="checkbox"/> Power Shovel
<input type="checkbox"/> Conveyor Belt	<input checked="" type="checkbox"/> Hydraulic excavator	<input checked="" type="checkbox"/> Explosives
<input checked="" type="checkbox"/> Self-loading pan	<input checked="" type="checkbox"/> "Off road" trucks	<input type="checkbox"/> Conventional Trucks
<input checked="" type="checkbox"/> Front-end loader	<input type="checkbox"/> Dragline	<input type="checkbox"/> Pipeline
<input type="checkbox"/> Other (specify): _____		

29) Fully describe the mining operation. At a minimum the following must be addressed.

- Site preparation- to include clearing and sediment control installation.

**Overburden is stripped in advance of mining. The majority of overburden has already been stripped, with only a small amount remaining in the corners of the permit area and the farm field which directs runoff toward approved sediment traps. Expansion of the quarry will be done in a way that directs all sediment into the quarry.**

• Mining Sequence- If phased provide sequence for each phase including reclamation. **Mining has progressed in a westerly direction from the original quarry hole. The upper bench is expanded to provide room to expand the lower benches. The bottom level of both Barrick and Legore Quarry will be used as reservoirs for makeup water for the plant.**

• Estimated mining depth and proposed mining method- Include number of benches and their dimensions for quarries.

**Currently, the quarry is worked in five levels, with the sixth used as a sump during periods of increased precipitation. Each level is 50-65 feet high with sufficient width to allow equipment to work safely.**

• What are the potential impacts to surrounding water supplies?

**A Zone of Influence has been established for the quarry.**

• Number of Acres proposed to be open, include mining, stripping, overburden storage, support and acres under active reclamation.

**The current active quarry pit is approximately 133 acres. The overburden is being placed in an adjacent farm field of approximately 128 acres. The remaining 20 acres include haul roads, the plant site, berm, and other support areas.**

- How and when will reclamation be completed?

**The proposed reclamation will allow the quarry to fill with water and become a reservoir. The remaining areas will be vegetatively stabilized. Reclamation of the quarry will not begin until mining has been completed. The overburden, product stockpiles, and wash pond areas will be stabilized within two years after completion of mining**

- Estimated cost per acre for reclamation in the active mining area (for unconsolidated material sites only).

**N/A**

## **V. RECLAMATION PLAN**

30) a) Describe how the surface gradient will be restored to a surface suitable for the proposed land use after reclamation. Include specifications on the gradient as well as maximum and minimum final slopes. **Final slopes of the berm, fill areas, and the top bench will be 2:1 or flatter. The benches that will be submerged will be mined out.**

b) Will final slopes (including highwalls) be constructed during mining or backfilled to proposed grades? **During mining for the lower benches and after mining for the top bench and surrounding area.**

c) If backfilled, describe material:

**Clay, dirt, rock**

d) State source(s) of backfill material: **Taken from the berm along Route 550 and/or Steiner Smith Farm.**

e) If back fill will be brought in from off-site, briefly describe the material, only clean fill may be authorized. (Note: Final grades of a site after reclamation may not exceed approximate pre-mining contours at the site except where post mining land use requires minimal variation and is approved by the Department.) **N/A**

31) How will highwalls remaining at the end of the mining operations be eliminated? **The top bench will be backfilled to 2:1. The lower benches will be mined out**

32) If a highwall can not be eliminated please complete the following:

a) What height and width will final highwalls be? **N/A**

b) State practices to be used to stabilize remaining highwalls: **N/A**

c) What provisions will be made to restrict access to highwalls (i.e., fencing, safety bench, etc.)  
**A chain link fence that has already been installed.**

d) What is the proposed source and elevation and final water elevation?  
**Surface (and some ground) water at 398.0 WSE**

e) What provisions will be made if mining is not carried out to completion? **The site will be reclaimed the same way.**

33) Will there be any metal or lumber, debris, old equipment, etc. left after completion of mining?

Yes       NO

a) If yes, specify the intended use or method disposal.

b) How will boulders and large rocks be disposed of after mining? **N/A**

c) Will any permanent buildings be left following completion of the operation? If yes, list and give intended use for such buildings. **The control building will be left. Its future is unknown.**

34) Manner and type of revegetation or other surface treatment of the affected areas. **Must specify both cool and hot weather seed mixes. Refer to the "Maryland Standards & Specifications for Soil and Erosion Control"**

a) Hot Weather Mix

1. Grasses (specify species)	Pounds/Acre
<b>Orchard Grass</b>	<b>60</b>
<b>Weeping Lovegrass</b>	<b>2</b>
2. Legumes (specify species)	Pounds/Acre
<b>Kobe Lespedeza</b>	<b>20</b>
3. Nurse Crop (fast growing annual grass or grain)	Pounds/Acre
<b>Annual Rye</b>	<b>2 ½ bushels</b>

b) Cool Weather Mix

1. Grasses (specify species)	Pounds/Acre
<b>Orchard Grass</b>	<b>60</b>
<b>Weeping Lovegrass</b>	<b>2</b>
2. Legumes (specify species)	Pounds/Acre
<b>Kobe Lespedeza</b>	<b>20</b>
3. Nurse Crop (fast growing annual grass or grain)	Pounds/Acre
<b>Annual Rye</b>	<b>2 ½ bushels</b>

c) Trees/vegetative fencing. Provide location and planting schedule. N/A

Species	Spacing	Acreage of Area Planted

d) Amount of lime, fertilizer, and mulch to be applied. **2 tons of lime, 600 lbs. 10-10-10 fertilizer, 2 tons of mulch**

e) Will sludge be applied?  Yes  No

If yes, have all appropriate approvals been obtained? \_\_\_\_\_

35) Describe the method of reclaiming settling ponds, wash ponds, sediment basins, and sediment traps.  
**NOTE:** Sediment Control Structures (basins, traps, etc.) can be removed [by the operator] upon approval from the Maryland Department of the Environment. **The wash ponds will be filled and vegetatively stabilized after the rest of the site has been stabilized.**

36) Will any stream channels or stream banks be disturbed by the mining operation?

Yes  No **Work already completed**

If yes please provide Wetlands & Waterways Construction permit number: **90-WC-0522**

37) Will permanent impoundments (ponds, lakes, sediment basins, etc.) be included in the final land form?  Yes  No

**\*Quarry Hole Only**

**NOTE:** IF yes, pond approval must be obtained prior to bond release

If Yes, provide the following information for each impoundment.

- a) What is the drainage contributing to each impoundment? **239.5 acres**
- b) Will the impoundment(s) be dugout type or dam, or a combination of the two? **dugout**
- c) What are the elevations of the principle spillway(s) and emergency spillway(s)? **unknown**

d) What will the surface area, minimum and maximum depths of each impoundment be?  
**127 acres; 200' minimum; 310' maximum**

e) State the proposed water surface elevation, and how this elevation was determined.  
**398 WSE, determined by water elevation of pre-existing streamway**

f) Indicate the major contributing source of water for each impoundment described above:

Groundwater       Surface Water

g) How will contamination of water in the permanent impoundment be prevented?  
**Quarry depth will prevent contamination**

h) How long will it take the quarry or impoundment to fill with water to the proposed elevation?  
**Unknown, although it is likely to be less than 3 years because all surface water is diverted to the quarry**

38) For operations in karst terrain located in Baltimore, Carroll, Frederick or Washington Counties, provide an analysis of the expected impact to water supplies and properties in the area.  
**Permit was modified by MDE by way of a Zone of Influence**

39) Complete Table 1. - For each item listed, fill in the number of acres and the expected starting date of construction for that item and date when that item is expected to be removed or reclaimed.

TABLE I SCHEDULE FOR COMPLETION OF MINING AND RECLAMATION					
Identification of How Lands Are To Be Affected	Number of Acres Within the Permitted Area	Expected Mining Dates Month/ Year		Expected Reclamation Date Month/ Year	
		Construction Date	Removal Date	Date to Begin	Date to Complete
Active Pit	134.94	existing	N/A	2100	2102
Haul Roads	1.00	existing	N/A	2100	2102
Topsoil Stockpile Areas					
Sediment Control Structures	1.40	existing	2100	2100	2102
Office – Shop					
Plant Site	13.50	existing	2100	2100	2102
Equipment Storage					
Waterways					
Overburden Stockpile Areas	127.88	existing	N/A	N/A	N/A
Refuse – Debris Storage					
Other (Specify) Berm	3.70	existing	N/A	existing	N/A
Total Acres (Must equal size of permit)	282.41				

## **VI. BLASTING PROCEDURE:**

**(Section IV is only to be completed for sites that require the use of explosives)**

40) Describe the basic elements of the production blasting procedure to be utilized at this site.

a) Blast hole diameter: **6 ½ inches**

b) Bench Height: **50-65 ft**

c) Stemming Height: **≈14 ft**

d) Burden: **≈ 18 ft**

e) Spacing: **≈ 17 ft**

f) Stemming Type: **crushed stone**

41) State the average number of holes and rows in a typical blast and the average amount of explosive used per delay. **35 holes; 3-4 rows per shot; 550-650 lbs per delay; Titan 1000G emulsion.**

42) How often will blasting occur for:

Production: **6/month**

Toe Shots: **N/A**

Strip Shots: **2/month**

How are oversize boulders handled? **Hydraulic breaker**

**Note: A written log must be maintained by the driller and presented to the blaster in charge prior to loading any holes.**

43) Describe how the blasts will be monitored for air blast and ground vibration.

**Seismograph location is moved around the perimeter of the quarry to monitor levels in all directions. Setup is between the shot and the nearest non-owned property.**

44) Will there be any blasting conducted within:

a) 1,000 feet of (check all that apply)

Church  Occupied dwelling  Hospital  
 School  Nursing facility  N/A

b) 100 feet of (check all that apply)

Public Road  Property Line  N/A

c) 500 feet of (check all that apply)

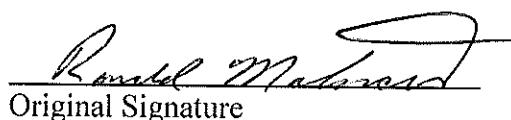
Disposal well  Petroleum or gas storage facility  
 Public water well or  Fluid transmission lines  
Water storage facility  
 Sewer Line  Underground/deep mine  
 N/A

I hereby certify that all information contained in the Application and Mining and Reclamation Plan is true and correct to the best of my knowledge and that any willful misrepresentation of facts will be a violation of Title 15, Subtitle 808 of the Environment Article, Annotated Code of Maryland, as amended and may be cause for penalty provided in the aforesaid section.

By submission of this application I hereby accept the responsibility of conducting the operation in accordance with the approved Mining and Reclamation Plan and maps, the conditions of the permit, and any applicable law and regulations.

**Ronald A. Matovcik, President**

Typewritten Name and Title

  
Original Signature

**01/13/14**  
Date