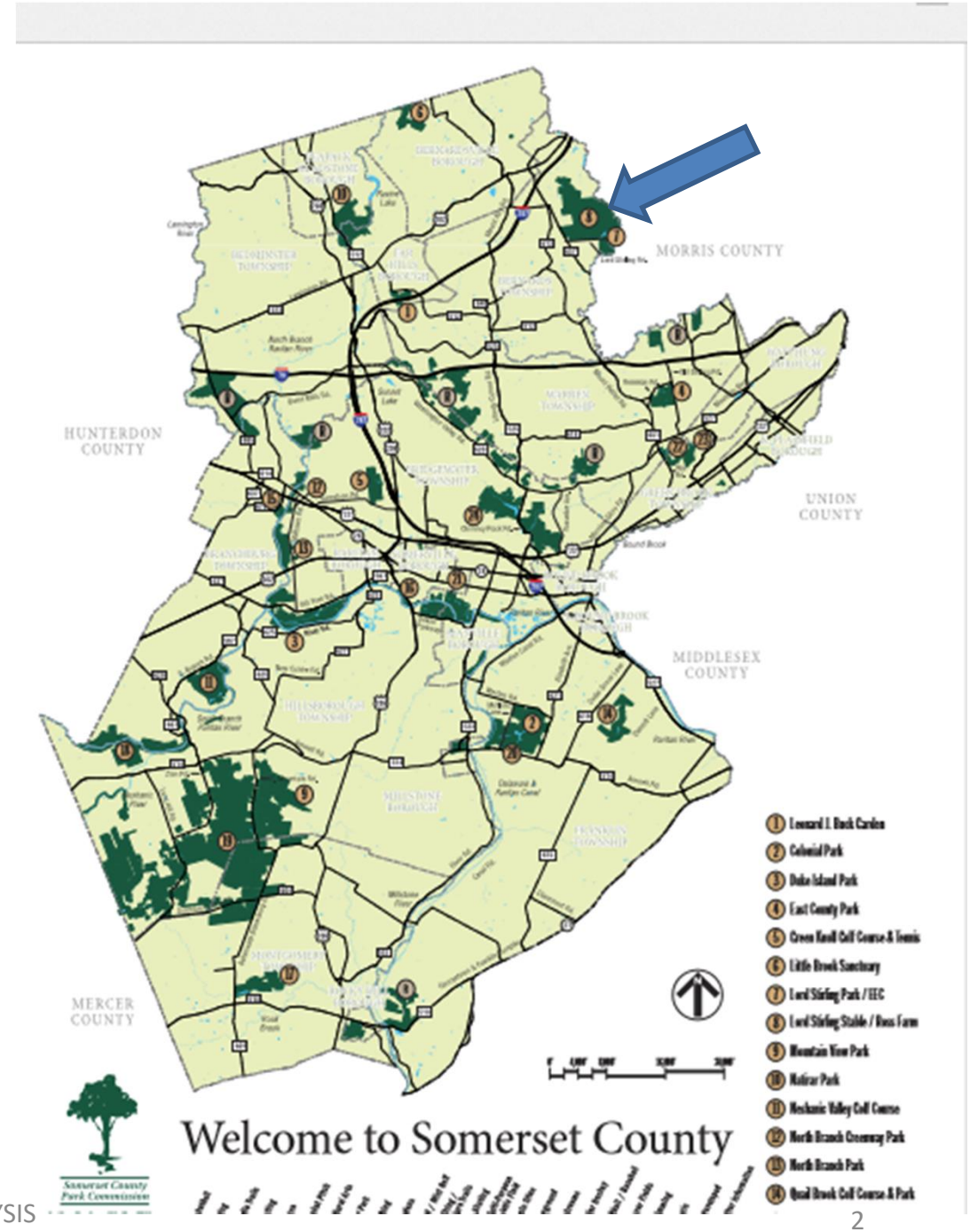
Lord Stirling Stable

256 S. Maple Avenue, Basking Ridge, NJ

DRAFT Manure Compost Sales Feasibility Analysis

April 20,2020

Analysis Prepared by Paul M. Drake, Candidate for Somerset County Freeholder


MORRIS COUNTY
HUNTERDON COUNTY
UNION COUNTY
MIDDLESEX COUNTY
MERCER COUNTY
Welcome to Somerset County
Somerset County Park Commission
1 Leonard J. Buck Garden
2 Colonial Park
3 Duke Island Park
4 East County Park
5 Green Knoll Golf Course & Tennis
6 Little Brook Sanctuary
7 Lord Stirling Park / EEC
8 Lord Stirling Stable / Ross Farm
9 Mountain View Park
10 Nature Park
11 Neshanic Valley Golf Course
12 North Branch Greenway Park
13 North Branch Park
14 Quail Brook Golf Course & Park

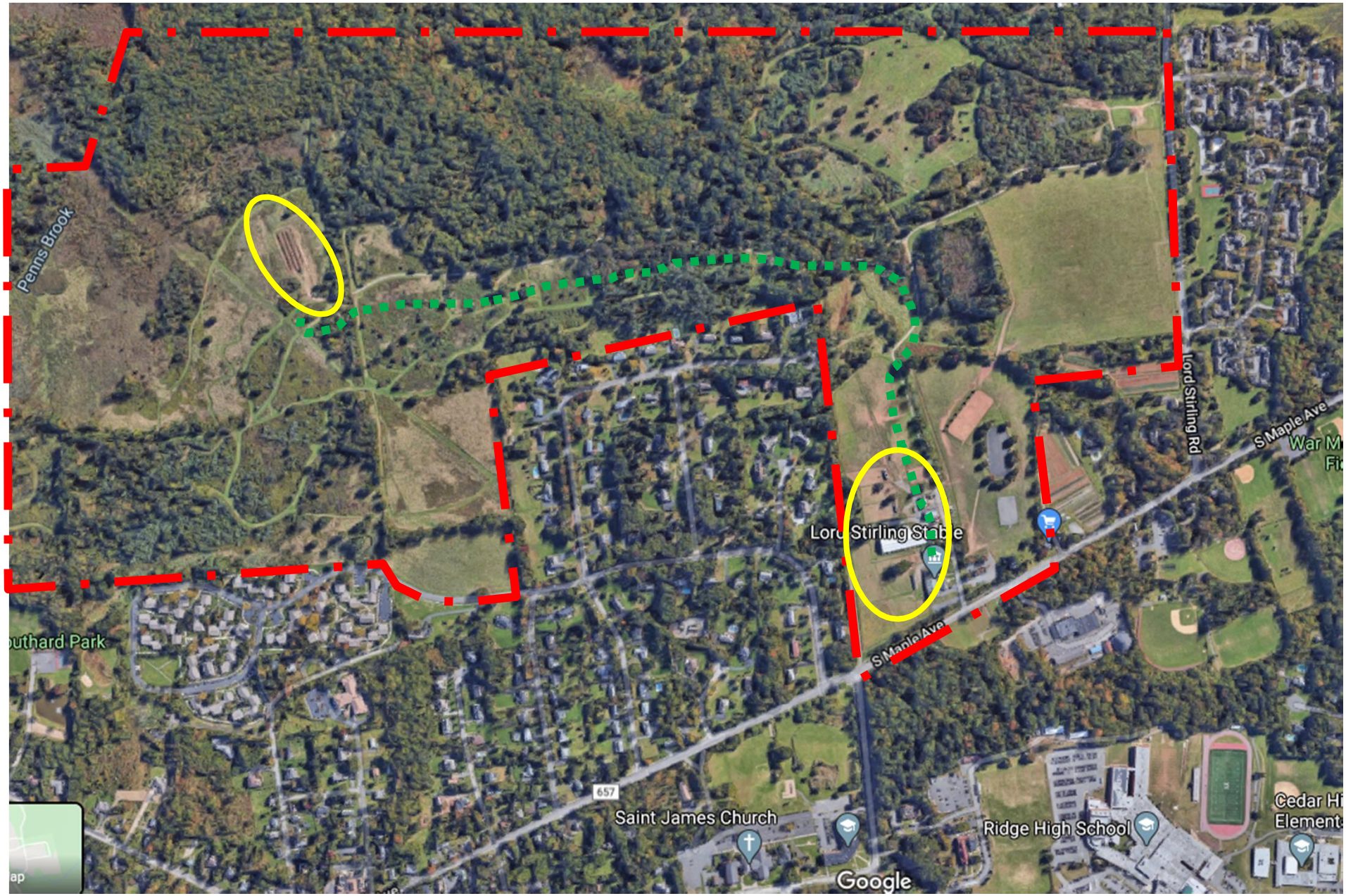

Welcome to
Lord Stirling Stable
Bernards Township
Somerset County, New Jersey
Wagon Turn-Around Trail
Long Woods Trail
Hawthorne Trail
Deer Trail
Great Swamp Trail
Loggin' Trail
Race Track
Devil's Run
Red Tail Hawk Trail
Lower Outback
Don't Be Late Trail
Rabbit Run
Service Road
Lord Stirling Road
The Slide
Roller Coaster
The 'Y' Trail
Upper Outback
Free Spirit Trail
Ridge Oak Trail
South Maple Avenue
1 Main Barn/Office
2 Pony Riding Ring
3 Indoor Ring/Viewing Area
4 Maintenance/Box Stalls
5 Maintenance Shop
6 Storage Building
7 Dressage Ring
8 Large Ring
9 Jump Ring
10 Pony Pasture
11 Moody's Pasture
12 Pasture/Outdoor Jump Course
13 Pines
14 Marsh Hawk Field
15 Ora's Meadow
Remounting Blocks
16 Trailer Parking Lot
17 Parking Lot
18 Employee Parking Lot
19 Pastures
20 Office Annex
21 Farm Stand

Horses*

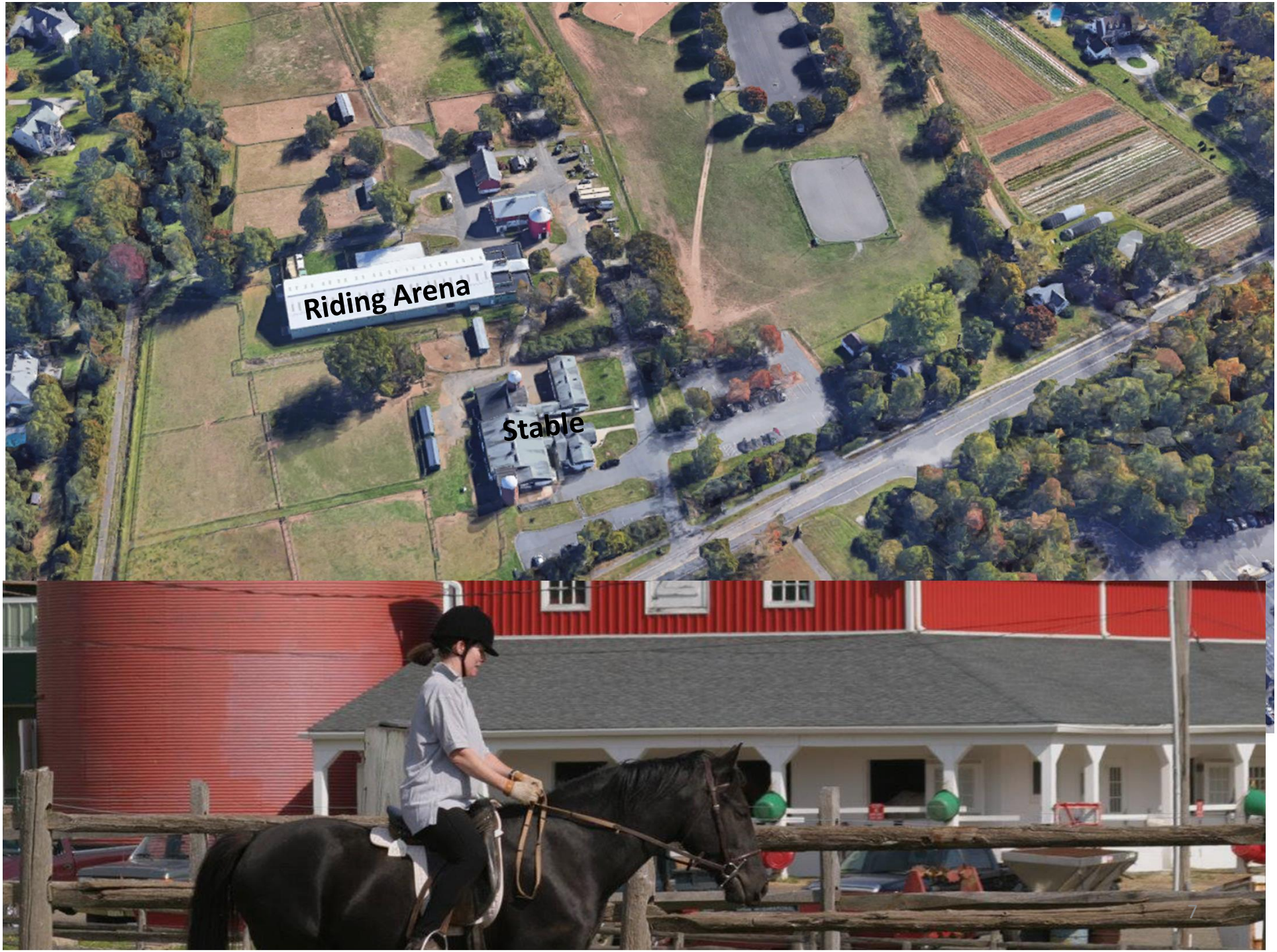
43 Park Commission
13 Paying boarders
8 Ponies

***As of 4/2020**

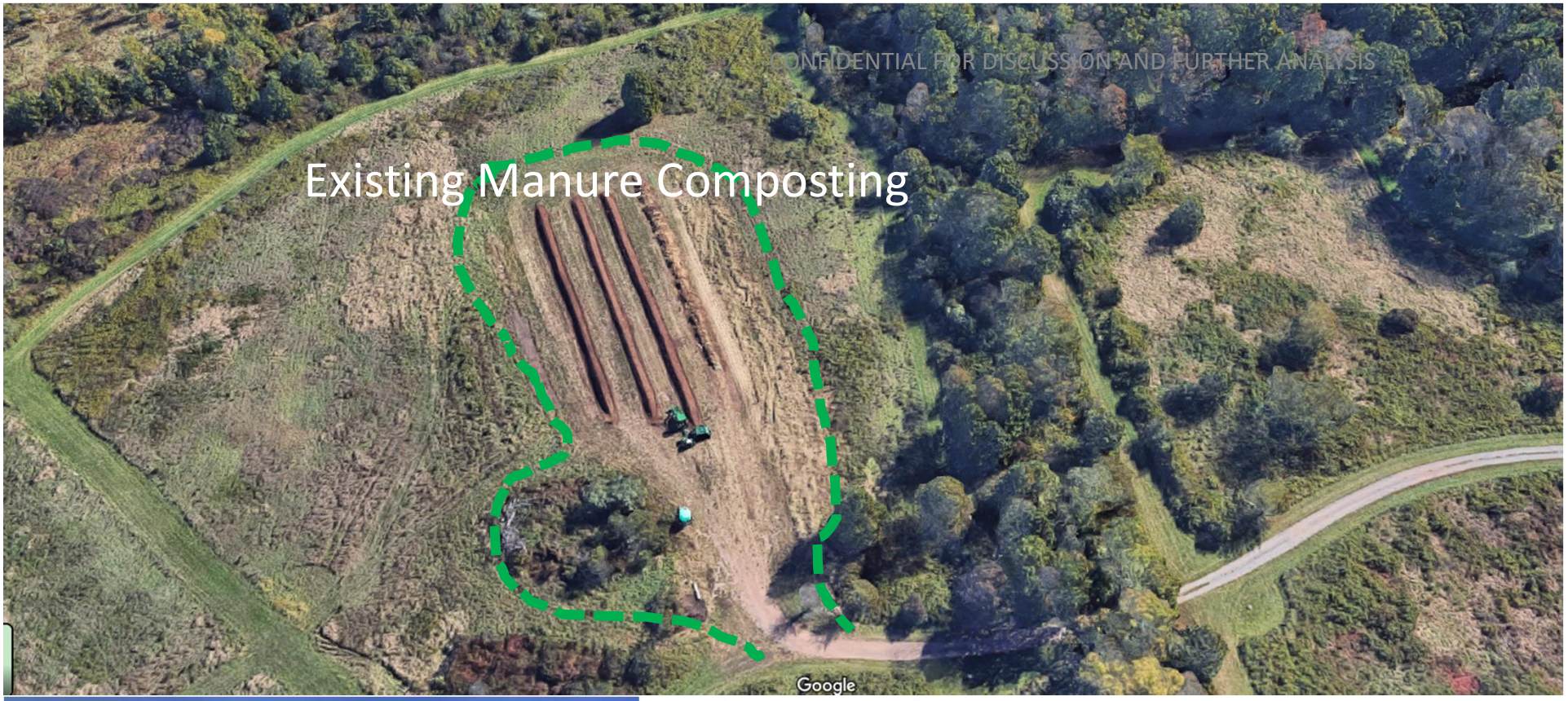
Approximate Lord Stirling Stable Park boundary in red

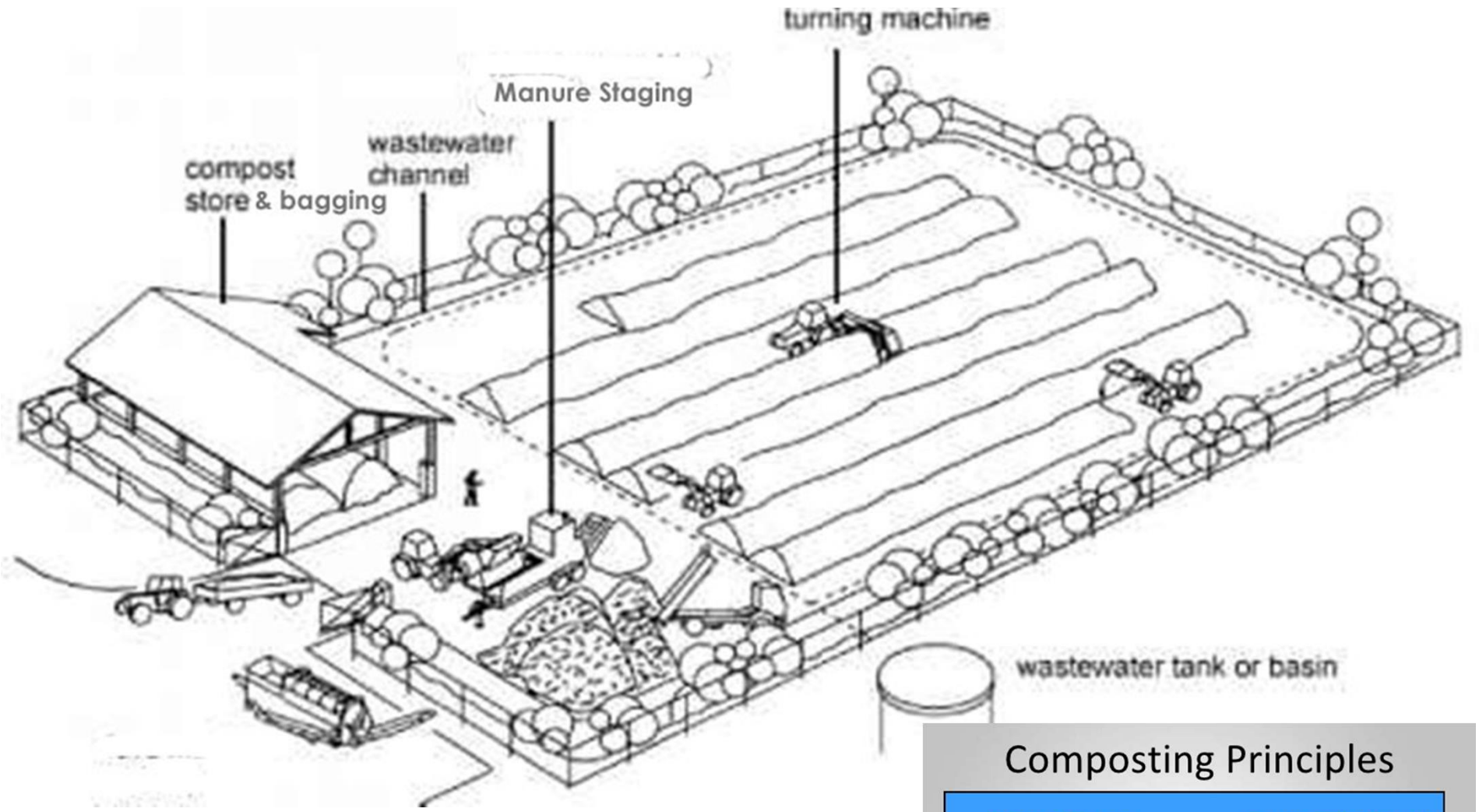


Existing Manure Composting Operation

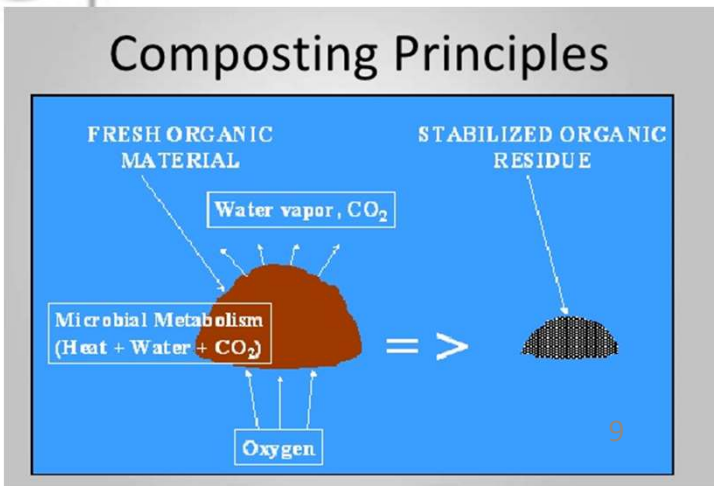

Riding Arena
Stable

Existing Manure Composting





Concept Sketch of
Manure Composting Bagging Operation



Total Manure Production lbs/yr

		Low	Medium	High
PC Horses	43	430,000	602,000	774,000
Boarders	13	130,000	182,000	234,000
Ponies	8	48,000	64,000	80,000
Total	64			
Bedding		256,000	384,000	512,000
		864,000	1,232,000	1,600,000

A Low Medium and High Range was used to account for some variability in the manure production based on the horse population.
Estimates based on reported horses at stable in March/April 2020.

Horse Manure Compost Rules

- **NJDA 2:91-1.1 et seq. – Animal Waste Management Rules**
  - **– Animal Waste Management Plan**
    - **Self-certified plan, No permits or fee required**
    - **Manure composting - highly regarded BMP**

- **§ 2:76-2B.3 Eligibility of equine activities for right to farm protections**

  … 3. The sale and distribution of manure and composted products produced on the farm to off-farm users, subject to the following:

  i. The manure must be generated on the farm, and composted products must be generated on the farm from materials generated on the farm, with the exception of soil amendments such as lime or super-phosphates that may be necessary; …

  - **Must be considered a "commercial farm"**
    - **Provisions to include some horse farms (i.e. horse breeding)**
    - **than added some exclusions (riding, lessons…)**
    - **Rule silent on "publicly owned" horse farm**

Existing Composting creates value!

- Avoided hauling and disposal costs
  - 12,000 month x 12 months = $144,000 per year

- Bulk donation to PC golf courses, gardens etc.
  - Wholesale value between $65,000 to $120,000
    - @ $60 per cubic yard
    - Compost should not be assumed “free” to other park facilities
      - Accounting should show a debit and credit

Potential Retail Sales

Retail price per bag		**$ 10.00**
Low	Medium	High
$ 187,200	$ 266,933	$ 346,667

Bulk Retail value between $75,000 to $140,000 @ $90 per cubic yard

A marketing strategy would need to be developed to excite sales – Something like "Save the Stable – Buy compost!"

A thoughtful bag design could also help tell the story!

Typical 1 cubic foot bag

Annual Net Revenue

Low	Medium	High
$ 80,400	$ 160,133	$ 239,867

10-year Net Revenue

Low	Medium	High
$ 804,000	$ 1,601,333	$ 2,398,667

10-year Revenue Forecast

$ 1,777,480

Net revenue estimates are based on the recurring supply of manure, a reduction of material due to water loss from the composting operation, the generalized price of retail compost minus the annual cost of labor, supplies, maintenance and 10-year capitalized expenses.

Compost Sales scenario

- 50% of total volume to retail bag sales
  - Approximately 17,000 bags
    - 1 FTE = 10 bags per hour x 8 hours = 80 bags per day
    - 80 x 5 days = 400 bags per week = $4000 per week gross sales
    - Approximately 42 weeks
    - Net profit = $120,000
- 25% of total volume to retail bulk sales
  - @ $90 CY = $30,000
- 25% to Park Commission wholesale
  - @$60 CY = $20,000 Credit to stable

Total value = $170,000*

*supply of manure is not a one-shot deal so this scenario can be flexible