

June 28, 2010



Mr. Jim Minor
Solid Waste Superintendent
Beaufort County Public Works
120 Shanklin Road
Beaufort, SC 29906-8402

Subject: Conceptual Layout and Site Criteria for Recycling and Transfer Station

Dear Jim:

This letter report includes a conceptual layout and suggested site criteria for one or more Beaufort County Recycling and Transfer Stations (RTSs). Attachment A is a non site-specific “ideal” layout for an RTS that meets the operational priorities identified in the work session with the County on June 8, 2010, including:

- A scale facility;
- A transfer station for commercial solid waste;
- A convenience center for residents including compactors for MSW and grade separated drop-off for bulky items;
- An OCC/fiber baling facility;
- A household hazardous waste (HHW) collection and storage facility;
- A vector decant facility;
- An administration building; and
- Space for future expansion.

As a starting point, we have prepared an “ideal” layout that is on a rectangular shaped site with 100 foot buffer on all sides and separate areas for traffic from citizens, route vehicles, and transfer trailers. The result is a site of nearly 30 acres, but another 10 adjacent acres would allow for debris storage and management the County is considering for this site. With the exception of the administration building, a second site would require similar area. A much smaller support building could replace the administration building at one of the sites as well as a smaller, or no, HHW facility.

The suggested site criteria for an RTS site are included as Attachment B. Our suggestions for land use/zoning criteria are based on our discussion with Tony Criscitiello on June 24, 2010. It is important to note that the County’s current zoning does not allow for sewer service in a Rural District which may mean used water would have to transported off-site which could increase operating costs.



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The next step is for the County to identify one to three sites that meet the size and other criteria indicated herein. Once these sites are identified, R. W. Beck will prepare a data request for information needed to evaluate these particular sites. Please call either Karl or myself if you have any other questions or need any additional information before identifying the sites for further review.

Sincerely,

R. W. BECK, INC.

A handwritten signature in black ink that reads "Abby Goldsmith". The signature is written in a cursive style with a large initial "A" and a long, sweeping underline.

Abby Goldsmith
Senior Consultant

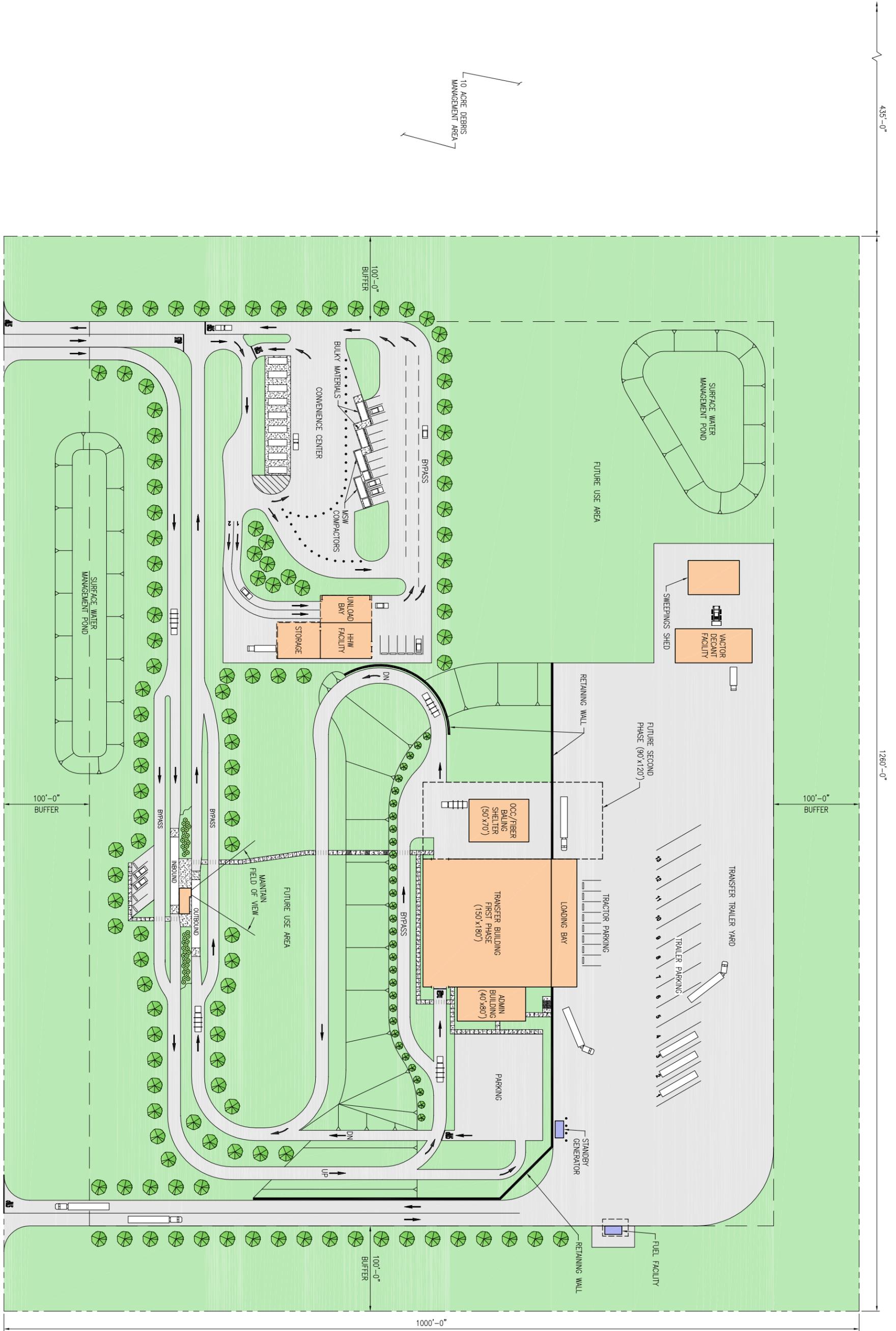
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Attachments



PLAN
BASIC TRANSFER STATION
SCALE: 1"=50'

1"=50'-0"
Scale
50 0 50
100
Feet



RECYCLING AND TRANSFER STATION
NON-SITE SPECIFIC
CONCEPTUAL SITE PLAN

DWG BY: ABG	REV:	BY:
REV BY:	REV:	BY:
APP BY: KRH	REV:	BY:
SCALE: 1"=50'	REV:	BY:

DRAWING #:
1

ATTACHMENT B

Beaufort County Recycling and Transfer Station Siting Criteria

Land Use/Zoning Districts: The most likely zoning districts for this type of composite use facility would seem to be Light Industrial (LI), Industrial Park (IP), or possibly Rural (R) given the multiple uses for the site. The County's zoning ordinance provides for waste transfer stations to be located in any of these districts with limited or special use constraints. The zoning ordinance allows convenience centers to be located in Light Industrial and Rural districts but not in Industrial Parks. However, an IP district might be the best type considering the traffic and noise impacts of the facility and the some of the other criteria listed below. Consideration could be given to possibly classifying the facility as a "Regional Utility" since that use would be permitted in almost any zoning district except Resource Conservation with limits.

Adjacent Land Uses: Compatible with Light Industrial and Industrial Park. The facility may be sited within 10,000 feet of jet plane runways provided certain design parameters are incorporated.

Location: Approximately at the centroid of the waste collection area being served as measured by travel time (not distance)

Flooding: Not in (above) the 100 year flood plain

Site Access: Direct access to regional highway system via arterials and not requiring transit through sensitive neighborhoods (such as residential neighborhoods) by customer and transfer vehicles

Site Size: Minimum 30 acres plus 10 additional acres for debris management assuming site topography is flat and minimum 100 foot buffers on all sides

Site Aspect Ratio Range (length to width): 1:1 to 1: 1.5 - Ideally the site will front on a main road that affords multiple driveway accesses to the site to accommodate separate customer and operator access

Topography: Ideally some grade separation across site, but flat site will work

Utilities: As close to site as possible

- Electrical: 3 Phase, 480 Volt, 750 kVA.
- Water: Ideally not less than 3,000 gpm with static pressure at property line of 70 psi or greater. Higher available flows and pressures would be preferred.
- Sewer: Available at property line.

ATTACHMENT B
Beaufort County Recycling and Transfer Station
Siting Criteria

- Surface Water: Access to constructed or natural local surface water drainage system.
- Natural Gas: Not required.
- Communications: Phone and high speed internet available.

Geotechnical Conditions: Soils suitable to support light weight buildings on spread footings desirable. 4,000 psf bearing capacity of native soils would be ideal but low capacity can work. Compressible and/or expansive soil sites should be avoided. Ideally, groundwater table should be 10 feet or more below existing surface which would allow for excavation for the loading bay and reduced amount of fill required to create grade separation in transfer building. High groundwater table means all grade separation will need to be created by fill.