

County of Loudoun
Office of Transportation Services
MEMORANDUM

DATE: April 29, 2009

TO: Judi Birkitt, Project Planner, Department of Planning

FROM: George Phillips, Senior Transportation Planner *GJP*

SUBJECT: Stonewall Secure Business Park Hybrid Energy Park, SPEX 2009-0009/CMPT 2009-0001

Location: Northside of the Dulles Greenway, west of Goose Creek, east of Sycolin Road and south of Cochran Mill Road and Gant Lane (Attachment 1)

Background

The applicant, Stonewall Creek LLC, is seeking special exception and commission permit approval to allow a utility generating plant and transmission facility on approximately 87 acres to serve the proposed Stonewall Secure Business Park in its PG-GI area. Please note that the Stonewall Secure Business Park is also in to the Loudoun County for review under ZMAP 2008-0068 and SPEX 2008-0068, SPEX 2008-0069 and SPEX 2008-0070. This application is to rezone 231.78 acres from TR-10 and PD-IP and 65.52 acres from TR-10 to PD-GI for the development of a secure business park. The three special exceptions would allow a .60 FAR, a water storage tank and a water treatment plant and would include 5,756,977 square feet of industrial/office in the PD-IP zone and 1,054,326 square feet of industrial/office in the PD-GI zone. The applicant has submitted a traffic letter, dated February 25, 2009, from Patton Harris Rust & Associates, a concept plan, dated February, 2009, by William H. Gordon Associates, Inc., a statement of justification, dated March 25, 2009, and draft conditions of approval, dated March 30, 2009.

Existing & Proposed Road Network

The site is directly served by the following facilities:

Route 643 (Sycolin Road) - an unpaved road, approximately 16-18 feet wide along the site frontage. It includes segments with poor vertical and horizontal geometry. It is a paved two lane undivided rural road from a point just west of the site to Leesburg. With the exception of the Sycolin Road bridge over the Dulles Greenway, it is also unpaved to the east up to the Goose Creek Bridge. At this point it becomes a paved two-lane facility east to Route 659. Based on the latest available (2007) VDOT traffic counts, this road segment carries 2,500 average annual vehicle trips. The Countywide Transportation Plan (CTP) calls for this portion of Sycolin Road to be a four-lane median divided major collector within a 90-foot wide right of way, plus additional right-of-way for turn lanes, which are required at major intersections (Attachment 2). It is to include a 40-mph design speed and desirable median break spacing of 700 feet. Due to the future extension of the Leesburg Airport runway, a portion of Sycolin Road will need to be realigned to the southeast in the vicinity of future Crosstrail Boulevard. The CTP also notes that bicycle accommodations need to be considered in the design. Unpaved portions of this road segment are included in the VDOT Secondary Road Program for paving to two lanes. It is currently under construction and is anticipated to be constructed by November, 2009. Also, please note that a grade-separated interchange is planned in the vicinity of the Sycolin Road bridge over the Dulles Greenway which would allow full access to/from the Dulles Greenway.

Route 653 (Cochran Mill Road) - is an unpaved road, approximately 14-16 feet wide, in the vicinity of the site. Based on the latest available (2007) VDOT traffic counts, the road segment adjacent to the site carries 270 average daily vehicle trips. It is unpaved between Sycolin Road to the south and the Washington & Old Dominion (W&OD) trail further north. This unpaved segment is characterized by poor vertical and horizontal geometry with portions that appear to experience flood impacts from the adjacent Sycolin Creek. From the W&OD Trail north to Route 7, it is a paved, four-lane, undivided facility which transitions to a two-lane, paved facility. The CTP calls for the segment of Cochran Mill Road in the vicinity of the site to be a four-lane undivided minor collector within a 70-foot wide right-of-way (Attachment 2). It is to include left- and right-turn lanes at major intersections and include a 40-mph design speed. In addition, beginning at Route 652 (Gant Lane), Cochran Mill Road is to transition onto a new alignment veering south through the property on a more advantageous alignment which avoids contact with Sycolin

Creek and intersects Sycolin Road approximately 2,500 feet south of the existing Cochran Mill Road (west)/Sycolin Road intersection. There are no plans, including under existing proffers or the VDOT Secondary Road Program, to improve this portion of Cochran Mill Road.

Route 652 (Gant Lane) - is an unpaved local road, approximately 13-15 feet wide which dead ends approximately 0.6 mile southeast of Cochran Mill Road. It is characterized by poor vertical and horizontal geometry. Based on the latest available VDOT traffic counts from 2002, Gant Lane carries 30 average daily vehicle trips. This road is not included in the CTP nor is it included in the VDOT Secondary Road Program for widening or improvement.

Trip Generation Information

Based on the applicant's traffic letter, the proposed energy park would generate 24 a.m. peak hour, 26 p.m. peak hour and 89 daily vehicle trips. Based on the by-right TR-10 zoning, the 87 acre property would yield 8 single-family dwelling units. This would generate 80 daily, 15 a.m. peak hour and 11 p.m. peak hour trips. The proposed use represents an increase of 9 daily, 9a.m. peak hour and 15 p.m. peak hour trips over a by-right development scenario.

Transportation Comments

1. The proposed hybrid energy park is tied to the overall Stonewall Secure Business Park application (ZMAP 2008-0068, SPEX 2008-0068, SPEX 2008-0069 and SPEX 2008-0070) under review by the County. As such, any recommended road improvements for the proposed hybrid energy park will be included in the review of the overall Stonewall Secure Business Park. Initial OTS comments have already been released for this application (See Attachment 3).
2. The applicant's revised traffic letter, dated February 25, 2009, doesn't provide a separate transportation analysis and apparently relies on the November 5, 2008 traffic study for the overall Stonewall Secure Business Park from Wells & Associates. However, please note that this study did not include the hybrid energy park. It included more intense office and research & development land uses which generate significantly higher site traffic. The question is, does the applicant want to revise the traffic study to accurately reflect the hybrid energy park? Or is the applicant willing to utilize the existing November 5, 2008 Wells

study, which has significantly higher site traffic, for determining transportation related improvements?

3. The applicant's proposed conditions of approval do not include any transportation-related improvements. How and under what format will needed transportation-related improvements, such as to Sycolin Road and Cochran Mill Road, be provided to serve the site? Please clarify.
4. The proposed concept plan does not appear to incorporate the planned realignment of Cochran Mill Road southwest through the site to Sycolin Road as a four-lane road. This includes the bridge crossing over Sycolin Creek. In addition, the applicant does not appear to provide a road connection to either Gant Lane or Cochran Mill Road. In order to fulfill the CTP road network as detailed in Appendix 1 of the CTP and better distribute site traffic, this will need to be addressed in the overall Stonewall Secure Business Park application.
5. In order to accommodate the widening of Cochran Mill Road along the site frontage and within the site, the applicant needs to dedicate all planned right-of-way in keeping with the CTP for these facilities. In addition, adequate right-of-way would need to be dedicated for Gant Lane, a local road, in the event it is to be utilized to serve the proposed development. It would include 70 feet of right-of-way to accommodate the relocated Cochran Mill Road through the site. In addition, all necessary construction-related easements need to be provided, including drainage, utility and grading easements where needed.
6. The status of existing Gant Road needs to be clarified. It appears that this road is not planned to remain in use within the proposed development. If this is the case, a road abandonment procedure would need to be initiated by the applicant and its function replaced by a similar type of facility.
7. All entrances need to be constructed to VDOT requirements including the provision of turn lanes and adequate sight distance.

Conclusion

The Office of Transportation Services has no recommendation at this time. OTS will provide a recommendation once the issues identified in this referral have been adequately addressed.

GRP/Stonewall Secure Business Park Hybrid Energy Park/ SPEX 2009-0009/
CMPT 2009-0001 D drive/C files