



# SEXTON ENGINEERING ASSOCIATES, INC.

Consulting Engineers and Surveyors

## EQUESTRIAN VILLAGE GRASS PARKING STATEMENT

August 28, 2013

A Circulation Plan has been proposed in support of the Compatibility Determination Application for the Commercial Equestrian Arena at Equestrian Village to designate parking areas and provide access control and routes for the circulation of vehicles, horses and pedestrian during events at Equestrian Village. A copy of the Circulation Plan is attached. Event durations vary from 1 day to 7 days a week, and can occur between 7:00 am to 10:00 pm daily and may operate one weekend night per week until 11:00 pm. The Circulation Plan provides 316 paved parking spaces, 145 existing grass parking spaces adjacent to the barns, and 640 event parking spaces in two primary event parking areas for overflow spectator parking during peak events. The purpose of this statement is to address the grass parking areas for overflow spectator peak parking.

The primary spectator parking area is located to the northwest of the main show arena consisting of 69 paved parking spaces to accommodate the average daily event spectator parking. An additional event parking area is located west of the covered arena. This event parking will serve as overflow to the primary event parking as needed. As provided in Section 7.2.3L of the Village of Wellington Land Development Regulations, an alternate surface treatment is proposed for this parking area with a grass surface treatment. This proposed grass parking area will be constructed to include a stabilized turf reinforcement grid product. This alternate base and surface material design provides equivalent durability as compared to a 6" limerock base and 1" asphalt. These flexible porous paving products are specifically designed for grass parking lots and fire lanes because they support heavy vehicle loads and low speed traffic. They consist of a ring and grid system which provides flexibility, stability, and exceptional grass growth by protecting the root system. Attached is a typical section of the proposed grass parking design treatment. Porous paving is recognized as a Best Management Practice (BMP) by the Environmental Protection Agency and the U.S. Army Corp of Engineers, and many other federal and state agencies. These products provide high percolation rates, which therefore provide additional stormwater storage and reduce stormwater runoff. The typical geogrid section (see attached section) consists of a 6" compacted sand/gravel base, 1" grid system with rings filled with sand, 2" top soil and sod. Attached are Soil Storage Calculations which demonstrate that this section provides more soil storage than the in-situ soil. It is therefore more porous and reduces runoff as compared to grass. Technical specifications for various manufacturers of these products are attached to demonstrate both the durability and porosity of the surface. This parking area can accommodate up to 260 vehicles. There will be three access points for the parking grass area manned by parking attendants to direct traffic to the parking spaces. This parking area will be divided into three sub-areas as shown on the attached Event Parking Sketch. Each sub-area will be used in rotation for no more than two days each week. This rotation will provide for routine turf management and recovery from weekly use. The grass will be mowed and maintained once a week prior to each event and will be irrigated. The underlying soils for the site are classified as depressional soils and soil storage has been calculated accordingly. The tertiary stormwater system is designed to sheet flow runoff from the north end of the parking area to the south end to be collected in a dry detention pond. The detention pond is the secondary stormwater system which provides water quality treatment of the stormwater runoff and compensating soil storage in accordance with the Village of Wellington and SFWMD regulations. The treated runoff is then piped east to outfall to the lake along the east side of the property.

**EQUESTRIAN VILLAGE  
GRASS PARKING STATEMENT  
August 28, 2013**

The equestrian ring area to the east of the main show arena will provide additional overflow event parking and can accommodate 380 vehicles. There are two ingress access points into the parking area and three egress points. The ingress access point will be manned by parking attendants to direct traffic to the parking spaces. These equestrian rings consist of 6" of sand on a 6" gravel underdrain layer. The underdrain layer serves as the tertiary stormwater system which drains runoff to a secondary stormwater system consisting of drainage inlets and exfiltration trenches which provide water quality treatment of the stormwater runoff in accordance with the Village of Wellington and SFWMD regulations. The treated runoff is then piped east to outfall to the lake along the east side of the property. This overflow event parking area is not a grassed parking area and therefore not subject to the regulatory treatment of grassed parking areas as defined in Section 7.2.3.J.4 of the Village of Wellington's Land Development Regulations.

It is our professional opinion that the standards of Section 7.2.3.J of the Village of Wellington's Land Development Regulations for the grassed parking area will be accommodated via dry detention and alternate paving designs in accordance with Section 7.2.3.L. of the Village of Wellington's Land Development Regulations.

It is also our professional opinion that the Equestrian Village site has sufficient project area to accommodate the stormwater management system required for the improvements and uses shown on the Conceptual Site Plan. While the Applicant believes that the proposed alternate surface treatment for the event parking areas for the site are not impervious, the Applicant has identified and shown on the Conceptual Site Plan, potential compensating soil storage areas for impervious event parking and that could be used to comply with the Village Engineer's worst case interpretation of the stormwater management system requirements of Article 7.2.3.J.4 if the parking areas are considered impervious. Other potential site design techniques not shown on the Conceptual Site Plan could also be used to comply with these requirements and the Applicant reserves the right to permit the improvements using other designs and techniques, at the Applicant's discretion and if deemed required by the Village. Further, the Applicant reserves the right to submit engineering data to support the actual drainage and stormwater management system requirements for the parking surfaces and the site, for objective review by the Village Engineer. The Applicant reserves the right to modify and/or not construct the compensating soil storage areas on the Conceptual Site Plan based on the engineering data submitted by the Applicant and/or if the data demonstrates that these are not necessary.

Respectfully Submitted:

  
Michael F. Sexton, P.E., P.S.M.  
FL Reg. No. 28558

