



**Modification to Development Plan Application  
Village of Groveport**

**Development Summary for Opus Business Center at Rickenbacker  
Rickenbacker Spec VIII Building**

March 28, 2014

**General**

PIP zoning is requested for the 28.95 acres of land adjacent to the south side of the property owned by Opus Real Estate OH VIII R7, L.L.C. The tract is currently owned by Opus Development Company, L.L.C. and has been referenced in the past as the Kurtz Brothers Property. The property lies at west end of Green Pointe Drive South.

The existing Final Development Plan associated with this property included five buildings and the extension of South Green Pointe Drive to the west. The buildings included Rickenbacker Spec VII Building to the north, Rickenbacker Spec V building to the east, Rickenbacker Spec VIII building on the subject property, and two additional buildings south of the South Green Point Drive extension.

As it stands today, Rickenbacker Spec V and VII buildings have been constructed. The subject property is currently vacant with plans to construct Rickenbacker Spec VIII building. The extension of South Green Point drive was never completed and the platted right-of-way has been vacated. A portion of the sanitary sewer and storm sewer were constructed along the south property line and will be utilized to service this development. The Kurtz property to the south is still being utilized as a mulch facility and is no longer a part of Opus' development plans.

Opus Design Build, LLC is proposing to move forward with the site as indicated on the enclosed Revised Final Development Plan. The plan proposes the construction of a cul-de-sac at the end of South Green Point Drive. The cul-de-sac has been designed with a 50 foot radius and a 12 foot right of way to serve the subject property and the property to the south. The plan includes the removal of the development area to the south of Green Point Drive South as indicated on the plans.

**Access**

The proposed development will include a cul-de-sac at the end of Green Point Drive South that will provide access to the proposed development and the Kurtz Foundation property to the south. Two access points are being proposed at the end of Green Point Drive South.

**Sanitary**

There is an existing 18" sewer running along the north side of Green Pointe Drive. The 18" sewer continues to the west across the project parcel in an existing 30' easement. The 18" sewer has capacity to serve the proposed development.

**Storm**

Stormwater management (detention/retention and water quality) is accommodated by an existing interconnected pond system within the overall development area. The proposed development is tributary to the existing pond along the north property line. The existing pond has been designed to accommodate the project development. The existing pond outlet is an existing 12" storm sewer along the east property line that connects to the existing 48" storm sewer along the south side of Green Point Drive South.

Water

There is an existing 16" waterline running along the south side of Green Pointe Drive South. The 16" waterline continues to the north across the project parcel in an existing 15' easement along the eastern portion of the property and continues to the adjoining Opus Real Estate parcel to the north. The 16" line has sufficient flow to service the proposed development.



Engineers, Surveyors, Planners, Scientists

## MEMO

**Date:** March 14, 2014  
**To:** The City of Groveport  
**From:** Alex McBride, PE, CFM  
**Subject:** Stormwater Management Plan – Rick VIII Spec Building Site  
**Copies:** Justin Zampardi, PE



*by J. McBride*

The following memo summarizes the stormwater management plan for the proposed Rick VIII Spec Building Site in the City of Groveport, Ohio. The 28.69 acre project site is located south of Toy Road between Alum Creek Drive and Opus Drive. The existing condition of the project area is open space/grass cover in Type "C" hydrologic soils (Celina Silt Loam, Crosby Silt Loam, Kokomo Silt Loam). The proposed condition consists of a warehouse and the associated access drives and parking areas. The stormwater runoff from the proposed site will discharge to the existing wet basin (Pond A, as labeled in the Rickenbacker Spec VII Stormwater Management Plan dated March 2007) located north of the proposed warehouse which addresses quantity and quality control for the tributary areas. The existing wet basin was designed to accommodate the proposed Rick VIII Spec Building as indicated in the March 2007 report narrative and shown on the Post-Developed Workmap included in the March 2007 Stormwater Management Plan. The existing wet basin will not require any modifications to the existing outlet structure and will meet the requirements for detention and water quality as set forth by the City of Groveport and the Ohio EPA. For convenience, the relevant excerpt from the March 2007 Rickenbacker Spec VII Stormwater Management Plan is included below. The Post-Developed Workmap, labeled as Exhibit 1, and PondPack output from the original report are attached to this memo.

The 28.69 acre project site is located within Subarea 102 per the original stormwater master plan, as described in the excerpt below. This excerpt was taken from the Rickenbacker Spec VII Stormwater Management Plan dated March 2007, pages 4-7:

*"Subarea 102 has an area of 60.18 acres with a curve number of 94, which is based on the proposed commercial development. The time of concentration is based on the storm sewer calculation sheets. The resulting time of concentration is 0.28 hours. Subarea 102a is broken out as a separate subarea because upon development of the building directly south of Pond A, the flow from the storm sewer will flow directly to Pond C4 via the storm sewer, but larger events flood route back into Pond A. Subarea 102a contains 0.26 acres with a curve number of 94, which is based on the proposed commercial development. The subarea has a minimum time of concentration of 10 minutes based on the short travel path. Subareas 102 and 102a discharge into Pond A, which is controlled by a 12" submerged water tight pipe which connects Pond A to a catch basin in Subarea 102a. The submerged pipe ends with a riser at this*

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catch basin that has an invert of 730.9', which controls the normal pool. Flows from the submerged pipe discharge into the storm sewer and ultimately to Pond C4. Peak Discharges on the pressure pipe are based on head pressure of the water levels in the basins. The water levels are modeled in FlowMaster. The output from the pressure pipe was entered into the PondPack model as a user defined table making it the outlet for the pond. FlowMaster output is contained within Appendix C. Pond A was held to the same 0.15 cfs/acre for the tributary area, 60.18 acres, resulting in an allowable release of  $(60.18 * 0.15 = 9.03)$  cfs into Pond C.

#### Outlet Structure

Pond A:

Invert: 730.90

Top: 737.00

Outlet: 12" submerged water tight pipe @ 727.00 connected to a riser that outlets at 730.90

Table 2  
Peak Release Rates

Storm Event (yr)	Pond A (cfs)
1	1.81
2	2.16
5	2.53
10	2.78
25	3.13
50	3.41
100	3.67

Table 3  
Peak Water Surface Elevations

Storm Event (yr)	Pond A (ft)
1	732.16
2	732.61
5	733.18
10	733.61
25	734.27
50	734.84
100	735.40

The March 2007 report assumed a Runoff Curve Number of 94 for the 60.18 acre tributary area to existing Pond A, which includes the proposed project area. This corresponds to a land use that is 85% impervious. The 28.69 acre project area consists of 20.45 acres of impervious area, which equates to a site imperviousness of 71% and corresponds to a Runoff Curve Number of 91. The construction plans also show approximately 1.2 acres of potential future parking lot expansion areas which would increase the total site impervious cover to 21.65 acres. Accounting for these

expansion areas would increase site imperviousness to 75% and would correspond to a Runoff Curve Number of 92 for the 28.69 acre project area. Any additional future development areas within the project area must confirm that the added impervious areas do not exceed the established hydrologic parameters of the original March 2007 stormwater management plan as well as those established in this summary.

The proposed development is located within an area that was recently analyzed as part of a watershed update for the Rohr Road Drainage Ditch which services the Rohr Road - Toy Road Watershed. The watershed update analysis, prepared by EMH&T, was summarized in a memo titled "Rohr Road-Toy Watershed Study Update" and dated November 12, 2013. Developments that discharge to the Rohr Road Drainage Ditch are required to provide stormwater detention features that will meet the mandated allowable release rate of 0.31 cfs per acre of development. Given that Pond A was designed more conservatively with an allowable release rate of 0.15 cfs per acre for the 60.18 acre tributary area, the existing outlet structure design will meet the allowable release rate criteria established for developments that discharge to the Rohr Road Drainage Ditch. A copy of the "Future Condition" watershed map that was submitted with the watershed update analysis has been attached to this memo for reference, and is labeled as Exhibit 2. The location of the proposed development is highlighted in light blue on the attached watershed map. The Rohr Road drainage ditch will route stormwater discharges to an outfall at Little Walnut Creek, located approximately 2,100 feet southeast of where Rohr Road crosses over the Rohr Road drainage ditch.

PostOconstruction water quality for the 60.18 acre tributary area including the proposed 28.69 acre project area) to Pond A is addressed in a downstream wet basin, Pond C, which is located approximately 1,500 feet southeast of Pond A and along Green Pointe Drive South. As described in the March 2007 report, existing Pond C provides water quality treatment for 240.35 acres of tributary area, comprised of subareas 101-106 as shown on the attached post-developed workmap. Pond C provides the proper 24-hour drawdown of the required 7.450 acre-feet, releasing less than half of the volume in the first 8 hours. The water quality calculations from the March 2007 report have been provided attached to this memo for reference.

The proposed Rick VIII Spec Building will meet the requirements for detention and water quality as set forth by the City of Groveport, the Rohr Road-Toy Road Watershed, and the Ohio EPA.