Thursday, August 30,

22

The Bainbridge Township Board of Trustees met in special session at the Bainbridge Town Hall on August 30, 2022. Those present were Trustees Mrs. Kristina O'Brien, Mr. Jeffrey Markley, and Dr. Michael Bates. Mrs. O'Brien presided and called the meeting to order at 8:12 P.M.

In attendance were Mrs. Karen Endres, Zoning Inspector, and Mr. Dave Dietrich, Planning and Zoning Coordinator.

Stormwater Modification Request

Mr. Markley began the discussion on Vision's stormwater modification request with a recap of the efforts to-date with ICP and their team of consultants, Geauga County Soil and Water (Carmella Shale), and the Vision team.

The township identified to ICP very early on in Geauga Lake's redevelopment process that stormwater be addressed on the macro level. Menards had presented their plan that fully met the CJE standards due to the size of their parcel. Smaller parcels and those closer or adjacent to the lake would be more challenging to design according to the standards without a site-wide solution. Vision was pursuing their plan independent of a comprehensive solution and ICP was attempting to facilitate a plan that might work with the Vision plan.

The trustees met onsite to review the work done thus far to better understand the challenges associated with the CJE standards. Following that meeting, ICP agreed to engage Davey Resources on a comprehensive stormwater program that may include both the existing wetlands and lake for the benefit of future applicants as it was demonstrated that individual project submittals would be a cumbersome process and the CJE standards would be difficult to fully achieve.

Approval of Resolution 08302022-A

Mr. Markley made a motion to approve Resolution 08302022-A approving the proposed alternatives, as set forth in the attached Structurepoint Report, to the requirements of Items (a), (b), and (e) of the Applicable Memorandum; and to authorize either or both of the Bainbridge Township Zoning Inspectors, to approve and/or place his/her signature upon such plans and documents comprising the Approved Plans that contain the alternatives approved hereby, and on such other related documents as shall be required to affect such approval. In addition, the township intends that such alternatives are approved **only** with respect to the Vision Property and such approval shall have no binding or other precedential effect with respect to any proposed future development of the Project Property.

Dr. Bates seconded the motion. Roll call vote followed: Dr. Bates, aye; Mrs. O'Brien, aye; Mr. Markley, aye. Motion carried.

*Resolution 08302022-A and the Structurepoint Report are attached to and become a permanent part of these minutes.

Since there was no further business to come before the Bainbridge Township Board of Trustees, the meeting was adjourned at 8:36 P.M.

	Respectfully Submitted,
	Janice S. Sugarman, Fiscal Officer, Bainbridge Township
	 Date
	 Date
	 Date
Minutes Read:	
Minutes Approved:	



THE BOARD OF TRUSTEES OF GEAUGA COUNTY, OHIO

RESOLUTION <u>08302022</u> - A

SUBJECT: Master Consent Judgment Entry ("Master CJE") approved on October 20, 2021 by Township Resolution 10202021-B, and approved by the Court of Common Pleas for Geauga County in Case Number 21M000337 on October 26, 2021 for the redevelopment of the former Geauga Lake property ("Project Property").

The Board of Trustees of Bainbridge Township, Geauga County, Ohio ("Board") met in a special session on the 30th day of August, 2022 with the following members present:

Kristina O'Brien Jeffrey Markley Michael Bates

Trustee Markley

moved for the adoption of the following Resolution:

WHEREAS, pursuant to the Master CJE, Vision Development ("Vision") has submitted its Final Development Plans for a proposed residential development ("Vision Development") on a portion of the Project Property (the "Vision Property");

WHEREAS, Section I(H) of the Master CJE states:

All stormwater management on the Property shall be in compliance with all rules and regulations of the Geauga County Soil & Water Conservation District and in compliance with those provisions laid out in the Memorandum from Chagrin River Watershed Partners and Geauga County Soil & Water Conservation District dated September 21, 2020. ("Applicable Memorandum"). The Applicable Memorandum is attached hereto and made a part hereof as EXHIBIT "D". On a case by case basis, if the owner of a portion of the Property suffers a hardship based on the requirements of the Applicable Memorandum, the Trustees, may consent, in the exercise of their discretion, to a variance or other relief from the requirements of the Applicable Memorandum, unless such requirements are at the time regulations or laws of other jurisdictions, such as Geauga County, and any relief must then be obtained as well from the other jurisdiction.

WHEREAS, the Applicable Memorandum sets forth specific requirements with respect to stormwater management ("Stormwater Requirements") regarding development of the Project Property.

WHEREAS, Vision has identified certain hardships that it would suffer in connection with the development of the Vision Property were it required to abide by the Stormwater Requirements.

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WHEREAS, American Structurepoint Inc., Vision's consultant, prepared and delivered to the Township a Stormwater Management Drainage Report, dated August 26, 2022 ("Structurepoint Report"), which set forth such hardships and certain alternatives to the Stormwater Requirements, specifically Items (a), (b), and (e) thereof, to address such hardships. A copy of the "Stormwater Management Narrative" section of the Structurepoint Report is attached hereto as Exhibit A.

WHEREAS, in a Memorandum to the Township Trustees dated August 26, 2022 ("Soil and Water Memorandum"), Carmella Shale, PE, Director of the Geauga Soil and Water Conservation District, set forth an analysis of the Structurepoint Report's proposed alternatives to Items (a), (b), and (e) and how they compare to the (1) Applicable Memorandum requirements of the Master CJE, and (2) standard requirements applicable to all development within Geauga County ("County Standards"). A copy of the Soil and Water Memorandum is attached hereto as Exhibit B.

WHEREAS, Ms. Shale concludes that while the proposed alternatives to Items (a), (b), and (e) "fall short" of the Applicable Memorandum requirements by roughly 100%, they "exceed" the County Standards by an average of 18%.

WHEREAS, pursuant to Section I(H) of the CJE, the Township, may agree, in the exercise of its discretion, to a variance or other relief from the requirements of the Applicable Memorandum.

WHEREAS, the Board believes Vision Development, as with other responsible economic development in the Township, benefits the health, safety and welfare of its residents.

WHEREAS, the Board believes that the hardships identified by Vision might jeopardize the Vision Development and that approval of the proposed alternatives will encourage and support the same.

BE IT RESOLVED THAT, given the hardships identified by Vision, and the fact that the proposed alternatives to the requirements of the Applicable Memorandum to address such hardships exceed the County Standards, the Township approves the proposed alternatives, as set forth in the Structurepoint Report, to the requirements of Items (a), (b), and (e) of the Applicable Memorandum.

BE IT RESOLVED FURTHER THAT, in hereby approving the proposed alternatives, the Township intends that such alternatives are approved only with respect to the Vision Property and such approval shall have no binding or other precedential effect with respect to any proposed future development of the Project Property.

BE IT RESOLVED FURTHER THAT, we hereby authorize either or both of the Bainbridge Township Zoning Inspector and Assistant Zoning Inspector, to approve and/or place his/her signature upon such plans and documents comprising the Approved Plans that contain the alternatives approved hereby, and on such other related documents as shall be required to effect such approval.

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being called upon its adoption, the	seconded the motion for vote resulted as follows:	adoption of the Resolution, and the roll
Kristina O'Brien A/E	Jeff Markley A F	Michael Bates AYE
Attest: Anice S. Sugarman, Fiscal Officer Date: 8-30-30-30-30	ar_	

EXHIBIT A

Structurepoint Report - Stormwater Management Narrative



VC Park at Geauga Lake

1.0 Project Information

VC Park at Geauga Lake is located in Geauga County, Ohio along Aurora Road. The proposed development consists of 23 total apartment buildings, townhouses, and carriage homes, along with a clubhouse and fitness building. Stormwater will be managed via two wetland detention basins along with associated storm sewers, swales, and outlet control structures for each basin. This project is subject to the requirements of the Geauga Soil and Water Conservation District Stormwater Management Memorandum (hereafter referred to as the "CJE requirements" – see Appendix F); however, site constraints limit the project's ability to adhere to all of those requirements (further discussion below). Apart from the Memorandum in Appendix E, the project meets the water quantity requirements set forth by the Geauga Soil and Water Conservation District and water quality requirements per the OEPA General Permit No.: OHC00005. Rainfall data was taken from NOAA's Precipitation Frequency Data Server (Appendix D).

Along with the challenging existing topography, this site was discovered to have a high water table, which significantly restrict the size, location, and depth of stormwater management the project can provide. Given these site restrictions, a stormwater management design in accordance with the full CJE requirements would detrimentally impact the site plan and amenity area, taking up valuable space along the lakefront. In light of this, the following CJE stormwater requirements are not being met; however, the proposed design still aligns with the intent of the CJE requirements, as described below.

CJE Item	Requirement	Intent		
а	"Post-construction stormwater management shall be approached as a new development rather than a redevelopment."	The intent of this requirement is to increase the amount of water quality that is provided by the development.		
ь	"Post-construction stormwater management must use separate stormwater control measures (SCM)s for water quality and water quantity."	The intent of this requirement is to increase the amount of water quality that is provided by the development, and to ensure the accumulated sediment can be easily removed from the stormwater basin(s).		
С	"Precipitation values for stormwater design must be increased by 20%"	The intent of this requirement is to decrease the amount of stormwater that is released to the Lake.		
e	"Existing impervious areas must be modeled as grassland in good condition for critical storm calculations."	The intent of this requirement is to decrease the amount of stormwater that is released to the Lake.		



2.0 Existing Drainage Conditions

The existing site was formerly an amusement park and still contains remnants of the park, including concrete, pavement, and foundations throughout the property. The existing condition is lacking any stormwater management controls and directly releases stormwater into Geauga Lake. The site's high imperviousness results in stormwater not being able to infiltrate into the ground effectively and in high, uninhibited flows of stormwater directly to the Lake. The 19.12 acre site was modeled as 3.29 acres of grass cover and 15.83 acres of impervious area, which resulted in a weighted CN of 96. The pre-developed time of concentration (TC) is 9.6 minutes. A pre-developed tributary area map and pre-developed runoff calculations using HydroCAD Version 10.00 by HydroCAD Software Solutions, LLC can be found in Appendix B of this report. Additionally, the pre-developed calculations reflecting the CJE requirements can be found in Appendix I.

3.0 Developed Drainage Conditions

As part of the proposed development, a storm system will be installed and directed to 2 proposed wetland basins, which will be used for water quality and quantity control. The basins will provide storage for the 1-100 year storm events and will ultimately release into Geauga Lake, as the site does in the existing condition. The post-developed tributary area consists of 11.90 acres of pavement and 7.22 acres of grass cover, which results in a weighted CN of 91. The post-developed tributary area for the north basin consists of 2.95 acres of impervious area and 1.63 acres of grass cover (a weighted CN of 92), along with a time of concentration of 10.0 minutes. The post-developed tributary area for the south basin consists of 8.35 acres of impervious area and 2.72 acres of grass cover (a weighted CN of 94), along with a time of concentration of 9.5 minutes. The proposed tributary map for the post-developed conditions can be found in Appendix C.

Additionally, 3 scenarios were analyzed, with respect to water quantity control. Firstly, the development's flows to the Lake were determined assuming all of the CJE requirements were followed. Second, the development's flows were determined using the typical County requirements. Finally, the development's flows were determined with the proposed stormwater management solution. A comparison was also performed to determine the impact of a 20% increase in rainfall depths (this increase is one of CJE requirements). In this comparison, all 3 of the above scenarios were computed with the increased rainfall depths. The pre-developed and post-developed conditions with the 20% increased rainfall depths can be found in Appendix G & H, respectively.

3.1 General Stormwater Control Narrative

The critical storm event (for all scenarios) was calculated by comparing the pre-developed conditions to the post-developed conditions 1-year, 24-hour event using the SCS Type II distribution curve.

Critical Storm (CJE requirements, 20% increased rainfall depths)

[(Post 1-year runoff volume) – (Pre 1-year runoff volume)]/(Pre 1-year runoff volume) = % increase [(2.502 af) – (1.364 af)]/(1.364 af) = 83.4% (10-year critical storm)



Critical Storm (County requirements, normal rainfall depths)*

[(1.919 af) - (2.581 af)]/(2.581 af) = -25.6% (1-year critical storm)

Critical Storm (Proposed Solution, normal rainfall depths)*

[(1.919 af) - (2.581 af)]/(2.581 af) = -25.6% (1-year critical storm)

*Note: the critical storms for the County requirements and Proposed Solution scenarios are the same storm event, regardless of the increased rainfall depths.

3.2 Stormwater Quantity Control

The post-developed release rates for all storm events up to and including the critical storm event are required to be equal or less than the 1-year pre-developed release rate. The post-developed release rates for storm events occurring less frequently than the critical storm event are required to be equal to or less than the pre-developed release rate for the equivalent storm. Below are the release rate comparison charts prepared for each scenario.

Table 3.2.1 Release Rates with 20% Increased Rainfall Depths (per CJE requirements)

Storm Event	County (cfs)	CJE (cfs)	Proposed (cfs)	% Decrease (County)*	% Increase (CJE)**	
1- year	55.96	18.90	35.11	37.3%	85.8%	
2- year	68.34	18.90	44.10	35.5%	133.3%	
5- year	86.42	18.90	56.81	34.3%	200.6%	
10- year	101.43	18.90	67.55	33.4%	257.4%	
25- year	122.56	67.95	82.62	32.6%	21.6%	
50- year	140.89	82.61	94.09	33.2%	13.9%	
100- year	159.66	97.81	124.79	21.8%	27.6%	

Table 3.2.2 Release Rates with Normal Rainfall Depths (except CJE, which still applies the 20% increase)

Storm Event County (cfs)		CJE (cfs)	Proposed (cfs)	% Decrease (County)*	% Increase (CJE)**	
1-year	45.52	18.90	27.10	40,5%	43.4%	
2- year	55.96	18.90	33.59	40.0%	77.7%	
5- year	71.11	18.90	42.97	39.6%	127.4%	
10- year	83.66	18.90	50.64	39.5%	167.9%	
25- year	101.43	67.95	60.61	40.2%	-10.8%	
50- year	116.36	82.61	67.81	41.7%	-17.9%	
100- year	132.47	97.81	87.84	33.7%	-17.9%	

^{*} the percent decrease in flow of the Vision proposal vs. the flows that would be allowed under standard County requirements

^{**} the percent increase in flow of the Vision proposal vs. the flows that would be allowed under the CJE requirements



3.3 Stormwater Quality Control

With regard to water quality, the proposed stormwater design considers the existing site as it is: a redevelopment of a previously developed site, instead of treating it as a new development per the CJE requirements. By considering the existing site as it is, the proposed development reduces imperviousness by nearly 30% and so, by Ohio EPA standards, water quality is not required. However, this design is still providing water quality for the site. To further aid in water quality, the proposed basins contain micropools and forebays within them, which provide a localized area for the sediment to be removed from the basins.

Water quality drawdown per the Ohio EPA NPDES Permit No.: OHCO00005 has been provided for the entire 19.15 acre tributary area. Per Table 4a of the permit, wetland basins shall provide a drain time of 24-hours. Additionally, since this is a previously developed site, the Extended Detention Volume (EDv) is sized at 20% of the Water Quality Volume (WQv). The first half of the EDv shall not be released in the first one-third of the drain time. Based on these factors, the EDv for the north basin is 0.043 acre-feet and the EDv for the south basin is 0.121 acre-feet. The calculations for the WQv for each basin can be found in Appendix D.

4.0 Summary and Conclusions

This project has analyzed the pre-developed and post-developed conditions for all storm frequencies (1-100 year) to determine the allowable release rates and storage requirements, while taking into account water quality control as well. The basins and storm system have been designed to meet or exceed the typical Geauga County and Ohio EPA requirements. This study also included analysis of multiple scenarios, in order to illustrate that the intent of the CJE requirements are being met with the proposed stormwater solution. Accordingly, we believe the proposed improvements will not adversely affect this site, adjacent property owners, Geauga County, or Bainbridge Township.

EXHIBIT B

Soil and Water Memorandum



MEMORANDUM

Date:

August 26, 2022

To:

Bainbridge Township Board of Trustees

From:

Carmella Shale, PE, Director/Engineer

RE:

Review of Stormwater Analysis for VC Park at Geauga Lake related to the Consent Judgement

Entry Requirements

After review of the stormwater analysis presented by American Structurepoint Inc. dated 8/26/22 for VC Park at Geauga Lake we present our analysis of stormwater design requirements of the Consent Judgment Entry (CJE) and how they have or have not been met.

Based on the analysis submitted three of the CJE items as listed below have not been met.

CJE Item (a)

Post-construction stormwater management shall be approached as a new development rather than a redevelopment.

CJE Item (b)

Post-construction stormwater management must use a separate stormwater control measures (SCM)s for water quality and water quantity.

CJE Item (e)

Existing impervious areas must be modeled as grassland in good condition for critical storm calculations.

While CJE Item (b) would be a desired item to have incorporated for ease of cleaning and maintenance, we believe that as long as CJE Item (k) regarding designation of a management company for long term maintenance is adhered to, the design not meeting CJE Item (b) may be acceptable.

The remaining CJE items (a) and (e) were assessed by reviewing the stormwater analysis and evaluating all engineering assumptions and calculations. Based on our review, we concur that it appears as the engineering calculations for the discharge rate of stormwater quantity are accurate. Provided below is a chart demonstrating a comparison of what the proposed design provides for post-developed water quantity control treatment versus Geauga County requirements versus the CJE requirements. As you can see the proposed design exceeds Geauga County standard requirements anywhere from 6% - 23% depending on the various storm events. Alternatively, a comparison shows the proposed design does NOT meet the CJE requirements anywhere from 14% - 214% depending on the various storm event.

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Post Developed Water Quantity Discharge Comparison

Storm Event	Pre- Developed Discharge	Cty Allowable Discharge	Proposed Design Discharge	Proposed % Diff from Cty Allowable	CJE Allowable Discharge	Proposed Design Discharge	Proposed % Diff from CJE Allowable
1	45.52	45.52	35.11	22.9%	18.90	35.11	-85.8%
2	55.96	55.96	44.10	21.2%	18.90	44.10	-133.3%
5	71.11	71.11	56.81	20.1%	18.90	56.81	-200.6%
10		83.66	67.55	19.3%	18.90	67.55	-257.4%
25	-	101.43	82.62	18.5%	67.95	82.62	-21.6%
50		116.36	94.09	19.1%	82.61	94.09	-13.9%
100	132.47	132.47	124.79	5.8%	97.81	124.79	-27.6%

Critical Storm for County Standard - 1 year Critical Storm for Proposed Design - 1 year Critical Storm for CJE Requirements - 10 year

In summary, while the proposed design exceeds Geauga County standard requirements by an average of approximately 18% of all storm events it seems to fall short by roughly 100% over all storm events on meeting the CJE requirements by not adhering to CJE Item (a) and (e).

Please accept this analysis as confirmation that calculations appear to be accurate with the results as listed in the above tables.

If there is any other information required, please let me know.