CASE NO. 868-S-17 and 874-V-17 SUPPLEMENTAL MEMORANDUM #2

Champaign County Department of

> PLANNING & ZONING

Petitioner: Topflight Grain Coop, Inc. via agent Scott Docherty

Request:

June 22, 2017

Case 868-S-17

Authorize the construction of 2 grain storage tanks with a height of 145 feet 2 inches as a Special Use in the AG-1 Agriculture and I-1 Light Industry Zoning Districts, per Section 4.3.1 of the Champaign County Zoning Ordinance.

Case 874-V-17

- Part A: Authorize a variance for the construction of 2 grain storage tanks with a front yard of 11 feet and a setback of 30 feet from the centerline of a local street in lieu of the minimum required 25 feet and 55 feet, respectively, in the AG-1 Agriculture and I-1 Light Industry Zoning Districts, per Section 5.3 of the Champaign County Zoning Ordinance.
- Part B: Authorize a variance for the construction of 1 grain storage tank with a rear yard of 15 feet for the portion of the western storage tank that is in the I-1 Zoning District in lieu of the minimum required 20 feet.
- Part C: Authorize a variance for the construction of 1 grain storage tank with a rear yard of 11 feet for the portion of the western storage tank that is in the AG-1 Zoning District in lieu of the minimum required 25 feet.
- Part D: Authorize a variance for the construction of 1 grain storage tank with a rear yard of 11 feet for the eastern storage tank that is entirely in the AG-1 Zoning District, in lieu of the minimum required 25 feet.
- Location: A tract of land located in Seymour, bounded by Main Street to the west, Front Street to the south, and the railroad tracks to the north, in the Southwest Quarter of the Northwest Quarter of Section 16, Township 19 North, Range 7 East of the Third Principal Meridian in Scott Township and commonly known as the Topflight Grain Cooperative Elevator at 202 North Main Street, Seymour, Illinois.
- Site Area: 2.25 acres + 3.16 acre adjacent TopFlight Grain property with existing detention basin

Time Schedule for Development: As soon as possible

Prepared by: Susan Burgstrom Senior Planner

John Hall

Zoning Administrator

Brookens Administrative Center 1776 E. Washington Street Urbana, Illinois 61802

(217) 384-3708 zoningdept@co.champaign.il.us www.co.champaign.il.us/zoning

STATUS

Testimony received during the May 11, 2017 public hearing focused on drainage issues in the Village of Seymour in the general area of the subject property. To help alleviate drainage concerns, TopFlight Grain constructed a dry detention basin in 2003 on the 3.16 acres they own east of the subject property. Several residents testified at the May 11th hearing that drainage issues continue. Seymour has longstanding drainage issues with multiple origins, so it is difficult to discern responsibility for the issues in this area of town.

P&Z Staff requested "as-built" drawings of the drainage basin constructed on the eastern property in 2002 to determine if what was approved by design was constructed as designed. Mr. Docherty contacted SKS Engineering, the engineering consultant from that project and forwarded the 2004 as-built drawing to P&Z Staff, which was received on May 16, 2017.

DRAINAGE BASIN: AS-DESIGNED VS. AS-BUILT

P&Z Staff compared the Revised Erosion Control Plan received May 16, 2003 (As-Designed) and the Detention Basin As-Built Volume Calculations, End Area Method, dated May 20, 2004 and received June 9, 2017 (As-Built). Zoning Administrator John Hall determined that the as-built drainage basin exceeds the amount of storm water storage that was in the approved design. The following is a summary of John Hall's analysis:

- The basin provides detention storage for (1) the increase in impervious area and (2) compensatory storage to make up for the air space taken up by the flat temporary grain storage structure (and the previous grain ring) and (3) the pre-development storm water storage that existed on the eastern tract prior to construction of the detention basin.
- The design of the basin anticipated storm water storage to a depth of 102.25 feet local datum and the level of the temporary flat grain storage structure was at 100.5 feet local datum and the low point of the basin was 97.5 feet local datum. The finished floor of the nearest residence was 102.23 local datum.
- The detention volume numbers do reflect detention storage on the property to the south- that storage happened prior to development and it will continue to happen.
- The detention storage and compensatory storage are the 111,016 cubic feet of new storage that was created on the eastern tract and that is in addition to approximately 156,530 cubic feet of pre-development (referred to as "current" in the Topflight drainage report) detention storage that existed prior to construction of the new storm water basin.

The comparison of as-built to as-designed was complicated by numerous revisions made to the SKS 2002 Drainage Report during the process to approve Zoning Case 360-V-02; and the fact that the geography of the area studied could not be verified to be the same as what was designed, what was built, and the most recent information provided by current SKS staff. Nonetheless, John Hall spent a significant amount of time analyzing all the information, and has determined that the as-built drainage basin exceeds the amount of storm water storage that was in the approved design.

The P&Z Staff's current position is that the basin does not necessarily need to be regraded, but Topflight Grain does need to keep the basin maintained and that could require cleaning out sediment whenever sediment collects in the basin, especially the lower part of the basin.

PUBLIC COMMENTS FROM MAY 11, 2017 ZBA MEETING

At the May 11, 2017 ZBA meeting, Mr. Carper's letter regarding drainage concerns was distributed as an attachment to Supplemental Memorandum #1 dated May 11, 2017. Testimony was received, summarized as follows, which will be added to the Summary of Evidence under Item 8.I.

1. Mr. Docherty stated that he did receive a copy of Mr. Carper's letter on Tuesday when it was dropped off at his office in Monticello. He said that he has not spoken with Mr. Carper personally, but Mr. Docherty believes that the drainage tile that Mr. Carper is referring to runs underneath the temporary storage pad. He said that Topflight would be glad to repair any broken tile on their property to alleviate any drainage issue that concerns Mr. Carper. He said that when a grain bin of this size is constructed there will be a concrete foundation and Topflight would definitely move or repair any drainage tile that is in the construction footprint on their property to make sure that it is working properly as it runs through Topflight's property. He said that if a blockage is beyond Topflight's property, Mr. Carper would have to speak to the appropriate drainage district for assistance regarding his concerns.

Note: A copy of a letter dated August 15, 2002, from Eric Clements, Topflight Grain Operations Manager during Zoning Case 360-V-02, is attached to this memorandum. The letter includes a diagram showing the direction of the two tiles running through the subject property.

- 2. Ms. Lee asked Mr. Docherty if he is aware of the dry basin not working properly because it is too high. Mr. Docherty stated that he is not aware that the dry basin is not working properly, because no one has brought this information to his attention. He said that the dry detention basin was not constructed to continuously hold water, but to capture heavy flows of water, and move it into the tile system and dissipate into that tile until it would allow movement downstream into Camp Creek. He said that he not currently aware that the dry detention basin is not operating correctly. Mr. DiNovo stated that the intent of the basin was not to store runoff from the elevator site, but to intercept runoff from the farmland to the east and to compensate for the lack of detention on the elevator site by storing farmland runoff. Mr. Docherty stated on a temporary basis to capture that overflow and move into the tile system.
- 3. Ms. Griest asked Mr. Docherty if he has as-built drawings for the dry basin when it was constructed. She said that staff was not able to get those because they were never filed. Mr. Hall stated that staff never asked for the as-builts and the project was never wrapped up. He said that staff has included this documentation as a special condition to ensure that the dry basin was constructed at the elevation that it was supposed to be. Ms. Griest stated that if Mr. Docherty could obtain that documentation prior to the Board concluding this case, then it would not have to be included as a special condition.
- 4. Mr. Kris Karr, who resides at 1411 CR 300 E, Seymour, stated that his grandfather, James Karr, and his great-great-grandfather started this facility in 1883 with a Mr. Johnson. He said that as time has gone along, there have been many changes seen in this facility at Seymour. He said that he was on the original Monticello Grain Company Board, who purchased Farmer's Elevator, for fourteen years. He said that in looking at the request by Topflight Grain to construct additional storage, he believes that he represents the majority

of the farmers in the community who brings grain to the Seymour facility. He said that Topflight Grain is a coop and the farmers own the facility, and looking back in time there have been a lot of changes to the facility in Seymour. He said that as a farmer, he is pleased that Topflight has made a commitment to construct the proposed bins to store and protect the grain that is delivered to the Seymour facility in the fall to replace the temporary concrete flat, tarp covered area. Mr. Karr stated that he is also one of three Drainage Commissioners for the Camp Creek Drainage District. He said that the Camp Creek Drainage District starts by Mahomet and exits Champaign County by Camp Creek. He said that as the agricultural economy permits Topflight Grain Cooperative to expand by building more grain storage, the Camp Creek Drainage Commissioners, Mr. Kris Karr, Mr. William Jay and Greg Miller, along with our local Scott Township Highway Commission, Jeff Sebens, will commit to assist in resolving the drainage issues in Seymour. He said that they cannot or will not eliminate water issues, but they live in the community and see that if they can assist with drainage issues, they will.

5. Mr. James Randol, who resides at 114 E. Center Street, Seymour, stated that he has concern with the tile that was indicated in the detention basin. He said that he has spoken with Jeff Sebens, Scott Township Highway Commissioner and Mr. Sebens has completed an elevation reading and the east end of the detention basin is almost three feet higher than the ground level at the west end of the detention basin. He said that he realizes that the water flows to the west, but when the detention is almost three fee higher than the street, something could be done to place more depth to the east to assist in holding more of the water. Mr. Randol stated that the grade needs to be reshot, because water comes from onemile away and drains into the Village of Seymour. He said that along with the water flows bean and corn stubble that is left in Seymour. He said that the drainage ditch that is indicated on the map runs in the east end of the temporary storage and has been filled with decaying bean and corn stubble and the grade is not the same. He said that at one time, the corn and bean stubble was attempted to be cleaned out, but it was so wet that nothing could be done. He said that it would help a lot if Topflight could reshoot and regrade the detention basin as part of the project. He said that he understands that the detention basin is on their property and it is their responsibility to keep the ditch cleaned out. Mr. Randol stated that he would like it clear that he is 100% in favor of the proposed bins, because it will be a major improvement for the community. He said that there is still a water drainage concern for Seymour. Mr. Randol stated that the detention basin was constructed and the ditches have filled in. He said that the ditches are the responsibility of the Scott Township Highway Commissioner, Jeff Sebens, but maintenance of the detention basin is the responsibility of Topflight. He said that water that comes from over 1,000 acres away requires that the detention basin be routinely maintained.

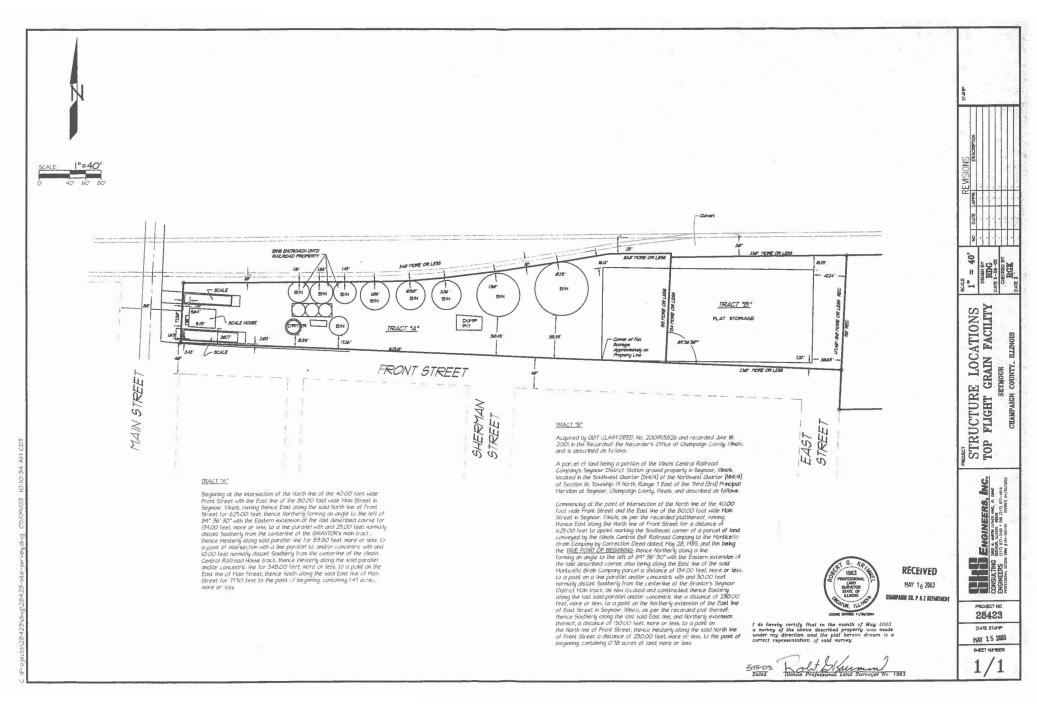
IMPERVIOUS AREA COMPARISON OF NEW STORAGE BINS AND FLAT STORAGE

The existing flat storage facility has an impervious area of 120 feet by 270 feet, or 32,400 square feet. Each proposed bin has an impervious area of 8,659 square feet. It is assumed that the proposed storage bins will be surrounded by gravel like the other existing bins once the concrete base from the temporary storage facility is removed. Drainage should improve both on-site and near the subject property, although the extent of that improvement is unknown.

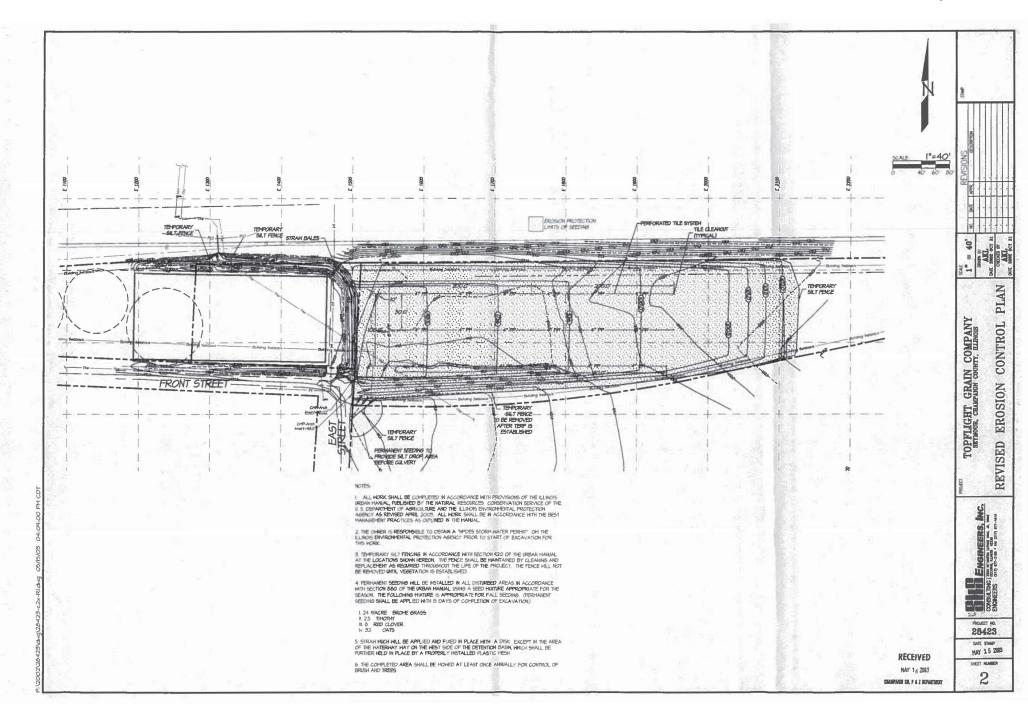
ATTACHMENTS

- A As-Approved drawing for the TopFlight detention basin received May 16, 2003
- B Email from SKS Engineering received June 9, 2017, with attachments:
 - Detention Basin As-Built Volume Calculations, End Area Method, dated May 20, 2004
 - Cross elevations for volume calculations
 - Map of calculated area
- C Email from SKS Engineering received June 15, 2017
- D Letter from Eric Clements to Robert Krimmel dated August 15, 2002

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Susan Burgstrom

From: Sent: To: Subject: Attachments: Julie Etherton <Julie.Etherton@sksengineers.com> Friday, June 09, 2017 3:04 PM Susan Burgstrom FW: Emailing - 28423-As-BuiltDrawing22x34.pdf Volume Calculations - End Area Method.pdf

Ms. Burgstrom:

These are the calculations from 2014. We hope this helps.

Thank you.

Julie Etherton

JUN 0 9 2017

CHAMPAIGN CC F&Z DEPARTMENT

From: Matt Schwenk Sent: Friday, June 9, 2017 3:01 PM To: Julie Etherton <Julie.Etherton@sksengineers.com> Subject: RE: Emailing - 28423-As-BuiltDrawing22x34.pdf

Here are the volume calculations from the original job.

Matt

Matthew A. Schwenk, P.E.-P.L.S. SKS Engineers, LLC 2900 N. Martin Luther King Jr., Dr. Decatur, IL 62526 217 877-2100 217 877-4816 (fax) matt.schwenk@sksengineers.com

From: Julie Etherton Sent: Friday, June 9, 2017 14:36 To: Matt Schwenk <<u>Matt.Schwenk@sksengineers.com</u>> Cc: <u>sburgstrom@co.champaign.il.us</u> Subject: FW: Emailing - 28423-As-BuiltDrawing22x34.pdf

Matt:

This dwg is in the 2002 file on the server. It is in the "2017" labeled file under the original project number, 28423. Would you be able to answer Ms. Burgstrom's question?

Thank you.

Julie

From: Susan Burgstrom [mailto:sburgstrom@co.champaign.il.us] Sent: Friday, June 9, 2017 2:24 PM To: Julie Etherton <Julie.Etherton@sksengineers.com> Cc: 'Scott Docherty' <<u>sdocherty@topflightgrain.com</u>> Subject: RE: Emailing - 28423-As-BuiltDrawing22x34.pdf

Hi Julie,

Would you happen to have the total as-built volume of the drainage basin?

Thanks, Susan

Susan Burgstrom, AICP, PCED Champaign County Department of Planning & Zoning 1776 East Washington Street Urbana, IL 61802

P: 217-384-3708 F: 217-819-4021

From: Scott Docherty [mailto:sdocherty@topflightgrain.com] Sent: Tuesday, May 16, 2017 3:35 PM To: Susan Burgstrom <<u>sburgstrom@co.champaign.il.us</u>> Cc: Eric Clements <<u>eclements@topflightgrain.com</u>> Subject: FW: Emailing - 28423-As-BuiltDrawing22x34.pdf

Susan,

Please find the attached copy of as built drawing for the Seymour detention basin you requested.

Regards Scott Docherty General Manager | Topflight Grain Cooperative 420 W. Marion, Monticello, IL 61856 phone: (217) 762-2163 fax: (217) 678-8113 email: sdocherty@topflightgrain.com

From: Julie Etherton [mailto:Julie.Etherton@sksengineers.com] Sent: Tuesday, May 16, 2017 3:34 PM To: Scott Docherty Subject: Emailing - 28423-As-BuiltDrawing22x34.pdf

Mr. Docherty:

Attached is the pdf for the As-Built Drawing for Seymour, Illinois.

If you have any questions, please let us know.

Thank you.

Julie Etherton Administrative Assistant

SKS No. 28423

May20, 2004

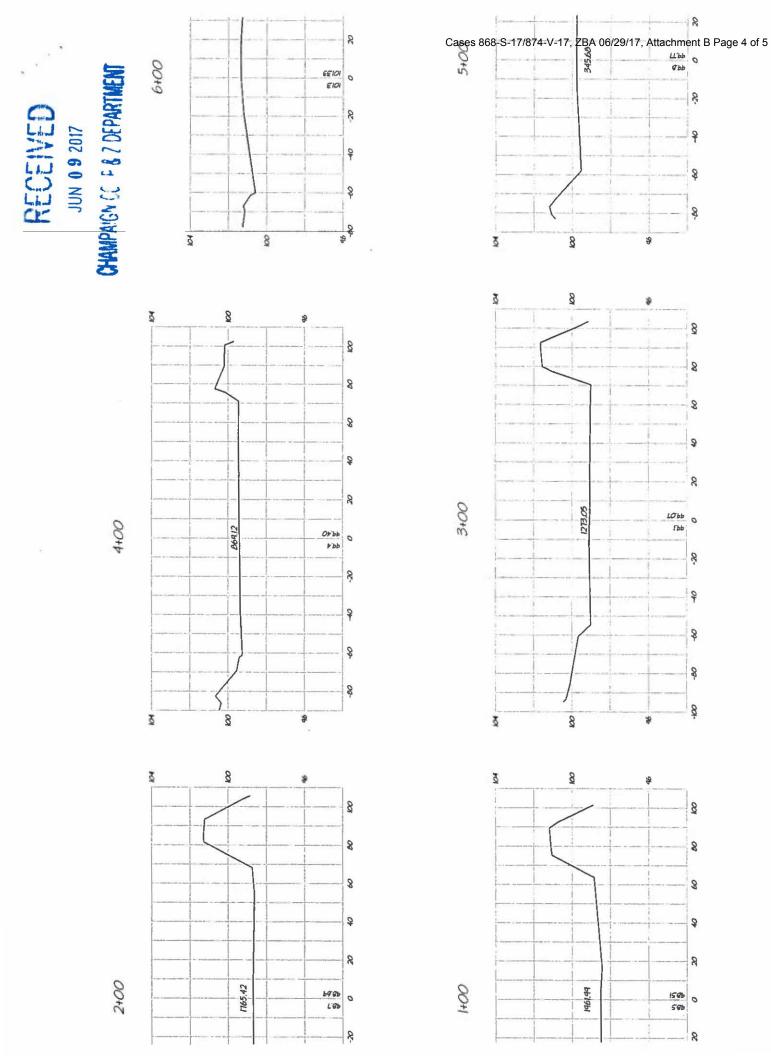
Top Flight Grain Seymour, Illinois

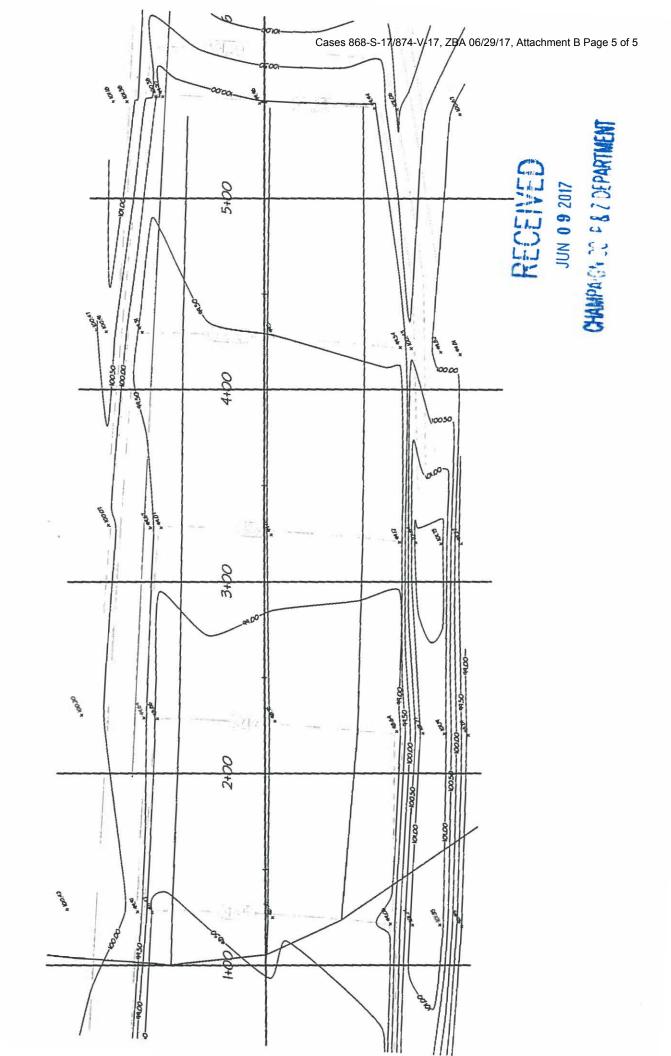
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Volumn Calculations - End Area Method

StationAreaLength1001961.991002001765.421003001273.05100400869.12100500345.68100							
Station 1+00							
Area 1+00 + Area 2+00 2	٠	100	=	186370.5	cu. ft.	6902.611	cu. yds.
Station 2+00							
Area 2+00 + Area 3+00	٠	100	=	151923.5	cu. ft.	5626.796	cu. yds.
2							
Station 3+00	11.000				1940		
Area 3+00 + Area 4+00 2	•	100	=	107108.5	cu. ft.	3966.981	cu. yds.
Station 4+00							
<u>Area 4+00 + Area 5+00</u> 2	٠	100	=	60740	cu. ft.	2249.63	cu. yds.
		<u></u>				<u>_</u>	
TOTALS		-11. U.S.		506142.5	cu. ft.	18746.02	cu. yds.

RECEIVED JUN 0 9 2017 CHAMPAIGN CO. P & Z DEPARTMENT





Susan Burgstrom

From:	Matt Schwenk <matt.schwenk@sksengineers.com></matt.schwenk@sksengineers.com>
Sent:	Wednesday, June 14, 2017 4:21 PM
To:	Susan Burgstrom; Julie Etherton
Subject:	RE: Emailing - 28423-As-BuiltDrawing22x34.pdf

Susan,

I did not do these calculations, but here is what I think I have figured out. The page 2 is cut off, but I think they cut it off on purpose because it shows only the area where they were computing the volume. On the calculations on page 1, I believe that the areas are too high by a factor of 10. If this is true, it is because the vertical scale on the sections is 10 times the horizontal scale and they forgot to factor that in to the result. I believe that the total volume should be 50,614 cubic feet, not 506,142.5. Hopefully this helps. Let me know if there is anything else you need us to do.

Matt

Matthew A. Schwenk, P.E.-P.L.S. SKS Engineers, LLC 2900 N. Martin Luther King Jr., Dr. Decatur, IL 62526 217 877-2100 217 877-4816 (fax) matt.schwenk@sksengineers.com RECEIVED JUN 1 5 2017 CHAMPAIGN CU. F & L DEFARTMENT

From: Susan Burgstrom [mailto:sburgstrom@co.champaign.il.us] Sent: Wednesday, June 14, 2017 11:27 To: Julie Etherton <Julie.Etherton@sksengineers.com>; Matt Schwenk <Matt.Schwenk@sksengineers.com> Subject: RE: Emailing - 28423-As-BuiltDrawing22x34.pdf

Hi Julie and Matt,

It looks like page 2 of the document you sent (attached) may have been cut off. Could I bother you to check that and resend?

Also, on page 1 (volume calculations), you have a total of 506,142.5 cubic feet. That volume seems extraordinarily large, and I just wanted to see if you could verify that/let me know if you stand by that figure.

Thanks, Susan

Susan Burgstrom, AICP, PCED Champaign County Department of Planning & Zoning 1776 East Washington Street Urbana, IL 61802

P: 217-384-3708 F: 217-819-4021

From: Julie Etherton [mailto:Julie.Etherton@sksengineers.com] Sent: Friday, June 09, 2017 3:04 PM



400 E. BODMAN BEMENT, IL 61813

ATWOOD . BEMENT . OSCO . EMERY . LA PLACE . MILMINE . MONTICELLO . PIERSON . SEYMOUR

August 15, 2002

Mr. Robert Krimmel 2900 N. Martin Luther King Jr. Drive Decatur, 11 62526

Dear Mr. Krimmel:

I am writing you in regards to a conversation I had with Dave Carper of Seymour on 8-12-02. Mr. Carper is a member of the drainage district in Seymour and has lived there for 79 years. Mr. Carper has a great deal of knowledge in regards to the drainage system in Seymour. Mr. Carper says that the tile that runs through our property from the southeast runs under the railroad tracks then proceeds north to a field tile before Rt. 10. The two catch basin's north of the tracks is a separate tile system. The two tiles ultimately end up in Camp Creek.

I have sent along a diagram that shows the direction of these two tiles. If you have any questions please give me a call at 217-678-2261.

Sincercly,

Eric Clements Operations Manager

