AFFADAVIT OF JUDIE CHILDRESS

My name is Judie Childress my address is 43W050 Seavey Rd, Sugar Grove, IL. I have lived at this address for over 20 years. I have worked in corporate accounting over 30 years and human resources over 25 years. I have a Bachelor's of Science in Accounting with a minor in Mathematics, and a Masters of Business Administration with concentrations in Accounting and Human Resources. I hold both an HRCI Senior Professional in Human Resources and the SHRM Senior Certified Professional accreditations.

My husband, firstborn son and I moved to our residence in Sugar Grove on December 31, 1998 in the middle of a snowstorm. As my husband is employed by a local municipality, he was plowing snow for his employer that evening and overnight – while I tried to start the unpacking process and dealt with a furnace that was not working. We moved from Batavia Township and we chose this property specifically for its rural setting with beautiful farmland views, its required proximity to my husband's employer and zoning that allows horses, as I have been a horse owner since 1989.

This residence and property would allow us to raise our children in a rural setting and have our horses, dogs and other animals, while continuing our careers in nearby local communities. We researched the local zoning laws to build a barn on our property and met all requirements, including commissioning architectural drawings, as required by county code before having our building permit approved, ordering the materials and building our barn with our own labor, including that of my father who has since passed away. We added fences that were good for our horses and would keep them safe. The day we brought the horses to our home property, I cried tears of joy, as it was my dream to have my dear mare Kate (whom I had owned for 10 years), my husband's mare Sunny and my sister-in-law's aged gelding Red, where I could see them at any time.

We have since added another son to our family, and have owned goats, rabbits, chickens and guineas at various times. We have lost Red, Sunny and Kate – but all 3 were allowed to live the balance of their lives on comfortable property where they were well loved and cared for. Kate lived to be nearly 38 years old and she had been my horse for over 25 years – Red lived to be 31 years old and Sunny was aged 34 at the time of her passing. We have added new equine partners and spend as much time as possible in the saddle every year.

We also lost our original barn to an electrical fire in 2009 – at a time when my family was out of town. The Elburn and Countryside Fire Department handled this catastrophe and ensured our home was protected and spared any damage. I cannot say enough about the emergency response team that put out the fire. Our wonderful neighbors, family and friends came together to deal with the immediate needs of the situation in our absence, even calling the insurance claims rep to get the process started. We have re-built the barn, in the same footprint of the original – though we could have asked for zoning changes or variance to build a larger or changed structure. We had to have a new set of architectural drawings done even with building in the same footprint and type of barn. We respect our community and the regulations and guidelines it contains to protect the well-being of all residents and other communities in the area.

We often see red tail hawks, white tail deer, Canadian geese, a variety of ducks and many other species of wildlife in our area. We enjoy colorful sunsets and beautiful starlit skies thanks to the open, rural area we live in.

We are active community members, including being 4-H Poultry Superintendents at the Kane County Fair through 2017, leaders of a local Cub Scout troup for 2 years, serving on local community Board of Trustees, serving on the Board of a local HR Chapter for over 8 years and serving the ILQHA Recreational Riding Program as the Co-Chair of the program and assisting with the organization and running of their charity ride, as well as silent and live auctions at the ride.

I am opposed to Sugar Grove Petition #18-010 Rezoning from E-1 to PDD.

I want to start with the reasons I am opposed with the beginning of our contact on this petition. I received notification from Crown Development of the public hearing on Planning Petition #18-010 on Thursday, January 3rd, 2019. This is less than 2 weeks from the hearing date, The notice listed the Hearing Date, Hearing Location, a one sentence description of the Zoning Request, and 3 sentences with the Project Description. The wording was less than 1/3 of an 8 ½" x 11" page. I believe this notification was insufficient to allow me to prepare for the public hearing. The notice did not include any resource or location to request or research information, either online or otherwise, regarding this rezoning request. This is not in accordance with the intent of the notification requirements embodied in local ordinance and law. The lack of any available resource of information being clearly included on the notice left me without the ability to gain needed facts to research the petition and its validity to prepare any significant public comment for the public hearing. I work full time and it is unrealistic to expect I have unlimited time to research for the information. The notice I received is attached as **Exhibit 1**.

Included in the Sugar Grove Planning Commission Advisory Report dated January 4, 2019 directed to the Sugar Grove Zoning Board, page 18 (**Exhibit 2**), there are 4 Standards for Rezoning listed – and this project meets none of these standards, as noted below:

1. Will this rezoning change promote the public health, safety, comfort, convenience and general welfare of the village and comply with the policies of the comprehensive land use plans adopted by the village?
    a. Public Health - Dr. Bajowala has provided information on the particulate matter increase due to the truck traffic and she discussed the effects on lungs and breathing. I want to add some research I have done on the effects of particulate matter on other health conditions.
        1. I have an autoimmune disorder that is shared by 10% of the US adult population and 25% of the youth – atopic dermatitis – commonly known as eczema. Per the included study published in the Central

European Journal of Immunology **(Exhibit 2-1)** the effects of particulate matter on autoimmune disorders are decisive.

1. Particulates can increase autoimmune reactions - "Autoimmune diseases are among the most crucial challenges of current medicine. They still cause chronic disability and mortality of patients with pulmonary and cardiovascular diseases. Currently, it has been accepted that particulate matter can contribute to autoimmunity by complex interactions between genetic, environmental, and epigenetic factors."

2. My husband has Type 2 Diabetes. I have also included a study **(Exhibit 2-2)** on the effects of particulate matter on diabetes. Again in the interested of honoring the respected board and community members time, I will simply quote the results:
    1. "Long-term exposure to relatively low levels of PM2.5 was associated with an increased risk for mortality attributable to underlying diabetes. In light of the growing epidemics of both diabetes and air pollution, this finding is of global public health importance."

b. Safety - The additional truck traffic will increase the number and frequency of accidents on our local roads. As brought forward by other speakers, Illinois Department of Transportation has no plans to widen Rte 47 leaving a 2 lane road to absorb all the additional traffic from the new interchange as well as the thousands of truck trips on top of the current traffic. More traffic simply means more accidents – significantly more traffic means significantly more accidents. On top of this – the low wages provided by these type of jobs put the employees on the cusp or under the poverty level, and per the attached Bureau of Justice Statistic report (**Exhibit #2A**), crime increases significantly for those living under the poverty level. Bringing low income level jobs in large volume to this area will increase crime significantly – decimating the safety of the residents of this area.

c. Comfort – heavy traffic at high speeds, especially of heavy vehicles, near residential homes causes road noise and pollution that does not allow the residents to be comfortable in their homes. They cannot use outdoor space without the constant noise and air pollution that disturbs the general sense of well being and comfort.

d. Convenience – additional traffic from the interchange, substantial truck traffic and employee traffic along with no planned increase in Rte 47 capacity, will result in longer commute times for all residents. The additional traffic from the interchange upgrade could not accurately be included in the traffic study commissioned, as the interchange upgrade is not yet complete. This makes all travel less convenient for all residents.

e. General Welfare – many residents have testified to the reasons they moved to our area – tranquility and a rural setting are listed top amongst these. This massive warehousing development will affect the landscape and make it commercial – no

longer rural, and the increased traffic, safety and crime concerns as previously discussed, will ruin any sense of tranquility.

2. Is the trend in of development in this area consistent with this request.
    a. No. As noted in the WSPY article dated January 18, 2019 and update January 21, 2019 (**Exhibit 3**) indicates this is the largest commercial project to date. Sugar Grove has not developed ANY land north of I-88 and nearly half of this property is north of I-88. All shown of the property north of I-88 is indicated as commercial in the Crown presentation on 1/16/19 – and this is in an agricultural and residential area. Also, the land adjacent to the portion south of I-88 has been developed as residential, and was zoned E-1 (estate residential) upon annexation in 2013. A warehousing development is not consistent with the current trend.

3. How are the permitted uses allowed by the rezoning more suitable for the property than the permitted uses allowed by the current zoning designation?
    a. They are not.
        1. This is farmland, recommended by the Kane-DuPage Soil Conservation District Report 18-107 dated November 1, 2018 (**Exhibit 4**) as may not be suited for the new zoning unless multiple Natural Resource Concerns, including soil erosion, topography & drainage, Kane County Green Infrastructure Plan, National Wetland Inventory High Functional Value Wetland area, a moderate to moderately high Aquifer contamination sensitivity and storm water drainage.
        2. Also, the report states that more than 60% of the soil is "somewhat limiting" for commercial building and just under 40% is "very limiting" for commercial building in the first section of the report.
        3. Sites with a score of 26-33 or greater on the Land Evaluation (LE) portion of the LESA score are considered to have high value farmland soils. The parcel included in the first section of the report has a score of 28 per the report.
        4. This report is for the portion North of Seavey Rd – for the sake of expediency, I am clearing defining where the reports for the other sections included in this project are available to be viewed or downloaded: http://www.sugargroveil.gov/elections/village-government-and-functions/planning-commission-zoning-board-of-appeals. They will be the files labeled Parts b, c, d and e. All have similar Natural Resource Concerns, even more percentages of soil in the "limiting" or "very "limiting" for commercial building and LESA scores in the high value farmland category.

4. Will this rezoning alter the character of the neighborhood or be detrimental to adjacent property?

a. This will completely alter the character of the neighborhood and surrounding area. It is farmland and residential – not commercial. This will completely change the landscape, view, road consistency, traffic level, pollution and noise levels.
b. This development will be detrimental to adjacent property. As noted in the Beacon News article (**Exhibit 5)** as well as evidence submitted by earlier speakers, residential properties located close to commercial developments lose approximately 16% of their value within 8 years.
c. The widening of Seavey Road from approximately 20 feet wide and gravel surface with grass shoulder area to 38' wide asphalt/concrete with curbs, gutters berms and buffers (**Exhibit 6 - Crossroad Corporate Center road plans**) greatly alters the character of Seavey Rd.

1. I have included photos taken from my property showing the current state of Seavey Road and the view south from my driveway towards I-88, as well as a photo from east of our property looking down Seavey. The picture in the upper left hand corner is from the Kane County Rustic Roads website and was included in a calendar for Kane County Rustic Roads (**Exhibit 7 & 7A**). The road itself and the character of the neighborhood are rural in character.
2. I have included photos of similar warehouse buildings that will be the new view from my driveway and a roadway similar to the type proposed in the plan and near a local warehousing facility (**Exhibit 8 & 8A**). The character of this property is clearly commercial and will greatly alter the current neighborhood and the roadway is highly trafficked, unlike our rural road now.

With all of these issues in mind, I have questions I would respectfully like to submit to the Planning Commission and Developer:

- The traffic study that was completed, was done in June 2018 and before the new interchange is even in service. The study was completed in June, when both Kaneland School District and Waubonsee Community College were not in session. In June 2018, there was a major construction project underway on I-88 – from the general area of the Rte4 47 intersection west to near Rochelle, IL. On top of all of this, there was also road construction at this time on Bliss Road and parts of Bliss Road were completely closed during this time. All of these factors would affect the travel in the area.
    - Can you please provide the methodology used in the calculations for this study?
    - How can the study be considered accurate when a significant change to the flow of traffic (i.e. the new interchange) is not yet in service?
    - Does this study estimate the interchange traffic, then estimate the effect of the truck traffic on that estimate?
    - With both the local public schools and the community college not being in session during the time of the traffic study, how can the results be accurate?
    - With the major construction project on I-88 affecting travel in the area, why was the study completed during this time?

- I respectfully ask that a new, more accurate traffic study be completed after the new exchange is complete and now that the major road construction projects are complete – and needs to be reviewed before any decision can be made on a significant zoning change.

I have attached a copy of the BP, Business Park District Code (**Exhibit BP**), as well as the requested variances from this code as made by the PDD zoning petition of Crown Development (**Exhibit BP-V**).

The variance request percentages are as follows in the Business Park section of the development:

- Lot size – 100% variance request (all 3 regulations)
    - This includes lot coverage – variance request is to increase allowable coverage from 70% to 90% -
        - Flooding, ground water issues, aquifer maintenance issues have not been addressed adequately for this variance request
- Building setbacks – 60% variance request (3 of the 5 regulations)
- Pavements setbacks – 64% variance request (7 of the 11 regulations)
- Architecture – 75% variance request (6 of the 8 regulations)
- Open Space and Tree Preservation Requirement – 32% variance in open space (13.2% less than the required 40%)
    - In the developers plans, open space includes water retention areas.

Essentially, this petition is allowing the Developer to ignore the Business Park District Code and set their own code at their own discretion.

- I would like to respectfully ask the Planning Commission and the Village Board their criteria for approving any and all variance allowances in a specific zoning petition
    - How significant would variance requests have to be for a petition to be non-recommended by the zoning board? (At what point is the code not worth the paper it's written on?)
    - With this large of a variance request, and no detailed plans for any portion of the project, how can this petition even be considered in accordance with Village regulations?
- I would like to ask for clarification of water retention areas being included as "open space" in the proposal. Is this up to current zoning ordinances? Is it in the best interest of the community to have them included as open space – or would a true 40% open space requirement better serve the needs of the community and the ability of the property to handle water absorption and flow?
- I would also like to respectfully ask the planning commission to support with facts how financially sound it is to have a self declared Residential Home master builder (in introducing the company as part of their presentation) in charge of a commercial development which is the largest commercial development (**Exhibis 3 & 5**) in Sugar Grove's history.

This plan has not been adequately communicated to other governing bodies that are affected by the proposed zoning and corresponding development. All the property north of Seavey Road included in this project (approximately 1/2 the project) falls into the Elburn & Countryside Fire Protection District (ECFD). This is the fire department that handled my barn fire in 2009 and protected my home in their efforts that day. I have personally spoken with 2 members of the Board of Trustees who have told me their first knowledge of this proposal to change the zoning and huge multi-use commercial project was via social media in the last few weeks.

- How can such a large draw of resources on a governmental body not be shared with that body before the proposal is being presented for Public Hearing?
- This will greatly tax the resources of the ECFD – and at the edge of their jurisdiction. How is Sugar Grove being a "good neighbor" when it is not readily sharing important information with the agencies it will need to support the development, and asking for their input?

In 20 years I have lived at Seavey Rd, I cannot remember a year when the creek, just east of the proposed development has not flooded its banks and spread well into the fields on both sides of it. I have attached pictures of just this flooding from a couple of years ago (**Exhibit 9**). When a creek already spills its banks annually every spring, and even into the summer, into both sides of the surrounding farm field – with plenty of open land and a gravel surface road around to help absorb the rains and snow melt – it will only do so more excessively with there are millions of feet of warehouse space, parking lots and asphalt road to cause run off.

This will cause flooded farm property – lowering the production rates of our local farms and causing them undue harm. In addition, there can be flooded homes as the water travels to find un-saturated ground to be absorbed. I went through the "100 year flood" in 1996 in our home in Batavia Township – and never want to experience water in my home again. I daresay all of the residents local to this development have the same opinion.

- I respectfully ask if there were any studies completed on the effects on farming yields in the area for the water diversion that will be caused by this proposed development.
- If not, I ask that the zoning board require a study of this type to assure the 4th zoning change guideline is met before any zoning change is considered.

I have not been notified as an adjacent property owner in any communication about significant changes in Sugar Grove's Comprehensive Plan.

Up until the 2005 plan was commissioned, Sugar Grove's Comprehensive Plan showed all property adjacent to mine as Agriculture (**Exhibit 10**) - Existing Land Use map from the 2005 Comprehensive Plan). On this first map, my property is clearly shown as a detached family residence zoning, as are the other similar properties along Seavey Rd up to Bliss Rd.

The 2005 Comprehensive Plan changed the zoning directly across Seavey Rd from my property to "Town Center Commercial" and the property all around my home as "Single Family Residential" per the new map (**Exhibit 11**). This would drastically change the nature of the area; is within 250 feet of my home – and I received no notification of this Plan change. This study to develop the Comprehensive Plan was started in 2003 at approximately the time when Crown started acquiring the property in the Blackberry Township area, under the Sugar Grove LLC entity - with the first legal document on record at the Kane County Records Land Search dated 02/21/2002 (**Exhibit 11A**). I understand the need for review and cooperative work effort when making long term plans, however the Plan Change so close to the land acquisition period raises the concern of the possibility of undue influence from outside the Village of Sugar Grove.

The 2014 Future Land Use Plan Amendment map (**Exhibit 12**) indicates the majority of areas around my home are "Business Park" with "Commercial Corridor" zoning on the western edge along Rte 47. It has all other homes on Seavey between Rte 47 and Bliss Rd as "Estate" does not show my property at all – it is part of open space. Again this is a significant change in planned zoning – eliminating the zoning for my home in the future - and no notification was given. This Amendment was put into place shortly after the annexation of parcels of the Crown property in mid-2013. The Comprehensive Plan 2018 Amendment map (**Exhibit 13 & 13A**) again shows my home as greenspace and significantly increases the "Business Park" area on Seavey Rd, up to the edge of Rte 47. This 2nd amendment to the Comprehensive Plan falls in line with the Petition currently under consideration for the new zoning. This again raises the concern of undue influence from outside Sugar Grove.

I put forth this is a taking without due process. The significant property zoning planned changes were never provided to me in notification, including my property being zoned as green space without a residence. I am seeking counsel to determine if this is actionable.

Closely related to this is the plan to widen Seavey Rd as part of the changed zoning and represented by **Exhibit 6 - Crossroad Corporate Center road plans**. The widening of the road continues past my property up to the creek as noted in Exhibit # - Crown doc. Part of my front yard and pasture space may be taken to create this road leaving me with insufficient room for our horse pastures. Again this is a taking without due process.

If the development and road are installed our property value will drop three fold – once for losing actual ground, another time for being so close to commercial and a third for the inability to be used as horse property. We have neighbors further east on Seavey Road who will have the same property value issues. We will not be able to sell our property for the current value that has come with residing here for over 20 years. This is undue financial hardship being directly caused by this development. Who does the petitioner suggest will make my family whole for its losses?

According to Blackberry Township assessor's records, our home was built in 1862 (**Exhibit 13-1**). This makes our home over 155 years old and constructed in the era of the Civil War. We have had a number of the family members who were raised in this home in the early 20th century come to visit us and our home. They tell stories of the farms here, the people who visited and stayed with them – including one of the first chiropractors to practice in the area – and neighborhood lore. Per their details – our home had the first indoor bathroom of any home in the

area, which was quite the news story at the time. These pieces of history will be lost when the houses are no longer standing. And these are just the family stories – there may be historically significant details that are not being considered.

- What research has been done on the historical significance of this home and the surrounding property?
- What research has been done on the historical significance of other properties (such as the Nickels farm) that will also be affected by this zoning change?
- Have any studies been completed to determine if there are significant historical artifacts in any of the property that is being re-zoned?

Also, we rent local farm fields and harvest approximately 8-10 acres of hay every year. We started doing so to feed our own animals, but were quickly asked by a number of local families and a church with property they were not yet ready to build on, with very small hay fields (under 6 acres) to process their hay as well. This is a win-win – as we can cover our expenses, and allow these families to benefit from local agriculture as well, whether it is feed for their animals or income. We have invested significant funds in the purchase and maintenance of the needed equipment to farm hay.

The new road development will make getting our various farm equipment, which are required to carry "slow moving" signs, to the local hay fields safely nearly an impossible task. This affects our ability to feed our animals and work with local residents to assure their agricultural product is harvested in a safe, well planned manner. It will also adversely affect us financially, as we will have to purchase hay, and the other local families as they will have to make the initial investment to purpose their own equipment to maintain hay fields.

This large, noisy road can pose a safety risk not only to our residents, but to our animals as well. Earlier this month, a horse in the southern suburbs had to be euthanized after running through a gate when frightened by snowmobile noise (**Exhibit A**) . I have ridden a horse along many roads in my 30 years of experience – and the nature of a horse is to respond to a threat by flight rather than fight. This means loud engines, or even a truck horn from someone who does not understand horses, trying to be "friendly", can cause the animal to cause severe harm to itself and anyone in it vicinity.

I also want to address an area I am well versed in – Illinois Sales Tax. I have dealt with sales tax from many governmental bodies for the 30 years of my career in some form – and Illinois for all of them. Crown listed in their presentation Sugar Grove would receive $1.1MM is sales tax revenue annually.

First and foremost, an understanding of the point of sale is needed. If these warehouses are "transfer" stations – i.e. the product is shipped in from manufacturers, re-organized at the warehouse and then distributed to retail stores/other warehouses/etc, there is not sales tax liability incurred. The sales tax liability happens at the point of sale – when the product is purchased by

the consumer. So any building that is truly a warehousing facility – there will be no sales tax revenue for the State of Illinois or Sugar Grove. This would also be true if the warehouses were for logistic companies – such as UPS, FedEx or DHL.

Illinois Sales Tax has a number of exemptions, as listed in the ST-1 Instructions from the Illinois Department of Revenue (**Exhibit 14**). Chief among them is the out of state sales tax exemption. If the product is shipping beyond state lines, the seller is not required to collect and remit sales tax on the sale to the State of Illinois. Even if the customer purchasing the product has a billing address in the state of Illinois, the determination of the sales tax liability is the address to where the product is shipped. For out of state sales, the sellers would be required to be registered in the state the product was shipped to, and collect and remit sales tax to that state. This is the general idea of the new internet sales tax regulations that were put in place last year.

Other exemptions include:

- Qualified food (designated to be prepared and consumed off the provider's premises)
- Drugs
- Medical appliances
- Items for resale
- Manufacturing machinery and equipment (including repair parts)
- Farm machinery and equipment (including repair parts)
- Graphic arts machinery and equipment (including repair parts)
- Payments from the SNAP food program.
- Purchases of material for use in specific designated enterprise zones
- Entity exemptions for Farms, not for profits, schools, churches, etc

There are other restrictions that will take too much time to describe and explain, and to respect the time of our board and the members of the community, I will allow you to read the information I have included herein.

This severely limits the Illinois Sales Tax liability for the warehousing companies and the corresponding sales tax revenue for the Village of Sugar Grove. All municipalities receive 1% of the State Sales Tax collected from sales of businesses in their borders.

The Village of Sugar Grove also has a non-home rule municipal tax of 1.0% (**Exhibit 15 & 15A**). As the Illinois Department of Revenue is the resource that collects the tax and disperses the revenue to municipalities, any non-home rule tax that would have been collected on the sale will also be considered as exempt.

Also, effective January 1, 2018, the State of Illinois enacted Public Act 100-023 imposing a 2% processing fee for collecting the municipal tax and dispersing the revenue to the municipalities. This effectively makes the 1% municipal tax 0.98%. (**Exhibit 16**)

In order for Sugar Grove to receive the $1.1MM sales tax revenue purported by Crown, the sales of non-exempt product would have to be in excess of $55.5MM per year. Please remember –

this does not include transfer transactions, out of state sales or any of the in state sales for exempted items or entities.

- I respectfully request the developer please provide the revenue studies supporting the level of revenue required by sales in the development to sustain this tax benefit and detailed calculations for this $1.1MM annual sales tax revenue.
- I also respectfully ask how a sales tax figure can be accurately estimated when the nature of the businesses who will occupy the buildings are not yet determined.

I have been in the Human Resources field for more than 25 years. The more I research and learn about the warehousing employment culture, the more concerned I become about it entering our community.

Wages for employees are driven by many factors, including supply and demand, education, experience and training required to complete the job, Primary amongst these is the amount of training required to complete the job. These warehousing "pick & pack" jobs require minimum training, and thereby are low wage jobs, as the employer can easily replace the employee without much "front loading" cost for training.

The working conditions have become so terrible, there is a group/website for their support: Warehouse Workers for Justice (http://www.ww4j.org).

Issues included in their "crisis" discussion:

- "Perma Temp" system – up to 70% of workers are through temp agencies
  - Very little chance for promotion
- Poverty level jobs – Chicagoland workers needs at least $16/ hr to support a family, most warehouse jobs pay $10 or less – local Kane County municipalities warehouse wages are as follows (per Indeed website) (**Exhibit 16-1**)
  - Average in Aurora - $12.28
  - Average in Elgin - $11.99
- Unfair and illegal wage payment by the employers
- Unfair and illegal labor practices – discrimination on various basis
- Lack of basic benefits – access to affordable health care, paid time off
- Unsafe working conditions
- Violations of worker's rights

I have already mentioned the Bureau of Justice Statistics report (**Exhibit #2A**) on the correlation between low wages and higher crime rates. The current percentage of residents living below the poverty level in Kane County is 10.8% (**Exhibit 16-2**). The warehousing jobs will increase this percentage, thereby increasing crime – right on our doorstep.

The wage level and benefits afforded by these jobs will inhibit the employees from being active members of our community – due to the need to work more than one job to cover living expenses.

These are "jobs" – not career paths for people to progress into higher level, better positions. Our community and its members deserve better that this.

I want to address the "unmentionable topic" set forth by Crown on Wednesday, January 16th – the development in Will County. I will not discuss in detail Elwood and the intermodal terminals – as this proposed development does not YET reach that level – but even Elwood had to start somewhere – and it wasn't with the size of the development they have now.

I would like to discuss the other Will County areas that I am familiar with have been greatly affected by this type of development and tax structure (TIF). I grew up in Bolingbrook, IL – and at the time, it was considered to be a semi-rural area. There were many residential subdivisions, surrounded by farmland. The only recognizable industry was the Johnson & Johnson facility that was south east of the I-55 & Rte 53 interchange. There was a commercial area near the Rte 53 and I-55 interchange with local businesses. The town has its own local airport (Clow International) and shared a school district with neighboring Village of Romeoville – sounds pretty familiar doesn't it?

When I visit Bolingbrook now, I don't recognize all the aspects that made it the hometown I grew up in. The Mr.Quick restaurant, local Tortura's and A&P grocery stores, Papa's Pizza (often credited for the development of my favorite pizza – the Mama's special - sausage, onion, bacon & BBQ sauce) and other local businesses have gone by the wayside. The small Rte 53 business district has been absorbed in the urban sprawl of the Remington Dr commercial developments. The quiet rural east edge of town now has an IKEA, Promenade shopping area and a massive business park full of giant warehouses that line I-355 and make it feel as if you are driving through an alternate universe where tranquil residential areas don't exist. The once rural western edge of town is now the home to warehousing for Ulta, WeatherTech and Goya products.

I moved away from the area 27 years ago – and if I didn't know where to locate the residential areas – I wouldn't think people actually lived now. I know I don't want to live in Bolingbrook in its current state.

The other side of this development is the burden it has put on the municipality through developments using tax incentives (**Exhibit 17**), Bolingbrook is now $289 million in the red (Romeoville is $89 million in the red). These communities didn't start this process in the red – but listened to developers promise appreciation in property values and tax related benefits that never came to fruition. The developers made their money and left the community to pick up the pieces. Let's not be a community who falls into that same trap.

The developer has mentioned TIF – which similar tax incentive programs were major contributors to the financial ruin noted above - as did the Zoning Board in their 4 point summary at the start of the meeting on Wednesday, January 16th meeting.

There is a TIF study underway for this development (**Exhibit 18**). The developer funded this study – and while finding alternate ways to pay for needed information helps keep costs low for Sugar Grove, it is tinged with tones of conflict of interest. The developer's rep has in fact told a

room full of Sugar Grove residents in Monday, January 14th meeting, that without the requested PDD zoning and TIF – they will drop out of this project.

The TIF is by definition to be used for blighted property to help revitalize areas that otherwise be overlooked as possible development projects (**Exhibit 18A**). Crown development said in their presentation on January 16th that this land is prime land ready for development – this does not meet the definition of blighted. Other jurisdictions, such as the State of California, have put regulations in place to help assure TIF funds are utilized in a way consistent with their intent. Obviously this is a current and flagrant problem – we need to see it for what it is – taxes that will have to be replaced by our community paying more, while the developer is able to pay for their costs with funds intended for the betterment of all.

The other point that gets questioned as conflict of interest on commentary from social media and beyond, is the monies Crown development is stating they are contributing to the I-88 Rte 47 interchange project. As it is unclear if Sugar Grove applied for federal funding that may have been possible for the project – the village is responsible for 5% ($1,25MM of $25MM project). Crown repeatedly announced on January 16th in their presentation their contribution of $1.25MM to cover this cost. Interestingly, there is a an article from November 2018 stating the Village is working with the developer to cover ½ of the cost ($625.000).(**Exhibit 19**)

- I respectfully ask the Planning Commission and Village Trustees if research was done for possible federal funding, and if the research and decision process not to apply for federal funding, instead accepting developer funds can be explained.

I often travel on I-88 west to DeKalb for various tasks – and exit at Peace Rd to travel into the DeKalb/Sycamore area. There is a large warehousing district directly off the exit – and away from the residential area of DeKalb. As I notice availability signs for these warehouses, I did an internet search on Google on "available warehouse space in DeKalb" and received a list of warehouses (**Exhibit 20**). Please note – I am not a realtor, this was a simple online search. Of these listings, 4 were available space to be built to the leasee's specifications for size, height, etc. All of these listings have been available for nearly 3 years.

This warehouse space is approximately 1 mile from a service interchange that includes fuel and food, and 15 miles closer to the I-39 interchange – which is a major north/south highway through Illinois and beyond its borders. As stated by Ryan Walters in his earlier presentation – this development was built without a tax incentive district. It also has a ready labor force, in the resident college students of Northern Illinois University. This is a much more responsibly thought out and placed warehousing district.

I have included the sales flier for these warehouses (**Exhibit 21**) – and it mentions a tax abatement program. As mentioned earlier, there was no TIF district for these warehouses, but a separate program, negotiated and approved through the local school district, to give the businesses a tax abatement for a limited period of time (**Exhibit 22**). This type of program works

WITH the local schools (or other tax fund recipients) to assure the needs of the community are met.

- The developer has put forth in their presentation that there is a need for warehouses that is not being met. I respectfully ask for the research, data and reports that were used to develop this conclusion.
- I also ask how the developer to provide data and research supporting their conclusion that the development at Rte 47 will meet the warehousing needs mentioned while the already established development at Peace Rd will not.
- Was there any research completed on tax abatement options, other than a TIF, to assure the community's needs are met, and tax income for the community would be equitably spread to the commercial properties to assure proper funding for all the community needs?
    - If so, why was a TIF chosen as the best option – when the property being considered does not meet the qualifications for TIF structure?
    - Were the tax funded entities (school district, fire district, etc) included in the discussions on this subject?

In closing, I ask our esteemed planning commission members and village trustees to review all the evidence submitted by the public in making a financially sound, health, environment and safety conscious decision based on the general welfare and not altering the character of the village and the surrounding communities. I believe the community agrees that decision would be to decline Petition 18-010.

Judie Childress

State of Illinois
County of Kane.

This instrument was acknowledged before me on 2-6-19
(date) by Paul J. Freske (name of person).

(seal)

Paul J Freske
signature of notary public

"OFFICIAL SEAL"
PAUL J FRESKE
Notary Public, State of Illinois
My Commission Expires 9/10/2020

Childress
Exhibit 1

Planning Commission Petition #18-010

Hearing Date: January 16, 2019, 7:00 p.m.

Hearing Location: Sugar Grove Public Library, 125 S Municipal Drive, Sugar Grove, IL

Zoning Request: To rezone property from E-1 Estate Residential to PDD Planned Development District and to assign PDD Planned Development District zoning to newly annexed property.

Project Description: The subject property consists of approximately 760 acres. The requested PDD zoning will allow the property to be developed with a mix of uses including: single family residential, one (1) multifamily residential complex, industrial uses such as manufacturing and warehouse distribution facilities, commercial uses such as retail, hotels, and restaurants.

This project will include the following amenities: bike paths will be constructed throughout the development, the wooded area south of Merrill Road will include an area of permently preserved open space, the creek area will be permently preserved as open space, and the new single family neighbohood will include a two (2) acre park.

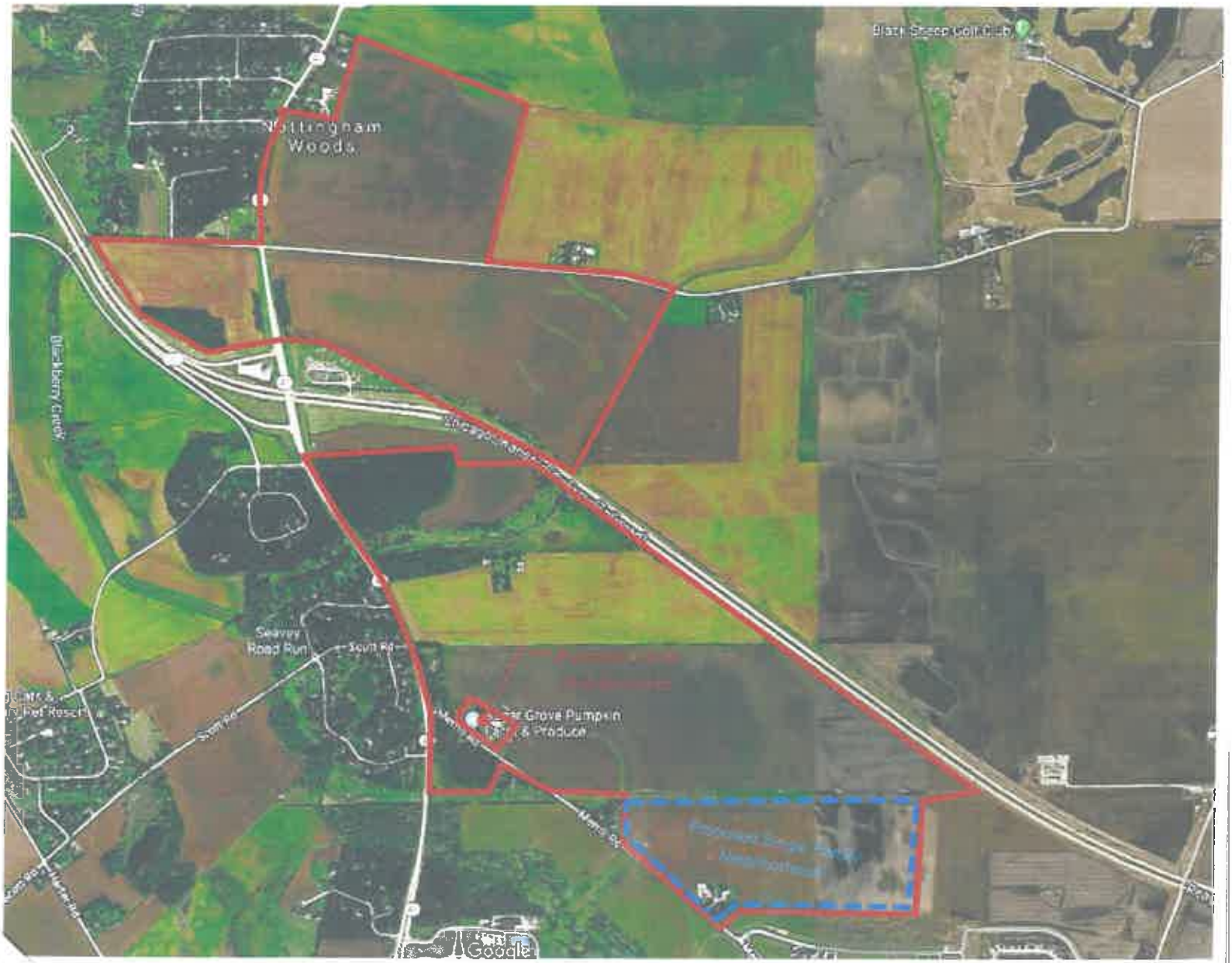

Exhibit 2
Childress

1. *Will this rezoning change promote the public health, safety, comfort, convenience and general welfare of the village and comply with the policies of the comprehensive land use plan and other plans adopted by the village?*

   This rezoning complies with the Village of Sugar Grove Comprehensive Plan. The proposed land uses are consistent with the contemplated uses of the Business Park and Single-Family Residential designations. This project will preserve the mapped environmentally sensitive areas.

2. *Is the trend of development in the area consistent with this request?*

   There is no trend of development in the immediate area. Development has been dormant since the 2008 Great Recession. The single-family portion of the project is in keeping with the established but dormant trend along the Village's northern boundary. This development will be located immediately adjacent to the existing Hannaford Farm single-family neighborhood. The proposed commercial and industrial uses are a direct result of the establishment of the interchange at I-88 and Sugar Grove Parkway. The interchange construction is a trend-setting development. The proposed uses are traditionally located near tollway interchanges and highway frontages.

3. *How are the permitted uses allowed by the rezoning more suitable for the property than the permitted uses allowed by the current zoning designation?*

   The current zoning allows only large lot single-family residential dwellings. This is not the highest and best use of the property due to the accessibility and proximity of regional transportation infrastructure.

4. *Will this rezoning alter the character of the neighborhood or be detrimental to adjacent property?*

   The addition of the interchange changes the character of this area. Historically, an interchange such as this brings commercial development to an area. The single-family residential portion of this project is in keeping with the established character of the adjacent area.

PUBLIC RESPONSE

The public hearing has been properly noticed. The Community Development Department has received a number of inquiries about this petition.

agreed to offset tree removal by donating money to fund the planting of trees throughout the Village per the annexation agreement amendment.

Lastly, there is no plan for permanently preserved open space on property north of I-88 outside of the required landscape setback area, stormwater management areas, and a ten foot (10') wide path along Seavey Road.

Traffic Impact

Attached is a Traffic Impact Study prepared by Kimley-Horn. The traffic study describes the roadway improvements planned for the southern portion of the planned development. Denny Road currently terminates east of this property. The petitioner is proposing to extend Denny Road through the property to provide both a local east/west connection between Norris Road and Sugar Grove Parkway south of the Tollway in accordance with the Village Comprehensive Plan and Transportation Plan and to provide access to future industrial lots planned immediately south of I-88. The planned roadway network will also require the realignment of the western most portion of Merrill Road. Merrill Road will be reconfigured to align directly opposite Thornapple Tree Road. The petitioner intends to complete these roadway improvements as part of the initial phase of the project.

The circulation network being proposed accomplishes several mutual objectives: (1) provide two access points to IL 47; (2) provide for continuation of Denny Road to IL 47 from its current termination point at Red Bud Land and (3) discourage unwanted business park traffic from Bliss Road and existing Merrill Road.

The traffic study provides information about additional roadway improvements based on anticipated traffic volumes generated by this project. Please be reminded that the assumptions of this traffic study are based on the maximum use of the property according to the petitioner. It should be understood, however, that without a commitment from the developer to the density and exact uses developed on the property, any conclusion draw from this study is speculative. As each parcel develops, a traffic impact study will be required.

No formal application has been submitted to the Illinois Department of Transportation (IDOT) for access to IL 47 at the proposed locations. The proposed access points are reflective of best practices, conversations the petitioner has had with IDOT officials concerning the proposed development and IL 47 access, and of the direction given by IDOT officials.

STANDARDS FOR REZONING

When considering map amendment requests, the Zoning Ordinance provides standards to be considered. Each standard is addressed below.

Children Eyh 2-1

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Air pollution, oxidative stress, and exacerbation of autoimmune diseases

Anna Gawda, Grzegorz Majka, Bernadeta Nowak, and Janusz Marcinkiewicz✉

Chair of Immunology, Jagiellonian University, Collegium Medicum, Krakow, Poland
✉Corresponding author.
Correspondence: Prof. Janusz Marcinkiewicz, Chair of Immunology, Jagiellonian University, Collegium Medicum, Czysta 18, 31-121 Krakow, Poland. e-mail: mmmarcin@cyf-kr.edu.pl

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Abstract

A number of epidemiological studies have shown a strong association between exposure to ambient airborne particulate matter (PM 2.5, PM < 1.0) and lung or cardiovascular diseases characterised by high mortality and morbidity. However, much less is known about the role of air pollution in the pathogenesis of autoimmune diseases, which constitutes a significant problem in modern society.

This paper summarises the state of current research regarding the influence of PM on the development and/or progression of autoimmune diseases. A brief review of the great body of research concerning pathogenesis of autoimmune disorders is presented. Then, the scope of our review is narrowed to the research related to the impact of particulate matter on oxidative and nitrosative stress, as well as exacerbation of chronic inflammation, because they can contribute to the development of autoimmune diseases. Moreover, we discuss the impact of various components of PM (metal, organic compounds) on PM toxicity and the ability to generate oxidants.

Keywords: inflammation, oxidative stress, air pollution, particulate matter, autoimmune disease, nitrosative stress

Introduction

The detrimental health effect of the exposure to particulate matter (PM) present in air pollution has been documented in numerous studies [1, 2]. Epidemiological evidence indicates that poor air quality contributes to increased morbidity and mortality due to several reasons. Primarily, chronic exposure to PM increases the risk and is associated with progression of lung and cardiovascular diseases [3]. Production of oxidants, either directly by components of PM or by the host response to air pollution, seems to be the major biological effect responsible for tissue injury, and a local as well as systemic inflammatory response [4]. The question arises whether oxidative stress induced by exposure to PM contributes to an increased risk and/or pathogenesis of autoimmune diseases. It is not clear yet whether composition (metal vs. organic components) and/or size of air pollution particles (PM 2.5 vs. PM < 1.0) affects their toxicity and capacity

to induce inflammation and immune response to autoantigens.

The immune system – consisting of the fine-tuned network of humoral and cellular components – provides protection against microbial pathogens. The unique ability to discriminate between 'self' and 'non-self' allows this defensive network to eliminate the invading microorganisms while maintaining tolerance towards autoantigens [5]. However, there are cases in which the system fails, and its malfunctioning contributes to pathological processes such as autoimmune diseases (ADs). Prolonged activation of the immune system resulting in chronic inflammation and tissue damage with following involvement of the adaptive immune system is typically observed in most ADs [6].

Autoimmune diseases have a strong genetic background involved [7, 8], but the impact of environmental factors must not be underestimated. Infectious agents, drugs as well as physical agents such as cold exposure or air pollution, have been considered as risk factors for either development or exacerbation of these conditions [6].

In this short review, we focus on the pathogenesis of ADs associated with oxidative stress in the correlation with particulate matter (present in air pollution), which can provide an environmental trigger for autoimmune processes.

Autoimmune diseases

Autoimmune diseases are chronic pathogenic conditions embodying a heterogeneous group of disorders associated with the loss of immunological tolerance to self-antigens [8]. Affecting ca. 5% of the world population, they are the fourth leading cause of disability for women [9], who are more predisposed to suffer from them (80% of AD patients being female [10]).

The common feature that defines autoimmune diseases is the breakdown of immune tolerance, leading to the development of the adaptive immune response to self-antigens. The hallmarks of the ADs are: the presence of defined autoantigens, production of autoantibodies, and activation of autoreactive CD4+ T helper cells and self-reactive CD8+ cytotoxic T cells along with the engagement of the innate immune systems components, such as phagocytic cells (macrophages and neutrophils) [11]. Macrophages take part in tissue damage by releasing reactive oxygen (hydrogen peroxide, superoxide anion) and nitrogen species (nitric oxide). Pro-inflammatory cytokines secreted by macrophages recruit neutrophils and T cells to the site of inflammation [8]. Moreover, macrophages can drive the autoimmune process by phagocytosis of apoptotic/necrotic cells serving as a potential source of self-antigens that can be subsequently presented to the auto-reactive T cells.

Autoimmune diseases are usually classified into two groups, depending on whether the effect is organ-specific or systemic [8]. Systemic autoimmune disorders, such as rheumatoid arthritis (RA) or systemic lupus erythematosus (SLE), are characterised by multi-organ involvement, which probably arises from the systemic distribution of the auto-antigens.

Organ-specific autoimmune disorders develop when the immune response is directed against auto-antigens located in a specific organ. Diabetes mellitus type 1, multiple sclerosis (MS), primary biliary cirrhosis (PBC), Hashimoto's thyroiditis or Graves' disease deserve to be mentioned among numerous organ-specific autoimmune diseases. What is important, the autoimmune processes which take part in the development of the chronic inflammatory diseases mentioned above demonstrate organ-specific characteristics.

The involvement of the immune system has implied theories that specific proteins, which play a crucial role in the immunological response, may take part in the pathogenesis of ADs. Some HLA haplotypes are considered to be particularly important for presentation of autoantigens in the autoimmune process. Thus, concurrent expression of both HLA-DR2 and HLA-DR3 predisposes an individual to development of systemic lupus erythematosus (SLE). Type 1 diabetes mellitus (DM) has a particularly strong correlation with HLA-DR3, -DR4, -DQ2, and -DQ8 [12, 13]. People with certain alleles of HLA-DR4 are notably

predisposed to rheumatoid arthritis (RA) [14]. Although genetic predilection plays a major role in autoimmunity (over 200 loci have been implicated in autoimmune disorders), genetics cannot fully explain the patterns of these diseases.

Infections [15, 16] and immune adjuvants [17, 18] are thought to play a crucial role in AD development or exacerbation in genetically susceptible individuals [19, 20]. Our current studies focus on elucidating the impact of the inorganic chemical substances (such as transition metal oxides) present in air pollution on the autoimmune processes.

Oxidative/nitrosative stress

Prolonged activation of the innate immune system and chronic inflammatory response are both features of ADs that are commonly associated with increased concentration of reactive species of oxygen and nitrogen that can significantly contribute to the development of these pathogenic conditions.

A relatively new term of oxidative stress refers to the imbalance between oxidant and antioxidant molecules that can potentially lead to a tissue damage due to the excess of the former [21]. Such a situation occurs when production of reactive oxygen species exceeds their elimination rate regulated by the antioxidant system. Similarly, nitrosative stress has been described as a phenomenon in which the reactive nitrogen species in excess contribute to the pathogenic processes [22].

The terms reactive oxygen and nitrogen species encompass molecules that are natural by-products of the normal cell metabolism. Physiologically, these molecules are involved in numerous processes – they are important for respiratory burst of phagocytic cells, cellular signalling, and thyroid hormone synthesis [23].

Most of the reactive oxygen species (ROS) are generated by electron leak during ATP production in mitochondria [24], but they can also be generated by NAPDH oxidase and other oxidases. Superoxide anion, hydrogen peroxide and hydroxyl radical are the three most important ROS in biological systems. Other reactive molecules such as HOCl (important for microbicidal activity of phagocytes) can be generated by reaction of hydrogen peroxide with chloride anion catalysed by myeloperoxidase present in azurophilic granules of neutrophils [25, 26].

Nitric oxide (NO) is the primary source of all reactive nitrogen species (RNS) present in the biological system [27, 28]. NO is a small signalling molecule generated by nitric oxide synthase, which plays a major role in vasodilation and neurotransmission but is also involved in the antimicrobial response of the phagocytes. The nitric oxide potential in the pathogenesis of diseases stems from its reaction with superoxide, and results in formation of peroxynitrite, which is a potent nitrating and oxidising agent [29, 30].

Under physiological conditions, the concentration of reactive oxygen and reactive nitrogen species (RONS) is controlled by the scavenging system involving molecular and enzymatic antioxidants, which serve to maintain cellular redox balance [31]. A decrease of RONS level negatively affects cellular signalling [32], whereas high levels of RONS have been implicated in the pathogenesis of ADs [33, 34]. The mechanism behind this observation might be related not only to the initiation of pro-inflammatory response, but also to the structural modification of autoantigen resulting in a generation of novel, potentially auto-reactive epitopes [35]. These alterations usually occur upon RONS-dependent peroxidation of lipids within the cells, which leads to formation of highly reactive aldehydes, such as malondialdehyde and 4-hydroxynonenal. These molecules can form covalent bonds with proteins and alter both their structure and biological functions. Products of oxidative modification present in blood are considered potential biomarkers of the systemic oxidative stress, inflammation, and ADs [36].

Particulate matter present in air pollution

Air pollution is a mixture of gases (carbon monoxide, nitrates, sulphur dioxide, and ozone), aerosols, and

particulate matter (solid and liquid particles) [37, 38]. There are two main subtypes of atmospheric particulate matter: fine particles and ultrafine particles. Fine particles have a diameter smaller than 2.5 μm (PM 2.5), while the ultrafine particles have a diameter smaller than 0.1 μm [3].

Roughly-speaking, particulate matter (PM) is a complex mixture of solid and liquid particles that is released into the air during combustion of coal, wood, gasoline, diesel, or fossil fuels, as well as from natural sources (road dust, fires, volcanic emissions, etc.) [39]. Most of the ultrafine particles are composed of sulphates and nitrates, but hydrocarbons, benzene, toluene, metals, and other substances can also be present in the adsorbed molecules, which can be inhaled by humans [2].

Human lungs make up the largest surface area exposed to the environmental factors present in the air. The human respiratory system possesses its own defensive mechanisms involving components of both innate (mechanical mucus barrier, mucociliary clearance, and antimicrobial factors) and acquired immunity (reaction to specific antigens with T-cell involvement) [40]. However, some oxidant substances constituting air pollution are likely to influence the physiology of the cells and either trigger or exacerbate the inflammatory reaction. Progressing industrialisation and the growing number of motor vehicles put people at risk to exposure of high concentrations of such substances that have the capability to percolate to the upper respiratory tract.

Air pollution vs. autoimmune diseases

Several epidemiological studies have provided substantial evidence for the relationship between air pollution and development of autoimmune diseases [41, 42]. Herein, we present certain ADs and analyse the correlation between disease incidence and the presence of particulate matter in inhaled air.

SLE is a chronic autoimmune disease characterised by the presence of autoantibodies, formation of immune complexes, and activation of autoreactive B and T lymphocytes [43, 44]. Occupational exposure to silica, pesticides, solvents, and other inhaled substances has been linked to its development [45–49]. The incidence of SLE has not been found to correlate with particulate matter present in the air. However, it seems likely that PM 2.5 may exacerbate the onset of the disease because they were attributed to a significant increase of the level of anti-dsDNA antibodies, and the presence of the renal casts in SLE patients [50].

Diabetes mellitus type 1 can be characterised by total deficiency of insulin release by the β-cells of pancreas, which are destroyed in the autoimmune process [51]. The root cause of DM type 1 remains unknown, but some studies suggest that a combination of genetic and environmental factors is involved. Exposure to ozone, sulphates, and other pollutants present in the air has been associated with type 1 diabetes in children [52, 53]. Air pollution was found to increase the risk of acute complications of diabetes demanding hospitalisation [54]. Nevertheless, there are only a few reports suggesting that air pollution increases mortality among diabetics [55–57].

Rheumatoid arthritis is a systemic autoimmune disease characterised by multi-system inflammation [58–60]. Both genetic and environmental factors have been implicated in its development; however, the mechanism through which the environmental triggers might affect the disease has not been elucidated [61]. Both tobacco smoking and exposure to silica have been associated with higher risk of developing RA [62–66]. High concentration of PM 2.5 has been shown to increase the risk of juvenile idiopathic arthritis among young children by 60% [67]. Similarly, exposure to PM 2.5 has been associated with the prevalence of systemic RA [61, 68]. Furthermore, the analyses performed by the Nurses' Health Study in 2009 [69] suggest that pollution emissions from road traffic may be an environmental factor responsible for exacerbation of RA.

Association between air pollution and autoimmunity has also been found for multiple sclerosis (MS) – increased concentration of pollutants in the air (PM10 as well as SO_2 + NO_2 + NO) was correlated with

relapses of the disease [42]. The potential association between MS occurrence and air pollution was implied following the study in the state of Georgia, US [70]. These findings were later confirmed by similar studies performed in Iran, Serbia, France, and Italy – demonstrating that MS occurrence and hospitalisation was associated with exposure to air pollutants such as PM10, SO_2, NO_2, and NOx [71–74].

From air pollution to autoimmune process

The mechanisms behind the relationship between poor air quality and AD prevalence and exacerbation are still unclear. While the local impact of inhaled air pollution particles on lung injury might seem obvious, it is not evident how they can affect other remote tissues to initiate autoimmune processes (how they can prime autoimmune processes in other remote tissues). Several hypotheses suggest activation of the systemic inflammatory response via oxidative/nitrosative stress, as well as the enhanced presentation of oxidative-modified autoantigens [75, 76].

When PMs are inhaled, some oxidants are generated locally in lung alveoli, where they may cause local chronic inflammation. However, the correlation between air pollution, the lung, and chronic inflammation has not been well examined [36]. The key to explain the role of lung in systemic inflammation lies in understanding the mechanism of modification of the biomolecules produced by inhaled oxidants (PM components), or generated by inflammatory cells in the upper and lower airways (alveolar macrophages) [77, 78]. Oxidised biomolecules are more susceptible to degradation, but they can also inhibit the removal of oxidatively modified proteins via the proteasome system [79].

The effect of inhaled nanoparticles (PM) on human health depends on both individual predisposition (such as genetic factors) and PM properties [80]. The opinion that a particle's toxicity depends on its size, shape, and composition is broadly accepted [81]. Importantly, the oxidative stress can result from Fenton-type reactions catalysed by the transition metal present in particles, such as Fe, V, Cr, Co, Ni, Cu, Zn, and Ti [82], but other metals and non-metals can also exert negative effects on the cells. For example, silica particles are toxic to macrophages [83–85] and induce cell death causing exposure of intracellular self-antigens to immune cells [86, 87]. In murine models of silica exposure an increase in the production of autoantibodies and formation of autoantibody immune complexes was observed [88, 89], as well as an increase in numbers of B-lymphocytes and CD4 T cells [90]. All these factors might contribute to chronic lung inflammation and have been reported as possible risk factors for development of autoimmune diseases, such as RA and SLE [91].

It has been shown that environmental exposure to asbestos particularly increases the risk of autoimmune diseases [92, 93]. In turn, exposure to iron and other transition metals can result in generation of reactive oxygen species on the lung cells surface, which may cause injury and lead to formation of scar tissue [94].

Numerous studies have revealed a negative impact of inhalation of air pollutants on human health. In general, particulate matter (PM) affects the upper bronchi, and this may lead to pulmonary inflammation [95]. Nanoparticles are considered even more dangerous than large size particles because they are more difficult to remove from the human body by the organism itself. Due to their small size, nanoparticles penetrate easily via the respiratory tract into the biological structures and disrupt their functions by driving oxidative stress and contributing to tissue inflammation [80].

Inhalation of nanoparticles has been shown to stimulate alveolar macrophages, creating conditions for development of an acute systemic inflammatory response [37, 96, 97]. Airway inflammation, a major short-term effect of inhalation of the particles present in the polluted air [98], is characterised by an increased secretion of pro-inflammatory mediators like interleukin-8 [99] and granulocyte macrophage-colony stimulating factor (GM-CSF), as well as by neutrophil influx [100, 101]. Inflammatory cells, neutrophils, and macrophages, generate a variety of reactive oxygen and nitrogen species and release various proteases that damage lung tissue [22]. Then, following the fine and ultrafine particles' passage into the blood, exposure to PM can potentially trigger a systemic inflammatory process [95] via induction of ROS

production and pro-inflammatory cytokine release [102, 103].

It seems plausible that generation of soluble inflammatory mediators in the lungs upon PM inhalation might have a systemic impact. Systemic oxidative stress [104, 105], stimulation of the bone marrow [97, 106, 107], and increased levels of cytokines and leukocytes in blood have all been associated with exposure to air pollutants [108, 109]. Furthermore, air pollution has been shown to induce maturation of antigen presenting cells by inducing expression of costimulatory molecules [110–116]. Particulate matter present in the air can also act as an adjuvant and induce immune response against otherwise non-immunogenic antigens in several animal models [101, 117–119]. Animal studies have also provided evidence that exposure to particulate matter can have glycaemic consequences in a gestational diabetes mellitus rat model [120].

Therefore, air pollution could affect the autoimmune processes in multiple ways. Induction of oxidative/nitrosative stress can lead to production of autoantigens (via oxidative modification) and additionally to the stimulation of the release of soluble inflammatory mediators (cytokines) that can trigger maturation of antigen-presenting cells [75]. APCs migrating to the lymph nodes could thus present the self-antigens to the lymphocytes that had evaded the mechanisms of central tolerance. Upon establishment of the autoimmune reaction, pro-inflammatory cytokines that are released following continuous inhalation of the pollutants could additionally exacerbate the process.

Conclusions

Autoimmune diseases are among the most crucial challenges of current medicine. They still cause chronic disability and mortality of patients with pulmonary and cardiovascular diseases. Currently, it has been accepted that particulate matter can contribute to autoimmunity by complex interactions between genetic, environmental, and epigenetic factors. However, the exact molecular mechanisms by which chemicals contained in air pollution affect autoimmunity are still unknown. Particulate matter present in air pollution can induce oxidative stress and cell death, both by apoptosis and necrosis of human cells leading to aggravation of chronic inflammation, i.e. the tissue damaging reaction observed in autoimmune diseases. Therefore, identification of strong inducers of oxidative stress among components of PM seems to be crucial for their neutralisation and elimination from the ambient environment.

Footnotes

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The authors declare no conflict of interest.

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Chillers Exh 2-2

Long-Term Fine Particulate Matter Exposure and Mortality From Diabetes Mellitus in Canada

ROBERT D. BROOK, MD[1]
SABIT CAKMAK, PHD[2]
MICHELLE C. TURNER, PHD[3]
JEFFREY R. BROOK, PHD[4,5]
DAN L. CROUSE, PHD[2]
PAUL A. PETERS, PHD[6]
AARON VAN DONKELAAR, PHD[7]
PAUL J. VILLENEUVE, PHD[2,5]
ORLY BRION, PHD[2]
MICHAEL JERRETT, PHD[8]
RANDALL V. MARTIN, PHD[7,9]
SANJAY RAJAGOPALAN, MD[10]
MARK S. GOLDBERG, PHD[11]
C. ARDEN POPE, III, PHD[12]
RICHARD T. BURNETT, PHD[2,3]

OBJECTIVE—Recent studies suggest that chronic exposure to air pollution can promote the development of diabetes. However, whether this relationship actually translates into an increased risk of mortality attributable to diabetes is uncertain.

RESEARCH DESIGN AND METHODS—We evaluated the association between long-term exposure to ambient fine particulate matter ($PM_{2.5}$) and diabetes-related mortality in a prospective cohort analysis of 2.1 million adults from the 1991 Canadian census mortality follow-up study. Mortality information, including ~5,200 deaths coded as diabetes being the underlying cause, was ascertained by linkage to the Canadian Mortality Database from 1991 to 2001. Subject-level estimates of long-term exposure to $PM_{2.5}$ were derived from satellite observations. The hazard ratios (HRs) for diabetes-related mortality were related to $PM_{2.5}$ and adjusted for individual-level and contextual variables using Cox proportional hazards survival models.

RESULTS—Mean $PM_{2.5}$ exposure levels for the entire population were low (8.7 $\mu g/m^3$; SD, 3.9 $\mu g/m^3$; interquartile range, 6.2 $\mu g/m^3$). In fully adjusted models, a 10-$\mu g/m^3$ elevation in $PM_{2.5}$ exposure was associated with an increase in risk for diabetes-related mortality (HR, 1.49; 95% CI, 1.37–1.62). The monotonic change in risk to the population persisted to $PM_{2.5}$ concentration <5 $\mu g/m^3$.

CONCLUSIONS—Long-term exposure to $PM_{2.5}$, even at low levels, is related to an increased risk of mortality attributable to diabetes. These findings have considerable public health importance given the billions of people exposed to air pollution and the worldwide growing epidemic of diabetes.

Fine particulate matter (particles measuring <2.5 μm in aerodynamic diameter [$PM_{2.5}$]) in ambient air is among the leading causes of worldwide mortality (1). Elevations in short-term exposures (1 day to several days) are associated with an increased risk of death from all causes and from cardiovascular (CV) diseases by 1–3% per 10-$\mu g/m^3$ increase in $PM_{2.5}$. Longer-term exposures attributable to living in regions for years or decades with higher levels of pollution, however, lead to substantially larger health risks (1,2). We demonstrated recently that among 2.1 million Canadians, a 10-$\mu g/m^3$ increase in long-term $PM_{2.5}$ exposure estimated by satellite observations elevates the risk for nonaccidental and ischemic heart disease deaths by 15 and 31%, respectively (3). One explanation for the ~10-fold greater CV risk posed by long-term relative to short-term exposures may be that continuous or recurrent inhalation of air pollutants over years is capable of promoting chronic disease states, thereby further augmenting future mortality risk (1). In support of this hypothesis, human and animal studies have demonstrated that $PM_{2.5}$ can accelerate the progression of atherosclerosis (4).

Similarly, long-term exposure to ambient air pollution has been associated with an increased risk of developing diabetes (5–8). Experimental studies also have provided a rational underlying mechanistic basis for this observation (9). However, few studies have evaluated if this relationship translates into more individuals actually dying from diabetes-related causes (10–13). It is possible that air pollution could worsen the underlying diabetic disease course by exacerbating insulin resistance or by instigating adverse biological responses (e.g., endothelial dysfunction) that promote future diabetes complications and diabetes-related fatal events (1,9).

Diabetes has reached global epidemic proportions, impacting ~347 million adults (14). Its health consequences are enormous and disproportionately impact developing nations (14,15). Given the vast number of individuals affected by diabetes and exposed to air pollution, contributions of $PM_{2.5}$ to diabetes mortality could be of growing public health importance. As such, we sought to investigate if long-term $PM_{2.5}$ exposure is associated with higher rates of mortality attributable to diabetes.

RESEARCH DESIGN AND METHODS

Study cohort

The study cohort was constructed from the 1991 Canadian census mortality

From the [1]Division of Cardiovascular Medicine, University of Michigan, Ann Arbor, Michigan; the [2]Health Canada, Ottawa, Canada; the [3]McLaughlin Centre for Population Health Risk Assessment, Institute of Population Health, University of Ottawa, Ottawa, Canada; the [4]Environment Canada, Downsview, Canada; the [5]Division of Occupational and Environmental Health, University of Toronto, Toronto, Canada; the [6]Statistics Canada, Ottawa, Canada; the [7]Department of Physics and Atmospheric Science, Dalhousie University, Halifax, Nova Scotia, Canada; the [8]Environmental Health Sciences Department, University of California, Berkeley, California; the [9]Harvard-Smithsonian Center for Astrophysics, Cambridge, Massachusetts; the [10]Davis Heart Lung Research Institute, The Ohio State University School of Medicine, Columbus, Ohio; the [11]Department of Medicine, McGill University, Montreal, Quebec, Canada; and the [12]Department of Economics, Brigham Young University, Provo, Utah.
Corresponding author: Robert D. Brook, robdbrok@umich.edu.
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follow-up (16). All individuals older than age 25 years who completed the 1991 census long form (randomly selected 20% of population) were linked using deterministic and probabilistic methods to the Canadian Mortality Database from 4 June 1991 to 31 December 2001 (16). Individuals born outside of Canada have unknown historical exposures, tend to settle in communities with higher levels of pollution (17), and live longer than native-born Canadians (18,19). Hence, we excluded immigrants (~600,000) from the analytical sample, leaving ~2.1 million subjects.

We included individual-level risk factors for mortality available from the census long-form (Table 1). The underlying cause of death and date of death were ascertained from the Canadian Mortality Database (coded by ICD-9 for those deaths before 2000 and by ICD-10 for those deaths registered from 2000 onwards). The ICD-9 code 250 and the ICD-10 codes E10–E14 were used to identify underlying diabetes-related causes.

The 1991 Canadian census mortality follow-up study received approval by the Statistics Canada Policy Committee (reference number 012–2001) after consultation with Statistics Canada Confidentiality and Legislation Committee, Data Access and Control Services Division, and the Federal Privacy Commissioner. This approval is equivalent to that of standard research ethics boards. All sample sizes presented have been rounded to the nearest hundred for confidentiality reasons.

Contextual variables

Census data from 1991 characterizing the demographic and socioeconomic environment of each subject's home neighborhood (census tracts [CTs]) and community (census divisions [CDs]) were complied. We subtracted the CD mean from the CT values to make comparisons between CTs within each CD. The proportion of unemployed adults (15 years of age and older), the proportion of adults who had not completed high school, and the proportion of individuals in the lowest income quintile were compiled for both scales for each cohort member. A five-level categorical variable representing the population size of the subject's home community was created as an additional mortality risk factor (Table 1).

Exposure assignment

Subject-level $PM_{2.5}$ exposures were created by averaging concentrations for the period 2001–2006 using estimates of $PM_{2.5}$ derived from satellite remote sensing observations of aerosol optical depth with a spatial resolution of ~10 × 10 km (3,20) and assigning these values to each subject by their place of residence in 1991. The population-weighted average number of days in which satellite observations were available over the 10 Canadian provinces for the 6-year period of 2001–2006 was 355 days. Satellite retrievals were not available because of a number of factors, including cloud and snow cover. An atmospheric model was used to compensate for the impact of this sampling frequency. Historical (1987–2001) average $PM_{2.5}$ concentrations in 11 of Canada's largest cities were highly correlated (r = 0.89) with corresponding $PM_{2.5}$ estimates based on remote sensing over the 2001–2006 time period. This method of exposure assessment provided a strategy to assign exposure to all members of the cohort because only 43% of subjects lived in a CD with historical $PM_{2.5}$ monitoring information (20).

Statistical methods

The follow-up time in the Cox proportional hazards model was defined by calendar time in days from 4 June 1991 to 31 December 2001. Subjects dying from causes other than diabetes were censored at the date of death, as were subjects alive at the end of follow-up. The baseline hazard function was stratified by single-year age groups and sex. We examined the sensitivity of the $PM_{2.5}$ association with mortality from diabetes to the stochastic structure of the Cox survival model by extending the standard Cox model to include random effects (REs) defined by CD. The REs account for spatial variation in diabetes mortality not explained by the predictor variables (3,21). We further extended the RE model to include correlation in the REs between adjacent CDs. Hazard ratios (HRs) and 95% CIs were calculated for an increment of 10 $\mu g/m^3$ in $PM_{2.5}$ based on both the standard Cox and spatial RE models.

We also explored the sensitivity of the estimated HRs and uncertainty to inclusion of different sets of predictor variables: none; all individual-based variables; urban size; and selected contextual variables. We tested the HR for variation among the categories of selected diabetes-related mortality risk factors (sex, education, income, and community size) using the Cochran Q test.

RESULTS—The analytical cohort consisted of 2,145,400 subjects, with 5,200 subjects dying of an underlying cause coded as diabetes over the nearly 10 years of follow-up. This accounted for 2.7% of all nonaccidental deaths (n = 192,300). $PM_{2.5}$ exposures were similar for both sexes and all age groups, averaging 8.7 $\mu g/m^3$ (SD, 3.9 $\mu g/m^3$; interquartile range, 6.2 $\mu g/m^3$), but increased with higher measures of socioeconomic position (SEP) such as education, occupation, and income (Table 1). Canadians with higher SEP tend to live in areas of higher pollution (i.e., southern Ontario and Quebec). The risk of dying from diabetes was higher for subjects with lower SEP (Table 1). People of aboriginal ancestry also had a higher risk of dying from diabetes, whereas married individuals experienced lower risks. Individuals living in smaller communities had higher diabetes mortality rates compared with those in larger cities.

Association between $PM_{2.5}$ exposure and diabetes mortality

$PM_{2.5}$ was positively associated with diabetes mortality in the Cox survival model with the baseline hazard function stratified by age and sex (Table 2; model 1: HR, 1.10; 95% CI, 1.03–1.18). Including diabetes mortality risk factors measured at the subject level increased the association (model 2: HR, 1.30; 95% CI, 1.21–1.39). Inclusion of the size of the community (model 3: HR, 1.51; 95% CI, 1.39–1.64) further increased the HR compared with model 2. The HR was insensitive to further inclusion of other contextual variables (model 4: HR, 1.49; 95% CI, 1.37–1.62).

Including REs in the statistical model marginally increased the HR from the standard Cox model (model 4) to 1.53 (95% CI, 1.31–1.78; Table 2; model 5), with a wider CI compared with the Cox model. This suggests that the mortality predictor variables included in the survival model could not explain all the variation in diabetes mortality across the country. The HR was reduced to 1.47 (95% CI, 1.16–1.72; Table 2; model 6) when the RE of adjacent CDs were assumed to be correlated. This suggests a spatial clustering of diabetes mortality not entirely accounted for by the covariates in the model.

The positive association between $PM_{2.5}$ and diabetes mortality was observed to be monotonic across the range of $PM_{2.5}$ in Canada, extending to relatively

Table 1—*Descriptive statistics for the study cohort*

Variable	Subjects, *n* (%)†		$PM_{2.5}$ mean	$PM_{2.5}$ SD	HR for diabetes mortality	95% CI
Full cohort	2,145,400	(100)	8.7	3.9	NA	NA
Sex						
Male	1,059,400	(49)	8.6	3.9	NA	NA
Female	1,086,000	(51)	8.7	3.9	NA	NA
Age at entry, years						
25–34	6,552,200	(30)	8.7	4.0	NA	NA
35–44	566,900	(26)	8.5	3.8	NA	NA
45–54	349,800	(16)	8.5	3.8	NA	NA
55–69	374,100	(17)	8.8	4.0	NA	NA
70 and older	202,400	(9)	8.8	4.0	NA	NA
Any aboriginal ancestry‡						
No*	2,047,500	(95)	8.8	3.9	1	NA
Yes	97,900	(5)	6.3	3.3	2.29	2.03–2.58
Visible minority§						
No*	2,124,600	(99)	8.6	3.9	1	NA
Yes	20,800	(1)	10.0	4.7	1.22	0.91–1.65
Marital status						
Married/common law*	1,572,900	(73)	8.5	3.8	1	NA
Divorced/separated/widowed	285,700	(13)	8.9	4.0	1.38	1.28–1.48
Single	286,800	(13)	9.4	4.2	1.45	1.32–1.60
Highest level of education						
Less than high school graduation	747,700	(35)	8.2	3.8	1.59	1.31–1.86
High school graduation with or without trade certificate	793,500	(37)	8.6	3.9	1.27	1.09–1.50
Some postsecondary or college diploma	334,000	(16)	8.9	3.9	1.05	0.88–1.27
University degree or higher*	270,200	(13)	9.7	4.2	1	NA
Employment status						
Employed*	1,412,500	(66)	8.8	3.9	1	NA
Unemployed	130,800	(6)	8.0	3.9	1.10	0.90–1.35
Not in the labor force	602,100	(28)	8.5	3.9	1.78	1.54–2.05
Occupation classification						
Management	174,600	(8)	9.1	4.0	1.17	0.89–1.54
Professional*	240,000	(11)	9.2	4.1	1	NA
Technical	521,600	(24)	8.4	3.8	1.12	0.88–1.42
Semiskilled	528,700	(25)	8.7	3.9	1.20	0.95–1.52
Unskilled	161,500	(8)	8.2	3.8	1.58	1.23–2.03
Not applicable	519,000	(24)	8.6	3.9	1.67	1.30–2.13
Low-income cut-off quintile¶						
Lowest*	470,700	(22)	8.4	3.8	1	NA
Lower-middle	450,300	(21)	8.5	3.8	0.86	0.80–0.92
Middle	377,500	(18)	8.7	3.9	0.79	0.72–0.87
Upper-middle	437,900	(20)	8.8	3.9	0.72	0.65–0.79
Upper	409,100	(19)	9.0	4.1	0.57	0.51–0.64
Size of home community (population)						
Rural/farm	585,900	(27)	6.5	2.6	1.17	1.05–1.31
Small town (<30,000)	326,400	(15)	6.6	2.8	1.21	1.08–1.35
Urban 3 (30,000–99,999)	216,200	(10)	7.6	2.7	1.22	1.10–1.36
Urban 2 (100,000–499,999)	233,600	(11)	9.4	4.1	1.06	0.96–1.17
Urban 1 (>500,000)*	783,400	(37)	11.1	3.8	1	NA
Contextual covariates‖						
% of adults with less than high school diploma						
CD level	NA	NA	NA	NA	1.08	1.03–1.14
CT level	NA	NA	NA	NA	1.11	1.06–1.16

Continued on p. 4

Table 1—*Continued*

Variable	Subjects, *n* (%)†	$PM_{2.5}$ mean	$PM_{2.5}$ SD	HR for diabetes mortality	95% CI
% of adults in the lowest low-income cut-off quintile					
CD level	NA	NA	NA	NA	1.05	1.02–1.07
CT level	NA	NA	NA	NA	0.99	0.95–1.03
% of adults unemployed					
CD level	NA	NA	NA	NA	0.99	0.97–1.02
CT level	NA	NA	NA	NA	1.02	0.98–1.05

Descriptive statistics for the study cohort and HR estimates for predictor variables for diabetes-related mortality based on standard Cox model with baseline hazard stratified by single-year age groups and sex, and adjusted for all variables listed and $PM_{2.5}$. NA, not applicable. *Reference category. †Rounded to nearest hundred. ‡Aboriginal status refers to those persons who reported at least one aboriginal ethnic origin, i.e., North American Indian, Métis, or Inuit, and/or reported being registered under the Indian Act of Canada. §Visible minorities are persons (other than aboriginal persons) who are non-Caucasian in race or nonwhite in color. ¶Adjusted for family and community size. ‖HR evaluated at interquartile range: 2 and 3% for the % unemployed; 10 and 12% for % without a high school diploma; and, 4 and 10% for % in the lowest income quintile for CD and CT respectively.

low levels (Fig. 1). Natural splines with two, three, and four degrees of freedom also were examined but did not improve the fit according to the value of the Bayesian Information Criteria that was compared with that of the linear model.

We performed analyses excluding subjects younger than 45 years of age (<300 deaths) at the start of the study to reduce the possibility of capturing deaths more likely attributable to type 1 diabetes among young patients. This had minimal effect on the findings, with model 4 results staying basically the same (HR, 1.49; 95% CI, 1.37–1.63). Excluding subjects younger than 55 years old (<700 deaths) produced similar results (HR, 1.55; 95% CI, 1.38–1.65). Finally, the association between $PM_{2.5}$ and diabetes-related mortality was found to be positive in all subgroups analyzed (sex, education status, income level, and community size) (Table 3). No significant effect modification was observed for these factors ($P > 0.13$ for all interaction terms using Cochran Q test).

We also accessed information of all mentions on the death certificate for the entire country in a subset of the data available (from 2004 to 2008 inclusive), the only available time period for this information. During this 5-year period, 1,158,622 Canadians died, 3.3% with diabetes as the underlying cause and 7.3% with diabetes as the contributing cause. We then assigned our estimate of $PM_{2.5}$ exposure to the home address postal code centroid for each death and compared the exposure distributions of those who died with diabetes as the underlying cause versus the contributing cause. These two distributions were nearly identical (data not shown), suggesting that there was no coding bias in the position of diabetes on the death certificate.

Table 2—*Diabetes mortality HR for a 10-μg/m³ change in $PM_{2.5}$ by survival model specification*

Model	HR per 10-μg/m³ $PM_{2.5}$	95% CI
1: Cox model stratified by age and sex with no additional covariates	1.10	1.03–1.18
2: Model 1 including covariates measured at the individual level*	1.30	1.21–1.39
3: Model 2 including community size	1.51	1.39–1.64
4: Model 3 including contextual covariates†	1.49	1.37–1.62
5: Model 4 including REs at CD with no spatial autocorrelation	1.53	1.31–1.78
6: Model 5 including REs in which adjacent CDs assumed correlated	1.47	1.16–1.72

*Individual covariates listed in Table 1 include the following: aboriginal ancestry; visible minority; marital status; education; employment status; occupation; and low income cutoff. †Contextual covariates: % of adults with less than high school diploma; % of adults in the lowest low-income cutoff quintile; and % of adults unemployed determined at both the CD and CT levels.

CONCLUSIONS—Long-term exposure to $PM_{2.5}$ was associated with a significant increase in diabetes-related mortality. This relationship was observed among all subgroups despite the relatively low concentrations of air pollution throughout Canada (1). Our findings suggest that air pollution may be an important modifiable environmental factor contributing to the mortality of diabetic individuals.

We observed lower HRs for subjects living in communities with <100,000 people compared with those subjects living in communities with >100,000 people. There is evidence of much lower utilization of endocrinologists in the smaller towns and in the areas only weakly or not influenced by a metropolitan zone and where access to care is more limited. We also observed lower levels of education, higher rates of unemployment, and lower incomes in the smaller towns and areas not influenced much by metropolitan zones. Thus, it is not surprising that mortality rates from diabetes would be higher in these smaller communities, as we observed in this study. Furthermore, fine particulate matter concentrations are generally lower in these smaller communities, and thus it is appropriate to adjust the $PM_{2.5}$ diabetes mortality association for community size (22).

Previous studies

Higher concentrations of $PM_{2.5}$ during the previous day have been shown in Montreal to be related to an increase in daily counts of mortality among diabetic individuals, particularly those with CV disease (11). Positive associations also were reported with short-term exposures

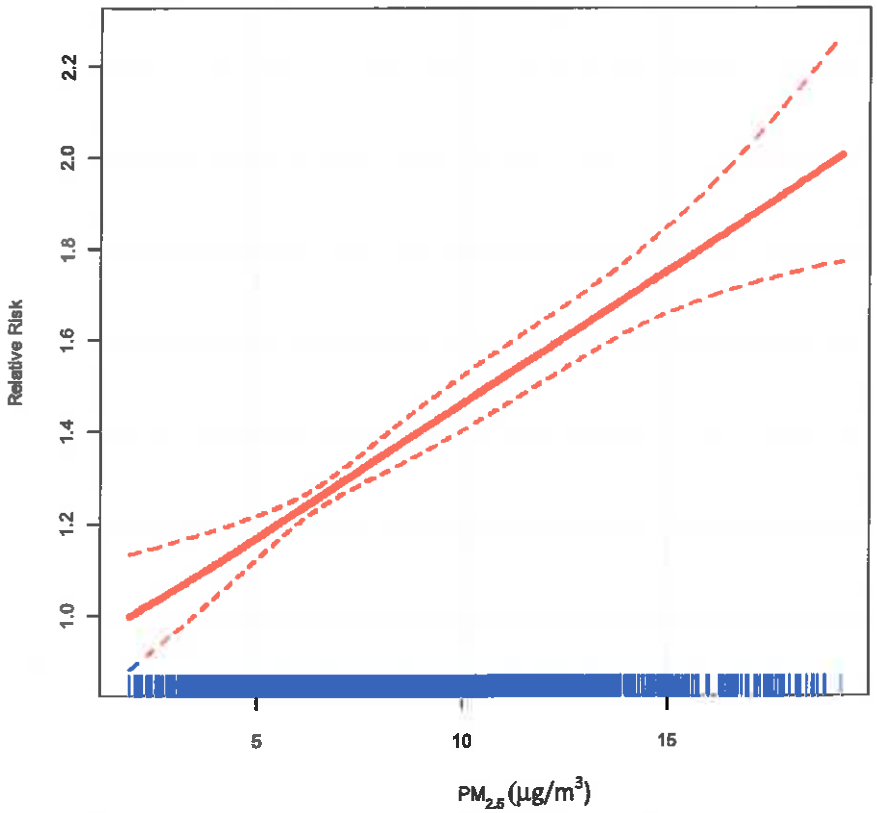

Figure 1—*The association between $PM_{2.5}$ exposure and diabetes-related mortality. The figure demonstrates the relative risk of diabetes-related mortality in relation to long-term $PM_{2.5}$ exposure. The association shown represents the results from the standard Cox survival model (model 3) with a natural spline of $PM_{2.5}$ with two degrees of freedom. Tick marks on the x-axis represent the position of $PM_{2.5}$ concentrations measured in $\mu g/m^3$. Dashed lines represent 95% CIs.*

to PM_{10} in Shanghai and to black carbon in Boston (12,13). However, these studies were only capable of demonstrating an acute triggering of diabetes-related mortality attributable to air pollutants and could not capture potential cumulative health effects caused by years of exposure.

As far as we are aware, only one previous cohort study, the American Cancer Society Cancer Prevention II study (ACS), reported the effects of long-term exposure specifically regarding $PM_{2.5}$ on diabetes-related mortality (10). $PM_{2.5}$ was not associated with this outcome during 16 years of follow-up (HR, 0.99; 95% CI, 0.86–1.14). It is possible that variations in pollution characteristics or unmeasured co-pollutants (e.g., nitrogen oxides) may have contributed to this null finding. Susceptibility differences compared with the population evaluated in the current Canadian study cannot be excluded. Variations in the tendencies of health care providers between nations to code the underlying cause of death specifically as diabetes-related also could be involved. However, this seems unlikely given that the percentages of diabetes deaths were similar in the ACS cohort (1.9%). Finally, in a Los Angeles–based subsample of the ACS cohort using more refined estimates of $PM_{2.5}$ exposure, the risk for diabetes-related deaths was similarly elevated (relative risk, 1.82; 95% CI, 0.55–6.02 for a 10-$\mu g/m^3$ exposure contrast) (23). This suggests that using more sophisticated estimates of chronic PM exposure may lead to more accurate data that are responsible for producing the positive associations. The risk was not statistically significant in the Los Angeles cohort of the ACS, likely attributable to low statistical power (only 55 deaths). Additional studies investigating the long-term effects of $PM_{2.5}$ on diabetes-related mortality are warranted.

Recently, diabetes mortality from a population of >52,000 participants in the Danish Diet, Cancer, and Health cohort was evaluated for its association with estimated long-term exposure to traffic-related pollution using dispersion-modeled NO_2 levels (24). Over a 13-year follow-up, the NO_2 level at each subject's residence was significantly related to deaths from diabetes, with the adjusted mortality rate ratio being 2.15 (95% CI, 1.21–3.83) in the upper versus lower quartile of exposures. Overall, these findings support the plausibility of our current results related to long-term $PM_{2.5}$ exposure by showing that a proxy for traffic-related air pollution is similarly associated with diabetes-related mortality over a long-term follow-up. Whether there are differences in the magnitude of health effects between $PM_{2.5}$ and traffic air pollution exposures and the underlying pollutant constituents principally responsible for promoting diabetes mortality requires further study.

Potential mechanisms

Beyond contributing to the acute triggering of diabetes-related mortality, there are two main pathways whereby long-term exposure could, in theory, increase the risk for deaths attributable to diabetes. $PM_{2.5}$ is capable of exacerbating insulin resistance (9,25). This has been experimentally demonstrated to occur by pollution-induced systemic and adipocyte-based inflammatory responses (1,9). The chronic worsening of the underlying diabetic state and inflammatory milieu could increase the risk of mortality attributable to poorly controlled diabetes.

Furthermore, the host of chronically occurring adverse systemic responses (e.g., endothelial dysfunction, enhanced thrombosis) induced by $PM_{2.5}$ could promote fatal events among patients with diabetes (1). A portion of this mortality may be attributed to diabetes as the "underlying cause of death" if the final event was strongly related to or thought to have only occurred because of the presence of diabetes. For example, $PM_{2.5}$ could insidiously contribute to worse glycemic control over years. Individuals with chronic hyperglycemia are rendered more susceptible to the adverse health effects of air pollution (1). As such, future exposures could trigger fatal events that are chiefly attributed to the underlying diabetic state (e.g., acute limb ischemia, CV-related deaths).

It might be possible to provide more insight into the most relevant mechanism underlying our findings if we could assess whether the immediate cause of death was largely because of ischemic heart disease, or whether the diabetes-related mortality associated with $PM_{2.5}$ occurred mostly (or only) among patients with preexisting CV diseases. In such cases, $PM_{2.5}$ most likely

Table 3—*Diabetes mortality HR for a 10-μg/m³ change in $PM_{2.5}$ by category of selected mortality risk factors for standard Cox survival model (model 4 results presented)*

Effect modifier	Category (%)	HR Cox (95% CI)
Sex	Males (49)	1.50 (1.34–1.67)
	Females (51)	1.48 (1.30–1.69)
	P	0.91*
Education	Less than high school (35)	1.39 (1.25–1.54)
	High school (37)	1.66 (1.41–1.97)
	Postsecondary (29)	1.66 (1.29–2.14)
	P	0.13*
Income quintile	First (22)	1.41 (1.23–1.61)
	Second (21)	1.58 (1.33–1.88)
	Third (18)	1.58 (1.27–1.99)
	Forth (20)	1.43 (1.13–1.81)
	Fifth (19)	1.47 (1.12–1.93)
	P	0.83*
Community size†	Farm/rural (27)	1.73 (1.38–2.16)
	30,000–500,000 (36)	1.38 (1.21–1.57)
	>500,000 (37)	1.58 (1.37–1.83)
	P	0.16*

Model 4 results presented. *P value for test of difference in HR among categories. †Five community size categories were collapsed into three categories of more equal sample sizes to provide for enhanced statistical stability of the HR estimates within each category.

would be serving to increase the susceptibility among patients with diabetes for a host of fatal CV disease–related events. Unfortunately, we do not have data regarding the immediate or contributing cause of death, or individual-level data regarding the presence of CV disease comorbidities. Hence, we are only able to speculate that some combination of the possible pathways described is responsible for the observed associations.

Global health importance

Although the World Health Organization recognizes $PM_{2.5}$ as a leading risk factor for mortality (26), this is principally driven by estimated effects of $PM_{2.5}$ on CV and pulmonary mortality. Our findings demonstrate that $PM_{2.5}$ also may contribute to diabetes-related mortality. Although diabetes accounts for a relatively small portion of deaths in our cohort (2.7%), the impact of diabetes on deaths is likely underestimated because we have not captured all deaths for which diabetes is a contributing cause (not available in our dataset), and because of substantive cross-coding and potential misclassification of the underlying cause of death. Diabetes is already a burgeoning global epidemic, impacting ~347 million adults (14). By 2030, the prevalence is expected to reach almost half a billion people (27). Given the omnipresent nature of air pollution (1,20), the population-attributable risk may be quite large.

$PM_{2.5}$ exposure was associated with diabetes-related mortality despite the relatively low concentrations across Canada. These results provide evidence that there is a continuous association without a discernible lower "safe" threshold between $PM_{2.5}$ and health risks to the population (1). Furthermore, billions of people among highly polluted regions (e.g., Middle East and Asia) routinely are exposed to concentrations 5- to 10-fold higher than in Canada (20,28). The developing world, disproportionately impacted by diabetes (14,15), faces the highest $PM_{2.5}$ concentrations (20,28). The full extent of the dose–response relationship could not be elucidated in this study because concentrations were <20 μg/m³. Should the monotonic relationship persist, or even if the degree of risk elevation is blunted at extreme values as suggested by previous studies related to CV events (29), millions of patients with diabetes encountering high $PM_{2.5}$ concentrations (often exceeding 50 μg/m³ in the developing world) would encounter even more marked health risks.

Strengths and limitations

This is the first cohort study to show a strong positive and statistically significant association between $PM_{2.5}$ and diabetes mortality. The large sample size, breadth of regions evaluated (every province and major city in Canada), and health outcomes using national-level databases are notable strengths. The large number of individuals reliably included despite residing remotely from ground-based monitors (e.g., rural locations) by using the satellite-based exposure methodology is a particular strength. Finally, we adjusted for numerous individual and contextual covariates, as well as for the effects of the spatial stochastic structure of mortality patterns.

Compared with the immediate cause, the underlying cause of death may be difficult to establish, leading to some degree of cross-coding and misclassification of underlying/contributing causes of death (i.e., deaths not attributed to diabetes even when biologically relevant). It is uncertain if this would bias the magnitude of the PM–diabetes association we observed; however, it has been estimated that up to 60% of subjects with diabetes are not captured by using data from death certificates (30). We acknowledge that previous studies suggest that using death certificate data for capturing diabetes as the underlying cause of death likely underestimates the true prevalence of diabetes (31). However, this error (if homogenous throughout the population) itself should not directly alter its associations with $PM_{2.5}$.

Although we have missed some deaths for which diabetes was a contributing cause, those identified in our study are likely not misclassified. In this regard, the authors of the recent Danish cohort study also recognized that using the underlying cause of death from death certificates likely underestimates mortality rates (24). When mortality was defined more broadly in their study as either the underlying or the contributing cause (or the combination thereof) attributable to diabetes, the associations with NO_2 were similar. We do not have similar data for the entire time period of our study and therefore are unable to perform similar sensitivity analyses. However, in our subset analysis of data available for a 5-year period, we did not find any evidence of coding bias in the position of diabetes on the death certificate in relation to $PM_{2.5}$ exposure. We recognize the limitations of relying on death certificate data for drawing conclusions regarding the underlying (or even immediate) cause of death. Even so, in addition to the recent Danish study (24), several previous epidemiological studies regarding the health effects of

environmental factors also have successfully used this approach even in North American locations (32).

The possibility of some confounding by regional differences in coding also cannot be excluded. For example, locations with higher $PM_{2.5}$ levels were in larger cities with higher SEP. It is possible that health care providers in these locations were more prone to code the underlying cause of death as diabetes-related. For example, primary care physicians are more likely to record diabetes as the underlying cause of death than other subspecialists (33). This could be an unaccounted-for confounder in our analyses if the underlying primary care physician frequency in the population is collinear with higher air pollution exposures. We do not have data regarding specialist prevalence in relation to $PM_{2.5}$ levels or information regarding the physicians who were responsible for coding diabetes as the underlying cause of death. However, it is unlikely that this is a major limitation given that $PM_{2.5}$ levels were actually higher among urban and more populated locales, where subspecialist care is generally more prevalent. Moreover, significant associations also were found separately within rural and less populated locations (Table 3). If the likelihood of accurately attributing diabetes as the underlying cause of death (i.e., when the chain of events that led to a death was truly initiated by diabetes) is not affected in some manner by the levels of air pollution, then the estimates provided by our analyses should be unbiased. Nevertheless, it remains a possibility that $PM_{2.5}$ levels could be associated with other aspects that predict a higher rate of coding diabetes as the underlying mortality cause (e.g., regional practice style, provincial reimbursement by diagnosis, density of specialist type, training in death certificate completion) that were not apparent in our main or subgroup analyses. Similar studies using the data from large prospective cohort studies or clinical trials that have better adjudication of the causes for mortality and person-level information of the subjects might yield more precise estimates of the risks.

It is also probable that a sizeable portion of diabetes-related deaths were not captured in our study (30,34). Diabetes, CV, and pulmonary diseases have substantial common comorbidities. For example, adults with diabetes are two- to four-times more likely to have CV disease, and the majority of adults with diabetes die of heart disease or stroke (31). In addition, some degree of exposure misclassification is possible and unaccounted-for mobility of subjects also could have affected the results. However, these errors are known to typically produce an underestimation of the true association between $PM_{2.5}$ and health risks (3). Finally, we did not control for smoking and obesity, two of the most important risk factors for diabetes mortality. However, we have shown that our $PM_{2.5}$ exposure estimates are inversely related to both smoking habits and BMI in the Canadian population (17). This inverse association is consistent with similar inverse associations between SEP and $PM_{2.5}$ in this cohort. We therefore hypothesize that including smoking and obesity information, if available, would actually serve to further increase the HR for diabetes-related mortality associated with $PM_{2.5}$ (similar to SEP).

Long-term exposure to relatively low levels of $PM_{2.5}$ was associated with an increased risk for mortality attributable to underlying diabetes. In light of the growing epidemics of both diabetes and air pollution, this finding is of global public health importance. Future studies are warranted to corroborate this association, especially among nations with higher rates of diabetes and levels of air pollutants, and to further elucidate the biological pathways involved.

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R.D.B. wrote, reviewed, and edited the manuscript. S.C. researched data and reviewed and edited the manuscript. M.C.T. researched data and reviewed and edited the manuscript. J.R.B., D.L.C., and P.A.P. reviewed and edited the manuscript. A.v.D. researched data and reviewed and edited the manuscript. P.J.V. reviewed and edited the manuscript. O.B. and M.J. researched data and reviewed and edited the manuscript. R.V.M., S.R., M.S.G., and C.A.P. reviewed and edited the manuscript. R.T.B. wrote, reviewed, and edited the manuscript and researched data. R.D.B. is the guarantor of this work and, as such had full access to all the data and takes responsibility for the integrity of the data and accuracy of the data.

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Childress #2A

Household Poverty and Nonfatal Violent Victimization, 2008-2012

Erika Harrell, Ph.D., Lynn Langton, Ph.D., *Bureau of Justice Statistics*, Marcus Berzofsky, DrPH, Lance Couzens, Hope Smiley-McDonald, Ph.D., *RTI International*

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Presents findings from 2008 to 2012 on the relationship between households that were above or below the federal poverty level and nonfatal violent victimization, including rape or sexual assault, robbery, aggravated assault, and simple assault. This report examines the violent victimization experiences of persons living in households at various levels of poverty, focusing on type of violence, victim's race or Hispanic origin, and location of residence. It also examines the percentage of violent victimizations reported to the police by poverty level. Data are from the National Crime Victimization Survey (NCVS), which collects information on nonfatal crimes, reported and not reported to the police, against persons age 12 or older from a nationally representative sample of U.S. households. During 2012, about 92,390 households and 162,940 persons were interviewed for the NCVS.

Highlights:

For the period 2008-12-

- Persons in poor households at or below the Federal Poverty Level (FPL) (39.8 per 1,000) had more than double the rate of violent victimization as persons in high-income households (16.9 per 1,000).
- Persons in poor households had a higher rate of violence involving a firearm (3.5 per 1,000) compared to persons above the FPL (0.8-2.5 per 1,000).
- The overall pattern of poor persons having the highest rates of violent victimization was consistent for both whites and blacks. However, the rate of violent victimization for Hispanics did not vary across poverty levels.
- Poor Hispanics (25.3 per 1,000) had lower rates of violence compared to poor whites (46.4 per 1,000) and poor blacks (43.4 per 1,000).
- Poor persons living in urban areas (43.9 per 1,000) had violent victimization rates similar to poor persons living in rural areas (38.8 per 1,000).
- Poor urban blacks (51.3 per 1,000) had rates of violence similar to poor urban whites (56.4 per 1,000).

Press Release
PDF (2.2M)
ASCII file (38K)
Comma-delimited format (csv) (Zip format 34K)

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To cite this product, use the following link:
http://www.bjs.gov/index.cfm?ty=pbdetail&iid=5137&fbclid=IwAR3dVGKN4mXe5kXwOd96_sDEkjGw08SvXcNQerSS1AbmYfpRCgSXMcGpwOs

View All Publications and Products

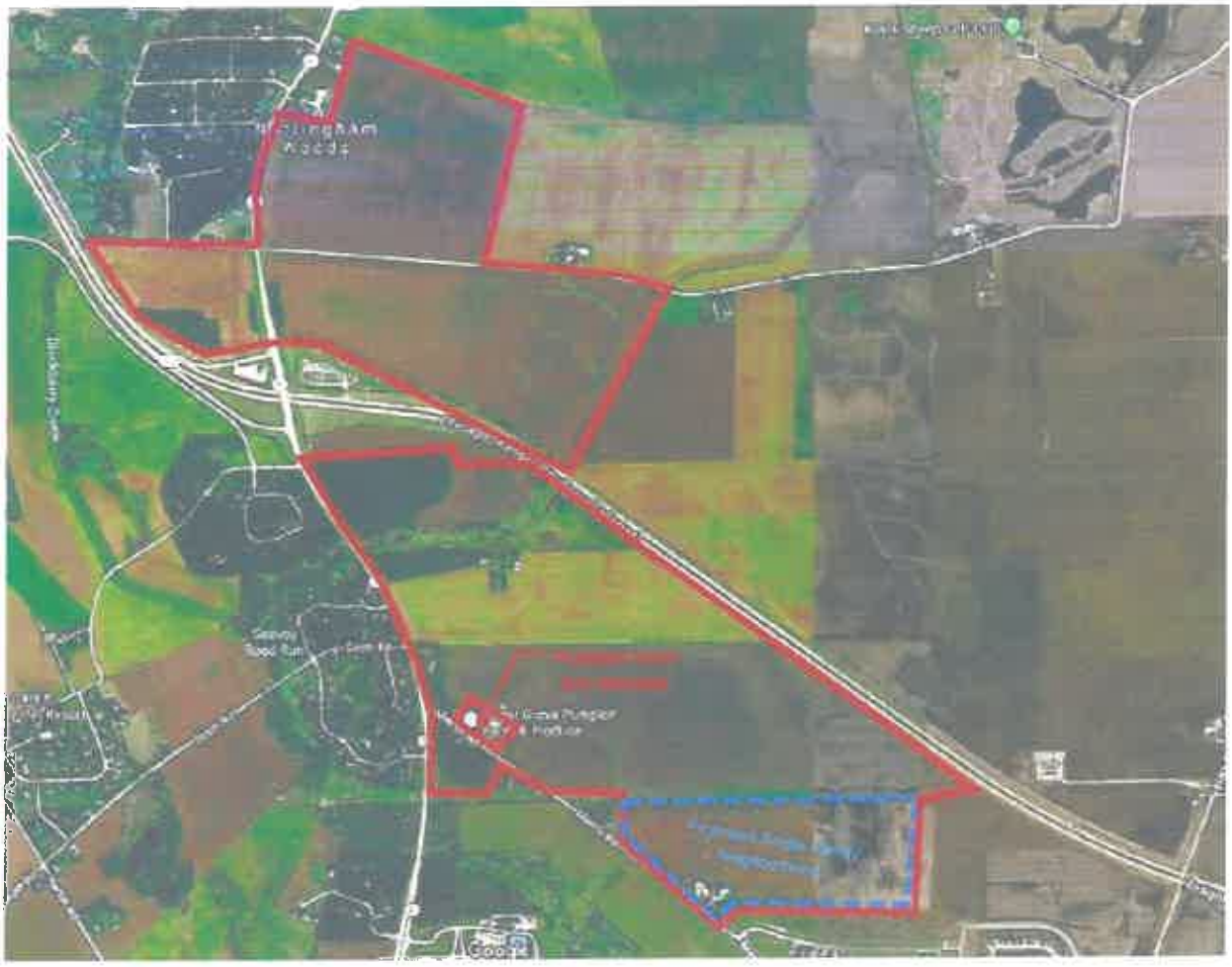
Exhibit B

Childress

http://www.wspynews.com/news/local/public-hearing-continued-for-large-land-redevelopment-in-sugar-grove/article_16c813a4-1b5e-11e9-8437-6f2e7ffaf0a5.html

Public Hearing Continued for Large Land Redevelopment in Sugar Grove as Hundreds Share Concerns, Comments

WSPYNEWS Jan 18, 2019 Updated Jan 21, 2019 Click Here to submit a News Tip or Story



(Photo provided by the Village of Sugar Grove)

Because of the mass amount of residents who showed up to speak, a public hearing has been continued for a controversial proposed rezoning of over 760 acres of land near Route 47 and I-88 in Sugar Grove.

Hundreds attended a meeting earlier this week at the Sugar Grove Public Library to voice concerns or

give comments on the proposal. The continued public hearing will take place at a larger venue – the APC Event Center at Waubonsee Community College at Route 47 and Waubonsee Dr.

The meeting is on Wednesday at 7:00 p.m.

As WSPY reported in early January, Crown Community Development is requesting the change from E-1 to Planned Development District to allow the property to be developed for a mix of uses.

Sugar Grove Village President Sean Michels spoke about the project.

Uses for the property, if the change to PDD is approved, could include single family residential, one multifamily residential complex, industrial uses and commercial uses.

The project would also include bike paths throughout the development as well as a two-acre park at the new single family neighborhood.

The property, which has to this point remained undeveloped and rural, surrounds the future Rt. 47 and I-88 interchange which once completed will allow motorists to be able to travel to and from both the east and west where Rt. 47 meets I-88.

Several residents have shared concerns about the broad change to the landscape in the area. If approved, the development would be the largest in the village to date.

WSPYNEWS

Childress Exhibit 4

Kane – DuPage Soil & Water Conservation District

November 1, 2018

Village of Sugar Grove
Renee Hanlonn
601 N Heartland Dr
Sugar Grove, IL 60554

We have assigned number 18-107 to a Land Use Opinion Applications from:

Crown Community Development
1751 A West Diehl Road
Naperville, IL 60563

The site location is:

Burlington and Sugar Grove Townships
Sections 4, 5, 29, 30, 31, 32, 33, Township 38 & 39N, Range 7E

The application was sent to us in compliance with Section 22.02a of the Illinois Soil and Water Conservations Districts Act.

___X__ Our review and comments will be sent on or before December 3, 2018.

_____ According to the information received, a full Land Use Opinion report is not required at this time. Therefore, no further action will be taken by the Soil and Water Conservation District Board.

Sincerely,

Jennifer Shroder
Resource Assistant

2315 Dean Street, Suite 100 St. Charles, Illinois 60175 (630) 584-7960 x3
www.kanedupageswcd.org

NOV – 1 2018

LAND USE OPINION APPLICATION

Kane-DuPage Soil and Water Conservation District
2315 Dean Street, Suite 100, St. Charles, IL 60175-4823
(630) 584-7960 Ext. 3

FOR OFFICE USE ONLY
LUO# 18-107 Date Due 12/1/18
Date initially rec'd 11/1/18
Date all rec'd 11/1/18 Date completed
Fee Paid $ 12,136.00 Refund Due
By Sugar Grove LLC Overpayment
1751 A West Diehl Rd No Report Nec
Naperville IL 60563 Gov't Agency

Send report to:
PETITIONER: Crown Community Development
ADDRESS: 1751 A West Diehl Road
Naperville, IL 60563
EMAIL: dolsen@crown-chicago.com
CONTACT PERSON: Daniel J. Olsen, P.E.
TELEPHONE: (630) 851-5490
Please allow 30 days for inspection and processing.

Location:
Township Blackberry and Sugar Grove
Section(s) 4, 5, 29, 30, 31, 32, 33
Township(s) 38, 39 N Range(s) 7 E

TYPE OF PROPOSAL: ☑ Change in Zoning from E-1 to PDD Project or Subdivision Name Crown Industrial - Sugar Grove
☑ Subdivision or Planned Unit Development (PUD)
☐ Variance-Please describe fully on separate sheet
☐ Special Use Permit-Please describe fully on separate sheet

Unit of Government Responsible for Permits Sugar Grove Date of Public Hearing 01/16/19
Current Use of Site Agricultural Proposed Use Industrial, Residential, Commercial
Surrounding Land Use Agricultural, Residential Number of Acres 150.87
Location address (or nearest intersection) NWC, NEC, & SEC of I-88 & IL-47. (See attached site plan for reference)

PROPOSED IMPROVEMENTS: (check all applicable items)

Planned Structures:
☑ Dwellings w/o Basements
☑ Dwellings with Basements
☑ Commercial Buildings
Other Industrial

Open Space:
☑ Park/Playground Areas
☑ Common Open Space Areas
Other

Water Supply:
☐ Individual Wells
☑ Community Water

Wastewater Treatment:
☐ Septic System
☑ Sanitary Sewers
☐ Other

Stormwater Treatment:
☑ Drainage Ditches or Swales
☑ Storm Sewers
☐ Dry Detention Basin
☐ Wet Retention Basin
☐ No Detention Facilities Proposed
☑ Other Naturalized Detention

EXISTING SITE CHARACTERISTICS: (check all applicable items)
☐ Ponds or Lakes ☑ Floodplain ☐ Woodland ☐ Drainage Tiles ☐ Stream(s)
☑ Wetland(s) ☐ Floodway ☑ Cropland ☐ Disturbed Land ☐ Other

REQUIRED: INCLUDE ONE COPY EACH OF THE FOLLOWING-Processing will not begin without the following:
☑ APPLICATION completed and signed
☑ FEE according to schedule below
☑ PLAT OF SURVEY/SITE PLAN showing legal description, legal measurements
☑ SITE /CONCEPT PLAN showing lots, streets, storm water detention areas, open areas, etc.
☑ LOCATION MAP (if not on maps above)-include distances from major roadways or tax parcel number

IF AVAILABLE – NOT REQUIRED:
☐ ZONING or LAND USE PETITION filed with unit of government **(if relevant)**
☑ TOPOGRAPHY MAP OR WETLANDS DELINEATIONS

FEE AMOUNTS: last updated November 1, 2013
$423.00 for 1 - 3 acres or fraction thereof
$459.00 for 4 - 5 acres or fraction thereof
For 5 - 200 acres see chart
> 200 acres: ADD $14.00 for each additional acre or fraction thereof over the 200 acre amount.
$65.00 processing fee if no report is required
***If there is more than one parcel in question and they are non-contiguous please contact KDSWCD for fee amount. ***

MAKE CHECKS PAYABLE TO: Kane-DuPage Soil and Water Conservation District

I (we) understand the filing of this application allows the authorized representative of the Kane-DuPage Soil and Water Conservation District to visit and conduct an evaluation of the site.

Petitioner or Authorized Agent _____ **Date** 10/31/18

This opinion will be issued on a nondiscriminatory basis without regard to race, color, religion, sex, age, marital status, handicap, or national origin.

Revised November 1, 2013

KANE-DUPAGE
SOIL AND WATER CONSERVATION DISTRICT

LAND USE OPINION
18-107A

December 3, 2018

Prepared for:
Village of Sugar Grove

Petitioner:
Crown Community Development
1751 A West Diehl Road
Naperville, IL 60563

18-107A **Executive Summary** **December 3, 2018**

Petitioner: Crown Community Development, 1751 A West Diehl Rd, Naperville, IL 60563
Contact Person: Daniel J. Olsem, 630-851-5490
Unit of Government Responsible for Permits: Village of Sugar Grove
Acreage: 124.93
Property Address/PIN#: 2S687 Route 47, Sugar Grove
Existing Land Use: Agriculture
Surrounding Land Use: Agricultural
Proposed Land Use: Residential/Commercial

Natural Resource Concerns

Land Cover in the Early 1800's: This site is located in an area previously identified as prairie. (See page 2 for more information.)

Kane County Green Infrastructure Plan: This site is located in an area indicated as Environmental Resource Area (with buffer). (See page 3.)

Wetlands: The National Wetland Inventory map does not identify wetland areas on this site. However, the ADID wetland map identifies a High Functional Value wetland area. In the event that any indications of wetlands are identified on this site during the proposed land use change, a wetland delineation specialist who is recognized by the U.S. Army Corps of Engineers should determine the exact boundaries and value of any wetlands. (See page 4 & 5 for more wetland information.)

Floodplain: There are no floodplain areas identified on this site. (See page 7.)

Streams: There are no streams on this site. (See page 8.)

Regulations: Please note that additional permits are required for any development impacting wetlands, streams or floodplain areas. Please see page 9 for regulation information.

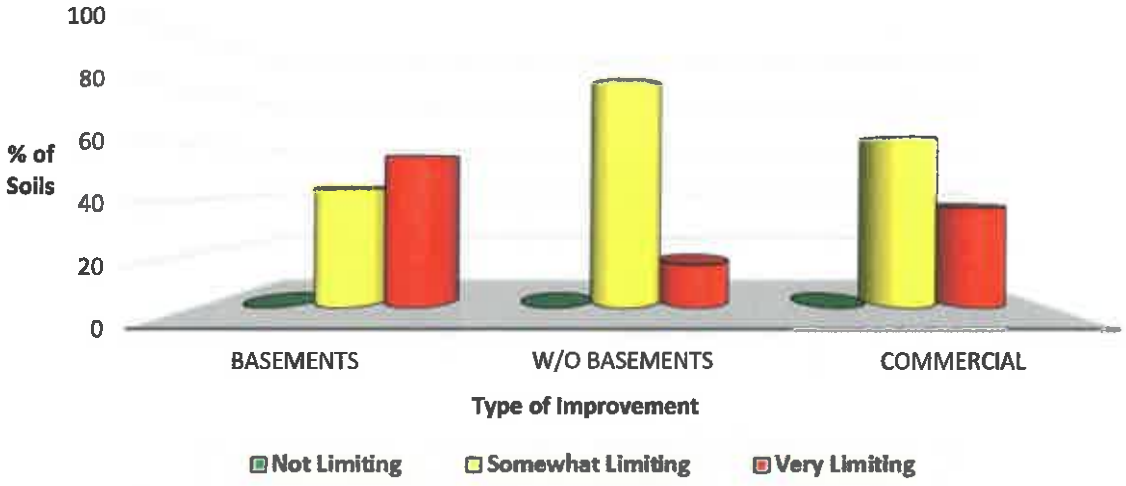
Aquifer Sensitivity: This site is classified as having a moderate to moderately high potential for aquifer contamination. (See page 10.)

Topography and Drainage: Please refer to page 11 for information regarding site topography and drainage.

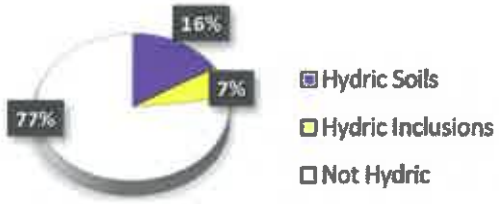
Stormwater: See page 13 for information regarding stormwater management.

Soil Erosion: Any development on this site should include a soil erosion and sediment control plan. (See page 13.)

Building Limitations: Soils at this site may contain limitations for dwellings with basements, dwellings without basements, and small commercial buildings. See page 15 and attached Soils Tables located on the final pages this report. All information is from the Soil Survey of Kane County, Illinois.



Hydric Soils: There are hydric soils and soils with hydric inclusions identified on this site. (See page 16.)



LESA-Prime Farmland: Sites with a score of 26-33 or greater on the Land Evaluation (LE) portion of the LESA score are considered to have high value farmland soils. This site has a score of **28** placing it within the definition of high value soils/prime farmland. (See Page 17 for more information.)

LAND USE OPINION

Land Use Opinion: The most current natural resource data indicates the following concerns for this site: **Wetlands, Soil Limitations, Aquifer Sensitivity, LESA – Prime Farmland, Soil Erosion and Sediment Control, and Stormwater Management.** Based on the information in this report, it is the opinion of the Kane-DuPage Soil and Water Conservation District Board that this site **may not be suited** for land use change **unless** the previously mentioned concerns are addressed.

SITE INSPECTION

A site inspection was conducted by Resource Assistant, Jennifer Shroder on November 29, 2018. The following photos were taken during this inspection and reflect the site conditions at that time.

TABLE OF CONTENTS

TABLE OF FIGURES

PURPOSE AND INTENT

This report presents natural resource information to officials of the local governing body and other decision makers. Decisions concerning variations, amendments or relief of local zoning ordinance may reference this report. Also, decisions concerning the future of a proposed subdivision of vacant or agricultural lands, and the subsequent development of these lands because of these decisions may reference this report. This report is a requirement under the Soil and Water Conservation District Act contained in ILCS 70, 405/1 ET seq.

This report intends to present the most current natural resource information available in an understandable format. It contains a description of the present conditions and resources available and their potential impact on each other. This information comes from standardized data, on-site investigations and other information furnished by the petitioner.

Please read the entire report to coordinate and interrelate all natural resource factors considered. This report, when used properly, will provide the basis for good land use change decisions and proper development while protecting the natural resource base of the county.

The conclusion of this report in no way indicates the impossibility of a certain land use. However, it should alert the reader to possible problems that may occur if the capabilities of the land are ignored. Please direct technical questions about data supplied in this report to:

Kane-DuPage
Soil and Water Conservation District
2315 Dean Street, Suite 100
St. Charles, IL 60175
Phone: (630) 584-7960

LAND COVER IN THE EARLY 1800'S

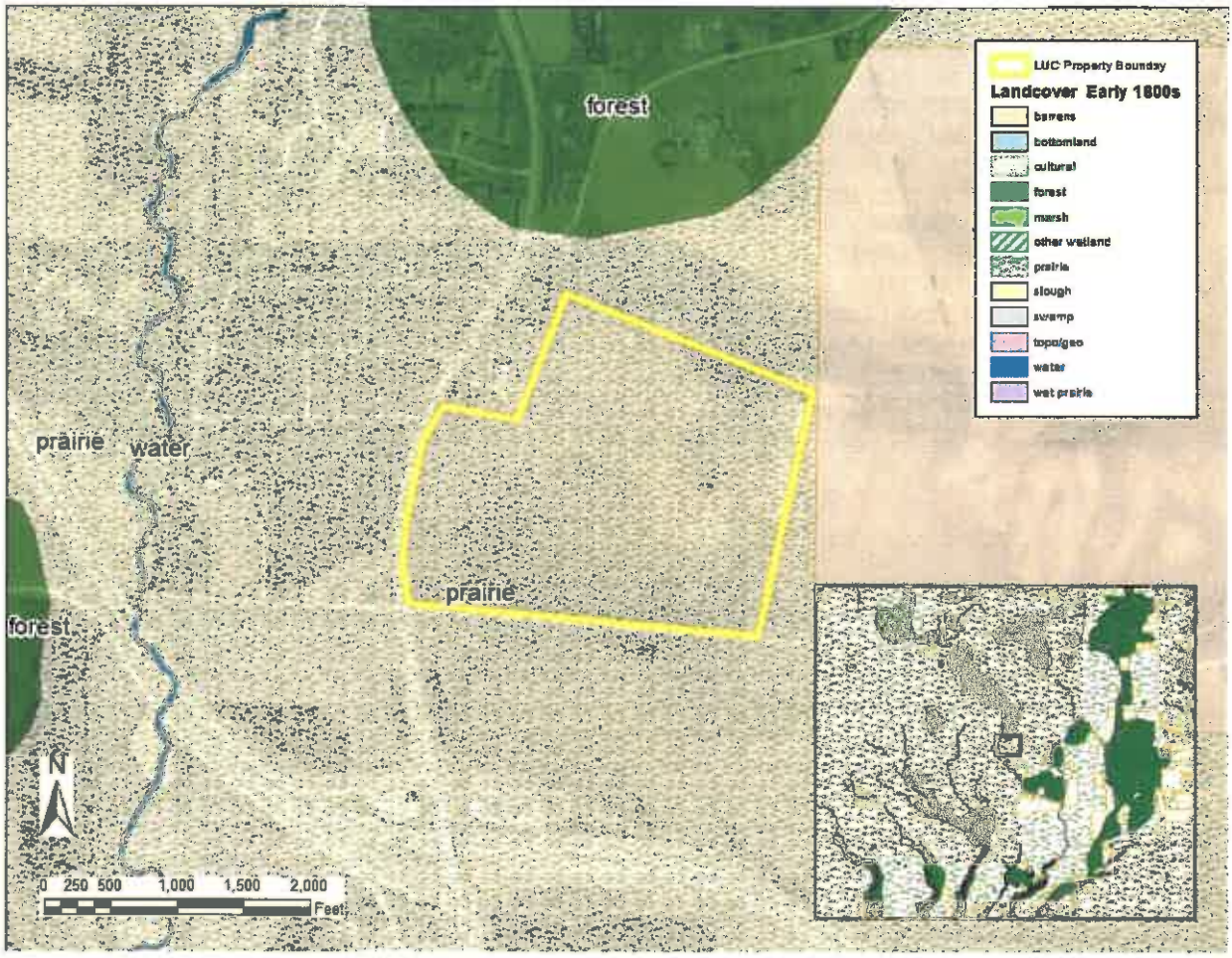


Figure 1: Land Cover in the Early 1800's

Illinois Department of Natural Resources, Illinois Natural History Survey, Land Cover of Illinois in the Early 1800s., Vector Digital Data, Version 6.0, August, 2003.

These surveys represent one of the earliest detailed maps for Illinois. The surveys began in 1804 and were largely completed by 1843. They predate our county land ownership maps and atlases. These plat maps and field notebooks contain a wealth of information about what the landscape was like before the flood of settlers came into the state.

The vast majority of the landscape of Illinois in the early 1800's consisted of two different natural resource areas. These two areas were prairie and forest. Prairie and woodland ecosystems are extremely valuable resources for many reasons. These areas:

- provide wildlife habitat and support biodiversity
- provide areas for recreational opportunities
- improve soil health and reduce soil loss
- improve air and water quality

Other designations include, cultural (or agricultural area), marsh, wet prairie, wetland, barrens and water. Please note that these designations are based on surveys taken in the early 1800's, and may not represent exact site conditions.

This site is located in an area surveyed as prairie on the land cover in the early 1800's map. The District recommends preserving as much as of the natural character of the site as possible during this land use change. It is also recommended that native plants be utilized for landscaping whenever possible. Removal of invasive species is also encouraged.

GREEN INFRASTRUCTURE

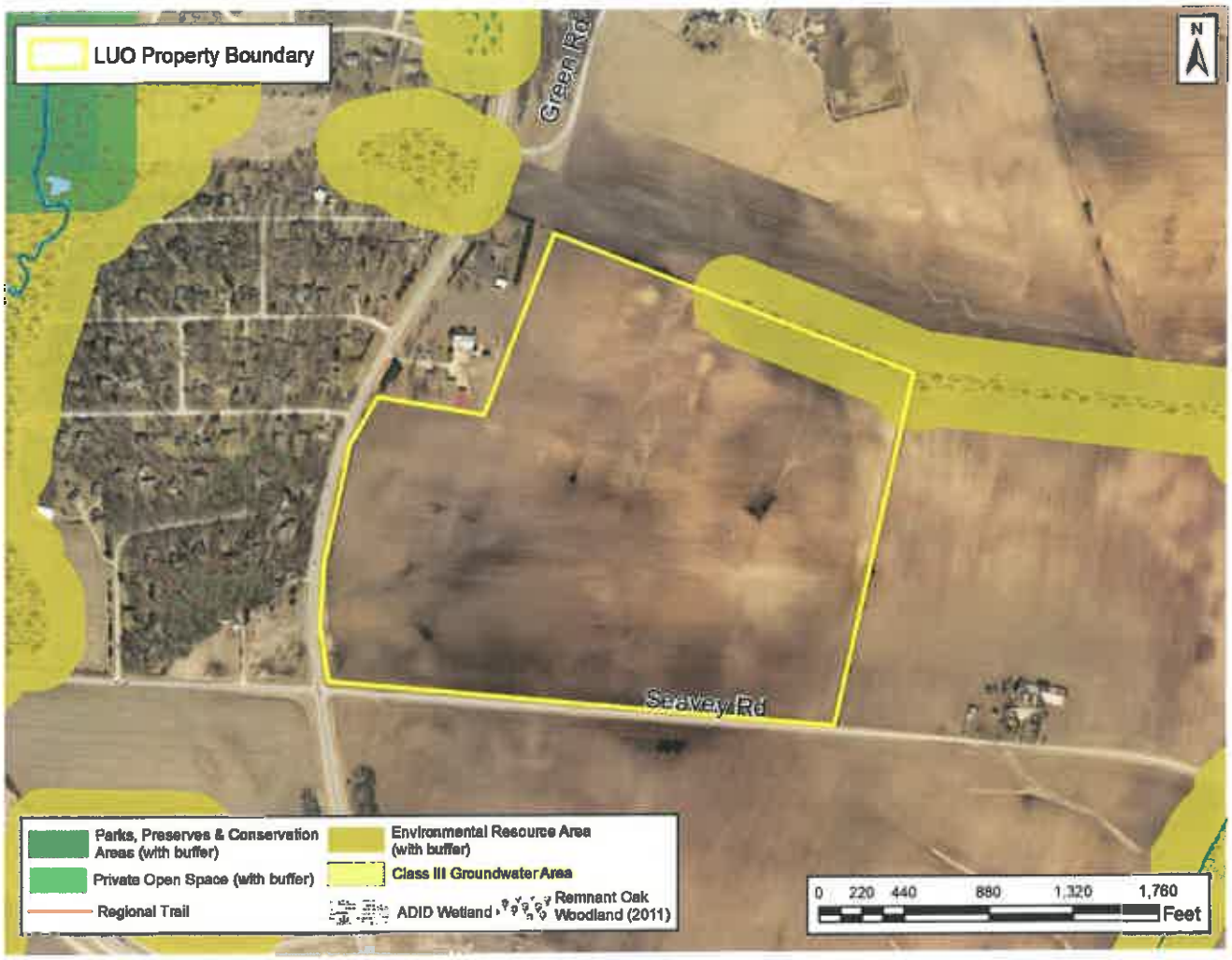


Figure 2: Kane County Green Infrastructure Plan

County of Kane. "Kane County 2040 Green Infrastructure Plan". Adopted December 10, 2013.

From the Kane County Green Infrastructure Plan, "Green infrastructure is an interconnected system of natural areas and open spaces including woodlands, wetlands, trails and parks, which are protected and managed for the ecological values and functions they provide to people and wildlife. The Kane County 2040 Green Infrastructure Plan includes analysis of existing natural resources in the County and recommendations for green infrastructure priorities and approaches. The ultimate goal of the Kane County 2040 Green infrastructure Plan is to lay the groundwork for green infrastructure planning and projects at the regional, community, neighborhood and site levels."

The benefits of green infrastructure include:

- Preservation of habitat and biodiversity
- Water and soil conservation
- Flood storage and protection
- Improved public health
- Encourage local food production
- Economic benefits
- Mitigation and adaptation for climate change

This site includes the following priority areas as designated on the Kane County 2040 Green Infrastructure Plan: Environmental Resource Area with buffer.

NWI WETLANDS

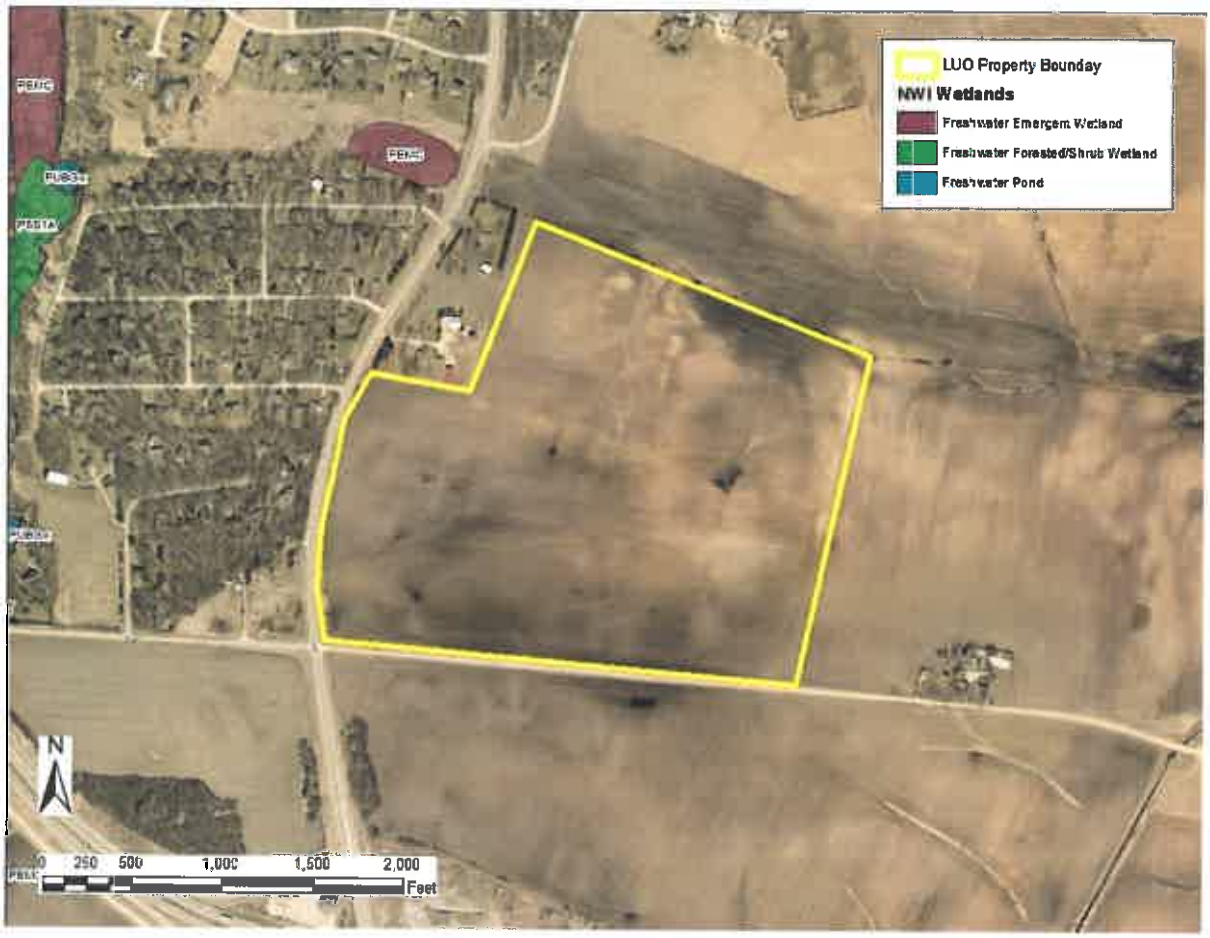


Figure 3: National Wetland Inventory Map

United States Department of the Interior, Fish and Wildlife Service, National Wetlands Inventory Photo Year 1983-1984, Digitized 1985-1986.

Wetlands are some of the most productive and diverse ecological systems on earth. The U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency define wetlands as follows, "Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas." Some other common wetlands located in this part of Illinois are fens and wet meadows.

Wetlands function in many ways to benefit mankind. Some of their many functions and benefits include:

- Controlling flooding by offering a slow release of excess water downstream or through the soil.
- Cleansing water by filtering out sediment and pollutants.
- Functioning as rechargers of our valuable groundwater.
- Providing essential breeding, rearing, and feeding grounds for many species of wildlife.

A review of the National Wetland Inventory Map indicates that wetlands do not appear to exist on this site. In the event that any indications of wetlands are identified on this site during the proposed land use change. A wetland delineation specialist who is recognized by the U.S. Army Corps of Engineers should determine the exact boundaries and value of these wetlands. Please see page 8 for wetland regulation information.

ADID WETLANDS

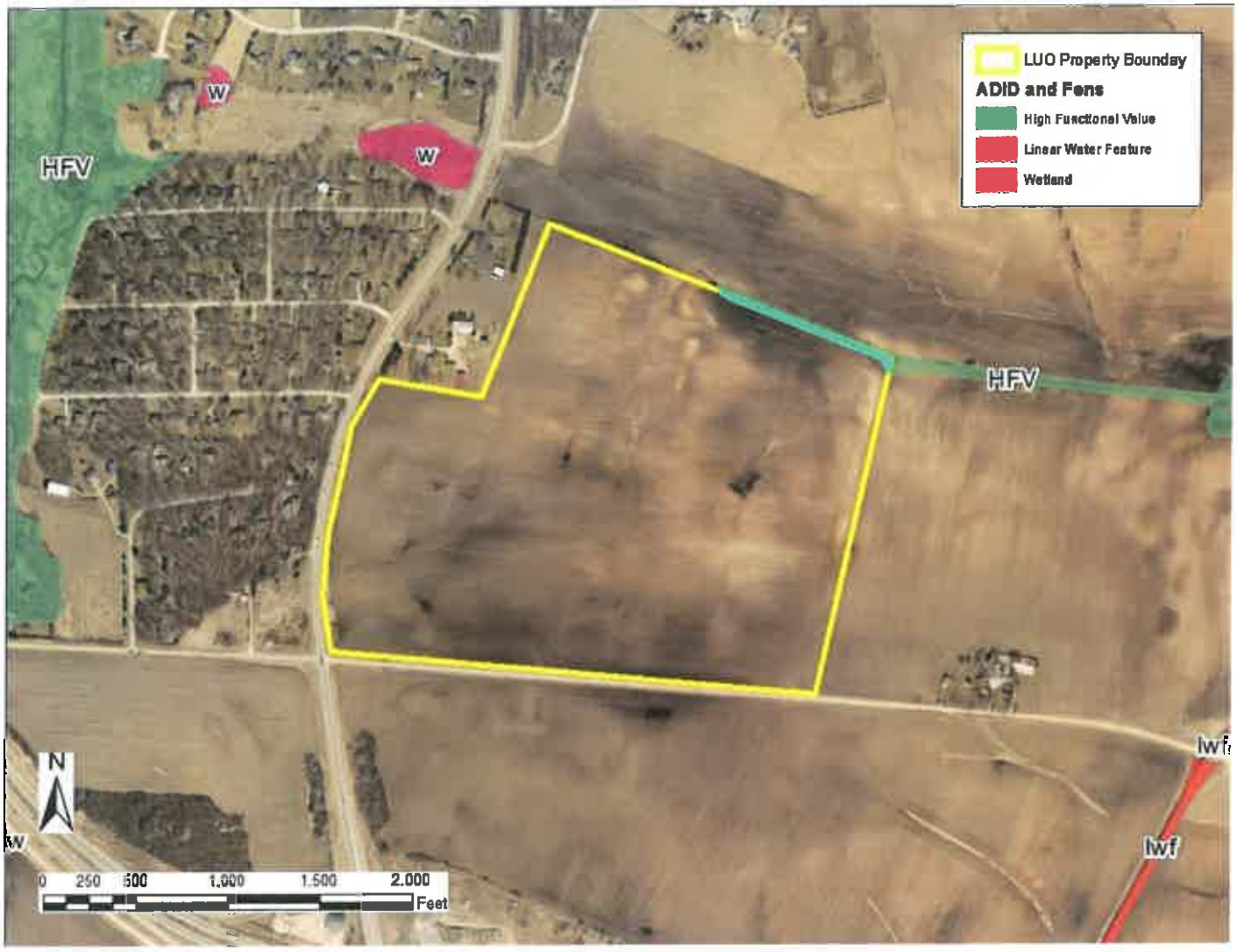


Figure 4: ADID Wetlands

Kane County's Wetlands and Streams Advanced Identification (ADID) Study completed in 2004.

Released in August of 2004, the Kane County Advanced Identification of Aquatic Resources (or ADID) study is a cooperative effort between federal, state, and local agencies to inventory, evaluate, and map high quality wetland and stream resources in the county. ADID studies are part of a U.S. Environmental Protection Agency program to provide improved awareness of the locations, functions, and values of wetlands and other waters of the United States. The primary purpose is to identify wetlands and streams unsuitable for dredging and filling because they are of particularly high quality. This information can be used by federal, state, and local governments to aid in zoning, permitting, and land acquisition decisions. In addition, the information can provide data to agencies, landowners, and private citizens interested in restoration, acquisition, or protection of aquatic sites and resources. For more detailed information regarding wetlands in Kane County, please refer to the full Kane County ADID study at : http://dewprojects.countyofkane.org/adid/index.htm

An ADID wetland was identified on this site. This wetland has been designated as having a high functional value.

WETLANDS PHOTOS

Figure 5: Wetlands photos

Point 1: Facing west-northwest

Point 2: Facing northwest

FLOODPLAIN

Figure 6: Floodplain Map

Federal Emergency Management Agency, National Flood Insurance Program, Q3 Flood Data, Disc 6, 2011.

From FEMA's Floodplain Natural Resources and Functions Chapter 8, "Undeveloped floodplain land provides many natural resources and functions of considerable economic, social and environmental value. Nevertheless, these and other benefits are often overlooked when local land-use decisions are made. Floodplains often contain wetlands and other important ecological areas as part of a total functioning system that impacts directly on the quality of the local environment."

There are so many benefits of the floodplain that not all can be listed here, but the following is a general list of benefits and functions:

- natural flood storage and erosion control
- water quality maintenance
- groundwater recharge
- nutrient filtration
- biological productivity/wildlife habitat
- recreational opportunities/aesthetic value

According to the Flood Insurance Rate Map, no part of this site is within the boundaries of a 100-year floodplain. This development should not impede the beneficial functions of the floodplain. Please see 8 for information regarding floodplain regulations.

Rivers and Streams are necessary components of successfully functioning ecosystems. It is important to protect the beneficial functions and integrity of our local streams and rivers. Development near stream systems has the potential to increase flooding, especially in urban areas where there is a lot of impervious surface and a greater amount of stormwater runoff. Pollution is also an issue for stream systems in urban and rural areas. It is rare for any surface waters to be impacted by only one source of pollution. With few exceptions, every land-use activity is a potential source of nonpoint source water pollution (IEPA– Nonpoint Source Pollution).

The Illinois Environmental Protection Agency provides the following in regards to nonpoint source pollution, "Nonpoint source pollution (NPS) occurs when runoff from rain and snowmelt carries pollutants into waterways such as rivers, streams, lakes, wetlands, and even groundwater. Examples of or sources of NPS pollution in Illinois include runoff from farm fields, livestock facilities, construction sites, lawns and gardens, city streets and parking lots, surface coal mines, and forestry. The major sources of NPS pollution in Illinois are agriculture, urban runoff, and habitat modification."

Local watershed management planning is an important effort that involves citizens of a watershed in the protection of their local water resources. Water quality is a reflection of its watershed.

Common Watershed Goals:

- Protect and restore natural resources
- Improve water quality
- Reduce flood damage
- Enhance and restore stream health
- Guide new development to benefit watershed goals
- Preserve and develop green infrastructure
- Enhance education and stewardship

There are many subwatershed plans that have already been developed in Kane County. Please follow the link to the Kane County 2040 Green Infrastructure Plan. See page 108 for a list of local watershed plans.

http://countyofkane.org/FDER/Pages/development/planning.aspx

Nutrient management is of vital importance to the health of our rivers and streams. Nutrient load in our local streams and rivers has contributed to the Gulf of Mexico hypoxia, or a "dead zone" located where the Mississippi River meets the Gulf of Mexico. This dead zone has little to no biological activity. Yearly averages indicate the dead zone to be greater than 5,000 square miles in size. Illinois was required and has introduced a plan to reduce nutrient loss from point source pollution sources, such as wastewater treatment plants and industrial wastewater, as well as nonpoint pollution sources. Read Illinois's Plan for reducing nutrient loss here:

http://www.epa.illinois.gov/topics/water-quality/watershed-management/excess-nutrients/nutrient-loss-reduction-strategy/index

REGULATORY INFORMATION

The laws of the United States and the State of Illinois assign certain agencies specific and different regulatory roles to protect the waters within the State's boundaries. These roles, when considered together, include protection of navigation channels and harbors, protection against floodway encroachment, maintenance and enhancement of water quality, protection of fish and wildlife habitat As well as recreational resources. Unregulated use of waters within the State of Illinois could permanently destroy or alter the character of these valuable resources and adversely impact the public. Therefore, please contact the proper regulatory authorities when planning any work associated with Illinois waters so that proper consideration and approval can be obtained.

REGULATORY AGENCIES:

Wetland/U.S. Waters: U.S. Army Corps of Engineers, Chicago District, 111 North Canal Street, Chicago, IL 60606-7206. Phone: (312) 353-6400.

http://www.lrc.usace.army.mil/

Wetland/Isolated: Kane County Water Resources Division, 719 Batavia Avenue, Geneva, IL 60134. (630)232-3400.

http://www.countyofkane.org/FDER/Pages/environmentalResources/water.aspx

Floodplains: Illinois Department of Natural Resources\Office of Water Resources, 2050 W. Stearns Road, Bartlett, IL 60103. (847)608-3100.

https://www.dnr.illinois.gov/WaterResources/Pages/Permit%20Programs.aspx

Who Must Apply:

Wetland and/or Floodplain Permit: Anyone proposing to dredge, fill, riprap, or otherwise alter the banks or beds of, or construct, operate, or maintain any dock, pier, wharf, sluice, dam, piling, wall, fence, utility, floodplain or floodway subject to State or Federal regulatory jurisdiction should apply for agency approvals.

Construction Permit: Anyone disturbing an acre or more of land during proposed construction activities should apply for the NPDES General Construction Permit ILR10. Building and stormwater permits should also be obtained locally from municipal government and/or Kane County.

NPDES General Construction Permit ILR10: Illinois Environmental Protection Agency, Division of Water Pollution Control, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794. (217)782-0610.

http://www.epa.illinois.gov/topics/forms/water-permits/storm-water/construction/index

Coordination: We recommend early coordination with the regulatory agencies BEFORE finalizing work plans. This allows the agencies to recommend measures to mitigate/compensate for adverse impacts. Also, the agency can make possible environmental enhancement provisions early in the project planning stage. This could reduce time required to process necessary approvals. Please be advised that failure to coordinate with regulatory agencies could result in project shut down, fines and/or imprisonment.

AQUIFER SENSITIVITY

Figure 6: Aquifer Sensitivity Map

Dey, W.S., A.M. Davis, and B.B. Curry 2007, Aquifer Sensitivity to Contamination, Kane County, Illinois: Illinois State Geological Survey, Illinois County Geologic Map, ICGM Kane-AS

The map aquifer sensitivity to contamination (Dey et al 2007) is a representation of the potential vulnerability of aquifers in an area to contamination from sources of contaminants at or near the surface. The U.S. Environmental Protection Agency (1993) defines aquifer sensitivity/contamination potential as "a measure of the ease with which a contaminant applied on or near the land surface can migrate to an aquifer."

Aquifers function as a storage area for groundwater recharge, which makes them a reliable source of fresh water. Groundwater accounts for a considerable percentage of the drinking water in Kane County. The chart below shows the aquifer sensitivity classifications. This site is classified as having a moderate potential for contamination.

A = High Potential, B = Moderately High Potential, C=Moderate Potential, D = Moderately Low Potential, E = Low Potential

A1	Aquifers are greater than 50ft thick and within 5ft of the surface	**C1**	Aquifers are greater than 50ft thick and between 20 and 50ft below the surface
A2	Aquifers are greater than 50ft thick and between 5 and 20ft below the surface	**C2**	Aquifers are between 20 and 50ft thick and between 20 and 50ft below the surface
A3	Aquifers are between 20 and 50ft thick and within 5ft of the surface	**C3**	Sand and gravel aquifers are between 5 and 20ft thick, or high-permeability bedrock aquifers are between 15 and 20ft thick, both between 20 and 50ft below the surface
A4	Aquifers are between 20 and 50ft thick and between 5 and 20ft below the surface	**D1**	Aquifers are greater than 50ft thick and between 20 and 50ft below the surface
B1	Sand and gravel aquifers are between 5 and 20ft thick, or high-permeability bedrock aquifers are between 15 and 20ft thick, both within 5ft of the surface	**D2**	Aquifers are between 20 and 50ft thick and between 50 and 100ft below the surface
B2	Sand and gravel aquifers are between 5 and 20ft thick, or high-permeability bedrock aquifers are between 15 and 20ft thick, both between 5 and 20ft below the surface	**D3**	Sand and gravel aquifers are between 5 and 20ft thick, or high-permeability bedrock aquifers are between 15 and 20ft thick, both between 50 and 100ft below the surface
E1	Sand and gravel or high-permeability bedrock aquifers are not present within 100 ft of the land surface		

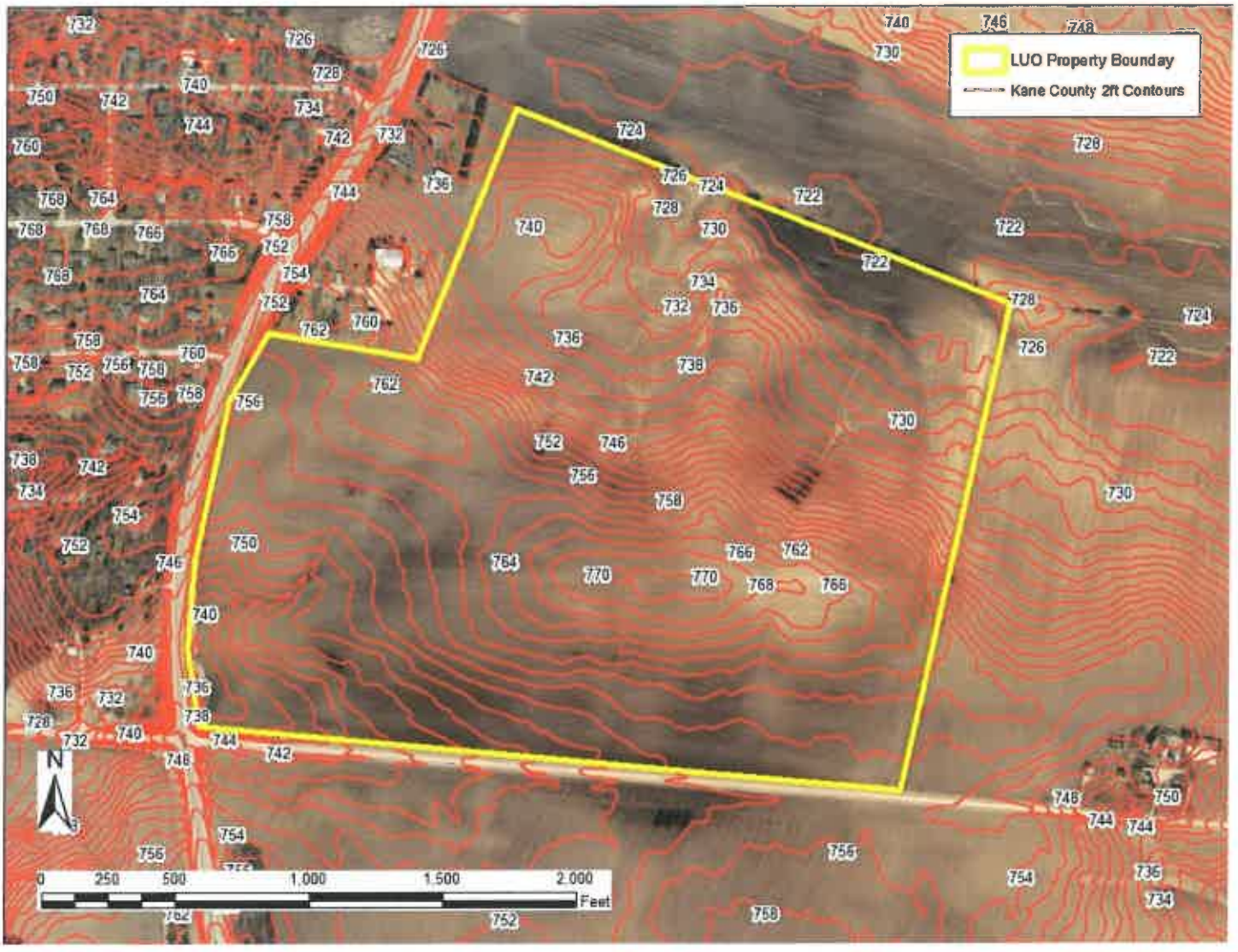


Figure 7: Municipalities 2 Ft Contours

USGS Topographic maps and other topographic surveys give information on elevations, which are important to determine slopes, natural drainage directions, and watershed information. Elevations determine the area of impact of flooding. Slope information determines steepness and erosion potential of the site. Slope has the greatest impact in determining the erosion potential of a site during construction activities. Drainage directions determine where water leaves the property in question, possibly impacting surrounding natural resources.

It is important to consider drainage during any proposed construction onsite. Any areas where water leaves the site should be monitored for potential pollutants which could contaminate downstream waters.

The high point of this property is located in the center of the site at an elevation of approximately 770 feet above mean sea level. The property generally drains in all directions via overland. The lowest elevation on the property is approximately 722 feet above sea level.

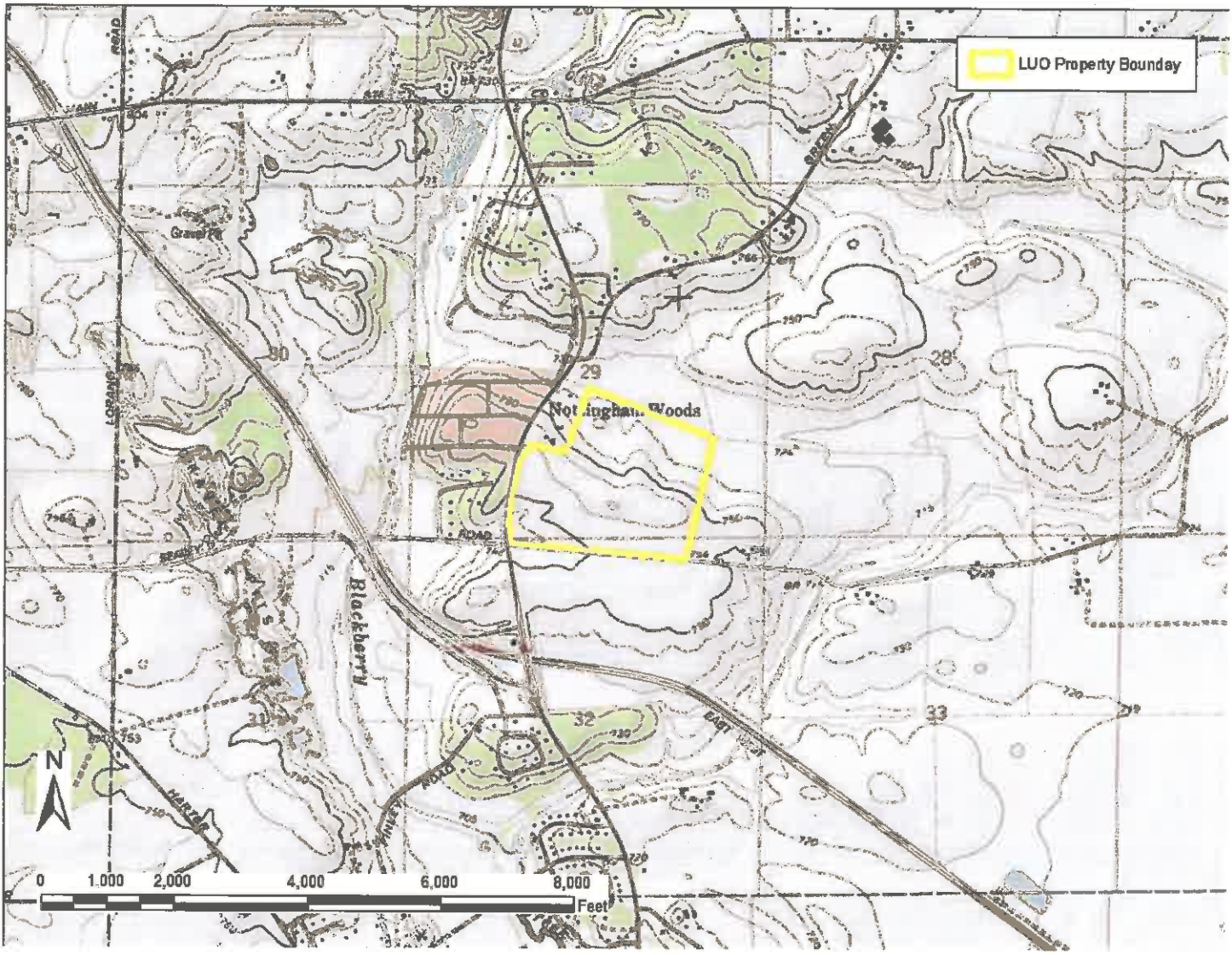


Figure 8: USGS Topographic Map

STORMWATER

Any proposed removal of vegetation, compaction of soil, and addition of impervious surfaces (rooftops, roadways, etc.) will greatly increase the amount of stormwater runoff generated on this site. The District recommends the use of onsite stormwater management strategies whenever possible. IEPA now recommends that stormwater pollution prevention plans include post-construction stormwater management which retains the greatest amount of post-development stormwater runoff practicable, given the site and project constraints. From the ILR10 permit for construction sites 1 acre or more, "Such practices include but are not limited to: stormwater detention structures (including wet ponds); stormwater retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices)."

Site assessment with soil testing should help to determine what stormwater management practices are best for your site. Insufficient stormwater management has the potential to cause or aggravate flooding conditions on surrounding properties, or elsewhere in the watershed. Please refer to the Kane County Stormwater Ordinance for stormwater requirements and minimum standards.

http://www.countyofkane.org/FDER/Pages/environmentalResources/waterResources/

SOIL EROSION

Development on this site should include the use of a soil erosion and sedimen-tation control plan. Due to the soil type and slope of the site, the District believes that the potential for soil erosion during and after any proposed construction could be **large**. Furthermore, the erosion and resulting sedimentation may become a primary nonpoint source of water pollution. Eroded soil during the construction phase can create unsafe conditions on roadways, degrade water quality, and destroy aquatic ecosystems lower in the watershed. Soil erosion also increases the risk of flooding due to choking culverts, ditches, and storm sewers, and by reducing the capacity of natural and man-made detention facilities.

Erosion and sedimentation control measures include: 1) staging the construction to minimize the amount of disturbed areas present at the same time, 2) maintaining or planting vegetative groundcover, and 3) keeping runoff velocities low.

Soil erosion and sedimentation control plans, including maintenance responsibilities, should be clearly communicated to all contractors working on the site. Special care must be taken to protect any wetlands, streams and other sensitive areas.

Please refer to the Illinois Urban Manual for erosion and sediment control information and technical guidance when creating erosion and sediment control plans. The practice standards and standard drawings from the Illinois Urban Manual represent the minimum standard in Illinois.

SOILS INFORMATION

IMPORTANCE OF SOILS INFORMATION

Soils information is taken from the Soil Survey of Kane County, Illinois, United States Department of Agriculture, Natural Resource Conservation Service. This information is important to all parties involved in determining the suitability of the proposed land use change.

SOIL MAP UNITS

The soil survey map of this area (Figure 1) indicates soil map units. Each soil map unit has limitations for a variety of land uses such as septic systems, and buildings site development, including dwellings with and without basements. All of the soils contain **very limiting** conditions for building site development. **See Soils Interpretations section and attached Soil Tables.**

The Soil Survey Geographic (SSURGO) data base was produced by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies for the Soil Survey of Kane County, Illinois. The soils were mapped at a scale of 1:12,000. The enlargement of these maps to scales greater than that at which they were originally mapped can cause misunderstanding of the detail of the mapping. If enlarged, maps do not show the small areas of contrasting soil that could have been shown at a larger scale. The depicted soil boundaries and interpretations derived from them do not eliminate the need of onsite sampling, testing, and detailed study of specific sites for intensive uses. Thus, this map and its interpretations are intended for planning purposes only.

LIST OF SOIL MAP UNITS

SOIL MAP UNIT	PERCENT OF PARCEL	ACRES
152A—Drummer	16%	19.55
198A—Elburn	7%	8.41
348B—Wingate	33%	40.92
348C2—Wingate	3%	3.22
512A—Danabrook	2%	2.97
512B—Danabrook	<1%	0.17
512C2—Danabrook	5%	6.25
656C2—Octagon	13%	16.92
656D2—Octagon	21%	26.52
Table 1: Soil Map Units	**Total**	**124.93**

All percentages and acreages are approximate.

We suggest that a geotechnical engineer conduct an on site investigation. This should determine, specifically, what soils type is present at a particular location, along with its associated limitations or potential for a particular use. It will also assist in determining which types of engineering procedures are necessary to account for the limitations of the soil on the site.

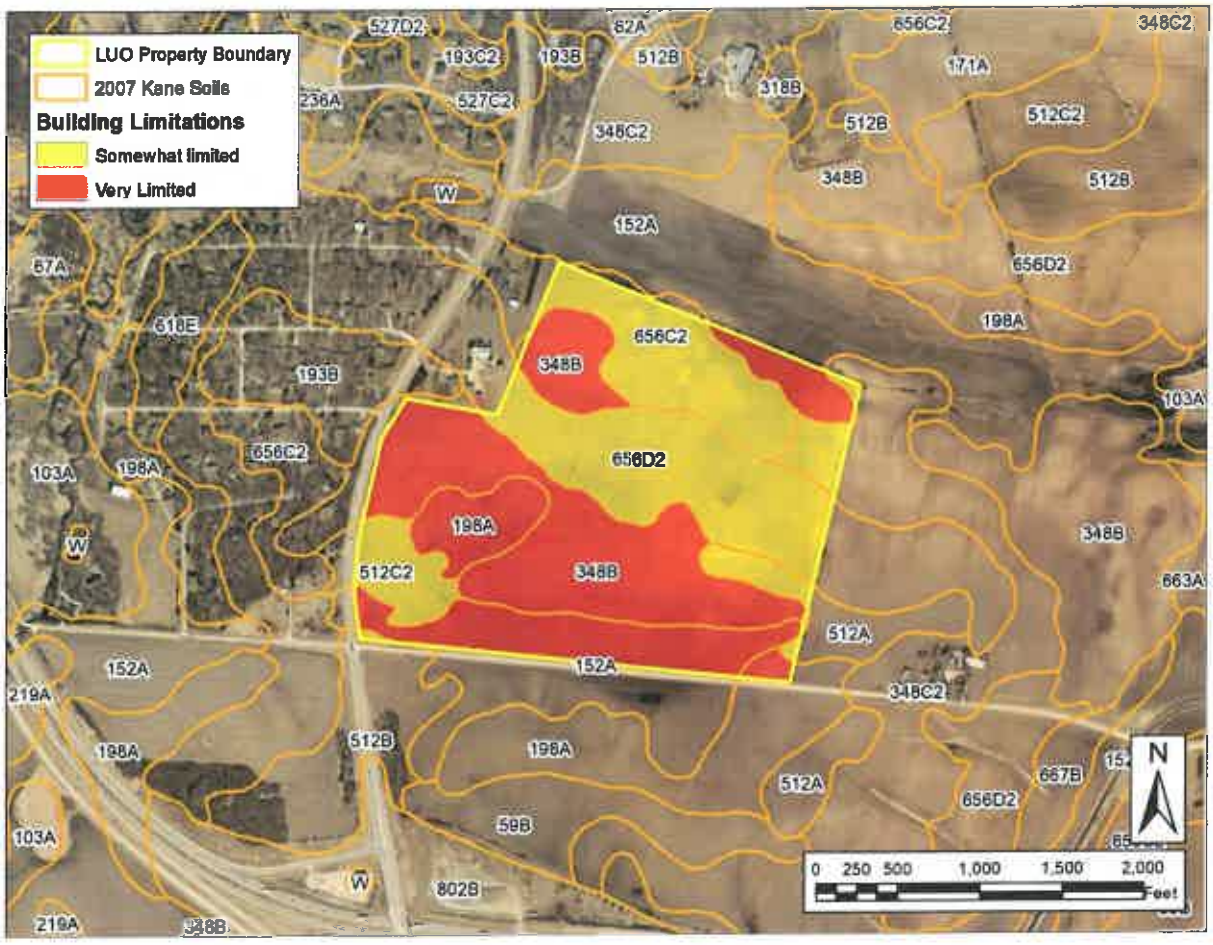


Figure 9: Soil Survey Map

United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Kane County SSURGO soil layer certified in 2007. Areas shaded red represent VERY LIMITING limitations for building site development, areas shaded yellow represent SOMEWHAT LIMITING limitations for building site development, and areas shaded green represent NOT LIMITING limitations for building site development.

The soil limitation ratings are used mainly for engineering designs of dwellings with or without basements, local streets and roads, small commercial buildings, septic tank absorption fields, and etc. The ratings of not limiting, somewhat limiting, and very limiting are based on national averages and are defined and used as follows:

Not Limiting (Slight) - This limitation rating indicates that the soil properties are generally favorable for the specified use and that any limitations are minor and easily overcome.

Somewhat Limiting (Moderate) - This rating indicates that the soil properties and site features are unfavorable for the specified use, but that the limitations can be overcome or minimized with special planning and design.

Very Limiting (Severe) - This indicates that one or more soil properties or site features are very unfavorable and difficult. A major increase in construction effort, special designs, or intensive maintenance is required. These costly measures may not be feasible for some soils that are rated as severe.

There are limitations for building site development on this site. A comprehensive soil assessment should be completed prior to any earth disturbing activities on this site.

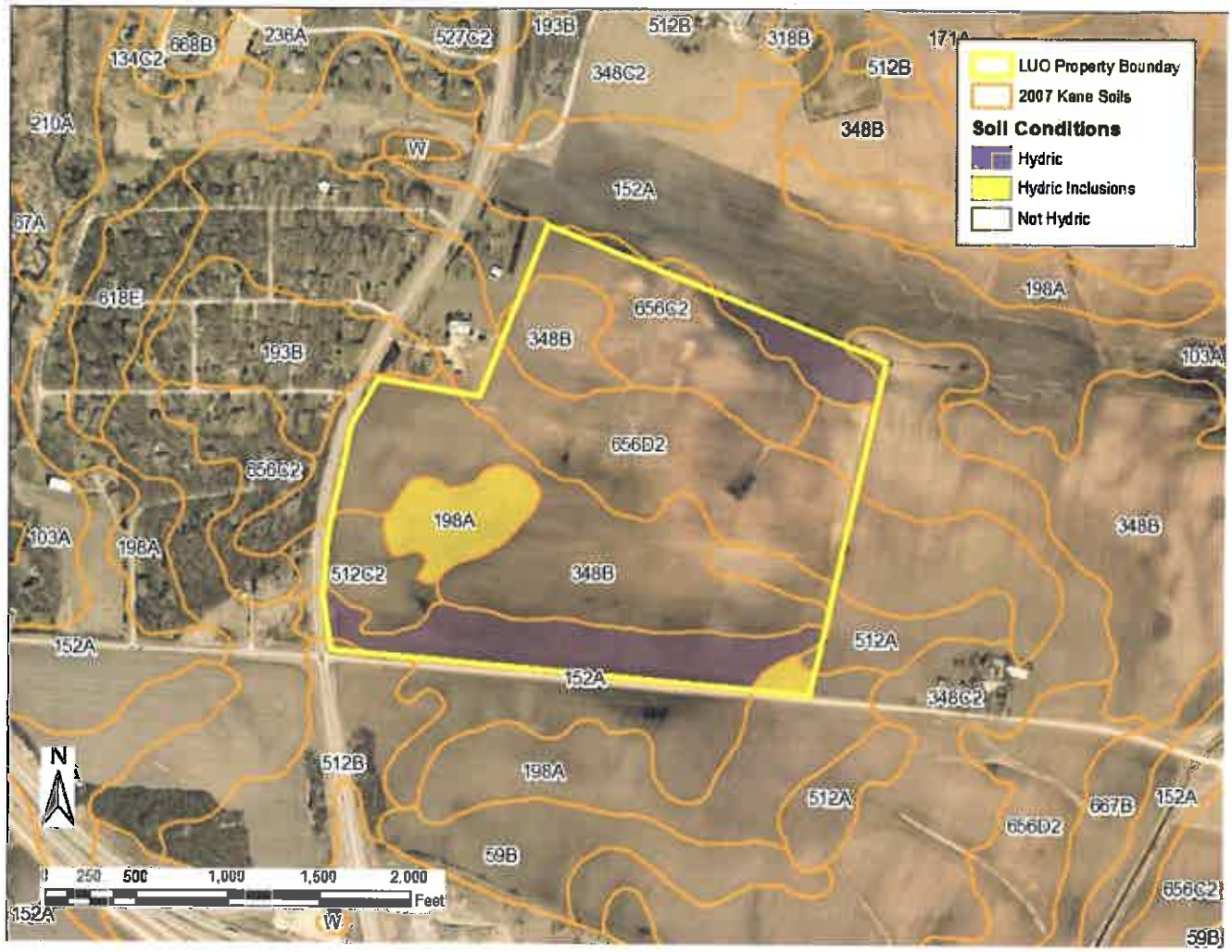


Figure 10: Hydric Soils

United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Kane County SSURGO soil layer certified in 2007. Hydric soils are shaded purple and soils with hydric inclusions are shaded yellow.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

Hydric inclusions are small areas, or inclusions, of nonhydric soils in the higher positions of the landform or map units dominantly made of nonhydric soils with inclusions of hydric soils in the low positions on the landform.

Hydric soils provide limitations for building site development due to their potential for ponding and poor drainage capacity. This often results in the need for improved drainage onsite prior to any proposed development. Any change to the natural drainage onsite has the potential to create flooding issues on and adjacent to the site. Hydric soils are often organic (peat or muck) and not suitable construction material. Hydric soils also may indicate wetlands onsite.

There are hydric soils and hydric inclusions on this site. A comprehensive soil assessment should be completed prior to any earth disturbing activities on this site.

LESA– PRIME FARMLAND

NOTE: The Kane County LESA System was revised and updated in 2004. Scores are reflected through a 33 point system used for the soils or Land Evaluation (LE) portion of the LESA Score.

Through the use of Kane County's Land Evaluation and Site Assessment System (LESA), a numerical value was determined for this site. The LESA System is designed to determine the quality of land for agricultural uses and to assess sites or land areas for their long term agricultural economic viability. In agricultural land evaluation, soils of a given area are rated ranging from the best to the worst suited for a stated agricultural use, i.e., cropland, forest land, or rangeland. A relative value is determined for each soil. The best soils are assigned a value of 33 and all others are assigned lower values. Therefore, the closer the relative value is to 33, the more valuable and more productive the site's soils are for agricultural purposes.

The land evaluation represents thirty-three percent of the total LESA score. It is based on data from the National Cooperative Soil Survey. The site assessment portion of a LESA represents sixty-seven percent of the LESA score. It is based on factors such as zoning and land use compatibility

The land evaluation for this site is 28, which does represent the upper percent level of agricultural productivity.

Our opinion is based on information from the following sources:

Illinois Department of Natural Resources, Illinois Natural History Survey, Land Cover of Illinois in the Early 1800s., Vector Digital Data, Version 6.0, August, 2003.

County of Kane. "Kane County 2040 Green Infrastructure Plan". Adopted December 10, 2013.

United States Department of the Interior, Fish and Wildlife Service, National Wetlands Inventory, Photo Year 1983-1984, Digitized 1985-1986.

Kane County's Wetlands and Streams Advanced Identification (ADID) Study completed in 2004.

Federal Emergency Management Agency, National Flood Insurance Program, Q3 Flood Data, Disc 6, 2011.

U.S. Geological Survey, Illinois Digital Orthophoto Quadrangles, 2006 photos, Published: Champaign, Illinois State Geological Survey, 2006.

Nonpoint Source Pollution– What's it All About?. Illinois Environmental Protection Agency. http://www.epa.illinois.gov/topics/water-quality/watershed-management/nonpoint-sources/what-is-nonpoint-source-pollution/index. 2015 Illinois EPA .

United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Kane County, IL SSURGO soil layer certified in 2007, and DuPage County, IL SSURGO soil layer certified in 2007 and accompanying interpretations.

Dey, W.S., A.M. Davis, and B.B. Curry, 2007, Aquifer Sensitivity to Contamination, Kane County, Illinois: Illinois State Geological Survey, Illinois County Geologic Map, ICGM Kane-AS.

An on-site investigation conducted by the SWCD Resource Assistant, Jennifer Shroder on November 29, 2018.

We respectfully submit this information in compliance with the Illinois Soil and Water Conservation Districts Act (ILCS 70, 405/1 et seq). The District Board reviews proposed developments. Jennifer Shroder, Resource Assistant, prepared this report.

cc: Crown Community Development
1751 A West Diehl Road
Naperville, IL 60563

Map Unit Description

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Map unit: 152A - Drummer silty clay loam, 0 to 2 percent slopes

Component: Drummer, drained (94%)

The Drummer, drained component makes up 94 percent of the map unit. Slopes are 0 to 2 percent. This component is on outwash plains on plains. The parent material consists of loess over stratified loamy outwash. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 2w. This soil meets hydric criteria.

Map unit: 198A - Elburn silt loam, 0 to 2 percent slopes

Component: Elburn (93%)

The Elburn component makes up 93 percent of the map unit. Slopes are 0 to 2 percent. This component is on outwash plains on plains. The parent material consists of loess over stratified loamy outwash. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April, May. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 1. This soil does not meet hydric criteria.

Map unit: 348B - Wingate silt loam, cool mesic, 2 to 5 percent slopes

Component: Wingate (97%)

The Wingate component makes up 97 percent of the map unit. Slopes are 2 to 5 percent. This component is on ground moraines on till plains. The parent material consists of loess over loamy till. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 26 inches during February, March, April. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Map unit: 348C2 - Wingate silt loam, 5 to 10 percent slopes, eroded

Component: Wingate (92%)

The Wingate component makes up 92 percent of the map unit. Slopes are 5 to 10 percent. This component is on ground moraines. The parent material consists of Loess or other silty material and in the underlying till. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during February, March, April. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

Map unit: 512A - Danabrook silt loam, 0 to 2 percent slopes

Component: Danabrook (90%)

The Danabrook component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on ground moraines. The parent material consists of Loess or other silty material and in the underlying till. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during February, March, April. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 1. This soil does not meet hydric criteria.

Map unit: 512B - Danabrook silt loam, 2 to 5 percent slopes

Component: Danabrook (90%)

The Danabrook component makes up 90 percent of the map unit. Slopes are 2 to 5 percent. This component is on end moraines, ground moraines. The parent material consists of Loess or other silty material and in the underlying till. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during February, March, April. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 10 percent.

Map unit: 512C2 - Danabrook silt loam, 5 to 10 percent slopes, eroded

Component: Danabrook (92%)

The Danabrook component makes up 92 percent of the map unit. Slopes are 5 to 10 percent. This component is on ground moraines, end moraines. The parent material consists of Loess or other silty material and in the underlying till. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during February, March, April. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

Map unit: 656C2 - Octagon silt loam, 4 to 6 percent slopes, eroded

Component: Octagon (92%)

The Octagon component makes up 92 percent of the map unit. Slopes are 4 to 6 percent. This component is on ground moraines. The parent material consists of Thin mantle of loess or other silty material and in the underlying till. Depth to a root restrictive layer, densic material, is 24 to 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during February, March, April. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 23 percent.

Map unit: 656D2 - Octagon silt loam, 6 to 12 percent slopes, eroded

Component: Octagon (92%)

The Octagon component makes up 92 percent of the map unit. Slopes are 6 to 12 percent. This component is on end moraines. The parent material consists of Thin mantle of loess or other silty material and in the underlying till. Depth to a root restrictive layer, densic material, is 24 to 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during February, March, April. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 23 percent.

Dwellings With Basements

Rating Options

Attribute Name: Dwellings With Basements

Dwellings are single-family houses of three stories or less. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet.

The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification of the soil. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
152A	Drummer silty clay loam, 0 to 2 percent slopes	Very limited	Drummer, drained 94% Ponding Depth to saturated zone Shrink-swell Pectone, drained 3% Ponding Depth to saturated zone Shrink-swell Harpster, drained 3% Ponding Depth to saturated zone Shrink-swell
198A	Elburn silt loam, 0 to 2 percent slopes	Very limited	Elburn 93% Depth to saturated zone Shrink-swell Drummer, drained 5% Ponding Depth to saturated zone Shrink-swell Thorp, drained 2% Ponding Depth to saturated zone Shrink-swell
348B	Wingate silt loam, cool mesic, 2 to 5 percent slopes	Very limited	Wingate 97% Depth to saturated zone Shrink-swell Elpaso, drained 3% Ponding Depth to saturated zone Shrink-swell
348C2	Wingate silt loam, 5 to 10 percent slopes, eroded	Somewhat limited	Wingate 92% Depth to saturated zone Shrink-swell
512A	Danabrook silt loam, 0 to 2 percent slopes	Somewhat limited	Danabrook 90% Depth to saturated zone Shrink-swell
512B	Danabrook silt loam, 2 to 5 percent slopes	Somewhat limited	Danabrook 90% Depth to saturated zone Shrink-swell
512C2	Danabrook silt loam, 5 to 10 percent slopes, eroded	Somewhat limited	Danabrook 92% Depth to saturated zone Shrink-swell
656C2	Octagon silt loam, 4 to 6 percent slopes, eroded	Somewhat limited	Octagon 92% Depth to saturated zone
656D2	Octagon silt loam, 6 to 12 percent slopes, eroded	Somewhat limited	Octagon 92% Depth to saturated zone Slope

Dwellings Without Basements

Rating Options

Attribute Name: Dwellings Without Basements

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper.

The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification of the soil. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
152A	Drummer silty clay loam, 0 to 2 percent slopes	Very limited	Drummer, drained 94% Ponding Depth to saturated zone Shrink-swell Peotone, drained 3% Ponding Depth to saturated zone Shrink-swell Harpster, drained 3% Ponding Depth to saturated zone Shrink-swell
198A	Elburn silt loam, 0 to 2 percent slopes	Somewhat limited	Elburn 93% Depth to saturated zone Shrink-swell
348B	Wingate silt loam, cool mesic, 2 to 5 percent slopes	Somewhat limited	Wingate 97% Depth to saturated zone Shrink-swell
348C2	Wingate silt loam, 5 to 10 percent slopes, eroded	Somewhat limited	Wingate 92% Shrink-swell
512A	Danabrook silt loam, 0 to 2 percent slopes	Somewhat limited	Danabrook 90% Shrink-swell
512B	Danabrook silt loam, 2 to 5 percent slopes	Somewhat limited	Danabrook 90% Shrink-swell
512C2	Danabrook silt loam, 5 to 10 percent slopes, eroded	Somewhat limited	Danabrook 92% Shrink-swell
656C2	Octagon silt loam, 4 to 6 percent slopes, eroded	Somewhat limited	Octagon 92% Shrink-swell
656D2	Octagon silt loam, 6 to 12 percent slopes, eroded	Somewhat limited	Octagon 92% Slope Shrink-swell

Small Commercial Buildings

Rating Options

Attribute Name: Small Commercial Buildings

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification of the soil). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
152A	Drummer silty clay loam, 0 to 2 percent slopes	Very limited	Drummer, drained 94% Ponding Depth to saturated zone Shrink-swell Peotone, drained 3% Ponding Depth to saturated zone Shrink-swell Harpster, drained 3% Ponding Depth to saturated zone Shrink-swell
198A	Elburn silt loam, 0 to 2 percent slopes	Somewhat limited	Elburn 93% Depth to saturated zone Shrink-swell
348B	Wingate silt loam, cool mesic, 2 to 5 percent slopes	Somewhat limited	Wingate 97% Depth to saturated zone Shrink-swell Slope
348C2	Wingate silt loam, 5 to 10 percent slopes, eroded	Somewhat limited	Wingate 92% Slope Shrink-swell
512A	Danabrook silt loam, 0 to 2 percent slopes	Somewhat limited	Danabrook 90% Shrink-swell
512B	Danabrook silt loam, 2 to 5 percent slopes	Somewhat limited	Danabrook 90% Shrink-swell
512C2	Danabrook silt loam, 5 to 10 percent slopes, eroded	Somewhat limited	Danabrook 92% Slope Shrink-swell
656C2	Octagon silt loam, 4 to 6 percent slopes, eroded	Somewhat limited	Octagon 92% Slope Shrink-swell
656D2	Octagon silt loam, 6 to 12 percent slopes, eroded	Very limited	Octagon 92% Slope Shrink-swell Elpaso 4% Ponding Depth to saturated zone Shrink-swell Herbert 4% Depth to saturated zone Shrink-swell

CONTACTS

Federal Agencies

U. S. Army Corps of Engineers
Regulatory Branch
231 S LaSalle Street, Suite 1500
Chicago, Illinois 60604
(312)846-5330

http://www.usace.army.mil

U.S.D.A. Natural Resources Conservation Service
2315 Dean Street Suite 100
St. Charles, Illinois 60175
(630)584-7960 ext. 3

http://www.il.nrcs.usda.gov/

U.S. Fish & Wildlife Service
Chicago Illinois Field Office
230 South Dearborn Suite 2938
Chicago, IL 60604
(847)298-3250

http://www.fws.gov/

U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604
(312)353-2000 or (800)621-8431

http://www.epa.gov/region5/
r5hotline@epa.gov

State Agencies

Illinois Department of Natural Resources
1 Natural Resources Way
Springfield, Illinois 62702-1271
(217)782-6302

http://dnr.state.il.us/

Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276
(217)782-3397

http://www.epa.state.il.us/

Illinois Department of Transportation
2300 South Dirksen Parkway
Schaumburg, Illinois 62764-0001

(217)782-7820/(800)452-4368

http://www.idot.illinois.gov/

Illinois Natural History Survey
1816 South Oak Street MC652
Champaign, Illinois 61820
(217)333-6880

http://www.inhs.uiuc.edu/

County Offices

Kane County
Government Center
719 South Batavia Ave.
Geneva, IL 60134
(630)232-3400

http://www.countyofkane.org/

Development Department
(630)232-3492

Department of Environmental Management
(630)208-5118

Forest Preserve District
1996 South Kirk Road, Suite 320
Geneva, IL 60134
(630)232-5980
forestpreserve.countyofkane.org

Health Department
1240 North Highland Avenue
Aurora, IL 60506
(630)208-3801

Childress Exhibit 5

Big project draws big crowd, debate

DAVID SHAROS/BEACON-NEWS

Hundreds showed up for the Sugar Grove Planning Commission meeting Wednesday night to offer their thoughts on a proposed project on more than 750 acres at Route 47 and Interstate 88.

Sugar Grove residents concerned plan could change 'quiet pace of life'

DAVID SHAROS
The Beacon-News

Residents jammed the Sugar Grove Planning Commission meeting at the Sugar Grove Public Library on Wednesday night to make their voices heard on a proposed large-scale development planned on more than 750 acres at Route 47 and Interstate 88.

Cars were circling the library looking for parking more than 30 minutes before the meeting. More than 300 people sat in the library's meeting room or stood outside in the hallway in a line stretching all the way back to the building's entrance to take part in the meeting.

"I think it's great that people come here and get to see the library and have a dialogue," Sugar Grove Public Library Director Shannon Halikias said. "It's a part of our democracy to hold a conversation."

Property owner Crown Community Development is seeking approval for a rezoning for a mixed-use development that would include single-family residences and a multifamily residential complex, as well as manufacturing and warehouse facilities and a commercial area that could include retail, hotels and restaurants.

If completed, the project would include bike paths throughout the development, permanently preserved open space at the creek area at the site and at the wooded area south of Merrill Road, and a 2-acre park within the neighborhood with the single-family homes.

Sugar Grove Community Development Director Walter Magdziarz said the property was annexed into the village in 2013 and at the time, plans called for a residential project. Magdziarz said the village began meeting with the developer last August and that the pro-

Turn to Debate, Page 4

"We know from past experience there are concerns about traffic and trucks but the most significant issue is that this is a farming community and people object to change."

— Marvin Bailey, vice president of the Naperville-based Crown Community Development

Sugar Grove residents resist changes

Debate, *from Page 1*

posed project would be the biggest development to date in Sugar Grove.

"The property remained undeveloped as owners were waiting for full access to the area from the tollway interchange," Magdziarz said. "There were infrastructure developments that weren't completed and Crown has been the only owner of the property when it was acquired in the early 2000s."

Marvin Bailey, vice president of the Naperville-based Crown Community Development, said before the meeting that the site "is ripe for development" with gas mains and high tension wires already in place and that the project "is consistent with the village's comprehensive plan."

"We know from past experience there are concerns about traffic and trucks but the most significant issue is that this is a farming community and people object to change," Bailey said.

Wednesday's jammed meeting forced Planning Commission Chairman Irv Ochsenschlager to declare even before public comment began that the meeting would be continued next Wednesday at the same site, but that local schools and churches would be contacted in order to secure a larger space if possible.

For the most part, those in attendance Wednesday said they were concerned about traffic and the environmental impact of the project, while others like Sugar Grove resident Brian Moore said he was looking to learn more about the proposal.

"This is the biggest thing that has happened here in some time, and I want to hear both sides," Moore said. "I'm a construction industry guy and I'm sure there are concerns about traffic and visibility and trucks."

Bill and Myrna Smar, who said they have lived in Sugar Grove since 1986, said they "had open minds about the project" and wanted to be more educated about it.

"I'm here to listen and would like to know more about the impact of the project," Bill Smar said.

"I know there are a lot of concerns about how this would affect the quiet pace of life we have here," Myrna Smar said.

Many spoke of moving to Sugar Grove in an effort to be near a major city such as Chicago while still enjoying the benefits of a quiet, rural life 45 miles away from it.

Beth Woods said her home is located on the west side of Route 47 and that she doesn't want to sit on her patio "where today I see nothing and now I'll be looking at a warehouse."

"We all moved here because of the open space and green pastures and like the look of our community and not seeing semitrucks," she said.

Sugar Grove resident Perry Elliott has a number of concerns with the proposal.

"Studies show that residential properties located close to commercial development lose about 16 percent of their value within eight years," he said. "The air pollution — particularly from diesel trucks — is a health hazard and the jobs they will be offering in these warehouses are filled often by temp agencies and there are no tax benefits."

Mavis Bates, of Aurora agreed, that there could be an uphill battle about the project but that it was "important to get here early enough in the process" to make sure it was done right.

"We're not here to stop this but to make sure it's done thoughtfully and meet the triple bottom line of people, planet and profits," she said.

David Sharos is a freelance reporter for The Beacon-News.

Childress Exhibit 6

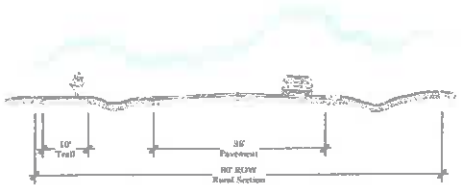
SIGNATURE DESIGN GROUP

CROWN COMMUNITY DEVELOPMENT

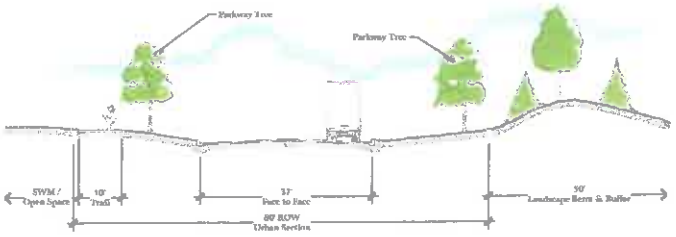
TYPICAL CROSS SECTION EXHIBIT

CROSSROADS CORPORATE CENTER

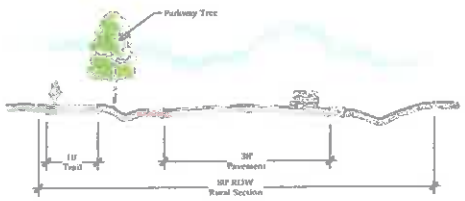
SUGAR GROVE, ILLINOIS



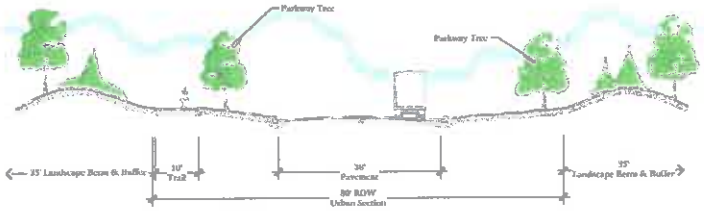
A **Merrill Road ROW**



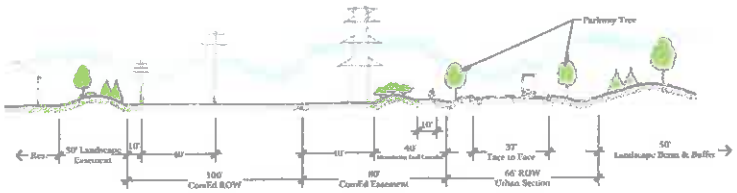
B **Denny Road - North of Roundabout**



C **Denny Road - South of Roundabout**



D **Seavey Road ROW**



E **Denny Road - Between Roundabouts / CommEd Easement & ROW**

Exhibit 7 Childress

Chalares Exh 7A

Exhibit 8 Childress

Chavarro Exh 8A

Chapter 9
BP, BUSINESS PARK DISTRICT

11-9-1: PURPOSE AND INTENT/SPECIAL PUD PROVISIONS:

A. The BP, Business Park District, has been established as a means to provide unified development of a variety of light industrial, warehousing, wholesale and office uses, in a campuslike setting. The mix of uses that are identified as permitted uses in this chapter are aimed at promoting and maintaining desirable economic activities.

B. This chapter sets forth specific standards for integrated development that considers all elements of good land planning, so as to provide appropriate relationships between structures and land uses, while at the same time:

1. Provides for adequate space, light, air, use and bulk limitations.

2. Promotes the health, safety and welfare of the Village and its residents. (Ord. 2002-01-15B, 1-15-2002)

C. All business park developments which consist of ten (10) acres or more, and/or propose more than one building on a zoning lot shall be processed as an industrial planned unit development. (Ord. 2018-03-20B, 3-20-2018)

11-9-2: USES:

A. Permitted uses: See section 11-4-22 of this title.

B. Special uses: See section 11-4-22 of this title. (Ord. 2016-12-13C, 12-13-2016)

C. Permitted accessory uses: Please refer to section 11-4-7 of this title. (Ord. 2011-07-05B, 7-5-2011)

11-9-3: LOT SIZE REGULATIONS:

A. Minimum lot size: Not less than two (2) acres.

B. Minimum lot width: Not less than two hundred feet (200') shall be maintained at the building setback line. (Ord. 2002-01-15B, 1-15-2002)

11-9-4: YARD AND SETBACK REGULATIONS:

Every building hereafter erected or enlarged in this district shall provide and maintain a setback in accordance with the following:

A. Setback from the boundary lines of the district: Not less than seventy five feet (75') from streets forming the boundary line of a BP District.

B. Minimum front and corner side yards: Not less than fifty feet (50') from a front or corner side lot line of a public or private street that is interior to a BP District.

C. Minimum interior side yards: Not less than twenty five feet (25') from an interior side lot line. Where a side lot line coincides with a side or rear lot line of a residential or institutional use or district, or forms the boundary line of a BP District, the interior side requirement shall be increased to seventy five feet (75').

D. Minimum rear yards: Not less than forty feet (40') from a rear lot line, unless the lot line forms the boundary line of a BP District. In that case, not less than seventy five feet (75') shall be provided. (Ord. 2002-01-15B, 1-15-2002)

11-9-5: MAXIMUM LOT COVERAGE:

No more than seventy percent (70%) of a lot shall be occupied with buildings, accessory structures and impervious surfaces. (Ord. 2018-03-20B, 3-20-2018)

11-9-6: STRUCTURE HEIGHT:

A. Not more than thirty five feet (35') when within one hundred fifty feet (150') from property planned, zoned or used for residential purposes.

B. Not more than fifty feet (50') when more than one hundred fifty feet (150') from property planned, zoned or used for residential purposes. (Ord. 2002-01-15B, 1-15-2002)

11-9-7: OTHER STANDARDS:

A. Sidewalks: Five foot (5') wide concrete walks shall be provided in the right-of-way, as required by the Village Engineer.

B. Street Trees: One (1) $2^1/_2$-inch caliper shade tree shall be installed in the right-of-way per each fifty (50) linear feet of frontage, as required by the Village Engineer. (Ord. 2018-03-20B, 3-20-2018)

C. Building Design/Materials:

1. The design of all buildings in a BP District shall be compatible in form, textures, and colors, consistent with a campus setting.

2. Buildings in a BP District shall be constructed of masonry, brick, cedar, stone or decorative concrete block (excluding plain concrete block), architectural steel and glass, or precast panels. Aluminum or vinyl siding shall not be allowed.

3. Entrances to buildings in a BP District shall be designed as a focal point of the building.

4. Walls that exceed a length of one hundred feet (100') shall be articulated through changes in the plane of the facade, installation of windows, installation of landscaping, or any combination thereof.

D. Roof Mounted Mechanical Equipment:

1. Screening of all roof mounted heating, ventilating and air conditioning equipment shall be provided on all sides of the building that are exposed to public view.

2. Roof screens and/or parapet wall screens shall be allowed in this district, provided they are designed to blend with the architectural style, materials and color of the building. The height of the approved screening shall be equal to the height of the tallest rooftop unit installed on the building.

3. Flues, goosenecks or other equipment that is mounted on the roof shall also be screened when heights exceed four feet (4'). (Ord. 2002-01-15B, 1-15-2002; amd. Ord. 2018-03-20B, 3-20-2018)

E. Tree Preservation/Mitigation: The intent of this provision is to mitigate the loss of healthy, mature trees in the Village, by requiring replacement trees: (Ord. 2018-03-20B, 3-20-2018)

1. Existing trees, six inches (6") in diameter or greater, as measured at breast height (dbh), shall be preserved, when possible, according to a tree preservation plan prepared by the developer with input from Village staff or designee. The tree preservation plan shall show:

a. Protective fencing planned to be installed around the critical root zone of those trees identified for preservation, on both grading and landscape plans.

b. Trees that will have their roots pruned by a certified arborist, to avoid tearing and other damage during construction.

c. Locations where limestone and other materials that might negatively affect trees planned to be preserved will be stored on the property.

d. Trees used for landscape screening shall comply with the required minimum sizes:

Deciduous ornamental	Not less than 6 feet tall, if multibranched. Not less than 2 inch caliper, if single stem.
Deciduous shade	Not less than 2.5 inch caliper, as measured 12 inches above grade.
Evergreen	Not less than 6 feet tall.

2. Where it is determined that trees six inches (6") dbh or greater must be removed to allow for proposed development, tree replacement shall be required:

   a. Not less than one (1) 3-inch caliper tree shall be required for each six inches (6") of tree proposed to be removed, as measured at breast height. However, in no instance shall more than three (3) 3-inch caliper replacement trees be required for any tree removed.

   b. Replacement trees shall be required in addition to any other landscaping that may be required by this title, except landscape screening. In this instance replacement trees can be used to count toward screening between BP development and properties planned, zoned or used for residential or institutional purposes.

   c. The number of trees that an individual property can support, according to good forestry practices, shall determine the number of replacement trees that will be required on an individual lot. (Ord. 2002-01-15B, 1-15-2002; amd. Ord. 2018-03-20B, 3-20-2018)

F. Waste Materials: No materials or wastes shall be deposited upon a lot in such a form that they might be transferred off the property by natural causes or forces, such as water, wind or snow. (Ord. 2018-03-20B, 3-20-2018)

11-9-8: PERFORMANCE STANDARDS:

Noise, glare, vibration, odor, etc., shall be regulated according to standards established by the Illinois Pollution Control Board or the Environmental Protection Agency, as may be amended from time to time. (Ord. 2002-01-15B, 1-15-2002)

11-9-9: SUBMITTAL REQUIREMENTS:

Drawings (number of sets to be determined by Village) that include the information set forth below are required for processing permitted uses zoned BP. Chapter 13 of this title includes requirements for processing map amendments (rezoning), special uses and planned developments.

A. Site information, including:

1. Name and address of the owner, applicant, planner, architect, engineer, and landscape architect.
2. Date, scale, and north arrow.
3. Total acreage of the site.
4. Title by which the property or project is to be referred.
5. Proof of ownership.

B. A copy of a survey, prepared by a registered land surveyor, including a legal description of the subject property.

C. Existing and proposed zoning of the subject property.

D. Existing zoning of adjacent parcels.

E. Adjacent development, including buildings, drives, fences, walls, parking lots, etc., within a minimum of one hundred feet (100') of the subject property.

F. Location and size of all buildings and structures, both existing and proposed.

G. Ground elevations of the property, both existing and proposed.

H. Locations of floodplain, floodway, wetlands and existing vegetation.

I. Soil analysis, if required by the Village Engineer.

J. Building setbacks from street rights-of-way and all property lines.

K. Yards and spaces between all structures.

L. Locations and dimensions of all fences and walls.

M. A landscape plan, prepared by a qualified landscape architect, which includes spot elevations, or is superimposed on a halftoned grading plan to show the relationship between proposed plantings and final grades.

N. Identification of vehicular, pedestrian and service access, including:

1. Distance from the driveway opening at the curb to the prolongation of the property line of the nearest intersecting street.

2. Width of proposed access drives and drive aisles.

3. Identification and location of:

a. Curb lines.

b. Property lines.

c. Sidewalks.

d. Existing driveways, if any.

e. Parking regulations and signs.

f. Traffic signals.

g. Utility poles.

h. Light standards.

i. Fire hydrants.

O. Off street parking and loading facilities, including the numbers of spaces and dimensions of spaces, drive aisles and loading zones.

P. Location, area and height of all freestanding signs, including proposed directional signage.

Q. Architectural drawings which depict, to scale, all elevations of the proposed structure or addition, and which include:

1. Proposed materials and colors for all elements of the building.

2. Cross sections of the building, showing the relationship between all roof mounted mechanical equipment and the top of the screen wall.

3. Location of utility meters and ground supported transformers, and proposed method of screening these elements when visible to the public.

4. Location, area, and dimensions for all wall mounted signs.

R. Photometric plan, superimposed on the site plan, showing:

1. Point by point foot-candle intensities, extended to all property lines.

2. Locations of light standards.

3. Average maintained foot-candle intensities.

4. Method of illumination.

5. Catalog cuts and specifications for light standards and luminaires.

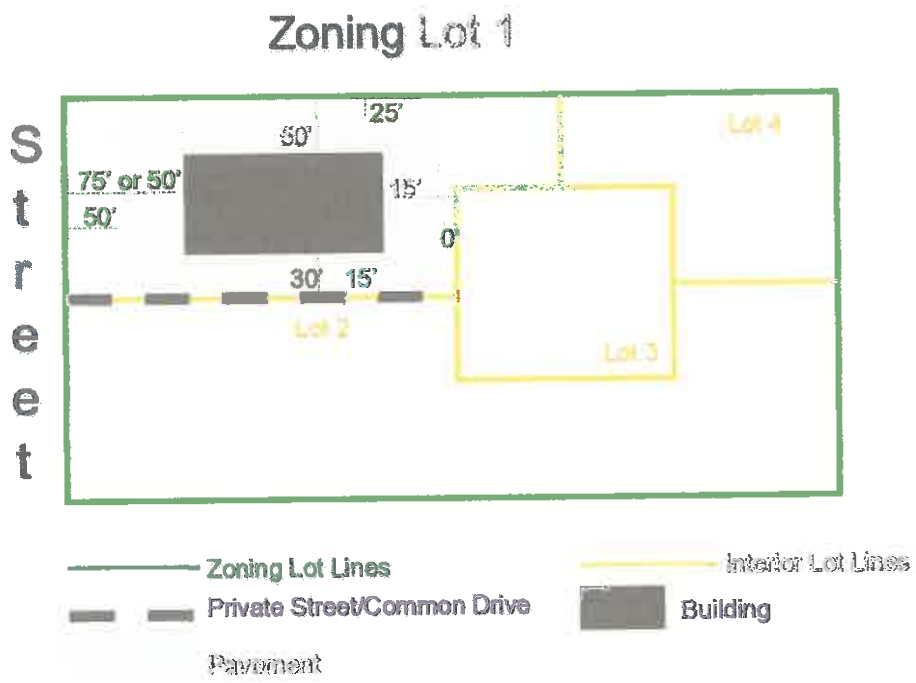
S. Waste disposal facilities, including trash bins, compactors, etc., and provision for screening these elements from public view.

T. Preliminary engineering, drainage, and grading plans, if required by the Village Engineer. Final engineering plans shall, however, be approved by the Village Engineer prior to the issuance of a building permit. (Ord. 2002-01-15B, 1-15-2002)

Chelsea Exh BP-V

	BP Business Park District	Zoning Lots 1 thru 5
Lot Size	87,120 square feet	40,000 square feet
Lot Width	200 feet	100 feet
Lot Coverage	70 percent	70 percent (commercial/multifamily) 90 percent (industrial)
Building Setbacks **Zoning Lot Setbacks:**		
Street Lot Line (except Denny Road and I-88)	50 feet	75 feet
Street Lot Line of Denny Road and I-88	50 feet	50 feet
Other Lot Line	75 feet	50 feet
Interior Lot Setbacks:		
Street Lot Line (this setback applies to private streets or common drives)	50 feet	30 feet
Other Lot Line	25 feet	15 feet
Pavement Setbacks **Zoning Lot Setbacks:**		
Street Lot Line (South of I-88)	45 feet	50 feet
Street Lot Line (North of I-88)	45 feet	35 feet
I-88 Lot Line	45 feet	35 feet
Other Lot Lines	25 feet	25 feet
Interior Lot Setbacks:		
Street Lot Line (this setback applies to private streets or common drives	25 feet	15 feet
Other Lot Lines	0 feet	0 feet

The following illustration indicates how each of the required setbacks will be applied to the property.



Landscaping

The following table compares the landscape standards of the BP District to the landscape guidelines of the proposed PD District.

	BP District	**Zoning Lots 1 thru 5**
Zoning Lot Setback Areas:		
Street Lot Line	Earthen berm + 1 evergreen tree, 1 shade tree, 1 ornamental tree, and 12 shrubs per 50 feet.	Earthen berm 4 feet in height + 1 evergreen tree, 1 shade tree, 1 ornamental tree, and 12 shrubs per 100 feet. No shrubs required along I88
Other Lot Lines	1 tree and 6 shrubs per 50 feet	1 tree and 6 shrubs per 50 feet
Interior Lot Setback Areas:		
Street Lot Line (this includes private streets and common drives)	1 evergreen, 1 shade tree and 6 shrubs per 50 feet	1 tree and 6 shrubs per 50 feet
Other lot lines	No landscape required	No landscape required

	BP District	**Zoning Lots 1 thru 5**
Building Foundation Plantings	1 tree and six shrubs per 20 feet in an 8 foot wide planting bed	5 columnar evergreen trees and fifteen shrubs per 100 feet in a 5 foot wide planting bed along industrial and multifamily buildings. Six shrubs or perennial grasses per 20 feet + perennial flowering plants in an 8 foot wide planting bed along commercial buildings.

Architecture

The following table compares additional items from the PD District design guidelines which are also addressed in the Village Zoning Ordinance. Please be advised that additional architectural items are included in the design guidelines which are not addressed in the Village Zoning Ordinance.

	BP District	**Zoning Lots 1 thru 5**
Building Height	50 feet where building is located at least 150 feet from residential uses and 35 feet where building is located less than 150 feet from residential uses.	Warehouse/Distribution = 60 feet Multifamily Residential = 50 feet All other uses = 50 feet where building is located at least 150 feet from residential uses and 35 feet where building is located less than 150 feet from residential uses
Off Street Parking Count All uses not listed shall comply with the Village of Sugar Grove Zoning Ordinance requirement.	Multifamily = 2 per dwelling Restaurant = 13 per 1000 square feet of floor area + 8 stacking for drive through window Office = 5 per 1000 square feet of floor area Warehousing = 1 per 2000 square feet of floor area OR 1 per 1.25 employees whichever is	Multifamily = 1.5 per dwelling Restaurant = 10 per 1000 square feet of floor area + 8 stacking for drive through window Office = 3 per 1000 square feet of floor area Warehousing = 1 per employee at peak shift and 10 visitor spaces

	greater	
	BP District	**Zoning Lots 1 thru 5**
Pedestrian Circulation	Parking spaces shall be separated from any building by an unobstructed pedestrian walkway measuring at least 8 feet wide	Parking lots adjacent to the office area of industrial buildings shall be constructed with a minimum 5' sidewalk. Parking lots adjacent to commercial buildings shall be constructed with a minimum 8' raised sidewalk.
Bicycle Facilities	Bicycle parking spaces shall be provided at a rate of 5% of the total number of vehicle parking spaces	On industrial lots, bicycle parking spaces shall be provided at a rate of 1% of the total number of vehicle parking spaces
Fencing	Fences may be constructed in the street yard at a height of 3' and excluding chain link in the street yard Fences in all other yards may be 8' in height Barbed wire is expressly prohibited	No fences permitted in the street yard with the exception of I-88 street yard. Fences in I-88 street yard may be 8' in height and may be black chain link All other yards: Commercial and multifamily lots fences 6 feet maximum height. Industrial lots fences 8 feet maximum height.
Wall signs	Wall sign surface area shall not exceed 1 square foot per 1 linear foot of building width or 200 square feet whichever is less	Wall sign surface area on buildings of 10 or more stories which are parallel with I-88 shall not exceed 20% of the façade square foot or 300 square feet whichever is less
Freestanding Signs	One (1) monument style freestanding sign per 150' of frontage. Signs shall be limited to 10' in height and 12' in width.	One (1) monument style freestanding sign per 150' of frontage. Signs shall be limited to 10' in height and 12' in width.
Permanent Development Signs	Master sign plan required	See master sign plan

Open Space and Tree Preservation

Section 11-16-2-1 (A) 1 of the Village of Sugar Grove Zoning Ordinance provides the following.

> *"Unless otherwise reviewed by the planning commission/zoning board of appeals and approved by the village board, not less than forty percent (40%) of the land within a planned development district shall be reserved and designated as open space, greenbelt and/or recreational facilities."*

As proposed, this PDD falls below the minimum forty percent (40%) open space requirement. According to the PDD Summary table submitted by the petitioner, a total open space percentage of 27.2 is being proposed. The percentage of the property devoted to each open space category breaks down as follows:

Site total	**Stormwater**	**Greenspace** (includes required landscape setbacks)	**Park**	**Total Open Space**
760.56 Ac	61.43 Ac (8%)	143.31 Ac (18.8%)	2.29 Ac (< 1%)	207.03 (27.2%)

Note: Roadways will account for an additional 31.04 Acres (4.08%)

The petitioner does plan to provide 31.9% open space within the residential area of the property. This open space will be both public and private open space. The area of the property devoted to single-family residential will consist of 98.61 acres and of that, 31.48 acres will be devoted to open space purposes.

The petitioner proposes to construct an extension to the current path system as an offset to the variation from the required forty percent (40%) open space set aside. By extending the path system, the petitioner is providing active open space. Please see the attached *Preliminary Landscape Plan* for details of the proposed path system.

Beyond the path system, the petitioner is setting aside a forested area south of Merrill Road. This area is approximately ten (10) acres. As proposed, the new Merrill Road will bisect this area and a water tower may be located on the property. The petitioner is planning the path system to dip through the area to create an active recreation trail on the parcel.

Seavey Road Run, a tributary of Blackberry Creek, traverses the property along the east edge of Zoning Lot 2 and between Zoning Lots 4 and 5. This area will be largely untouched by development activity due to the environmental sensitivity of the area. The area falls within the floodplain.

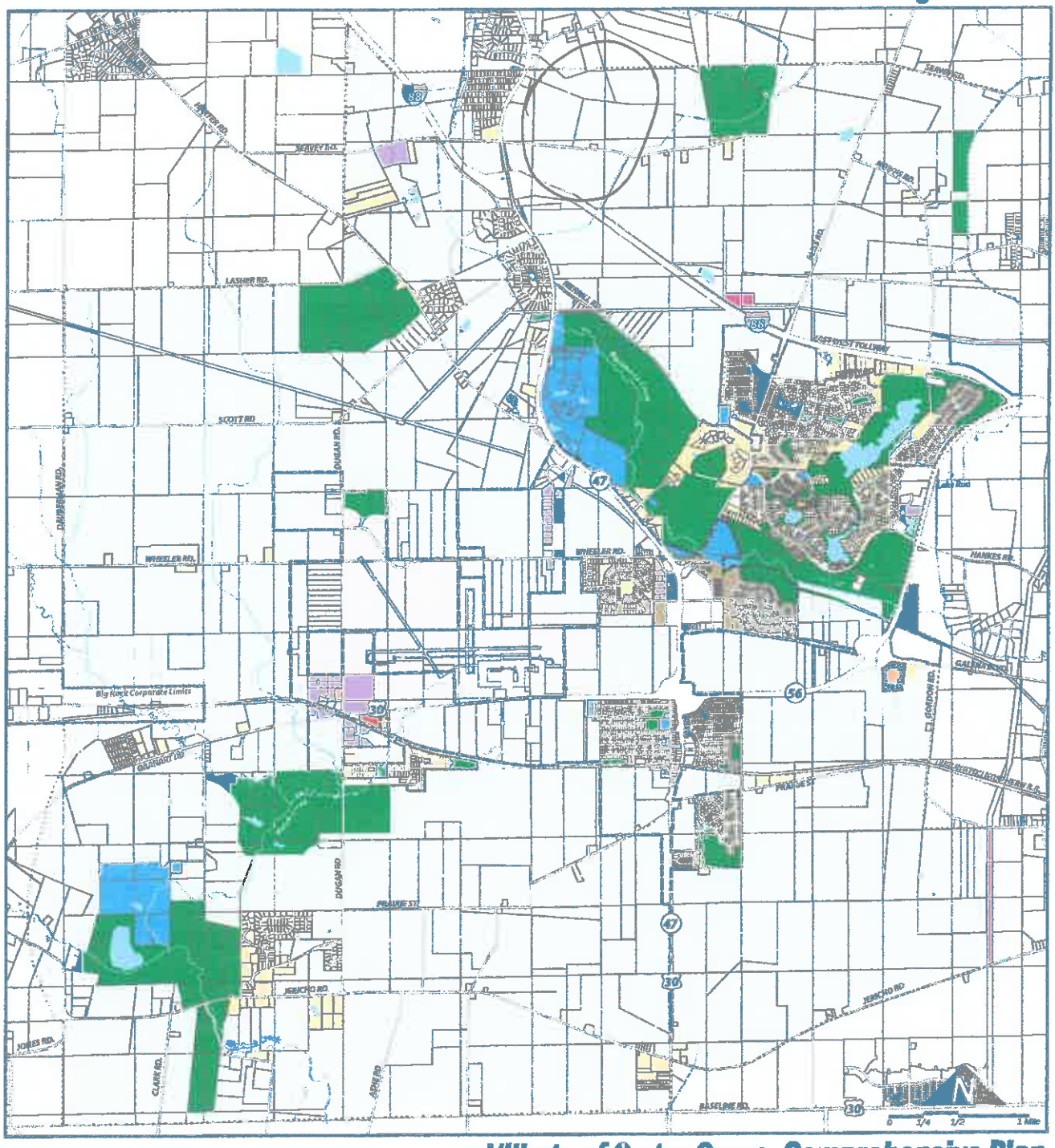
There are many mature trees on this property which will not be protected by the proposed PD District Ordinance. In exchange for the elimination of these forested areas, the petitioner has

Exhibit 9 Childress

Childress Exhibit 10

- Detached Single Family Residential
- Attached Single-Family Residential
- Multi-Family Residential
- Commercial Retail
- Commercial Service
- Mixed Commercial
- Industrial
- Aurora Municipal Airport
- Public/Semi Public & Institutional Property
- Parks/Recreation/Open Space
- Utility
- Vacant Land
- Agricultural Land
- Village of Sugar Grove Corporate Limits
- Planning Boundary
- Stream/Watercourse

Figure 2: Existing Land Use



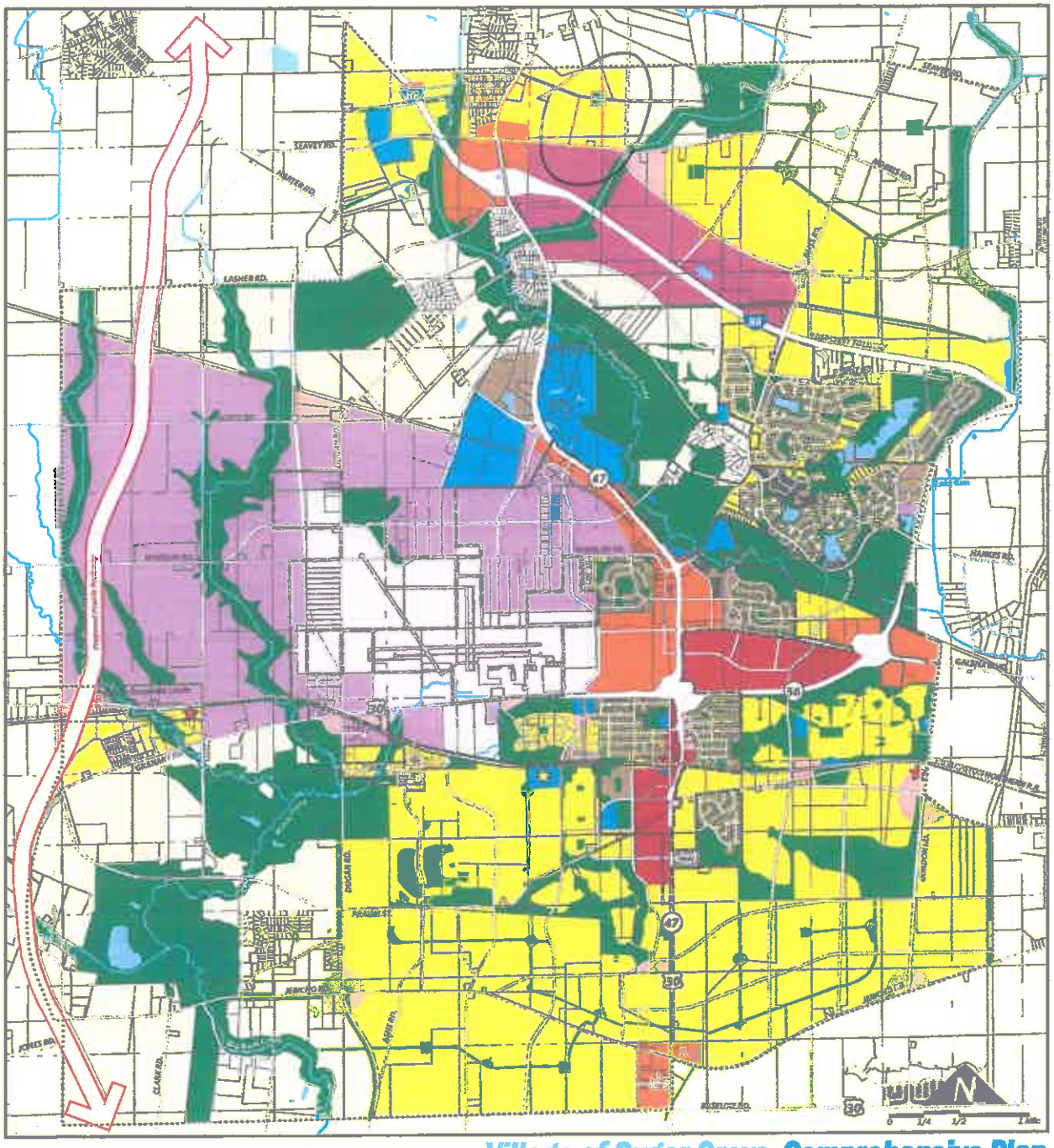
Village of Sugar Grove Comprehensive Plan

Prepared By: URS • TPAP

Childress Exhibit 11

- Estate Residential
- Single Family Residential
- Multi-Family Residential
- Neighborhood Commercial
- Town Center Commercial
- Corridor Commercial
- Corporate Campus
- Business Park
- Open Space
- Public/Semi-Public
- Airport
- Stream/Watercourse
- Village of Sugar Grove Planning Area
- Existing Corporate Limits
- Metra Station
- Alternate Metra Stations

Figure 3: Land Use Plan



Village of Sugar Grove **Comprehensive Plan**

Prepared By: URS + TPAP

Childers Exhibit 11A

ColeTaylorBank

FILED FOR RECORD
KANE COUNTY, ILL.
2002K026070
2002 FEB 21 AM 10:00
Sandy Wegman
RECORDER

48697

TRUSTEE'S DEED

This Indenture, made this 31st day of January, 20 02, between Cole Taylor Bank, an Illinois Banking Corporation, Trustee under the provisions of a deed or deeds in trust, duly recorded and delivered in pursuance of a trust agreement dated the 17th day of January, 19 90 and known as Trust No. 94663 party of the first part,

and Sugar Grove LLC, an Illinois limited liability company party of the second part.

Address of Grantee(s): 3600 Thayer Court, Suite 100, Aurora, IL 60504-7202

Witnesseth, that said party of the first part, in consideration of the sum of Ten ($10.00) dollars, and other good an valuable considerations in hand paid, does hereby Convey and Quit Claim unto said parties of the second part,

the following described real estate, situated in Kane County, Illinois, to wit:

LEGAL DESCRIPTION ATTACHED HERETO AND MADE A PART HEREOF.

STATE OF ILLINOIS
STATE & COUNTY TAX
FEB 21.02
KANE COUNTY

REAL ESTATE TRANSFER TAX
0000008792
0487.75
FP326704

Cole Taylor Bank is successor trustee to Harris Trust and Savings Bank.

P.I.N. 11-32-100-018, 11-32-200-005, 11-32-326-020, 11-32-328-004, 11-32-328-007, 11-32-426-009, 11-33-300-007

Together with the tenements and appurtenances thereunto belonging.

To Have and to Hold the same unto said parties of the second part, and to proper use, benefit and behoof forever of said party of the second part.

This deed is executed by the party of the first part, as Trustee, as aforesaid, pursuant to and in the exercise of the power and authority granted to and vested in it by the terms of said Deed or Deeds in Trust and the provisions of said Trust Agreement above mentioned, and of every other power and authority thereunto enabling.

See Reverse

CHICAGO TITLE INSURANCE CO.
Kane County Office
Geneva, Illinois 60134
Phone 232-2750

(5)

2002K026070

In Witness Whereof, said part of the first part has caused its corporate seal to be hereto affixed, and has cause its name to be signed to these presents by its ____Vice President and attested by its Sr. Trust Officer, the day and yea first above written.

COLE TAYLOR BANK,
As Trustee, as aforesaid.

By: _____
Vice President

Attest: _____
Sr. Trust Officer

STATE OF ILLINOIS
SS
COUNTY OF COOK

I, the undersigned, a Notary Public in and for said County, in the state aforesaid Do Hereby Certify, That Mario V. Gotanco, Vice President and Maritza Castillo, Sr. Trust Officer, of Cole Taylor Bank, personally known to me to be the same persons whose names are subscribed to the foregoing instruments as such Vice President and Sr. Trust Officer respectively appeared before me this day in person and acknowledged that they signed and delivered the said instrument as their own free and voluntary act , as the free and voluntary act of said Bank, for uses and purposes therein set forth; and the said Sr. Trust Officer did also then and there acknowledge that said Sr. Trust Officer as custodian of the corporate seal of said Bank did affix the said corporate seal of said Bank to instrument as said Trust Officer's own free and voluntary act, and as the free and voluntary act of said Bank for the uses and purposes therein set forth.

Given under my hand and Notarial seal this 5th of February, 2002

"OFFICIAL SEAL"
SHERRI SMITH
NOTARY PUBLIC STATE OF ILLINOIS
My Commission Expires 02/19/2002

_____
Notary Public

Mail ~~To and mail~~ tax bills to:

Sugar Grove LLC
3600 Thayer Court, Suite 100
Aurora, IL 60504-7202

After recording return to:
Eleni S. Pantazis
Gould and Ratner
222 North LaSalle, Suite 800
Chicago IL 60601.

Address of Property:

This instrument was prepared by:

Sherri Smith
Cole Taylor Bank
111 W. Washington Street, Suite 650
Chicago, Illinois 60602

Y

:2002K026070

Exhibit 'A'

PARCEL 1:

THAT PART OF SECTION 32 AND PART OF THE SOUTHWEST 1/4 OF SECTION 33, TOWNSHIP 39 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF THE SOUTHWEST 1/4 OF SAID SECTION 32; THENCE NORTHERLY ALONG THE EAST LINE OF SAID SOUTHWEST 1/4 580.80 FEET TO THE CENTER LINE OF A ROAD; THENCE NORTH 87 DEGREES, 59 MINUTES, 0 SECONDS EAST ALONG SAID CENTER LINE 625.20 FEET TO THE CENTER LINE OF ILLINOIS STATE ROUTE NO. 47; THENCE CONTINUING NORTH 87 DEGREES, 59 MINUTES, 0 SECONDS EAST 63.08 FEET TO THE EASTERLY LINE OF SAID STATE ROUTE AS ESTABLISHED BY DOCUMENT 1172075 FOR A POINT OF BEGINNING; THENCE CONTINUING NORTH 87 DEGREES, 59 MINUTES, 0 SECONDS EAST 66.12 FEET TO A POINT THAT IS 129.20 FEET NORTH 87 DEGREES, 59 MINUTES, 0 SECONDS EAST OF THE CENTER LINE OF SAID STATE ROUTE; THENCE NORTH 88 DEGREES, 37 MINUTES, 0 SECONDS EAST 4105.25 FEET TO THE SOUTHWESTERLY LINE OF PARCEL E8-31, BEING PART OF PREMISES ACQUIRED BY THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY BY CONDEMNATION PROCEEDINGS HELD IN THE CIRCUIT COURT OF KANE COUNTY AND KNOWN AS CASE NO. 71-ED-7447; THENCE NORTH 55 DEGREES, 17 MINUTES, 41 SECONDS WEST ALONG SAID SOUTHWESTERLY LINE 1439.12 FEET TO AN ANGLE IN SAID SOUTHWESTERLY LINE; THENCE NORTH 60 DEGREES, 02 MINUTES, 46 SECONDS WEST ALONG SAID SOUTHWESTERLY LINE 301.10 FEET TO AN ANGLE IN SAID SOUTHWESTERLY LINE; THENCE NORTH 52 DEGREES, 25 MINUTES, 58 SECONDS WEST ALONG SAID SOUTHWESTERLY LINE 500.73 FEET TO AN ANGLE IN SAID SOUTHWESTERLY LINE; THENCE NORTH 55 DEGREES, 17 MINUTES, 41 SECONDS WEST ALONG SAID SOUTHWESTERLY LINE 1314.01 FEET TO THE NORTH LINE OF THE SOUTH EAST 1/4 OF SAID SECTION 32; THENCE SOUTH 88 DEGREES, 15 MINUTES, 15 SECONDS WEST ALONG THE NORTH LINE OF SAID SOUTH EAST 1/4 938.03 FEET TO A POINT THAT IS 995.45 FEET EASTERLY OF THE NORTHWEST CORNER OF SAID SOUTH EAST 1/4; THENCE NORTH 4 DEGREES, 08 MINUTES, 43 SECONDS WEST 221.76 FEET TO A MONUMENTAL STONE; THENCE SOUTH 84 DEGREES, 15 MINUTES, 40 SECONDS WEST 1502.24 FEET TO THE NORTHEAST CORNER OF PARCEL E8-31. 1, BEING PART OF SAID ILLINOIS STATE TOLL HIGHWAY PREMISES; THENCE SOUTH 19 DEGREES, 39 MINUTES, 49 SECONDS EAST ALONG THE EASTERLY LINE OF SAID PARCEL 447.36 FEET TO THE SOUTHERLY CORNER THEREOF; THENCE SOUTH 41 DEGREES 08 MINUTES 37 SECONDS EAST ALONG THE NORTHEASTERLY LINE OF SAID STATE ROUTE 100.38 FEET TO AN ANGLE IN SAID NORTHEASTERLY LINE; THENCE SOUTH 35 DEGREES, 25 MINUTES, 34 SECONDS EAST ALONG THE NORTHEASTERLY LINE OF SAID STATE ROUTE 72.39 FEET TO THE WESTERLY LINE OF A TRACT OF LAND CONVEYED TO HORACE MASON BY DEED RECORDED APRIL 24, 1848 IN BOOK 10 AT PAGE 487; THENCE SOUTH 39 DEGREES, 38 MINUTES, 22 SECONDS EAST ALONG SAID WESTERLY LINE 328.57 FEET TO A STONE ON THE SOUTHEASTERLY LINE EXTENDED OF LOT 13 IN MARIAN WOODS, BEING A SUBDIVISION OF PART OF THE SOUTHWEST 1/4 OF SECTION 32, TOWNSHIP 39 NORTH, RANGE 7, BLACKBERRY TOWNSHIP, KANE COUNTY, ILLINOIS; THENCE SOUTH 66 DEGREES, 02 MINUTES, 22 SECONDS WEST ALONG SAID SOUTHEASTERLY LINE EXTENDED 24.63 FEET TO THE EASTERLY LINE OF SAID STATE ROUTE; THENCE SOUTHERLY ALONG THE EASTERLY LINE OF SAID STATE ROUTE AS ESTABLISHED BY DOCUMENT 1172075, 1550.42 FEET TO THE POINT OF BEGINNING, IN BLACKBERRY TOWNSHIP, KANE COUNTY, ILLINOIS.

PARCEL 2:

THAT PART LYING EASTERLY OF A LINE DRAWN PARALLEL WITH AND 90 FEET NORMALLY DISTANT EASTERLY OF THE CENTER LINE OF ILLINOIS STATE ROUTE 47 OF THAT PART OF

THE SOUTHWEST 1/4 OF SECTION 32, TOWNSHIP 39 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN DESCRIBED AS FOLLOWS:: BEGINNING AT A POINT IN THE NORTH LINE OF SAID SOUTHWEST 1/4, 16.90 CHAINS EAST OF THE NORTHWEST CORNER THEREOF; THENCE EAST ALONG SAID NORTH LINE TO THE WESTERLY LINE OF A TRACT OF LAND CONVEYED TO HORACE MASON BY DEED DATED OCTOBER 17, 1844 AND RECORDED APRIL 24, 1848 IN BOOK 10, PAGE 487; THENCE SOUTH 40 DEGREES EAST ALONG SAID WESTERLY LINE 13.83 CHAINS TO THE NORTHERLY LINE OF A TRACT OF LAND CONVEYED TO HARRY WHITE BY DEED DATED NOVEMBER 8, 1844 AND RECORDED DECEMBER 21, 1849 IN BOOK 16, PAGE 56; THENCE SOUTH 68 DEGREES WEST ALONG SAID NORTHERLY LINE 14.80 CHAINS; THENCE WESTERLY ALONG SAID NORTHERLY LINE TO A POINT IN THE EAST LINE OF THE WEST HALF OF THE SOUTHWEST 1/4 OF SECTION 32 AFORESAID, 15.78 CHAINS SOUTH OF THE NORTH LINE OF SAID SOUTHWEST 1/4; THENCE WEST 1.58 CHAINS; THENCE NORTH 3-3/4 DEGREES WEST 15.88 CHAINS TO THE POINT OF BEGINNING, IN THE TOWNSHIP OF BLACKBERRY, KANE COUNTY, ILLINOIS.

State of Illinois }
} SS.
County of Cook }

Paul S. Vander Woude, being duly sworn on oath, states that he resides at 1119 S. Spring Avenue, LaGrange, IL. That the attached deed is not in violation of 765 ILCS 205/1 for one of the following reasons:

1. Said Act is not applicable as the grantors own no adjoining property to the premises described in said deed;
-OR-
the conveyance falls in one of the following exemptions as shown by Amended Act which became effective July 17, 1959.

2. The division or subdivision of the land into parcels or tracts of five acres or more in size which does not involve any new streets or easements of access.

3. The divisions of lots or blocks of less than one acre in any recorded subdivision which does not involve any new streets or easements of access.

4. The sale or exchange or parcels of land between owners of adjoining and contiguous land.

5. The conveyance of parcels of land or interests therein for use as right of way for railroads or other public utility facilities, which does not involve any new streets or easements of access.

6. The conveyance of land owned by railroad or other public utility which does not involve any new streets or easements of access.

7. The conveyance of land for highway or other public purposes or grants or conveyances relating to the dedication of land for public use or instruments relating to the vacation of land impressed with a public use.

8. Conveyances made to correct descriptions in prior conveyances.

9. The sale or exchange of parcels or tracts of land existing on the date of the amendatory Act into no more than two parts and not involving any new streets or easements of access.

10. The sale of a single lot of less than 5.0 acres from a larger tract when a survey is made by an Illinois registered surveyor; provided, that this exemption shall not apply to the sale of any subsequent lots from the same larger tract of land, as determined by the dimensions and configuration of the larger tract on October 1, 1973, and provided also that this exemption does not invalidate any local requirements applicable to the subdivision of land. Amended by P.A. 80-318, 1 eff. October 1, 1977.

CIRCLE THE NUMBER ABOVE WHICH IS APPLICABLE TO THE ATTACHED DEED.

Affiant further states that he makes this affidavit for the purpose of inducing the Recorder of Deeds of Cook County, Illinois, to accept the attached deed for recording.

Paul S. Vander Woude

SUBSCRIBED and SWORN to before me

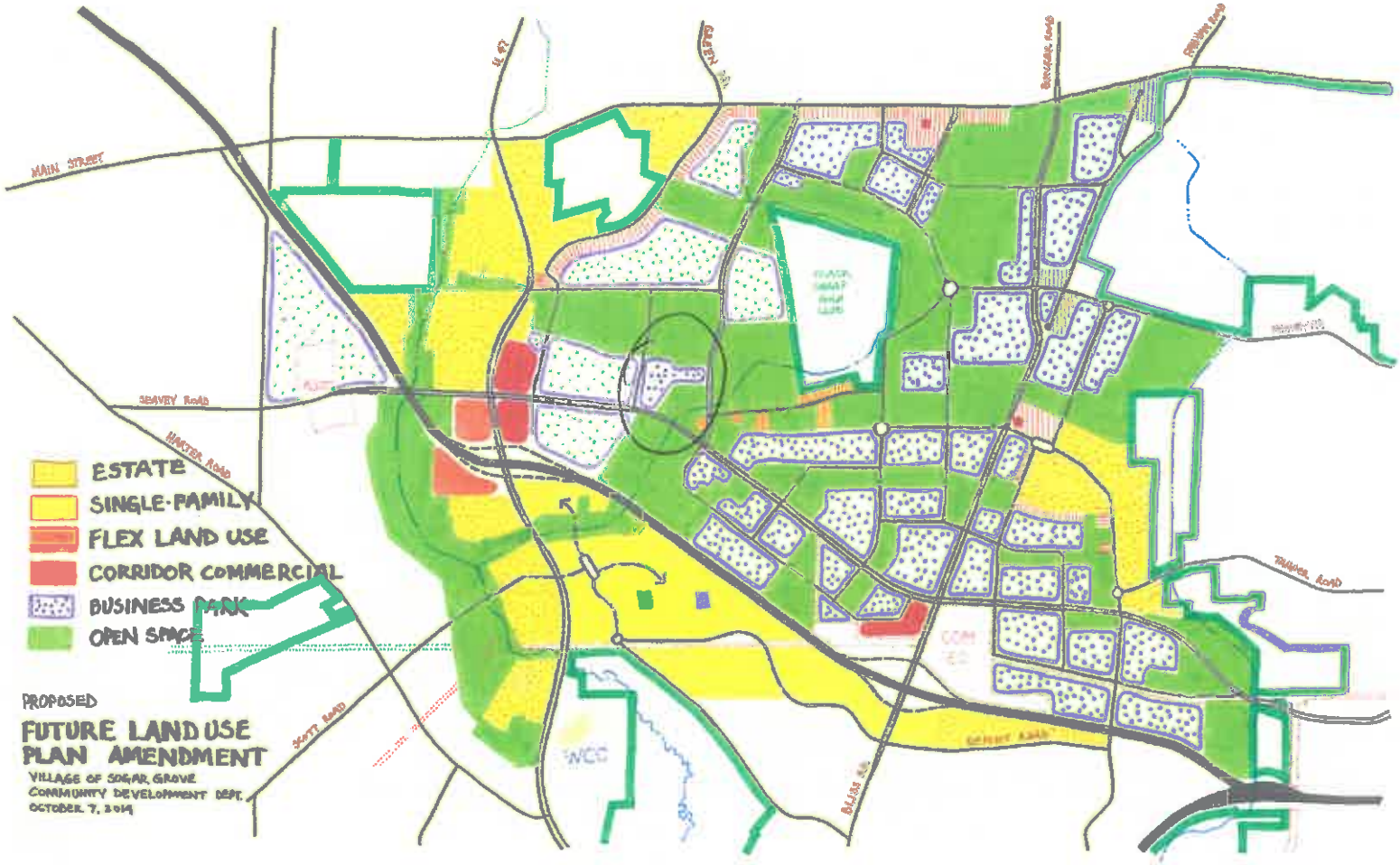
this 28th day of January, 2002.

"OFFICIAL SEAL"
KEITH SHAYLAN BALDWIN
Notary Public, State of Illinois
My Commission Expires 11/21/04

DPLATAC WPD

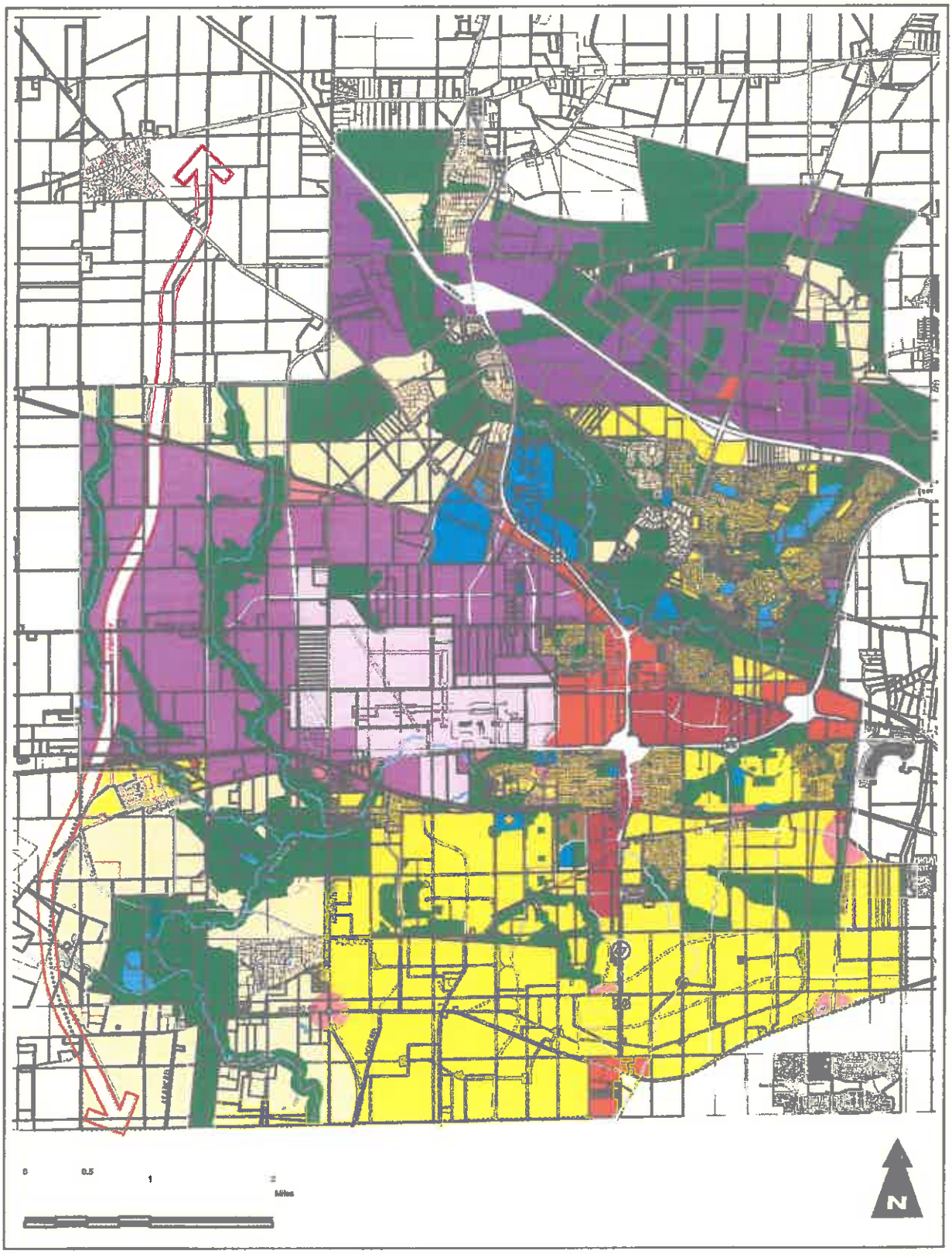
2002K026070

Childress Exhibit 17



Childress Exhibit 13

Land Use Plan



- Planning Area Boundary
- Village Limits
- Estate Residential
- Open Space
- Single Family Residential
- Business Park
- Corridor Commercial
- Town Center Commercial
- Neighborhood Commercial
- Public/Semi-Public
- Airport
- Multi-Family Residential

Village of Sugar Grove Comprehensive Plan

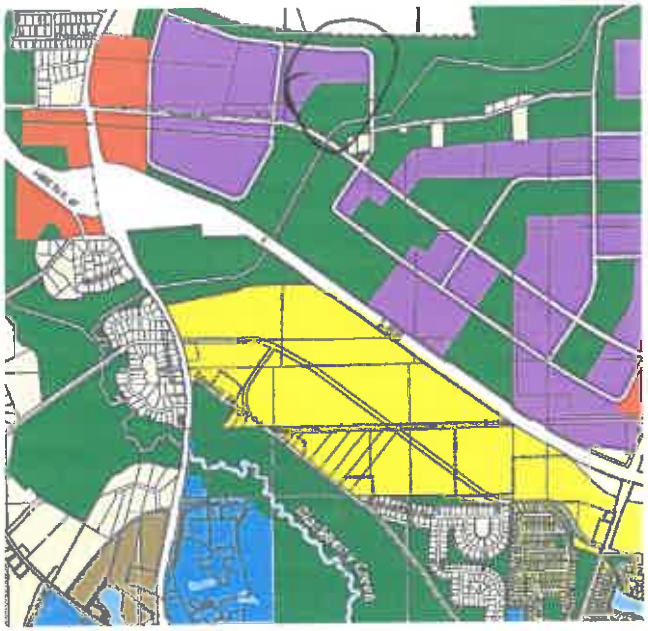
Prepared By: Village of Sugar Grove
Community Development Dept.
Revised June 8, 2015

Childress Exhibit 13A

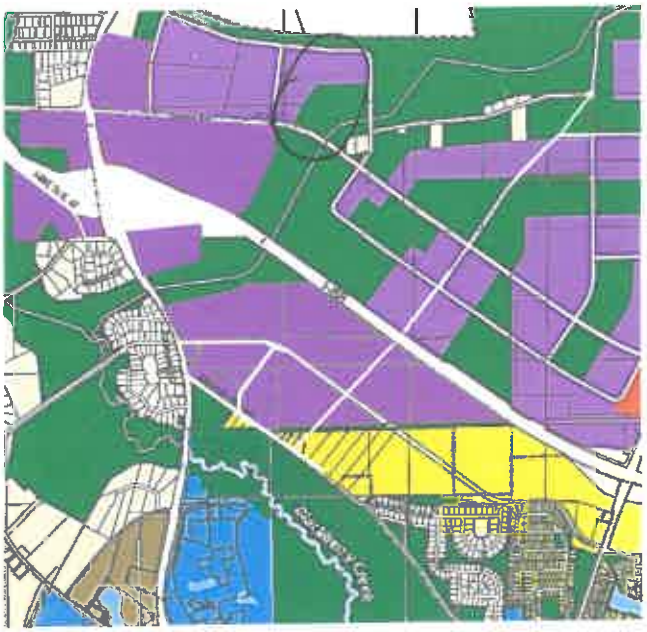
Petition #18-004 Comprehensive Plan Amendment

Estate Residential
Single Family Residential
Multiple Family Residential
Corridor Commercial
Business Park
Open Space
Public Semi-Public

2015 Land Use Plan



Proposed Land Use Plan



Childress Exh 13-1

Pin# 11-32-200-011

Property Information

Property Address:	Site Information:			
43w050 Seavey Rd.	Subdivision	Unsubdivided	Property Class	0011 Farm Land with Buildings
Sugar Grove , IL 60554	Neighborhood	100	Tax Code	BB009
Tax Bill Information	Lot Type	RR-UKC-HTR/Farm		
James A. & Judith A. Childress	Lot Number	1.06 Acs NE Cor NE		
43w050 Seavey Rd.	Lot Square Feet	46,287		
Sugar Grove , IL 60554	Lot Acreage	1.06		

Building Description

Model	Residence	**Year Built**	1862	**Stories**	1.5 Story
Assessment Group	RR-TS08.30C	**Rooms**	9	**Living Space Sq Ft**	2,338
Quality		**Bedrooms**	4	**Full Bsmt Sq Ft**	1,503
Condition		**Bathrooms**		**Partial Bsmt Sq Ft**	0

Sale Information

Sale Date	Sale Amount	Sale Type	Docket#

Building Permits

Permit Date	Permit Number	Permit Reason
5/19/2009	09-7951	Barn
3/10/2009	7469	Addition

Assessment

Year	Type	Unimproved Land	Improved Land	Other Buildings	Building	Total
2018	Normal	$17	$11,421	$1,138	$56,059	$68,635
2017	Normal	$14	$11,291	$1,138	$55,422	$67,865
2016	Normal	$16	$15,638	$1,458	$49,553	$66,665

Children Ex 17 A

Retired Show Horse Dies After Scare From Trespassing Snowmobiles

Unauthorized snowmobiles startled a show horse that lived on a retirement farm. It jumped a fence, fell, and broke its neck.

By Erika Hobbs | Jan 22, 2019 8:41 pm ET

FRANKFORT, IL — A retired, trophied show horse died Sunday after it fell and broke its neck when speeding snowmobiles zipped through fenced, private property in an afternoon joy ride. Owners of the farm that boarded it believed the horse

"All we wanted to do was give her a good life," said Victoria Vogel, of Vogel Retirement Equine Farm in Frankfort. "You know — eat, sleep, maybe nap a little. Live in retirement."

Mia, Vogel said, was an otherwise healthy, 20-year-old horse that had many years yet left to live.

Late Sunday afternoon, Vogel said, she let out the 13 horses she cares for to graze while she and her husband prepared feed in the barn. Several snowmobiles buzzed through a nearby easement owned by electric company ComEd and into a neighboring soybean farm, then slipped across frozen creeks in a shortcut to the street.

They did not have permission to be on any of the properties. But it was the acceleration and the loud "zing" noise it makes that was the problem. Vogel said it was so loud it was startling.

"You could hear it throughout the whole property," she said.

It spooked the horses, and they ran. Mia jumped over a fence, fell, and landed on her neck. Vogel was able to get her to her stall. But the next morning, Mia could not get up on her own. A veterinarian determined that Mia had broken her neck and suffered from spinal damage. After consulting with Mia's owner, Vogel said they decided there was no choice but to euthanize the horse.

"Now my friend [Mia's owner] has no friend to come and look it, to pet and groom. You can't replace that," Vogel said.

Snowmobile riders have been an increasing problem on Frankfort's private properties, Vogel said, and so far, the Will County Sheriff's Office have not been able to help. A spokesperson from the department could not be reached for comment.

No one has been identified as the riders in the incident.

offers 11 acres to horses who need a home to age in peace. Her neighbor farms soybeans. And others grow winter crops, such as wheat, that the vehicles can destroy. If any of those properties are damaged, such as with Mia's death, it affects the owners' livelihoods.

"Look, I like to have fun, too," she said. "And I don't even think they know what they did."

"But even if they had eased off the gas and came through carefully and slowly, things would be different," she said.

Seeing the corral should have indicated livestock was close by.

"You can't just go anywhere you want to," Vogel said.

In Illinois, snowmobiles must be registered with the state, and it is unlawful to speed when driving them.

A list of snowmobile-riding regulations can be found at the Illinois Department of Natural Resources website.

Photos via Shutterstock, Vogel Retirement Equine Farm.

See article on Patch >

Illinois Department of Revenue

ST-1 Instructions

Chiedress
Exh 14

General Information

Who must file Form ST-1?

You must file Form ST-1, Sales and Use Tax and E911 Surcharge Return, if you are making retail sales of any of the following in Illinois:

- general merchandise,
- qualifying foods, drugs, and medical appliances, and/or
- prepaid wireless telecommunications service.

"General merchandise" includes sales of most tangible personal property including sales of

- soft drinks and candy;
- prepared food such as food purchased at a restaurant;
- photo processing (getting pictures developed);
- prewritten and "canned" computer software;
- prepaid telephone calling cards and other prepaid telephone calling arrangements;
- repair parts and other items transferred or sold in conjunction with providing a service under certain circumstances based on the actual selling price; and
- grooming and hygiene products.

See 86 Ill. Adm. Code Part 130 for more information on general merchandise.

"Qualifying food, drugs, and medical appliances" include

- food that has not been prepared for immediate consumption, such as most food sold at grocery stores, excluding hot foods, alcoholic beverages, candy, and soft drinks;
- prescription medicines and nonprescription items claimed to have medicinal value, such as aspirin, cough medicine, and medicated hand lotion, excluding grooming and hygiene products; and
- prescription and nonprescription medical appliances that directly replace a malfunctioning part of the human body, such as corrective eyewear, contact lenses, prostheses, insulin syringes, and dentures.

See 86 Ill. Adm. Code Part 130 for more information on qualifying food, drugs, and medical appliances.

"Prepaid wireless telecommunications service" includes sales of

- prepaid telephone calling cards and other prepaid telephone calling arrangements, and
- the minutes for "pay-as-you-go" phones.

How do I report sales of aviation fuel?

All sales of aviation fuel made on or after December 1, 2017, must be reported and the tax paid on Form ST-70, Aviation Fuel Sales and Use Tax Return. Receipts from sales of aviation fuel still will be reported on Form ST-1, Step 2, Line 1, but then must be deducted entirely from the ST-1 as an Other Deduction on Schedule A, Line 16, using the write-in description "Sales of Aviation Fuel."

When must I file my return?

You must file this return, along with any payment you owe, on or before the 20th day of the month following the end of your reporting period.

Note: If the due date falls on a weekend or holiday, your return and payment are due the next business day.

The Department determines how often you must file a return based on your initial registration and annual liability. Filing requirements based on your average monthly liability are determined as follows:

- If your average monthly liability is greater than $200, the Department may notify you that your filing frequency has been changed to a monthly requirement.
- If your average monthly liability is between $50 and $200, the Department may notify you that your filing frequency has been changed to a quarterly requirement.
- If your average monthly liability is less than $50, the Department may notify you that your filing frequency has been changed to an annual requirement.

Can I file this return and pay the tax due electronically?

Yes, you can use MyTax Illinois at **mytax.illinois.gov** to file your Form ST-1. MyTax Illinois also allows for electronic payment of any tax due.

You can also file Form ST-1 using a direct file service through an outside vendor.

Note: Some taxpayers are mandated to file Form ST-1 electronically. For more information, see our website at **tax.illinois.gov**.

What if I have multiple sites?

If you have one business but sell items at more than one location (site), you must collect and remit sales and use taxes according to the rates of each particular location. You must complete and attach Form ST-2, Multiple Site Form, to your Form ST-1 to show the breakdown of taxes collected and paid from each site.

MyTax Illinois allows users to calculate their tax due for each location on Form ST-2, Multiple Site Form, and combine their liability on a single Form ST-1.

How can I find out what tax, surcharge, and assessment rates I should be collecting?

If you file electronically using MyTax Illinois, the rates will be populated for you according to your registration. You can also use the Tax Rate Database on our website at **tax.illinois.gov** to look up location-specific tax rates. Depending upon the location of the sale, the actual sales tax rate may be higher than the state rate of 6.25 percent (1.00 percent for qualifying food, drugs, and medical appliances) because of home rule, non-home rule, mass transit, park district, flood prevention district, county public safety, public facilities or transportation, and county school facility tax. The E911 Surcharge has two different rates, one for Chicago locations and one for non-Chicago locations. These rates can also be found on the Tax Rate Database on our website. The ITAC Assessment rate is a competitively neutral rate set by the Illinois Commerce Commission. It changes annually on July 1. Use the Tax Rate Database, available on our website at **tax.illinois.gov** to determine the current rate.

What if I add or discontinue one of my sites or change locations?

MyTax Illinois allows users to correct, add, or delete their location information. You also can contact us by calling **217 785-3707** or writing to:

CENTRAL REGISTRATION DIVISION
ILLINOIS DEPARTMENT OF REVENUE
PO BOX 19030
SPRINGFIELD IL 62794-9030

It is important to keep your registration information updated so your returns will include the correct tax rates.

What if I need help?

If you need help, call us at **1 800 732-8866** or **217 782-3336**, call our TDD-telecommunications device for the deaf at **1 800 544-5304**, or visit our website at **tax.illinois.gov**.

Printed by authority of the State of Illinois
Web only — One copy

Specific Instructions

When completing this form, please round to the nearest dollar by dropping amounts of less than 50 cents and increasing amounts of 50 cents or more to the next higher dollar.

Step 1: Alcoholic Liquor Purchases

Line A, Total dollar amount of alcoholic liquor purchased (invoiced and delivered) — If you are a liquor store, tavern, or a restaurant that sells alcohol and you are not required to remit quarter-monthly payments, you must report the total dollar amount of all alcoholic liquor invoiced and delivered during the liability period, regardless of when you actually remit payment to your distributor. By the 10th day of each month, each of your distributors should give you a statement that identifies the total amount purchased during the previous month. This statement may be a summary for the month on the bottom of each of your invoices or on a separate report.

Note: Liquor distributors will report to us the value of alcoholic beverages invoiced and delivered to each retailer the previous month.

If you are **not** required to report your purchases, go to Step 2.

Step 2: Taxable Receipts

Note: All sales of aviation fuel made on or after December 1, 2017, must be reported and the tax paid on Form ST-70, Aviation Fuel Sales and Use Tax Return. Sales of aviation fuel occurring prior to December 1, 2017, should be reported along with other general merchandise sales on Form ST-1.

Line 1 - Enter the amount you received from all sales of merchandise and service, including service charges, E911 Surcharge, ITAC Assessment and taxes collected. Do not include purchases of merchandise on which you are paying use tax in Step 5.

Note: You must include the county motor fuel tax imposed in DuPage, Kane, and McHenry counties in Line 1.

Line 2 - Enter the total amount of deductions from Line 30 of Schedule A located on the back of Form ST-1. The amount of deductions on Line 2 cannot be more than the total receipts you entered on Line 1. If so, you must file a claim for credit on Form ST-1-X, Amended Sales and Use Tax and E911 Surcharge Return, for the month you originally reported the sale.

Line 3 - Subtract Line 2 from Line 1.

Step 3: Tax on Receipts

If you report for multiple sites, you must use Form ST-2, Multiple Site Form. See the instructions for Form ST-2 for how to complete Step 3 of Form ST-1 with your combined totals.

Sales from locations within Illinois

Note: If you are a multiple site retailer or serviceperson who also has out-of-state locations, see the instructions for Lines 6a and 7a.

Line 4a - General merchandise base
Enter the portion of Line 3 that you received from sales of general merchandise, plus the amount you received from the general merchandise you sold in performing your service.

Line 4b - Multiply Line 4a by the tax rate.

Line 5a - Food, drugs, and medical appliances base
Enter the portion of Line 3 that you received from your sales of qualifying food, drugs, and medical appliances, plus the amount you received from the qualifying food, drugs, and medical appliances you sold in performing your service.

Line 5b - Multiply Line 5a by the tax rate.

Sales from locations outside Illinois

Line 6a - General merchandise base
Enter the portion of Line 3 that you received from general merchandise you sold to users in Illinois, plus the amount you received from general merchandise you sold for use in Illinois in performing your service.

Line 6b - Multiply Line 6a by the tax rate.

Line 7a - Food, drugs, and medical appliances base
Enter the portion of Line 3 that you received from qualifying food, drugs, and medical appliances you sold to users in Illinois, plus the amount you received from qualifying food, drugs, and medical appliances you sold for use in Illinois in performing your service.

Line 7b - Multiply Line 7a by the tax rate.

Sales at prior rates

Line 8a - Receipts taxed at other rates base
Enter on this line **only** the receipts from sales of merchandise and service you made at rates different from the rates printed in Lines 4a, 5a, 6a, and 7a. If you need instructions on how to report receipts from current sales that you believe are taxable at a different rate, call us at one of the numbers listed in the "What if I need help?" section on the general information page.

Line 8b - Multiply each amount in Line 8a by the correct tax rate, add the results, and enter the total on Line 8b.
Note: Check your math. Lines 4a + 5a + 6a + 7a + 8a must equal Line 3.

Line 9 - Add Lines 4b, 5b, 6b, 7b, and 8b.

Step 4: Retailer's Discount and Net Tax on Receipts

Line 10 - If you are required to file Form ST-1 electronically and have not been approved for a waiver of that electronic filing mandate, you are entitled to a discount only if you electronically file your return on or before the due date **and** also timely pay the tax due.

If you are not required to file Form ST-1 electronically (or if you are required to file Form ST-1 electronically but have been approved for a waiver of that electronic filing mandate), you are entitled to a discount if you mail or electronically file your return and payment on or before the due date.

If you are entitled to a discount, multiply Line 9 by the percentage printed in Line 10.

Line 11 - Subtract Line 10 from Line 9.

Step 5: Tax on Purchases

Note: The figures you enter on Lines 12a, 13a, and 14a should not include amounts already contained in Lines 4a through 8a. Do not include tax in these lines.

Line 12a - General merchandise base
Enter the sum of

- your cost of the general merchandise you purchased to use from an out-of-state retailer who did not collect Illinois tax from you,
- your cost of general merchandise you purchased tax free to sell at retail, but instead used or consumed it yourself,
- your cost of general merchandise you purchased tax free to sell in performing your service, but instead used or consumed it yourself, or transferred subject to use tax, and
- your cost of general merchandise an out-of-state serviceperson used in performing a service for you, if Illinois tax was not paid.

Line 12b - Multiply Line 12a by the tax rate.

Line 13a - Food, drugs, and medical appliances base
Enter the sum of

- your cost of the qualifying food, drugs, and medical appliances you purchased to use from an out-of-state retailer who did not collect Illinois tax from you,
- your cost of the qualifying food, drugs, and medical appliances you purchased tax free to sell at retail, but instead used or consumed it yourself,
- your cost of the qualifying food, drugs, and medical appliances you purchased tax free to sell in performing your service, but instead used or consumed it yourself, or transferred subject to use tax, and
- your cost of the qualifying food, drugs, and medical appliances an out-of-state serviceperson used in performing a service for you, if Illinois tax was not paid.

Line 13b - Multiply Line 13a by the tax rate.

Line 14a - Purchases taxed at other rates base
Enter the total of all purchases you made at rates different from the rates printed in Lines 12a and 13a. This includes

- your cost of the general merchandise and qualifying food, drugs, and medical appliances on which you paid tax to another state at a rate lower than Illinois tax rates, and
- your cost of the general merchandise and qualifying food, drugs, and medical appliances an out-of-state serviceperson used in performing a service for you, if Illinois tax was not paid.

Line 14b - Multiply each amount in Line 14a by the correct rate, add the results, and enter the total on Line 14b.

Line 15 - Add Lines 12b, 13b, and 14b.

Step 6: Net tax due

Line 16 - Add Lines 11 and 15.

Line 16a - Enter the total amount of Manufacturer's Purchase Credit (MPC) that you are using. This amount should include any MPC you have received from your customers plus any MPC of your own that you are using to satisfy use tax on qualifying purchases for the current liability period.

Generally, you cannot claim MPC credit on Form ST-1 for any reporting period after December 31, 2016.

Line 17 - Complete Line 17 **only if** you prepay Illinois sales tax on motor fuel. Enter the amount of sales tax you prepaid on motor fuel by adding the total from the PST-2, Prepaid Sales Tax Statement of Tax Paid, forms you are attaching to this return.

Line 18 - Complete Line 18 **only if** you made quarter-monthly (accelerated) payments. Include on this line any prior overpayment credit that you used to make these payments.

Line 19 - Add Lines 16a, 17, and 18.

Line 20 - Subtract Line 19 from Line 16.

Step 7: Payment due

Line 21 Enter the total amount of E911 Surcharge and ITAC Assessment from Line 10 of Schedule B located on the back of Form ST-1.

Line 22 - If you collected more tax, E911 Surcharge, or ITAC Assessment than is due, enter your total excess tax, excess surcharge, and excess assessment collected.

Line 23 - Add Lines 20, 21 and 22.

Line 24 - If you have a credit memorandum or prior overpayment and you wish to use it towards what you owe, enter the amount you are using.

Line 25 - Subtract Line 24 from Line 23. This is the amount of tax, E911 Surcharge, and ITAC Assessment that you owe.

Step 8: Sign below

We cannot process this form until it is signed by the owner, officer, or other person authorized to sign the return.

You owe a **late-filing penalty** if you do not file a processable return by the due date, a **late-payment penalty** if you do not pay the amount you owe by the original due date of the return or were required to make quarter-monthly payments and failed to do so, a **bad check penalty** if your remittance is not honored by your financial institution, and a **cost of collection fee** if you do not pay the amount you owe within 30 days of the date printed on a bill. For more information, see Publication 103, Penalty and Interest for Illinois Taxes, available on our website at **tax.illinois.gov**.

We will bill you for any penalty and interest amounts owed.

Send your return and remittance to:
ILLINOIS DEPARTMENT OF REVENUE
RETAILERS' OCCUPATION TAX
SPRINGFIELD IL 62796-0001

Schedule A Instructions

Total deductions claimed cannot be more than the total receipts, including Prepaid Wireless E911 Surcharge, ITAC Assessment, and tax, on Step 2, Line 1 of Form ST-1.

When completing this schedule, please round to the nearest dollar by dropping amounts of less than 50 cents and increasing amounts of 50 cents or more to the next higher dollar.

Line 1 - Taxes collected on general merchandise sales and service

Enter the amount of tax you collected on your retail sales of general merchandise and tax you collected on general merchandise you sold in performing service. This includes food sold for immediate consumption, such as food sold at a restaurant.

Line 2 - Taxes collected on food, drugs, and medical appliances sales and service

Enter the amount of tax you collected on your retail sales of qualifying food, drugs, and medical appliances and tax you collected on qualifying food, drugs, and medical appliances you sold in performing service.

Line 3 - E911 Surcharge and ITAC Assessment collected

Enter the amount of E911 Surcharge and ITAC Assessment you collected on your retail sales of prepaid wireless telecommunications service.

Line 4 - Resale

Enter the amount you collected from the items you sold to someone who will resell those items at retail. For each sale for resale you make, the buyer must give you an Illinois certificate of resale or have a blanket certificate of resale on file with you.

Line 5 - Interstate commerce

Enter the amount you collected from merchandise you sold that was **shipped or delivered by you** outside Illinois.

Line 6 - Manufacturing machinery and equipment (including photoprocessing)

Enter the amount you collected from the sale of qualifying manufacturing machinery and equipment (including repair and replacement parts) that produce items to be sold. Use Schedule A, Line 8 to claim a deduction for qualifying graphic arts machinery and equipment. Do not combine a deduction for graphic arts machinery and equipment with your deduction for manufacturing machinery and equipment on Schedule A, Line 6.

Line 7 - Farm machinery and equipment

Enter the amount you collected from qualifying farm machinery and equipment (including repair and replacement parts) you sold for use in production agriculture.

Line 8 - Graphic arts machinery and equipment

Enter the amount you collected from qualifying graphic arts machinery and equipment (including repair and replacement parts). Do not combine a deduction for graphic arts machinery and equipment with your deduction for manufacturing machinery and equipment on Schedule A, Line 6.

Note: The deduction for exempt graphic arts machinery and equipment cannot be claimed for any reporting period between August 30, 2014, and June 30, 2017.

Line 9 - Supplemental Nutrition Assistance Program (SNAP - formerly called food stamps)

Enter the amount you collected from customers who used SNAP benefits.

Line 10 - Enterprise zone

a) Sales of building materials

Enter the amount you collected from sales of building materials to a customer who will incorporate those materials into an enterprise zone certified by the Illinois Department of Commerce and Economic Opportunity (DCEO). You must maintain in your books and records the documentation obtained from the customer and required by the Department's rules to support the exemption.

b) Sales of items other than building materials

Enter the amount you collected from sales of items other than building materials to a business certified by DCEO to buy consumables tax free. You must maintain in your books and records the documentation obtained from the customer and required by the Department's rules to support the exemption. This amount can include, but is not limited to:

- tangible personal property used or consumed in the operation of pollution control facilities.
- tangible personal property used or consumed within an enterprise zone in the process of manufacturing or assembly of tangible personal property for wholesale or retail sale or lease.
- tangible personal property used or consumed within an enterprise zone in the process of graphic arts production if used or consumed at a certified facility, including repair and replacement.
- machinery and equipment used in the operation of a high impact service facility within the enterprise zone.
- jet fuel used in the operation of high impact service facilities.
- machinery and equipment used in the operation of an aircraft maintenance facility located within an enterprise zone.

Line 11 - High Impact Business

a) Sales of building materials

Enter the amount you collected from sales of building materials to a customer who will incorporate those materials into a high impact business location certified by the DCEO.

b) Sales of items other than building materials

Enter the amount you collected from sales of items other than building materials to a business certified by DCEO as a high impact business.

This amount can include, but is not limited to, tangible personal property used or consumed:

- by a high impact business in the process of manufacturing or assembly of tangible personal property for wholesale or retail sale or lease.
- by a high impact business in the process of graphic arts production if used or consumed at a certified facility, including repair and replacement.

Line 12 - River edge redevelopment zone building materials

Enter the amount you collected from sales of building materials to a customer who will incorporate the materials into real estate within a River Edge Redevelopment Zone in accordance with the Act by remodeling, rehabilitating, or adding new construction.

Line 13 - Exempt organizations
Enter the amount you collected from merchandise you sold to organizations that are exempt from paying sales tax. For each tax-exempt sale you make, you must obtain a copy of the organization's Illinois Sales Tax exemption identification number.

Note: Do not include motor fuel taxes reported on Schedule A, Line 16 or Schedule A, Section 2.

Line 14 - Uncollectible debt on which tax was previously paid
Enter amounts that have become worthless or uncollectible and on which tax previously has been paid. You must have charged off the uncollectible amounts as bad debt in your records in accordance with generally accepted accounting principles and have claimed the uncollectible amounts as a deduction pursuant to Section 166 of the Internal Revenue Code on your federal income tax return. Enter only the amount of uncollectible debt. Do *not* include the tax paid in this amount.

Line 15 - Sales of service
Enter the total of any portion of all service transactions on which you did not charge your customers tax. Identify on the line provided the type of transaction that took place. Some examples of these are transactions made by dry cleaners, hairdressers, medical professionals, pharmacists, and other servicepersons.

Line 16 - Other
Identify other deductions. Enter the amount you collected from the sale of the deductions you listed.
This amount can include:

- cash refunds — Enter the amount of cash refunds you made to customers for merchandise they returned and on which you have paid tax to us during the preceding return period or have now included on Step 2, Line 1 of your Form ST-1. **Note:** This amount should not include the tax amount from the returned item.
- newspaper and magazine sales — Enter the amount you collected from your sales of newspapers, magazines, and other periodicals.
- proceeds of mandatory service charges separately stated on customers' bills for purchase and consumption of food and beverages, to the extent that the proceeds of the service charge are in fact turned over as tips or as a substitute for tips to employees who participate directly in preparing, serving, hosting, or cleaning up the food or beverage function with respect to which the service charge is imposed.
- other deductions allowed in the Acts not listed on Schedule A, Lines 1 through 15 or Schedule A, Section 2.

Line 17 - Total taxes and miscellaneous deductions
Add the amounts on Lines 1 through 16, and enter the total.

Lines 18 through 23 - State motor fuel tax
For each type of fuel, enter the number of gallons you sold. Multiply the number of gallons by the state tax rate printed on Lines 18 through 23 of Schedule A, and enter the total for each type of fuel.

Note: The county motor fuel tax imposed in DuPage, Kane, and McHenry counties must be included in the gross receipts on Step 2, Line 1 of your Form ST-1. These taxes are not authorized deductions from your gross receipts. Report any other local motor fuel taxes on Schedule A, Line 16, "Other." Do not include them on Schedule A, Lines 18 through 23.

Lines 24 through 28 - Specific fuels sales tax exemptions
Subtract all motor fuel taxes and all state and local sales taxes from the amount you received for the specific fuel types listed. Multiply your receipts for each type of fuel by its corresponding rate on Schedule A, and enter the total for each type of fuel.

Note: On Line 24, do not include receipts from sales that are not subject to sales tax. The 20-percent Sales and Use Tax exemption for biodiesel blends (no less than 1% but no more than 10% biodiesel) sunsets on December 31, 2018. Effective January 1, 2019, sales of these biodiesel blends are no longer exempt and are subject to Illinois Sales Tax. Figures will no longer be allowed on Schedule A, Lines 24a and 24b.

Line 29 - Total motor fuel deductions
Add the amounts on Lines 18b through 27b and 28, and enter the total.

Line 30 - Total deductions
Add the amounts on Lines 17 and 29, and enter this amount on Schedule A, Line 30 and on Step 2, Line 2 of Form ST-1.

Note: This amount cannot exceed the amount reported on Step 2, Line 1 of your ST-1 return.

Schedule B Instructions

When completing this schedule, please round to the nearest dollar by dropping amounts of less than 50 cents and increasing amounts of 50 cents or more to the next higher dollar.

Line 1 - Enter the total receipts from retail transactions of prepaid wireless telecommunications service. **Note:** Do not complete Schedule B in the same manner that you complete Step 2 of Form ST-1. Instead Line 1 of Schedule B should only report your receipts subject to the E911 surcharge and ITAC Assessment, not all amounts collected for the reporting period. Do not include receipts from sales that are exempt from the E911 surcharge and ITAC Assessment. Also do not include the amount of surcharge and assessment you actually collected from your customers.

Figure your breakdown of retail transactions for Chicago locations

Locations within the city limits of Chicago are considered Chicago locations for purposes of E911 Surcharge and ITAC Assessment collections.

Line 2a - Enter the portion of Line 1 receipts that were collected from retail transactions of prepaid wireless telecommunications service at Chicago locations.

Line 2b - Multiply Line 2a by the combined E911 Surcharge and ITAC Assessment rate for Chicago locations.

Note: The E911 rate for Chicago locations and the ITAC Assessment rate can be found in the Tax Rate Database on our website at **tax.illinois.gov** under "Other Miscellaneous Taxes, Fees, and Surcharges."

Line 3a - Enter the portion of Line 1 receipts that were collected from retail transactions of prepaid wireless telecommunications service at Chicago locations at rates different from the Chicago locations included on Line 2a. This line will only be used if a rate change should occur and you are remitting E911 Surcharge or ITAC Assessment for receipts that were subject to the rate prior to the change.

Line 3b - Multiply Line 3a by the combined E911 Surcharge and ITAC Assessment rate.

Line 4 - Add Lines 2b and 3b.

Figure your breakdown of retail transactions for non-Chicago locations

Line 5a - Enter the portion of Line 1 receipts that were collected from retail transactions of prepaid wireless telecommunications service at non-Chicago locations.

Line 5b - Multiply Line 5a by the combined E911 Surcharge and ITAC Assessment rate for non-Chicago locations.

Note: The E911 rate for non-Chicago locations and the ITAC Assessment rate can be found in the Tax Rate Database on our website at **tax.illinois.gov** under "Other Miscellaneous Taxes, Fees, and Surcharges."

Line 6a - Enter the portion of Line 1 receipts that were collected from retail transactions of prepaid wireless telecommunications service at non-Chicago locations at rates different from the non-Chicago locations included on Line 5a. This line will only be used if a rate change should occur and you are remitting E911 Surcharge or ITAC Assessment for receipts that were subject to the rate prior to the change.

Line 6b - Multiply Line 6a by the combined E911 Surcharge and ITAC Assessment rate.

Line 7 - Add Lines 5b and 6b.

Line 8 - Add Lines 4 and 7.

Line 9 - If you are required to file Form ST-1 electronically and have not been approved for a waiver of that electronic filing mandate, you are entitled to a discount only if you electronically file your return on or before the due date **and** also timely pay the tax, surcharge, and assessment due.

If you are not required to file Form ST-1 electronically (or if you are required to file Form ST-1 electronically but have been approved for a waiver of that electronic filing mandate), you are entitled to a discount if you mail or electronically file your return and payment on or before the due date.

If you are entitled to a discount, multiply Line 8 by the percentage printed in Line 9.

Line 10 - Subtract Line 9 from Line 8 and enter this amount on Line 10 and on Step 7, Line 21 of Form ST-1.

Childress Exh 15

Illinois Department of Revenue

Non-Home Rule Municipal Sales Taxes

Local Governments' Guide to Tax Allocations

What is a non-home rule unit?

In general, a home-rule unit is the form of government for either a county that has a Chief Executive Officer elected by the electors of the county or a municipality that has a population of 25,000 or more. Counties or municipalities that have a population of less than 25,000 may elect to become home-rule units by referendum.

If you are not a home-rule unit as described above, you are then considered a non-home rule unit.

What is non-home rule sales tax?

The corporate authorities of a non-home rule municipality may impose a tax upon all persons engaged in the business of selling tangible personal property at retail in their jurisdiction. This tax is referred to as non-home rule sales tax. The Illinois Department of Revenue is responsible for administering this tax.

Are there kinds of sales that are *not* subject to this tax and that will *not* generate additional revenue?

Yes, non-home rule sales tax does not apply to the sales of

- tangible personal property that is titled or registered with an agency of this state's government, (e.g., cars, trucks, boats, motorcycle, trailers, snowmobiles, aircraft), and
- food for human consumption that is to be consumed off the premises where it is sold (other than alcoholic beverages, soft drinks, and food which has been prepared for immediate consumption) and prescription and non-prescription medicines, drugs, medical appliances, and insulin, urine testing materials, syringes, and needles used by diabetics.

Is voter approval required before implementation?

Yes, voter approval is required.

What must a non-home rule unit do to establish, change, or discontinue this tax?

Once a referendum is approved, an ordinance or resolution is required to establish the tax or to change or discontinue the tax rate. Once an ordinance has been adopted and a certified copy has been filed with the department, we will administer and enforce the rate that is imposed or changed.

Non-Home Rule Municipal Sales Taxes

What is the deadline for filing the ordinance?

If the local government has filed a certified copy of a proper ordinance with the department on or before

- May 1, the tax rate will take effect July 1 of the same year.
- October 1, the tax rate will take effect January 1 of the following year.

What tax rate can be imposed?

Non-home rule sales tax may be imposed only in ¼ percent increments and may not be imposed for more than 1 percent.

When will the non-home rule unit receive its first tax disbursement?

For taxes imposed effective January 1, the first disbursement will be made to the local government during the following April. For taxes imposed effective July 1, the first disbursement will be made to the local government during the following October.

Can a non-home rule unit impose a use tax on vehicles?

Yes, a non-home rule unit may impose a use tax on residents who purchase cars, boats, or other vehicles (from any retailer) and title or register the item through an Illinois agency to an address in its taxing jurisdiction. This is the Non-Home Rule Municipal Use Tax. The collection and administration of a non-home rule municipal use tax is the responsibility of the local government.

What financial information is available to non-home rule governments?

Non-home rule municipalities that impose a non-home rule sales tax may enter into a reciprocal agreement for exchange of information with us. This exchange allows designated individuals within the non-home rule unit to receive specific financial information. Under the terms of the agreement, and in accordance with the Illinois Compiled Statutes, the information provided must be kept confidential.

To update an information exchange agreement or for more information concerning the exchange of information between the Illinois Department of Revenue and non-home rule governments, please contact us at the following address:

LOCAL TAX ALLOCATION DIVISION
ILLINOIS DEPARTMENT OF REVENUE
101 WEST JEFFERSON
SPRINGFIELD IL 62794

217 785-6518

Is there other general information I should know?

Interest is paid on non-home rule municipal sales taxes. Collections are deposited into the non-home rule fund, and the money is promptly invested by the Office of the State Treasurer. Interest income earned during each month is reported to us for monthly distribution. This interest amount will be included in the check issued.

Non-home rule municipal sales tax will be disbursed separate from other taxes administered by the Illinois Department of Revenue. You will receive your non-home rule municipal sales tax disbursement in the same way that you have chosen to receive your municipal sales tax disbursement.

Taxpayers are allowed to take a 1.75 percent discount for timely filing and payment of these taxes. Any allowable discount that is taken is reflected in the local government distributions.

Statutory references

Non-Home Rule Municipal Sales Tax, generally, 65 ILCS 5/8-11-1.1
Non-Home Rule Municipal Retailers' Occupation Tax, 65 ILCS 5/8-11-1.3
Non-Home Rule Municipal Service Occupation Tax, 65 ILCS 5/8-11-1.4
Non-Home Rule Municipal Use Tax, 65 ILCS 5/8-11-1.5

Childress Exh 15A

Sales Tax Rates in Non-Home Rule Municipalities

The following table outlines the sales tax rates for general merchandise for each of the non-home rule municipalities in Illinois that impose non-home rule sales tax. You will find the combined rate pre-populated on the Department's electronic filing system, MyTax Illinois, for each reporting period. Visit our website at **tax.illinois.gov** to verify all tax rates using the **Tax Rate Database.** These rates are subject to change January 1 and July 1 of each year.

	Non-Home Rule Sales Tax Rate as of January 1, 2018
South Pekin	0.25%
Spring Valley	0.50%
St. Joseph	0.50%
Sterling	1.00%
Streator (LaSalle)	1.00%
Streator (Livingston)	1.00%
Stillman Valley	1.00%
Sugar Grove	1.00%
Swansea	0.50%
Tamaroa	0.50%
Taylorville	0.75%
Toledo	0.50%
Trenton	0.25%
Vandalia	0.50%
Villa Grove	1.00%
Villa Park	1.00%
Wadsworth	1.00%
Waterman	1.00%
Westchester	1.00%
Westmont	0.50%
West Peoria	0.50%
Willow Springs (Cook)	1.00%
Willow Springs (DuPage)	1.00%
Winfield	0.50%
Winnebago	1.00%
Wood Dale	1.00%
Worth	1.00%
Yorkville	1.00%

Childress Exh 16

The Civic Federation

Research * Information * Action * Est. 1894

Local Governments Begin to Measure Effect of New Illinois Sales Tax Collection Fee

October 20, 2017

As the City of Chicago and Cook County prepare their budgets for the upcoming 2018 fiscal year, their sales tax estimates show the impact of a provision approved as part of the State of Illinois FY2018 budget that holds back a 2.0% administrative fee on locally imposed sales taxes.

As part of the State budget approved by Illinois lawmakers on July 6, 2017, the Budget Implementation Bill, Public Act 100-0023, established a new 2.0% sales tax administrative fee that the State will retain from sales tax proceeds that otherwise would have gone to local governments. Instead those monies will be transferred to the Tax Compliance and Administrative Fund. The fee is meant to cover the State's cost of collecting and distributing sales tax revenue to local governments.

According to the Illinois Municipal League, the Illinois Department of Revenue estimates that 2.0% of local government sales tax collection statewide equals $60 million annually.

The new 2.0% administrative fee does not affect the portion of sales tax that is imposed and collected statewide. It will only affect sales taxes that are imposed locally. For example, the City of Chicago

and Cook County both impose a local sales tax rate through their home rule authority. The City of Chicago's home rule sales tax rate is 1.25%, so the 2.0% administrative fee will affect the City's revenues from that 1.25%. Likewise, Cook County's home rule sales tax rate is 1.75%, so the administrative fee will impact the County's sales tax revenues from that 1.75%.

The table below provides a comparison among the composite sales tax rates in Chicago, Cook County and the surrounding collar counties. For example, the total composite sales tax rate in the City of Chicago is 10.25%, although as shown in the table, portions of that composite rate are actually allocated to several different governments. The State of Illinois collects a 6.25% sales tax statewide, of which the State keeps 5.0%, municipalities receive 1.0% and counties receive 0.25% (with the exception of Cook County, where the 0.25% portion is allocated instead to the Regional Transportation Authority). The revenues the State shares with municipalities, counties and the RTA will not be reduced by the 2.0% service fee. In addition to the 6.25% statewide rate, some local governments including Cook County, municipalities and the Regional Transportation Authority have the authority to impose additional sales tax rates. Revenues from those additional sales taxes will be impacted by the 2.0% service fee.

2017 Sales Tax on General Merchandise: Chicago, Cook County and Collar Counties			
	Chicago	Suburban Cook County	Collar Counties
State Share	5.0%	5.0%	5.0%
Municipality* Share	1.0%	1.0%	1.0%
County** Share	0.25%	0.25%	0.25%
Base Sales Tax Statewide	6.25%	6.25%	6.25%
Cook County Home Rule Share	1.75%	1.75%	-
Locally Imposed Municipality*** Share	1.25%	0.25% to 2.0%	0.25% to 2.0%
Regional Transportation Authority Share	1.0%	1.0%	0.75%
Total Composite Sales Tax Rate	10.25%	9.25% to 11.0%	7.25% to 9.0%

*This rate also applies to unincorporated areas in suburban Cook County.

**Cook County's portion is allocated to the Regional Transportation Authority rather than to the county.

***Varies depending on the municipality. Not all municipalities are home rule units of government; therefore some cannot impose a municipal sales tax without a referendum.

Source: Illinois Legislative Research Unit 2017 Tax Handbook for Legislators, p. 119.

Cook County estimates that the new 2.0% service fee will cause the County to lose $14 million annually. The County's total sales tax revenue for FY2018 net of the new fee is projected at $779.2 million.[1] City of Chicago budget officials estimate that the City will lose approximately $6 million in sales tax revenue in FY2018.[2] The City's total sales tax revenue in the Corporate Fund for FY2018 is projected to be $653.4 million.[3]

Other municipalities in Cook County and throughout the State will likewise be impacted by the administrative fee. With sales tax revenues already reportedly experiencing decline due to stagnant economic growth and an increase in online sales, some local government leaders have said that the administrative fee is burdensome, as reported here, here and here.

A bill recently introduced in the Illinois House proposes a reduction of the administrative fee. House Bill 4101, sponsored by Representative Anthony DeLuca, would reduce the fee from 2.0% to 1.0%. The bill represents a proposed compromise, acknowledging that there may be a cost to the State to collect the locally imposed tax, but also would restore half of the revenues local governments would

otherwise lose. The bill was introduced on September 27, 2017 and could be considered as soon as during the veto session, which starts on October 24, 2017.

Helpful Link: Civic Federation 2017 Report on Consumer Taxes in the City of Chicago

[1] Cook County FY2018 Executive Budget Recommendation, Volume 1, p. 32.

[2] Communication between the Civic Federation and the City of Chicago on October 17, 2017.

[3] City of Chicago FY2018 Budget Overview, p. 25.

We welcome any questions and feedback about the content of this blog. Please e-mail civicfed@civicfed.org with your query.

Chevaires Exh 16-1

indeed Find Jobs Company Reviews **Find Salaries** Find Resumes Employers Post Job

Warehouse Worker Salaries in Aurora, IL

Salary estimated from 241 employees, users, and past and present job advertisements on Indeed in the past 36 months. Last updated: January 24, 2019

Location

Aurora

Average in Aurora, IL

$12.28 per hour

▲ Meets national average

Salary Distribution

indeed Find Jobs Company Reviews **Find Salaries** Find Resumes Employers Post Job

Warehouse Worker Salaries in Elgin, IL

Salary estimated from 175 employees, users, and past and present job advertisements on Indeed in the past 36 months. Last updated: January 25, 2019

Location

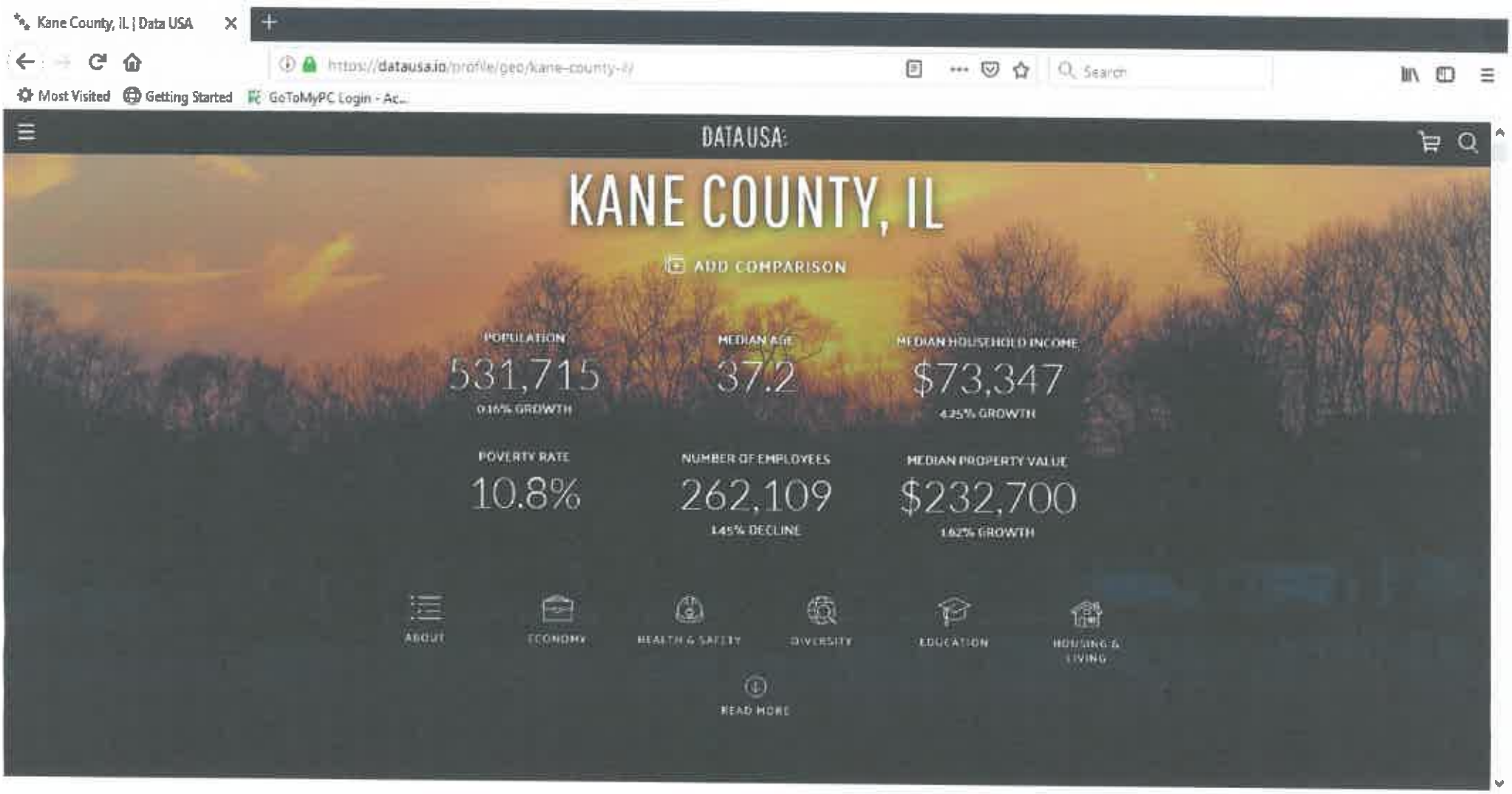
Elgin

Average in Elgin, IL

$11.99 per hour

▲ Meets national average

Salary Distribution



Childress Exh 16-2

Childress Exh 17

The I-53, an Illinois expressway known for frequent truck collisions, is nicknamed "The Die-Road."

Elwood, Illinois (Pop. 2,200), Has Become a Vital Hub of America's Consumer Economy. And It's Hell.

The rural town south of Chicago is now a crucial stop for Amazon, Wal-Mart, IKEA, Home Depot, and other giant retailers. Developers had promised growth and good jobs. So why is everyone so miserable?

By **ALEXANDER SAMMON**

January 9, 2019

Photographs by Sebastián Hidalgo for The New Republic

It's hard to find anyone who will admit to it now, but when the CenterPoint Intermodal freight terminal opened in 2002, people in Elwood, Illinois, were excited. The plan was simple: shipping containers, arriving by train from the country's major ports, were offloaded onto trucks at the facility, then driven to warehouses scattered about the area, where they were emptied, their contents stored. From there, those products—merchandise for Wal-Mart, Target, and Home Depot—were loaded into semis, and trucked to stores all over the country. Goods in, goods out. The arrangement was supposed to produce a windfall for Elwood and its 2,200 residents, giving them access to the highly lucrative logistics and warehousing industry. "People thought it was the greatest thing," said Delilah Legrett, an Elwood native.

In addition to bringing more containers and warehouses, the Intermodal promised to foster vital growth and development. In a town without sidewalks, grand pronouncements were made in the run-up to the Intermodal's debut. There would soon be hotels, restaurants, a grocery store; flower shops and bars would follow. Property values would surge, schools would be flush with cash. Most importantly, there would be great, high-paying jobs, the kind that could sustain a community devastated by farm failures and the wide-

scale deindustrialization of the Midwest. In Will County, of which Elwood is part, the unemployment rate soared to a high of 18 percent in the 1980s, before gradually coming closer to the national average in the 1990s. In Joliet, the nearest urban center, it hit 27 percent in 1981.

An opportunity as great as the Intermodal came with a cost. First, to help seal the deal, the town had to offer the developer, CenterPoint, a sweetener: total tax abatement for two decades, until 2022. Second, the town would have to put up with an influx of truck traffic. No matter: With large-scale manufacturing shifting to the Pacific Rim at the turn of the millennium, the warehousing and logistics industry offered a chance to get back in the good graces of a global economy that had, for decades, turned its back on rural America. Elwood yoked its hopes to warehousing, which would carry the town to the forefront of America's new consumer economy.

In a few short years after the Intermodal opened, Elwood became the largest inland port in North America. Billions of dollars in goods flowed through the area annually. The world's most profitable retailers flocked to this stretch of barren country, while the headline unemployment rate plunged. Wal-Mart set up three warehouses in Will County alone, including its two largest national facilities, both located in Elwood. Samsung, Target, Home Depot, IKEA, and others all moved in. Will County is now home to some 300 warehouses. A region once known for its soybeans and cornfields was boxed up with gray facilities, some as large as a million square feet, like some enormous, horizontal equivalent of a game of Tetris.

Fifteen years before Amazon's HQ2 horserace, Elwood had won the retail lottery. "Nobody envisioned what we have out here," said Jerry Heinrich, who sat on the board of the planning commission that first apportioned the land for development in the mid-1990s. "It was never anticipated that every major business entity would end up in the area."

"It was never anticipated that every major business entity would end up in the area," said Jerry Heinrich.

But this corporate valhalla turned out to be hell for the community, which suffered a concentrated dose of the indignities and disappointments of late capitalism in the 21st century. Instead of abundant full-time work, a regime of partial, precarious employment set in. Temp agencies flourished, but no restaurants, hotels, or grocery stores ever came, save for the recent addition of a dollar store. Tens of thousands of semis rumbled through Will County every day, wreaking havoc on the infrastructure. And as the town of Elwood scrambled to pave its potholes, its inability to collect taxes from the facilities plunged it into more than $30 million in debt.

And that was before Big Tech rolled in. Just four years ago Amazon didn't even have one facility in the region; now, with five fulfillment centers, it's the county's largest employer. Growth, once arithmetic, became exponential. Plans were made to build a new facility, this one bigger than the original Intermodal,

with room for some 35 million additional square feet of industrial space.

Elwood, a gateway to six major rail lines, has seen the emergence of immense warehouse projects from the country's biggest companies.

NorthPoint, a Kansas City-based developer, began quietly buying up the necessary parcels of land. In June 2017, a map of the proposed project was leaked on Facebook. Some residents, like Legrett, saw their homes up against a new industrial park. "Some of my friends' houses had buildings on top of them," she said. Others fared worse. Julie Baum-Coldwater spotted her family's farm smack in the middle of the facility. "When I saw the plan I just freaked," she told me.

The town mobilized to stop the new warehousing development. Signs reading "Just Say No to NorthPoint" and "No More Trucks" sprouted on front lawns. Doors were knocked on. By the time the Elwood planning and zoning commission convened in December 2017 to vote on whether to recommend the facility to the town's board for approval, tensions were high. Some 400 attendees crammed in the Elwood Village hall, with more still turned away. The meeting ran long, as did a second one, then a third, which had to be scheduled at the gymnasium at Elwood School, with bleachers packed and folding chairs on the basketball court. An overflow room with a livestream was set up in the cafeteria. Altogether, 800 people turned up, in the dead of winter, more than a third of the town's population.

Nearly 100 speakers commented publicly; only four were in favor. Amid tears and a chorus of boos, the committee voted 3-to-1 to approve the new facility. If the people of Elwood wanted to save themselves and their town, they would have to fight for it.

In Elwood, geography is destiny. For homesteaders and farmers heading west in the 19th century, the flat terrain and quality soil made the region a major draw. "This area is kind of like a fertile crescent," said Baum-Coldwater, whose 540-acre farm has been worked by her family for 160 years

and counting. The Coldwaters are one of many multi-generational farming families in the area, producing soybean seeds, primarily, as well as corn and oats. From the front porch, they can still see the original residence Julie's husband's great-great-grandfather built in 1858, as well as the houses his grandmother and grandfather each grew up in, before they married.

Even the most thorough tour of Elwood doesn't last long. The town's nucleus sits on the west side of a highway, where a small strip mall, home to Silver Dollar restaurant and the Dollar Tree, leads to a handful of municipal buildings and a few blocks of housing. That denser development quickly gives way to a broad campestral swath, with the occasional farmhouse identifiable only because the area is so flat.

But it wasn't topsoil that caught the eye of industry—it was Elwood's serendipitous proximity to the country's major infrastructure. Six class-1 railroads and four interstate highways pass through the region, which is situated a day's drive from a full 60 percent of the country. Chicago is some 40 miles northeast as the crow flies.

For much of the 20th century, Elwood sat in the shadow of the Joliet Arsenal, an Army facility built in 1940 that churned out bombs and TNT to feed the American war machine from World War II through the Cold War. But once the Vietnam War ended, its utility subsided. In 1976, the facility was shuttered.

What to do with 23,500 idle acres became the subject of great debate. Mining and asphalt plants were suggested; a coal-fired power plant was proposed; so, too, was a new landfill. The passage of the Illinois Land Conservation Act in 1996 enshrined a solution. Nineteen thousand acres were converted into protected prairie land, where 73 head of bison currently roam. The Abraham Lincoln National Cemetery, the country's second-largest military cemetery, was also established. That left 2,000-odd remaining acres, officially a Superfund site, too spoiled to farm. This remaining tract was zoned for light industry. For Jerry and Connie Heinrich, who headed up the effort to preserve the region's prairies, it was the best of all possible outcomes, considering the alternatives. "The Greens were excited," Jerry told me.

Soon after, CenterPoint came through with its proposal for the Intermodal. The deal sounded good. CenterPoint, which is now owned by CalPers, the California public sector pension group, bought the land for an undisclosed amount. In addition to the tax abatement, Elwood, then shy of 1,700 people in total, agreed to build out a big-league water and sewer system for the facility, and extend municipal fire and police protection. In anticipation of the population and economic growth to come, they even built a new town hall, a tan, multi-story structure complete with a backyard pond and a fountain, referred to playfully as the Taj Ma-hall.

> A staggering $623 billion worth of freight traversed Will County infrastructure in 2015 alone, roughly equivalent to 3.5 percent of the U.S.'s total GDP.

When the facility opened in 2002, it was centered around the Burlington North Santa Fe (BNSF) railroad, which subsequently bought the loading zone. Warehouses were constructed nearby. The plan proved to be

an immediate success: An ambitious forecast claimed that within eight to ten years the facility would see 500,000 containers annually; that threshold was surpassed in four.

That was enough to attract the eye of a notable investor: Warren Buffett, who made a pilgrimage to little Elwood in the late 2000s to survey the facility. According to one version of local legend, Buffett took in the scene of BNSF trains unloading containers onto trucks, and the trucks casting off into all corners of the United States, and declared, "This is the future of logistics." On November 3, 2009, Buffett bought BNSF in its entirety—and with it, the Intermodal.

After that, it was on. The success of the BNSF Intermodal, no doubt aided by the star power of Buffett, inspired railroad rival Union Pacific to set up a smaller, copycat facility across the street. The country's richest families moved in, at least in name. In addition to two Wal-Mart warehouses, each between 1.6 million and 1.8 million square feet, Elwood got a Walton Drive, named after the Walton dynasty that owns the big-box chain.

For Delilah Legrett, a lifelong resident of the area and mother of four, the drawbacks came quickly—starting with all the trucks. Property values were supposed to skyrocket, but Legrett didn't even feel comfortable letting her children play in front of their house with the semis hurtling through the town, sometimes as fast as 40 or 50 miles per hour. With toddlers, the persistent diesel exhaust was concerning. "We had problems with our baby monitor because it would pick up frequencies" from passing truck radios and warehouse dispatchers, she told me.

According to the Will County Center for Economic Development, at least 25,000 tractor trailers a day come through the Intermodals. That amounts to three million containers annually, carrying $65 billion worth of goods. A staggering $623 billion worth of freight traversed Will County infrastructure in 2015 alone, roughly equivalent to 3.5 percent of the U.S.'s total GDP.

"When I started, all these roads were dirt," says Paul Buss, the 77-year-old highway commissioner of Jackson Township.

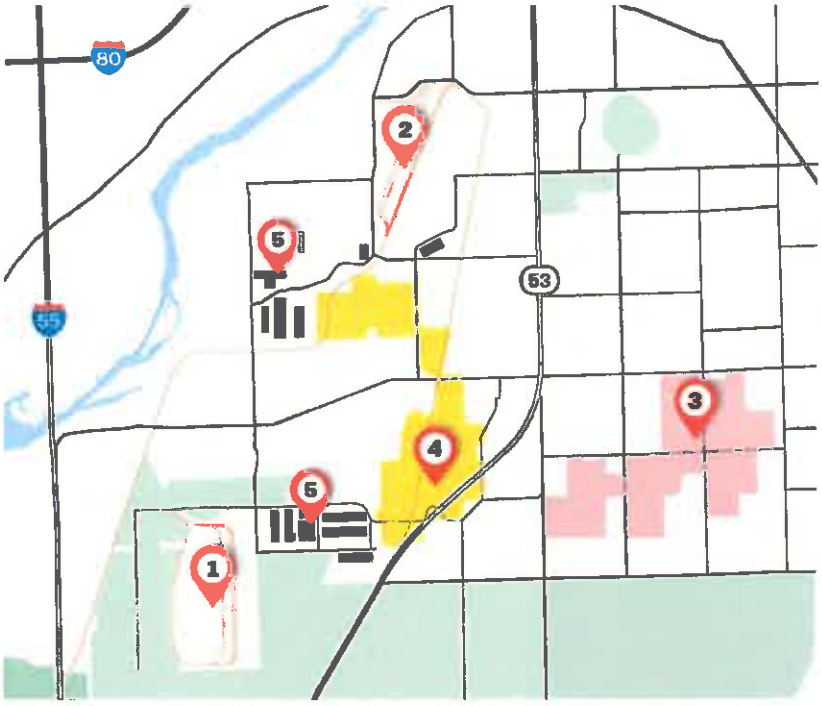
For Paul Buss, the 77-year-old highway commissioner of Jackson Township, the unincorporated land that sits to Elwood's north, the trucks unleashed the chaos of the global supply chain on what was once a provincial post. "When I started, all these roads were dirt," he told me as we drove around in his raised red Ford pickup. Once, a few slow tractors on the highway constituted a traffic jam. Now, the nearby interstates—the I-80 and the I-55—are swollen with semis at all hours of the day, while cataracts of trucks have spilled onto local highways and country roads. Potholes abound, and serpentine traffic jams have roiled residents. Trucks have backed over gravestones at the local cemetery after taking wrong turns. In 2016, a train derailed and hit a semi, throwing debris across the grounds of an elementary school, which was subsequently shuttered permanently for safety reasons. On the day I arrived, there were three accidents alone on I-80.

The inconvenience of a gridlocked infrastructure pales in comparison to the horror of increasingly commonplace traffic fatalities. In recent years, a pregnant mother was killed on I-80, and an eight-year-old girl was killed off highway 53. In 2014, a truck driver fell asleep at the wheel and killed five people on I-55. After a fatal accident outside the two newest Amazon fulfillment centers, cops had to take over traffic control during the afternoon shift change. "You think it would be a big news story," said Legrett, "but it happens all of the time."

The trucks unleashed the chaos of the global supply chain on what was once a provincial post.

Buss is responsible for the country and local roads around highway 53, a ribbon of four narrow lanes that connects the interstates with Elwood. Sometimes all four lanes will be occupied by baby blue Amazon trailers featuring the company's signature curved arrow, four immense white smiles all in momentary alignment. The facilities run 24 hours a day, and the three shift changes—morning, afternoon, and just before midnight—are particularly harried. Backups of hundreds of cars and semis are frequent. Municipalities have struggled to maintain the roads—one stretch of 53 was repaved three times last summer alone.

The turmoil has only been exacerbated by changes in the trucking industry, which has pivoted to an owner-operator model, relying on independent contractors over full-time employees. Oftentimes, truckers are paid per load—$50 to $70 to pick up a container from the Intermodal and drop it off at a warehouse. For independent contractors, responsible for their own gas and operating costs, speed is tantamount to profitability. A traffic jam can turn the trip from profit to loss. So truckers often take shortcuts down small residential roads, unequipped for weight and traffic, to shave valuable minutes off their commute. Sometimes they'll get stuck in narrow intersections. "No Trucks" signs are ubiquitous, but they've been of little use as deterrents.



A map of Elwood and its environs: 1) The Centerpoint Intermodal freight terminal, operated by BSNF; 2) the Union Pacific Global IV Intermodal; 3) a proposed warehouse facility, whose size and location are based on leaked projections; 4) the town of Elwood proper; 5) warehouses. Map by Siung Tjia

"Truckers are different than they used to be," Buss told me. "They're just some guy off the street who bought some junk truck." Later, we spotted a semi heading into a residential neighborhood, surging past "No Trucks" warnings. Buss flipped his lights on and sped to overtake the truck, swinging his pickup in front of it to bring it to a stop. "It's gonna be a problem trying to get him out of here," Buss grumbled. "There's no training now. Most of these guys don't know how to back up."

Sure enough, the escape proved challenging. As the driver pulled forward to line up a three-point turn, the truck teetered dangerously on the edge of the road. Buss had to get out and wave the driver through the process. Ten minutes later, the truck finally made its exit. "It's like this every day," Buss said. "Every day."

The only thing more common in Will County than the "No Trucks" signs are the hiring notices from temp agencies. The county is home to 99 in all—one of the highest concentrations of staffing agencies in the country. They share lofty, aspirational monikers, like Paramount, Accurate, and Elite. Amazon has its own preferred staffing agency: Integrity.

Temp agencies existed before the Intermodal came along—they played a crucial role in breaking the union stranglehold on labor in the Joliet Caterpillar plant. But the arrival of the logistics industry created a whole new market for temporary work. On the day I arrived, my hotel in Joliet was hosting a job fair for a staffing company called Geodis, which was looking for seasonal workers to help box Legos. After I inquired, they

told me they'd be willing to hire me on the spot and start me on Monday, provided I could lift 50 pounds. They asked me to sign a 90-day contract, "temp-to-hire," after which I'd be evaluated for a potential full-time role.

Antonio Suarez drove 45 minutes from the suburbs of Chicago for the opportunity to interview with Geodis. He was hired right away. "It seems too good to be true," he joked nervously. Suarez told me he was expecting to work 30 hours a week for Geodis, which would complement the 30 hours he was working as a special needs caregiver. He also worked part time for his mom's catering company, and was on his way to yet another gig delivering pizzas. He expected he would soon be brought on full-time by Geodis.

Larry Coldwater and his wife Julie are fifth-generation farmers. They worry that the diesel pollution affects their crops, and that neighboring farms will accept buyouts to make room for even more warehouses.

While "temp-to-hire" may sound promising, the latter stage of that progression can prove elusive. A full 63 percent of the warehouse workforce in Will County is temp labor or provided by staffing agencies. At a recent hearing in Joliet to deliberate the establishment of two new companies, one group claimed that only 23 of their 147 workers had been placed in permanent full-time jobs. "And that's their own data!" said Roberto Clack, associate director of Warehouse Workers for Justice, a Chicagoland advocacy group. "I'm not sure we believe it's even that high."

While Will County's reliance on temp labor force may seem extreme, it's part of a larger national trend. A 2016 study by Harvard and Princeton researchers dug into federal employment numbers and found that "94 percent of the net employment growth in the U.S. economy from 2005 to 2015 appears to have occurred in alternative work arrangements," which include temp workers, on-call workers, independent contractors, and freelancers.

In Will County, alternative work is gained haphazardly and with great effort. Prospective

After I inquired, they told me

workers use shuttle buses to skip from warehouse to warehouse because the cost of maintaining a car is often prohibitively expensive for temp laborers. (Sometimes workers will bike or walk, adding yet another element of danger to the area's beleaguered highways.) The first shuttle from Elite Staffing in Joliet leaves at 3:45 a.m. When I first stopped by Elite, there was a line of hopeful workers out front. I was offered the chance to work that night, but denied the chance to ride on the shuttle because there were 16 people for 14 seats and those were "for the less fortunate." A few days later, on Sunday morning, it was less crowded. The shuttle headed to the "cold stores," a series of heavily refrigerated food preparation warehouses in nearby Bolingbrook. The first stop was Greencore, the world's largest sandwich maker, preparing sandwiches for chains like 7-Eleven (Greencore recently agreed to sell its U.S. operations to Hearthside Food Solutions). The workers customarily don't know if there are hours for them until they arrive, but on this day all were given a shift.

> they'd be willing to hire me on the spot and start me on Monday, provided I could lift 50 pounds.

Charles Lovett worked for Elite Staffing for years, across multiple different facilities, often spreading condiments on sandwich bread or boxing A-1 steak sauce. He got into warehousing at the recommendation of his family—his aunt, cousin, and brother have all worked in warehousing. "Everyone goes in at some point," he told me.

For those who can't afford a car, the shuttle is a lifeline. But it can also be a burden. Sometimes, Lovett mentioned, the shuttle departed before workers had confirmed a shift, leaving them stranded at the facility for hours at a time. It was only in July that temp agencies became legally required to provide return transportation from warehouses. And though recent reforms require them to pay their workers for time spent in transit, collecting that money can be challenging. These frustrations led Lovett to finally quit. Now, he works in the Dollar Tree in Joliet, making $8.90 an hour.

Brandin McDonald, a 38-year-old African American with a stocky build and a scar under his left eye, grew up in Joliet, where he got into trouble as a kid. In ninth grade, he was thrown out of Joliet Central High School for fighting. He spent time in juvenile detention as a teenager and did two stints in jail in his twenties, disqualifying him from much full-time work. In his younger years, McDonald worked construction. But with a booming warehouse industry just down the road, he decided to try his hand at it.

The industrial expansion has not brought good jobs to Elwood. Charles Lovett, 25, was one of many to leave warehousing work after vainly seeking permanent full-time employment.

Between 2010 and 2014, he worked at the Wal-Mart facility in Elwood. There, he unloaded trucks and pallets, everything from light inventory, like artificial Christmas trees, to the unwieldy, like trampolines. That distinction was important, because McDonald, like many others, was paid not by the hour, but by the truckload. For 999 pieces unloaded, "you'd get $45, split between two people," he told me. Small objects could be unloaded in an hour or two, but bulkier items could take three to five hours.

He hung on at the same warehouse, but his employer wasn't Wal-Mart, historically one of the pioneers of subcontracting. As John Greuling, the CEO of the Will County Center for Economic Development, told me, "You'll not find one Wal-Mart employee" anywhere in Elwood. The facility is run by Schneider, a third-party logistics firm, which subcontracts further, sometimes to four or five staffing agencies at a time. That arrangement has chilled any prospects of union organizing. "Under the law they're legalized as five separate employers, you'd have to organize literally five separate companies at the same time," Clack explained.

In his estimation, McDonald worked for "at least six or seven" different temp agencies during his three-plus years at Wal-Mart. Sometimes his 90-day "temp-to-hire" contracts would expire, not to be renewed, or they'd be extended repeatedly with the promise of full-time employment on the horizon. Inability to serve last-minute, mandatory overtime resulted in termination and a place on the "DNR" (Do Not Return) list. Illinois is already an "at-will" state, meaning an employee can be dismissed for any reason, without cause, at any time.

As one official told me, "You'll not find one Wal-Mart employee" anywhere in Elwood.

When a contract ended with one temp agency, he'd seek work from another, and get sent right back to the same warehouse, in the same role. During a stint with one particular agency, he did not receive benefits, sick days, or paid vacation for a whole year. Raises were out of the question. He drove to the warehouse

every day just to find out if they had hours for him. At least he lived in Joliet: Some temp employees come from places as far as Chicago, southern Illinois, and Indiana, and can commute over an hour each direction.

With nearly 100 staffing agencies promising access to the same low-wage workforce, offering a competitive cost advantage to warehouses looking to staff up is nearly impossible. That pressure leads to corner-cutting of all sorts, which often includes wage theft, in the form of paying piece rates, skimping on hours, or having workers pay for their own drug tests, a process that was only recently outlawed. "How else are you going to cut costs?" posited Clack. "It's this race to the bottom mentality." McDonald ultimately filed a suit against Reliable Staffing for wage theft and won a couple thousand dollars in a settlement—but not before the agency tried to declare bankruptcy to avoid a payout. "That's what they do," he said, "they file bankruptcy so they don't have to pay people." (None of the staffing agencies contacted for this article responded to request for comment.)

Reliable eventually rebranded: It's now called Dependable Staffing Group. McDonald now works at Wendy's.

Elwood is now North America's largest inland port.

All Elwood's problems—the choking traffic, the precarious work conditions, the crumbling infrastructure—have been compounded by an original sin: the decision to forego tax collection. With little money coming in, the village issued bonds to finance the town hall, the gleaming new sidewalks, and the stop signs that are observed only voluntarily. "At the end of the day, it turns out they cut a very bad deal," Greuling told me. "They issued bonds for a water and sewer system that was too large. They built all of this capacity and now they have this huge debt. That's the next chapter: How are they going to find a way to retire this debt?"

Elwood, down $30 million and counting, isn't the only town in a hole. Neighboring towns wanted a piece of

the fast-burgeoning industry, and cut their own tax incentive deals with warehouse developers. Nearby Bolingbrook, where Weathertech, Ulta, and Goya Beans moved in, is now $200 million in debt. Romeoville, home to Sony and one of the county's five Amazon facilities, is $89 million in the red. "The area grew so rapidly that we lost the ability to regulate," said Jerry Heinrich, who continues to advocate for the region's prairie as head of the Midewin Tallgrass Prairie Alliance, a local environmental group. "There are a lot of hard feelings," Delilah Legrett told me. Elwood "was a small village and they were taken advantage of by a big corporation."

The numbers are extreme, but they're far from unusual. Despite research indicating that tax incentives rarely motivate corporate relocation, such deals are being doled out at record rates, tripling since 1990. This year, the town of Mount Pleasant, Wisconsin (population 26,000), famously borrowed hundreds of millions of dollars to help bankroll a $760 million incentive package to Foxconn, from which they wouldn't break even for some 30 years. Smaller, but no less ridiculous, deals pervade—in 2016, a town in Maryland offered Marriott $62 million to move its headquarters just five miles down the road.

By the time NorthPoint proposed creating what could amount to a third Intermodal, one that would bring a sprawling industrial park of 30-plus warehouses spanning Elwood and the neighboring village of Manhattan, the people of Will County had had more than enough of these development schemes. The developer promised a better deal, offering to make a one-time payment to Elwood to wipe out its towering debt. (It also claimed that this facility would bring the prosperity that the previous development had failed to deliver.) But closer examination of the paperwork showed that the company would've made that money back over time via the generous tax structure it was hoping to secure.

Even those promises did not assuage concerns. There were suspicions that the new facility would be hooked up to a rail line, resulting in the creation of a 270-degree perimeter of development around the town. "We would be totally boxed in," said Julie Baum-Coldwater, who began to worry that, at that point, her family farm could be targeted for eminent domain.

Frustrated residents began to organize in opposition. Legrett and a group of fellow objectors, none of whom had experience in political activism, founded the group Just Say No to NorthPoint. They started small, ten people in a town hall in Jackson Township. But they quickly made their presence felt. Members showed up in the dozens at village board meetings. They printed yard signs, circulated petitions and group emails. Their Facebook group swelled to a thousand members, building an explicitly nonpartisan coalition that included both avowed progressives and MAGA-hat wearers. (Elwood overwhelmingly voted for Donald Trump in the 2016 election.)

There were suspicions that the new facility would be hooked up to a rail line, resulting in the creation of a 270-degree perimeter of development around the town.

After the planning and zoning board recommended the project to the Village of Elwood board for final approval, Just Say No to NorthPoint upped its activity. They teamed up with environmental groups like the

Sierra Club and the Joliet branch of the worker advocacy group Warehouse Workers for Justice. They orchestrated demonstrations. "It was really impressive the way they built it," said Roberto Clack, whose organization got involved with the campaign in the last 12 months.

The group put pressure on local politicians. Elwood Village President Todd Matichak, who was careful not to take too firm a position on the development, resigned days ahead of the planning and zoning meeting in December 2017, after just eight months on the job. "I guess the seat just got too hot for him," said Jackie Traynere, a Will County Board Member from nearby Bolingbrook. The group also won the resignations of numerous pro-development Elwood board members. Finally, in April 2018, it was announced by interim President Doug Jenco that the project did not have enough votes to go through. The fallout was significant: Multiple board members left their posts, with one, who had proclaimed the NorthPoint development "a gift from God," selling his house and leaving the area altogether.

It was a major victory. "What happened was the community organized, they resisted and they won," Clack told me. "But there's a round two." Once news broke of Elwood's refusal, the developer submitted an application with the Will County board, hoping to override local authority. Hearings will begin again sometime in 2019.

As summer turned to fall, Just Say No to NorthPoint trained their efforts on the Will County board. They organized a climate march in September, where environmental activists from as far Chicago marched alongside Elwood's farmers to the BNSF facility, interrupting traffic in the process. The Coldwaters, who participated in the march, even sent a letter to Warren Buffett. "[T]he legacy you seek to leave behind by your generosity will, in reality, be tarnished by the personal hurt and damage done to others in the name of 'business,'" they wrote. So far, Buffett hasn't responded. (BNSF also declined to comment for this article.)

In early November, the city of Joliet rejected the applications for the two new staffing agencies it was considering, another small victory that would've seemed unthinkable a year ago. Nearby towns have begun negotiating better deals with warehouse developers. "A lot of people saw the campaign and then became empowered by it," said Stephanie Irvine, one of the founders of Just Say No to NorthPoint.

But when it comes to the long-term prospects for the region, optimism is scarce. Paul Buss's son, who works as a building inspector in Joliet, told his dad there's concern "these companies are gonna come in, they're gonna build these buildings, and they're gonna use them for however long they can get a tax break on them, and then they'll move someplace else." The threat of empty warehouses looms large.

So, too, does the threat of automation. In 2017, it was estimated that 20 percent of the work in any given Amazon warehouse is automated, a figure that is expected to rise. This fall, IKEA opened up a new warehouse, 1.5 million square feet in total. "Fully automated," John Greuling told me, it will have about 200 employees. Incredulous, I counted all the spots in the parking lot: 226.

Brandin McDonald told me he was concerned that they'd be left with a bunch of warehouses empty of people, terrible jobs having given way to no jobs at all. Legrett said she was worried about it, too. "What are

all these buildings going to look like in 10 years?" she asked.

Alexander Sammon is a reporter-researcher at *The New Republic.* @alex_sammon

Childress Exh 18

Sugar Grove Village Board approves TIF Study

Board discussed potential TIF projects

By NATALIE JUNS - editorial@kcchronicle.com
April 19, 2018

SUGAR GROVE – The Sugar Grove Village Board accepted a bid proposal from Moran Economic Development for a Tax Increment Financing study at the board's April 17 meeting.

The study is to determine if Crown Community Development would be eligible to establish a TIF district for the 260 acres of land they own surrounding Route 47 and Interstate 88, according to Walter Magdziarz, development director for Sugar Grove. This study will be funded by Crown and will cost up to $35,000; there is no cost associated with the village for this project.

"We recommended Moran's proposal for two reasons," Magdziarz said. "Moran is a true economic development consultant. That's all they do, and Moran has experience with many similar situations in other parts of Illinois. What Moran provides Crown is extensive economic development experience by finding solutions for complex financial problems."

Several potential TIF district projects were presented to the Village Board for its consideration during the meeting, according to Magdziarz. The projects discussed are for TIF District 1, located at Dugan Road and U.S. 30 to the west side of the Aurora Municipal Airport, and for TIF District 2, located on the east side of the Aurora Municipal Airport to US 30 to Galena Boulevard up to Wheeler Road.

"The Village Board was receptive to the suggested TIF projects," Magdziarz said. "We are going to move forward with the Airpark Drive resurfacing project. The board also wants us to investigate the likelihood of expanding the boundaries of one or both of the TIF districts to make them coterminous. Another high priority project is providing a crosswalk across U.S. 30 at Municipal Drive to connect the existing bike paths. We need

to make the TIF districts coterminous in order to fund this improvement as TIF District 2 isn't producing a lot of increment yet."

The other TIF district projects for TIF district 1 and 2 cover a wide variety of improvements related to extending sanitary sewer to the industrial parks along Dugan Road, establishing fiber optic infrastructure to the areas included in the TIF districts along with the addition of cell towers to increase and improve cell reception on the west side of the Aurora Municipal Airport, Magdziarz said.

Village Administrator Brent Eichelberger explained the reasoning behind the proposed TIF projects.

"[The] discussion is about the possibilities and the types of improvements that are needed to bring nonresidential development and the accompanying jobs, tax base and convenience," Eichelberger said.

In order to move forward with the projects discussed the Village Board will need to accept a bid proposal for the Airpark Drive resurfacing project and speak with a TIF consultant to obtain a bid proposal to create the same boundaries for TIF district 1 and 2, according to Magdziarz.

Childress Exh 18A

CITYLAB
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Cool deal: To renovate Chicago's Navy Pier, Mayor Rahm Emanuel used $55 million in TIF dollars—ostensibly meant for fighting blight. // Barry Brecheisen/Invision for Popsicle/AP Images

The Trouble With TIF

TANVI MISRA SEP 12, 2018

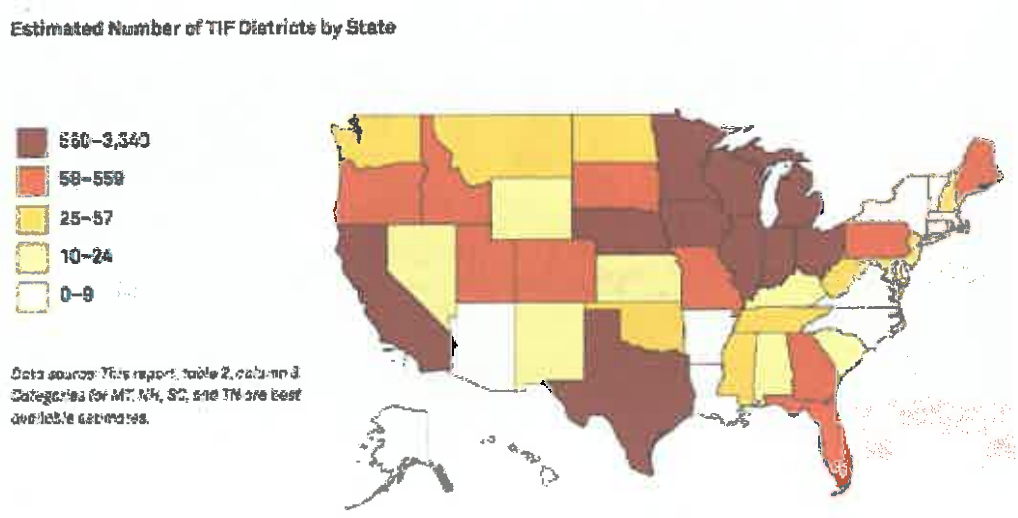
Cities love to use Tax Increment Financing to boost development. Should they?

Local governments often hail this tool as a way to revitalize investment-deprived neighborhoods, fix dilapidated roads, clean up polluted waters, revamp blighted property, and foster commercial activity and job creation. It's often poorly understood by city taxpayers, but it affects them in very real ways.

I'm talking about Tax Increment Financing (TIF), a popular mechanism meant to boost economic development. Its usage is widespread: Every state but one employs it, and it's a go-to move for many cities trying to revive struggling neighborhoods, especially in the Midwest. But how effective is it, really?

The answer, like life itself, is complicated. But David Merriman, a professor at the University of Illinois at Chicago, takes a stab at it in a new report for the Lincoln Institute of Land Policy. After reviewing available research on the implementation and impacts of TIF, Merriman concludes that the mechanism, while helpful in some ways, leaves a lot to be desired.

"In the end, it can be a valuable mechanism," he said. "It's not something I'd like to get rid of—but it deserves a lot of scrutiny because public sector dollars are being re-routed into a different task, away from general purpose funds."



(Lincoln Institute of Land Policy)

To understand what he means, let's first explain how TIF works: When a city designates an area as a TIF district, the property value of all the real estate within its boundaries at that time is designated as the "base value." This is the amount that, for a set amount of years after the fact, generates revenue through the city's property tax process. Everything over and above that, through an increase in value of existing real estate and new development in that time frame, goes into a separate fund earmarked for economic development.

It's economic development that, in a sense, pays for itself. But in practice, TIF doesn't always play out that way.

The city can then use this second pot of money to lure private investors with loans and subsidies for commercial projects, or to make public projects more attractive. Sometimes, private entities put money on a TIF district even before the revenue comes in, because they're anticipating revenue from economic development. The overall idea behind TIF is: By creating these districts, cities can spark new private-public partnerships and new economic activity in a region that may not otherwise see it, and by doing that, widen its tax base. It's economic development that, in a sense, pays for itself.

But in practice, TIF doesn't always play out that way. Critics often charge that it funnels money out of the taxpayers' pockets into a special fund that, by and large, works in a pretty opaque manner. While some of that money funds essential public works, much has also gone towards erecting new Whole Foods, renovating glitzy hotels, and building stadiums—the type of projects, one might argue, should not require such incentives. And the evidence Merriman analyzes suggest they may have a point. He shows that, in most cases around the country, the tool did not fulfill its main goal of boosting economic development.

"On average, [TIF] may be moving development from one part of the city to another, and changing the timing of the development, but there's not *more* development than would have otherwise been made," Merriman said.

In addition, this is a tool with several drawbacks. According to Merriman, TIFs might "capture" some tax revenue above the capped "base value" that may have been generated anyway through natural appreciation in property values if the TIF hadn't been created. This is money that taxpayers might have otherwise paid directly towards an overlapping school district, or for public services. And while TIF is not a direct tax increase, it may lead to higher rates or service cuts elsewhere, if the city plans on bringing in the same general property tax revenue as before TIF.

"If property taxes are higher—if the rates are higher—then the TIF money has come of the taxpayer's pocket," Merriman said. "It's a diversion in that way."

In other words, TIF doesn't exist in a vacuum. Like other tax incentive programs, it may have the adverse affect of creating competition between neighboring jurisdictions in a way that is not always beneficial—all for outcomes that are mixed, at best.

Perhaps the biggest concern with TIF, though, is that of transparency, because of the way this mechanism effectively bypasses the public municipal budget process.

"Once a TIF is created, the operation of a TIF receives less scrutiny than other spending," Merriman said.

Take Chicago, where a whopping $660 million—a third of the city's property taxes—go into its many TIF districts. Back in 2009, *Chicago Reader*'s Ben Javorsky and Mick Dumke called TIF spending a "shadow budget." They uncovered documents revealing how the administration of then-Mayor Richard M. Daley used TIF money to revamp skyscrapers and dole out subsidies to large corporations in deals made behind closed doors. Not a lot appears to have changed since then: In 2017, an investigation by *Crain's Chicago Business* and the Better Government Association found that under Mayor Rahm Emanuel, $55 million in TIF dollars—ostensibly meant for fighting blight—were spent to renovate Navy Pier, a glitzy waterfront tourist attraction.

But TIF is good for sparking public-private partnerships that may help fund useful infrastructure that may not otherwise be appealing to investors, such as raising the height of a bridge tunnel so it can carry large trucks, for example. In the report, Merriman recommends several ways to use this tool more effectively, and make it easier for policymakers and researchers to evaluate. Most important: Cities needs to be more transparent about how they are using TIF. It's not a magic free-money generator.

"It's a concern about why those decisions are being made," he said, "and why there's a public subsidy for development that might have occurred even without the subsidy."

About the Author

Tanvi Misra

@TANVIM / FEED

Tanvi Misra is a staff writer for CityLab covering immigrant communities, housing, economic inequality, and culture. She also authors Navigator, a weekly newsletter for urban explorers (subscribe here). Her work also appears in *The Atlantic*, NPR, and BBC.

Childress Exh 19

Spring start set for work on I-88 interchange at Route 47

Project bids lower than estimated $25 million

By MARTHA QUETSCHEmail
Nov. 30, 2018

An intergovernmental agreement is paving the way for a long-awaited transportation project that will provide access to and from the east at Route 47 and Interstate 88 in Sugar Grove as soon as next fall.

The Sugar Grove Village Board on Nov. 20 authorized the agreement with the Illinois Tollway Authority, IDOT and Kane County, which must approve it before the project can proceed.

Good news for all four entities was that construction bids recently came in lower than expected, so the project cost will be significantly lower than the original estimate of $25 million, village officials announced at the board meeting.

"Due to timing, [the village, IDOT, the tollway authority and the county] were able to save $5 million on the project – $250,000 for the village," Sugar Grove Village President Sean Michels said.

The board approved village funding for up to $1.25 million of the interchange project cost.

Michels said construction will begin in April, and the new ramps will be open in November 2019.

The interchange project also will rehabilitate the bridge over the tollway in Sugar Grove and realign the existing ramps constructed in the early 1970s, which only provide for travel to and from the west at Route 47.

The interchange improvements are expected to be a boon for the local economy and a huge benefit for drivers who currently must use interchanges in Aurora on Orchard

Road, Route 31 and Eola Road to access I-88.

Of the total cost of the project, the tollway will provide 60 percent, and IDOT will contribute up to 25 percent, with the county paying 10 percent and Sugar Grove covering 5 percent.

Sugar Grove village officials are working with a local property developer to fund 50 percent of the village's share and plan to fund the remaining half through the municipal roadway maintenance fee.

The village already has funded the cost of preliminary design and engineering studies for the interchange improvements, as required by the tollway authority.

Chilares Exh 20

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1 Macom Dr - Warehouse for Lease

Dekalb, Illinois

Status:	For Lease
Price:	Rent Upon Request
Property Type:	Industrial
Sub-Type:	Industrial
Spaces:	1 Space
Space Available:	1,998,865 SF
Building Size:	1,998,865 SF

204 N 4th St - Warehouse for Lease

Dekalb, Illinois

Status:	For Lease
Price:	$0.25 /SF/Mo
Property Type:	Industrial
Sub-Type:	Retail, Industrial
Spaces:	2 Spaces
Space Available:	5,000 - 60,000 SF
Building Size:	60,000 SF

711 Fairview Dr - Warehouse for Lease

DeKalb, Illinois

- 48,892 s.f. total - 45,792 s.f. warehouse 3,100 s.f. office space - 28' ceiling height - 5 existing exterior loading doors (expandable to 9) -...

Status:	For Lease
Price:	$0.38 /SF/Mo
Property Type:	Industrial
Sub-Type:	Industrial
Spaces:	1 Space
Space Available:	48,892 SF
Building Size:	161,542 SF

Macom Dr - Warehouse for Lease

Dekalb, Illinois

Status:	For Lease
Price:	Rent Upon Request
Property Type:	Industrial
Sub-Type:	Industrial
Spaces:	1 Space
Space Available:	100,000 - 570,000 SF
Building Size:	570,000 SF

1250 Macom Dr - Warehouse for Lease

DeKalb, Illinois

Status:	For Lease
Price:	Rent Upon Request
Property Type:	Industrial
Sub-Type:	Industrial
Spaces:	1 Space
Space Available:	327,360 SF
Building Size:	327,360 SF

001 Macom Dr - Warehouse for Lease

Dekalb, Illinois

Status:	For Lease
Price:	Rent Upon Request
Property Type:	Industrial
Sub-Type:	Industrial
Spaces:	1 Space
Space Available:	761,600 SF
Building Size:	761,600 SF

17170 US Highway 30 - Warehouse for Lease

Hinckley, Illinois

3,350 square foot space available. Very usable shop/warehouse space. Heated floors, heavy power. Good access East and West along US Route 30. US...

Status:	For Lease
Price:	$0.69 /SF/Mo
Property Type:	Industrial
Sub-Type:	Industrial
Spaces:	1 Space
Space Available:	3,650 SF
Building Size:	14,805 SF

421-469 N California St - Warehouse for Lease

Sycamore, Illinois

Approximately 60,000 square feet of industrial space for lease. Could be subdivided. 184,460 SF are contiguous. Heavy power; in excess of 4,000...

Status:	For Lease
Price:	$0.27 - $0.50 /SF/Mo
Property Type:	Industrial
Sub-Type:	Industrial
Spaces:	5 Spaces
Space Available:	9,740 - 288,566 SF
Building Size:	657,813 SF

1730 Afton Rd - Warehouse for Lease

Sycamore, Illinois

Status:	For Lease
Price:	$0.79 /SF/Mo
Property Type:	Industrial
Sub-Type:	Industrial
Spaces:	1 Space
Space Available:	2,700 - 5,400 SF

Building Size: 16,000 SF

228 W Page St - Warehouse for Lease
Sycamore, Illinois
30,000 square foot warehouse space available for lease. 14 foot ceilings and loading dock door. Heavy Power.

Status:	For Lease
Price:	$0.27 - $0.50 /SF/Mo
Property Type:	Industrial
Sub-Type:	Office, Industrial
Spaces:	2 Spaces
Space Available:	5,000 - 35,000 SF
Building Size:	86,000 SF

1

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88 PARK EIGHTY EIGHT

DEKALB, ILLINOIS

LAND SITES FROM 5-120 ACRES
BUILDINGS FROM 50,000-2,000,000 SQUARE FEET

DEVELOPERS:
VENTURE ONE REAL ESTATE, LLC
CLAYCO

EXCLUSIVE AGENTS:
Jason West, SIOR | jason.west@cushwake.com | 847.518.3210
Sean Henrick, SIOR, CCIM | sean.henrick@cushwake.com | 847.518.3215
Michael Magliano | michael.magliano@cushwake.com | 847.518.3259
CUSHMAN & WAKEFIELD

IN COLLABORATION WITH:
Steve Milner, SIOR | 815.758.2100
Denise Weinmann, CCIM | 815.758.2100
RVG

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CUSHMAN & WAKEFIELD

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Childress Exh 21

88 PARK EIGHTY EIGHT

LAND SITES FROM 5-120 ACRES

BUILDINGS FROM 50,000-2,000,000 SQUARE FEET

FOR SALE, LEASE OR BUILD-TO-SUIT

- SITES AVAILABLE FROM 5-120 ACRES
- BUILDINGS FROM 50,000 - 2,000,000 SF
- UNION PACIFIC RAIL AVAILABLE
- PAD-READY SITES FOR QUICK DELIVERY
- UNIQUE SITE FOR UP TO 2,000,000 SF
- IMMEDIATE ACCESS TO I-88
- PEACE ROAD & I-88 (4-WAY INTERCHANGE)
- I-39 LOGISTICS CORRIDOR DIRECTLY LINKS I-88, I-80, I-90, I-55, I-57 & I-74
- NEIGHBORS INCLUDE GOODYEAR, NESTLE, 3M, TARGET AND PANDUIT
- COOPERATIVE AND BUSINESS FRIENDLY COMMUNITY
- DEKALB TAYLOR MUNICIPAL AIRPORT (DKB) - CORPORATE & CARGO JET SERVICE

ECONOMIC OVERVIEW

TAX INCENTIVES

- BUILD-TO-SUITS QUALIFY FOR TAX ABATEMENT

FOREIGN TRADE ZONE #176 BENEFITS

QUALITY LABOR FORCE

- 4,9 9,968 POPULATION WITHIN 50 MILES
- UNEMPLOYMENT RATE OF 8.57%
- 227,000 + AVAILABLE WORKERS
- AVERAGE HOUSEHOLD INCOME $84,265
- NIU WORKFORCE

DEVELOPERS:

Clayco-Venture One Development Services

VENTURE ONE REAL ESTATE, LLC

CLAYCO

EXCLUSIVE AGENTS:

CUSHMAN & WAKEFIELD

Jason West, SIOR | Jason.west@cushwake.com | 847.518.3210
Sean Henrick, SIOR, CCIM | sean.henrick@cushwake.com | 847.518.3215
Michael Magliano | michael.magliano@cushwake.com | 847.518.3259

IN COLLABORATION WITH:

Steve Milner, SIOR | 815.758.2100
Denise Weinmann, CCIM | 815.758.2100

RVG

Chilaires Exh 22

DeKalb extends tax abatement program

By KATIE DAHLSTROM - kdahlstrom@shawmedia.com
Sept. 30, 2014

DeKALB – Big companies will continue to receive a tax break for locating in DeKalb after all the city's taxing bodies agreed to extend a tax abatement agreement through 2015.

DeKalb District 428 school board members were the final group of officials to approve the extension, which they did during a special meeting Tuesday morning, the day the abatement agreement was set to expire.

"It wasn't our intent to stand in the way of any economic development," school board President Tracy Williams said. "But we had to know how it would impact us."

The agreement provides tax incentives for large businesses that come to or expand in DeKalb as long as they follow certain criteria on building size, number of jobs and wages. Industrial, logistic and highly skilled, research-oriented companies that create at least 20 full-time jobs and meet a set of conditions outlined in the agreement can save on property taxes for the first five years after they either expand in DeKalb or move there.

Local taxing bodies abate 90 percent of property taxes in the first year a company is open, with the abatement decreasing in the following years.

The school district alone has abated more than $2.6 million in property taxes, though Assistant Superintendent of Business and Finance Andrea Gorla said the abatement is offset some by state funding. The district also sees increased property values, Gorla said.

Companies including 3M, Target, Panduit and Right Pointe have taken advantage of the agreement since the City Council last updated it in 2010.

Paul Borek, executive director of the DeKalb County Economic Development Corporation, said tax abatement has been critical in attracting more than 1,200 new jobs and millions of dollars in tax revenue since 2006.

"Without this agreement," Borek said, "we might not have realized the Target distribution center and the two newest 3M facilities. There was competition from other communities."

Extending the agreement will give DeKalb County and DeKalb County Economic Development Corporation leaders time to apply for enterprise zone status, which would give businesses tax breaks to move or expand within the zone's boundaries. Borek said a tax abatement program that would replace the existing one will be included in the enterprise zone application.

The application is due to the state by Dec. 31. Local officials expect the state designations will be awarded by September 2015 and go into effect in 2016.