

**Court of Appeals, State of Michigan**

**ORDER**

David Sinclair v City of Grosse Pointe Farms

Michael J. Talbot, C.J.  
Presiding Judge

Docket Nos. 319317; 319318; 319319; 319368; 319370; 319371

William B. Murphy

LC Nos. 11-011115-NZ; 13-007152-NZ; 13-007151-NZ;  
13-007154-NZ; 13-007156-NZ; 11-015209-NZ

Elizabeth L. Gleicher  
Judges

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The Court orders that the June 4, 2015 unpublished per curiam opinion is hereby AMENDED to correct a clerical error. The last paragraph found on page 24 of the majority's slip opinion now reads:

"We reverse in part the circuit court's grant of summary disposition in docket numbers 319317, 319318 and 319319, as explained in this opinion, affirm in part the circuit court's denial of summary disposition in docket numbers 319368, 319370 and 319371, as explained in this opinion, and remand for further proceedings."

In all other respects, the June 4, 2015 opinion remains unchanged.



A true copy entered and certified by Jerome W. Zimmer Jr., Chief Clerk, on

JUN 05 2015

Date

*Jerome W. Zimmer Jr.*  
Chief Clerk

**STATE OF MICHIGAN**  
**COURT OF APPEALS**

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DAVID SINCLAIR,

Plaintiff-Appellant,

v

CITY OF GROSSE POINTE FARMS,

Defendant-Appellee,

and

DETROIT WATER AND SEWERAGE  
DEPARTMENT,

Third-Party Defendant.

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UNPUBLISHED

June 4, 2015

No. 319317

Wayne Circuit Court

LC No. 11-011115-NZ

GLORIE STONISCH, JORGE STONISCH,  
ZENON KOSSACK, EUGENIA KOSSACK,  
MICHELENE LEPCZYK, and JAMES  
LEPCZYK,

Plaintiffs-Appellants,

v

CITY OF GROSSE POINTE FARMS,

Defendant-Appellee.

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No. 319318

Wayne Circuit Court

LC No. 13-007152-NZ

KAREN ALLISON *et al.*,

Plaintiffs-Appellants,

v

CITY OF GROSSE POINTE FARMS,

Defendant-Appellee.

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No. 319319

Wayne Circuit Court

LC No. 13-007151-NZ

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EDWARD ABRAHA *et al.*,

Plaintiffs-Appellees,

v

CITY OF GROSSE POINTE FARMS,

Defendant-Appellant.

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No. 319368  
Wayne Circuit Court  
LC No. 13-007154-NZ

LAWRENCE BOURBEAU, MARY  
BOURBEAU, CLARINDA RAY, RICHARD  
RAY, GLORIE STONISCH, and JORGE  
STONISCH,

Plaintiffs-Appellees,

v

CITY OF GROSSE POINTE FARMS,

Defendant-Appellant.

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No. 319370  
Wayne Circuit Court  
LC No. 13-007156-NZ

LAWRENCE CHOLODY, TARA CHOLODY,  
VICTOR KOPPANG, and MARY KOPPANG,

Plaintiffs-Appellees,

v

CITY OF GROSSE POINTE FARMS,

Defendant-Appellant.

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No. 319371  
Wayne Circuit Court  
LC No. 11-015209-NZ

Before: TALBOT, C.J., and MURPHY and GLEICHER, JJ.

PER CURIAM.

Heavy rain fell on the City of Grosse Pointe Farms during the morning of May 25, 2011. A large volume of storm water rapidly entered the City's sewer system. When a series of brief

electrical outages brought the City's wastewater pumps to a halt, raw sewage backed up into hundreds of homeowners' basements.

History repeated itself on September 9, 2011, when a second major storm swept through the City. Once again, intense rainfall threatened to overtax the wastewater pumping plant. And once again, an electrical problem stopped the pumps, resulting in hundreds of sewage-flooded basements.

The plaintiffs in docket numbers 319317, 319318, and 319319 filed suit against the City seeking compensation for the May sewage event. The plaintiffs in docket numbers 319368, 319370, and 319371 demanded redress for the September basement flooding. Governmental immunity generally shields cities from tort suits such as this. Under the "sewer disposal system event" exception to the Governmental Tort Liability Act, MCL 691.1416 *et seq.*, however, recovery may be obtained if a plaintiff proves a systemic "defect" that was known or should have been known to the governmental agency that owned or operated the sewer system, that the governmental agency failed to remedy the defect, and that the defect served as a "substantial proximate cause" of the claimed damages.

After the parties engaged in substantial discovery, the City moved for summary disposition based on governmental immunity. The City contended that plaintiffs failed to establish material questions of fact concerning whether the sewer system had any defects known to the City, and whether the alleged defects proximately caused the flooding. The circuit court granted summary disposition in the first-filed cases and denied it in the second wave of suits. This Court consolidated all six cases on appeal. Because material fact questions precluded summary disposition in both cases, we reverse in part, affirm in part, and remand for further proceedings.

## I. BACKGROUND FACTS AND PROCEEDINGS

### A. THE GROSSE POINTE FARMS' SEWER SYSTEM: AN OVERVIEW

The City's sewer system consists of two somewhat independent elements: the Lakeside system, and the Inland system. The Lakeside system handles sewage and rainfall accumulating near the City's border with Lake St. Clair. The Inland system collects sewage and rainfall from an area west of Ridge Road, and also receives sewage from the Lakeside district. Although this case involves basement flooding primarily within the Inland system territory, a review of both sewer systems' historical development provides necessary context.

For many years, the Inland and Lakeside districts employed "combined" sewer systems in which rainwater and raw sewage collected and commingled in the same pipes. During heavy rains, the Lakeside system discharged overflows containing this mixture directly into Lake St. Clair. In 1990, the United States Environmental Protection Agency (EPA) ordered the City to develop a plan to prevent sewage from flowing into the lake. By 1997, the City had not entirely eradicated the discharges, as "untreated combined sewage" continued to enter the lake during some rain events. That year, the City and Michigan Department of Environmental Quality (DEQ) entered into an Administrative Consent Order obligating the City to undertake further efforts to prevent future lake overflows. The City elected to abate the pollution problem by

separating the Lakeside sewers into a storm water collection system and a sewage collection system. Once the sewers were divided, rainfall and surface water that accumulated within the Lakeside system continued to occasionally discharge into Lake St. Clair, while raw sewage from the Lakeside district now flows to the Inland System.

The City maintained the design of the Inland system as a combined sewerage unit. Raw sewage and rainwater continue to mix and travel together in the same Inland system pipes, via gravity, to a pumping station located on Kerby Road. Pumps at the Kerby Road Pumping Station (KPS) lift the wastewater from an underground collection pit, called a wet well, and propel it to a nearby drain enclosure called Fox Creek.<sup>1</sup> From Fox Creek, the wastewater travels to a Detroit Water and Sewerage Department treatment plant.

During storm conditions, combined sewer systems must contend with the risk that the volume of water entering the pipes will exceed the pumps' ability to lift it from the wet well. When this occurs, the excess wastewater must go somewhere. One option is a "relief valve" called a combined system overflow (CSO). CSOs are designed to discharge excess wastewater into a river, lake, or other receptacle. Lake St. Clair continues to function as a CSO for the Lakeside district despite that the sewers have been separated. Now, however, only storm water enters the lake, as sewage flows to the Inland district.<sup>2</sup>

The plaintiffs' basements serve as CSO for the Inland district.<sup>3</sup> The 1997 Administrative Consent Order required the City to address this problem by confirming the system's ability to transport, "at a minimum," the volume of combined sewage and rainwater that would be expected during a "10-year, 1-hour storm event, without creating basement flooding." A 10-year storm refers to rainfall totals that have a 10 percent probability of occurring at that location in a given year, during a one-hour long torrent. The City was further directed to analyze flow volumes for a 25-year, 24-hour storm event, which by definition have a four percent per year

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<sup>1</sup> Thomas Biehl, an engineer who participated in the design of the City's sewer system, testified at his deposition to the existence of "wet wells" at the KPS. Whether there is one wet well or more than one is unclear. Because other witnesses referred to "the wet well," we will assume only one wet well is of consequence to this case.

<sup>2</sup> The City's 2004 "Project Performance Certification" for the Lakeside sewer separation project asserts that the system can safely (without overflow) convey a capacity consistent with a 25-year design storm. Nevertheless, the certification document's authors added that it was impossible to "bulkhead" all of the system's overflows into the lake, "since it could result in basement flooding for storms which exceed the system design storm."

<sup>3</sup> A 1947 study of the City's sewer system performed by Hubbell, Roth & Clark (HRC), acknowledged that basement flooding "now occurs," and offered several recommendations, including the purchase of two new pumps capable of pumping at a rate of 165 cubic feet each second (CFS). These pumps, now known as pumps seven and eight, were added several years later.

probability. The term “design storm” similarly refers to the rain volume that may confront a wastewater system.

The City retained HRC to conduct a study of the Inland district “to meet the requirements of the Administrative Consent Order.” The HRC study evaluated the Inland district’s combined sewer system and, as also required by the Consent Order, provided a hydraulic model of the system using design storm data. HRC produced the modeling based on information generated by metering wastewater flows through the Kerby Road Interceptor, the main sewer serving the Inland system. As stated in HRC’s report, “[t]he primary purpose of the metering was to evaluate peak dry weather flow during high groundwater (late spring) conditions, and evaluate the impact of various storm events on wet weather interceptor flows.” The data obtained, the report continued, “assisted in determining conditions that cause overflows and evaluating system performance and capacities.”

Not surprisingly, the report revealed that the level of material in the sewer and the rate of flow through the Kerby Road Interceptor increased “with surcharge conditions developing following a 1” per hour rainfall intensity event.”<sup>4</sup> With a 10-year, 1-hour event, the report estimated a peak flow rate of 554 CFS. In the 25-year event, the model estimated a peak flow rate of approximately 600 CFS. In 2004, HRC certified to the DEQ on behalf of the City, “there is sufficient capacity in the Kerby Road Interceptor . . . to convey the 25 year frequency - 24 hour duration storm event.”

## B. THE KERBY ROAD PUMPING STATION

The KPS is equipped with eight pumps. Pumps one and two are used during periods of dry weather. Each is capable of pumping at a rate of 4.5 CFS. As the level of wastewater in the wet well rises, an automated system activates additional pumps in sequence. Pumps three, four, five, and six are more powerful than the dry weather pumps, with respective capacities of 12, 24, 75 and 100 CFS. When pump six activates, an automated system notifies City employees; the station is unmanned until City personnel arrive in response to this notification. Pumps seven and eight serve as the storm pumps and were added to the station in 1954 to alleviate basement flooding. Each pumps at a rate of 165 CFS. When all eight pumps are working together, the KPS theoretically can transport wastewater at a rate of 550 CFS. As later discussed in greater detail, this pumping capacity arguably falls short of that needed to handle either a 10-year or a 25-year design storm.

Two separate power lines, known as 32T and 191T, provide electrical power to the pumps. Line 32T emanates from a DTW substation on Mack Avenue, and line 191T starts from a substation called “Erin.” Both lines 32T and 191T pass through a single DTE substation located in Grosse Pointe, where transformers reduce each line’s output from 24,000 volts to 4,800 volts. Line 32T powers pumps one, two, seven, and eight, as well as the KPS control

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<sup>4</sup> According to the report, a 10-year, 1-hour event involves 1.75 inches of rainfall in a uniform distribution. A “surcharge condition” occurs when the pipes fill to an extent that requires pumping to prevent overflow.

panel. The remaining pumps are powered by line 191T. If either line loses power, an automatic switching mechanism transfers power to the functional line. At the time of the events in question, however, the switchgear was programmed to delay any transfer of power for 10 to 20 seconds after a power outage. Thus, momentary power interruptions did not trigger a power-line shift. Additionally, the control panel received power only from line 32T. As a result, if line 32T lost power, the control panel shut down. The control panel's incapacitation would immediately stop all the pumps, including those powered by line 191T.

When a pump loses power, it winds down before coming to rest. The larger the pump, the longer it takes to wind down. Likewise, when a pump is reenergized, time elapses before the pump regains its full pumping strength. According to Scott Homminga, the KPS superintendent, the two large storm pumps wind-down when deenergized, and then require approximately three minutes to recover full pumping capacity. Thus, even a momentary power failure may knock a large pump out of service for five minutes or more.

The parties agree that a series of published standards known as "The Ten States Recommended Standards for Wastewater Facilities," promulgated in 2004, apply to the KPS. The Ten States Standards were first published in 1951 by a committee formed of representatives of 10 states in the Great Lakes and Upper Mississippi regions. The Foreword to the lengthy document states in relevant part: "These standards . . . are intended for use as a guide in the design and preparation of plans and specifications for wastewater facilities insofar as these standards are applicable to normal situations for an individual project."

Ten States Standard 42.3 addresses pumps. Paragraph 42.31 necessitates that "[m]ultiple pumps shall be provided." The standard continues, "Units shall have capacity such that, with any unit out of service, the remaining units will have capacity to handle the design peak hourly flow." The Ten State Standards also specify that in emergency situations,

pumping capability shall be accomplished by connection of the station to at least two independent utility substations, or by provision of portable or in-place internal combustion engine equipment which will generate electrical or mechanical energy, or by the provision of portable pumping equipment. Such emergency standby systems shall have sufficient capacity to start up and maintain the total rated running capacity of the station. [Ten States Standard 47.2.]

The KPS's electrical configuration and pumping capacity are at the heart of plaintiffs' defect claims in both cases.

### C. THE FIRST STORM: MAY 25, 2011

On May 25, 2011, the City experienced rainfall equivalent to a 10-year, 12-hour storm.<sup>5</sup> Between 10:00 a.m. and 11:00 a.m., KPS's maintenance foreman, Daniel Chauvin, received an automated alarm call signaling that pump six had energized. When he arrived at the KPS, Chauvin observed that all eight pumps were operating, and that wet well level was 12 feet. Five to ten minutes later, a momentary electrical event, which Chauvin called "an Edison bump," shut down all eight pumps. Chauvin recounted that when the KPS lost power, the wet well level quickly rose to "20, 21, 22, 23 feet." At this level, basements may flood. When the power returned, pumps one through six automatically restarted, coming on in sequence. Pump eight did not automatically restart. Chauvin reset its circuit breaker and pump eight came back online.

The power failed again two to five minutes later, stopping all eight pumps. As before, pumps one through six automatically restarted in order, while Chauvin had to reset the circuit breaker for pump eight. Approximately three to five minutes after the second outage, all eight pumps were back online. But within minutes, two additional "Edison bumps" occurred, each silencing the pumps for a period of time. After the last event, Chauvin elected not to reset the breaker for pump eight because he believed that an electrical problem within that pump had repeatedly tripped the breaker. According to a subsequent report prepared by HRC, "the pumps may have been running at less than full capacity for 10-15 minutes." With seven pumps restored to electrical life, the wet well water level decreased. The pumps continued to run without interruption through the remainder of the storm.

According to Chauvin, the automatic switching mechanism never activated during the power outages. An HRC-generated document subsequently confirmed: "The Station's electrical power did not switch over to the other primary Detroit Edison line and all of the pumps stopped."

The City contracts with Colville Electric Company, L.L.C., for electrical repairs to the KPS. Several months before the May storm, Colville removed the "surge arresters/capacitors" on pump eight because they were defective. New parts had been ordered, but had not arrived by the time of the May storm. After the storm, Colville determined that "the lightning arrester for line 32T was blown out." According to an affidavit signed by James Colville, "The blown lightning arrester, along with several blown fuses, evidences that a high-voltage surge came into the pump station."

### D. THE SECOND STORM: SEPTEMBER 9, 2011

During the evening of September 9, 2011, another large storm struck the City. The automatic alarm notified Chauvin that pump six had activated. Chauvin was camping in Holly, and notified Homminga of the rising wet well level. On his way to the KPS, Homminga learned that 40 basements had flooded.

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<sup>5</sup> The City contends that the event was a 100-year storm. Plaintiffs proffered a report prepared by Genesis Weather Solutions which states otherwise. Because we must view the facts in the light most favorable to plaintiffs, we have accepted that the May storm was a 10-year event.

Homminga arrived at the KPS at approximately 12:15 a.m. He discovered that all eight pumps were dead and that the wet well level exceeded 20 feet. Within ten minutes, Homminga was able to get pumps one through six back online. But when he tried to start pump seven, the power to all the pumps “shut down again.” Homminga believed that a “surge arrestor” for pump seven had “short-circuited.” According to Chauvin, Homminga did not try to start pump eight because he knew that its surge arrestor was “blown” and was awaiting replacement. Chauvin arrived and started pump eight despite that it had no functioning surge arrestor. The wet well level rapidly subsided.

HRC’s subsequent investigation revealed that two power surges emanating from line 32T had occurred, each lasting 20 seconds. The first surge, at approximately 11:48 p.m. on September 9, stopped all the pumps. In this sense, the event duplicated what happened in May. The record is not entirely clear what happened next. Plaintiffs assert that after the initial power surge, pumps one through six automatically restarted, but pumps seven and eight did not. The parties agree that at approximately 12:11 a.m. on September 10, a second surge “blew out” fuse FU-2 on the pump control panel. The pumps had not restarted by 12:15 a.m., when Homminga arrived. According to HRC, a “[p]ower surge taking out control fuse FU-2 and the surge protector for storm pump no[.] 7 was critical and prevented the pumps from re-starting automatically.”<sup>6</sup>

Further evidence regarding the cause of the September basement flooding is located in a September 2011 grant proposal to the DEQ seeking funds for a study of the Inland system. The request summarized the September event as follows:

Grosse Pointe Farms experienced several large storms in Summer, 2011 with two (2) events resulting in basement flooding in the Inland Sewer District affecting between 300-400 homes. The most recent flooding incident occurred on September 10, 2011. A substantial rainfall event occurred along with reported lightning and a power surge was experienced at the [KPS] on the Primary Feed 32-T from Detroit Edison. The [KPS] had electrical issues and an apparent failure of the [KPS] switchgear, the cause of which is unknown and under investigation at this time. The [KPS’s] electrical power did not switch over the other primary Detroit Edison line and all of the pumps stopped. The [KPS] is not equipped with an emergency generator large enough to run the large storm pumps. Operators arrived at the [KPS] due to a high water alarm and manually reset the system. By this time, high water had caused widespread basement flooding.

The DEQ responded to the grant request in relevant part:

The September 10, 2011 event being caused by a power failure is not a collection system problem but a pump station backup power system failure. We

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<sup>6</sup> Apparently a video taken at the pump station displays the control panel and the time of the various outages. The parties did not provide this Court with a copy of the video. We have used the times provided in the affidavits of Homminga and Marvin Olane.

therefore fail to see how an evaluation of the entire inland district to develop a hydraulic model addresses this issue. Any plan must include evaluation of the power backup system for the [KPS]. GPF must solve electrical, mechanical, and availability issues at this pumping station.

#### E. THE LAWSUITS AND THE EXPERT WITNESSES

Plaintiffs seeking damages from both flooding events filed suit against the City under the “sewage disposal event” exception to the governmental immunity act, which is set forth in MCL 691.1416 through MCL 691.1419. The purpose of this exception is “ ‘[t]o afford property owners, individuals, and governmental agencies greater efficiency, certainty, and consistency in the provision of relief for damages . . . caused by a sewage disposal system event. . . .’ ” *Willett v Waterford Twp*, 271 Mich App 38, 48; 718 NW2d 386 (2006) (alterations in original), quoting MCL 691.1417(1).

Plaintiffs retained a number of experts to investigate and analyze the causes of the basement flooding. According to plaintiffs, five categories of defects caused the May flooding: (1) lack of sufficient pumping capacity, (2) improperly configured electrical power, (3) the absence of an “emergency outlet,” (4) electrical problems with pump eight, and (5) “improper operation and maintenance.” For the most part, plaintiffs invoked the same defect allegations in the September cases. On appeal, plaintiffs rely on affidavits and deposition testimony submitted by three experts: James Heyl, an electrical engineer, Louis VanLiere, a civil engineer who has designed a number of wastewater pumping and treatment facilities, and Rick Arbour, a civil engineer with extensive experience in the operation and maintenance of sewer systems and pumping stations.<sup>7</sup>

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<sup>7</sup> Arbour was not deposed. Plaintiffs submitted his affidavit to the circuit court shortly before the summary disposition hearing. Over the City’s objection, the circuit court considered it. The propriety of that decision has not been raised on appeal. Plaintiffs also submitted snippets of deposition testimony provided by Michael Williams, a civil engineer.

The dissent accuses us of having neglected to “explain how the case developed in the trial court,” and criticizes that we failed to include in our opinion the now-discarded liability theories developed early in the litigation. Our dissenting colleague devotes several pages to an exegesis of how plaintiffs’ experts’ opinions changed over time. The dissent fails to acknowledge, however, two critical facts. First, only the City and its agents had access to the pumping station during the days after the storms. The City, and only the City, was positioned to investigate what happened and to marshal a factual explanation for the flooding. Second, as discussed in footnote 8 within, the City and its agents provided plaintiffs with information regarding the KPS’s electrical functioning that later proved completely inaccurate. Accurate information was produced relatively late in the game, after plaintiffs’ experts had been deposed. Given that the City “hid the ball,” likely inadvertently rather than deliberately, plaintiffs had no option but to submit the City’s new factual account to their experts for renewed consideration.

The City retained as experts two engineers employed by HRC, the company that assisted the City with the design of its sewer system in the 1940s, and the redesign in the 1990s. Marvin Olane is an electrical engineer, and Thomas Biehl is a civil engineer. We turn to a summary of the expert testimonies regarding the defects alleged for each event.

## 1. THE MAY FLOODING

### a. Pumping Capacity

Both Arbour and VanLiere opined that the KPS lacked adequate pumping capacity and that this defect, in combination with others, contributed to the flooding events. Arbour explained that the City added pumps seven and eight in 1954, because storms had resulted in basement flooding. These pumps increased the KPS's pumping capacity to 550 CFS. But even with the two large storm pumps on board, Arbour asserted, the 1997 computer modeling demonstrated that under peak flow conditions the Inland system delivered wastewater to the KPS at a rate of approximately 600 CFS. "The[se] calculations alone," Arbour expressed, "established a lack of capacity."

Arbour estimated that the KPS's pumping capacity was even lower than 550 CFS, because "it is well known that pump capacity diminishes significantly due to wear over time." In his view, "it is likely that the current capacity of the [KPS] is significantly less than 550 CFS." According to Arbour, because the City failed to calibrate its pumps by measuring actual flow capabilities on a regular basis, no evidence refutes that this natural and expected process of gradual capacity loss lessened pump capacity at the KPS. The City provided no testimony or data refuting Arbour's opinion. Biehl admitted in his deposition that the City had not checked pump capacity "as of May 25th, 2011."

The dissent takes issue with plaintiffs' experts' reliance on the 1997 modeling report in formulating their opinions. According to the dissent, this reliance is misplaced, as *less* rain fell during the May 2011 storm than in the modeled storm. It seems to us that the dissent's factual assumption tends to enhance the validity of Arbour's contention that the KPS lacked adequate capacity. More troubling, however, is the dissent's assertion that plaintiffs should not be permitted to rely on the modeling at all. We fear that this statement reflects a misunderstanding of sewer system modeling.

The modeling was performed by measuring *actual* flows through the KPS from August through October 1996, and again from May through September 1997. The actual flow data reflected the volume of water and sewage that moved through the system under real-life conditions, with manhole and catch basin covers in place. According to the modeling report, "[t]his data . . . assisted in determining conditions that cause overflows and evaluating system performance and capacities." Computer-generated data simulating the effect of heavy rainfall was then "plugged in" to the empirical infrastructure information, permitting the most accurate prediction possible of sewer system capacity in surcharge conditions. The ability to predict peak flows assists sewer system operators in complying with regulatory requirements—precisely the reason the 1997 modeling was performed. Indeed, the Ten States Standards require such modeling, as did the Administrative Consent Order, and as do general engineering principles applicable to sewer design. Simply put, there is no other objective way to measure a sewer's

performance, or lack thereof. And most importantly, the City has raised no objection to the scientific validity of using this data to calculate peak flows during heavy rains.

Both Arbour and VanLiere opined that the KPS's pumping capacity also failed to meet the Ten States Standards. The Ten State Standards, they explained, require that wastewater facilities maintain their required peak design capacity even with the largest pump out of service. VanLiere's third affidavit states, "Without the capacity of one of its large stormwater pumps (either pump 7 or 8), the [KPS] has a total pump capacity of only 385 CFS," despite that the rated capacity for the station is 550 CFS. Because the KPS receives up to 20.7 CFS of sewerage flowing from the Lakeside district, VanLiere calculated that the Ten States Standards required the station to pump 574.7 CFS with the largest pump out of service, which "means the station should have had a total capacity of 740 CFS[.]" Arbour, too, urged that the City incorrectly calculated its pump capacity with all pumps running rather than with the largest pump out of service, as required by the Ten States Standards.

VanLiere's third affidavit averred that had the KPS been equipped with the required pumping capacity and electrically configured in an appropriate fashion, "the basement flooding during May and September would have been most likely prevented altogether." The affidavit continues:

35. For the May storm, a reduction in the lost pumping capacity of approximately 86 percent would have reduced the estimated lost pumping volume from 2,216,000 gallons to 309,000 gallons.

36. During the May event, when pumps 1-7 were restarted, the wet well level immediately subsided. Pumps 1-7 provide a combined 385 CFS of pumping capacity. Therefore, it is clear that if the station had between 370 and 395 CFS of uninterrupted pumping capacity, as it should have, it is very likely that no basement flooding would have occurred in the May event.

The City countered this testimony with an affidavit signed by Biehl, filed on the day before the summary disposition hearing. Biehl averred that the manhole covers on "approximately half" of the Inland district's catch basins limit the flow to the system to "approximately 390 CFS for the 10 yr./1 hr. design storm." This data, however, is nowhere to be found in the record, and appears contrary to the City's 1997 modeling results, which calculated the estimated peak flow rate as 554 CFS during a 10-year event.

The City's brief on appeal asserts that the modeling data "did not factor in the restricted catch basins," but cited no evidence to support this claim. Appendix B to the Administrative Consent Order required that the mandated modeling include "[a] physical inventory of the Grosse Pointe Farms sewer system . . . to aid in the development of the hydraulic model." Moreover, HRC's 1997 report of the modeling described the model in relevant part as follows:

A SWMM (Storm Water Management Model) computer model was developed and used to evaluate the capacity and performance of the combined Inland sewer system in the City of Grosse Pointe Farms. The model represents existing major sewers and allows simulated rainfalls to be applied and predicts

how the system would react to these rainfalls. The software utilized, XP-SWMM 32, Version 5.0, is the latest release by XP software, Inc., and operates in a fully graphical environment.

The actual construction of the model involves creating a network of nodes and links, laid out to represent major components of the system, followed by data entry to define existing system and topographic conditions. A digital map of the Inland District was incorporated into the modeling software as a background, providing additional reference and giving the network a more realistic look. The model is best represented by the Inland District Model Schematic . . . *which shows the background picture map and the links and nodes laid out to represent major sewers and manholes respectively.* [Emphasis added.]

This information appears to contradict the City's contention that the modeling failed to take into account catch basins and manholes. Accordingly, whether the modeling calculations incorporated flow reductions obtained by restrictive covers represents a disputed fact, and Biehl's statement regarding the effect of the manhole covers remains an unverified opinion.

#### b. Electrical Power Configuration

Evidence produced by the City during discovery suggested that the electrical switchgear had, in fact, activated when power on line 32T was lost, automatically transferring power to line 191T.<sup>8</sup> A few days before Heyl's deposition, Chauvin signed an affidavit stating that the switchgear had *not* activated at any point during the storm. Heyl was apparently unaware of this revelation during his deposition. He subsequently provided an affidavit addressing the new information regarding the switchgear and its role in the flooding, averring in relevant part:

10. On the days in question (May 25 and September 9-10, 2011), the [KPS] was provided power by two DTE lines, line 32 and line 191.

11. DTE records establish that in both the May and September events, power was never interrupted on line 191.

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<sup>8</sup> A June 21, 2011 email written by HRC associate Marvin Olane, who also serves as an expert for the City, states:

I spoke with Dan from GPF who explained what he observed while he was at the station during the storm. They had received a High Water Level alarm and he responded by going to the site. He observed that all 8 pumps were running and then they all stopped and re-started several times as the switchgear automatically transferred from one utility line to the other during power interruptions.

A handwritten HRC summary of the May event also claimed that when the power went down on line 32T, it automatically transferred to line 191T.

12. In the May event, there may have been up to five momentary power interruptions on line 32.

13. In the September event, there were two more substantial outages.

14. The primary power for the control panel *that serves all pumps* at the [KPS] comes from line 32. Any interruption in power on line 32 will therefore cause all pumping to cease, despite the fact that the primary power for pumps 4, 5, and 6 is, according to the City's engineers, HRC, drawn from line 191.

15. According to the City and its engineers, there are provisions for automatic transfer of power to line 191 when line 32 is interrupted. However, there is a delay built in to the transfer mechanism, so shorter power interruptions may not trigger a transfer to line 191.

16. If line 32 is interrupted, but no transfer to line 191 takes place, all pumps will sequentially restart on line 32. If the transfer does take place, all pumps will sequentially restart on line 191. In either event, the pumps that are powered from line 191 will spend unnecessary time out of operation because their controls are powered from a different line.

17. The power configuration of the [KPS] was defective. The proper configuration would have had, as nearly as possible, pumps generating half of the station's pumping capacity on line 32, with half powered by line 191.

18. Additionally, separate controls would have existed for the pumps on each line, so that interruptions on one line could only take half of the station's pumping capacity out of service. [Emphasis in original.]

As support for his opinions, Heyl cited EPA standards governing federally-funded wastewater facilities. He acknowledged that the standards were not directly applicable to the KPS, but expressed that they exemplified the engineering principle "of providing redundant equipment to enhance the reliability of power supply and control," which is "commonly applied to designs for critical facilities in this and other industries."

Arbour echoed these sentiments, opining that "[t]he industry standard of care dictates that the power supply to the control panel should have been distributed between the two electrical feeds so that a loss of power to one line would have still allowed the remaining independent line to supply power to some of the pumps." VanLiere opined that had "revised" electrical and control measures been employed,

the loss of pumping capacity during the May storm would have been reduced by approximately 86 percent and lost pumping capacity during the September storm would have been reduced by approximately 56 percent. In addition, a minimum of 370 to 395 CFS of pump capacity would have been provided without any interruption, and would have significantly reduced the period of time that remaining pump capacity would have been out of service.

A handwritten report generated by HRC supports the critical role played by the loss of power to the pumps, stating: “Losing the maximum pumping capacity during the peak of the storm as a result of multiple bumps, particularly for a storm of this intensity was critical.”

#### c. An “Emergency Outlet”

Arbour and VanLiere expressed that the City’s failure to design the Inland system with a CSO constituted another defect. “A CSO,” Arbour explained “provides an outlet, or a point of release, when a sewer system is overburdened and surcharging. The excess flow is then released to a body of water or a retention pond.” Without a CSO, he continued, excess flows back up into homes or basements. Arbour expressed, “In my opinion, it is a design defect to design a combined sewer system without access to a CSO.” He further asserted, “In my 49 years of experience in the area of wastewater treatment, I have never seen a combined sewer system that did not have access to a CSO.” He concluded: “If the City’s system had a CSO during the rain events in May and September, the Plaintiffs’ homes would not have flooded.”

VanLiere likewise averred in his third affidavit: “The lack of a CSO or retention basin in a combined sewer system is very rare and leaves little room for error when it comes to pumping a sufficient volume of sewage.” In VanLiere’s view, a pump station lacking a CSO bears a “heightened responsibility” to otherwise handle incoming flows.

In response to these claims, the City filed an affidavit signed by Biehl, asserting that while homes in the Lakeside district “are high enough to permit gravity overflows to Lake St. Clair,” “[m]any homes in the Inland District . . . have basements that are at or below lake level. As a result, it is not feasible from an engineering standpoint to incorporate a gravity-fed overflow to the Lake.” The record evidence neither supports nor refutes Biehl’s statement; the evidentiary foundation for his conclusions is unknown. The affidavit does not address whether gravity-fed overflows to locations other than the lake were feasible.

#### d. Electrical Problems With Pump Eight

Several months before the May storm, the City determined that the surge arrester for pump eight was damaged and required replacement. According to an affidavit signed by James Colville, the surge arresters are “custom parts,” and “several months” are needed for their fabrication and installation. Even without the surge arrester, Colville asserted, pump eight was “fully operational.”

None of plaintiffs’ experts opined that the surge arrester could have been installed earlier, or that its absence played any role in the events of the May or September storms. Arbour expressed only that “[p]roper operation and maintenance of a pump station . . . in which a necessary storm water pump has a known surge arrester problem should be manned during a significant wet weather event.” Neither he nor the other experts explained, however, how the presence of a City employee at the pump station at the outset of either storm would have changed the course of events.

#### e. Improper Operation and Maintenance

Arbour took issue with the City's operation and maintenance of its pump station. According to Arbour, the hydraulic capacity of the pumps likely deteriorated over time due to inadequate preventative maintenance. And the City produced no evidence the pumps had ever been calibrated, Arbour pointed out, which can only be accomplished "in the field using flow meters and pressure [gauges] on the pump suction and discharge."

Arbour also identified the failure of the City's personnel to follow the City's Operation & Maintenance Manual as another breach of the standard of care. According to Arbour, the manual instructs pump operators to "manually go to a manual mode and execute a Primary Power transfer if nuisance bumps were repeatedly knocking all pumps and motors off the line, forcing a restart." In Arbour's view, a manual transfer should have been made after the second "Edison bump." He opined, "The City failed to train its operators and they did not have the necessary knowledge, skills or abilities to correctly diagnose operating problems during wet weather emergencies and remediate the problems so pumps 7 & 8 could be operated, significantly increasing the pumping capacity."

## 2. THE SEPTEMBER STORM

VanLiere averred that the September rainfall corresponded to a 10-year design storm. After reviewing the available data regarding the flow rates at the KPS before and after the power outages, VanLiere concluded that the lost pumping capacity was "a significant contributor to flooding and sewer back-ups that occurred during" the storm. With "proper design capacity, electrical systems and controls," VanLiere concluded, "all basement flooding would likely have been avoided in the September event." Heyl termed this a "single-point failure" that could have been remedied by separating the control panels for the various pumps, allowing some to keep working even while others were electrically disabled. "Basically, at the heart of it," he summarized, "is losing all the pumps until the station operators can go and restore pumping by turning the pumps on manual."

Arbour's affidavit expresses similar criticisms. He explained that because "the pump recognition function for all 8 pumps was on one fuse," the pumps system lost its ability to recognize that the wet well levels were rising. "[T]he industry standard of care," he averred, dictated that each pump at the KPS "should have had its own individual fuse."

Arbour reiterated that a CSO would have prevented the September basement flooding. He further contended that the KPS should have been staffed during the September storm, given the problems that had arisen in May and "because it knew it had a documented lack of capacity and it knew that it did not have a CSO for any excessive flow that would have resulted from a rain event." That pump eight had no functioning surge arrestor also supported staffing the station, Arbour charged. A properly trained maintenance worker would have recognized the blown fuse on the control panel and promptly changed it. Arbour asserted that the operators' failure to implement an appropriate emergency procedure "significantly increased the impact of any flooding given the 30 minutes that elapsed from notification to correction."

## F. SUMMARY DISPOSITION MOTIONS

The City moved for summary disposition in the cases arising from both flooding events.<sup>9</sup> As to the complaints concerning the May storm, the City contended that plaintiffs' experts failed to substantiate that a "defect" in the City's sewer system caused the flooding, as required under MCL 691.1416 *et seq.* According to the City, the expert opinions constituted "pure speculation" that the alleged defects caused the overflows. The City raised similar arguments when seeking summary disposition of the September event claims.

The circuit court granted the City's motion regarding the May event, reasoning that the City "did not . . . as to this particular pumping station . . . [know] of the potential defects before the May event." The court denied summary disposition of the September claims, explaining:

But clearly, as to the September event, the Court will be denying the [City]'s motion for summary disposition. In part because of the May event, the City of Grosse Pointe Farms was on notice of the particular issue which involved this particular pumping station. And as a result of now knowing the lack of capacity or the fact that this particular pumping station was problematic after the, the May event, they were on notice that the sewage disposal system had a defect. They knew, obviously, of the defect, as set forth in the, what I would call the [homeowners]' experts' unrefuted affidavits by the City of Grosse Pointe Farms, and they had more than a reasonable amount of time, they had from May to September in order to remedy the now known defect regarding this -- or defects -- regarding these, this particular pumping station. And clearly there was physical damage, and there's a question of fact as to whether these defects constitute a substantial proximate cause of the damage.

Both plaintiffs and the City now appeal.

## II. ANALYSIS

### A. STANDARD OF REVIEW

"We review de novo a circuit court's summary disposition ruling." *Walsh v Taylor*, 263 Mich App 618, 621; 689 NW2d 506 (2004). We also review de novo the circuit court's ruling on the availability of governmental immunity. *Norris v City of Lincoln Park Police Officers*, 292 Mich App 574, 578; 808 NW2d 578 (2011). A summary disposition motion brought under subrule (C)(7) "does not test the merits of a claim but rather certain defenses" that may eliminate the need for a trial. *DMI Design & Mfg, Inc v Adac Plastics, Inc*, 165 Mich App 205, 208; 418 NW2d 386 (1987). Under this subrule, summary disposition may be granted when "a claim is

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<sup>9</sup> Plaintiffs' counsel initially filed a class action complaint asserting that defects in the City's sewer system caused the May, 2011 basement flooding. The circuit court refused to certify the case as a class action. Counsel then filed two additional complaints on behalf of numerous additional plaintiffs involving the same operative facts, and the three cases were joined.

barred because of immunity granted by law.” *Dextrom v Wexford Co*, 287 Mich App 406, 428; 789 NW2d 211 (2010).

When reviewing a grant of summary disposition under subrule (C)(7), this Court accepts as true the plaintiff’s well-pleaded allegations and construes them in the light most favorable to the nonmoving party. *Id.* Our review under subrule (C)(7) encompasses affidavits, depositions, admissions, or other documentary evidence submitted on behalf of the moving party. *Id.* at 429. “If no facts are in dispute, and if reasonable minds could not differ regarding the legal effect of those facts,” whether immunity bars the claim is a question of law for the court. *Id.* However, “[a] genuine issue of material fact exists when the record, giving the benefit of reasonable doubt to the opposing party, leaves open an issue upon which reasonable minds might differ.” *West v Gen Motors Corp*, 469 Mich 177, 183; 665 NW2d 468 (2003). A court may not make findings of fact when deciding a summary disposition motion. *Jackhill Oil Co v Powell Prod, Inc*, 210 Mich App 114, 117; 532 NW2d 866 (1995).

## B. THE STATUTORY FRAMEWORK

MCL 691.1417(2) provides an exception to governmental immunity for sewage disposal system events as follows:

A governmental agency is immune from tort liability for the overflow or backup of a sewage disposal system unless the overflow or backup is a sewage disposal system event and the governmental agency is an appropriate governmental agency. [MCL 691.1416 to MCL 691.1419] abrogate common law exceptions, if any, to immunity for the overflow or backup of a sewage disposal system and provide the sole remedy for obtaining any form of relief for damages or physical injuries caused by a sewage disposal system event regardless of the legal theory.

To be entitled to relief, plaintiffs must prove all of the statutory elements of a sewer disposal event claim:

- (a) The governmental agency was an appropriate governmental agency.
- (b) The sewage disposal system had a defect.
- (c) The governmental agency knew, or in the exercise of reasonable diligence should have known, about the defect.
- (d) The governmental agency, having the legal authority to do so, failed to take reasonable steps in a reasonable amount of time to repair, correct, or remedy the defect.
- (e) The defect was a substantial proximate cause of the event and the property damage or physical injury. [MCL 691.1417(3).]

The parties’ dispute centers on whether plaintiffs presented evidence giving rise to material questions of fact concerning: (1) the existence of “defects” in the City’s sewer system, (2) whether the City knew or should have known of the alleged defects, (3) whether the City

should have corrected or remedied the defects, and (4) whether the alleged defects served as substantial proximate causes of the flooding events.

MCL 691.1416(e) defines a “defect” as “a construction, design, maintenance, operation, or repair defect.” Because the statutory definition of “defect” itself uses the term “defect,” this Court has noted that a dictionary defines “defect” as “ ‘a fault or shortcoming; imperfection.’ ” *Willett*, 271 Mich App at 51, quoting *Random House Webster’s College Dictionary* (1997). “ ‘Substantial proximate cause’ means a proximate cause that was 50% or more of the cause of the event and the property damage or physical injury.” MCL 691.1416(l).

Bearing in mind the statutory prerequisites for a sewer disposal event claim and the controlling definitions, we turn to whether the record testimony substantiates plaintiffs’ sewer defect claims.

## C. APPLICATION OF LAW TO FACTS

### 1. THE MAY FLOODING

Plaintiffs first contend that the circuit court erroneously “shifted the burden” to plaintiffs to prove that the sewer system was defective. More specifically, plaintiffs complain that in response to the City’s summary disposition motion, they offered “unrebutted evidence” regarding the elements of MCL 691.1417(3). The City merely challenged plaintiffs’ evidence as “wrong,” plaintiffs claim, without proffering countervailing proof. The record refutes this argument.

The City’s summary disposition arguments rested primarily on the contention that plaintiffs’ experts’ opinions derived from a false premise: that the electrical supply to the KPS had, in fact, switched from line 32T to line 191T. Citing *Badalamenti v William Beaumont Hosp*, 237 Mich App 278, 286; 602 NW2d 854 (1999), the City argued that plaintiffs’ experts’ opinions were fundamentally flawed because they were “not in accord with the established facts.” The City supported this argument with the affidavits and deposition testimony of Chauvin and Homminga. The City further asserted that Heyl improperly relied on EPA standards for his opinion that the controls for the pumps should have been separately energized, as the EPA standards did not apply to the KPS. Further, the City urged, plaintiffs’ experts’ claims that the pump station defects caused the basement flooding were “pure speculation,” lacking factual foundation.

“The party moving for summary disposition under MCR 2.116(C)(7) may show that he or she is entitled to immunity granted by law in two distinct ways. First, the moving party may show that immunity is apparent on the face of the plaintiff’s pleadings.” *Yono v Dep’t of Transp (On Remand)*, 306 Mich App 671, 678; 858 NW2d 128 (2014). Alternatively, the moving party may, as in a motion brought under MCR 2.116(C)(10), support the (C)(7) motion with evidence tending to establish that, given undisputed facts, the moving party is entitled to immunity as a matter of law. *Id.* at 679. The City pursued the latter course, challenging plaintiffs’ defect claims by bringing forward evidence calling into question the factual foundation for the plaintiffs’ experts’ opinions.

Once the City supported its motion with affidavits, depositions, admissions, and documentary evidence, the burden shifted to plaintiffs to demonstrate the existence of material fact questions. *Barnard Mfg Co, Inc v Gates Performance Engineering, Inc*, 285 Mich App 362, 370; 775 NW2d 618 (2009). Plaintiffs responded to the City's motion by filing voluminous exhibits, including Arbour's affidavit and new affidavits signed by the other expert witnesses. The circuit court considered the entirety of the evidence submitted in reaching its decision. Thus, we discern no improper shifting of summary disposition burdens.

Plaintiffs next assert that the record evidence established material fact questions regarding the existence of a sewer system defect, the City's knowledge of the defect, and proximate causation. Viewed in the light most favorable to plaintiffs, we agree that the evidence precluded summary disposition.

Plaintiffs' experts set forward three varieties of defect claims: defective design, defective maintenance, and defective operation.<sup>10</sup> The design claims center on the City's alleged failure to employ adequate pumping capacity, a redundant power configuration, and a CSO. Operationally, Arbour claimed that Chauvin should have manually transferred the power to line 191T after the second "bump," and that because pump eight had a nonfunctioning surge arrester, the KPS should have been staffed during rainstorms. Poor maintenance, Arbour added, exacerbated the design flaws.

Two of the Ten States Standards figure prominently in the plaintiffs' experts' design opinions: Standards 42.31 and 47.2. In relevant part, the former provides that the pumps employed by a wastewater facility "shall have capacity such that, with any [pump] out of service, the remaining [pumps] will have capacity to handle the design peak hourly flow." The latter standard, governing "emergency pumping capacity," states that a pumping station must be connected "to at least two independent utility substations" or have in place a generator or portable pumping equipment such that the "emergency standby systems shall have sufficient capacity to start up and maintain the total rated running capacity of the station."

Plaintiffs' evidence supported that in May 2011, the City experienced a 10-year storm. According to the 1997 Administrative Consent Order, the KPS could manage the predicted 600 CFS peak flow generated by a 10-year design storm. Plaintiffs' experts averred, however, that the KPS had a capacity of only 550 CFS, and probably less given natural wear and tear of the pumps. This evidence supports that at the outset of the storm, regardless of the electrical events that befell the station, the KPS was incapable of managing the foreseeable peak flow. As we have noted, the City challenged plaintiffs' peak flow number by submitting Biehl's affidavit asserting that manhole covers actually reduced the flow to "approximately 390 CFS." Biehl's statement is unsupported by any facts of record, and appears inconsistent with the 1997 modeling data.<sup>11</sup>

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<sup>10</sup> MCL 691.1416(e) specifically endorses these three defect theories.

<sup>11</sup> Biehl admitted at his deposition that he did not know how many manhole covers were in use in May 2011, and also lacked personal knowledge of the modeling parameters.

Furthermore, the City violated both the letter and the spirit of MCR 2.116(G)(1)(a)(i) by filing Biehl's affidavit one day before the summary disposition hearing. The court rule provides that "any affidavits" filed in support of summary disposition must be "filed and served at least 21 days before the time set for hearing." According to the dissent, our view that Biehl's affidavit should have been filed with the City's motion is "specious." To the contrary, we believe that MCR 2.116(G)(1)(a)(i) sets forth an important and eminently rational rule. Requiring a moving party to put all his cards on the table informs the responding party of the fact questions and legal issues at play. We hardly think it "specious" to point out that the Court Rules do not envision that summary disposition can be granted based on an affidavit filed less than 21 days before the hearing. The rule is designed to prevent the moving party from springing new facts on the nonmoving party when it is impossible for the nonmoving party to contest them—exactly what happened here. The timeframe called for in the court rule affords the nonmoving party an opportunity to gather and present refuting evidence. Here, plaintiffs had no ability to challenge Biehl's manhole claim, which is why we have not engaged in judicial fact finding to accept it as true, as has the dissent.<sup>12</sup>

Moreover, unlike Biehl's opinion, plaintiffs' experts' opinions concerning the KPS's pumping capacity are supported by facts of record, specifically the modeling data and other information contained in the Administration Consent Order. Viewing the evidence in the light most favorable to plaintiffs, we conclude that whether the KPS was defectively designed with an inadequate pumping capacity for a 10-year design storm constitutes a triable issue of fact.

We reach the same conclusion as to the KPS's electrical configuration. The Ten States Standards contemplate that a wastewater pumping facility must be powered by two entirely separate power sources, so that if one source is lost, the remaining source can run enough pumps to keep up with foreseeable peak flows. Plaintiffs' experts opined that the KPS failed to meet this standard, as a failure of one line—32T—shut down all the pumps. Further, plaintiffs' experts asserted, the loss of one pump, such as pump seven or eight, prevented the KPS from transporting the amount of wastewater projected for a design storm. According to plaintiffs' experts, this defect violated the Ten States Standards requirement that with any one pump out of service, the remaining pumps will maintain an ability "to handle the design peak hourly flow."

Arbour and VanLiere proffered calculations supporting that the City's failure to design its pumping station with an appropriate and available pumping capacity for a 10-year design storm proximately caused the basement flooding. The calculations are rooted in facts of record. Their accuracy remains to be tested. At this juncture, however, plaintiffs have established material

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<sup>12</sup> Another problem that has resulted from the late-filed affidavit—determining whether the restrictive covers on catch basins were factored into the modeling data—is truly of the City's own making. As to the substance of Biehl's affidavit, the dissent misapprehends basic sewer engineering principles. Manhole covers *are* "restrictive covers." The modeling took into full account the condition of the City's entire Inland system, which included the "restrictive covers" on manholes and catch basins. Had it failed to do so, it would have been rather useless modeling.

questions of fact regarding whether the KPS's electrical system was defectively designed from both hydraulic and electrical perspectives.<sup>13</sup>

Similarly, plaintiffs created a fact question regarding whether the absence of a CSO constitutes a defective design. The City challenged plaintiffs' CSO theory by submitting Biehl's affidavit averment that a CSO is not feasible in the Inland district due to the low elevations of many homes. Because Biehl's affidavit was filed one day before the summary disposition hearing and the City failed to provide any factual support for his opinion, a question of fact remains. We highlight that in considering the propriety of summary disposition, neither we nor the circuit court may weigh the evidence or find facts. We conclude that fact questions regarding whether the Inland system was defectively designed without a CSO preclude summary disposition.<sup>14</sup>

Under MCL 691.1417(3), plaintiffs were further obligated to establish material fact questions regarding whether the City knew or should have known of the defects, and "failed to take reasonable steps in a reasonable manner to repair, correct, or remedy" them. In 1997, the City closely evaluated the Inland system's design and specifically certified the system's ability to manage a 10-year design storm. The data upon which plaintiffs' experts rely are contained in the Administrative Consent Order and its attachments, information provided by the City concerning the configuration of the KPS's electrical power, and the Ten States Standards. Each of these components was known to the City, as was the risk of basement flooding during a 10-year design storm. The record supports that the City arrived at its design decisions through conscious choices rather than inadvertence.<sup>15</sup> Accordingly, questions of fact as to whether the City knew or should have known of the defects, and should have remedied them, precluded summary disposition.

Plaintiffs also created a fact question as to whether these design defects constituted a "substantial proximate cause" of the basement flooding. VanLiere's third affidavit attested that if the electrical supply to the KPS had been properly configured, the basement flooding likely would have been prevented, particularly if the station had been designed with "between 370 and 395 CFS of uninterrupted pumping capacity." Chauvin testified that when energized, seven

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<sup>13</sup> We reject the City's argument that Heyl's citation to EPA standards governing wastewater treatment plants rendered his opinions unreliable. Heyl offered the EPA standards as an example of what he claimed was a generally accepted electrical engineering principal that complex, critical systems require separately energized controls. The City failed to bring forward any testimony or information contradicting this principal.

<sup>14</sup> Indeed, the dissent cites several fact questions that remain due to the late filing of Biehl's affidavit, such as whether a feasible location exists for the installation of a gravity-fed CSO and whether a CSO of sufficient capacity could have been created. Unlike the dissent, we do not fault plaintiffs for failing to present expert testimony geared toward answering these questions one day later, during the summary disposition hearing.

<sup>15</sup> We further note that the City neither argued nor produced evidence that the KPS' pumping capacity and electrical configuration was unknown to it.

pumps were able to reduce the wet well level. This evidence supports that had the power to either pump seven or eight been maintained when line 32T failed, flooding would have been prevented. Alternatively stated, plaintiffs' submissions substantiated that a failure to separate the power consistent with the Ten States Standards substantially proximately caused the flooding. HRC's conclusion that "losing the maximum pumping capacity during the peak of the storm . . . was critical" lends further support to plaintiffs' proximate cause argument. Similarly, plaintiffs demonstrated that a CSO likely would have prevented basement flooding.

We reach a different conclusion regarding plaintiffs' contentions that deficiencies in the City's operation and maintenance of the KPS proximately cause the flooding. Although Arbour's affidavit sets forth various criticisms that potentially establish additional fact questions regarding the presence of a sewer system defect, no evidence supports that the operational and maintenance deficiencies he identified constituted substantial proximate causes of the basement flooding. These alleged deficiencies may provide evidence relevant to plaintiffs' actionable claims. But plaintiffs failed to establish that defective operation and maintenance of the KPS qualified as substantial proximate causes of the basement flooding. Accordingly, the circuit court properly dismissed this portion of plaintiffs' claims relating to the May flooding event.

## 2. THE SEPTEMBER FLOODING

We turn our attention to the September flooding cases, in which the circuit court denied the City's motion for summary disposition. On appeal, the City argues that plaintiffs' defect theories "are completely speculative and ignore what actually happened during the September 2011 storm." Because plaintiffs' basements flooded shortly after power to line 32T failed, the City asserts, flooding could not have been avoided despite that the City was "on notice" of potential DTE power outages during rainstorms. The City further insists that plaintiffs' experts' focus on the failure of fuse FU-2 is entirely misplaced, as some basements flooded with the first power outage and before the fuse failed.<sup>16</sup>

In response to the City's summary disposition motion, plaintiffs submitted a weather analysis concluding that the average rainfall across the Inland district during the September storm equated with a 25-year, 18-hour rainfall event. According to the report, the rainfall on September 9 and 10 did not rank within the top ten rain events in that area during the last 61 years. The City did not challenge this data.

The affidavits of VanLiere and Arbour assert that the KPS lacked sufficient pumping capacity to lift the projected flow for a 25-year storm event, despite that the City claimed an ability to do so as part of the 1997 Administrative Consent Order. Mirroring their argument in the May cases, plaintiffs' experts allege that the KPS's design violated the Ten States Standards, as the station lacked the ability to lift "the design peak hourly flow" with one pump out of

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<sup>16</sup> No record evidence sets forth the times at which particular plaintiff's basements flooded, or whether all the September basement flooding occurred between the first power outage and the failure of fuse FU-2. Thus, we do not know whether the basements that flooded before Homminga arrived at the station belonged to some or all plaintiffs in the second case.

service. As we did in the May cases, we hold that fact questions precluded summary disposition of this defect claim.

Our resolution of the electrical defect claims also rests on the reasoning we employed in the May cases. Plaintiffs' evidence supported that the electrical configuration of the KPS resulted in a total and sustained loss of pumping capacity with a momentary interruption of power to line 32T. The circuit court correctly determined that this alleged defect was known to the City and could have been remedied before the September storm. Based on the evidence we described above concerning the alleged electrical deficiencies responsible for the May flooding event, including the Ten States Standards, we conclude that plaintiffs established a triable fact question regarding whether the same or a similar electrical defect plagued the KPS in September. And we reach the same conclusion as to plaintiffs' CSO allegation.

The City argues that other than the absent CSO, none of the claimed "defects" served as substantial proximate causes of the September damage claims, as 40 basements had flooded by the time Homminga arrived at the KPS. This argument overlooks plaintiffs' experts' contention that if properly designed, the KPS would have been able to pump enough wastewater to keep up with the storm, even with one storm pump deenergized by the surge on line 32T. Accordingly, plaintiffs established a fact question regarding proximate cause.

We have detected no evidence, however, that the operational and maintenance defects described by Arbour proximately caused the September flooding. Accordingly, we hold that the circuit court erred by failing to grant summary disposition of these two species of defect claims.

Summarizing, plaintiffs have established fact questions regarding whether the City's sewage disposal system "had a defect" that was known or should have been known to the City, whether the City failed to take reasonable steps to repair, correct, or remedy the defect, and whether the defect served as a substantial proximate cause of the basement flooding. See MCL 691.1417(3). These fact questions are for the jury. If summary disposition is not granted in a case involving governmental immunity governed by MCL 691.1407(2)(c), the existence or nonexistence of gross negligence and proximate cause are questions of fact for a jury. *Briggs v Oakland Co*, 276 Mich App 369, 374; 742 NW2d 136 (2007). This is because "generally, once a standard of conduct is established, the reasonableness of an actor's conduct under the standard is a question for the factfinder, not the court." *Jackson v Saginaw Co*, 458 Mich 141, 146; 580 NW2d 870 (1998) (quotation marks and citation omitted.) The same rule applies here. We respectfully disagree with the dissent's assertion that "the proper procedure is for the trial court to resolve these factual questions" pursuant to *Dextrom*, 287 Mich App at 430. In *Dextrom*, the question presented was whether the defendants' "conduct fell outside the immunity protection through application of the proprietary function exception." *Id.* The existence or nonexistence of a proprietary function exception is a purely *legal* question that sometimes, as in *Dextrom*, cannot be determined without fact-finding. Here, the remaining questions are wholly factual, not legal. Accordingly, they are for the jury.

We reverse in part the circuit court's grant of summary disposition in docket numbers 319317, 319318 and 319319, as explained in this opinion, affirm in part the circuit court's grant of summary disposition in docket numbers 319368, 319370 and 319371, as explained in this opinion, and remand for further proceedings.

/s/ William B. Murphy  
/s/ Elizabeth L. Gleicher