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February 7, 2018

Michael Magnussen, CBO Building Commissioner City of Crystal Lake 100 W. Woodstock Street Crystal Lake, Illinois 60014

RE: IDPH Approval of Plumbing Ordinance – City of Crystal Lake

Dear Mr. Magnussen,

The Illinois Department of Public Health ("IDPH" or the "Department") has received a certified copy of the City of Crystal Lake's (the "City") plumbing ordinance adopted on May 17, 2016, attached and referenced here. Pursuant to Sections 36 and 38 of the Illinois Plumbing License Law (the "Law"; 225 ILCS 320) and Section 750.800(b) of the Illinois Plumbing Licensing Code (the "Code"; 78 Ill. Adm. Code 750), units of local government should seek advisement for the adoption of a local plumbing ordinance.

As authorized by the Law and Code, the Department hereby approves the City of Crystal Lake's adoption of the amendments relative to the following Sections of the Illinois Plumbing Code (77 Ill. Adm. Code 890):

- Section 890.200 Operation of Plumbing Equipment
- Section 890.410 Fixture Traps/Continuous Waste
- Section 890.420 Pipe Cleanouts
- Section 890.1130 Protection of Potable Water
- Section 890.1150 Water Service Pipe Installation
- Section 890.1190 Water Supply Control Valves and Meter
- Section 890.1320 Drainage System Installation
- Section 890. Appendix A, Table A, Approved Water Materials for Water Service Pipe
- Section 890. Appendix A, Table B, Minimum Number of Plumbing Fixtures

These amendments shall be approved until five (5) years after the date of the adoption of the subject ordinance or until the promulgation of subsequent revisions of the amended Sections of the ILPC by the Department. The Department neither approves nor disapproves of administrative language added by the City in these Sections.

If you have any further questions concerning the City's adoption of the Illinois Plumbing Code, please contact the Department at (217) 524-0791 or at <u>dph.plumbing@illinois.gov</u>.

Sincerely,

Brian W. Cox, P.E. Manager, Plumbing and Water Quality Program

PROTECTING HEALTH, IMPROVING LIVES Nationally Accredited by PHAB

Ord. No. 7223 File No. 148AA



The City of Crystal Lake Illinois

AN ORDINANCE AMENDING VARIOUS SECTIONS OF THE CODE OF ORDINANCES OF THE CITY OF CRYSTAL LAKE, ILLINOIS BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF

CRYSTAL LAKE as follows:

<u>SECTION I:</u> That Section 241-33 be amended to read as follows:

If overtime is necessary in order to perform inspections or plan reviews, in addition to other fees prescribed in the section, a fee of \$100 shall be charged for the first hour or part thereof. Any time beyond the first hour shall be charged in quarter-hour increments at a rate of \$25 per quarter hour. All overtime fees shall be paid by the owner or permittee.

SECTION II: That Section 241-34 be amended to read as follows:

All fees, actual costs or actual expenses related to the City retaining a professional service consultant or technician to conduct any plan review, inspections, economic impact analysis, environmental analysis, legal fees, or other due diligence development costs on behalf of the City shall be paid for by the owner or permittee, in addition to other fees or costs required by the City. The petitioner shall execute a consultant fee reimbursement acknowledgement form.

SECTION III: That Section 241-35A be amended to read as follows:

A. The minimum fee shall be computed as 1.25% of the cost estimate for public and/or private property site improvements as approved by the City Engineer.

SECTION IV: That Section 241-35B(5) be amended to read as follows:

(5) Overtime fees as stated in §241-33 and §241-34 incurred by City staff or consultant inspectors when developer's contractor(s) chooses to work overtime, Saturdays or holidays. **SECTION V:** That Section 241-38 be amended to read as follows:

§ 241-38 Stormwater fees.

The following stormwater review and inspection fees shall be charged when the review is not completed by a professional service consultant:

- A. General Permit #1: \$150.
- B. General Permit #2: \$400.
- C. Minor development: \$400.
- D. Intermediate development: \$550.
- E. Major development: \$850 + \$50 per additional acre.

SECTION VI: That Section 251-2A(2)(b) be amended to read as follows:

- b. Appendix D is adopted in its entirety with the following amendments:
 - i. D103.1, Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 28 feet (back of curb to back of curb). See Figure D103.1.
 - ii. D103.6.1, Roads 20 feet to 24 feet in width. Fire apparatus access roads 20 feet up to but less than 24 feet wide (back of curb to back of curb) shall be posted on both sides as a fire lane.
 - iii. D103.6.2, Roads 24 feet to 28 feet in width. Fire apparatus access roads 24 feet wide up to but less than 28 feet wide (back of curb to back of curb) shall be posted on one side of the road as a fire lane.
 - iv. D103.6.3, Roads more than 28 feet in width. Fire apparatus access roads greater than or equal to 28 feet wide (back of curb to back of curb) shall not be required to post either side as a fire lane.

SECTION VII: That Section 392-1 be amended to read as follows:

The Illinois State Plumbing Code, effective date April 24, 2014, and subsequent amendments thereto published by the State of Illinois Department of Public Health, shall be and is hereby adopted by reference as the Plumbing Code for the City of Crystal Lake, and all terms and conditions contained in the Illinois State Plumbing Code, with an effective date of April 24, 2014, and subsequent amendments thereto published by the Illinois Department of Public Health, shall be part of the ordinances of the City of Crystal Lake, the same as if they were adopted verbatim.

SECTION VIII: That Section 392-2B be amended to read as follows:

B. Section 890.200c) is hereby added as follows: A building or structure wherein sewer or water service is required to serve the building or structure, and service is shut off due to nonpayment of the water bill, a water service leak or any failure of the water or sewer

service, shall not be occupied by persons thereafter until such time as remedial repairs are made and approved by the Plumbing Inspector or payment of services has been made and the water service has been restored by the City of Crystal Lake. This section is not intended to prevent occupancy of the building while maintenance or repairs of the sewer or water service are being performed to restore service.

SECTION IX: That the following be inserted into a new section after Section 392-2B:

Section 890.410 b) 1) is hereby added as follows: Clothes Washing Standpipe. The standpipe inlet for an automatic clothes washing machine shall be a minimum of 24 inches above the trap weir.

SECTION X: That Section 392-2C be amended to read as follows:

C. Section 890.420 a) 4), Pipe Cleanouts; Location of Cleanouts within a Building Drain, is hereby amended as follows: A full-size cleanout shall be located within five feet of the building foundation, inside or outside, in direct line with the building drain and sewer. A monitoring manhole may be installed as an alternative to an outside cleanout and shall also be located outside of the building within five feet of the building foundation and installed in such a manner that it meets the approval of the City of Crystal Lake Community Development Department or Public Works Department.

SECTION XI: That the following be inserted into a new section after Section 392-2C:

Section 890.1130 g) 8) is hereby added as follows: A backflow prevention device shall be installed on each customer water service supply serving any building, other than a single-family dwelling; such installation shall be performed in accordance with the Illinois Plumbing Code. This requirement shall apply whenever there is an installation of a new customer service supply pipe, alteration to an existing building, renovation of an existing building or replacement of an existing customer service supply pipe.

SECTION XII: That Section 392-2F be amended to read as follows:

F. Section 890.1150a)3) is hereby amended as follows: The minimum depth for any water service pipe shall be at least six feet or the maximum frost penetration of the local area, whichever is greater.

SECTION XIII: That Section 392-2G be amended to read as follows:

G. Section 890.1190b) is hereby amended as follows: Water Supply Control Valves and Meter: A water meter shall be installed on every water service pipe entering every building. Water meters shall be approved and supplied by the City of Crystal Lake. The water meter shall be installed within the building in an accessible location. Meters may not be installed in crawl spaces or pits within the building. The meter shall have unions on the inlet and outlet opening and is required to have shutoff valves on both the inlet and outlet sides for all installations. Valves shall be full-port valves with an open area at least that of the water service pipe and be provided with a drip valve installed on the outlet side of the meter. Any variations of the water meter placement shall be subject to the approval of the Director of Public Works or his/her designated representative.

SECTION XIV: That Section 392-2H be amended to read as follows:

H. Section 890.1190b)1), Non-Single-Family Water Meter Installation, is hereby added as follows: The valve on the inlet side before the domestic water meter shall be a lockable style approved by the Building Commissioner or his/her duly designated representative.

SECTION XV: That the following be inserted into a new section after 392-2H

Section 890.1190 f)1) is hereby added as follows: Line valves shall be readily accessible and located no more than five feet above the finished floor. Valves shall be located in the tenant or occupant space where the fixtures are located.

SECTION XVI: That the following be inserted into a new section after 392-2J

Section 890.1320 a)1) is hereby added as follows: All new buildings with basements, floors, rooms or occupancy areas below ground level shall have the building drain located above the finished floor. Footing drains shall be connected to sump pumps for discharge outside the building or into the storm sewer system with Public Works Department approval. No footing drain or drainage tile shall be connected to the sanitary sewer system.

SECTION XVII: That Section 392-2N be amended to read as follows:

- N. Section 890, Appendix A, Tables, Plumbing Materials, Equipment, Use Restrictions and Applicable Standards. The following amendments to Appendix A, Tables, shall be made as follows:
 - (1) Table A, Approved Materials for Water Service Pipe.
 - (a) Delete items 1, 2, 4, 5, 7, 8, 9, 10, 11, 12, and 13.

(b) Approved for use: 3 Cast-iron (ductile iron) water pipe; 6 Type K copper tube with compression or flared connections.

(2) Section 890, Appendix A, Table B, Minimum Number of Plumbing Fixtures, plumbing materials, equipment, use restrictions and applicable standards, single dwelling or multiple dwelling units, condo or apartment or hotel/motel unit, other fixtures, add as follows: Install a minimum of one antisiphon self-draining frostproof sill cock at ground level for attached or detached single-family dwellings, when separate water service and water meter is provided for each dwelling unit.

SECTION XVIII: That the following sections of Chapter 392 be deleted and the remaining sections be renumbered in sequential order:

- Section 392-2E
- Section 392-2I
- Section 392-2J
- Section 392-2K
- Section 392-2L

• Section 392-2M

SECTION XIX: That Section 515-2 be amended to read as follows:

- A. Any property owner, hereinafter referred to as "applicant," desiring an extension of the City water or sewer main or other conveyance to his/her property shall submit to the City a detailed plan showing the location of the extensions to the property. The applicant shall state in said request that he/she agrees to pay the cost of the extension, unless otherwise provided by § 241-46 of the City Code. Such request shall be subject to the approval of the City Engineer, or his/her designee.
- B. Upon approval of the request, the applicant shall submit to the City a surety for 120% of the estimated amount of the cost chargeable to him/her for the extension. The surety may be a letter of credit, bond, cash deposit, as may be designated by the City, or other security approved by the City, in a format approved by the City (hereinafter, "performance security"). Upon completion of any portion of such improvements, a reduction to the performance security may be requested and the City may grant a reduction at its sole discretion. If, at any time, the City determines that the funds remaining in the performance security are not sufficient to pay in full the remaining unpaid costs of such improvements, within 30 days of written notice the performance security shall be increased to an amount determined by the City to be sufficient to pay in full the remaining costs of such improvements. Failure to increase the amount of the performance security shall be grounds to draw down the entire remaining balance of the performance security. Any performance security submitted to the City in the form of a bond shall be issued by an insurance company that has a current rating of A++, A+, or A as rated by A.M. Best rating company. Any performance security must be issued by a business licensed to do business in the State of Illinois and redeemable in the State of Illinois.
- C. A bond, letter of credit, cash deposit, as may be designated by the City, or other security approved by the City, in a form approved by the City (hereinafter, "maintenance security"), in the amount not less than 5% of the approved engineer's estimate of cost of the installation of such improvements, providing guarantee of workmanship and materials for a period of two years from the final inspection and acceptance of such improvements, shall be submitted. If, at any time, the City determines that the funds remaining in the maintenance security are not sufficient to pay for correcting defects and deficiencies of such improvements, within 30 days of written notice, the maintenance security shall be increased to an amount determined by the City to be sufficient to pay for correcting defects and deficiencies of such improvements. Failure to increase the amount of the maintenance security shall be grounds to draw down the entire remaining balance of the maintenance security. Any maintenance security submitted to the City in the form of a bond shall be issued by an insurance company that has a current rating of A^{++} , A^+ , or A as rated by A.M. Best rating company. Any maintenance security must be issued by a business licensed to do business in the State of Illinois and redeemable in the State of Illinois.

SECTION XX: That Section 515-3A be amended to read as follows:

A. Water main extension. The applicant will be required to pay the cost of the water main

extension of a size suitable for his/her needs, but in no event shall the size be smaller than an eight-inch main unless approved by the City Engineer and Chief of Fire Rescue.

SECTION XXI: That Section 515-13A be amended to read as follows:

A. No unauthorized person shall uncover, make any connections with or opening into, use, alter, or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the Community Development Department. Any person, firm or corporation who or which utilizes an unauthorized connection or unauthorized use shall be fined for each offense as set forth in Chapter 248, Fines.

SECTION XXII: That Section 515-13C be amended to read as follows:

C. Allocation of costs.

- (1) All costs and expenses incident to the installation, connection, disconnection, repair, or maintenance of the building sewer shall be borne by the owner. The owner shall indemnify the City from any loss or damage that may directly or indirectly be occasioned by the installation, connection, disconnection, repair and maintenance of the building sewer.
- (2) All costs and expenses incident to the installation, connection, disconnection, repair, or maintenance of the building water service shall be borne by the owner. The owner shall indemnify the City from any loss or damage that may directly or indirectly be occasioned by the installation, connection, disconnection, repair, and maintenance of the building water service.

SECTION XXIII: That Section 515-13M be created and reads as follows:

M. Abandonment of sanitary sewer lines.

- (1) All existing portions of the sanitary sewer system serving a building or property that will not be re-used as part of building demolition or remodeling must be properly disconnected and abandoned by the property owner from the point where such system connects to the sewer main.
- (2) The sanitary sewer service lateral shall be capped at the public right-of-way. An abandonment fee will be charged for grouting the service line at the sanitary main, which shall be based on the City's annual grouting program cost.
- (3) Upon abandonment of a sewer line, as required by this subsection, the owner of the property serviced by such line shall be required to restore all property disturbed by such abandonment, including compacted backfill, restoration of grounds, sidewalk, pavement, or other features to match surrounding conditions.

SECTION XXIV: That Section 515-29 be amended to read as follows:

In the event of a disputed water and/or sewer bill, or for other cause, the building owner or occupant may request a water meter accuracy test. Water meter accuracy testing shall be scheduled by the Public Works Department and conducted by a third-party meter testing company. The meter shall be

deemed accurate if it meets the AWWA meter accuracy standards as they apply to each specific meter. Should the meter accuracy test prove the meter to be accurate a meter testing fee of \$25 plus the City cost for the third-party test will be assessed, and the amount of the water and/or sewer bill in dispute owed. Should the meter be determined to be defective, no meter testing fee will be assessed and the water and/or sewer bill in question will be adjusted based on the inaccuracy percentage determined, provided that such adjustment shall be for a period not exceeding one year.

SECTION XXV: That Section 515-43E be amended to read as follows:

E. The consumer's water system shall include all parts of the facilities used to convey water from the public water supply distribution system to the point of use, beyond the curb stop or shut-off valve. In the event that no curb stop or shut-off valve exists, the consumer's water system shall include all parts of such facilities located within the consumer's property.

SECTION XXVI: That Section 515-43F be amended to read as follows:

F. Water service line installation. No water service line shall be installed or used to supply water to more than one parcel or building unless a separate curb stop or shut-off valve is installed in the public right-of-way or easement for each parcel or building. Each parcel or building with a water service line shall have a City water meter installed for billing purposes.

SECTION XXVII: That Sections 515-43G through 515-43I be created a reads as follows:

- G. Maintenance and repair responsibilities.
 - (1) The City shall repair and/or replace any leaky or defective condition of the public water supply system and the public water distribution system. The consumer shall be responsible to repair and/or replace any leaky or defective condition of the consumer's water system. The consumer shall be notified by the City either in person or in writing of such leak or defective condition. If a defective condition is not repaired within 10 business days after such notice, the water supply shall be shut off and not reinstated until defective conditions have been corrected. Shut-off fees shall be charged per Chapter 248, Fines.
 - (2) In such cases where the operation, use, maintenance or repair of the consumer's water system results in the need to repair or replace the curb stop or shut-off valve, the consumer shall be responsible to repair and/or replace the curb stop or shut-off valve.
- H. Abandonment of water lines.
 - (1) All existing portions of the water system serving a building or property that will not be reused as part of building demolition or remodeling must be properly disconnected and abandoned by the property owner from the point where such system connects to the water main.
 - (2) Water service lines shall be disconnected at the water main and sealed. The corporation stop or valve at the water main shall be either capped or removed per the direction of the Director of Public Works.
 - (3) Upon abandonment of a water line, as required by this subsection, the owner of the property

serviced by such line shall be required to restore all property disturbed by such abandonment, including compacted backfill, restoration of grounds, sidewalk, pavement, or other features to match surrounding conditions.

I. Any person, firm, or corporation who or which draws water from the public water supply through an unauthorized connection or unauthorized use shall be fined for each offense as set forth in Chapter 248, Fines.

SECTION XXVIII: That Chapter 570 be amended to read as follows:

- § 570-1 Residential parking lots and driveways.
- A. Parking lots for one to six vehicles. Pavement design shall be according to Chapter 650, Section A-700. The parking lot must be graded for surface drainage. The driveway shall have sufficient crown to provide surface runoff. The driveway must be graded in such a manner that it will drain from the lot line to the street drainage system. The concrete public sidewalk shall extend through the driveway per the City standard detail. The driveway shall end at a depressed concrete curb (if curbs exist) or at the edge of the paved roadway. A depressed driveway section must be installed in those driveways that cross a drainage swale. It is the responsibility of the permittee to call for City inspection before the concrete or bituminous paved surface is applied. The permittee shall provide the City inspector with verification of material thickness and compaction. All single-family residentially zoned sections shall have a minimum of one enclosed parking space (garage) for each dwelling unit. Driveways shall be offset a minimum of 18 inches from the property lines, unless local conditions or design are approved by the City Engineer. All sidewalks shall be constructed in such a manner so as to provide access to the sidewalk for handicapped persons by means of an inclined ramp at the curbline where the sidewalk intersects the driveway and at the curbline where the sidewalk intersects the street line per the City standard detail.
- B. Parking lots for more than six vehicles. The same structural specification applies to this parking section that applies to the parking area in Subsection A. Drainage for this capacity of parking area must be obtained by a system of catch basins and dry wells of sufficient capacity to drain this surface for a ten-year-frequency storm. Ponding of no more than 0.75 foot is permitted. Drainage to an existing storm sewer of adequate capacity through underground conduit connected to a system of inlets located in the parking area is acceptable. Surface runoff onto adjoining areas is prohibited.
 - (1) The driveway shall be drained in the same manner or with the parking area. The concrete sidewalk shall extend through the driveway. It shall be a high point in the driveway to facilitate drainage to the street from that point and also back into the driveway drainage system.

(2) All sidewalks shall be constructed in such a manner as to provide access to the sidewalk for handicapped persons by means of an inclined ramp at the curbline where the sidewalk intersects the driveway and at the curbline where the sidewalk intersects the street line, per the City standard detail.

(3) All standards and materials referred to in this subsection shall follow the City

standard details or Standard Specifications for Road and Bridge Construction for the State of Illinois Highway Department, most current edition.

C. A site plan will be required for all parking lots. The elevations shown shall be to USGS datum. A permit must be obtained before construction begins.

- § 570-2 Commercial parking lots and driveways.
- A. Pavement design shall be according to Chapter 650, Section A-700. Portland cement concrete shall be reinforced with 6-6/6-6 welded wire mesh and be treated with a membrane curing and sealing compound per IDOT standards. The paved surface shall be graded to produce positive drainage to a series of inlets connected by underground conduit to an existing storm sewer or drainage ditch of adequate capacity. A system of catch basins and dry wells can be used if none of the above-noted outlets are available. The drainage system shall be designed to convey 100% of the runoff for a ten-year storm. Refer to Chapter 595, Stormwater Management, for additional requirements. No more than 0.75 foot of ponding is permitted. The parking lot shall have an arrangement of islands, planted with trees, ground cover and shrubbery, as required by Chapter 650, Unified Development Ordinance.
- B. The entrance and any areas within the parking lot that will provide for a service truck route shall need to follow the heavy-duty pavement design per Chapter 650, Section A-700.
- C. All standards and materials referred to in this section are to follow the City details or the Standard Specifications for Road and Bridge Construction for the State of Illinois Highway Department, most current edition.
- D. Site plans covering the entire parking area shall be submitted to the City Engineer for approval. The plans shall be detailed and complete, showing the drainage plan with elevations shown to produce positive drainage to all drainage structures. The elevations shall be to USGS datum.
- E. All curbs constructed upon private property shall be constructed of Portland cement concrete in accordance with specifications as determined by the City Engineer. The curb or curb and gutter width shall not be included in the parking lot drive aisle width. Sidewalks immediately adjacent to curbs shall be a minimum six-foot width.
- F. In the event the use of property zoned for commercial, business, industrial or manufacturing uses pursuant to Chapter 650, Unified Development Ordinance, of the Ordinances of the City of Crystal Lake is intensified or expanded beyond the use in existence on the effective date of this section, or in the event property is rezoned for any of said uses subsequent to said date, or in the event of any new construction on said property subsequent to the effective date of this section, curbs shall be constructed in the public right-of-way when required by the City Engineer.
- G. Permit. A permit issued by the Community Development Department shall be required for all parking lot, driveway and curb work.
- § 570-3 Sidewalks.

- A. General specifications.
 - (1) Concrete sidewalks in the public right-of-way shall conform with Chapter 650, Section 4-100.
 - (2) The width of commercial sidewalks in the Central Business District are to be consistent with adjacent commercial parcels, but not less than five feet.
 - (3) A permit issued by the Community Development Department shall be required for all sidewalk installations.
 - (4) Sidewalks shall be constructed if none exist whenever a new house is erected, unless otherwise provided by the City Council of the City of Crystal Lake.
- B. Construction specifications shall conform with Chapter 650, Section A-800.

SECTION XXIX: That Chapter 575, Article I, shall be amended to read as follows:

§ 575-1 Purpose.

The City of Crystal Lake requires the periodic use of private traffic engineering consultants to provide independent, unbiased evaluations of developments where traffic studies are required or deemed necessary by the City Engineer.

§ 575-2 Procedure.

- A. The Engineering Services Division shall determine is a traffic study is necessary or specific traffic issues need to be evaluated as part of the development review process, as outlined in Chapter 650, Unified Development Ordinance.
- B. The Engineering Services Division shall review the proposed development and, based upon a suitable site plan, shall develop a scope of services or request a scope of services from one of the approved traffic engineering firms.
- C. The developer/owner shall be given the choice to select the private traffic consulting firm to be retained by the City that will complete the traffic study using one of the following two selection procedures:
 - (1) The developer/owner can opt to select one of the six approved traffic engineering firms to complete the traffic study/analysis, pursuant to the process outlined in Subsection D below.
 - (2) The developer/owner can opt to select one of the six approved traffic engineering firms to complete the traffic study/analysis using the request for proposal (RFP) process outlined in Subsection E below.
- D. In order to expedite the traffic review procedure, the developer/owner shall have the option of selecting an approved traffic consultant to complete the traffic study/analysis, exclusive of the RFP process. The City shall furnish the developer/owner with a list of six approved traffic consultants having been selected pursuant to the selection process in §575-3.

- (1) The developer/owner shall select one of the six approved traffic consultants, and notify the City in writing of the selection. Upon receipt of the developer's/owner's selection, the Engineering Services Division shall request a scope of services from the selected consultant and request a quote from the consultant, to include a "not to exceed" amount, for review and approval.
- (2) The developer/owner shall execute a task order, in a form provided by the City Engineer, that acknowledges and agrees that the services provided by the consultant are for the benefit of the developer/owner. The developer/owner shall, pursuant to §241-34 of this Code, be responsible for payment to the City of all fees, actual costs or actual expenses related to the City retaining a traffic consultant pursuant to this section.
- (3) Upon compliance with Subsection D(2), the City shall enter into a contract with the selected consultant. A completed and finally approved copy of the consultant's report shall be furnished to the developer/owner.
- E. At the request of the developer/owner, the traffic study/analysis can be completed using the request for proposal (RFP) process.
 - (1) The Engineering Division shall send a request for proposals to a list of six traffic engineering consultants.
 - (2) All tendered proposals shall be furnished to the developer/owner, who will have the right to select the proposal/consultant of its choice.
 - (3) The developer/owner shall execute a task order, in a form provided by the City Engineer, that acknowledges and agrees that the services provided by the consultant are for the benefit of the developer/owner. The developer/owner shall, pursuant to §241-34 of this Code, be responsible for payment to the City of all fees, actual costs or actual expenses related to the City retaining a traffic consultant pursuant to this section.
 - (4) Upon compliance with Subsection E(3), the City shall enter into a contract with the selected consultant. A completed and finally approved copy of the consultant's report shall be furnished to the developer/owner.
- § 575-3 Consultant selection.
- A. The selection of traffic engineering consultants shall be the duty of a committee comprised of the City Manager, Director of Community Development and the City Engineer, who shall be subject to confirmation and approval by the Mayor and City Council.
- B. Statements of qualifications from interested consultants will be received by the committee and evaluated to obtain the most qualified field of candidates.
- C. It is the policy of the City to place up to six qualified consultants on an active list that would be called upon to review traffic-related issues pertinent to development projects and provide proposals to the City for studying same.
- D. The essential criteria used to select consultants would include, but may not be limited to:

(1) Traffic engineering experience.

(2) Qualifications of principals and staff engineers to supervise and perform the scope of intended services.

(3) Suitable, comparable results in previous studies performed with the City of Crystal Lake or other reliable references.

(4) Adequate available personnel to accomplish the scope of services in a timely manner.

(5) That the consultant does not perform engineering services to private developers/owners seeking approvals within the City of Crystal Lake.

E. The six consultants selected pursuant to this section shall be subject to removal from the list, at any time, by direction of the committee referred to in § 573-3A. If, in the opinion of the City selection committee, results are unsatisfactory on a second successive study or other negative quality issue, that firm may be dropped and replaced with the next most highly qualified firm.

SECTION XXX: All ordinances or parts of ordinances in conflict herewith are hereby repealed.

SECTION XXXI: That this Ordinance shall be in full force and effect from and after its passage, approval, and publication as provide by law.

DATED at Crystal Lake, Illinois, this 17th day of May, 2016.

City of Crystal Lake, an Illinois municipal corporation ()Aaron T. Shepley, Mayor

Aaron 1. Snepley, Mayor

SEAL

ATTES Nick Kashroubas, City Clerk

Passed: May 17, 2016 Approved: May 17, 2016

EXHIBIT A

Chapter 241 Fees

241-33 Overtime Fees

If overtime is necessary in order to perform inspections or plan reviews, in addition to other fees prescribed in the section, actual hourly rates including overtime and benefits for time incurred shall be charged. a \$100 fee shall be charged for the first hour or part thereof. Any time beyond the first hour shall be charged in quarter hour increments at a rate of \$25 per quarter hour. All overtime fees shall be paid by the owner or permittee.

241-34 Professional Services

All fees, actual costs or actual expenses related to the City retaining a professional service consultant or technician to conduct any plan review, or-inspections, economic impact analysis, environmental analysis, legal fees, or other due diligence development costs on behalf of the City shall be paid for by the owner or permittee, in addition to other fees or costs required by the City. The petitioner shall execute a consultant fee reimbursement acknowledgement form.

241-35 New subdivision or individual property plan review and inspection by City staff

- A. The minimum fee shall be computed as 1.25% of the cost estimate for public and/or private property site improvements as approved by the City Engineer. Should the value of the time incurred by City staff exceed the fee previously established, that difference shall be due and payable by the developer upon final acceptance by the City.
- B. (5) Overtime salary costsfees as stated in §241-33 and §241-34 incurred by City staff or consultant inspectors when developer's contractor(s) chooses to work overtime, Saturdays or holidays.

241-38 Stormwater Fees

Editor's Note: Former § 241-38, Contractor's bond, as amended, was repealed 6-3-2014 by Ord. No. 7032

The following review and inspection fees shall be charged when the review is not completed by a professional service consultant:

A. General Permit #1: \$150

- B. General Permit #2: \$400
- C. Minor Development: \$400
- **D. Intermediate Development: \$550**

E. Major Development: \$850 + \$50 per additional acre

Chapter 251: Fire Code

- 251-2 Additions, insertions and amendments
 - A. The following sections or chapters of the International Fire Code are hereby revised and amended as follows:
 - (1) Section 101.1 (page 1, second line): insert "City of Crystal Lake"
 - (2) Section 101.2.1, Appendices, shall be amended as follows:
 - a. Appendixes B and C are adopted in their entirety.
 - b. Appendix D is adopted in its entirety with the following amendments:

- i. D103.1, Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 24 28 feet (back of curb to back of curb). See Figure D103.1
- ii. D103.6.1, Roads 20 feet to 24 feet in width. Fire apparatus access roads 20 feet up to but less than 24 feet wide (back of curb to back of curb) shall be posted on both sides as a fire lane.
- iii. D103.6.2, Roads more than 24 feet to 28 feet in width. Fire apparatus access roads more than 24 feet wide up to but less than 32 28 feet wide (back of curb to back of curb) shall be posted on one side of the road as a fire lane.
- iv. D103.6.3, Roads more than 28 feet in width. Fire apparatus access roads greater than or equal to 28 feet wide (back of curb to back of curb) shall not be required to post either side as a fire lane.

Chapter 392: Plumbing Code

392-1 Adoption of standards by reference.

The Illinois State Plumbing Code, effective date February 18, 2004 April 24, 2014, and subsequent amendments thereto published by the State of Illinois Department of Public Health, shall be and is hereby adopted by reference as the Plumbing Code for the City of Crystal Lake, and all terms and conditions contained in the Illinois State Plumbing Code, with an effective date of February 18, 2004 April 24, 2014, and subsequent amendments thereto published by the Illinois Department of Public Health, shall be part of the ordinances of the City of Crystal Lake, the same as if they were adopted verbatim.

392-2 Additions, insertions and amendments.

The following sections shall be amended to read as follows:

Section 890.200c) is hereby added as follows: The occupancy of a building or structure, wherein sewer or water service is required to serve the building or structure, and is shut off due to nonpayment of the water bill, a water service leak or any failure of the water or sewer service, shall not be occupied by persons thereafter until such time as remedial repairs are made and approved by the Plumbing Inspector or payment of services has been made and the water service has been restored by the City of Crystal Lake. This section is not intended to prevent occupancy of the building while maintenance or repairs of the sewer or water service are being performed to restore service.

Section 890.410 b) 1) is hereby added as follows: Clothes Washing Standpipe. The standpipe inlet for an automatic clothes washing machine shall be a minimum of twenty four inches above the trap weir.

Section 890.420 a) 4), Pipe Cleanouts; Location of Cleanouts within a Building Drain, is hereby amended as follows: A full-size cleanout shall be located within five feet of the building **foundation**, inside or outside, in direct line with the building drain and sewer. A monitoring manhole may be installed as an alternative to an outside cleanout and shall also be located

outside of the building within five feet of the building foundation and installed in such a manner that it meets the approval of the City of Crystal Lake Community Development Department or Public Works Department.

Section 890.1130 g) 8) is hereby added as follows: A backflow prevention device shall be installed on each customer water service supply serving any building, other than a single family dwelling, such installation shall be performed in accordance with the Illinois Plumbing Code. This requirement shall apply whenever there is an installation of a new customer service supply pipe, alteration to an existing building, renovation of an existing building, or replacement of an existing customer service supply pipe.

Section 890.1150a)2), Water Service Pipe Installation, is hereby amended as follows: The water service and the building drain or building sewer may be installed in the same trench, provided that the water service pipe is placed on a solid shelf a minimum of 18 inches above and 24 inches horizontally of the building drain or building sewer. For such installations, the water service, the building sewer and the building drain shall be of approved material listed in Appendix A, Table A, "Approved Building Drainage/Vent Pipe," as amended, provided that such material is approved for its specific use. (See Appendix I, Illustrations E, F and G, for the proper installation of the water service, building drain and building sewer.)

Section 890.1150a)3) is hereby amended as follows: The minimum depth for any water service pipe shall be at least six feet minimum depth or the maximum frost penetration of the local area, whichever is over-greater depth.

Section 890.1190b) is hereby amended as follows: Water Supply Control Valves and Meter: A water meter shall be installed on every water service pipe entering every building. Water meters shall be approved and supplied by the City of Crystal Lake. The water meter shall be installed within the building in an accessible location. Meters may not be installed in crawl spaces or pits within the building. The meter shall have unions on the inlet / and outlet opening and is required to have shutoff valves on both the inlet and outlet sides for all installations. Valves shall be full-port valves with an open area at least that of the water service pipe and be provided with a drip valve installed on the discharge outlet side of the meter. The drip valve may be of any type and may not have hose threads. Any variations of the water meter placement shall be subject to the approval of the Director of Public Works.

Section 890.1190b)1), Non-Single-Family Water Meter Installation, is hereby added as follows: The valve on the inlet side before the domestic water meter shall be lockable style **approved by the Building Commissioner or his/her duly designated representative.**

Section 890.1190h), Water Shut off Valves, is hereby added: Water shut-off valves shall be ball type for water services/supply system for two-inch or smaller.

Section 890.1190 f)1) is hereby added as follows: Line valves shall be readily accessible and located no more than five feet above the finished floor. Valves shall be located in the tenant or occupant space where the fixtures are located.

Section 890.1240, Miscellaneous, is hereby added as follows:

- 1. Drain cock. All storage tanks shall be equipped with drain cocks.
- 2. Water softener installation. The following regulations shall apply to all water softeners, water conditioners and all water-treating equipment, appurtenances and appliances:
 - a. All softeners and equipment shall have a valve bypass on the water supply so that any equipment failure will not interfere with the water service to the building.
 - b. All equipment shall be installed with unions or flare disconnect type of water connections to allow ease of disconnection and servicing.
 - e. The waterline from any softener or equipment shall not be connected directly to any sewer, soil, waste or vent line.
 - d. All water softeners and equipment shall be installed with a trapped and vented outlet and open site connection.
 - e. Placement of water softeners and other equipment shall not interfere with the accessibility of installation or servicing of water meters, furnaces, hot water heaters, appliances, etc.

Section 890.1320 a)1) is hereby added as follows: All new buildings with basements, floors, rooms or occupancy areas below ground level shall have the building drain located above the finished floor. Footing drains shall be connected to sump pumps for discharge outside the building or into the storm sewer system with Public Works Department approval. No footing drain or drainage tile shall be connected to the sanitary sewer system.

Section 890.1360a)3) shall be amended by adding the following: Finished floor elevations of basements below 878.00 feet elevation above sea level, USGS datum, are prohibited unless overhead building sewer service is provided.

Section 890, Subpart M, Inspections, Tests, Maintenance and Administration, is added as follows:

(1) Section 890.1960 is hereby added as follows: MAINTENANCE, General. All plumbing and drainage systems, both existing and new, and all parts thereof, shall be maintained in a functional, safe and sanitary manner. All devices or safeguards which are required by the Plumbing Code shall be maintained in good working order. The owner or his/her designated agent shall be responsible for the maintenance of the plumbing system.

(2) Section 890.1970 is hereby added as follows: PERMIT FOR PLUMBING WORK. Issuance of Required Permit. No plumbing work shall be undertaken prior to the issuance of a permit by the administrative authority. A permit shall be issued only to a licensed plumber. A plumbing permit may be issued to the owner/occupant or lessee/occupant of a single-family residence. Such person is authorized in accordance with the State of Illinois Plumbing License Law^{III} to install, alter or repair the plumbing system of such single family residence, provided that such plumbing shall comply with all plumbing laws, rules and regulations and the Illinois State Plumbing Code, shall be subject to such inspections as may be provided by the administrative authority, and provided further that any such owner/occupant or lessee/occupant shall not employ any person other than an Illinois licensed plumber to assist in such work.

[1] Editor's Note: See 225 ILCS 320/0.01 et seq.

(3) APPLICATION FOR PERMIT. Application for a plumbing permit shall be made on forms provided by the administrative authority. The application shall be accompanied by fees in accordance with the schedule of fees adopted by the administrative authority.

(4) PLANS AND SPECIFICATIONS. No plumbing permit shall be issued until after plans and specifications showing the proposed plumbing work have been submitted, reviewed and approved by the administrative authority. If a plumbing permit is denied, the applicant shall submit revised plans and specifications. When it is found necessary to make any change in the plumbing from the plans and specifications on which a permit has been issued, amended plans and specifications shall be submitted to the administrative authority for approval prior to making any change in the plumbing system.

(5) MINOR REPAIRS. No plumbing perm it permit is required for minor repairs. Minor repairs are repairs which do not require changes in the piping to or from plumbing fixtures or involve the removal, replacement, installation or reinstallation of any pipe or plumbing fixtures.

(6) PROTECTION OF WATER SUPPLY SYSTEM. The administrative authority may adopt rules and regulations to protect the potable water system. Such rules and regulations should include, but are not necessarily limited to, the following types of installation: i.e., water treatment; heating; cooling; sprinklers, fire or lawn; swimming pools; ornamental fountains; or other water sources.

M.Section 890.1990, Enforcement, is added as follows:

(1) PERMIT FEES. No permit shall be valid until the fees prescribed by the administrative authority have been paid, nor shall an amendment to a permit be approved until the additional fees, if any, have been paid to the administrative authority.

(2) FAILURE TO OBTAIN PERMIT. Any person who installs any plumbing before obtaining a required plumbing permit from the administrative authority shall be subject to the penalties prescribed by the administrative authority.

(3) INSPECTION AND TESTS. It is the responsibility of the administrative authority to enforce the provisions of any adopted ordinance, resolution, rules and regulations or code regulating plumbing and plumbers.

(4) RIGHT OF ENTRY. The authorized representative of the administrative authority shall, after proper identification, have the right, subject to constitutional limitations, to enter any premises for the purpose of enforcing any ordinance, resolution, rule or regulation, or code adopted to regulate plumbing and plumbers.

(5) COMPLIANCE WITH PLUMBING CODE. The administrative authority shall make routine plumbing inspections to ascertain compliance with the Plumbing Code and shall investigate complaints involving plumbing.

(6) PENALTY. Any person who violates, disobeys, omits, neglects or refuses to comply with or who resists the enforcement of any of the provisions of this chapter shall be fined in an amount set forth in Chapter **<u>248</u>**, Fines, for each offense. Each day that a violation is permitted to exist shall constitute a separate offense.

Section 890, Appendix A, Tables, Plumbing Materials, Equipment, Use Restrictions and Applicable Standards. The following amendments to Appendix A, Tables, shall be made as follows:

(1) Table A, Approved Building Drainage/Vent Pipe Underground. Approved for use: Items 3 and 11; neoprene insert gaskets (ASTM C-564-1989).

(2) Table A, Building Drainage/Vent Pipe Above Ground.

(a) Delete items 1, 2, 9 and 13.

(b) Approved for use: Items 3, 4, 5, 6, 7, 8, 10, 11, 12 and 14.

(3) Table A, Building Sewer.

(a) Delete items 1, 2, 3, 5, 7 and 9.

(b) Approved for use: Items 4, 6 and 8.

(4) Table A, Water Service Pipe — Underground.

(a) Delete items 1, 2, 4, 5, 7, 8, 9, 10, 11, 12 and 13.

(b) Approved for use: 3 Cast-iron (ductile iron) water pipe; 6 Type K copper tube with compression or flared connections.

(5) Table A, Water Distribution Above Ground.

(a) Delete items 2, 5, 7 and 8.

(b) Approved for use: Items 1, 3, 4, 5, 6, 9 and 10.

Chapter 515: Water and Sewer

515-2 Submission of written request; approval; deposit

- A. Any property owner, hereinafter referred to as "applicant," desiring an extension of the City water or sewer main or other conveyance to his/her property shall submit to the City a detailed plan showing the location of the extensions to the property. The applicant shall state in said request that he/she agrees to pay the cost of the extension, unless otherwise provided by § 241-46 of the City Code. Such request shall be subject to the approval of the City Engineer, or his/her designee.
- **B.** Upon approval of the request, the applicant shall deposit with submit to the City a surety letter of credit for 120% percent of the estimated amount of the cost chargeable to him/her for the extension. Upon approval of the installation, the letter of credit may be reduced as approved by the City Engineer. All approved extensions require a two-year mainteancne bond from the date of approval. The surety may be a letter of credit, bond, cash deposit, as may be designated by the City or other security approved by the City, in a format approved by the City (hereinafter, Performance Security). Upon completion of any portion of such improvements, a reduction to the Performance Security may be requested and the City may grant a reduction at its sole discretion. If, at any time, the City determines that the funds remaining in the Performance Security are not sufficient to pay in full the remaining unpaid costs of such improvements, within 30 days of written notice, the Performance Security shall be increased to an amount determined by the City to be sufficient to pay in full the remaining costs of such improvements. Failure to increase the amount of the Performance Security shall be grounds to draw down the entire remaining balance of the Performance Security. Any Performance Security submitted to the City in the form of a bond shall be issued by an insurance company that has a current rating of A++, A+, or A as rated by A.M. Best

rating company. Any Performance Security must be issued by a business licensed to do business in the State of Illinois and redeemable in the State of Illinois.

C. A bond, letter of credit, cash deposit, as may be designated by the City, or other security approved by the City, in a form approved by the City (hereinafter, Maintenance Security), in the amount not less than 5 percent of the approved engineer's estimate of cost of the installation of such improvements, providing guarantee of workmanship and materials for a period of two years from the final inspection and acceptance of such improvements. If, at any time, the City determines that the funds remaining in the Maintenance Security are not sufficient to pay for correcting defects and deficiencies of such improvements, within 30 days of written notice, the Maintenance Security shall be increased to an amount determined by the City to be sufficient to pay for correcting defects and deficiencies of such improvements. Failure to increase the amount of the Maintenance Security shall be grounds to draw down the entire remaining balance of the Maintenance Security. Any Maintenance Security submitted to the City in the form of a bond shall be issued by an insurance company that has a current rating of A++, A+, or A as rated by A.M. Best rating company. Any Maintenance Security must be issued by a business licensed to do business in the State of Illinois and redeemable in the State of Illinois.

515-3 Responsibility for costs

- A. Water main extension. The applicant will be required to pay the cost of the water main extension of a size suitable for his/her needs, but in no event shall the size be smaller than an eight-inch main unless approved by the City Engineer and Chief of Fire Rescue. the City Council.
- 515-13 Building sewers and connections

A. No unauthorized person shall uncover, make any connections with or opening into, use, alter, or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the Community Development Department. Any person, firm or corporation who utilizes an unauthorized connection or unauthorized use shall be fined for each offense as set forth in Chapter 248, Fines.

C. Allocation of costs.

- 1. All costs and expenses incident to the installation, connection, **disconnection**, repair or maintenance of the building sewer shall be borne by the owner. The owner shall indemnify the City from any loss or damage that may directly or indirectly be occasioned by the installation, connection, **disconnection**, repair and maintenance of the building sewer.
- 2. All costs and expenses incident to the installation, connection, **disconnection**, repair or maintenance of the building water service shall be borne by the owner. The owner shall indemnify the City from any loss or damage that may directly or indirectly be occasioned by the installation, connection, **disconnection**, repair and maintenance of the building water service. For purpose of this article, the building water service shall be considered that portion of the water main between the building and the B box unless otherwise approved by the City.

M. Abandonment of sanitary sewer lines: All existing portions of the sanitary sewer system serving a building or property that will not be re-used as part of building demolition or remodeling must be properly disconnected and abandoned by the property owner from the point where such system connects to the sewer main.

Sanitary sewer service lateral shall be capped at the public right-of-way. An abandonment fee will be charged for grouting the service line at the sanitary main which shall be based on the City's annual grouting program cost.

Upon abandonment of a sewer line, as required by this Section, the owner of the property serviced by such line shall be required to restore all property disturbed by such abandonment, including compacted backfill, restoration of grounds, sidewalk, pavement, or other features to match surrounding conditions.

515-29 Meter accuracy tests.

In the event of a disputed water and/or sewer bill, or for other cause, the building owner or occupant may request a water meter accuracy test. completed by Water Department personnel. Water meter accuracy testing may be shall be scheduled by the Public Works Department and conducted on site or at the Municipal Complex at the discrection of the Water Department superintendent by a third party meter testing company. The requesting party shall witness any such test. The meter shall be deemed accurate if it meets the AWWA meter accuracy standards as they apply to each specific meter. Should the meter accuracy test prove the meter to be accurate a meter testing fee of \$25 will be assessed and the amount of the water and/or sewer bill in dispute owed. For compound meters, large-size meters or other meters requiring specialized meter testing services provided by a third party, the customer requesting the test will be invoiced for the meter testing fee of \$25 plus the City cost of for the third-party test. with no additional markup. Should the meter be determined to be defective, no meter testing fee will be applied and the water and/or sewer bill in question will be adjusted based on the inaccuracy percentage determined provided that such adjustment shall be for a period not exceeding one year.

515-43 Water System

E. The consumer's water system shall include all parts of the facilities used to convey water from the public water supply distribution system to the point of use, beyond the curb stop or shut off valve. In the event that no curb stop or shut off valve exists the consumer's water system shall include all parts of such facilities located within the consumer's property.beyond the service connection used to convey water from the public water supply distribution system to points of use.

F. Water service line installation: No water service line shall be installed or used to supply water to more than one parcel or building unless a separate curb stop or shut off valve is installed in the public right-of-way or easement for each parcel or building. Each parcel or building with a water service line shall have a City water meter installed for billing purposes.

G. Maintenance and repair responsibilities: The City shall repair and/or replace any leaky or defective condition of the public water supply system and the public water distribution system. The consumer shall be responsible to repair and/or replace any leaky or defective condition of the consumer's water system. Consumer shall be notified by the City either in person or in writing of such leak or defective condition. If defective condition is not repaired within 10 business days after such notice, the water supply shall be shut off and not reinstated until defective conditions have been corrected. Shut off fees shall be charged per Chapter 248, Fines.

In such cases where the operation, use, maintenance or repair of the consumer's water system results in the need to repair or replace the curb stop or shut off valve, the consumer shall be responsible to repair and/or replace the curb stop or shut off valve.

H. Abandonment of water lines: All existing portions of the water system serving a building or property that will not be re-used as part of building demolition or remodeling must be properly disconnected and abandoned by the property owner from the point where such system connects to the water main.

Water service lines shall be disconnected at the watermain and sealed. The corporation stop or valve at the watermain shall be either capped or removed per the direction of the Director of Public Works

Upon abandonment of a water line, as required by this Section, the owner of the property serviced by such line shall be required to restore all property disturbed by such abandonment, including compacted backfill, restoration of grounds, sidewalk, pavement, or other features to match surrounding conditions.

FI. Any person, firm or corporation who or which draws water from the public water supply through an unauthorized connection **or unauthorized use** shall be fined for each offense as set forth in Chapter 248, Fines.

Chapter 570 Parking Lot, Driveway and Sidewalk Construction

570-1 Residential parking lots and driveways

A. Parking lots for one to six vehicles. Bituminous drives and parking areas shall be constructed on a solid, thoroughly compacted subgrade. The paved section shall consist of six inches of compacted CA6 Grade #9 gravel base and two inches of Class I bituminous paved surface. Recycled concrete meeting the CA-6 gradation and meeting IDOT requirements is also permitted as base material. The paved surface may also consist of four inches of concrete on a two-inch CA6 Grade #9 gravel base. A curing and sealing compound meeting IDOT requirements shall be applied to the fresh concrete surface for curing and sealing. The concrete shall be IDOT SI concrete Pavement design shall be according to §650, section A-700. The parking lot must be graded for surface drainage. The driveway shall have sufficient crown to provide surface runoff. The driveway must be graded in such a manner that it will drain from the lot line to the street drainage system. The concrete public sidewalk shall extend through the driveway per the City standard detail and be six-inch minimum thickness through residential driveways. The driveway shall end at a depressed concrete curb (if curbs exist) or at the edge of the paved roadway. A depressed driveway section must be installed in those driveways that cross a drainage swale. It is the responsibility of the permittee to call for City inspection before the concrete or bituminous paved surface is applied. The permittee shall provide the City inspector verification of material thickness and compaction. All singlefamily residentially zoned sections shall have a minimum of one enclosed parking space (garage) for each dwelling unit. Driveways shall be offset a minimum of 18 inches from the property lines, unless local conditions or design are approved by the City Engineer. All sidewalks shall be constructed in such a manner so as to provide access to the sidewalk for handicapped persons by means of an inclined ramp at the curbline where the sidewalk intersects the driveway and at the curbline where the sidewalk intersects the street line **per the City standard detail** the grade of which shall be determined and approved by the City Engineer.

B. Parking lots for more than six vehicles. The same structural specification applies to this parking section that applies to the parking area in Subsection A. Drainage for this capacity of parking area must be obtained by a system of catch basins and dry wells of sufficient capacity to drain this surface for a ten-year frequency storm. Ponding of no more than 0.75 feet is permitted. Drainage to an existing storm sewer of adequate capacity through underground conduit connected to a system of inlets located in the parking area is acceptable. Surface runoff onto adjoining areas is prohibited.

(2) All sidewalks shall be constructed in such a manner to as to provide access to the sidewalk for handicapped persons by means of an inclined ramp at the curbline where the sidewalk intersects the driveway and at the curbline where the sidewalk intersects the street line, the grade of which shall be determined and approved by the City Engineer.per the City standard detail.

(3) All standards and materials numbers referred to in this section are to be found in the shall follow the City standard details or Standard Specifications for Road and Bridge Construction, for the State of Illinois Highway Department, most current edition.

(4) The following sections of the State Standards that are not in conflict with the above specification shall apply and are a part of this section by reference. They are as follows:

a.-Section 212, Subgrade, or as updated.

b. Section 301, Aggregate Base Course, or as updated.

c. Section 406, Bituminous Binder and Surface Course (Class I), or as updated.

A site plan will be required for all parking lots. The elevations shown shall be to USGS datum. The site plan must be approved by the City Engineer A permit must be obtained before construction begins.

570-2 Commercial parking lots and driveways

A. Commercial parking areas shall be constructed Pavement design shall be according to §650, section A-700.on a thoroughly compacted subgrade, meeting the requirements of Section 212 of the Standard Specifications. The subgrade material shall have a minimum CBR of 3. The subbase shall consist of a minimum of 10 inches of CA6 Grade #9 gravel furnished and placed as required by Section 301 of the Standard Specifications. The paved surface shall consist of a bituminous prime coat, 1 1/2 inches bituminous binder and a one inch bituminous surface course, furnished and placed all in accordance with Section 405 of the Standard Specifications. Portland cement concrete shall be reinforced with 6-6/6-6 welded wire mesh and be treated with a membrane curing and sealing compound per IDOT standards. The paved surface shall be graded to produce positive drainage to a series of inlets connected by underground conduit to an existing storm sewer or drainage ditch of adequate capacity. A system of catch basins and dry wells can be used if none of the above-noted outlets are available. The drainage system shall be designed to convey 100% runoff for a ten-year storm. Refer to Chapter 595, Stormwater Management, for additional requirements. No more than 0.75 feet of ponding is

permitted. The parking lot shall have an arrangement of islands, planted with trees, ground cover and shrubbery, as required by Chapter 650, Zoning.

B. The entrance and inner roadways shall be placed on the same subgrade as the parking area. The subbase shall consist of a minimum of two inches of CA6 Grade #9 gravel and four inches of bituminous aggregate material, furnished and placed in accordance with Sections 301 and 406 of the Standard Specifications. The paved surface shall consist of an 1.1/2 inches bituminous binder of one inch bituminous surface course furnished and placed according to Section 406 of the Standard Specifications. The entrance and any areas within the parking lot that will provide for a service truck route shall need to follow the heavy duty pavement design per §650, section A-700.

C. The roadway section for the service truck routes shall have six inches of BAM base instead of the four inches of BAM required for the inner roadway sections.

D. C. All standards and materials referred to in this section are to follow the City details or the Standard Specifications for Road and Bridge Construction, for the State of Illinois Highway Department, most current edition. Portland cement concrete driveways shall have the same subgrade requirements as Item I, Section B. The base course shall consist of three inches of CA6 Grade #9 gravel furnished and placed as required by Section 301 of the Standard Specifications. The concrete paved surface shall be a minimum of six inches thick and shall be furnished and installed as specified in Section 623, Portland Cement Concrete Driveways Pavement, of the Standard Specifications and shall be reinforced with 6-6/6-6 welded wire mesh. The paved surface shall be treated with a membrane curing and sealing compound per IDOT standards.

E.D. Site plans covering the entire parking area shall be submitted to the City Engineer for approval. The plans shall be detailed and complete, showing the drainage plan with elevations shown to produce positive drainage to all drainage structures. The elevations shall be to USGS datum. The standard specifications referred to are the Standard Specifications for Road and Bridge Construction for the State Highway Department, most current edition.

F. E. All curbs constructed upon private property shall be constructed of portland cement concrete in accordance with the specifications as determined by the City Engineer. The curb or curb and gutter width shall not be included in the parking lot drive aisle width. Sidewalk immediately adjacent to curb shall be minimum six-foot width.

G. F. In the event the use of property zoned for commercial, business, industrial or manufacturing uses pursuant to Chapter 650, Zoning, of the Ordinances of the City of Crystal Lake is intensified or expanded beyond the use in existence on the effective date of this section, or in the event property is rezoned for any of said uses subsequent to said date, or in the event of any new construction on said property subsequent to the effective date of this section, curbs shall be constructed in the public right-of-way when required by the City Engineer-of the City of Crystal Lake, in accordance with the specifications approved by the City Engineer of the City of Crystal Lake.

H. G. Permit. A permit issued by the Community Development Department shall be required for all parking lot, driveway and curb work.

570-3 Sidewalks

A. General specifications.

(1) Concrete sidewalks in the public right-of-way shall meet §650, section 4-100. be not less than four feet in width and not less than four inches in thickness. For corner lots, the

sidewalks shall be extended to the curblines to provide pedestrian crossings in all directions at each street intersection. All sidewalks shall be constructed in such a manner so as to provide access to the sidewalk at the curbline for handicapped persons by means of an inclined ramp, the grade of which shall be determined and approved by the City Engineer.

(2) All sidewalks are to extend through driveways, unless said driveway is constructed of concrete, in good condition and at proper grade.

(32) The width of commercial sidewalks in the Central Business District are to be consistent with adjacent commercial parcels, but not less than four five feet.

(43) A permit issued by the Community Development Department shall be required for all sidewalk installations.

(54) (Reserved) Editor's Note: Former Subsection A(5), requiring public sidewalks to be constructed by licensed contractors, was repealed 9-4-2007 by Ord. No. 6251.

(65)Sidewalks shall be constructed if none exist whenever a new house is erected, unless otherwise provided by the City Council of the City of Crystal Lake.

(7) The Standard Specifications for Road and Bridge Construction manual for the State of Illinois adopted October 1, 1979, and henceforth referred to as the "IDOT STSRBC" shall govern the sidewalk construction and is hereby incorporated by reference.

B. Construction specifications shall meet §650, section A-800.

(1)No walk shall be poured unless the subgrade, compacted granular base, forms, grade and alignment have been inspected and approved by the Community Development Department.[Amended 6-3-2014 by Ord. No. 7036]

(2) Sidewalks shall be constructed on a well compacted subgrade.

(3) The base course shall consist of a minimum of two inches of compacted CA-6 gravel, Grade 7 or 9. Sand and pea gravel are not acceptable as a base course material.

(4) The surface shall be constructed with a six-bag cement mix per cubic yard of concrete. The aggregate gradation incorporated shall meet the minimum requirements of Class X concrete as specified by IDOT STSRBC, Sections 703 and 704. The sidewalk shall be five feet wide and four inches thick. Where the sidewalk extends through a residential driveway, the walk shall be six inches thick. For commercial/industrial properties, the thickness through driveways shall be eight inches minimum.

- (5) The finish grade of the sidewalk shall be established by the City Engineer. However, general criteria includes a minimum pitch to the street of 1/4 inch per foot of width, and the grade of the finished walk shall have sufficient fall from the edge of the walk to the curbline to provide sufficient drainage which shall be 1/4 inch to 1/2 inch per foot.
- (6) The sidewalk finish surface shall have a broom finish and shall have contraction joints on five foot centers, and 1/2 inch full depth expansion joints every 50 feet. Expansion joints shall also be required where the walk abuts an existing walk, a curb, driveway, approach, building, or as directed by the City Engineer. Contraction joints shall not exceed 1/3 the thickness of the finished walk. All joints and edges of the walk shall be tooled. Preformed expansion joint material shall meet the requirements of Section 715 of the IDOT STSRBC.
- (7) A curing compound shall be applied to all finished surfaces. Alternate methods of curing may be used as specified in Section 625.04 of the IDOT STSRBC.
- (8) Special attention shall be given to pouring concrete in cold weather as follows:

(a) Unless authorized by the City Engineer, the placing of concrete shall not commence unless the ambient air temperature is 35°F. and rising. Operations shall cease and finished work protected if the temperature drops below that level.

(b) Protection after placing concrete shall be in place for at least four days as follows:

Minimum Temperature	Protection
25F through 32F	Two layers of polyethylene
Below 25F	12 inches of straw covered with two layers of
	Polyethylene

- (c) If calcium chloride is added to the concrete mix, it may be added only in liquid form as part of the mixing water at the batch plant and shall not exceed 2% by weight of the amount of cement in the concrete.
- (d) No material containing frost shall be used.
- (e) No sidewalk shall be placed on a frozen base or subgrade.
- (9) Water service boxes shall not be located in the sidewalk slab. In the event of a conflict, the contractor shall contact the Water Department of the City of Crystal Lake for further instructions.
- (10) The area around all walks and approaches must be backfilled, graded and seeded. Excess dirt and concrete must be cleaned away by the contractor, leaving the right-of-way in a neat, workmanlike condition.
- (11) The same material and construction specifications apply to sidewalks erected on private property. The minimum cross section of all private sidewalks shall be 30 inches in width and four inches in thickness.
- (12) It is the responsibility of the permit holder or his/her agent/contractor to supply warning devices, barricades, etc., to protect the work and to warn of any excavations, material stockpile, dropoffs, or any condition constituting a pedestrian or traffic hazard.
- ^[2][2]Editor's Note: Former Subsection 3.75-3, Adjacent property owner's responsibilities for repairing sidewalks, which immediately followed this subsection, was deleted 2-20-2007 by Ord. No. 6161.

Chapter 575 Planning and Development

575-2 Procedure

- A. The Engineering Services Division shall determine is a traffic study is necessary or specific traffic issues need to be evaluated as part of the development review process, as outlined in §650-42 or Chapter 650, Zoning.
- B. The Engineering Services Division shall review the proposed development and, based upon a suitable site plan, shall develop a scope of services or request a scope of services from one of the approved traffic engineering firms.
- C. The developer/owner shall be given the choice to select the private traffic consulting firm to **be retained by the City** that will complete the traffic study using one of the following two selection procedures:

(1) The developer/owner can opt to select one of the six approved traffic engineering firms to complete the traffic study/analysis, pursuant to the process outlined in Subsection D below.

(2) The developer/owner can opt to select one of the six approved traffic engineering firms to complete the traffic study/analysis using the request for proposal (RFP) process outlined in Subsection E below.

- D. In order to expedite the traffic review procedure, the developer/owner shall have the option of selecting an approved traffic consultant to complete the traffic study/analysis, exclusive of the RFP process. The City shall furnish the developer/owner with a list of six approved traffic consultants having been selected pursuant to the selection process in §98-3575-3.
 - (1) The developer/owner shall select one of the six approved traffic consultants, and notify the City in writing of the selection. Upon receipt of the developer's/owner's selection, the Engineering Services Division shall send the request a scope of services to from the selected consultant and request a quote from the consultant to include a "not to exceed" amount for review and approval.
 - (2) The developer/owner shall provide to the City Engineering Services Division a cashier's check, letter of credit or cash to secure the cost of the selected consultant's proposal execute a task order, in a form provided by the City Engineer, that acknowledges and agrees that the services provided by the Consultant are for the benefit of the developer/owner. Developer/owner shall, pursuant to §241-34 of this Code be responsible for payment to the City of all fees, actual costs or actual expenses related to the City retaining a traffic consultant pursuant to this Section.

E. At the request of the developer/owner, the traffic study/analysis can be completed using the request for proposal (RFP) process

- (1) The Engineering Division Services shall send a request for proposals to a list of six traffic engineering consultants.
- (2) All tendered proposals shall be furnished to the developer/owner who will have the right to select the proposal/consultant of its choice.
- (3) The developer/owner shall provide to the City Engineering Services Division a cashier's check, letter of credit or cash to secure the cost of the selected consultant's proposal execute a task order, in a form provided by the City Engineer, that acknowledges and agrees that the services provided by the Consultant are for the benefit of the developer/owner. Developer/owner shall, pursuant to §241-34 of this Code be responsible for payment to the City of all fees, actual costs or actual expenses related to the City retaining a traffic consultant pursuant to this Section.
- (4) Upon compliance with Subsection E(3), the City shall enter into a contract with the selected consultant. A completed and finally approved copy of the consultant's report shall be furnished to the developer/owner.
- (5) In the event subsequent reviews and/or additional meetings are required of the consultant, the developer/owner is obligated to compensate the City for any additional amount billed by the consultant.
- 575-3 Consultant Selection
- A. The selection of traffic engineering consultants shall be the duty of a committee comprised of the City Manager, Planning Director Director of Community Development and the City Engineer, who shall be subject to confirmation and approval by the Mayor and City Council.
- B. Statements of qualifications from interested consultants will be received by the committee and evaluated to obtain the most qualified field of candidates.
- C. It is the policy of the City to place up to six qualified consultants on an active list that would be called upon to review traffic-related issues pertinent to development projects and provide proposals to the City for studying same.
- D. The essential criteria used to select consultants would include, but may not be limited to:

(1) Traffic engineering experience.

(2) Qualifications of principals and staff engineers to supervise and perform the scope of intended services.

(3) Suitable, comparable results in previous studies performed with the City of Crystal Lake or other reliable references.

(4) Adequate available personnel to accomplish the scope of services in a timely manner.

(5) That the consultant does not perform engineering services to private developers/owners seeking approvals within the City of Crystal Lake.

- E. The six consultants selected shall be eligible to remain on the active list, provided that their results are comprehensive, responsive and timely. If, in the opinion of the City selection committee, results are unsatisfactory on a second successive study or other negative quality issue, that firm may be dropped and replaced with the next most highly qualified firm.
- F. Consultant firms that are not on the active list shall be encouraged to keep up-to-date statements of qualifications on file with the City committee in the event a replacement is necessary.