

**CITY OF LONG LAKE  
DESIGN STANDARDS**

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475.042 Conformity with Comprehensive Plan, Zoning Ordinance, and Design Standards

A proposed (re)subdivision of one existing lot into two or more lots shall conform to the Comprehensive Plan, the official Zoning Ordinance of the City, these Design Standards, and related policies adopted by the City.

475.043 Land Requirements

Subd. 1 Land shall be suited to the purpose for which it is to be (re)subdivided. No plan shall be approved if the site is not suitable for the purpose by reason of potential flooding, topography or adverse soil or rock formation.

Sub. 2 Land subject to hazards to life, health or property shall not be subdivided until all such hazards have been eliminated or unless adequate safeguards against such hazards are provided by the (re)subdivision plan.

Subd. 3 Proposed (re)subdivision shall be coordinated with existing nearby municipalities or neighborhoods, so that the City as a whole may develop efficiently and harmoniously.

475.044 Blocks

Subd. 1 Block length and width or acreage within bounding streets shall be such as to accommodate the size of residential lots required in the area by the Zoning Ordinance and to provide for convenient access, circulation control and safety of street traffic.

Subd. 2 Block Length. In general, intersecting streets shall be provided at such intervals so as to serve cross-traffic adequately and to meet existing streets. Where no existing plats control, the blocks in residential subdivisions, other than those with lake frontage, should not exceed one thousand eight hundred (1,800') feet nor be less than six hundred (600') feet in length, except where topography or other conditions justify a departure from this standard. In blocks longer than nine hundred (900') feet, ten (10) foot-wide pedestrian rights-of-way and/or easement(s) through the block may be required in locations deemed necessary for the public health, convenience and necessity. Suitable surfacing shall be provided in pedestrian ways. New pedestrian paths must be consistent with the Comprehensive Park & Recreation Plan as amended from time to time.

Subd. 3 Block Width. The width of the block shall normally be sufficient to allow two (2) tiers of lots of minimum depth as required by the Zoning Ordinance except adjoining a lake, stream, railroad or arterial or where one tier of lot is necessary because of topographic conditions. Blocks intended for business or industrial use shall be of such width as to be considered most suitable for their respective use, including adequate space for off-street parking, deliveries and loading. Such facilities shall be provided with safe and convenient limited access to the street system.

#### 475.045 Lots

Subd. 1 Area. The minimum lot area, width and depth shall not be less than that established by the City Zoning Ordinance in effect at the time of adoption of the final plat.

Subd. 2 Side Lot Lines. Side lines of lots shall be at right angles to street lines, radial to curved street lines, or radial to lake or stream shores unless topographic conditions necessitate a different arrangement.

Subd. 3 Building Sites. Each lot shall be provided an adequate building site at least one (1) foot above the street grade.

Subd. 4 Butt lots in any subdivision are to be discouraged. Where such lots must be used to fit a particular type of design, they shall be platted at least twenty (20) feet wider than the average width of interior lots in the block.

Subd. 5 Frontage. Every lot must have the minimum frontage on a City approved public street other than an alley, as required in the City Zoning Ordinance.

Subd. 6 Setback Lines. Setback or building lines shall be shown on all lots and shall not be less than the setback required by the City Zoning Ordinance, as may be amended.

Subd. 7 Watercourses. Lots abutting a watercourse, wetland, pond area, drainage, channel or stream shall have additional depth and width, as required under the provisions of the City Zoning Ordinance to assure building sites that are not subject to flooding.

Subd. 8 Lots with lakeshore frontage shall be designed so that the lot lines extended shall maintain the closest approximation to riparian rights.

Subd. 9 Features. In the (re)subdivision of any land, due regard shall be shown for all natural features, such as tree growth, watercourses, historic spots or similar conditions which, if preserved, will add attractiveness and stability to the proposed development.

Subd. 10 Lot Remnants. All remnants of lots below minimum size for the respective zoning district in which they are located must be added to abutting lots or lots immediately adjoining, separated only by a public right-of-way. In those cases where parcels are separated by a public right-of-way, the lot remnant shall be designated an outlot and may be dedicated to the City. Lot remnants may be allowed if a plan for future use is found acceptable by the City Council.

Subd. 11 Political Boundaries. No singular plat shall extend over or onto another political boundary or school district line.

Subd. 12 Frontage on Two Streets. Double-frontage, or lots with frontage on two (2) parallel or non-intersecting streets shall not be permitted except where lots back on arterial streets or highways, or where topographic or other conditions render subdividing otherwise unreasonable. Such double-frontage lots shall have an additional depth of at least ten (10) feet in order to allow space for screen planting along the rear lot line.

Subd. 13 Turn-Around Access. Where proposed residential lots abut a collector street, they should be platted in such a manner as to encourage turn-around access and egress on each lot and discourage direct access onto such streets.

Subd. 14 Access to Arterial Streets. In the case where a proposed plat is adjacent to a limited access highway, other major highway, or other arterial street, there shall be no direct vehicular access from individual lots to such streets and roads. In the platting of small tracts of land fronting on limited access highways where there is no other alternative, a temporary entrance may be granted. As neighboring land becomes subdivided and more preferable access arrangements become possible, such temporary access permits shall become void.

Subd. 15. Outlots. The creation of outlots is to be discouraged. In such cases where outlots are created or exist, their area shall not be utilized in calculating minimums for buildable lot area requirements. Said outlots are also prohibited from qualifying for building permits except for public uses and private recreational uses accessory to allowable uses within the respective zoning district and which are properties under common ownership.

Subd. 16. Flag Lots. The creation of lots with less than 40 feet of frontage on a public right of way is prohibited.

Subd. 17. Platting of lot combinations. Any lots proposed to be combined to function as a single parcel must be replatted. The newly created plat map must be drafted by a licensed engineer or other individual authorized by the State, and must be accompanied by a revised legal description that accurately describes the

boundaries of the new parcel. The plat map must include graphical and notations of all necessary easements that are required by the City, and it must be accompanied by legal descriptions of those easements. The plat map must be drawn in a recordable form, and it must be filed with the Hennepin County of Taxpayer Services or comparable department and with the City Clerk.

Subd. 18. Platting of lot subdivisions. Any lots proposed to be subdivided to function as more than one parcel must be replatted. The newly created plat map must be drafted by a licensed engineer or other individual authorized by the State, and must be accompanied by a revised legal description that accurately describes the boundaries of the new parcel. The plat map must include graphical and notations of all necessary easements that are required by the City, and it must be accompanied by legal descriptions of those easements. The plat map must be drawn in a recordable form, and it must be filed with the Hennepin County of Taxpayer Services or comparable department and with the City Clerk.

#### 475.046 Streets

Subd. 1 Proposed streets shall conform to State and County transportation plans which have been prepared, adopted and/or filed as prescribed by law.

Subd. 2 Streets shall be logically related to the topography, so as to produce usable lots and reasonable grades.

Subd. 3 Access shall be given to all lots and portions of the tract in a subdivision and to adjacent un-subdivided parcels. Reserved strips and land-locked areas shall not be created.

Subd. 4 The arrangement of streets in new subdivisions shall make provision for the appropriate continuation of existing streets in adjoining areas.

Subd. 5 Where adjoining areas are not subdivided, but may be subdivided, the arrangement of streets in a new subdivision shall make provision for the proper projection of streets into adjoining areas by carrying the new streets to the boundaries of the new subdivision at appropriate locations. A temporary turn-around facility may be required at the closed end, in conformance with cul-de-sac requirements.

Subd. 6 Local streets shall be laid out to discourage their use by through traffic. The arrangement of arterial and collector streets shall be considered in their relation to the reasonable circulation of traffic, to topographic conditions, to runoff of storm water, to public convenience and safety, and in their appropriate relation to the proposed uses of the area to be served.

Subd. 7 Provisions for Resubdivision of Large Lots and Parcels. When a tract is subdivided into larger than normal building lots or parcels, such lots or parcels shall be so arranged as to permit the logical location and openings of future streets and appropriate resubdivision, with provision for adequate utility connections for such resubdivision.

Subd. 8 Half or partial streets will not be permitted, except where essential to reasonable subdivision of a tract in conformance with the other requirements and standards of these regulations and where, in addition, satisfactory assurance for dedication of the remaining part of the street can be secured.

Subd. 9 Wherever a tract to be (re)subdivided adjoins an existing half or partial street, the part of the street within such tract shall be dedicated to the City with a plat recorded with Hennepin County.

Subd. 10 Dead-end streets shall be prohibited, except as stubs to permit future street extension into adjoining tracts with temporary cul-de-sacs, or when designed as cul-de-sac streets.

Subd. 11 Private streets and reserve strips, except in the case of planned unit developments, shall be prohibited and no public improvements shall be approved for any private street. All streets shall be dedicated for public use. If any person applies to subdivide or replat any land or parcels adjoining an existing private street, the private street shall be required to be dedicated for public use and scheduled for improvement to public street standards at the time of final plat. In the case of planned unit developments, the private street must be constructed to meet or exceed minimum City standards.

Subd. 12. Up to two single family parcels may be served by a shared driveway. Proper cross access easements and a cooperative maintenance agreement must be drafted in a recordable form and filed with the Hennepin County Office of Taxpayer Services or comparable department and the City Clerk prior to the issuance of a building permit for said driveway.

Subd. 13 Where a subdivision abuts or contains an existing or planned major arterial or a railroad right-of-way, a street approximately parallel to and on each side of such arterial and right-of-way may be required for adequate protection of adjacent properties and separation of through and local traffic. Such service streets shall be located at a distance from the major arterial or railroad right-of-way suitable for appropriate use of the intervening land, as for park purposes in residential districts, or for commercial and industrial purposes in appropriate districts. Such distances also shall be determined with due regard for the requirements of approach grades and future grade separations.

Subd. 14 The street design shall not be such as to cause hardship to owners of adjoining property in platting their own land and providing convenient access to it.

Subd. 15 Cul-de-sac streets, permanently designed as such, shall not exceed six hundred (600) feet in length, including a terminal turn around which shall be provided at the closed end, with a right-of-way radius of not less than sixty (60) feet. The length shall be measured along the centerline from the nearest intersection to the center point of the cul-de-sac.

Subd. 16 Where a temporary cul-de-sac is required, the turnaround right-of-way shall be placed adjacent to a plat boundary line and a right-of-way of the same width as the street shall be carried to said property line in such a way as to permit future extension of the street into the adjoining tract. At such time as such a street

is extended, the acreage covered by the turnaround outside the boundaries of the extended street shall revert in ownership to the property owner fronting on the temporary turnaround.

Subd. 17. Dedication. All newly created streets must be located within adequate dedicated right of way as dictated by the entity who has jurisdiction over that road.

475.047 Reserved

475.048 Street Design

Subd. 1 Minimum right-of-way widths and pavement widths (face to face of curb) for each type of public street or road shall be as follows:

<u>Type of Street</u>	<u>Right-of-way Width</u>	<u>Pavement Width</u>
Industrial Service Street	70 feet	44 feet
Local Street	60 feet	30 feet
Cul-de-sac	60 feet	48 feet
	turnaround radius	turnaround radius

Subd. 2 Where a (re)subdivision abuts or contains an existing street of inadequate width, sufficient additional width shall be provided and dedicated to meet the above standards.

Subd. 3 Additional right-of-way and roadway widths may be required to promote public safety and convenience when special conditions require it.

Subd. 4 Restriction of Access. Access of local streets onto and collector streets shall be discouraged at intervals of less than five hundred (500) feet between access points.

Subd. 5 Street Jog. Street jogs with centerline offsets of less than one hundred fifty (150) feet shall not be allowed.

Subd. 6 Deflection. When connecting street lines deflect from each other at any one point by more than ten (10) degrees, they shall be connected by a curve with a radius of not less than one hundred (100) feet.

Subd. 7 Grades. Centerline gradients shall be at least 0.4 percent and shall not exceed a 6% gradient on local streets.

Subd. 8 Vertical Curves. Different connecting street gradients shall be connected with vertical curves. Minimum length, in feet, of these curves shall be twenty (20) times the algebraic difference in the percent of grade of the two adjacent slopes.

Subd. 9 Angle of Intersection. The angle formed by intersecting streets shall not be less than sixty (60) degrees, with ninety (90) degree intersections preferred.

Subd. 10 Size of Intersection. Intersections of more than four (4) corners shall be prohibited.

Subd. 11 Corner Radii. Roadways of street intersections shall be rounded by a radius of not less than fifteen (15) feet. Corners at entrances to the turn-around portions of cul-de-sacs shall be designed for installation along both sides of all roadways.

Subd. 12. Private Streets. Private streets if approved by the City Council shall be designed in compliance with the standards in this Section.

475.049 Sidewalks

Subd. 1 Widths. In subdivisions or areas where sidewalks are deemed necessary by the City Council as guided by the Comprehensive Park and Recreation plan as amended from time to time, all new sidewalks shall be at least six (6) feet in width.

475.0491 Public Utilities

Subd. 1 Water Supply. Extension of the public water supply system, when available, shall be designed so as to provide the public water service to each lot.

Subd. 2 Sewage disposal. Extension of the public sanitary sewer system, when available, shall be designed so as to provide public sewer service to each lot.

475.0492 Drainage

Subd. 1 A complete and adequate drainage system design shall be required for the subdivision and may include a storm sewer system or system of open ditches, culverts, pipes, catch basins and pond areas, or a combination thereof. Said system shall be consistent with the Water Resources Management Plan as amended from time to time.

475.0493 Easements

Subd. 1 Provided for Utilities. Easements for drainage and utilities of at least ten (10) feet wide shall be provided on all lot lines. In the case of side or rear lot lines, these may be centered on the lot line.

Subd. 2 Provided for Drainage. Easements shall be provided along each side of the center line of any water course or drainage channel, whether or not shown on the Comprehensive Plan or Water Resources Management Plan as amended from time to time, to a sufficient width to provide proper maintenance and protection, to provide for storm water runoff, and to provide for installation and maintenance of public infrastructure.

Subd. 3 Continuous Utility Easement Locations. Utility easements shall connect with easements established in adjoining properties. These easements, when approved, shall not thereafter be changed without the approval of the City Council.

Subd. 4 Dedication. All easements shall be dedicated to the City for the required use and shall be shown on the final plat.

Subd. 5 Lake Access Easements. The platting or granting of private easements across private property or property lines for the purpose of providing private lake shore access is prohibited.

Subd. 6. Cross-Access Easements. Easements providing access between adjacent private parcels shall be encouraged.

Subd. 7. Filing. The legal description of all easements shall be filed with Hennepin County Office of Taxpayer Services or comparable department on a Plat of Dedication or comparable document and dedicated to the City.

#### 475.0494 Street Names

Subd. 1. Names of new streets shall not duplicate existing or platted street names within the City, unless a new street is a continuation of or in alignment with the existing or platted street. In that event, it shall bear the same name of the existing or platted street. Street names shall conform to the City's Street Naming and Property Numbering System as applicable.

#### 475.0495 Erosion and Sediment Control

Subd. 1. All land disturbing or land filling activities or soil storage shall be undertaken in a manner consistent with the Long Lake Water Resources Management Plan.

Subd. 2. Land disturbing or land filling activities shall be required to be permitted by the City of Long Lake and may be required to be permitted by the Minnehaha Creek Watershed District.

Subd 3. Land disturbing activities shall provide for silt fencing, catch basin inlet protection and rock construction entrances consistent with the BMPs required by Minnehaha Creek Watershed District rules and this Plan. Plans noting land disturbance may be required to be reviewed by the City Engineer.

#### 475.0496 Protected Areas

Subd. 1. Where land proposed for subdivision is deemed environmentally sensitive by the City, due to the existence of wetlands, drainage ways, watercourses, floodable areas or steep slopes, the design of said subdivision shall clearly reflect all necessary measures of protection to ensure against adverse environmental impact. The City's Water Resources Management Plan shall be carefully referenced and adhered to when designing a subdivision.

Subd. 2. Based upon the necessity to control and maintain certain sensitive areas, the City shall determine whether said protection will be accomplished through lot enlargement and redesign or dedication of those sensitive areas in the form of outlots or permanent conservation easements.

Subd. 3. In general, measures of protection shall include design solutions which allow for construction and grading involving a minimum of alteration to sensitive areas. Where these areas are to be incorporated into lots within the proposed subdivision, the applicant shall be required to demonstrate that the proposed design will not require construction on slopes over eighteen (18) percent, or result in significant alteration to the natural drainage system such that adverse impacts cannot be contained within the plat boundary.

#### 475.0497 Park Land Dedication Requirements

Subd. 1. As a prerequisite to final plat approval, applicants for the subdivision of land into more than one lot shall dedicate land for parks, playgrounds, public open spaces or trails and/or shall make a cash contribution to the City's Park Fund as provided by this Section.

Subd. 2. Land to be dedicated shall be reasonably suitable for active recreation as determined by the City and shall be at a location convenient to the public to be served. Factors used in evaluating the adequacy of proposed park and recreation areas shall include size, shape, topography, geology, hydrology, tree cover, access and location.

Subd. 3. The applicant shall consult with the Planning Commission, at the time his/her preliminary plat is under consideration, to secure their recommendation as to the location of any property that should be dedicated to the public, such as parks, playgrounds or other public property. The preliminary plat shall show the location and dimensions of all areas to be dedicated in this manner. Such contribution requirement recommendation(s) will be sent to the City Council for their approval.

Subd. 4. When a proposed park, playground, recreational area, or other public ground has been indicated in the City's official map, Comprehensive Plan, or Comprehensive Park and Recreation Plan, all as amended from time to time, and is located in whole or in part within a proposed plat, it shall be designated as an outlot on the final plat and shall be dedicated to the City or other appropriate governmental unit. If the applicant elects not to dedicate an area in excess of the land required hereunder for a proposed public site that the City feels is in the public interest to acquire, the City may consider acquiring the additional land through purchase or condemnation.

Subd. 5. Land area conveyed or dedicated to the City shall not be used in calculating density requirements of the City Zoning Ordinance and shall be in addition to and not in lieu of open space requirements for planned unit developments.

Subd. 6. Where private open space for park and recreation purposes is provided in a proposed subdivision, such area may be used for credit, at the discretion of the City Council, against the requirement of dedication for park and recreation purposes, provided the City Council finds it is in the public interest to do so.

Subd. 7. The City, upon consideration of the particular type of development, may require larger parcels of land to be dedicated if the City determines that

present or future residents would require greater land for park and playground purposes. In addition, the City Council may also require lots within the subdivision be held in escrow for future sale or development. The moneys derived from the sale of escrowed lots will be used to develop facilities or to purchase parkland in the future.

Subd. 8. In all new subdivisions, five (5%) percent of the gross area subdivided, or a different percentage as the Council shall determine to be reasonably necessary as a result of the subdivision approval, shall be dedicated for public recreation space or other public use as established by City Council resolution. The dedicated percent of the gross area subdivided shall be in addition to property dedicated for streets alleys, easements or other public ways. No areas may be dedicated for public use until such areas have been approved by the governing body as suitable and necessary for the health, safety, convenience and general welfare of the City.

Subd. 9. When a subdivision is too small for practical dedication of public land, or if no land in the subdivision is suitable for such use, the applicant may be required to pay an equivalent cash fee for all or part of the portion to be dedicated, based on the fair market value of the gross area of land prior to the subdivision on the day of final plat approval. All other residential construction is required to pay a minimum of five percent (5%) of the determined land value.

Subd. 10. The City may elect to receive a combination of cash, land and development of the land for park use. The fair market value of the land the City wants and the value of the development of land shall be calculated. That amount shall be subtracted from the cash contribution required by subsection 9 above.

Subd. 11. "Fair market value" shall be determined as of the time of the final plat approval in accordance with the following:

- a) The City and the applicant may agree as to the fair market value based upon a current appraisal.
- b) The market value of the property as determined by a recent selling price of the parcel(s) in question.

Subd. 12. Planned unit developments with mixed land uses shall make cash and/or land contributions in accordance with this Section based upon the percentage of land devoted to the various uses.

Subd. 13. Park cash contributions are to be calculated at the time of final plat approval. The Council may require the payment at the time of final plat approval or at a later time under terms agreed upon in a development agreement as authorized in this Section. Delayed payment may include interest at a rate set by the City.

Subd. 14. Park cash contributions shall be deposited in the City's Park and Recreation Capital Outlay Fund and shall only be used for park acquisition or physical park improvements.

Subd. 15. If an applicant is unable to make a commitment to the City as to the type of building that will be constructed on lots in the proposed plat, then the land and cash contribution requirement will be a reasonable amount as determined by the City Council.

Subd. 16. Property being replatted with the same number of lots shall be exempt from all parkland dedication requirements. If the number of lots is increased or if land outside the previously recorded plat is added, then the park land dedication and/or park cash contributions shall be based on the additional lots and on the additional land being added to the plat. If the additional land does not create additional lots, then each one-third (1/3) acre added shall be considered a new lot for purposes of calculating the dedication requirements.

Subd. 17. Wetlands, pond areas and drainage ways accepted by the City may not be considered in the parkland and/or cash contribution to the City.

475.0498 Minimum Building Elevation

See Section 475.0407.

475.0499 Minimum Design Features

Subd. 1. The design features set forth in this Chapter are minimum requirements. The City may impose additional or more stringent requirements concerning lot size, streets and overall design as deemed appropriate considering the property being subdivided based upon site considerations, the Comprehensive Plan, and other City codes, regulations, and policies.

**CONSTRUCTION**

SECTION: 475.0401

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- 475.0403 Sidewalks
- 475.0404 Public Utilities
- 475.0405 Sanitation
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- 475.0408 Water Quality Treatment
- 475.0409 Pond Construction
- 475.0410 Private Storm Water Facility Maintenance
- 475.0411 Drainage
- 475.0412 Street Signs
- 475.0413 Utilities Location
- 475.0414 Street Lighting Requirements
- 475.0415 Inspection

475.0402 Streets

Subd. 1 Street Grading. Streets shall be graded in accordance with a plan approved by the City Engineer. The grading shall include the entire width of the right-of-way and shall provide a boulevard section, in addition to the minimum pavement width.

Subd. 2 Street Pavement. The design of street pavement for all streets covered by this regulation shall be in accordance with the State of Minnesota Department of Transportation Road Design Manual for flexible pavements. The designed thickness of the surfacing elements shall be in accordance with the flexible pavement design standard for road classifications as follows:

<u>Classification</u>	<u>Pavement Design: Axle Load</u>
a) Collector Streets and Commercial or Industrial Service Streets	9 ton minimum
b) Local Streets	7 ton minimum

Subd. 3 Soil Tests. To determine subgrade soil classifications, soil samples shall be collected and analyzed by a reputable testing laboratory. Reports of the soil analysis shall be submitted to the City Engineer with the pavement plans. Soil samples shall be taken along the centerline of the proposed road at intervals not exceeding three hundred (300) feet unless otherwise approved by the City Engineer.

Subd. 4 Curb and Gutter. Concrete curb and gutter in accordance with the following provisions, shall be constructed on both sides of all streets:

- a) In single family residential districts, either surmountable curb and gutter of a City approved type and design or Mn/DOT Design No. B shall be used.

b) In all other districts, concrete curb and gutter cross-sections shall be Mn/DOT Design No. B618.

Subd. 5 Boulevards. All boulevards shall have four (4) inches of top soil (black dirt) placed on them and then shall be sodded.

#### 475.0403 Sidewalks

Subd. 1 All required sidewalks shall be concrete, four (4) inches thick, placed on a four (4) inch gravel base.

Subd. 2 Sidewalks shall slope one-quarter (1/4) inch per foot away from the property line and the profile grade shall not exceed eight (8) percent. All grades shall be constructed as approved by the City Engineer.

Subd. 3 Sidewalks shall be placed in the public right-of-way.

#### 475.0404 Public Utilities

Subd. 1 Water Main. A minimum water main of six (6) inch ductile iron pipe or other approved pipe shall be required. Mains over six (6) inches in size may be required, and the additional cost shall be allocated pursuant to established City Council policies.

Subd. 2 Sanitary Sewer. Unless otherwise required, a sanitary sewer of eight (8) inch pipe shall be installed as the minimum size, placed at grades approved by the City Engineer. Mains over eight (8) inches in size may be required, and the additional cost shall be allocated pursuant to established City Council policies. Service pipes shall be at least four (4) inches in diameter.

Subd. 3 House Services. Each house service shall be installed from the main to the property line, where a cap or plug shall be placed until the service is extended to the structure. A one (1) inch Type K copper water service, or approved equal; corporation cock, curb box and stop; and four (4) inch extra heavy cast iron soil pipe, or approved equal, sewer service shall be the minimum requirements, and they may be placed in a common trench.

Subd. 4 Reproducible “as-built” drawings showing all utilities and improvements shall be furnished to the City by the applicant of all required improvements prior to the issuance of a permanent or temporary certificate of occupancy. Such “as-built” drawings shall be certified to be true and accurate by the registered engineer responsible for the installation of the improvements. This certification may be verified by the City Engineer at the expense of the applicant or developer.

Subd. 5 Storm Sewer. The minimum storm sewer pipe size shall be 15 inches and all inlets shall be fitted with trash guards. All castings, catch basin, manhole, and pipe material shall be subject to approval by the City Engineer.

475.0405 Sanitation

Water and sewer lines shall be installed and connected to the public system to serve all lots within the proposed subdivision under the provisions of applicable statutes and ordinances. The City Council shall require the installation of water and sewer mains, at the applicant's expense or under the provisions of applicable statutes and ordinances.

475.0406 Reserved

475.0407 Minimum Building Elevation

Subd 1. Minimum Building Elevation. The minimum building elevation for habitable structures and garages shall be no lower than the following elevation criteria, whichever provides the greater degree of protection as determined by the City Engineer unless proven to the City Engineer's satisfaction that the property will drain effectively and will be protected from flood damage:

- a) A minimum of 1.5 feet above the back of curb of the accessed street;
- b) Four feet above the water table or 1 foot above the high water table elevation determined by the City Engineer.

Subd.2. Low Floor Elevations within the Water Management Overlay District and Adjacent to Other Ponds and Watercourses. All habitable structures constructed within a Water Management Overlay District as defined within the Water Management section of the Zoning Ordinance shall be built with their lowest floor, including basement, no lower than the following elevation criteria, whichever provides the greater degree of protection as determined by the City Engineer:

- a) Two feet (2') above the 100-year flood elevation; or
- b) At least three feet (3') above the highest known water level, or three feet (3') above the ordinary high water level, whichever is higher; or
- c) At least three feet (3') above the "wetland boundary" as defined in Section 1016.05 of this Chapter; or
- d) Two feet (2') above the emergency overflow elevation

Subd. 3. Water-oriented accessory structures may have the lowest floor placed lower than the elevation determined in this item if the structure is constructed of flood-resistant materials, electrical and mechanical equipment is placed above the elevation and, if long duration flooding is anticipated, the structure is built to withstand ice action and wind-driven waves and debris. In addition, there shall be no net loss of floodplain storage.

#### 475.0408 Water Quality and Quantity Controls

Subd. 1. Development that is not tributary to an existing regional treatment pond as identified by the Minnehaha Creek Watershed District (MCWD) is required to employ best management practices to treat storm water discharge as indicated in the Water Resources Management Plan as amended from time to time.

Subd. 2. The runoff rates shall not increase for the 1, 10 and 100-year rainfall events as indicated in the Water Resources Management Plan as amended from time to time.

Subd. 3. The MCWD may require permits to be acquired when land alteration is proposed to alter water quality and drainage patterns.

#### 475.0409 Pond Construction

##### Subd. 1. Above Normal Water Elevation

The following criteria will be followed for pond construction above the normal water elevation. For pond construction below the normal water elevation, refer to Pond Restoration and Nutrient Trapping Pond Design Standards on the following pages. This area of the pond will more than likely be the pond area flooded during a storm up to a 100-year duration.

- a) Maximum 3 Horizontal to 1 Vertical (3H:1V) side slopes.
- b) Proper access for maintenance, operations, and inspection.
- c) Emergency overflow above the 100-year design storm high water elevation.

##### Subd. 2. Nutrient Trapping Pond Design

Newly constructed detention basins shall provide additional storage volume below the outlet to allow for reasonable accumulation of sediment. Where sedimentation is determined to be a continuous problem, access to the area to allow for sediment removal is required. The City may require a public utilities easement to be filed with Hennepin County Office of Taxpayer Services or comparable department and the City Clerk for this access.

##### Subd. 3. General Criteria

The following general criteria should be used when designing the sediment pond:

- a) For basins intended to have permanent water levels, a minimum of 4 feet of standing water (dead storage depth) is required.
- b) Maximize the separation between inlet points and outlets to prevent short-circuiting of storm flows.
- c) A 10:1 slope for the first 15 feet from shore, then 3:1 maximum slope.

- d) Proper access for maintenance, operations, and inspection.

Subd. 4. Size

Nationwide Urban Runoff Program (NURP) ponds will be designed with standing water or dead storage for pollutant removal. The total phosphorus removal efficiency for each pond or pond network shall be at least 65%. Storm water treatment can be provided via a single pond which meets the design and treatment criteria or an onsite network of interconnected ponds. If an onsite pond network is used, the overall pollutant removal efficiency for the network must meet the criteria.

Subd. 5. Permanent Pool

The recommended pond design criteria in order of importance are as follows:

- a) Permanent pool volume should be greater than or equal to the volume of runoff resulting from a 2.5-inch rainstorm under complete watershed development. This value has been derived from design criteria developed in NURP, with a 25 percent increase in volume to allow for roughly 25 years of sediment accumulation. This sizing rule provides a mean hydraulic residence time of about 15 days.
- b) The mean depth of the permanent pool (volume/surface area) shall be greater than or equal to 4 feet. This constraint may be infeasible for small ponds (approx. 3 acre-feet in volume, see below), where mean depths of 3-4 feet may be used.
- c) The maximum depth of permanent pool shall be less than or equal to 10 feet.
- d) The ratio of maximum length to maximum width ( $L_c/W_c$ ) should be greater than or equal to 3. This constraint may be infeasible for some site plans or for small ponds. In such situations, baffles may be installed to isolate the inflow area from the remainder of the pond. A desirable alternative (for all pond sizes) is to construct two or more separate ponds in series with a total volume equal to that specified above Item a).
- e) The bench width shall be at least 15 feet and the bench slope shall not be steeper than 10:1 (horizontal vertical). The bench slope begins at the normal pool elevation and includes lower elevations until the minimum length criteria is met.
- f) The side slopes below the bench shall not be steeper than 3 feet horizontal to 1-foot vertical. Shallower slopes may be appropriate, depending upon soil engineering properties.
- g) A forebay to provide the settlement of sand-sized particles shall be provided at the pond inlet(s).
- h) Wet detention ponds shall include an outlet that is designed to remove floatables for a 1-year rainfall event.

#### 475.0410 Private Storm Water Facility Maintenance

Subd 1. All private storm water facilities shall be designed to minimum City standards and shall be privately maintained in proper condition consistent with the performance standards for which they were originally designed. All settled materials from ponds, sumps, grit chambers, and other devices, including settled solids, shall be removed and properly disposed of on an annual basis as noted by the Water Resources Management Plan as amended from time to time. One to five (5) year waivers from this requirement may be granted by the City Engineer when the owner presents evidence that the facility has additional capacity to remove settled solids in accordance with the original design capacity. No private storm water facilities may be approved unless a maintenance plan is provided that defines who will conduct the maintenance, the type of maintenance and the maintenance intervals.

#### 475.0411 Drainage

All surface and underground drainage systems shall be installed to adequately remove all natural drainage that accumulates on the developed property. All such systems shall provide complete removal and a permanent solution for the removal of drainage water.

#### 475.0412 Street Signs

All street signs shall be provided and installed by the City, at the expense of the applicant or developer.

#### 475.0413 Utilities Location

All utilities shall be placed underground, including electrical service. All underground work shall be completed prior to street surfacing. All utility lines shall be placed in rear line easements when carried on overhead poles if approved by the City Council.

#### 475.0414 Street Lighting Requirements

The minimum requirement for street lighting facilities shall be one (1) two thousand five hundred (2,500) lumen light, or equal, at each street intersection within or abutting the subdivision. Lighting improvements shall be consistent with the Lighting Master Plan as amended from time to time and approved by the City Council.

#### 475.0415 Inspection

All required improvements shall be inspected by the City Engineer during construction, at the expense of the applicant or developer.

## **REQUIRED IMPROVEMENTS AND FINANCIAL ARRANGEMENTS**

- 475.016 Improvements Required
- 475.017 Construction Plans and Inspection
- 475.018 Payment for Installation of Improvements
- 475.019 Financial Guarantee
- 475.020 Improvements Completed Prior to Approval of the Final Plat
- 475.021 Trunk Facilities
- 475.022 Alternate Installation

### 475.016 Improvements Required

Prior to the approval of a plat by the City Council, the applicant shall have agreed, in the manner set forth below, to install the following improvements on the site, in conformity with approved construction plans and in conformity with all applicable standards and ordinances:

Subd. 1 Survey Monuments. All subdivision boundary corners, block and lot corners, road intersection corners and points of tangency and curvature shall be marked with survey monuments meeting the minimum requirements of State law. All United States, State, County and other official bench marks, monuments or triangulation stations in or adjacent to the property shall be preserved in precise position, unless a relocation is approved by the controlling agency. All lot corner markers or iron rods shall be a minimum of one-half inch in diameter, eighteen (18) inches in length, and shall be inscribed with the registration number of the land surveyor making the survey as prescribed in Minnesota Statutes, Chapter 505.

Subd. 2 Grading. The full width of the right-of-way of each street dedicated in the plat shall be graded as outlined in Section 475.048 (Subd. 7) of this Section.

Subd. 3 Pavement. All streets and alleys shall be improved with concrete or bituminous surface, except as may be approved by action of the City Council. Pavement standards are outlined in Section 475.046 (Subd. 7) of this Section. Unpaved, gravel, or dirt driveways or streets are not permitted.

Subd. 4 Curb and Gutter. There shall be concrete curb and gutter installed along both sides of all streets to the standards listed in Section 475.042 (Subd. 4) of this Section.

Subd. 5 Water Mains. In the case where mains from a public water system are available, the applicant shall be required to install water mains in the plat and connect the same to the public water system.

Subd. 6 Public Sanitary Sewer. In all cases where trunk line sanitary sewer facilities are available, the applicant shall be required to install sanitary sewers and connect the same to the trunk line sewers.

Subd. 7 Drainage Facilities. Such facilities and easements shall be installed to adequately provide for the drainage of surface waters, and a storm sewer system may be required. Drainage way easements of land dedication may be required when such easements or land is needed in the public interest for purposes of flood

plain management, proper drainage, prevention of erosion, pedestrian access to water bodies, maintenance, or other public purpose. All surface water drainage plans are subject to review by the Minnehaha Creek Watershed District.

Subd. 8 Miscellaneous Facilities. Tree planting, street name signs, traffic control signs, oversized utility trunk lines, pedestrian ways and other improvements may be required to be furnished and/or installed by the developer or applicant.

#### 475.017 Construction Plans and Inspection

Subd. 1 Construction plans for the required improvements conforming in all respects with the standards and ordinances of the City shall be prepared at the applicants' expense by a professional engineer who is registered in the State of Minnesota. Such plans together with the quantities of construction items shall be submitted to the City Engineer for approval and for estimation of the total costs of the required improvements. Upon approval, such plans shall become a part of the required development agreement and/or building permit. The final plans approved by the Engineer, plus (2) prints, shall be furnished to the City to be filed as a public record.

Subd. 2 All required improvements on the site that are to be installed under the provisions of these regulations shall be inspected during the course of construction by the City Engineer at the applicants' expense, and acceptance by the City shall be subject to the City Engineer's certificate of compliance with the contract.

#### 475.018 Payment for Installation of Improvements

Subd. 1. The required improvements as listed elsewhere are to be furnished and installed at the sole expense of the applicant. If any improvement installed within the subdivision will be of substantial benefit to lands beyond the boundaries of the subdivision, provision may be made for causing a portion of the cost of the improvement, representing the benefit to such lands, to be assessed against the same. In such a situation the applicant will be required only to pay for such portion of the whole cost of said improvement as will represent the benefit to the property within the subdivision.

Subd. 2 Agreement Providing for the Installation of Improvements. Prior to the installation of any required improvements by the applicant and prior to approval of the plat, the applicant shall enter into a development agreement in writing with the City requiring the applicant to furnish and construct said improvements at the sole cost of the applicant and in accordance with the approved plans and specifications. This shall include provision for supervision of details of construction by the City Engineer and shall grant to the City Engineer authority to coordinate the work and improvements to be done under said contract by any subcontractor authorized to proceed thereunder and with any other work being done or contracted by the City. On request of the applicant, the development agreement may provide for completion of part or all of the improvements covered thereby prior to acceptance of the plat. In such event, and if evidence is presented that the described work and improvements have been paid for, the amount of the deposit, bond, letter of credit, or comparable surety may be reduced in a sum equal to the estimated costs of the improvements so completed prior to the acceptance of the plat. The time for

completion of the work and the several parts thereof shall be determined by the City Council, upon recommendation of the Engineer after consultation with the applicant. It shall be reasonable with relation to the work to be done, the seasons of the year, and proper coordination with construction activities in the plat and subdivision.

No applicant shall be permitted to start work on any other subdivision without special approval of the City Council, if the applicant has previously defaulted on work or commitments.

#### 475.019 Financial Guarantee

Subd. 1 The development agreement shall require the applicant to make an escrow deposit, furnish an irrevocable letter of credit, a certified check, or other surety as determined by the City Attorney, City Engineer and City Administrator. The surety shall conform to the requirements of this Section.

Subd. 2 Escrow Deposit, Certified Check. If an escrow deposit of certified check is required, the escrow deposit or certified check shall be made with the City Clerk in a sum equal to one hundred fifty (150%) percent of the total cost, as estimated by a registered engineer, of all the improvements which have not been completed prior to approval of the plat to be furnished and installed by the applicant pursuant to the development agreement. The total costs shall include costs of inspection by the City and other necessary review and inspection by the City's consultants. The City shall be entitled to reimburse itself out of said deposit or check for any cost and expense incurred by the City for completion of the work in case of default of the applicant under said, development agreement, and for any damages sustained on account of any breach thereof. Upon completion of the work and termination of any liability, the balance remaining in said deposit or check shall be refunded to the applicant. The City shall not be responsible for paying interest on these funds.

Subd. 3 Irrevocable Letters of Credit. If the applicant is required to furnish an irrevocable letter of credit, the sum shall be equal to one hundred fifty (150%) percent of the total cost as estimated by the City Engineer of all the site improvements to be furnished and installed by the applicant or developer pursuant to the contract, which have not been completed prior to the approval of the plat. The total costs shall include costs of inspection by the City. The irrevocable letter of credit shall be approved as to form by the City Attorney and filed with the City Administrator. A letter of credit following the same criteria shall be filed with the City Administrator for the landscaping improvements, and it shall have an effective period of two full calendar years after the effective date of the letter of credit.

#### 475.020 Improvements Completed Prior to Approval of the Final Plat

Improvements within a subdivision which have been completed prior to application for approval of the final plat, or execution of the development agreement for installation of the required improvements, shall be accepted as equivalent improvements in compliance with these requirements only if the City Engineer certifies in writing that the existing improvements conform to applicable standards and if evidence of payment for the work that has been completed is presented in such form as the City reasonably requires.

475.021 Trunk Facilities

Where a larger size water main, sanitary sewer, storm drain or similar facility is required to serve a geographic area outside the subdivision, the larger facility required shall be constructed. Additional costs shall be allocated pursuant to established City policies.

475.022 Alternate Installation

The City Council may elect to install any or all of the required improvements pursuant to a cash escrow or other financial arrangements made with the applicant.

## **ADMINISTRATION AND ENFORCEMENT**

### SECTION: 475.0460

- 475.0461 Registered Land Surveys
- 475.0462 Metes and Bounds
- 475.0463 Unapproved Subdivisions
- 475.0464 Violations and Penalty

#### 475.0461 Registered Land Surveys

All registered land surveys shall be filed with Hennepin County Office of Taxpayer Services or comparable department and the City Clerk subject to the same procedure as required for the filing of a preliminary plat for platting purposes. The standards and requirements set forth in these regulations shall apply to all registered land surveys. Unless approved by the City Council, a registered land survey shall not be used to divide a parcel of land into lots for the purpose of transfer of ownership or building development, if any of the tracts do not have the required frontage on a dedicated public street.

#### 475.0462 Metes and Bounds

Conveyance by metes and bounds shall be prohibited.

#### 475.0463 Unapproved Subdivisions

Subd. 1 No conveyance of land to which these regulations are applicable shall be filed or recorded, if the land is described in the conveyance by metes and bounds or by reference to an unapproved registered land survey made after April 21, 1961, or to a plat not approved by the City Council. The foregoing provision does not apply to a conveyance if the land described:

- a) Was a separate parcel of record May 1, 1959.
- b) Was the subject of a written agreement to convey entered into prior to such time.
- c) Was a separate parcel of not less than two and one-half (2 ½) acres in area and one hundred fifty (150) feet in width on January 1, 1996.
- d) Was a separate parcel of not less than five (5) acres in area and three hundred (300) feet in width on July 1, 1980.

#### 475.0464 Violations and Penalty

Subd. 1 Sale of Lots from Unrecorded Plats. It shall be a misdemeanor to sell, trade, or otherwise convey any lot or parcel of land as a part of, or in conformity with any plan, plat or replat of any subdivision or area located within the jurisdiction of this Chapter unless said plan, plat or replat shall have first been recorded in the office of the Recorder of Hennepin County.

Subd. 2 Receiving or Recording Unapproved Plats. It shall be unlawful for a private individual to receive or record in any public office any plans, plats of land laid out in building lots and streets, alleys or other portions of the same intended to be dedicated to public or private use, or for the use of purchasers or owners of lots fronting on or adjacent thereto, and located within the jurisdiction of this Chapter, unless the same shall bear thereon, by endorsement or otherwise, the approval of the City Council.

Subd. 3 Misrepresentations. It shall be a misdemeanor for any person owning an addition or subdivision of land within the City to represent that any improvement upon any of the streets, alleys or avenues of said addition or subdivision has been constructed according to the plans and specifications approved by the City Council, or has been supervised or inspected by the City, when such improvements have not been so constructed, supervised, or inspected.

Subd. 4 Penalty. Anyone violating any of the provisions of this Chapter shall be guilty of a misdemeanor. Each month during which compliance is delayed shall constitute a separate offense.