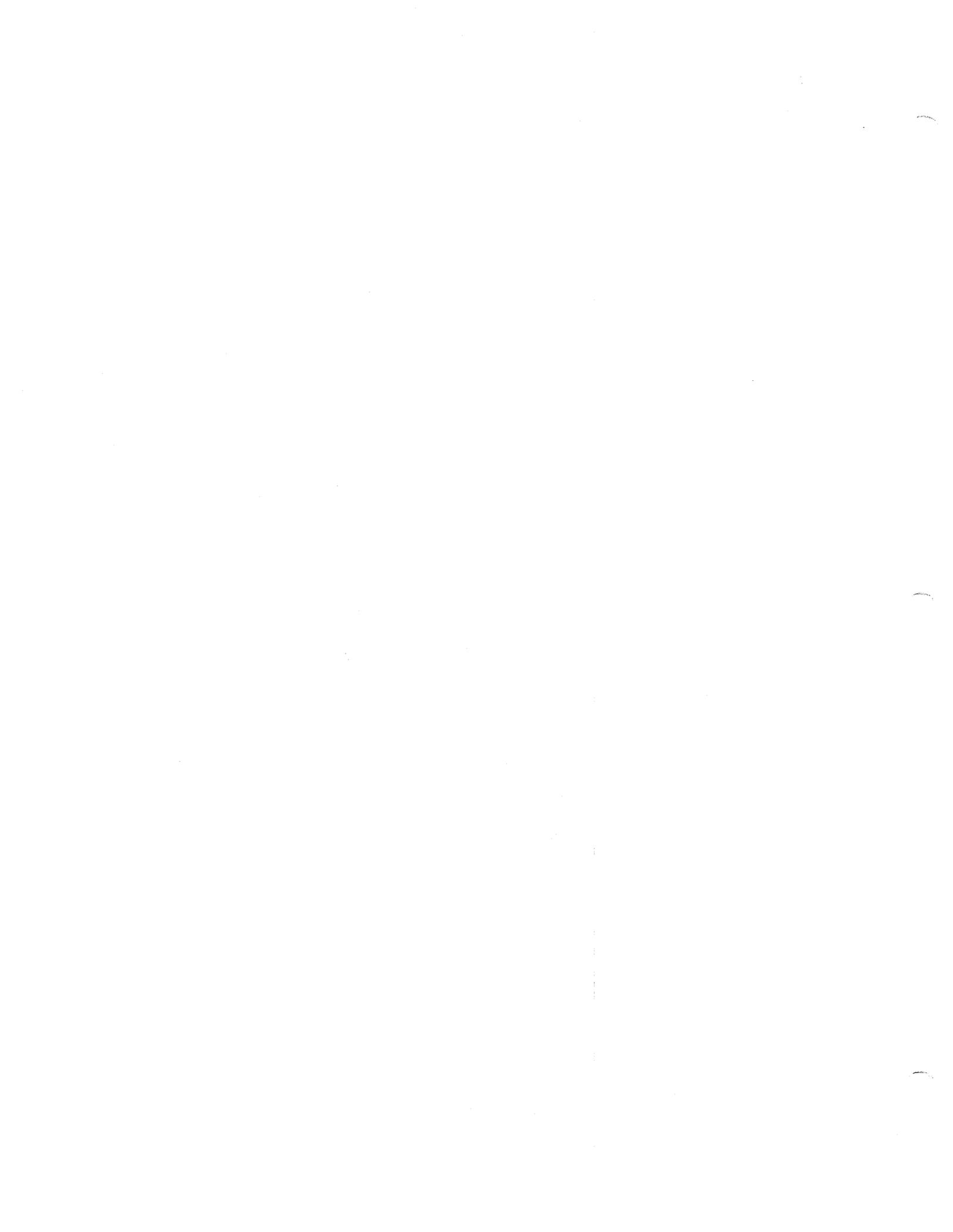




**CITY OF OAKBROOK TERRACE**

**SUBDIVISION REGULATIONS**  
**AND**  
**SUBDIVISION IMPROVEMENTS**  
**STANDARDS**



**CHAPTER 159: SUBDIVISION REGULATIONS**

Section

City of Oakbrook Terrace, and such regulations are hereby adopted pursuant to the authorization of ILCS Ch. 65, Act 5, §§ 11-12-1 et seq. (Ord. 08-19, passed 9-9-08)

**General Provisions**

- 159.01 Title
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- 159.05 Interpretation
- 159.06 Administration and enforcement
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**§ 159.02 PURPOSE.**

(A) The regulations included in this chapter are adopted for the following purposes:

- (1) To implement the city's Comprehensive Plan;
- (2) To promote the public health, safety, and general welfare;
- (3) To harmoniously relate the development of various tracts of land to the existing community and facilitate the future development of adjoining tracts;
- (4) To avoid undue concentration of population and overcrowding of land;
- (5) To lessen congestion in the streets and highways;
- (6) To provide for adequate light and air;
- (7) To secure a uniform system of utilities and other public improvements;
- (8) To provide for proper ingress and egress; and
- (9) To ensure proper legal description and monumentation of subdivided land.

**Land Dedication for Park, Open Space and Recreation Purposes**

- 159.20 Dedication of land for park, open space and recreation purposes, or cash contribution in lieu thereof
- 159.21 Criteria for requiring land dedication for park, open space and recreation purposes
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- 159.23 Density formula
- 159.24 Topography and grading
- 159.25 Improved sites
- 159.26 Title to dedicated land for park, open space and recreation purposes
- 159.27 Indemnification

(B) It is intended that these regulations shall supplement and facilitate the enforcement of the provisions and development standards established in the city's building codes, zoning map, zoning code, and Comprehensive Plan. (Ord. 08-19, passed 9-9-08)

**GENERAL PROVISIONS**

**§ 159.01 TITLE.**

This chapter shall hereby be known, cited and referred to as the "Subdivision Regulations" of the

**§ 159.03 JURISDICTION.**

The city's subdivision regulations and zoning code shall apply to any subdivision or development within the city, and the city's subdivision regulations and the DuPage County Zoning Ordinance shall apply to any subdivision or development outside the city but within 1-1/2 miles of the corporate limits of the city, for all maps or plats of any subdivision of land, as defined herein; and all PUD's with respect to §§ 159.05(A)-(C), 159.06, 159.08(A)-(B), 159.09, 159.10, 159.11(A)-(B), and the subchapter entitled "Land Dedication for Park, Open Space and Recreation Purposes", in accordance with authority vested in the municipality under the provisions of ILCS Ch. 65, Act 5, §§ 11-12-5 and 11-12-12. (Ord. 08-19, passed 9-9-08)

**§ 159.04 DEFINITIONS.**

For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

**ADMINISTRATOR.** The Building and Zoning Administrator or a designee, who shall be responsible for administering and enforcing all of the requirements and provisions of the city's subdivision regulations.

**BEDROOM.** Any room within a residential living unit, including but not limited to a den or study with a closet space, other than rooms designed for the general living space for the entire household, such as a living room, family room, kitchen, dining room, bathroom, lavatory, and garage.

**BIKE PATH.** A lane or other surface reserved for bicycles. A bike path may be physically separated from motorized vehicular traffic by an open space and/or barrier or it may be on a contiguous surface adjacent to lanes used for motorized vehicles.

**BLOCK.** A tract of land bounded by streets, or by a combination of streets and public land, cemeteries, railroad rights-of-way, shorelines of waterways, or boundary lines of the city.

**BUILDING.** A structure that is permanently affixed to the land, has one or more floors and a roof, and is designed or intended for use as a living quarters, shelter, business or storage.

**BUILDING LINE.** The line nearest the front lot line, running approximately parallel to the front lot line across the width of a lot at the point of the required front yard depth.

**CITY COUNCIL.** The City Council of the City of Oakbrook Terrace.

**COMPREHENSIVE PLAN.** The Comprehensive Plan of the City of Oakbrook Terrace.

**CONSTRUCTION.** Installation, reconstruction, repair, replacement and maintenance of improvements, including public and private improvements, buildings or structures.

**CONTOUR MAP.** A map on which irregularities of the land surface are shown by lines connecting points of equal elevations. Contour intervals are the vertical height between contour lines.

**CUL-DE-SAC.** A minor street which has one open end and is permanently terminated at the other by a vehicular turnaround.

**DEVELOPER.** Any owner or person with a lawful interest in property within the city's jurisdiction, as provided in § 159.03 of this chapter, who undertakes the development of land, as defined herein.

**DEVELOPMENT.** The physical alteration of a tract of land, including construction, reconstruction or modification of buildings and structures, grading, and other related changes.

**ELMHURST COUNTRYSIDE SUBDIVISION.** The area that is legally described as the Town Development Company Elmhurst Countryside Subdivision, Units 3, 4 and 5, being a part of Section 22, Township 39 North, Range 13 East of the Third Principal Meridian in DuPage County, Illinois, according to the plats thereof, respectively recorded as Document No. 487163 on November 13, 1945, Document No. 488358 on December 5, 1945, and Document Number 488359 on December 5, 1945. Such area is commonly described as the residential portions of the city that are bounded by Summit Avenue/Midwest Road on the west, Butterfield Road (Illinois Route 56) on the north, Illinois Route 83 on the east, and 22nd Street on the south.

**FINAL PLAT.** A map indicating graphically a proposed land subdivision or re-subdivision, prepared in a form suitable for filing for record, with the necessary affidavits, dedications and acceptances, and with complete bearings and dimensions of all lines defining lots and blocks, streets, public areas and other dimensions of land.

**FRONTAGE.** All of the property fronting on one side of a street between two intersecting streets, or in the case of a dead end street, all of the property along one side of the street between an intersecting street and the end of such dead end street.

**LOT.** A parcel of land which is part of a real estate subdivision, the plat for which has been recorded in the office of the DuPage County Recorder of Deeds pursuant to state law, or for which an assessment plat describing the parcel by a metes and bounds description has been recorded in the office of the DuPage County Recorder of Deeds pursuant to state law, and which is occupied or intended for occupancy by a use permitted in the city's zoning code, and which has its principal frontage upon a road or street.

**LOT CONSOLIDATION.** The removal of lot lines between contiguous parcels, which does not qualify as a subdivision or an exempt land division pursuant to the requirements of this chapter, and which does not involve any additional public rights-of-way, or the vacation of any existing public rights-of-way.

**LOT, CORNER.** A lot situated at the junction of and abutting on two or more intersecting rights-of-way or streets; or a lot at the point of deflection in alignment of a single street, the interior angle of which does not exceed 135 degrees.

**LOT LINE.** The property lines bounding a lot.

**LOT RECONFIGURATION.** An exchange of land between adjoining or contiguous parcels of land located within the city that changes the boundaries of the existing lots, but does not create an additional lot, does not qualify as a subdivision or an exempt land division pursuant to the requirements of this chapter, and does not involve any additional public rights-of-way, or the vacation of any existing public rights-of-way.

**LOT SPLIT.** Any conveyance of real property located within the city that results in a land division

that does not qualify as a subdivision, a lot reconfiguration or an exempt land division pursuant to the requirements of this chapter, and that does not involve any additional public rights-of-way, or the vacation of any existing public rights-of-way.

**LOT, THROUGH.** A lot having frontage on two streets, but excluding corner lots.

**METES AND BOUNDS.** A method of property description whereby properties are described by means of their direction and distances from an easily identifiable location or point.

**OUTLOT.** A parcel of land within a subdivision that has been included on a final plat, but is designated as an unbuildable lot for storm water detention or retention, or for park, open space or recreation purposes, or as unbuildable due to insufficient size and/or frontage or peculiar siting or topographical problems.

**OWNER.** Any individual or group of individuals or any legal entity having record ownership of land.

**PEDESTRIANWAY or CROSSWALK.** A right-of-way across or within a block, for use by pedestrian traffic whether designated as a pedestrianway, crosswalk, or however otherwise designated, which may include utilities if necessary.

**PARKWAY.** Any portion of the right-of-way not improved by a street or sidewalk.

**PLANNED UNIT DEVELOPMENT (PUD).** A use of land which offers benefits to the neighborhood of which it is a part or to the general public welfare beyond those required by this chapter, which use of land will contain or provide amenities not otherwise required by law, including but not limited to provisions for common park, open space, or recreation purposes, or specific design, engineering, architectural, site planning or landscape features, or will allow uses, bulk and site layout that would not otherwise be allowed by law.

**PLANNING AND ZONING COMMISSION.** The Planning and Zoning Commission of the City of Oakbrook Terrace.

**PUBLIC IMPROVEMENT.** Any sanitary sewer, storm sewer, storm water management facility, drainage ditch, water main, roadway, parkway, sidewalk, pedestrianway, public lighting, planting strip, or other facility intended for public

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use or benefit, or for which the city may ultimately assume the responsibility for maintenance and operation.

**PRELIMINARY PLAT.** The tentative map or plan of a proposed subdivision indicating the proposed layout to be submitted to the city for its consideration.

**RIGHT-OF-WAY.** A strip of land dedicated to the public or owned by a public utility, and occupied or intended to be occupied by a street; pedestrianway or crosswalk; railroad line; utility transmission lines, including but not limited to oil or gas pipelines, water mains, sanitary or storm sewer mains; or for another similar use, as established and depicted on a final plat so as to be separate and distinct from the lots or parcels abutting such right-of-way, and so as not to be included within the dimensions of any lots or other parcels.

**ROADWAY.** A paved portion of a street available for vehicular traffic.

**SIDEWALK.** A paved surface within a public right-of-way intended for use as a pedestrian walkway.

**STREET.** A permanent, improved public or private right-of-way or roadway which affords a primary means of vehicular access to abutting property.

**STREET, ARTERIAL.** A street designated as such in the city's Comprehensive Plan, which serves as a major thoroughfare for travel between and through a municipality, is generally a controlled access highway that is part of a major system of streets or highways, and is designed to handle a large volume of traffic. The arterial streets serving the city include Roosevelt Road (IL Route 38), 22nd Street, IL Route 83, and Butterfield Road (IL Route 56).

**STREET, COLLECTOR.** A street designated as such in the city's Comprehensive Plan, which collects traffic from local streets and moves the traffic toward arterial streets for efficient flow. Such streets may be classified as major and minor depending on the volume of traffic they are intended to carry.

**STREET, FRONTAGE.** A minor street which is parallel and adjacent to an arterial or major

collector street, and which provides access to abutting properties and protection from through traffic.

**STREET, LOCAL.** A street designated as such in the city's Comprehensive Plan, which is intended to serve primarily those vehicle trips generated by land uses abutting the street.

**STREET, MAJOR COLLECTOR.** A street designated as such in the city's Comprehensive Plan. The major collector streets serving the city include Summit Avenue/Midwest Road and Meyers Road.

**STREET, MINOR COLLECTOR.** A street designated as such in the city's Comprehensive Plan. The minor collector streets serving the city include Danby Street/14th Street, Ardmore Avenue, South Villa Avenue, MacArthur Drive, 16th Street, and Spring Road.

**STRUCTURE.** Anything constructed or erected, the use of which requires a more or less permanent location on the ground or an attachment to something having a permanent location on the ground, including but not limited to, buildings, signs, decks, fences, patios, swimming pools, pavements, driveways and walkways; provided that readily removable decorative landscape borders or features, including but not limited to, bricks, stones, timbers, flower boxes and other similar features, shall not be considered structures; and further provided that fences shall not be considered structures for purposes of calculating the maximum permitted coverage of the front yard.

**SUBDIVIDER.** Any owner or person with a lawful interest in property within the city's jurisdiction as provided in § 159.03 of this chapter, who undertakes the subdivision of land as defined herein.

**SUBDIVISION.** The division of a lot, into two or more lots, tracts, parcels or other divisions of land for sale, development or lease; provided, however that, consistent with the provisions of the Plat Act, ILCS Ch. 765, Act 205, § 1, the following shall not be considered a subdivision and shall be exempt from the requirements of this chapter:

(1) The subdivision or division of land into parcels or tracts of five acres or more in size which does not involve any new streets or easements of access;

(2) The division of lots or blocks of less than one acre in any recorded subdivision which does not involve any new streets or easements of access;

(3) The sale or exchange of parcels of land between owners of adjoining and contiguous land;

(4) The conveyance of parcels of land or interests therein for use as right-of-way for railroads or other public utility facilities which does not involve any new streets or easements of access;

(5) The conveyance of land owned by a railroad or other public utility which does not involve any new streets or easements of access;

(6) The conveyance of land for highway or other public purposes, grants or conveyances relating to the dedication of land for public use, or instruments relating to the vacation of land impressed with a public use;

(7) Conveyances made to correct descriptions in prior conveyances;

(8) The sale or exchange of parcels or tracts of land following the division into no more than two parts of a particular parcel or tract of land existing on July 17, 1959 and not involving any new streets or easements of access; and

(9) The sale of a single lot of less than five acres from a larger tract when a survey is made by a registered surveyor; provided that this exemption shall not apply to the sale of any subsequent lots from the same larger tract of land, as determined by the dimensions and configuration of the larger tract as of October 1, 1973, and provided also that this exemption does not invalidate any city requirements with respect to the division or consolidation of land.

(10) The preparation of a plat for wind energy devices under 35 ILCS 200/10-260 of the Property Tax Code.  
(Ord. 08-19, passed 9-9-08)

**§ 159.05 INTERPRETATION.**

(A) In their interpretation and application, the provisions of this chapter shall be held to be the minimum requirements for the promotion of the public health, safety and general welfare.

(B) Where the conditions imposed by any provisions of this chapter upon the subdivision or development of land are either more restrictive or less restrictive than comparable conditions imposed by any other city ordinance or any other applicable law, the city ordinance or other applicable law which is more restrictive and imposes a higher standard or requirement shall govern.

(C) This chapter is not intended to abrogate any easement, covenant, or any other private agreement; provided that where the regulations of this chapter are more restrictive or impose higher standards or regulations than such easement, covenant, or other private agreement, the requirements of this chapter shall govern.

(D) Any subdivision of land which was not lawfully existing at the time of the adoption of this chapter shall not be made lawful solely by reason of the adoption of this chapter, and to the extent that said subdivision of land is in conflict in any manner with the requirements of this chapter, said subdivision of land remains unlawful hereunder.  
(Ord. 08-19, passed 9-9-08)

**§ 159.06 ADMINISTRATION AND ENFORCEMENT.**

(A) Administrator. The Administrator or a designee shall have the duty to administer and enforce the provisions of this chapter.

(B) Plan review and inspections. The City Engineer, or a duly designated representative of the Engineer, shall review all plans and specifications and shall inspect all public improvements proposed to be made under this chapter during the course and upon completion of their construction.

(C) Transfers of lots; building permits; occupancy permits.

(1) Except as exempted under the definition of "subdivision" in § 159.04, no person shall sell, convey or transfer any lot in a subdivision until the final plat of subdivision has been approved by the City Council in accordance with this chapter, and recorded with the DuPage County Recorder of Deeds.

(2) Except as exempted under the definition of "subdivision" in § 159.04, no permit shall be issued providing for the improvement of

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any lot in a subdivision until the final plat of subdivision or the final plan for a PUD, and the plans and specifications for the public improvements therein, have been approved by the City Council, and the final plat of subdivision or the ordinance approving the final plan for a PUD has been recorded with the DuPage County Recorder of Deeds.

(3) No occupancy permit shall be issued for any building or structure within any subdivision or PUD until all required utility facilities have been installed and are ready to serve the subdivision, and access to the properties therein has been constructed; provided, however, that temporary occupancy permit may be issued prior to the installation of final landscaping for the subdivision or PUD in accordance with § 110.3 of the city's Building Code, as amended by § 150.02(U) of this title.

(D) Variations and waivers. The City Council may authorize variations and waivers from the provisions of this chapter for a subdivision or PUD when, in its opinion, there are practical difficulties or particular hardships in carrying out the strict letter of the provisions of this chapter; provided that such variations or waivers shall apply only to the requirements of this chapter and not to any other law, code or ordinance. No variations or waivers shall be granted unless the City Council finds:

(1) That there are special circumstances or conditions affecting said property such that the strict application of the provisions of this chapter would deprive the applicant of the reasonable use of its land;

(2) That the proposed subdivision or PUD, including the variations or waivers, promotes the objectives and policies of the city's Comprehensive Plan;

(3) That the granting of the variations or waivers will not be detrimental to the public welfare or injurious to the value or reasonable use of surrounding properties;

(4) That the variations or waivers are consistent with the trend of development in the area and the surrounding uses with respect to density, stormwater management, and similar matters;

(5) That the variations or waivers are in conformance with the general spirit of this chapter.

(E) Fees. A fee in the amount established in Chapter 154 (Fees and Deposits), shall be submitted with each application for any approval or relief pursuant to this chapter.

(Ord. 08-19, passed 9-9-08)

### § 159.07 PROCEDURE FOR SUBDIVISION APPROVAL.

(A) Preliminary plat.

(1) The subdivider shall prepare a preliminary plat, including preliminary engineering plans and specifications, intended dedication or reservation of public lands, and all technical requirements and specifications required by the Administrator, and shall file with the Administrator an application including the required number of copies of the proposed plat. The preliminary plat shall conform to the following requirements:

(a) Size. All plats shall be accurately drawn to a scale of not less than one inch equals 50 feet, and shall not be larger than 30 inches by 36 inches.

(b) Title. The title on the plat shall contain a name for the proposed subdivision that does not duplicate a previously recorded plat; the date of preparation of the plat; a "north" sign; and the section, township, range, city, county and state in which the property being subdivided is located.

(c) Legal description and survey. The plat shall describe the property being subdivided, including section, township and range, from a correct survey made of the entire tract. The plat shall depict three ties to existing survey monumentation. The error of closure of the boundary survey shall not exceed one in 5,000. The boundary line of the proposed subdivision shall be depicted with a solid heavy line, and a notation of the approximate acreage shall be included.

(d) Streets. The plat shall show the full width and names of intersecting streets within the property being subdivided and the full width and names of streets bounding and immediately adjacent thereto.

(e) Boundaries. The plat shall depict all municipal boundary lines within or adjacent to the proposed subdivision, and the boundaries of all adjacent properties for a distance of not less than 200 feet from the proposed subdivision.

(f) Lots and blocks. The plat shall show the dimensions of all lots and blocks, with a number designating each lot and block.

(g) Dimensions. The plat shall show all dimensions, both angular and linear, which are necessary to retrace the survey, including linear dimensions in feet and decimals thereof, and angular dimensions by the radii, central angles, and supporting curve data; and the location of the ends of curves, shall also be shown on the plat. The plat shall show whether arc or chord measurements were used along the curves.

(h) Owner's certificates. The plat shall include owner's certificates with a statement of dedication properly conveying all lands dedicated for such public uses, including streets, utility easements, parks, open space and recreation purposes, or other public uses, as well as all restrictions as may be applied to the subdivision. In the event that the restrictions are lengthy, the owner may elect to record them as a separate instrument, noting in the certificate the proper recorder's number, and that the restrictions as recorded run concurrently with the plat, in the same manner as if included therein.

(i) Building lines. The plat shall show building lines conforming to the requirements of the applicable zoning code for front yards.

(j) Survey monuments. The plat shall show the description and location of all permanent survey monuments placed during the survey of the subdivision. Permanent monuments shall be of concrete not less than four inches square and not less than 30 inches long, and they shall be set flush with the adjacent ground. Each permanent monument shall be fitted with a suitable mark in the center of the top to designate the survey point. Permanent monuments shall be placed at all block corners, at boundary survey corners and at angle points in street lines. Iron pipes or iron rod markers shall be set at all corners, except where monuments are required and so noted on the plat.

(k) Certificates. The plat shall show all certificates, seals and signatures required by law, and the Building and Zoning Department shall maintain a listing of such required certificates and provide such list upon request.

(1) Identification information. The plat shall show the names and addresses of the owners, the subdivider or developer, the surveyor who made the plat, and the date of preparation.

(2) After receiving a report from the Administrator, the Planning and Zoning Commission shall consider the proposed preliminary plat based on the requirements of this chapter and shall, within 90 days after its consideration thereof, make a recommendation to the City Council as to whether approval of the preliminary plat should be granted, denied or granted with modifications or conditions.

(3) If the City Council approves the preliminary plat, it shall be returned to the subdivider for compliance with final plat approval requirements. Unless otherwise agreed to by the City Council and the subdivider, the City Council shall act on the preliminary plat at its next regularly scheduled meeting within 30 days following the recommendation of the Planning and Zoning Commission.

(4) If the preliminary plat is denied approval by the City Council, the Council's objections to it shall be noted, and the subdivider may modify the preliminary plat and resubmit it to the Administrator.

(5) An approved preliminary plat shall be valid for one year, during which time the subdivider shall obtain City Council approval of a final plat. Upon written application, extensions of not to exceed one year for each extension authorized may be granted by the City Council.

#### (B) Final plat.

(1) Filing of final plat. The subdivider shall file the final plat, including the required number of copies thereof, with the Administrator. Such plat shall substantially conform with the preliminary plat, including any modifications thereto required by the approval thereof by the City Council.

(2) Action of the City Council. Upon receipt of the final plat, the Administrator and City Engineer shall immediately review the plat, and if the plat is in acceptable form and in conformance with the preliminary plat, the approval thereof by the City Council, and the requirements established in this chapter, the Administrator shall forward such plat to the Planning and Zoning Commission. The Planning and Zoning Commission shall examine the final plat and shall promptly recommend to the City Council that approval of the plat be granted or denied, or granted with modifications or conditions. The City Council shall approve or disapprove said final plat within 60 days from the date of filing of the last required document or within 60 days from the

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date of the filing of the application for final approval of the plat, whichever date is later, unless the time is extended by agreement with the subdivider. Failure of the City Council to act within such time shall be deemed a denial. After the final plat is approved by the City Council, the City Clerk shall cause a certified copy of the resolution or ordinance approving such plat to be attached to the plat and returned to the subdivider. A copy of the resolution or ordinance and plat shall be transmitted to the Administrator, and a copy shall also be promptly recorded in the office of the DuPage County Recorder of Deeds.

(C) Street vacations. As part of any subdivision, a street, or any part thereof, may be vacated by ordinance of the City Council pursuant to the authority and procedures as set forth in ILCS Ch. 65, Act 5, § 11-91-1.  
(Ord. 08-19, passed 9-9-08)

### § 159.08 GENERAL REQUIREMENTS AND PRINCIPLES.

(A) Planning and Zoning Commission; review standards. In the review of subdivision plats and plans for PUD's for recommendation, and in the application of this chapter, the Planning and Zoning Commission shall consider the following issues:

(1) The location of streets, lot sizes and locations, as well as the reports and recommendations of the Administrator and City Engineer.

(2) Conformance to the provisions and conditions of the Comprehensive Plan of the city. A recommendation for plat approval may be withheld if a subdivision does not conform to the provisions of the Comprehensive Plan.

(3) No recommendation for approval of any plat of subdivision shall be forwarded to the City Council if such plat does not make adequate provision for storm water management, as determined by the City Engineer.

(4) Due regard shall be given to the preservation of natural features such as trees, for which preservation credits may be considered under the city's zoning code; watercourses; and historical and similar features.

(B) Dedication of land for public use; general provisions.

(1) Whenever a preliminary plat or preliminary plan for a PUD includes a proposed dedication of land for public use, and the City Council finds that such land is not required or is not suitable for public use, the City Council may either refuse to approve such dedication in the location shown, or require that the configuration of the dedicated land be modified to an acceptable form.

(2) Upon approval of a final plat of subdivision or a final plan for a PUD by the City Council, and the granting of all other required approvals of such plat or plan, land shown on the plat or plan as dedicated to or reserved for public use, including street dedications, shall be deemed accepted by the city for the purpose(s) designated thereon.

(3) Dedication of land for park and recreation use shall be governed by the provisions of the city's Comprehensive Plan and the subchapter entitled "Land Dedication for Park, Open Space and Recreation Purposes" of this chapter.

(C) Vacation of a plat of subdivision. Any plat or any part of a plat may be vacated by the owner of the premises at any time before the sale of any lot therein, by a written instrument declaring the plat to be vacated, and a copy of such plat shall be attached to such instrument. If there are public service facilities in the highways, streets and other public ways, and in easements shown on the plat, the instrument shall reserve to the city or public utility owning such facilities, the property, rights-of-way and easements necessary for continuing public service by means of those facilities, and for the maintenance, renewal and reconstruction of such facilities. Such an instrument shall be approved by the City Council prior to its recordation in the same manner as plats of subdivision. The City Council may reject any such instrument which abridges or destroys any public rights in any of its streets and other public rights-of-way. Such an instrument shall be executed, acknowledged or proved, and recorded or filed, in the same manner as plats of subdivision. Once recorded or filed, the instrument operates to destroy the force and effect of the recording of the plat vacated, and to divest all public rights in the streets, and other public rights-of-way, and all dedications laid out or described in such plat, and to render effective any reservation set forth in the instrument as provided in this division. When lots have been sold, the plat may be vacated in the

manner herein provided by the owners of lots in such subdivision joining in the execution of such writing.

(D) Approval of a lot split, lot reconfiguration or lot consolidation. Notwithstanding the provisions set forth in the divisions above, a lot split, lot reconfiguration or lot consolidation may be permitted upon review and recommendation by the Planning and Zoning Commission. The following procedure shall be required:

(1) The owner or owners of any lot or lots may apply for a lot split, lot reconfiguration or lot consolidation for said lot or lots without complying with all of the regulations of this chapter, by submitting a petition therefor to the Administrator substantially in the following form:

State of Illinois )
)SS
City of Oakbrook Terrace )

Before the Planning and Zoning Commission of City of Oakbrook Terrace

In the Matter of
\_\_\_\_\_ Subdivision No. \_\_\_\_\_

1. That \_\_\_\_\_ is the owner of record of the following described property:

2. (If there are beneficial owners) That \_\_\_\_\_ are the beneficial owners of said property in the following proportions.

3. The final plat of said subdivision was recorded in the Recorder of Deeds Office of the County of DuPage on the \_\_\_\_ day of \_\_\_\_\_, 2 \_\_\_\_, as Document No. \_\_\_\_\_.

4. That a plat of survey for the lot split, lot reconfiguration or lot consolidation is attached hereto as "Exhibit A", and such plat has been duly attested by a registered land surveyor, contains all certifications required by law, and is in an appropriate condition to be recorded, except for the signatures required from the city.

5. That the plat of survey for the lot split, lot reconfiguration or lot consolidation contains no additional public rights-of-way, and no public rights-of-way are vacated therein.

(Verification)
(Jurat)

(2) Final disposition.

(a) The Planning and Zoning Commission shall review the plat of survey, the Administrator's review for zoning compliance and the City Engineer's review for environmental impact, including stormwater management. The Commission shall then make a recommendation to the City Council that it grant or deny approval of the lot split, lot reconfiguration or lot consolidation, or grant approval subject to specified modifications or conditions, including the Commission's findings as to items 1 through 5 of the petition as set forth in subdivision (1) of this division.

(b) The City Council shall consider the recommendation of the Planning and Zoning Commission, and shall grant or deny approval of the final plat or grant approval subject to specified conditions.
(Ord. 08-19, passed 9-9-08)

§ 159.09 PUBLIC IMPROVEMENTS.

(A) Streets. All dedicated streets abutting upon or within subdivided properties or properties developed under an approved PUD shall be constructed, by the subdivider or developer, at its own expense, in accordance with the specifications established in the "City of Oakbrook Terrace Subdivision and Public Improvement Standards".

(1) General considerations. Streets shall be designed and located in relation to existing and planned streets, to topographical conditions and natural terrain features such as streams and existing tree growth, to public convenience and safety, and in appropriate relation to the proposed uses of land to be served by such streets.

(2) Arrangement.

(a) All streets shall be properly integrated with the existing and proposed system of thoroughfares and dedicated rights of way as established in the city's Comprehensive Plan.

(b) All arterial and major collector streets shall be properly related to special traffic generators, such as businesses, schools, churches, and shopping centers; to population centers; and to the pattern of existing and proposed land uses.

(c) Minor collector and local streets shall be laid out to conform as much as possible to the topography, to discourage use by through

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traffic, to permit efficient drainage and utility systems, and to require the minimum number of streets necessary to provide convenient and safe access to property.

(d) A rigid rectangular gridiron street pattern need not necessarily be adhered to, and the use of curvilinear streets shall be encouraged where they will result in more desirable layout.

(e) Proposed streets shall be extended to the boundary lines of the tract to be subdivided or developed, unless prevented by topography or other physical conditions, or unless in the opinion of the Planning and Zoning Commission, based on the recommendation of the City Engineer, such extension is not necessary or desirable for the coordination of the layout of the subdivision with the existing layout or most advantageous future development of adjacent tracts.

(f) In business subdivisions or PUD's, the streets shall be planned in connection with the grouping of buildings and truck loading and maneuvering areas, so as to minimize conflicts of movement between the various types of traffic.

(3) Access to arterial or major collector streets. Where a subdivision or PUD borders on or includes an existing or proposed arterial or major collector street, the City Council may require that access to such streets be limited by one of the following means:

(a) The subdivision of lots so as to back onto the arterial or major collector street and front onto a parallel minor collector or local street, so that no access is provided from the arterial or major collector street, with landscaped screening provided along the rear lot lines of such lots;

(b) A series of cul-de-sacs, U-shaped streets, or short loops, which enter from and are designed generally at right angles to the arterial or major collector street; or

(c) A frontage street, separated from the arterial or major collector street by a landscaped or grass strip, with suitable access points.

(d) The number of minor collector and local streets entering an arterial or major collector street shall be kept to a minimum.

(4) Street intersections.

(a) Streets shall generally be designed to intersect approximately at right angles, and no more than two streets shall intersect at any one point. No intersection of two new streets shall be designed or constructed at an angle of less than 75 degrees.

(b) Proposed new intersections along one side of an existing street shall, whenever practicable, coincide with any existing intersections on the opposite side of an existing street. No street jogs with center line offsets of less than 150 feet shall be permitted. Where streets intersect arterial or major collector streets, their alignment shall be continuous.

(5) Private streets.

(a) The City Council may, in its discretion, approve the construction, maintenance and use of private streets within subdivisions and PUD's, and may allow access to lots therein by means of such private streets. The following standards shall apply to the construction, maintenance and use of private streets within the city:

1. All private streets shall conform to all design standards as provided under this code for public streets.

2. All private streets shall feature street signs substantially similar in size, lettering and placement as the street signs required for public streets within the city.

(b) A performance guarantee shall be provided to the city by the subdivider or developer for the completion of the private streets and associated improvements, in the same manner as provided in this chapter for the completion of construction of the public improvements in a subdivision or PUD.

(c) The subdivider or developer shall record a declaration of covenants, conditions and restrictions with respect to the subdivision, in a form acceptable to the city's corporation counsel. Such declaration shall include the following:

1. The establishment of an owners' association, which shall have the obligation to maintain the private streets; have the right and obligation to impose assessments against the lots within the subdivision or PUD for the purpose of

maintaining the private streets; and have the right and obligation, pursuant to ILCS Ch. 625, Act 5, § 11-209.1, to file a written request to have the city provide parking and traffic enforcement on the private streets.

2. A prohibition against any amendment to such declaration that would affect the requirements under this division, without the written consent of the city.

(B) Sidewalks, pedestrianways and bike paths.

(1) Except for the Elmhurst Countryside Subdivision, as defined herein, sidewalks shall be constructed in all subdivisions and PUD's, by the subdivider or developer, at its own expense, in locations and in accordance with the specifications established in the "City of Oakbrook Terrace Subdivision and Public Improvement Standards".

(2) Bike paths may be constructed in a subdivision or PUD only with the City Council's approval thereof as part of the approval of the subdivision plat or PUD plan approval, in accordance with the specifications established in the "City of Oakbrook Terrace Subdivision and Public Improvement Standards".

(C) Street lighting. Except for the Elmhurst Countryside Subdivision, as defined herein, street lights shall be installed in all subdivisions and PUD's, by the subdivider or developer, at its own expense, in locations and in accordance with the specifications established in the "City of Oakbrook Terrace Subdivision and Public Improvement Standards".

(D) Street trees. Street trees shall be planted in all subdivisions or PUD's, by the subdivider or developer, at its own expense, in locations and in accordance with the specifications established in the "City of Oakbrook Terrace Subdivision and Public Improvement Standards".

(E) Street names and signs. Street signs shall be installed in all subdivisions or PUD's, by the subdivider or developer, at its own expense, in locations and in accordance with the specifications established in the "City of Oakbrook Terrace Subdivision and Public Improvement Standards". No street name shall be used if it would duplicate or be confused with the names of existing streets, and all street names shall be subject to the approval of the City Council.

(F) Water supply. All subdivisions and PUD's within the city shall have an interconnected water distribution system supplying all lots with water from the city's water system or some other public water system if the city's water system is not reasonably available. A subdivision outside of the city's corporate limits may be supplied with water from individual wells located on each lot, provided that such water supplies are approved by the DuPage County Health Department. The required water distribution system shall be constructed by the subdivider or developer, at its own expense, in accordance with the specifications established in the "City of Oakbrook Terrace Subdivision and Public Improvement Standards".

(G) Sanitary sewer system. All subdivisions and PUD's within the city shall have a system of sanitary sewers, which shall serve each lot and be connected to the appropriate public sanitary sewer system. The subdivider or developer shall construct such system, at its own expense, in accordance with the requirements of the appropriate public sanitary sewer system. A subdivision or PUD outside of the city's corporate limits may have sewage disposal facilities on individual lots; provided that such sewage disposal facilities are approved by the DuPage County Health Department.

(H) Storm water management.

(1) All subdivisions and PUD's within the city shall have a storm water management system, which shall be constructed, at the subdivider's or developer's own expense, in accordance with the requirements of Chapter 152 of this code.

(2) Lots shall be laid out so as to provide drainage away from all buildings, and drainage for each individual lot shall be coordinated with the general storm drainage pattern for the area. Drainage shall be designed to avoid concentration of storm water on adjacent lots.

(I) Variations and waivers. Variations and waivers of the requirements of this section may be granted by the City Council in accordance with § 159.06(D) of this chapter.  
(Ord. 08-19, passed 9-9-08)

#### **§ 159.10 GUARANTEES FOR PUBLIC IMPROVEMENTS; INSPECTION; ACCEPTANCE.**

(A) Guarantee of completion and compliance. For all subdivisions and PUD's, guarantees shall be

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provided to the city to assure that any public improvements required by § 159.09 this chapter shall be completed in compliance with the requirements thereof. Such guarantees shall be instruments of credit in the form provided for in division (C) of this section.

(B) Submittal of Engineer's cost estimate. A detailed estimate of the costs for all public improvements required by § 159.09 this chapter shall be submitted to the Administrator for review and approval by the City Engineer. The estimate shall include a line item accounting of all public improvement costs, based on current costs for materials and labor. The approved Engineer's cost estimate shall be used to determine the amount of the required instrument of credit.

### (C) Instruments of credit.

(1) Submittal of letter of credit. The subdivider or developer shall submit to the Administrator an irrevocable letter of credit (or other comparable instrument of credit) equal to 110% of the Engineer's cost estimate for the required public improvements. Such letter of credit shall be subject to the approval of the city's Corporation Counsel and Engineer, which approval shall be subject to the following conditions:

(a) The lending institution shall be acceptable to the Administrator.

(b) The letter of credit shall provide that it shall not be canceled without the prior written consent of the Administrator and shall not require the consent of the subdivider or developer prior to any draw by the Administrator.

(c) The letter of credit shall include a guarantee that all required public improvements shall be completed by the subdivider or developer not later than 24 months from the date of the recording of the plat or the issuance of a building permit, whichever occurs first.

(2) If at any time the letter of credit is due to expire within 45 days or less, and has not been renewed, the Administrator may, upon a determination that any required public improvements have not been satisfactorily completed by the subdivider or developer call and draw on the letter of credit without notice to the subdivider or developer, and without being required to take any further action of any nature whatsoever. Thereafter, the Administrator may either hold all proceeds from the letter of credit as

security for the satisfactory completion of all required public improvements or use the proceeds to complete all such improvements and reimburse the city for any and all costs and expenses incurred by the city to complete such improvements, including legal fees and administrative costs.

(3) If at any time the Administrator determines that the funds remaining in the letter of credit are not, or may not be, sufficient to pay in full the remaining unpaid cost of required public improvements then, within ten days following a demand by the Administrator, the subdivider or developer shall increase the amount of the letter of credit to an amount determined by the Administrator to be sufficient to pay such unpaid costs. Failure to so increase the amount of the security shall be grounds for the Administrator to draw the entire remaining balance of the letter of credit.

(4) If at any time the Administrator determines that the lending institution issuing the letter of credit is no longer acceptable to the city or is in danger of being unable to honor the letter of credit at any time during its term, the Administrator shall have the right to demand that the subdivider or developer provide a letter of credit from a bank satisfactory to the Administrator, or may draw on the letter of credit in the Administrator's discretion. Any replacement letter of credit shall be deposited with the Administrator not later than ten days following such demand. Upon such deposit, the Administrator shall surrender the original letter of credit to the developer.

(5) The Administrator may, from time to time, authorize the release of some portion of the funds remaining in the letter of credit as required public improvements are satisfactorily completed; provided, however, that no more than 75% of the funds remaining in the letter of credit may be released by the city until such time as a public improvements have been fully completed and accepted by the City Council.

(6) Failure to complete. If the subdivider or developer fails or refuses to satisfactorily complete all required public improvements within the specified time periods, or in any way fails or refuses to meet fully its obligations under this chapter, the Administrator shall have the sole authority to draw on and retain all or any of the funds remaining in the letter of credit. Thereafter, the Administrator shall have the further right to take any action deemed reasonable and appropriate to mitigate the effects of such failure or refusal. The

proceeds of the letter of credit shall be utilized to pay for all costs and expenses, including legal fees and administrative expenses, resulting from or incurred as a result of the subdivider's or developer's failure or refusal to satisfactorily complete the required public improvements and fully meet its obligations under this chapter. If the funds remaining in the letter of credit are insufficient to cover all such costs and expenses and to maintain an amount in the letter of credit sufficient to guarantee any remaining improvements or obligations during the entire time such letter of credit should have been maintained by the subdivider or developer, then the subdivider or developer shall, upon demand of the Administrator, immediately increase the balance remaining in the letter of credit and deposit such letter with the Administrator, or the Administrator may initiate such remedies as are available to the city to collect any additional costs.

(7) Extension of letter of credit. The Administrator, upon written proof of the subdivider's or developer's difficulty in satisfactorily completing the required public improvements in a timely manner, shall have the authority to grant one extension of the letter of credit, not to exceed six months. The City Council may, upon written proof of such difficulty, grant additional extensions of the letter of credit.

(D) Inspection of improvements.

(1) All materials and each part or detail of the required public improvements shall be subject, at all times, to inspection by the city or its authorized representatives, and the subdivider or developer shall be held strictly to the true intent of the specifications for such improvements as to quality of materials, workmanship and the diligent execution of the improvements. The city's inspections may include, but are not limited to, mill, plant or shop inspections, and any material provided shall be subject to such inspections. The city shall be allowed access to all parts of the subdivision or PUD, and shall be furnished with such information and assistance from the subdivider or developer as may be required to make a complete and detailed inspection.

(2) All required public improvements that have been rejected shall be repaired or removed and replaced in an acceptable manner by the subdivider or developer at its own expense. Upon any failure on the part of the subdivider or developer to comply with any order of the city made under the provisions of this chapter, the city

shall, after giving written notice to the subdivider or developer, have the authority to cause defective improvements to be repaired or removed and replaced, and to draw on the letter of credit for the cost thereof or otherwise charge such costs to the subdivider or developer.

(E) Final acceptance of public improvements. Upon satisfactory completion of all required public improvements in the subdivision or PUD, the subdivider or developer shall notify the Administrator and City Engineer, in writing, that all such improvements have been satisfactorily completed and that final inspection thereof is requested. The subdivider or developer shall also forward to the Administrator two copies of as-built drawings showing all such improvements. Final inspection shall be made by the City Engineer and the subdivider or developer. When the final inspection shows that the required public improvements have been completed in a satisfactory and workmanlike manner, and substantially in accordance with the approved plans and specifications, the City Engineer shall so report to the City Council or such other governmental agency as may be applicable, in writing, and shall recommend that the required public improvements be accepted by the city or such other governmental agency. Upon the city's acceptance of improvements, the subdivider or developer shall execute a bill of sale conveying ownership and title to the required public improvements to the city, and the Mayor and City Clerk shall execute such bill of sale as evidence of the city's acceptance of such public improvements. Upon acceptance of improvements by any other governmental agency as may be applicable, the subdivider or developer shall execute any documentation required by such governmental agency to convey ownership and title to the required public improvements. Any items found to be deficient during the inspection shall be identified to the subdivider or developer, and final acceptance shall be withheld pending correction of any deficiencies. Upon final acceptance of the required public improvements by the city or such other governmental agency as may be applicable, the letter of credit required in this division shall be released to the subdivider or developer, but only upon receipt of the guarantee required in division (F) of this section.

(F) Guarantee after completion and acceptance of public improvements.

(1) In order to ensure the satisfactory condition and function, operation and maintenance of the required public improvements after

acceptance by the City Council or such other governmental agency as may be applicable, the subdivider or developer shall provide a letter of credit equal to 10% of the estimated cost of the required public improvements. The letter of credit shall generally comply with the requirements of this section for the initial letter of credit, or in lieu of providing a new letter of credit, the subdivider or developer may provide and the city may accept retention of 10% of the letter of credit originally provided to guarantee construction of required public improvements. All required public improvements must be guaranteed by the developer or subdivider for a period of at least two years after final acceptance by the city or such other governmental agency as may be applicable. For public improvements not to be owned by the city or such other governmental agency as may be applicable, such guarantee shall be for a period of at least two years after approval of the record drawings. Any warranty that is still in effect on materials accepted by the city or such other governmental agency as may be applicable shall be submitted to the Administrator at the time of acceptance.

(2) The full balance of funds in the letter of credit shall be released at the end of the 24-month guarantee period, if no defects in materials (including dead landscape materials), workmanship, or design have become apparent. If defects are found, the balance of funds remaining in the letter of credit shall be released after any draw by the city to reimburse itself for any costs expended by the city to correct defective improvements upon the subdivider's or developer's failure to do so. An inspection of the function and condition of the improvements shall be conducted by the City Engineer in the twenty-second month of the guarantee period.

(3) Establishment of property owner's associations. In order to guarantee the continued maintenance of public, semi-public and privately-owned common areas, stormwater management facilities, and other public or common areas, an association of property owners or other comparable administrative body shall be established. Such association shall be responsible for the perpetual maintenance of all such areas. A declaration of restrictions and covenants shall be prepared by the subdivider or developer to establish the property owner's association and to require perpetual maintenance of such areas and a means of funding such maintenance, and such

declaration shall be subject to the review and approval of the city's corporation counsel. (Ord. 08-19, passed 9-9-08)

#### § 159.11 OTHER DESIGN STANDARDS.

(A) On corner lots, no obstruction in a yard, including trees and shrubs, shall be higher than 18 inches above the street level if located in that portion of the yard within 25 feet of the corner formed by the intersection of any two street right-of-way lines; provided that, notwithstanding such height restriction, existing vegetation shall be allowed to remain unless it creates a hazard to pedestrian or vehicular traffic as determined by the Administrator in consultation with the Chief of Police, the Public Services Director and other consultants as deemed necessary and appropriate.

#### (B) Easements.

(1) Easements across lots or on the rear or side lot lines shall be provided for public and private utilities where required by the city or any other public entity. Such easements shall be at least ten feet wide on each lot where there are abutting lots. If there is no abutting lot, such easements shall be at least 20 feet wide. The location of such easements shall be established by coordination between developer and utility.

(2) Where a subdivision or PUD is traversed by a watercourse, drainage swale, channel, or stream, there shall be provided a storm water or drainage easement conforming substantially to the boundaries of such watercourse, drainage swale, channel or stream. Wherever possible, the drainage shall be maintained within an open channel, with landscaped banks, adequate to provide the maximum potential volume of flow.

#### (C) Blocks.

(1) Blocks shall have sufficient width to provide for two tiers of lots of appropriate depths. Exceptions may be permitted for blocks adjacent to a municipal boundary, a zoning district boundary, or arterial or major collector streets or waterways.

(2) The lengths, widths, and shapes of blocks shall be such as are appropriate for the locality and the type of development contemplated.

(3) Blocks in residential areas shall not be more than 2,000 feet or less than 400 feet in length.

(4) Wherever practicable, blocks along arterial and major collector streets shall not be less than 1,000 feet in length.

(5) Pedestrianways or crosswalks, not less than ten feet wide, may be required by the City Council through the center of blocks more than 800 feet long where deemed essential to provide circulation for or access to schools, playgrounds, shopping centers, transportation or other community facilities.

(D) Lots.

(1) In general, the size, shape and orientation of lots shall be appropriate for the location of the subdivision and for the use contemplated. Lot dimensions shall conform to the requirements of the city's zoning code.

(2) Depth and width of properties reserved or laid out for business purposes shall be adequate to provide for off-street parking and loading facilities as required in the city's zoning code for the use contemplated.

(3) If the City Council permits residential lots fronting on arterial or major collector streets, such lots shall be platted with extra depth so that the required building line is increased by an additional 20 feet.

(4) Lots in residential blocks that are improved with buildings used for business purposes shall be platted with a building line at least equal to the building line for the residential lots in that block, and shall comply with all applicable zoning requirements.

(5) Every lot shall front on or abut a street.

(6) Side lot lines shall be approximately at right angles or radial to street lines.

(7) Corner lots shall be provided with an additional 20 feet in width to permit the required building line from both streets.

(8) Through lots shall be avoided except where necessary to provide separation of residential development from arterial and major collector streets, or to overcome specific disadvantages of topography and orientation.

(Ord. 08-19, passed 9-9-08)

**LAND DEDICATION FOR PARK, OPEN SPACE AND RECREATION PURPOSES**

**§ 159.20 DEDICATION OF LAND FOR PARK, OPEN SPACE AND RECREATION PURPOSES, OR CASH CONTRIBUTION IN LIEU THEREOF.**

As a condition of approval of a final plat of subdivision or a final plan for a PUD for any residential use, regardless of the zoning classification of the property to be developed, each subdivider or developer will be required to dedicate land for park, open space and recreation purposes that will serve the immediate and future needs of the residents of the subdivision or PUD, or to make a cash contribution in lieu of actual land dedication, or a combination of both, at the option of the city, in accordance with the criteria set forth in this subchapter.

(Ord. 08-19, passed 9-9-08)

**§ 159.21 CRITERIA FOR REQUIRING LAND DEDICATION FOR PARK, OPEN SPACE AND RECREATION PURPOSES.**

(A) Requirements and population ratio. The ultimate density of a proposed development for any residential use, regardless of the zoning classification of the property to be developed, shall bear directly upon the amount of land required for dedication. The total requirement shall be 5.5 acres of land per 1,000 of ultimate population. The required 5.5 acres may be allocated by the City Council, in its discretion, based upon the following criteria:

<i>Types of Recreation Areas</i>	<i>Size Range</i>	<i>Minimum Acres per 1,000 People</i>
(a) Mini or vest pocket park	.20 acres	Not applicable
(b) Playlot	.5 to 2.9 acres	.5
(c) Neighborhood playground	3 to 4.9 acres	1.5
(d) Neighborhood park and school	5 acres per elementary school to 6.9 acres per junior high school	Not applicable
(e) Neighborhood park	7 to 14.9 acres	1.5
(f) Playfield	15 to 40 acres or more	1.5
(g) Regional community park	40 to 100 acres or more	4.00

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(B) Location. The most desirable location for land dedication for park, open space and recreation purposes is a central location within the subdivision or PUD that will serve the entire subdivision or PUD equally. In large subdivisions or PUD's, such park, open space and recreation sites may be located throughout the subdivision or PUD, and shall meet established standards for the appropriate distances between park, open space and recreation areas as set forth in Recreation Park and Open Space Standards and Guidelines. Additional guidelines for consideration in locating park, open space and recreation sites include, but are not limited to, the size of the subdivision or PUD; the proximity of a proposed site to other parks, open spaces, recreation areas, schools and municipal services; and the topography and shape of the proposed site.

(C) Credit for private park, open space and recreation areas. As the provision of private park, open space and recreation areas has the effect of reducing the demand for public parks, open spaces and recreation areas, consideration may be given to reducing the required land dedication or contribution for park, open space and recreation purposes by the substitution of private park, open space and recreation areas. The extent to which private park, open space and recreation areas may be substituted shall be determined by the City Council, based on the following standards:

(1) The extent to which the substituted private park, open space and recreation sites substantially conform with the total park and recreation land requirements for the general area as identified in the city's Comprehensive Plan.

(2) Whether the subdivider or developer has provided guarantees, by the execution of appropriate legal documents, to assure permanent and ongoing maintenance of the private park, open space and recreation areas.

(Ord. 08-19, passed 9-9-08)

**§ 159.22 CRITERIA FOR REQUIRING A CASH CONTRIBUTION IN LIEU OF LAND DEDICATION FOR PARK, OPEN SPACE AND RECREATION PURPOSES.**

Where the subdivision or PUD is small and the resulting potential for park, open space and recreation areas is, in the opinion of the city, too small to be practical, or when the available land, in the opinion of the city, is inappropriate for park, open space and recreational purposes, the city shall

require the subdivider or developer to pay a cash contribution in lieu of any required land dedication. The cash contribution in lieu of land dedication shall be paid to the city, which shall hold the contribution in trust for the park district having jurisdiction over the subdivision or PUD. Such contribution shall be held in trust by the city for the park district in which the subdivision or PUD is located, solely for the acquisition and/or improvement of land located entirely within the corporate limits of the city for park, open space or recreation purposes to serve the immediate or future needs of the residents of the subdivision or PUD, or for the improvement of other existing park, open space and recreation areas located entirely within the corporate limits of the city that already serve such needs. When the park district provides the city with appropriate documentation, such as a signed sales contract, a signed public improvement contract, or a signed park district purchase order, to verify that a purchase of land or an improvement to an existing park by the park district is in compliance with the use requirements for the cash contribution made by any subdivider or developer pursuant to this subchapter, the city shall release the funds to the park district as soon as reasonably possible. The city shall have the right to request and receive annual audit reports and any other information from the affected park districts as the city may need from time to time to ensure the park districts' compliance with use requirements for the cash contribution made by any subdivider or developer pursuant to this subchapter. If any portion of a cash contribution in lieu of land dedication for park, open space and recreation purposes is not expended for the permitted purposes within ten years from the date of receipt, the city or the park district holding the funds shall refund such contribution to the owners of record of all lots in the subdivision or PUD for which such contribution was made, except for land or lots already dedicated or improved for park, open space and recreation purposes pursuant to the provisions of this subchapter.

(A) Acquisition using cash in lieu of land dedication for park, open space and recreation purposes.

(1) The term *ACQUISITION* as used in this subchapter shall mean the acquiring of land located or to be located entirely within the corporate limits of the city by purchase, condemnation or such other means as may be appropriate.

(2) The acquired land shall be appropriate for the type of facility defined as an "improvement" in division (B) of this section.

(B) Improvement using cash in lieu of park land donations.

(1) Where existing park, open space and recreation areas located entirely within the corporate limits of the city will serve the needs of the subdivision or PUD, the cash contribution in lieu of land dedication shall be used for the following types of physical improvements in such existing areas:

- (a) Play lots and playgrounds.
- (b) Hard surface courts (tennis, basketball, tetherball).
- (c) Pathways (walkways, jogging and cycle paths).
- (d) Sport fields and athletic grounds (baseball, soccer, football).
- (e) Picnic facilities (tables, grills, and the like).
- (f) Open shelters and restroom facilities.
- (g) Support facilities (i.e. parking, parking lots, drinking fountains, security lighting, water service, sanitary sewer service, internal roadways, electrical lines, lights and standards, sidewalks) for any of the improvements authorized in this division (B).
- (h) Other recreational grounds.

(2) Improvements shall also include the construction of buildings and structures, additions to existing buildings and structures, or remodeling and renovations to existing buildings and structures to better serve existing or future needs of the residents of the subdivision or PUD.

(3) Improvements shall not include general maintenance or operations, salaries of employees or officers, or payment of existing debt service for the park district.

(4) If any improvement provided for herein shall require voter referendum approval under existing statutory authority before such funds

may be lawfully expended, such approval shall be obtained prior to making, constructing or installing such improvement.

(C) Fair market value. The cash contribution in lieu of land shall be based on the sum of the fair market value of a vacant, unimproved and unsubdivided acre of land in the city and the estimate of the city as to the cost of improving such land with electrical utilities, water, sewer and streets, including enclosed drainage and curbs and gutters, and all other improvements required to comply with all requirements of any statute, regulation or ordinance applicable to the development. All cash contribution calculations shall be made by the city, and the park district shall refer all developers to the city for such calculations. The fair market value of a vacant unsubdivided acre of land for purposes of determining any cash contribution in lieu of land shall be the greater of (i) the amount per acre paid by the developer to purchase the land underlying the proposed development plus the cost of improvement of the land which the city hereby declares to be \$31,000; or (ii) the fair market value of a vacant unsubdivided, unimproved acre of land in and about the city, which the city has determined to be \$125,000, and the cost of improvements, which the city has declared to be \$31,000, and such figure shall be used in making any calculation herein unless the subdivider, developer or the park district files a written objection thereto. In the event of any such objection, the developer shall, at his cost and by a Member of Appraisal Institute (M.A.I.), submit an appraisal showing the "fair market value" of the land in the development or other evidence thereof, the final determination of the fair market value of said unsubdivided land shall be made by the City Council based upon such information submitted by the subdivider or developer and from other relevant sources which may be submitted by the subdivider or developer and from other sources which may be submitted to the City Council by the Oakbrook Terrace Park District, or others. The city, on its own motion or at the request of the City Park District, may from time to time amend this provision to provide for different fair market value for parcels that are deemed by the City Park District and the city to be of greater or lesser value than provided for herein.

(D) Cash contributions in lieu of land dedication shall be paid to the city prior to the execution of the final plat by the requisite city officers.

(E) Criteria for requiring both a land dedication and a cash contribution in lieu of land dedication. There may be situations when both a land dedication and a cash contribution in lieu of land dedication are necessary. Such situations may arise, if:

(1) It is determined by the city that the land to be dedicated for a park, open space or recreation area within a subdivision or PUD does not include the full acreage required, but is otherwise acceptable to the city, a cash contribution shall be required for the difference between the required acreage and the acreage proposed for the land dedication.

(2) It is determined by the city that a major portion of a park, open space or recreation area has already been acquired and will serve the subdivision or PUD, and that only a small portion of land is needed from the contributing subdivision or PUD to complete the required park, open space or recreation area, the dedication of such remaining portions shall be required, and the subdivider or developer shall pay a cash contribution in lieu of dedication for the difference between the land dedicated and the land required to be dedicated for such subdivision or PUD.

(Ord. 08-19, passed 9-9-08)

#### **§ 159.23 DENSITY FORMULA.**

The following table of population density is generally indicative of current and short range projected trends in family size for new construction and shall be used in calculating the required land dedication in acres of land or the cash contribution in lieu thereof, unless a written objection is filed thereto by the subdivider or developer as provided in division (B) of this section:

Table of Estimated Population Per Dwelling Unit

Type of Unit	Preschool 0 - 4 years	Elementary Grades K - 5 5 - 10 years	Middle School Grades 6 - 8 11 - 13 years	High School Grades 9 - 12 14 - 17 years	Adults (18 - up)	Total per Unit
<b>Detached Single-Family (No. of Bedrooms)</b>						
2	.125	.120	.026	.018	1.700	1.989
3	.308	.381	.174	.146	1.978	2.987
4	.472	.513	.314	.313	2.195	3.807
5	.402	.620	.420	.327	2.650	4.419
<b>Attached Single-Family (No. of Bedrooms)</b>						
1	-	-	-	-	1.050	1.050
2	0.51	.075	.011	.021	1.741	1.899
3	.217	.212	.022	.051	1.775	2.277
4	.333	.316	.166	.180	2.333	3.328
<b>Multiple-family (No. of Bedrooms)</b>						
Efficiency	-	-	-	-	1.000	1.000
1	-	-	-	-	1.190	1.190
2	.038	.065	.021	.035	1.500	1.659
3	.208	.157	.037	.082	2.330	2.814

## Oakbrook Terrace - Land Usage

(A) Objections to density formula. In the event a subdivider or developer files a written objection to the Table of Estimated Population Per Dwelling Unit established in this section and submits, at its own expense, other demographic studies or information showing the estimated additional population to be generated from the subdivision or PUD, a final determination of the density formula to be used in such calculations shall be made by the City Council based upon such demographic information submitted by the subdivider or developer to the city, or upon such information as may otherwise be available to the City Council. It is recognized that population density, age distribution and local conditions change over the years, and the specific formula for the dedication of land, or the payment of a cash contribution in lieu thereof, as stated herein, is subject to periodic review and amendment if necessary.

(B) Presumed density formula. In the event the relevant data on file with the city, including any ordinances granting approval of a subdivision or PUD, establishes a density level other than the density established in the Table of Estimated Population Per Dwelling Unit established in this section, then such density shall be used to determine a cash contribution in lieu of land dedication; provided that the subdivider or developer shall be limited to the final density level established by the City Council for its actual construction of the subdivision or PUD.  
(Ord. 08-19, passed 9-9-08)

### § 159.24 TOPOGRAPHY AND GRADING.

The slope, topography, grading, soil quality and drainage of the land dedicated for park, open space and recreation purposes, as well as its surroundings, shall be suitable for its intended purposes, and no unreasonable danger shall be created thereby.  
(Ord. 08-19, passed 9-9-08)

### § 159.25 IMPROVED SITES.

Public improvements shall be accessible to provide service to any land dedicated for park, open space and recreation purposes, as appropriate for the location of such land.  
(Ord. 08-19, passed 9-9-08)

### § 159.26 TITLE TO DEDICATED LAND FOR PARK, OPEN SPACE AND RECREATION PURPOSES.

All land to be dedicated for park, open space and recreation purposes shall be conveyed to the city either by warranty or trustee's deed. The subdivider or developer shall be responsible for conveying good, merchantable title to such land, and shall be responsible for payment of all real estate taxes to the date of conveyance. In the discretion of the city, a commitment for title insurance issued by a company authorized to do business in Illinois may be required as evidence of clear title. Conveyance shall occur only after or simultaneously with the passage of an ordinance by the park district in which the subdivision or PUD is located, which ordinance shall provide that the land is accepted by the park district or city for park, open space and recreation purposes.  
(Ord. 08-19, passed 9-9-08)

### § 159.27 INDEMNIFICATION.

Except as otherwise provided below, any affected park district shall, as a condition of receiving the donations hereunder, agree to indemnify and hold harmless the city, its officers, employees and agents, from any loss, claim or damages of any kind incurred by the city as a result, either directly or indirectly, of the passage of this subchapter, or the administration or enforcement thereof. If the city is sued by any subdivider or developer as a result, directly or indirectly, of the passage of this subchapter, the city may, at its option, undertake the defense thereof, but all costs and expenses of such defense, including attorneys' fees, shall be immediately reimbursed by the affected park district. The city may withhold delivery of any cash contribution to a park district pending compliance with these indemnity provisions, except as follows:

(A) If the city receives a cash contribution in lieu of land dedication and fails to convey such contribution to the affected park district or expends such contribution for its own purposes, and the affected park district files a suit, the city shall defend against such suit and pay for all its own costs and expenses related to such suit, including attorney's fees.

(B) If a park district improperly uses a cash contribution, or fails to timely use a cash contribution and does not return such contribution

as required in § 159.22 of this chapter, the city may sue the affected park district and shall be entitled to recover as part of the judgment in, or any settlement of such suit, all of the costs and expenses, including attorneys' fees, incurred by the city.

(C) Unless otherwise specifically provided, the indemnification provisions established in this section shall be an implied condition of any intergovernmental agreement entered between the city and a park district with respect to cash contributions for park, open space and recreation purposes pursuant to this subchapter.  
(Ord. 08-19, passed 9-9-08)

[Text continues on p. 145.]

**Oakbrook Terrace - Land Usage**

**CITY OF OAKBROOK TERRACE**

**SUBDIVISION AND PUBLIC  
IMPROVEMENTS STANDARDS**

**CITY OF OAKBROOK TERRACE  
SUBDIVISION AND PUBLIC IMPROVEMENT STANDARDS**

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## ARTICLE 1: STREETS

### Section 1-101: Provision of Streets

All streets abutting upon or within subdivided or developed properties shall be provided by the subdivider or developer at its own expense, with pavements having a minimum width (face to face of curb) sufficient to adequately serve the subdivision or development and to comply with the requirements of these standards. All new pavement, sidewalks, and pathways shall be constructed in conformance to the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Recurring Special Provisions (IDOT STANDARD SPECIFICATIONS), as amended, except as modified herein.

### Section 1-102: Traffic Studies and Traffic Signals

Traffic studies shall be required of all proposed residential subdivisions or developments of fifty (50) dwelling units or more, for all commercial subdivisions of 40,000 square feet of floor area or more and for businesses with drive-through facilities, or as directed by the City Engineer. The need for traffic signals and turn lanes will be determined by a traffic study commissioned by the subdivider or developer or as determined by the City Engineer. The traffic study shall use established standards of the Manual of Uniform Traffic Control Devices (MUTCD), and the American Association of State Highway and Transportation Officials. The traffic study shall be prepared by firms with demonstrated competence in traffic engineering and traffic studies related to subdivisions and developments. All traffic studies will be submitted to the City for review.

### Section 1-103: Outside Permitting Agencies

If the tract of land proposed to be subdivided or developed, or any part thereof lies adjacent to an arterial, or major collector street over which the Department of Transportation of the State of Illinois or the County of DuPage have jurisdiction with respect to maintenance and upkeep thereof and an entrance or entrances are desired from such arterial or major collector street to lots, streets, or roadways in the proposed subdivision or development, the subdivider or developer shall submit a written permit application to the appropriate jurisdiction granting permission to construct such an entrance or entrances after preliminary subdivision plat or preliminary PUD plan approval by the City Council. The subdivider or developer shall obtain the written permission from the City and all other appropriate jurisdictions for all required permits.

### Section 1-104: Street Pavement Design

Pavement design shall relate to the street classification as described in this Section. The classification of new streets, as well as variations to street classifications for a given street, shall be submitted to the City Engineer for review when the preliminary subdivision plat or preliminary PUD plan is submitted. All streets shall be designed to conform to the requirements found in Tables A, B, C, D, and E. Streets constructed of Portland Cement Concrete shall be designed in conformance with IDOT standards and shall be approved by the City Engineer.

## ARTICLE 1: STREETS

Table A: Minimum Right-of-Way and Pavement Widths

TYPE OF STREET	RIGHT-OF-WAY WIDTH (FT)	PAVED SECTION WIDTH B-B OF CURB (FT)
MINOR COLLECTOR	80	39
LOCAL - RESIDENTIAL	66	27
LOCAL - COMMERCIAL	66	36
CUL-DE-SAC (RESIDENTIAL)	66*	27**
CUL-DE-SAC (COMMERCIAL)	66*	36**
FRONTAGE	40	25

\*Cul-de-sac street bulbs shall have a right-of-way radius of 75' measured from the center to the bulb to the right-of-way line.

\*\* Cul-de-sac street pavements shall have a minimum pavement radius of 55' measured from the center to the back of curb or outer edge of street pavement.

Table B: Horizontal & Vertical Alignments and Minimum Sight Distances

TYPE OF STREET	MINIMUM SIGHT DISTANCE (FT)	MINIMUM CENTERLINE HORIZONTAL RADIUS (FT)	MINIMUM & MAXIMUM CENTERLINE VERTICAL SLOPE (%)
MINOR COLLECTOR	240	350	0.5 TO 7.0
LOCAL - RESIDENTIAL	200	250	0.5 TO 7.0
LOCAL - COMMERCIAL	200	250	0.5 TO 7.0
CUL-DE-SAC (RESIDENTIAL)	200	250	0.5 TO 7.0
CUL-DE-SAC (COMMERCIAL)	200	250	0.5 TO 7.0
FRONTAGE	200	250	0.5 TO 7.0

Table C: Bituminous Street Material Thicknesses

TYPE OF STREET	BIT. SURFACE COURSE THICKNESS (IN)	BIT. BINDER COURSE THICKNESS (IN)	COMBINED AGG. BASE COURSE AND SUBGRADE THICKNESS (IN)
MINOR COLLECTOR	4.0	6.0	12.0
LOCAL - RESIDENTIAL	2.0	3.0	12.0
LOCAL - COMMERCIAL	2.0	3.0	12.0
CUL-DE-SAC (RESIDENTIAL)	2.0	3.0	12.0
CUL-DE-SAC (COMMERCIAL)	2.0	3.0	12.0
FRONTAGE	2.0	3.0	12.0

## ARTICLE 1: STREETS

Table D: Bituminous Materials Table – Minor Collector Streets

The bituminous materials used to construct Minor Collector Streets shall be as follows:

ITEM	Design Compactive Effort	AC TYPE	VOIDS @ 50 Gyr.	MAX RAP%
Hot Mix Asphalt Binder Course, IL-19, N50	50	PG 64-22 or PG 58-22	4%	25%
Hot Mix Asphalt Surface Course, Mix "D", N50	50	PG 64-22	4%	15%

Table E: Bituminous Materials Table – All other Streets

The bituminous materials used to construct all non-Collector Streets shall be as follows:

ITEM	Design Compactive Effort	AC TYPE	VOIDS @ 50 Gyr.	MAX RAP%
Hot Mix Asphalt Binder Course, IL-19, N50	50	PG 64-22 or PG 58-22	4%	25%
Hot Mix Asphalt Surface Course, Mix "C", N50	50	PG 64-22	4%	15%

### Section 1-105: Vertical Curves

A vertical curve in the pavement centerline shall be introduced when the difference of grade along the centerline is equal to or greater than two (2.0) percent. The minimum length of vertical curves shall be one hundred (100) feet for two (2.0) percent difference of grade along the centerline. For each additional one (1.0) percent difference in grade over two (2.0) percent, a fifty (50) foot increment shall be added to the length of a vertical curve. If the grade differential is less than two (2.0) percent, a vertical curve is not required.

### Section 1-106: Sight Distances

At points of intersection of proposed streets with existing streets, the minimum stopping sight distance indicated below for the legal speed limits shall be provided on existing streets. Clear visibility, at any point of movement along the street measured along the center line of the street, shall be provided for at least three hundred fifty (350) feet on all arterial streets, two hundred (200) feet on collector and local streets, or as designated by an engineering study.

## ARTICLE 1: STREETS

Legal Speed Limit (MPH)	Minimum Stopping Sight Distance
25-30	200 FT
35-40	275 FT
45-50	350 FT
55	475 FT

### Section 1-107: Subgrade.

- a. All subgrade material shall have a minimum Illinois Bearing Ratio (IBR) of 3.0. All unsuitable subgrade material, including subgrade material having an IBR less than 3.0, shall be removed and replaced with a suitable fill material, or the pavement must be designed to compensate for the soil condition. The soil support IBR values selected for use by the engineer shall represent a minimum value for the soil to be used. Soil tests must be provided to verify suitability of subgrade material.
- b. The subgrade of all paved areas shall be graded and rolled in accordance with IDOT STANDARD SPECIFICATIONS Division 300. Embankment shall be placed and compacted in accordance with IDOT STANDARD SPECIFICATIONS Section 205.
- c. At least one Standard Proctor Density Test, performed in accordance with AASHTO T99, shall be taken in each embankment section, with the maximum distance between tests of three hundred (300) feet. One standard proctor density test shall be taken from each different source of borrowed material. The density tests must be submitted for review to the City Engineer. Upon review of these tests, an inspection of the subgrade shall be made by the engineer and a report of acceptable subgrade and preparation must be submitted to the City Engineer prior to placing any curb and gutter or base material.

### Section 1-108: Curb & Gutter and Shoulder

- a. Curbs and gutters are required on all streets within the corporate limits of Oakbrook Terrace and shall be constructed of Portland Cement Concrete of a design equal to IDOT B6.12, except for the area of the Original City. A concrete shoulder shall be used in the Original City in lieu of a curb and gutter and shall be 9" in depth and have a width of 18" per standard detail SD 21 of this manual. All curb or shoulder corners shall have a radius of not less than 25 feet in residential areas and 40 feet in commercial areas.
- b. Two (2) No. 4 reinforcing bars shall be placed continuously between expansion joints. Expansion joints shall be doweled and spaced no more than sixty (60) feet on center and at tangent points of all radii. Control joints shall be provided at least fifteen (15) feet on center and shall consist of an actual saw cut, at least one and one-half (1 1/2) inches deep. If curb machines are used, doweled sections are not required.
- c. Curbs and shoulders installed by slip joint machines shall be allowed.
- d. Before final pavement surface is installed the City Engineer may request that the contractor run water down the curb lines to check for "low" and "high" spots that

## ARTICLE 1: STREETS

may impede Stormwater flow. The City Engineer shall verify flow line acceptance prior to final acceptance of streets. Curb replacement shall be required at all standing water locations.

### Section 1-109: Street Identification and Traffic Control Signs.

The subdivider or developer shall submit a drawing or list indicating the locations and descriptions of all street identification and traffic control signs to be installed with the subdivision street improvements for the subdivision or development for the City Engineer to review and approve prior to their purchase by the subdivider or developer. The installation of all required street identification and traffic control signs within the subdivision or development shall be performed by the developer/property owner. One (1) extra set of street identification signs shall be submitted to the City for its use prior to approval of the street improvements in the subdivision or development by the City. All traffic control signs and pavement markings shall be in accordance with the Manual of Uniform Traffic Control Devices, latest version. Street identification signs shall be as manufactured by Traffic & Parking Control Company, Inc. of Elm Grove, Wisconsin.

### Section 1-110: Street Trees

Trees shall be planted on both sides of all streets. The trees shall have a minimum trunk diameter of 2.5 inches in residential districts and 3.0 inches in non-residential districts. Trunk diameter shall be measured at breast height. All street trees shall be in accordance with the requirements of section 156.049 of the City Code.

## **ARTICLE 2: SIDEWALKS, DRIVEWAY APRONS, AND BIKE PATHS**

### Section 2-101: Provision of Sidewalks

Sidewalks shall be constructed by subdivider or developer along all streets within a subdivision or development, except in the Elmhurst Countryside Subdivision and as otherwise provided in this section. The City may itself, or upon application of the subdivider or developer, in its discretion, require or approve alternative path systems, such as pedestrian ways or bike paths, as a condition to the approval of any subdivision or development. If a street is planned for widening within five (5) years of the date of final subdivision or development approval, the subdivider or developer shall provide security for sidewalk construction with the City. All subdivisions and developments shall provide a sidewalk to connect buildings with public sidewalks.

### Section 2-102: Location

The location of sidewalks shall generally be one (1) foot inside of the right-of-way. The location may be modified, depending on factors that include but are not limited to: relationship to drainage ditches, easements, permitted obstructions in the right-of-way, handicapped ramps, existing trees and landscaping, and topography.

### Section 2-103: Construction

Construction of sidewalk improvements shall be in conformance with IDOT STANDARD Section 424. Sidewalk width shall be a minimum of five (5) feet in width, subject to City Engineer approval. Thickness shall be a minimum of five (5) inches, increased to 7" when the sidewalk is installed through a driveway. All sidewalks at curb depressions shall include a detectable warning for the vision impaired consisting of truncated domes. The warning area shall begin six (6) inches from the back of the curb and continue two (2) feet in the direction of pedestrian travel for the entire width of the walking surface. The detectable warning shall also present a contrast in color from the adjacent sidewalk with integrally colored concrete or other means subject to City Engineer approval.

### Section 2-104: Subgrade Preparation

Where a fill condition exists, all topsoil and unsuitable material shall be removed. Subgrade shall be rolled or tamped before granular fill is placed. Fill shall be placed in six (6) inch layers to the proper subgrade elevation. Side slopes of fill material shall not exceed one (1) foot vertical to three (3) feet horizontal. Where a cut condition exists, all top soil and unsuitable material shall be removed. Subgrade shall be removed to the proper elevation to allow sufficient width to accommodate the forms.

### Section 2-105: Granular Base

A granular base of two (2) inch minimum thickness shall be placed on the prepared subgrade. The base shall extend the full width of the sidewalk or driveway apron. The granular base shall consist of CA-6 aggregate conforming to IDOT STANDARD Section 104.

## ARTICLE 2: SIDEWALKS, DRIVEWAY APRONS, AND BIKE PATHS

### Section 2-106; Expansion Joints

- a. Expansion joints of the thickness specified below shall consist of a pre-molded filler strip with the top strip placed one-fourth (1/4) inch below the surface of the sidewalk or driveway apron.
- b. One-Half Inch Thick Expansion Joints. Expansion joints one-half (1/2) inches thick shall be placed between sidewalks and all structures which extend through sidewalks, such as light standards, traffic light standards, and traffic poles. One-half (1/2) inch thick expansion joints shall also be provided at the junction of the driveway apron and the sidewalk and at the junction of the driveway apron and the curb.
- c. Three-Fourth Inch Thick Expansion Joints. Expansion joints three-fourth (3/4) inches thick shall be placed at maximum intervals of one hundred (100) feet in sidewalks and where specified by the City Engineer. Where sidewalks are constructed adjacent to pavement or curbs that have expansion joints, the expansion joints in the sidewalk shall be placed opposite the existing expansion joints as nearly as practicable. Expansion joints shall also be placed where the sidewalk abuts existing sidewalks, between driveway pavement and sidewalk, and between sidewalk and curbs where the sidewalk abuts a curb.

### Section 2-107: Control of Materials

The subdivider or developer shall, when requested by the City Engineer, and at its expense, have a commercial testing laboratory prepare and test samples of delivered concrete. One (1) set of tests shall be taken for the first twenty-five (25) cubic yards, or fraction thereof, and one (1) set of tests shall be taken for each additional fifty (50) cubic yards. A set of tests shall consist of four (4) standard cylinders (two (2) shall be broken at seven (7) days and two (2) shall be broken at twenty-eight (28) days), one (1) slump test and one (1) air content test. The laboratory shall perform tests in accordance with recognized ASTM standards and shall submit written reports of such tests to the City Engineer for review.

### Section 2-108: Driveway Aprons

A paved driveway approach between the curb and sidewalk, or between curb and lot line, shall be provided at each lot before an occupancy permit is issued. Driveway aprons shall only be constructed of Portland cement concrete or bituminous concrete. Portland cement concrete aprons shall be constructed of 6" of Portland cement concrete placed upon a 2" compacted aggregate base. Bituminous Concrete aprons shall be constructed of 3" of bituminous concrete placed upon a 6" compacted aggregate base.

### Section 2-109: Bike Paths

All off-street bike paths constructed within the City shall have a minimum width of eight (8) feet and shall have a minimum pavement structure consisting of two (2) inches of bituminous surface course and six (6) inches of compacted aggregate base course. The pavement thickness shall be increased to the satisfaction of the City Engineer if the pathway is to be subjected to maintenance vehicle loadings. On-street bicycle paths are not allowed unless the proposed pavements widths have been increased to allow for a four (4) foot wide bicycle lane in each direction of travel.

## ARTICLE 3: STREET LIGHTING

### Section 3-101: Provision of Street Lights

Except in the Elmhurst Countryside Subdivision, street lights shall be provided at each intersection of streets within a subdivision or development and at each cul-de-sac, but in no event shall there be less than one street light per 400 feet (or portion thereof) of street frontage between intersections, of between a street intersection and the terminus of a dead-end street.

### Section 3-102: Location

Light standards shall not be located within three feet of the street pavement. Where sidewalks are required, street light standards shall be located between the sidewalk and street pavement.

### Section 3-103: Requirements

Lighting shall be designed and maintained to avoid unnecessary illumination of residence interiors. The lighting intensity of each street light shall be equivalent, at a minimum, to a 175 watt lamp or a 6800 lumen mercury luminaire lamp. The source of illumination shall not be lower than 16 feet above grade.

## ARTICLE 4: STORMWATER MANAGEMENT AND STORM SEWERS

### Section 4-101: Provision of Storm Sewers and Stormwater Management Facilities

Stormwater management shall be provided for all subdivisions and developments in accordance with Chapter 152 of the City Code and this Article. All street curb and gutter systems shall discharge directly into the storm sewer system, which shall convey the Stormwater to an approved Stormwater storage facility. Sump pumps shall not discharge into the storm sewer conveyance system unless such system is designed to convey the discharge in accordance with Section 50.06 of the City's Code.

### Section 4-102: Requirements

- a. Storm sewer systems shall be installed in accordance with Section 600 of the IDOT "Standard Specifications for Road and Bridge Construction," and "Standard Specifications for Water and Sewer Main Construction in Illinois," latest edition, unless otherwise modified in this Article.
- b. All storm sewers, streams or channels shall be designed to accommodate all areas which naturally flow to the area of the subdivision or development and also any additional areas which are planned to contribute to the drainage area as identified by the City Engineer. The drainage areas as designated shall be designed so as not to adversely impact the capacity of the downstream system.
- c. Storm sewers shall be designed to carry, without surcharge, water deposited on the proposed site by a storm sewer of a ten-year frequency as defined in the Frequency Distribution and Hydroclimatic Characteristics of Heavy Rainstorms in Illinois (Bulletin 70 – State of Illinois (Northeast Section)), and known commonly as Bulletin 70. Storm sewers shall be designed to carry the design flow at a minimum velocity of three (3) feet per second and a maximum velocity of 10 feet per second.
- d. The underlying objective is to provide capacity to pass the 10-year peak flow in the minor drainage system and an overland flow path for flows in excess of the design capacity. Whenever practicable, all areas of the property must be provided with an overland flow path that will pass the 100-year flow at a stage at least 1 foot below the lowest grade adjacent to the foundation in the vicinity of the flow path. Overland flow paths designed to convey flows in excess of the minor drainage system capacity shall be constructed within designated drainage easements. Street ponding and flow depths shall not exceed curb heights by more than one inch, except as allowed by the City Engineer.

### Section 4-103: Storm Sewer and Open Channel Hydraulics.

- a. Storm sewers, stream improvements and open channels shall be designed to provide design flow capacity using Manning's formula:

$$Q = (A) (1.486) (R^{2/3}) (S^{1/2})$$

**ARTICLE 4: STORMWATER MANAGEMENT AND STORM SEWERS**

Design mean velocity shall not exceed the following:

Storm sewers	10 feet per second
Open Channels, concrete or asphalt lining	10 feet per second
Open Channels, sodded	5 feet per second

Roughness coefficients (n) shall be as follows:

Concrete Pipe	0.013
Plastic Pipe (PVC & HDPE)	0.010
Open Channels, concrete or asphalt lining	0.013
Open Channels, sodded	0.020
Improved Stream	0.025
Natural Stream	0.050

- b. Storm sewers shall be constructed sufficiently deep so as to prevent freezing and provide an outfall for all storm water within the ultimate service area, both existing and future. The minimum cover shall be three (3) feet.
- c. Sewer pipe class shall be determined based upon the specifications of Section 603 of the IDOT STANDARD SPECIFICATIONS, latest edition.
- d. Sewer pipe concrete cradle, arch, or fill encasement shall be constructed whenever dictated by trench or embankment conditions.
- e. Swales. All swales shall be sodded and limited to a maximum water depth of twelve (12) inches. The maximum water depth shall be a minimum of one foot (1') below the lowest opening of an adjacent foundation along the flow path. Maximum side slopes of swales shall not be steeper than four (4) horizontal to one (1) vertical.
- f. Pipe Design Flows. Unless otherwise approved by the City Engineer, storm sewer pipes and open channels shall be designed to carry storm water runoff flows determined by the Rational Method using the formula:

$$Q = C i A, \text{ where}$$

- Q = runoff flow in units of cubic feet per second.
- C = runoff coefficient, characteristic of tributary drainage area in dimensionless units.
- A = tributary drainage area in units of acres.
- i = average rainfall intensity in units of inches per hour.

## ARTICLE 4: STORMWATER MANAGEMENT AND STORM SEWERS

The runoff coefficient, C, is the ratio of runoff to rainfall and shall be assumed as follows:

All impervious areas (paved or hard surfaced areas of all types and buildings, inclusive of, but not limited to, patios, garage walks, stoned landscaped areas and pools)	0.95
All pervious areas (all areas not classified as impervious),	0.45
All bodies of water (wetlands, lakes, streams, and depressional storage areas)	1.00

The runoff coefficient used in design shall be the weighted average for the proposed tributary watershed. Within a subdivision or development, the runoff coefficient shall be computed assuming ultimate development. Where ultimate subdivision or development plans are not available at the time of the design of the storm sewer system, a runoff coefficient shall be selected by the City Engineer based on the zoning classification, knowledge of the specific subdivision or development and the previous experience of the City with similar subdivisions or developments. The area within the watershed, but outside the subdivision or development, shall be computed for existing conditions, the runoff coefficient shall be approved by the City Engineer.

- g. Minimum Sewer Size.
  - 1. Storm sewer serving inlets shall not be less than ten (10) inch diameter.
  - 2. Storm sewer serving sump pumps and roof drains shall not be less than eight (8) inch diameter.
  - 3. Storm sewer service lines shall not be less than four (4) inch diameter.
- h. All pipes shall terminate at reinforced concrete headwalls or precast structures or end sections.

### Section 4-104: Storm Sewer Inlets

- a. Storm sewer inlets shall be constructed of precast concrete in conformance with ASTM C478 and ASTM C443. Inlets shall have 24" inside diameter and a maximum depth of four (4) feet. No more than two (2) precast concrete adjusting rings with six (6) inch maximum height adjustment shall be allowed. Only one (1) pipe connection is allowed and it shall be precast with resilient rubber water tight pipe to manhole sleeves or seals. Storm sewer inlet construction shall be as depicted in standard detail SD 4.
- b. Surface drainage inlets shall be provided so that surface water is not carried across any street intersections or parking lot drives. Surface runoff shall not extend a distance of more than four hundred (400) feet along the surface of the ground and shall not build up a flow of more than two (2) cubic feet per second (with no more than 1.0' of head) in a ten (10) year storm before being intercepted by drainage inlets. Inlets shall discharge into storm sewers which shall not discharge into side lot or rear lot drainage ditches. Inlets shall be provided at all low points. Rear yard inlets having a minimum depth of two (2) feet shall be provided where necessary.

**ARTICLE 4: STORMWATER MANAGEMENT AND STORM SEWERS**

Section 4-105: Storm Sewer Manholes and Catch Basins

- a. Storm sewer catch basins and manholes shall be constructed of precast concrete in conformance with ASTM C478 and ASTM C443. No more than two (2) precast concrete adjusting rings with six (6) inch maximum height adjustment shall be allowed. All pipe connections shall be precast with resilient rubber water tight pipe to manhole sleeves or seals. Catch basin construction shall be as depicted in standard detail SD 5. Manhole construction shall be as depicted in standard detail SD 6.
- b. Manholes and catch basins shall be located at the termination of all sewers (which do not terminate at an inlet), changes in direction (horizontal or vertical), changes in pipe shape or diameter, and junctions with other storm sewers. Where flows and other conditions dictate, special manholes or junction chambers shall be designed and constructed

Access spacing shall be:

<b>Sewer Pipe Size (in inches)</b>	<b>Maximum Interval (in feet)</b>
6-24	350
27-36	400
42-54	500
60 or larger	1000

Structure diameter shall be:

<b>Sewer Pipe Size (in inches)</b>	<b>Structure diameter</b>
18 inch diameter or less	48 inches
21 inch diameter to 36 inch diameter	60 inches
42 inch diameter to 48 inch diameter	72 inches
54 inch diameter and larger	Structure shall be a pipe tee with an offset riser pipe of 48 inch diameter

Section 4-106: Frames and Lids

The frames and lids to be used on all storm sewer structures are as depicted in standard details SD 7, SD 8, SD 9, and SD 10. The type of frame and lid to be used will be based upon the location of the structure (within or without a paved surface).

Section 4-107: Storm Sewer Materials

All storm sewers shall be constructed in accordance with Section 550 of the IDOT STANDARD SPECIFICATIONS with the following exceptions:

- a. The use of Clay Sewer Pipe and Extra Strength Clay Pipe is prohibited.
- b. The use of Flexible Pipes under Streets is prohibited. Flexible Pipes may be used under paved parking surfaces and turf areas, including driveway crossings within the rights-of-way.

## ARTICLE 4: STORMWATER MANAGEMENT AND STORM SEWERS

### Section 4-108: Stormwater Detention Facilities

- a. The volume of detention facilities shall be determined as the maximum volume of storm water generated by the 100 year frequency storm, less the volume of Stormwater released through the outlet pipe at the calculated peak of the 100 year frequency storm. The design maximum storage to be provided in a detention basin shall be based on the runoff from the 100-year, 24-hour event and reservoir routing or equal. Detention storage shall be computed using hydrograph methods described in Chapter 152 of the City Code. The City Engineer may designate an alternative design computation for detention storage. Stormwater runoff from areas tributary to the property shall be considered in the design of the detention facility. Whenever practicable, flows from upstream areas that are not to be detained should be routed through the basin being provided for the site being subdivided or developed.
- b. The detention basin outlet pipe shall be designed to allow a maximum discharge of no more than 0.10 cubic feet per second per gross acre of development for a 24 hour-100 year storm event. If the calculated release rate results in a flow restrictor diameter less than 3" in diameter, then an alternative outlet design utilizing a self cleaning flow restrictor shall be used. Backwater on the outlet structure from the downstream drainage system shall be evaluated when designing the outlet. To the extent feasible, the distance between detention basin inlets and outlets shall be maximized. If possible, they should be at opposite ends of the basin. Velocity dissipation measures shall be incorporated into dry basin designs to minimize erosion at inlets and outlets and to minimize the re-suspension of pollutants. All storm water inflow pipes must be constructed to inverts that are at or above the normal water level in "wet basins".
- c. Dry bottom detention basins must be landscaped including the establishment of a groundcover over all unpaved areas through sodding or native natural growth plant material as designated by the City Engineer. Such groundcover shall not be of a plant type which can be carried by water flow to aggressively invade other downstream lands or properties, and crown vetch shall be prohibited. Native natural plant growth may comprise a variety of techniques that employ in concert according to the needs of the site. Detention Basins shall be designed so that the portion of their bottom area which is intended to be dry shall have standing water no longer than seventy-two (72) hours for all runoff events less than the 100 year frequency storm.
- d. Dry bottom detention basins shall be designed so that the cross slope is at least two (2) percent. If this cross slope cannot be obtained, then the bottom of the facility shall be provided with an underdrain (minimum six (6) inch diameter perforated drain tile) covered on all sides with a minimum of six (6) inches of crushed stone. The underdrain shall be installed to drain the basin below grade during periods of low flow and shall connect to a storm sewer outfall pipe. Detention facilities shall be designed with side slopes not steeper than four (4) horizontal to one (1) vertical (4:1).
- e. Wet Bottom detention basins shall be designed in accordance with standard detail SD-22. Native natural plantings are recommended for shorelines and banks. Prior to the construction of the basin, soil testing must be done to

## ARTICLE 4: STORMWATER MANAGEMENT AND STORM SEWERS

determine the need for a clay or synthetic liner and to determine the minimum side slopes required to prevent soil erosion. Native natural plant growth is recommended and may comprise a variety of techniques according to the needs of the site. Ponds shall have a minimum of four (4) foot horizontal to one (1) foot vertical side slopes (4:1). Sediment basins (forebays) are required in dry ponds in accordance with Appendix E of the DuPage County Stormwater and Flood Plain Ordinance. Wet bottom detention facilities may be required to have aeration equipment installed to ensure adequate water quality.

- f. All Stormwater detention basins shall be provided with an overflow structure capable of safely passing excess flows at a stage at least 1 foot below the lowest foundation grade in the vicinity of the detention basin. The design flow rate of the overflow structure shall be equivalent to the 100-year inflow rate, or as designated by the City Engineer.
- g. All storm water inflow pipes must be constructed to inverts that are at or above the normal water level in wet bottom detention basins.
- h. Existing wetlands and depressional storage areas shall not be modified for the purposes of storm water detention unless it is demonstrated that the existing wetland is low in quality and/or the proposed modifications will maintain or improve its habitat and ability to perform beneficial functions. Existing storage and release rate characteristics of wetlands and other depressional storage areas shall be maintained and the volume of detention storage provided to meet the requirements of this section shall be in addition to this existing storage. The existing wetland shall be protected during construction by appropriate soil erosion and sediment control measures.

### Section 4-109: Inspection and Testing.

- a. All sewers and appurtenances shall be cleaned prior to inspection and testing required by this Section.
- b. Visual Inspection. All sewer and appurtenances shall be visually inspected by representatives of the subdivider or developer during and following construction. Sewers designed to be straight between manholes will be tested for straightness by flashing a light from manhole to manhole, lamping or by other suitable means.
- c. T.V. Inspection. Upon completion of construction and prior to initiation of the maintenance guarantee period, a T.V. inspection shall be performed on the sections or portions of the sewer to be turned over to the City. Video tapes and a written report of all television inspections shall be provided to the City Engineer prior to the initial acceptance provided for by this Section. The form of the report and type and format of the video tape shall be approved by the City Engineer. Fees and costs connected with T.V. inspections shall be paid for by the subdivider or developer.
- d. Repair of Defects. All dips, cracks, leaks, improperly sealed joints, and departures from approved grades and alignment shall be repaired by removing and replacing the involved sections of pipe. All defects and corrective work required as the result of T.V. inspection shall be performed by the subdivider or

#### **ARTICLE 4: STORMWATER MANAGEMENT AND STORM SEWERS**

developer without delay. Upon completion thereof, the sewer shall be re-tested and such further inspection made as may appear warranted.

## ARTICLE 5: WATER SYSTEM IMPROVEMENTS

### Section 5-101: Water System Design Standards and Regulations

All water system improvements shall conform to the requirements set forth "Standard Specifications for Water and Sewer Construction in Illinois" (latest edition), The Illinois Environmental Protection Agency Division of Public Water Supplies " Technical Policy Statements", State of Illinois Rules and Regulations specified under Title 35: Environmental Protection – Public Water Supplies, the Illinois State Plumbing Code (latest edition), the DuPage County Health Department, except where as modified by these requirements..

### Section 5-102: Project Permitting

The subdivider or developer is responsible for preparing, submitting, and obtaining all requisite permits from the Illinois Environmental Protection Agency (IEPA) for all water system improvement to be constructed with the subdivision or development. The construction of watermain system improvements shall not begin without the issuance of the IEPA permits unless otherwise authorized in writing by the City Engineer.

### Section 5-103: Design Criteria

- a. Where parkways are available in the street right-of-way, water main placement shall be along a line within the parkway and at an average distance of ten feet (10') from the right-of-way line or within the parkway at an average distance of four feet (4') back of the curb line. Watermains installed upon private property shall be constructed within permanent easements dedicated to the City of Oakbrook Terrace that are a width of 20'.
- b. Extension to the City's water system shall have a minimum diameter of eight (8) inches. Sizing of all watermain extensions will be determined by the City. No water main shall be non-circulating (Dead-ended) unless there is an anticipated extension of the water main within one (1) year and without the written approval of the City Engineer. All new water main extensions shall have a minimum cover of five feet (5') from the top of the pipe.
- c. The approval of a drawing and issuance of a permit may not, under any circumstances, be construed as an approval of any violation of City regulations, and further, shall not relieve any party from full compliance with all building codes and ordinances. This shall apply even if the drawing were approved by the City's agent or an employee.
- d. All water mains, tees, bends, hydrant barrels, hydrant leads valves, etc. shall be wrapped in polyethylene materials 8mm in thickness and taped, and shall conform to the requirements of ASTM D1248 and ANSI/AWWA.

### Section 5-104: Water Main

- a. All water mains shall be constructed of cement lined ductile iron pipe, class 52 with restrained joint, mechanical with mega lugs, or push on joints. Refer to (1) above. Water mains shall conform to ANSI A21.51/AWWA C151.

## ARTICLE 5: WATER SYSTEM IMPROVEMENTS

- b. Water mains shall be secured to resist movements at all fittings, hydrants and valves using restrained joint pipe and fittings as follows: Restrained joint pipe and fittings shall be manufactured by A) American Ductile Iron Pipe Co.-lok ring or flex joints; or (B) U.S. Pipe Company- TR flex joints; (C) Griffin Pipe Products-snap-lok joint; or (D) EBBA Iron, Inc- Mega Lugs. The EBBA, Inc Mega Lugs shall be used only with mechanical joint pipe and fittings. The required length of restrained pipe shall be in accordance with the table at the end of this pamphlet. Half of the total restrained length for elbows as shown in the table shall be installed on each side of the elbow. Plugs only require restraint in one direction. Tees require the perpendicular branch to be restrained. Both plugs and tees shall be restrained to the distances provided by the City.
- c. The length of restrained pipe at valves shall be the same as for plugs or dead ends; this restrained length shall be installed on both sides of each valve. The length of restrained pipe at tees shall be based on the size of the run of the tee.

### Section 5-105: Fire Hydrants

- a. Fire hydrants shall be only American Flow Control/ Waterous Pacer model WB67-250, complying with AWWA standard C-502. Hydrants shall have two 2-1/2" inch hose nozzles and one 4-1/2" pumper nozzle and each nozzle shall have National Standard threads (N.S.T.) on nozzles and caps. Hydrants shall have "304" stainless steel shoe bolts and nuts. The trim for the shoe bolts connection shall be bronze. All hydrants must be visible in an area clear of trees, bushes, vegetation etc. All hydrants shall be yellow in color and shall be designed to withstand a 300psi test pressure and 150psi working pressure. Finished grade must be 2" below breakaway flange. Each auxiliary valve shall be place 24" away from barrel with minimum 16" spool piece. Each valve box shall be provided with a rubber insert in the base of the valve box and this rubber insert shall be the Valve Box Adapter II as manufactured by Adapter Inc. West Allis, WI, or equivalent.
- b. Hydrants shall be installed on water mains at intervals of approximately 300' feet and shall be located whenever possible so as to be adjacent to a common lot-line or in the middle of a lot.
- c. Hydrants to be installed on street parkways shall be a minimum of 4' feet to a maximum of 8' feet behind the back of curb line, except when abutting a designated arterial or major collector street under the State's jurisdiction in which case they shall be placed as approved by the City and the applicable Fire Protection District. It shall be the policy of the City to comply with Illinois state law 85-343 which requires a 48-inch clearance around all fire hydrants. Hydrants may be used only by the City or Fire Protection Districts or by such persons specifically authorized by the City.

### Section 5-106: Water Valves and Vaults

- a. All water main valves will be American Flow Control 2500 resilient wedge or comparable type AWWA C509 and suitable for buried service. In circumstances where gate valves cannot be used, Henry Pratt or equivalent Butterfly valves shall be used. All bonnet bolts, studs, and nuts shall be made of "304" stainless

## ARTICLE 5: WATER SYSTEM IMPROVEMENTS

steel per ASTM F593 and F594. All valves bodies; bonnets and gates shall be ductile iron per ASTM A 536, valves to open in a counter clockwise direction.

- b. Valve Vaults shall be installed over all valves located on the water mains providing the distribution of water throughout the system. Valves having a diameter of 10" inches or less shall be housed in valve vaults having an inside diameter of forty-eight (48"). All valves twelve inches (12") or larger shall be placed in valve vaults sixty inches (60") in diameter. Vaults shall be constructed of precast concrete units conforming to section 44 in the "Standard Specifications for Water and Sewer in Illinois". Valve basins shall be provided on all valves except for hydrant valves. Valve basins shall be constructed of precast concrete with openings cut and fit for the pipe. Each valve basin shall provide KOR-N-SEAL A-Lock gaskets, or approved equal, to seal around pipe openings. All joints of valve vaults shall be sealed in a bituminous mastic bed; mortar is not allowed.
- c. Valves shall be installed at the following locations:
  - on each branch of the water main.
  - At each water main connection, not exceeding six hundred feet.
  - At intervals of 1500 feet on all principle feeder mains.
  - Valves to be installed at junctions of mains in a manner that will allow any section of water main to be isolated by closing of no more than three (3) valves.
  - The City will ultimately decide the number and placement of each valve.

### Section 5-107: Water Services

- a. All water service lines shall be one (1") minimum copper water service pipe, type "K", soft temper, conforming to ASTM B88 and B251. Water service shall be laid at a depth so that the service line has a minimum of four feet six inches (4'-6") of cover. No solder or sweat joints are allowed. Dielectric unions shall be placed on water heaters and on adjoining dissimilar metals.
- b. Water service taps into a water main shall be made at an upward angle of forty-five (45) degrees. Along a street right-of-way, the preferred location for the curb valve (Buffalo Box) shall be on line eight feet (8') within the right-of-way.
- c. Corporations and Curb Stops shall be Mueller: Corp stops shall be model H-15000. Curb Stops shall be model H-15154. Curb box/stop key Model-10302 for one inch (1) Curb stops and Model 10304 for two inch (2") Curb Stops.
- d. Tapping shall be done by direct tap or by using tapping saddle; Model BR2B conforming to AWWA C800. Corporation stops and curb stops shall be brass and suitable for copper connections. Curb stops shall be round way type.
- e. Water Service boxes and hydrant boxes shall be adjusted to the elevations of the finished ground surface as soon as construction operations permit. Any boxes damaged or backfilled during construction and prior to written acceptance by the City shall be replaced by the subdivider or developer at his or her own expense.

## ARTICLE 5: WATER SYSTEM IMPROVEMENTS

- f. The exact location of the Buffalo Box shall be determined in the field by the City at the time of construction. Upon completion of water main and service lines, the subdivider or developer shall furnish to the City "As Built Drawings" of the water system in a form acceptable to the City. These locations shall be dimensioned from the property corners.
- g. No water service connection tap shall be made until the newly constructed main has been tested, chlorinated and found to be acceptable by the City and the I.E.P.A. operating permit has been issued. New material shall be used for the entire service to be constructed.
- h. Water meters shall be located in heated spaces indoors except upon written approval of the Public Services Department. Whenever a water meter is located underground, it shall be housed within a meter vault. Meter vaults may be similar to valve vaults provided a sump is installed within the vault and all metering equipment can be accessible within the vault. Meters with extensive by-pass piping may require special pre-cast or cast-in-place concrete vaults having sufficient interior height and width to allow working room. These larger vaults shall include such accessories as sump pump facilities, electric power, lockable roof entrance hatches, and access steps.

### Section 5-108: Water Use During Construction

All construction water use will be monitored by the City. Any hydrant or main used for construction purposes must have prior approval from the City and must be properly metered with provisions made for backflow prevention. It shall be the policy of the City that any water used for construction by use of a hydrant, shall have a meter issued by the City and an approved backflow device. A hydrant meter can be obtained at City Hall for such purposes upon issuance of a permit by the Public Services Department, which shall require a payment of an \$850.00 deposit. Water usage charges shall be billed and paid on a monthly basis.

### Section 5-109: Inspection and Acceptance

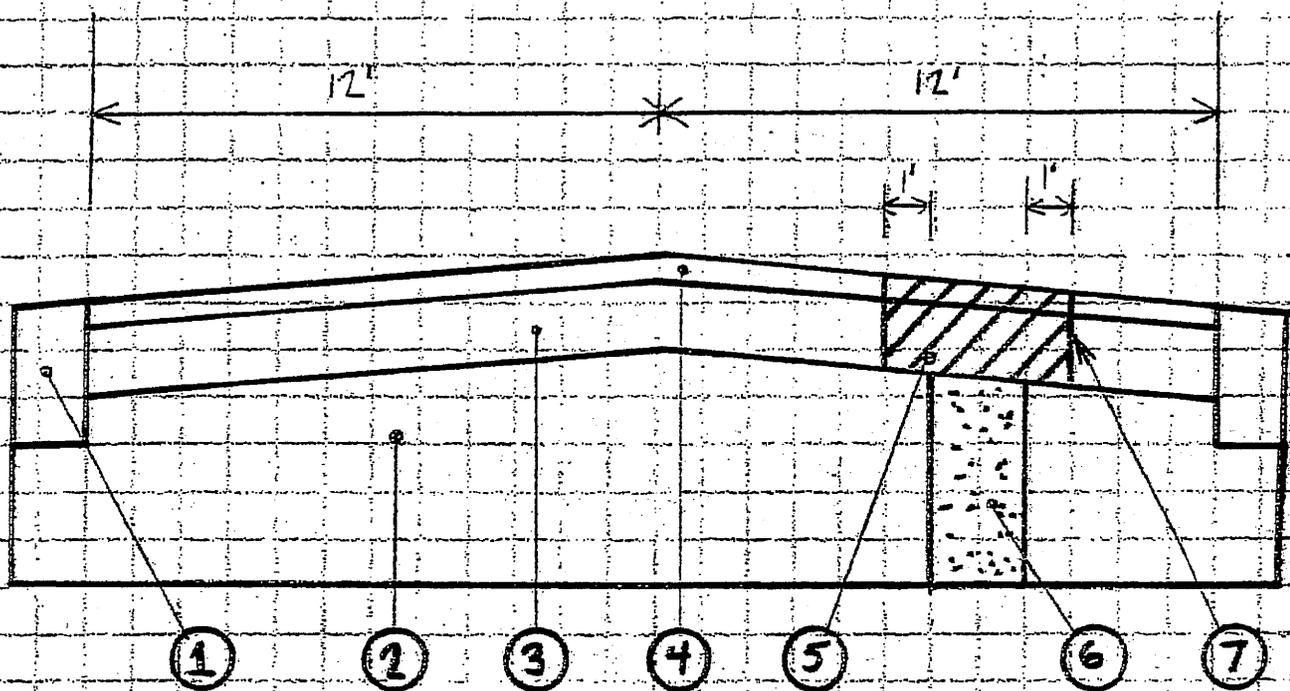
- a. All water service lines shall be one (1) inch diameter (minimum) copper water service pipe, type "K", soft temper, conforming to ASTM B88 and B251. Water service shall be laid at a depth so that the service line has a minimum of four feet six inches (4'-6") of cover. No solder or sweat joints are allowed. Dielectric unions shall be placed on water heaters and on adjoining dissimilar metals. Homes installing residential fire sprinkler systems shall be one and one-half (1.50) inch diameter (minimum) copper service line and tap.
- b. The water main shall be subjected to a pressure and leakage test according to the standard specifications except the water main shall be subjected to minimum hydrostatic pressure of 150psi for a minimum of two hours, and leakage shall not exceed one (1) P.S.I. of loss. This test must be scheduled 48 hours in advance and witnessed by a member of the City's Public Services Department.
- c. Upon completion of a successful pressure test, the main shall be chlorinated for disinfection. Chlorination of the main shall be accomplished with a chlorine gas-

## ARTICLE 5: WATER SYSTEM IMPROVEMENTS

water mixture. The initial chlorine residual must have a value of at least 50 ppm, and must maintain at least 25 ppm concentration after 24 hours to be considered acceptable. Each portion of the chlorination process must be witnessed by a representative of the City to be valid. Isolation of the portion to be chlorinated must be sealed by valve to isolate. Samples will be collected by the City on two consecutive days not less than 24 hours apart and sent to a Certified Laboratory in the State of Illinois for analysis. This must be scheduled at least 48 hours in advance. This portion of the main will not be placed into service until the IEPA has issued an operating permit.

- d. The final inspection for the approval by the Public Services Department of any water main extension work shall be conducted after the total project work has been completed. If the project work consists only of water main extensions, the final inspection shall be conducted after all of the water main work has been completed, the water main is pressure tested and chlorinated, and the water main extensions are ready to be placed into service. If the project work consists of other phases of improvements in addition to the water main extensions, the final inspection shall be conducted after all of the improvements have been completed.
- e. Fire protection systems need not be chlorinated and bacteriologically tested provided the system is not for potable use and an approved backflow device that separates the system which has been tested. All other backflow devices must be installed and tested before acceptance by the City.

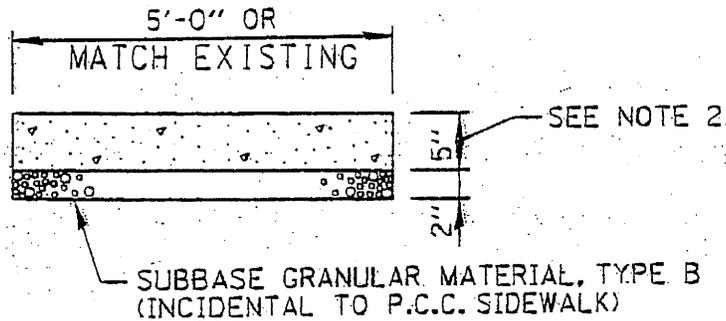
# CITY OF OAKBROOK TERRACE DEPARTMENT OF PUBLIC WORKS



## OAKBROOK TERRACE PAVEMENT RESTORATION DETAIL

1. EXISTING 9" PORTLAND CEMENT SHOULDER (18" WIDE)
2. EXISTING AGGREGATE BASE COURSE (VARIABLE DEPTH)
3. EXISTING BITUMINOUS BASE COURSE (3.5"-6")
4. EXISTING BITUMINOUS SURFACE COURSE (1.5")
5. BITUMINOUS PAVEMENT REPLACEMENT - MATERIALS AND THICKNESS TO MATCH EXISTING.
6. AGGREGATE BASE COURSE, TYPE B - THICKNESS TO MATCH EXISTING
7. SAWCUT NEATLY AROUND EXCAVATION; 1' MINIMUM BEYOND BOUNDARY TO OBTAIN UNDISTURBED BASE. APPLY PRIME TO TOP OF BASE COURSE AND SIDES OF EXISTING PAVEMENT.

**SD 2  
SIDEWALK DETAIL**



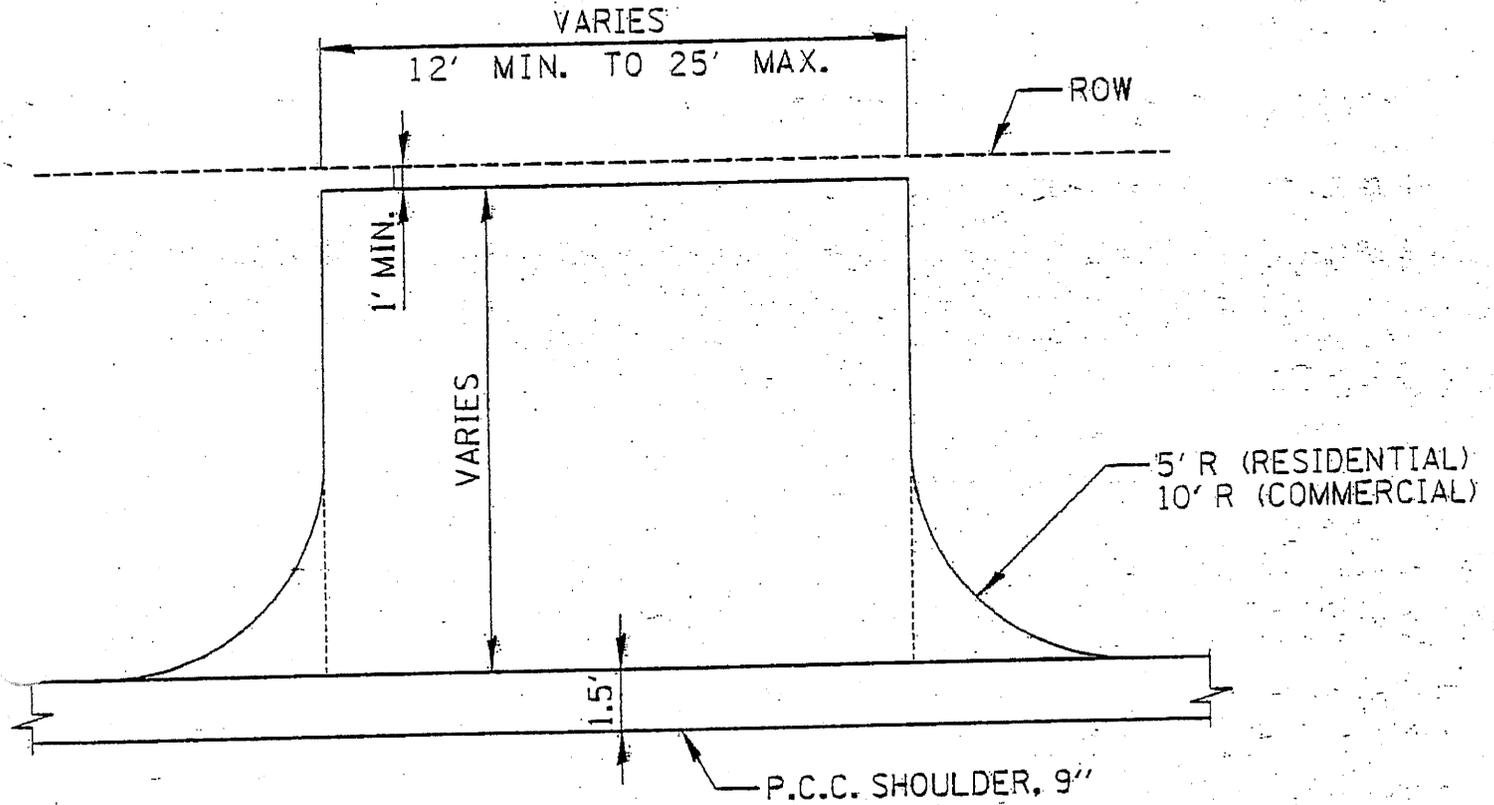
\* CROSS SLOPE 2% OR AS SHOWN  
ON CROSS SECTIONS

**NOTES:**

1. ALL REQUIRED EARTH EXCAVATION TO CONSTRUCT P.C.C. SIDEWALK SHALL BE INCIDENTAL TO THE P.C.C. SIDEWALK 5 INCH, SPECIAL.
2. THICKNESS SHALL BE INCREASED TO 6" WHERE SIDEWALK IS ADJACENT TO A CONCRETE DRIVEWAY. (COST INCIDENTAL).
3. IN LOCATIONS WHERE SIDEWALK IS REMOVED AND REPLACED THROUGH DRIVEWAYS, DRIVEWAYS SHALL BE SAWCUT AND PATCHED A MINIMUM OF 1' ON EITHER SIDE OF THE WALK. THIS WORK SHALL BE PAID FOR PER SQUARE YARD AT THE CONTRACT UNIT PRICE FOR CONCRETE DRIVEWAY REPLACEMENT OR BITUMINOUS DRIVEWAY REPLACEMENT.
4. WHEN FORMS ARE REMOVED FROM THE SIDEWALK EITHER THE SIDEWALK SHALL BE BARRICADED OR BACKFILLED WITHIN 24 HOURS.

**P.C.C. SIDEWALK, 5 INCH SPECIAL**

SD 3  
**DRIVEWAY DETAIL**

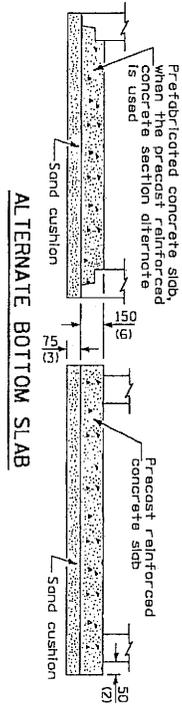
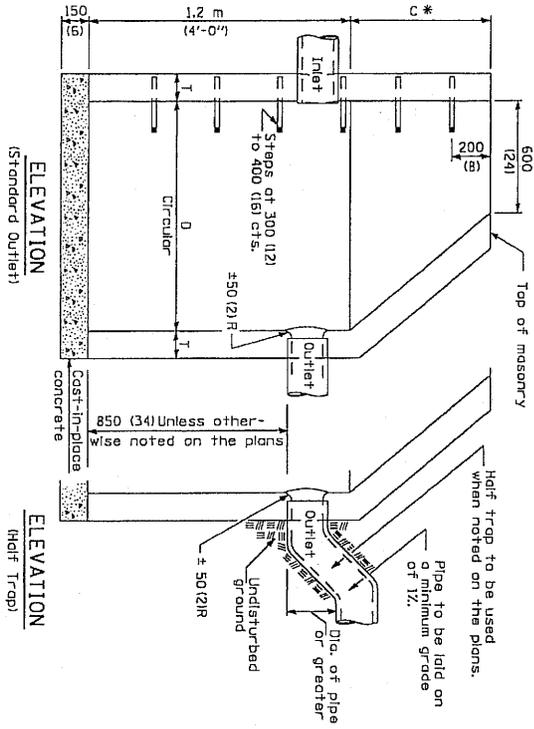


- |                  |   |  |
|------------------|---|--|
| P. C. C. DRIVE   | - | 6" HIGH EARLY STRENGTH P. C. C.            |
|                  |   | 3" AGGREGATE BASE COURSE, TYPE B           |
| BITUMINOUS DRIVE | - | 3" BIT. CONCRETE SURFACE COURSE, SUPERPAVE |
| OR BIKE PATH     |   | 6" AGGREGATE BASE COURSE, TYPE B           |

**DETAIL OF DRIVEWAY**

THIS TYPICAL DRIVE LAYOUT IS FOR  
 BOTH CONCRETE AND BITUMINOUS DRIVES

# SD 4 Type A Inlet



ALTERNATE MATERIALS FOR WALLS	D	C	T
Concrete Masonry Unit	1.2 m (4'-0") 1.5 m (5'-0")	750 (30) 1,15 m (3'-9")	125 (5) 200 (8)
Brick Masonry	1.2 m (4'-0") 1.5 m (5'-0")	750 (30) 1,15 m (3'-9")	200 (8) 125 (5)
Precast Reinforced Concrete Section	1.2 m (4'-0") 1.5 m (5'-0")	750 (30) 1,15 m (3'-9")	100 (4) 125 (5)
Cast-in-place Concrete	1.2 m (4'-0") 1.5 m (5'-0")	750 (30) 1,15 m (3'-9")	150 (6) 150 (6)

### GENERAL NOTES

- All catch basins shall be 1.2 m (4'-0") in diameter unless otherwise noted on the plans.
- \* Dimension C for precast reinforced concrete section may vary from the dimension given to plus 150 mm (6").
- See Standard 602501 for optional precast reinforced concrete flat slab top.
- See Standard 602701 for details of steps.
- All dimensions are in millimeters (inches) unless otherwise shown.

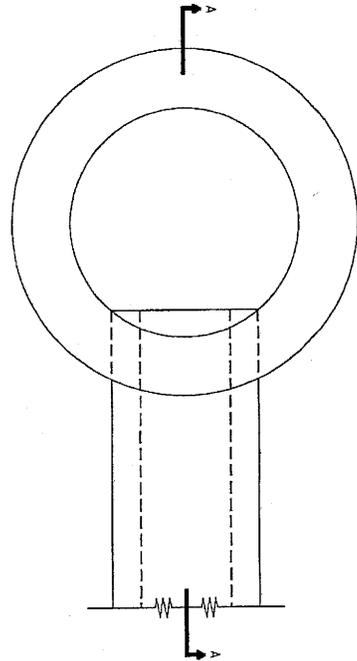
Illinois Department of Transportation  
 DIVISION OF HIGHWAYS  
 ENGINEER OF DESIGN AND CONSTRUCTION  
 APPROVED: [Signature]  
 J. J. JACOBY, I. C. E.  
 1937  
 ISSUED: 1-1-97

DATE	REVISIONS
1-1-97	Revised Standard 1514-10.
	Revised 1st C.N.
6-15-94	Moved C.N. to Specs.
	Del. step details & Cook
	CTY. note, Rev. Half Trap

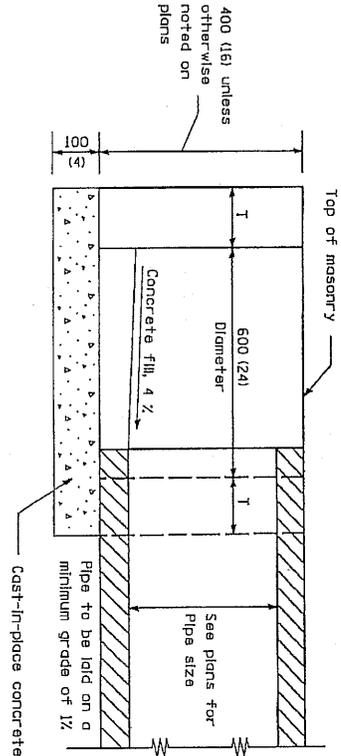
**CATCH BASIN  
TYPE A**

**STANDARD 602001**

# SD 5 Type A Catch Basin

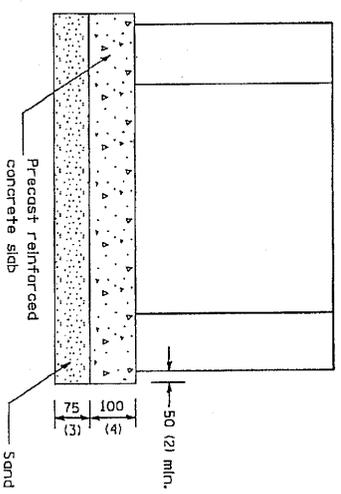


**PLAN**

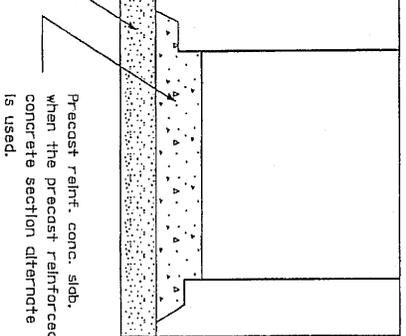


**SECTION A-A**

ALTERNATE MATERIALS FOR WALLS		T
BRICK MASONRY		200 (8)
CAST-IN-PLACE CONCRETE		150 (6)
CONCRETE MASONRY UNIT		125 (5)
PRECAST REINFORCED CONCRETE SECTION		75 (3)



**ALTERNATE METHODS**

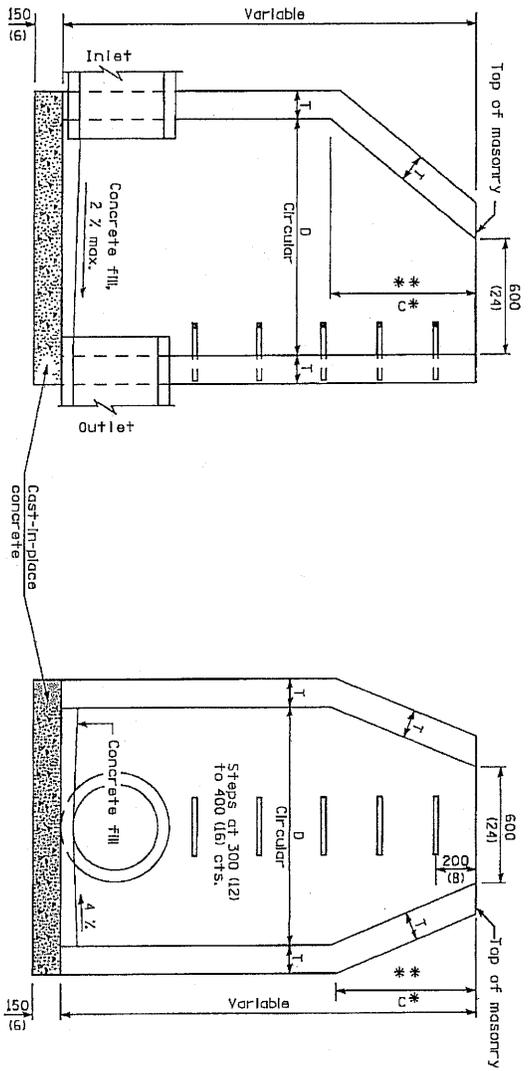


All dimensions are in millimeters (inches) unless otherwise shown.

Illinois Department of Transportation  
 April 1, 2006  
 ENGINEER  
 APPROVED  
 PROJECT NO. SD 5  
 DATE 1-1-97  
 ISSUED 1-1-97  
 DIVISION OF DESIGN AND ENVIRONMENT

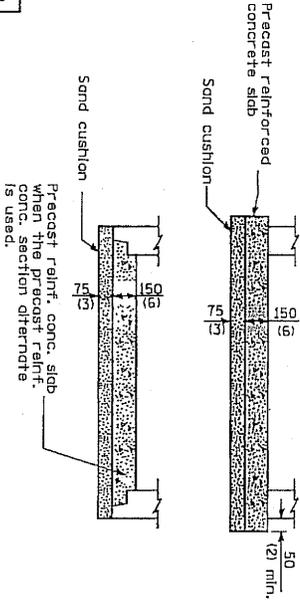
DATE	REVISIONS	INLET - TYPE A
4-1-06	Added concrete fill in bottom of inlet.	<b>STANDARD 602301-01</b>
1-1-97	Remum. Standard 1683-5	

SD 6  
Type A Manhole



ELEVATION - ECCENTRIC

ELEVATION - CONCENTRIC



ALTERNATE BOTTOM SLAB

ALTERNATE MATERIALS FOR WALLS	D	C	T (min.)
Concrete Masonry Unit	1.2 m (4'-0")	750 (30)	125 (5)
	1.5 m (5'-0")	1,15 m (3'-9")	125 (5)
Brick Masonry	1.2 m (4'-0")	750 (30)	200 (8)
	1.5 m (5'-0")	1,15 m (3'-9")	200 (8)
Precast Reinforced Concrete Section	1.2 m (4'-0")	750 (30)	100 (4)
	1.5 m (5'-0")	1,15 m (3'-9")	125 (5)
Cast-in-place Concrete	1.2 m (4'-0")	750 (30)	150 (6)
	1.5 m (5'-0")	1,15 m (3'-9")	150 (6)

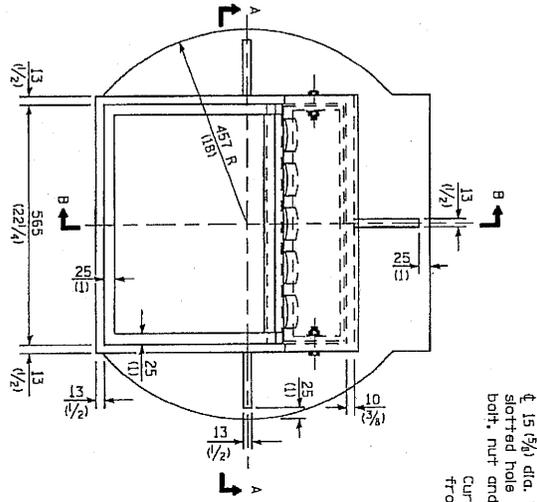
GENERAL NOTES

- See Standard 602701 for details of steps.
- \* Dimension "C" for Precast Reinforced Concrete Sections may vary from the dimension given to plus 150 mm (6").
- \*\* See Standard 602601 for Optional Precast Reinforced Concrete Flat Slab Top.
- All dimensions are in millimeters (inches) unless otherwise shown.

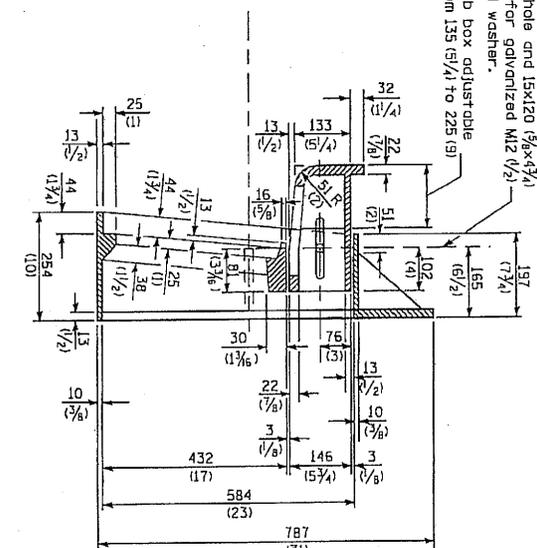
Missile Department of Transportation  
 PASSED APR 11 2008  
 ENGINEER OF PUBLIC WORKS  
 APPROVED APR 11 2008  
 ENGINEER OF DESIGN AND ENVIRONMENT  
 155160 1-1-97

DATE	REVISIONS	MANHOLE TYPE A
4-1-06	Revised detail for concrete fill in elevation views.	STANDARD 602401-01
1-1-97	Revised Standard 1527-10.	

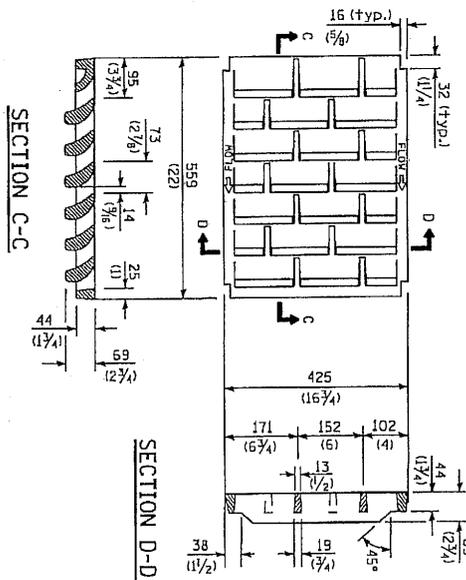
# SD 7 Type 3V Storm Frame and Grate



15 (5/8) dia. hole and 15x120 (3/8x4 3/4) slotted hole for galvanized M12 (1/2) bolt, nut and washer.  
Curb box adjustable from 135 (5 1/4) to 225 (9)

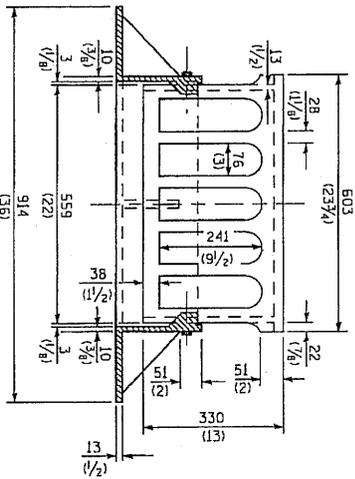


SECTION B-B

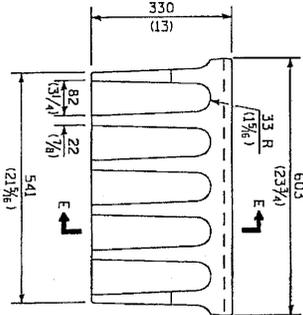


SECTION C-C

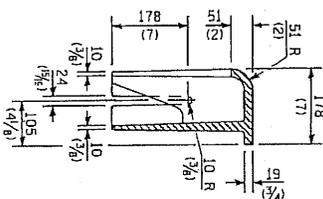
SECTION D-D



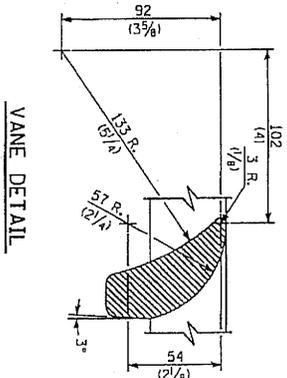
SECTION A-A



ALTERNATE CURB BOX



SECTION E-E



VANE DETAIL

All dimensions are in millimeters (inches) unless otherwise shown.

Illinois Department of Transportation	
Project No. 74-550	January 1, 2008
DESIGNED BY: <i>Scott S. K...</i>	APPROVED BY: <i>...</i>
ENGINEER OF TRAFFIC AND PRECEDENCES	APPROVED BY: <i>...</i>
APPROVED BY: <i>...</i>	APPROVED BY: <i>...</i>
DESIGNED BY: <i>...</i>	APPROVED BY: <i>...</i>
ENGINEER OF DESIGN AND ENVIRONMENT	APPROVED BY: <i>...</i>
1555UED	1-1-03

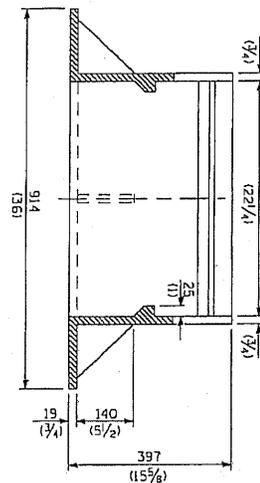
DATE	REVISIONS
1-1-08	Added alternate curb box.
1-1-04	Revised frame and removed weights.

**FRAME AND GRATE  
TYPE 3V  
STANDARD 604011-03**

# SD 8 Type 6 Storm Frame and Grate

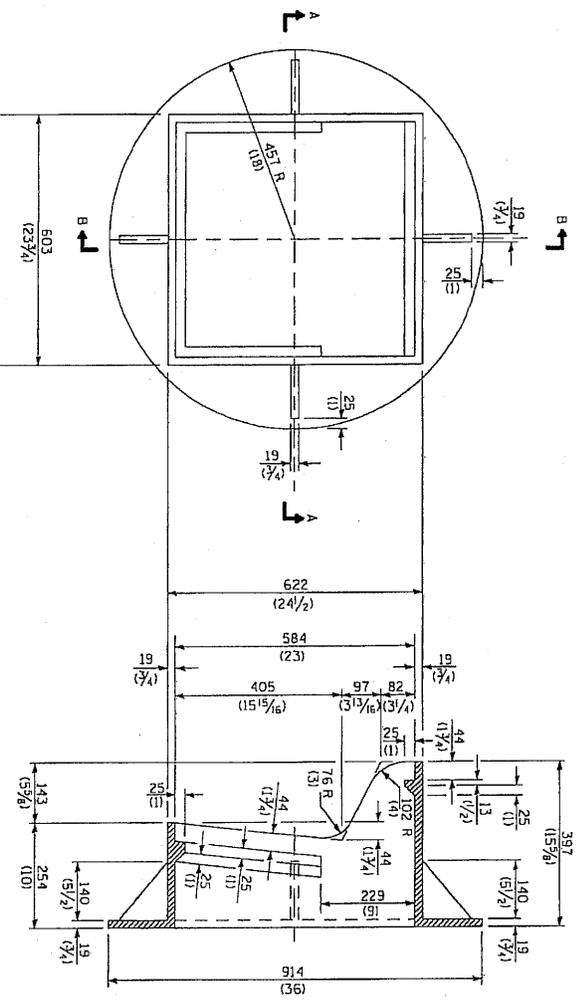

 Michigan Department of Transportation  
 PASSED                      JANUARY 1, 2004  
 ENGINEER OF TECHNICAL SERVICES  
 Approved:                      JANUARY 1, 2004  
 INCHES & FEET AND EQUIVALENTS  
 ISSUED 1-1-97

**SECTION A-A**



**CAST FRAME**

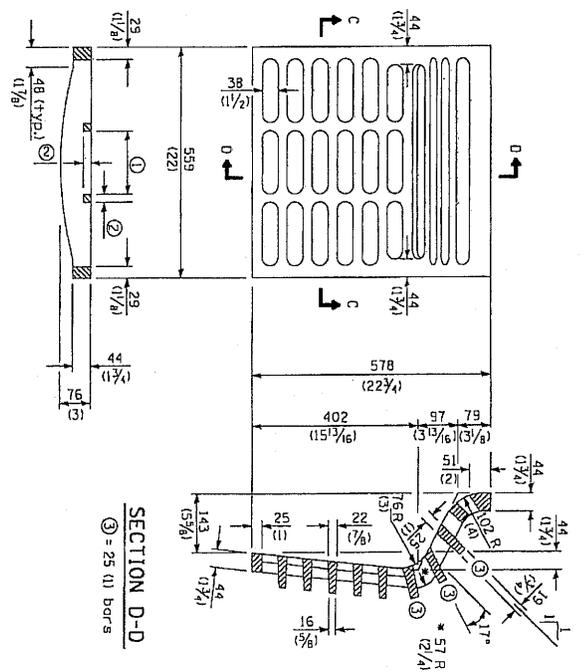
**SECTION B-B**



- SECTION C-C**
- ① = 159 (6 3/4) max. (typ.)
  - ② = 19 (3/4) min. (typ.)

**CAST GRATE**

**SECTION D-D**



DATE	REVISIONS
1-1-04	Removed weights
1-1-97	Renum. Standard 2215-5.

All dimensions are in millimeters (inches)  
 unless otherwise shown.

**FRAME AND GRATE  
TYPE 6**

**STANDARD 604026-01**

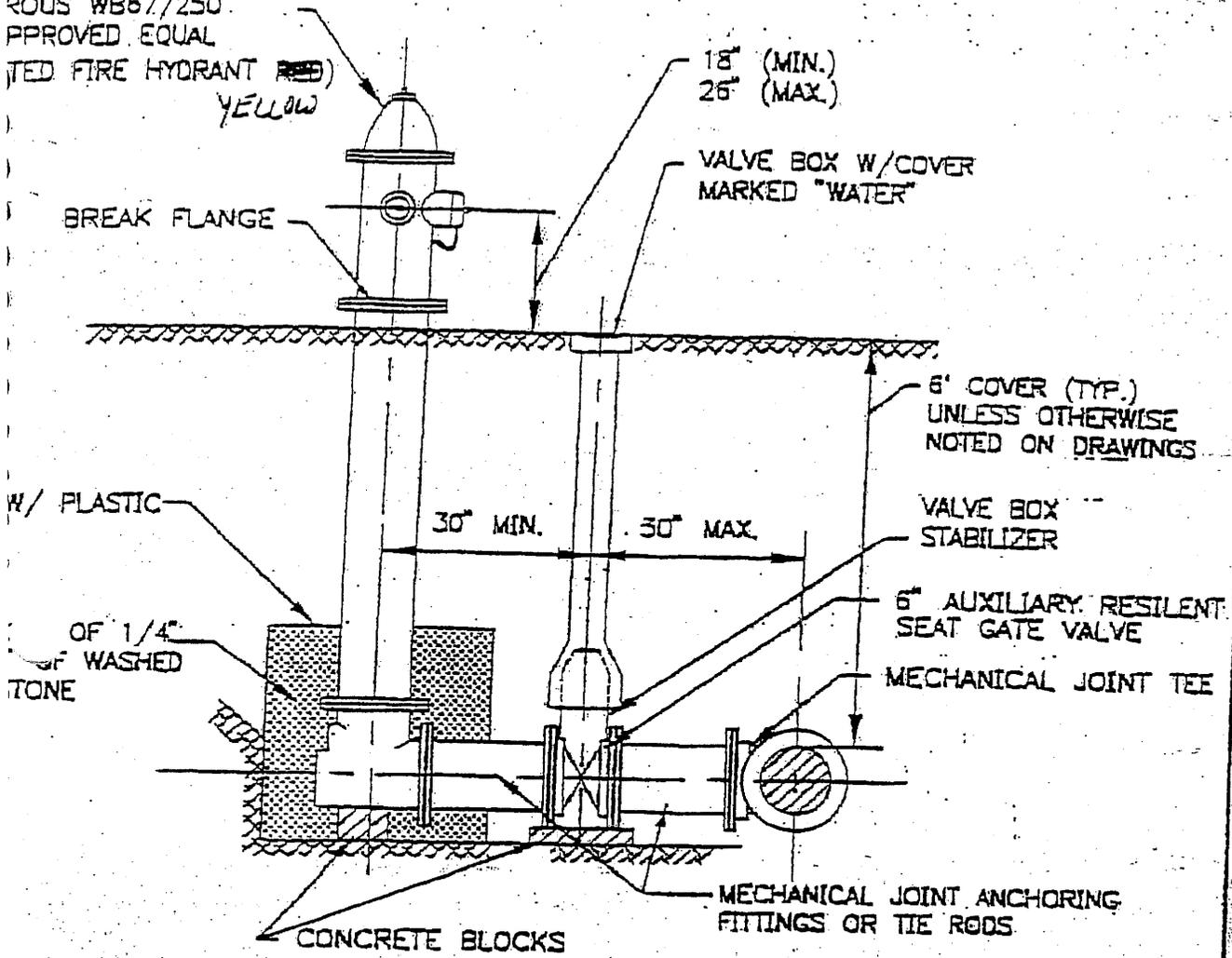




SD 11  
HYDRANT INSTALLATION

FRAGILE GLASS HYDRANT FLAG  
REQUIRED

APPROVED WB67/250  
EQUALLY APPROVED  
RED (FRAGILE GLASS)  
YELLOW

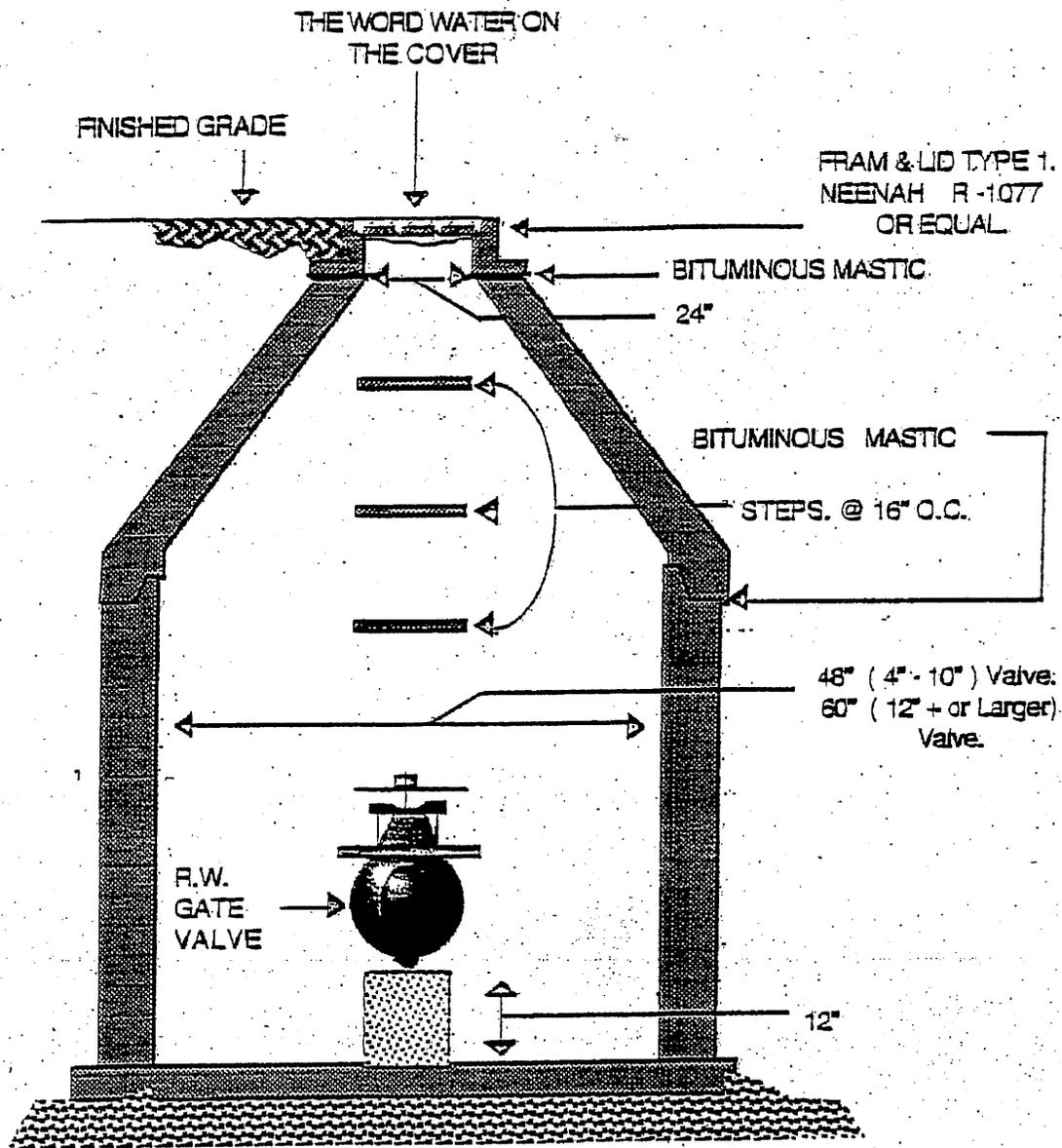


FIRE HYDRANT INSTALLATION DETAIL

NO SCALE

FIRE HYDRANT  
INSTALLATION DETAIL

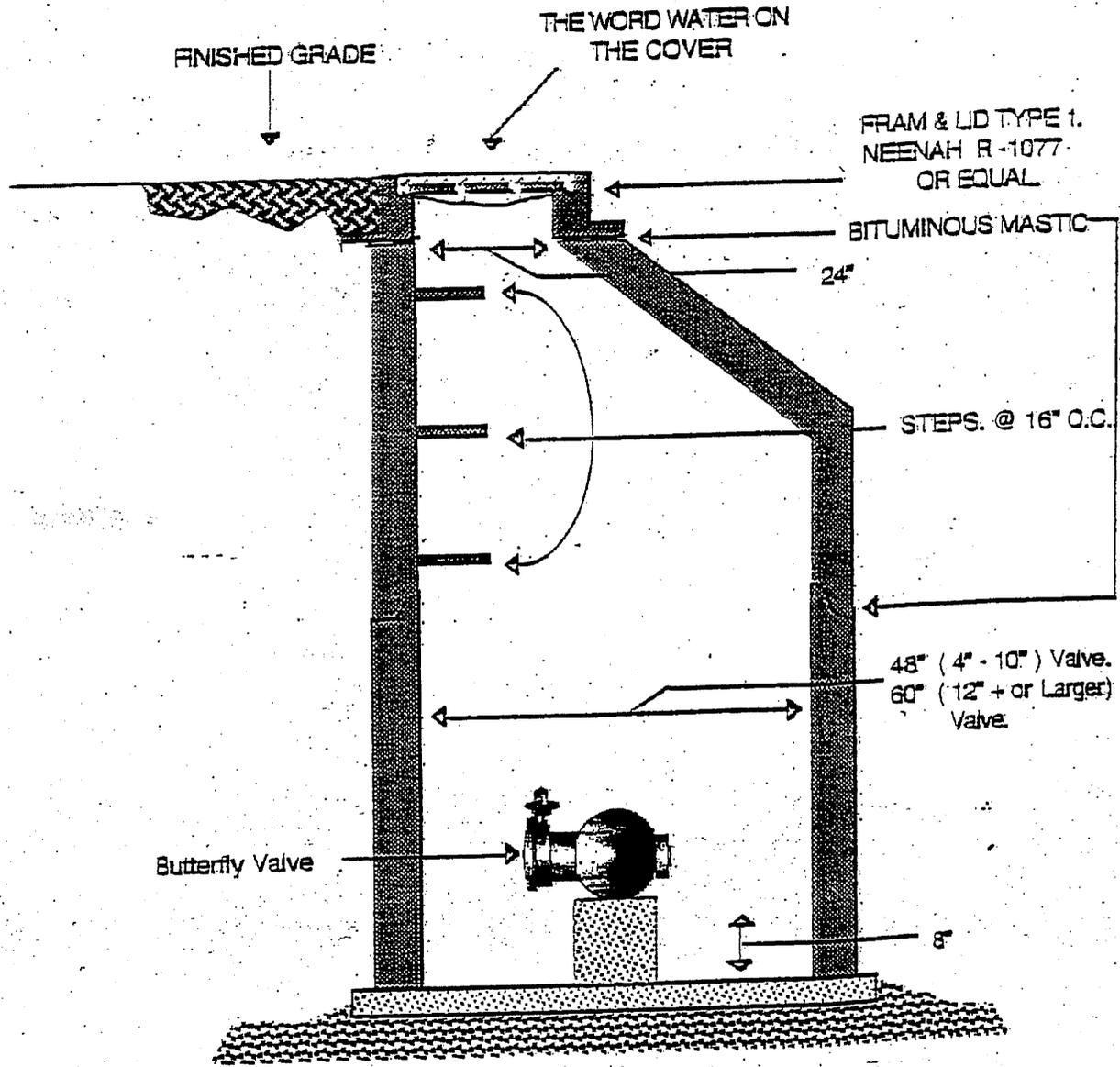
SD-12  
 WATER GATE VALVE & VAULT  
**GATE VALVE & VAULT**



500 p.s.i. Concrete poured in place or precast, On 4" of CA-6

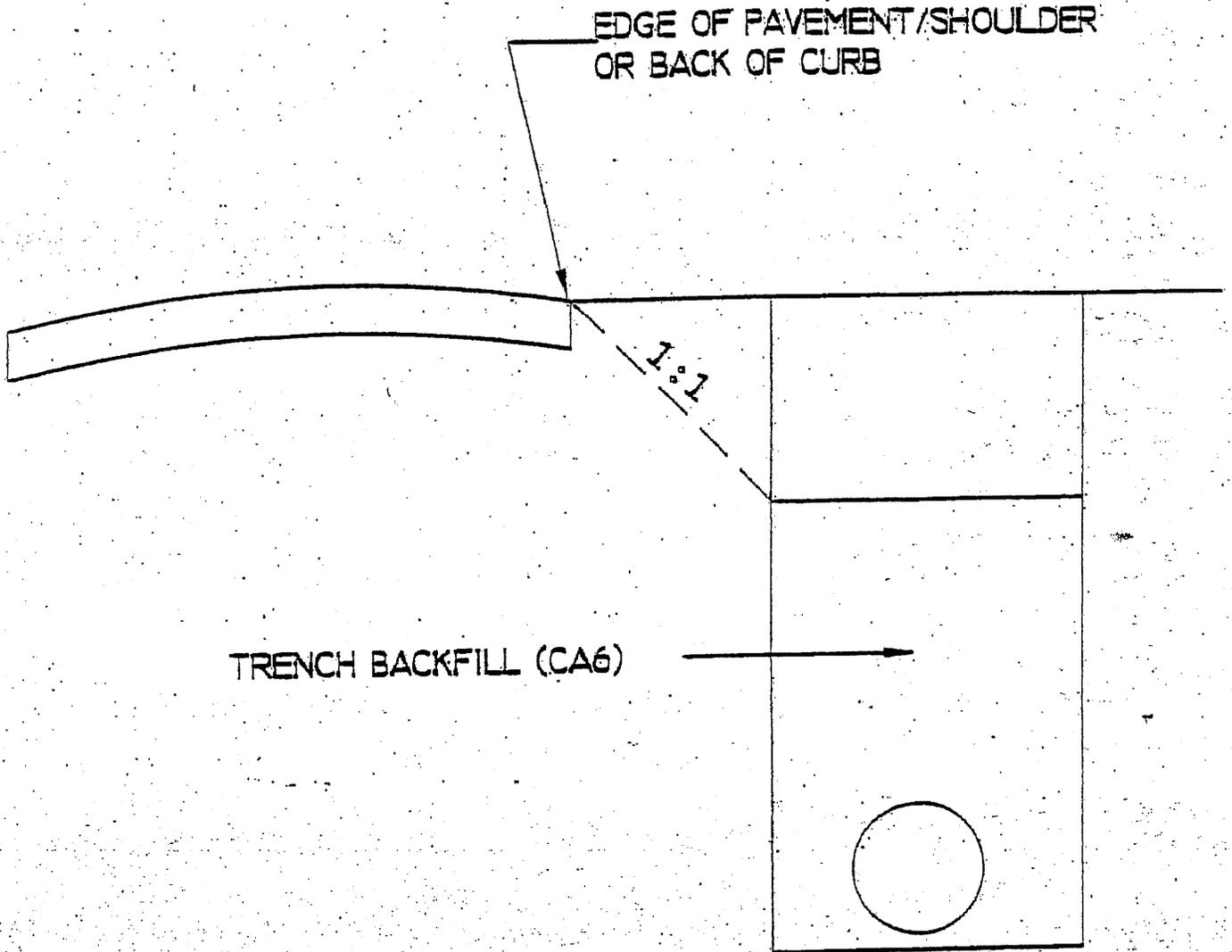
4/1/96  
 T.W.K.

SD 13  
WATER BUTTERFLY VALVE & VAULT



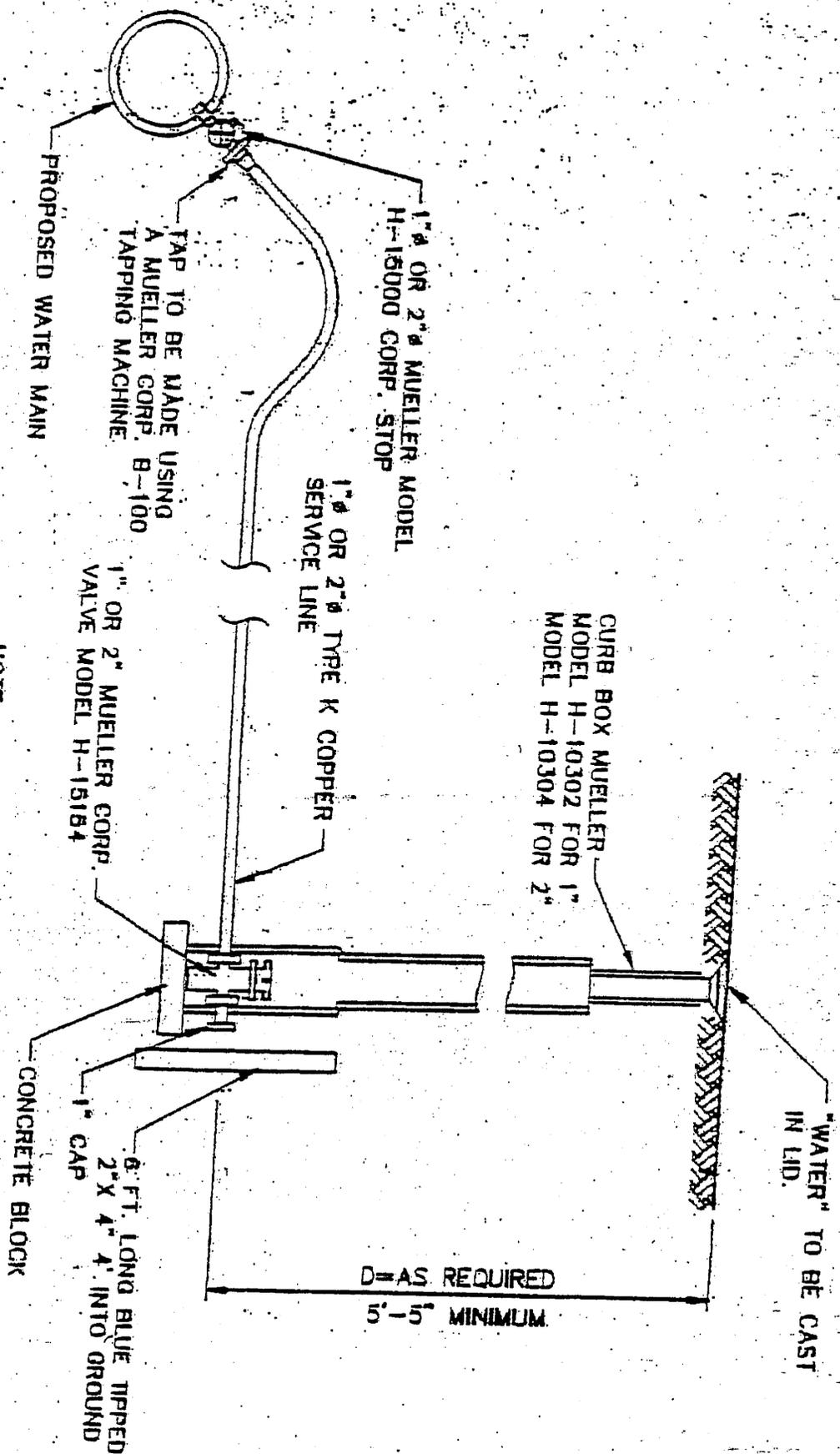
500 p.s.i. Concrete poured in place or precast, On 4" of CA-6

TRENCH BACKFILL PARALLEL TO ROADWAY



TRENCH BACKFILL DETAIL  
TRENCH PARALLEL TO ROADWAY

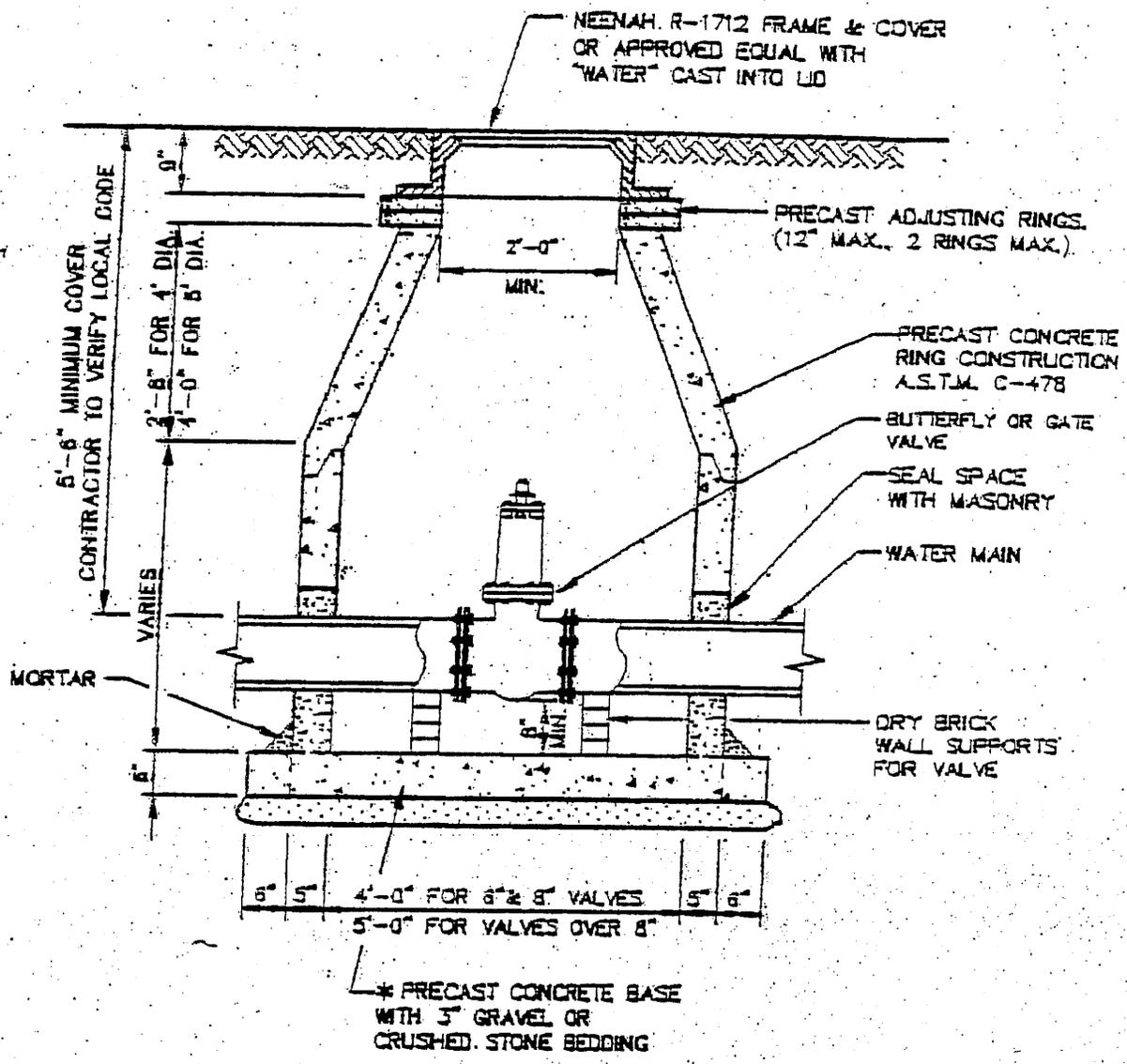
SD 15  
**WATER SERVICE DETAIL**



**NOTE:**  
 ALL FAR SIDE WATER SERVICES  
 TO BE AUGURED UNDER PAVEMENT

**WATER SERVICE DETAIL**

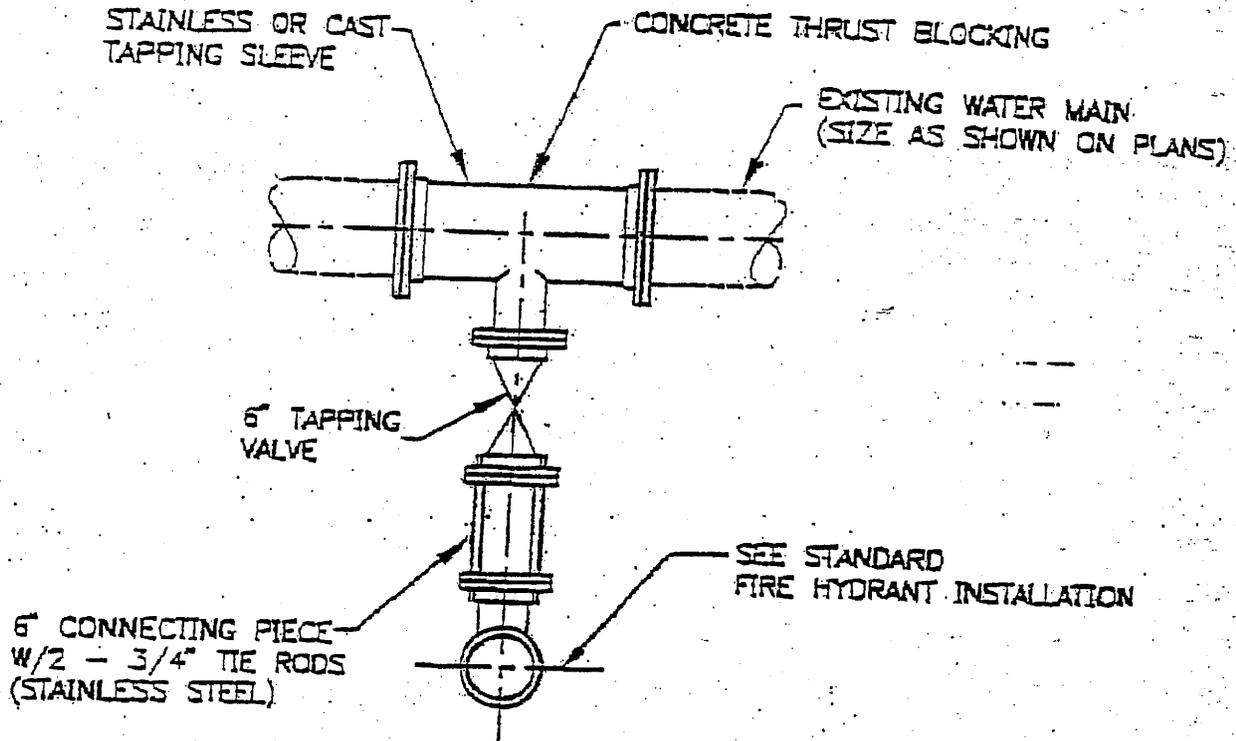
SD 10  
**WATER VALVE BASIN DETAIL**



**VALVE BASIN DETAIL**

- NOTES:**
1. PIPE OPENINGS TO BE CAST INTO WALL.
  2. \* IT IS PREFERRED THAT PRECAST CONCRETE BASE BE CAST INTEGRAL WITH LOWEST WALL SECTION.
  3. PRECAST SECTIONS, ADJUSTING RINGS AND FRAME TO BE JOINED WITH CONTINUOUS LAYER OF NON-HARDENING, PREFORMED BUTYL MASTIC MATERIAL (RUB R NEX, E-Z STICK OR EQUAL).

SD 17  
WATER PRESSURE TAP DETAIL



FIRE HYDRANT - PRESSURE TAP

## WATER PRESSURE TEST DETAIL

### Pressure Testing:

- If concrete thrust blocking was used, wait 5 days before conducting pressure test.
- Pressure water main to 150 PSI.
- Hold pressure for 2 hour duration without pressure lost.
- Open and close in line valves during test.

### Leakage Test:

- \* Conduct after satisfactory pressure test.
- \* Pressure water main to system pressure.
- \* Conduct test for 24 hours.
- \* Maximum allowable leakage= 4 gals/inch diameter/1000 ft/ 24 hours.
- \* Leakage test only on distances over 500 feet. No service shall be leak tested.

Allowable Leakage (gallons) in 24 hours

Size\Length	500'	1000'	1500'	2000'	2500'	3000'	4000'	5000'
4"	8	16	24	32	40	48	64	80
6"	12	24	36	48	60	72	84	96
8"	16	32	48	64	80	96	128	160
10"	20	40	60	80	100	120	160	200
12"	24	48	72	96	120	144	192	240
16"	32	64	96	128	160	192	256	320
20"	40	80	120	160	200	240	320	400
24"	48	96	144	192	240	288	384	480

### Disinfection:

- \* Conduct after all pressure and leakage tests are satisfactory completed.
- \* Disinfecting solution must have at least 50 mg/l of available chlorine.
- \* Contact time in water main for a minimum of 24 hours.
- \* Chlorine residual after retention should be at 25mg/l or greater.
- \* Flush water main and collect two samples on two successive days.
- \* The City Water Department collect samples and take to approved testing lab.

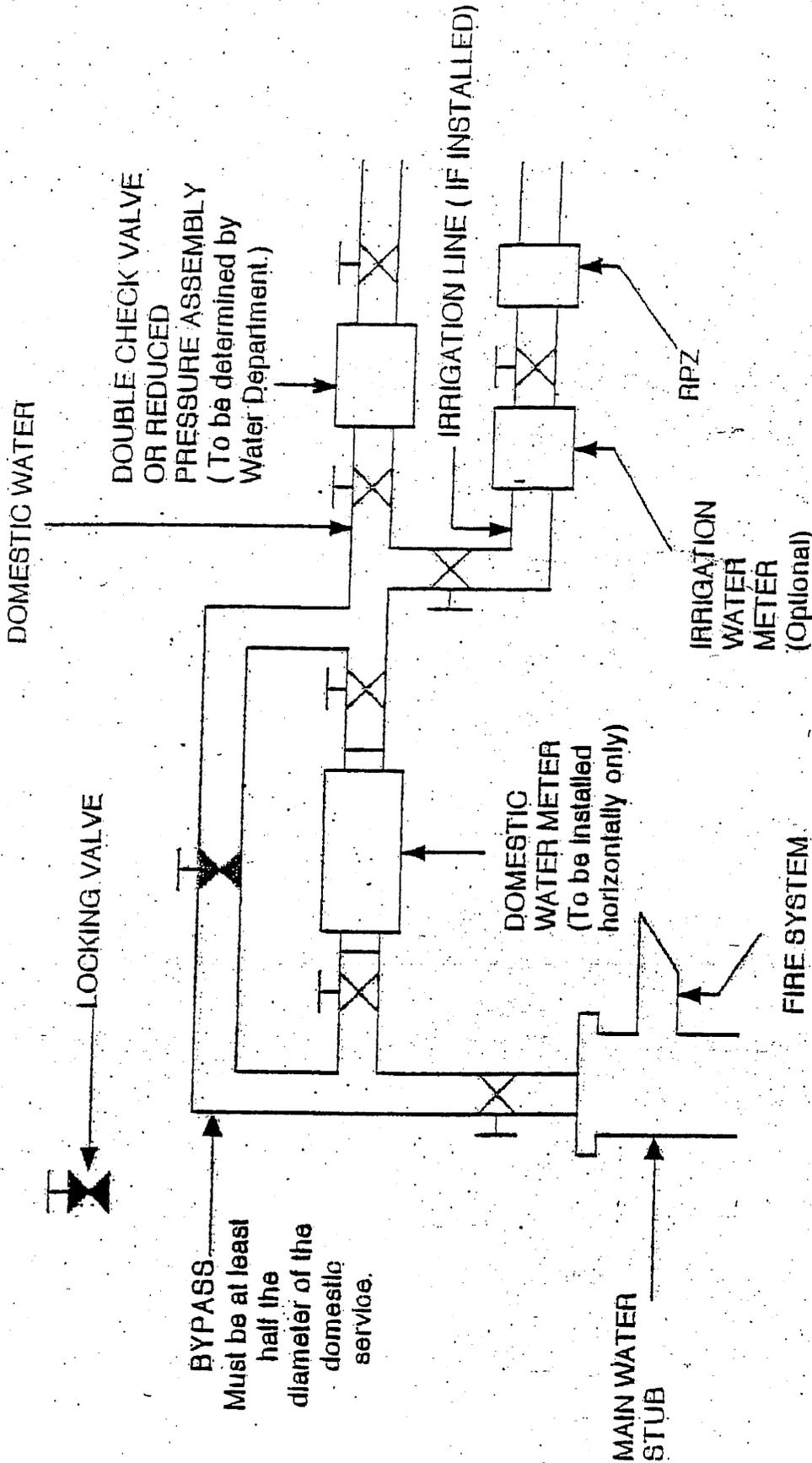
## WATER RESTRAINED JOINT SCHEDULE

Type of Fitting	6" Total Restrained Length	8" Total Restrained Length
Horizontal	Ductile Iron Pipe	Ductile Iron Pipe
90 Deg. Bend	90	117
75 Deg. Bend	N.A.	N.A.
60 Deg. Bend	N.A.	N.A.
45 Deg. Bend	37	48
22 1/2 Deg. Bend	18	23
11 1/4 Deg. Bend	9	11
Tee	30	40
Plug (Dead End)	30	40
Vertical		
90 Deg. Bend	166	217
45 Deg. Bend	69	90
22 1/2 Deg. Bend	33	43
11 1/4 Deg. Bend	16	21

Type of Fitting	10" Total Restrained Length	12" Total Restrained Length
Horizontal	Ductile Iron Pipe	Ductile Iron Pipe
90 Deg. Bend	144	171
75 Deg. Bend	N.A.	N.A.
60 Deg. Bend	N.A.	N.A.
45 Deg. Bend	60	71
22 1/2 Deg. Bend	29	34
11 1/4 Deg. Bend	14	17
Tee	50	61
Plug (Dead End)	60	61
Vertical		
90 Deg. Bend	269	318
45 Deg. Bend	111	132
22 1/2 Deg. Bend	54	53
11 1/4 Deg. Bend	26	31

Type of Fitting	Total Restrained Length	Total Restrained Length
Horizontal	Ductile Iron Pipe	Ductile Iron Pipe
90 Deg. Bend	379	16" x 12"
75 Deg. Bend	N.A.	36
60 Deg. Bend	N.A.	16" x 8"
45 Deg. Bend	145	62
22 1/2 Deg. Bend	74	12" x 10"
11 1/4 Deg. Bend	37	19
Tee	379	12" x 8"
Plug (Dead End)	379	34
Vertical		10" x 8"
90 Deg. Bend	379	18
45 Deg. Bend	145	
22 1/2 Deg. Bend	74	
11 1/4 Deg. Bend	37	

**COMMERCIAL WATER METER INSTALLATION**



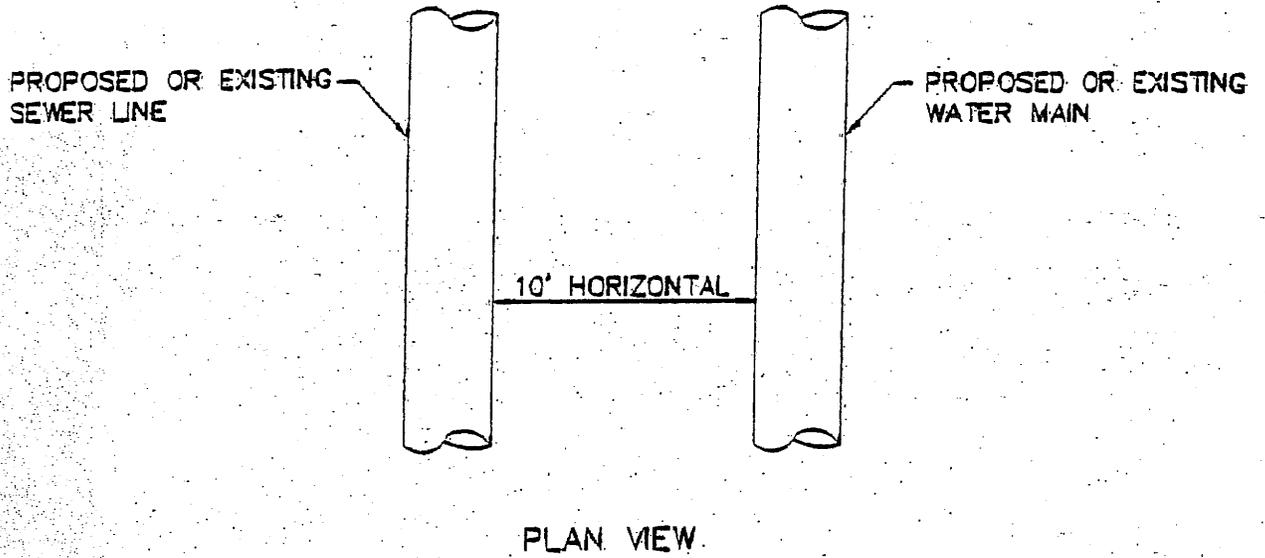
**\* NOTE**

A thermal expansion tank or pressure relief valve is required on the water heater or toilet if a double check valve is installed. Any existing wells must be disconnected from the interior water systems. No piping from the well is allowed inside the dwelling.

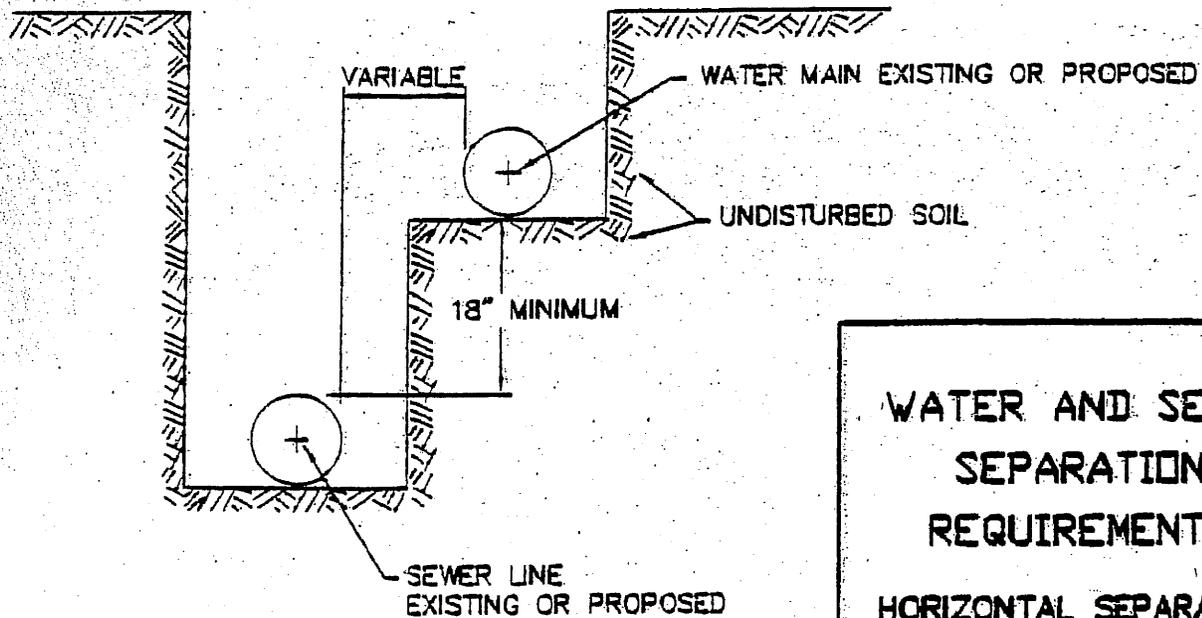
**BYPASS LINE IS REQUIRED FOR 2" DOMESTIC METERS OR LARGER.**

WATER AND SEWER SEPERATION DETAIL

WHEN PROPOSED SEWER (OR WATER) IS LOCATED 10 FEET OR MORE FROM EXISTING WATER (OR SEWER), NO SPECIAL CONSTRUCTION REQUIRED. SEE SECTION 41-2.01B (1)



WHEN PROPOSED SEWER (OR WATER) IS LOCATED LESS THAN 10 FEET FROM EXISTING WATER (OR SEWER), DETAILS BELOW SHALL APPLY. SEE SECTION 41-2.01B (2)



WATER AND SEWER  
SEPARATION  
REQUIREMENTS  
HORIZONTAL SEPARATION

DMS

# SD 21 Combination Curb and Gutter (B6.12)

Illinois Department of Transportation  
 January 1, 2007  
 Approved for use on all projects  
 Approved by: *[Signature]*  
 Date: January 1, 2007  
 Engineer: *[Signature]*  
 Project: *[Signature]*

TYPE	A	B	C	D	R <sub>1</sub>
B-15-30	300	25	150	150	25
B-6-121	(12)	(1)	(6)	(6)	(1)
B-15-45	450	25	150	150	25
B-6-181	(18)	(1)	(6)	(6)	(1)
B-15-60	600	25	150	150	25
B-6-241	(24)	(1)	(6)	(6)	(1)
B-22-30	300	50	125	225	25
B-9-121	(12)	(2)	(5)	(9)	(1)
B-22-45	450	50	125	225	25
B-9-181	(18)	(2)	(5)	(9)	(1)
B-22-60	600	50	125	225	25
B-9-241	(24)	(2)	(5)	(9)	(1)

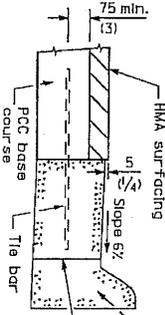
TYPE	A	B	C	D	R <sub>1</sub>	R <sub>2</sub>
M-5-15	150	50	100	50	75	50
M-2-061	(6)	(2)	(4)	(2)	(3)	(2)
M-5-30	300	50	100	50	75	50
M-2-121	(12)	(2)	(4)	(2)	(3)	(2)
M-10-15	150	100	75	100	75	NA
M-4-061	(6)	(4)	(3)	(4)	(3)	NA
M-10-30	300	100	75	100	75	NA
M-4-121	(12)	(4)	(3)	(4)	(3)	NA
M-10-45	450	100	75	100	75	NA
M-4-181	(18)	(4)	(3)	(4)	(3)	NA
M-10-60	600	100	75	100	75	NA
M-4-241	(24)	(4)	(3)	(4)	(3)	NA
M-15-15	150	150	50	150	50	NA
M-6-016	(6)	(6)	(2)	(6)	(2)	NA
M-15-30	300	150	50	150	50	NA
M-6-121	(12)	(6)	(2)	(6)	(2)	NA
M-15-45	450	150	50	150	50	NA
M-6-181	(18)	(6)	(2)	(6)	(2)	NA
M-15-60	600	150	50	150	50	NA
M-6-241	(24)	(6)	(2)	(6)	(2)	NA

DATE	REVISIONS
1-1-07	Switched to Hot-Mix Asphalt (HMA) terminology.
1-1-04	Revised expansion cap and soft converted metric to either centimeter.

M-5.15 (M-2.06) and M-5.30 (M-2.12)



### ADJACENT TO PCC BASE COURSE WITH HMA SURFACING



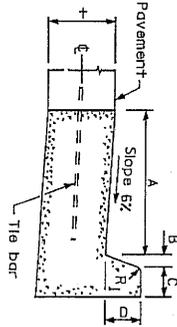
Mountable curb shown (other types permitted)  
 225 (9) when PCC base course ≤ 200 (8)  
 250 (10) when PCC base course > 200 (8)

### GENERAL NOTES

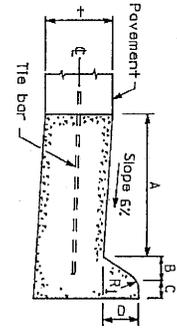
The bottom slope of combination curb and gutter constructed adjacent to pcc pavement shall be the same slope as the subbase or 5% when subbase is omitted.  
 + = Thickness of pavement.  
 Longitudinal joint tie bars shall be No. 19 (No. 6) or 600 mm (24") centers in occurrence with details for longitudinal construction joint shown on Standard 420001. A minimum clearance of 50 mm (2") between the end of the tie bar and the back of the curb shall be maintained.  
 All dimensions are in millimeters (inches) unless otherwise shown.

CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER  
 (Sheet 1 of 2)  
 STANDARD 606001-03

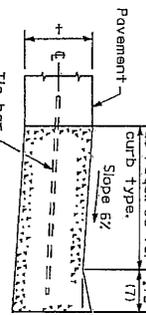
### BARRIER CURB



### MOUNTABLE CURB

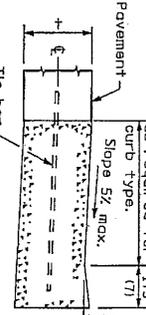


### DEPRESSED CURB (TYPICAL)



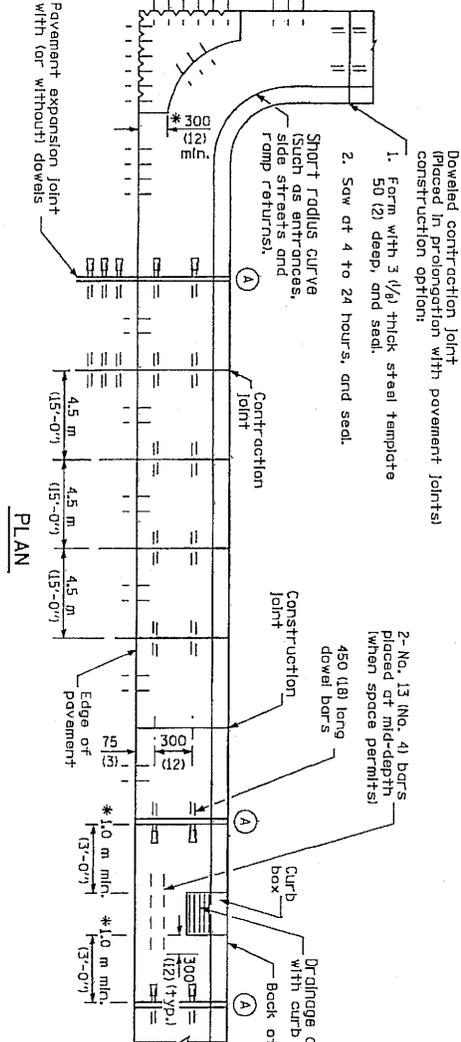
Cutter flag width (7) as required for curb type.

### DEPRESSED CURB ADJACENT TO CURB RAMP ACCESSIBLE TO THE DISABLED



Cutter flag width (7) as required for curb type.

### ADJACENT TO PCC PAVEMENT OR PCC BASE COURSE



Dowled contraction joint placed in conjunction with pavement joints in construction option.

- Form with 3 (1/2) thick steel template 50 (2) deep, and seal.
- Saw at 4 to 24 hours, and seal.

2-No. 13 (No. 4) bars placed at mid-depth (when space permits) 450 (18) long

2-No. 13 (No. 4) bars placed at mid-depth (when space permits)

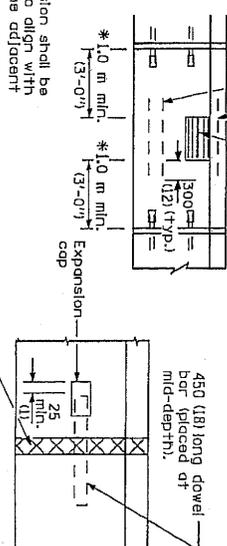
2-No. 13 (No. 4) bars placed at mid-depth (when space permits)

Drainage casting without curb box

\* This dimension shall be adjusted to align with joint on the adjacent pavement

Full depth & width (25 (1) - thick (min.)) performed expansion joint filler.

### DETAIL (A) EXPANSION JOINT



450 (18) long dowel bar (placed at mid-depth).

Wet Bottom Detention Basin  
Typical Cross-Section

