

Kane County
Division Of Transportation
Permit Regulations
And
Access Control Regulations

SECTION 2

ACCESS PERMIT
AND
ACCESS CONTROL REGULATIONS

Agricultural Access
Temporary Access
Minimum Use Access
Minor Access
Major Access

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I. ACCESS PERMIT POLICY

A. Purpose

Introduction

A highway system must perform the primary function of safely carrying through traffic, as well as safely providing access to adjacent land uses. Unplanned land development and uncontrolled access connections reduce highway safety and capacity and results in an early obsolescence of the highway. Unregulated access increases accidents, delay, and congestion for the users of the highway systems within Kane County.

The regulation of highway ingress and egress to and from properties abutting highway facilities is called access control. The principal advantages of access control are improved safety as well as the preservation of a high quality of service for through traffic. In order to minimize accidents and assure the best overall use of the highways within Kane County, it is necessary for Kane County to establish access controls and policies on the number, location, and design of access points to Kane County highways and designated freeways, and to encourage, and require, when feasible, that these policies are appropriately utilized on highway systems not under the jurisdiction of Kane County.

Background

The Kane County Year 2020 Transportation Plan contains the overall mission statement “To provide safe and efficient transportation routes linking the various parts of Kane County and linking the County with other parts of the metropolitan region”. The specific transportation policies contained in the Kane County Year 2020 Transportation Plan that relate to this Access Policy are:

- Right-of-way – Encourage the effective preservation and protection of potential and existing right-of-way for improved safety of transportation systems.
- Area Character – Balance the need for additional capacity with the need to preserve and maintain the local areas character.
- Highway – Provide safe highways, capacity improvements to support recent growth and potential future growth, and provide continuous routes between activity centers and improve access to Regional Transportation Facilities.
- Bicycle / Pedestrian – Help plan and implement safe, convenient facilities for bicyclists and pedestrians to serve daily transportation needs as well as recreation.
- Access Control – The essential element of access control is the regulation of access to County highways by designing major highways to minimize curb cuts and local street intersections, to enhance safety and to maintain existing highway capacity.

- Land Use and Transportation Planning – Coordinate transportation improvements with land use planning, population, and employment projections in cooperation with regional agencies.

The Kane County Year 2020 Land Resource Management Plan states that the overall transportation goal for countywide planning is to “Provide safe, efficient transportation systems compatible with land use”. The specific transportation policies developed by the Division of Transportation and contained in the Kane County Year 2020 Land Resource Management Plan that relate to the Access Control Regulations are:

- Implement land use based transportation planning in cooperation with local and regional agencies.
- Coordinate the 2020 Land Resource Management Plan with the Kane County Transportation Plan to develop a transportation system based on land use.
- Plan and develop bike paths in conjunction with new or existing road construction.
- Plan and implement safe and convenient facilities for bicyclists and pedestrians to serve daily transportation needs as well as recreation.
- Improve the County’s freeways by developing and adopting intergovernmental agreements with municipalities for protecting and improving safe access.
- Require that development proposals comply with right-of-way dedications per adopted County policy.

B. Definitions

AASHTO – America Association of State Highway and Transportation Officials

Access - the right of an owner of property immediately adjacent to a highway to ingress and egress from the property by way of the adjacent highway.

Access Point - the designated location along a highway where ingress to and egress from a property or properties immediately adjacent to the highway is allowed by the County.

ADA - Americans with Disabilities Act

Agricultural Access - an access to a field or fields for vehicles and equipment to perform farming activities. An Agricultural Access is limited to agricultural use.

Applicant - the person(s), entity, municipality or utility company requesting a permit to work in the County right-of-way.

Arterial - is a highway generally characterized by its ability to quickly move relatively large volumes of traffic but often with restricted capacity to serve abutting properties. The arterial system typically provides for high travel speeds and long trip movements.

Change in land use - when an existing property is in the process of, or is subdivided re-subdivided, reconstructed, redeveloped, structurally altered, relocated or enlarged where the type of service area, density and population growth rates would affect the level of traffic.

Collector - highway link to a State or County arterial highway; typically a County or township road or a municipal street and characterized by a relatively equal distribution of access and mobility function. Traffic volumes and speeds are typically lower than those of arterials.

County - Kane County or County of Kane

County Board - Kane County Board

County Engineer - as defined in Chapter ILCS 605 5/5 201.

County Highway - a highway under the jurisdiction of the County as further defined in 605 ILCS 5/2-204.

Developer - The person, persons or entity proposing and/or undertaking the improvements to a property.

Development - any residential, commercial, industrial or other project which is being constructed, reconstructed, redeveloped, structurally altered, relocated or enlarged, and which generates additional traffic within the service area or areas of the unit of local government.

Engineer - person who is trained or professionally engaged in a specific branch of engineering and is required to be licensed in the State of Illinois.

FEMA - Federal Emergency Management Administration

FHWA - Federal Highway Administration

Freeway - a limited access highway defined in 605 ILCS 5/2-212 and designated as such by the County Board.

Highway - as defined in 605 ILCS 5/2-202 and also sometimes referred to as “road” in a rural area and “street” in a municipal area.

IDNR - Illinois Division of Natural Resources

IDOT - The Illinois Department of Transportation

IEPA - Illinois Environmental Protection Agency

ILCS - The Illinois Compiled Statutes

Illinois Highway Code - The Illinois Compiled Statutes, 605 ILCS 5/1-101 *et. seq.*

KDOT - The Kane County Division of Transportation

Local - any public road or street not classified as arterial or collector. Local roads or streets are characterized by the many points of direct access to adjacent properties and the relatively minor value in accommodating mobility. Speeds and traffic volumes are usually low and trip distances short.

Major Access - an access for a subdivision, public street, commercial development, multi-family development, recreational development, or any other development that is expected to generate 150 or more traffic movements per day.

Minimum Use Access - an access for single-family residences, and other low-traffic – volume facilities expected to generate 20 or less traffic movements per day.

Minor Access - an access for a small subdivision, small commercial development, multi-family development or any other development that is expected to generate more than 20 but less than 150 traffic movements per day.

MUTCD - The Manual on Uniform Traffic Control Devices

Owner - the owner of record of a property for which a permit is being applied.

Parkway - the landscaped area located between the back of curb and the right-of-way.

Permit - a document or certificate giving permission from the County of Kane to undertake certain activities in accordance with these regulations on a County right-of-way, and does not create a property right or grant authority to the Applicant to impinge on the rights of others who may have an interest in the right-of-way.

Permittee - the person, persons or entity listed as Applicant on the permit and to whom the permit has been issued by KDOT.

Right of way - as defined by 605 ILCS 5/2-217 as the land, or interest therein, acquired for or devoted to a highway.

Rural - all places outside of urbanized areas.

SRA - Strategic Regional Arterial, a highway as defined by Chicago Area Transportation Study (CATS).

State - State of Illinois

Suburban - an area that has a degree of development greater than that of a rural area but less than that of an urban area, with the predominant character of the surrounding environment being usually residential, but may include a considerable number of commercial establishments and a few industrial business parks.

Temporary Access - an access used for a specified purpose for a short and limited duration. Upon expiration of the duration of the Temporary Access it shall be removed. The use and duration thereof will be specified on the permit. Temporary Access may be included with Major Access developments, Minor Access developments, utility permit projects, or right-of-way alteration permits.

Throat Length - defined as the separation between the highway edge of pavement and the edge of pavement of the nearest internal drive.

Urban - an area are those areas identifies by the U.S. Census Bureau having a population of 5,000 or more but less than 50,000.

USACOE - Unites States Army Corps of Engineers

C. Authority and Jurisdiction

General Highway Statutes – The ILCS grant the responsibility and authority for the review of access and related issues that impact County highways to the County Board or the County Engineer. Several of the applicable Statutes are:

County Highways

Access to County highways is under the authority of the County Engineer. Access requests on County highways not designated as freeways do not require the review and approval of the County Board, but may, however, be reviewed and considered by the Transportation Committee of the County Board if required by the County Engineer. The following portions of the ILCS generally are applicable to both County highways and County freeways:

- 605 ILCS 5/5-413 authorizes the County Engineer to issue permits for and regulate the establishment of public road and private driveway entrances along highways under the jurisdiction of the County.
- 765 ILCS 205/2 requires that written approval be obtained from the appropriate local highway authority regarding highway access prior to final approval and recording of a plat. For Kane County, the authority shall be the County Engineer, with the primary concerns being safety and the nature of access and related impacts to the County's transportation system.

- 605 ILCS 5/9-113 requires the written consent of the County Engineer for the placement of utilities within the County right-of-way.
- 605 ILCS 5/9-115.1 prohibits the construction of any drainage facility for the purpose of the detention or retention of water within a distance of 10 feet plus one and one-half times the depth of any drainage facility adjacent to the right-of-way of a County highway without the written permission of the County Engineer. It also prohibits the construction of any earthen berm such that the toe of such berm will be nearer than ten (10) feet to the right-of-way of a County highway without the written permission of the County Engineer (see Exhibit 4-8 in Section 4 of this manual).
- 605 ILCS 5/9-101.1 authorizes the County Engineer to consider additional detention in lands to be subdivided.
- 605 ILCS 5/9-118 authorizes the County Engineer to regulate the planting of landscaping on the County right-of-way.

All access requests onto County highways shall be subject to the Access Control Regulations and design standards contained or referenced in these regulations.

County Freeways

Access requests on County freeways require the review and approval of the County Board. The County highways designated by the County Board as freeways are:

- Fabyan Parkway from Randall Road to DuPage County Line.
- Kirk Road from IL Rte. 56 (Butterfield Rd.) to Dunham Road.
- Dunham Road from Kirk Rd. to IL.
- Orchard Road from U.S. Route 30 to Randall Road.
- Randall Road from East-West Toll Road (I-88) to North County Line Road.

The following portions of the ILCS are applicable to County freeways:

- 605 ILCS 5/8-101 authorizes the County Board to designate and establish any existing or proposed highway under their jurisdiction and control as a freeway. The County Board has the authority to regulate the use of a freeway, as well as intersecting highways, roads, streets and other public ways not under their jurisdiction and control.
- 605 ILCS 5/8-102 states that the County Board has the full authority to deny their respective consent relative to access or to specify and enforce the terms and conditions under which new means of ingress and egress may be provided or existing means enlarged or extended. The County Board has full authority to control existing and future access points to a freeway, establish local service drives, relocate or eliminate intersecting roads, streets or other public ways, and extinguish the right of access by

purchase or condemnation. Written consent must be obtained from the County Board prior to laying out, providing or constructing any new means of access, or enlarging or extending any existing means of ingress to or egress from said abutting properties to a County highway.

All access requests onto County freeways shall be subject to the access policies and design standards contained or referenced in these regulations.

Other Highways Under the Review Authority of the County Engineer

An additional duty and responsibility of the County Engineer is to review zoning and development proposals within unincorporated areas of Kane County relative to Kane County access control regulations, transportation policies and standards. These reviews include County, Township, State, Municipal and private roads. Safety factors, zoning considerations, subdivision plats, and proposed improvement plans shall be reviewed to make determinations in the area of design standards and engineering specifications for road and related drainage construction. The following portions of the ILCS and County Codes are applicable:

- 605 ILCS 5/6-325 requires that subdivision roads conform to the rules, specifications and regulations established by the County Engineer and adopted by the County Board.
- 5.4-1 of the Kane County Zoning Ordinance requires that the erection of any new building or structure, or any change in land use or new or additional use made of any tract of land or existing building or structure shall comply with the KDOT Access Control Regulations. The Access Control Regulations are contained within these Permit Regulations.

Kane County Division of Transportation shall provide regional leadership in maintaining and developing of a system of highways, streets and roads that serve present and future transportation needs. Proposed developments and access locations shall be designed to promote safety, reduce or avoid congestion, and maintain the integrity and efficiency of the existing highway.

Change In Land Use

An Access permit is required for a change in land use from the agency having jurisdiction of the highway for which access is requested. The agencies include the State, the County or township(s). The change in land use is a comparison of the extent and use of the existing access and the proposed access. An existing access may not be used for any aspect of the proposed development, including grading or construction, until an Access Permit is obtained from the agency with jurisdiction authority.

D. Permit Types and Application Requirements

There are five types of access permits. The following describes the specific permit-application requirements for each of the five types of access permits: Agricultural Access, Temporary Access, Minimum Use Access, Minor Access, and Major Access.

Agricultural Access

A permit is required for an Agricultural Access to a County highway or freeway. The Applicant can begin work on the construction of the access only with written authorization from the County Engineer. The permit application process, fees, and guidelines can be found in Articles II and III of this section. In addition to the permit application, plans, calculation, and reports may be required to evaluate the permit request. The County recommends that the Applicant discuss the nature and extent of the work with the Permit Section Staff prior to submitting an application to determine the submission requirements.

Temporary Access

A permit is required for a Temporary Access to a County highway or freeway. The Applicant can begin work on the construction of the access only with written authorization from the County Engineer. The permit application process, fees, and guidelines can be found in Articles II and III of this section. In addition to the permit application, plans and other supporting information may be required to evaluate the permit request. A Temporary Access permit may be required in conjunction with other permits. The County recommends that the Applicant discuss the nature and extent of the work with the County Permit Section Staff prior to submitting an application to determine the submission requirements. If a temporary access is granted its duration shall not exceed 365 days.

Minimum Use Access

A permit is required for a Minimum Use Access to a County highway or freeway. The Applicant can begin work on the construction of the access only with written authorization from the County Engineer. The permit-application process, fees, and guidelines can be found in Articles II and III of this section. In addition to the permit application, plans, calculations, and reports may be required to evaluate the permit request. The County recommends that the Applicant discuss the nature and extent of the work with the Permit Section Staff prior to submitting an application to determine the submission requirements

Minor Access

A permit is required for a Minor Access to a County highway or freeway. The Applicant can begin work on the construction of the access only with written authorization from the County Engineer. The permit application process, fees, and guidelines can be found in Articles II and III of this section. In addition to the permit application, plans, calculations, and reports may be required to evaluate the permit request. The County recommends that the Applicant discuss the

nature and extent of the work with the Permit Section Staff prior to submitting an application to determine the submission requirements.

Major Access

A permit is required for a Major Access to a County highway or freeway. The Applicant can begin work on the construction of the access only with written authorization from the County Engineer. The permit application process, fees, and guidelines can be found in Articles II and III of this section. In addition to the permit application, plans, calculation, and reports may be required to evaluate the permit request. A pre-application meeting with the Permit Section staff is required to determine the submission requirements.

E. General Requirements

The following are general requirements pertaining to all types of access proposed within County right-of-way.

Authority of County

A permit from KDOT grants permission only to undertake certain activities in accordance with these regulations on a County right-of-way, and does not create a property right or grant authority to the Applicant to impinge on the rights of others who may have a legal interest in the right-of-way. Such others might include an owner of an underlying fee simple interest if the right-of-way is an easement, the holder of an easement, or another Applicant. It is the responsibility of the Applicant to satisfy all owners of property within or outside of County right-of-way.

Written Consent

Only a permit issued by the County Board or the County Engineer under these regulations will satisfy the “written consent” requirement of 605 ILCS 5/5-413 and 605 ILCS 5/8-102.

Compliance

The Applicant shall comply with all other applicable laws relating to the access. The issuance of an Access Permit by the County Engineer does not excuse the Applicant from complying with other requirements of the County Engineer (e.g., oversize and overweight vehicles) or the rules, regulations and requirements of other Local, State and Federal agencies, including but not limited to IDOT, USACOE, IDNR, IEPA, AND EPA.

Compliance by Other Agencies

State, County, township, municipalities, and other local units of government are subject to all the requirements of these regulations.

Damage to County Right-of-Way

Those facilities and highway structures and appurtenances (i.e.: guardrails, street lights, etc.) within the highway right-of-way that are damaged as a result of the permit work shall be immediately reported to the KDOT. Damaged items shall be replaced or repaired by the Applicant to the County's satisfaction in a reasonable length of time as established by the KDOT. Any signs damaged during emergency, maintenance or construction operations must be immediately repaired and/or replaced and erected. . The occurrence shall be immediately reported to the KDOT.

Inspection

All improvements to a County highway occurring in conjunction with the permit shall be inspected by a representative of KDOT or a consultant. The level of inspection will be determined by the County based on the complexity and magnitude of the improvements to the County right-of-way. The level of inspection will be discussed at the Pre-construction Meeting.

Enforcement

If permit improvements to the County right-of-way are not constructed in accordance with the design approved by the County Engineer or made in accordance with the conditions of the permit, the County Engineer will issue a Stop Work Order or revoke a permit as described below. If the Applicant does not correct any deficiencies or, at a minimum, contact the KDOT to discuss the deficiencies within fourteen (14) calendar days after notification by certified mail, the County Engineer has the right to correct the deficiencies either through the Letter of Credit or other security for the permit or through a bill or invoice submitted to the Applicant. In addition, the Final Completion and Compliance Certificate and/or Certificate of Occupancy shall be withheld until the improvement conforms to the approved design.

Duty to Correct Defects

The Applicant shall guarantee the restoration of the County right-of-way for twelve (12) months following the issuance of the Final Completion and Compliance Certificate. During the 12-month period, the Applicant shall, upon written notification from the County Engineer, correct all non-complying work using methods and materials required by the County Engineer. The corrective measures shall be completed within fourteen (14) calendar days of the receipt of the notice from the County Engineer, not including days during which work cannot be done due to circumstances constituting force majeure or of unseasonable or inclement weather. If corrective measures are not commenced within the length of time specified, the County Engineer will take appropriate action to ensure completion of the work to the County Engineer's satisfaction at the expense of the Applicant.

Stop Work-Order/Revocation of Permit

The County may issue a Stop-Work Order or suspend or revoke a permit for the following reasons:

- The work was started without a valid permit. . In addition to the permit fee, a fine will be assessed in the amount equal to the applicable permit fee. .
- A material provision or condition of the permit was substantially breached.
- A material misrepresentation has been made in the application for a permit.
- The Applicant failed to maintain the required bonds or other security and insurance.
- The Applicant failed to complete the work within the time specified in the permit unless the failure to complete the work is due to reasons beyond the Applicant's control.
- The Applicant failed in a timely manner to correct work that does not conform to applicable standards, conditions federal, state or local laws, rules or regulations.
- An evasion or attempt to evade any material provision of the permit, or the perpetration or attempt to perpetrate any fraud or deceit upon the County.
- The work poses a hazardous situation or constitutes a public nuisance, public emergency, or other threat to the public health, safety or welfare.

Lifting of Stop Work Order/Reinstatement of Permit

The County may lift a Stop-Work Order or reinstate a permit if:

- A permit application and applicable fees and fines are paid and submitted, and the County Engineer has issued a permit.
- An amended application is submitted correcting any misrepresentations included in the original permit application.
- The Applicant provides proof that the required bonds or other security and insurances have been reinstated.
- After discussions with the County, the Applicant submits a revised schedule and completion date acceptable to the County.
- The Applicant corrects all work that does not conform to the permit specifications, applicable standards, conditions, or federal, state, or local laws.
- The Applicant agrees to follow all provisions of the permit and pays for the perpetration or attempt to perpetrate any fraud or deceit upon the County.
- The conditions posing a hazardous situation or constituting a public nuisance, public emergency, or other threat to the public health, safety, or welfare are corrected or removed.

If the Applicant does not correct any deficiencies, or at a minimum, contact the County to discuss the deficiencies within fourteen (14) calendar days, the County Engineer has the right to correct the deficiencies either through the bond or other security for the permit or as a bill submitted to the Applicant.

All conditions that pose a hazardous situation or constitute a public nuisance, public emergency, or other threat to the public health, safety, or welfare shall be corrected immediately by the Applicant.

Advanced Public Notification

All permitted access work will require advanced public notification prior to commencing the work. The advanced public notification shall be by use of advanced warning signs or message boards placed for each direction of traffic. The warning signs or message boards shall comply with the MUTCD and County policy. The advanced notification shall be posted at least 72 hours prior to commencing the work. The message will be as specified by the County Engineer. No work shall commence at the site for at least one week after the issue date of the permit.

Permit Working Hours

For County highways identified as a Freeway, the permit working hours shall be from 9:00 a.m. to 3:00 p.m., unless the County approves extended hours. All other County highways, the working hours shall be as directed by the Permit Section Staff, but are generally considered 8:00 a.m. to 4:00 p.m.

Traffic Control and Protection

During the period of time the access is being constructed, due care must be taken to ensure the protection of workers and traffic. The work should be accomplished in a manner that will minimize interference with normal highway operations. All warning signs, pavement markings, and traffic control during construction shall be in strict compliance with the MUTCD and the IDOT Highway Standards. Copies of traffic control standards may be attached to the permit indicating to the permit holder the manner in which traffic is to be controlled and protected during construction. Special care shall be taken during the construction of accesses, driveways and the development of the property to avoid tracking mud or other material onto the highway. The Applicant shall immediately remove any mud, debris or other material tracked onto the highway. If it is necessary for KDOT or its contractor to remove mud, construction debris, or otherwise correct unsafe conditions, the County Engineer shall invoice the Applicant for the cost of time and materials and the Applicant shall pay said invoice within 30 days of receipt thereof. No funds will be released from the Letter of Credit until the invoice is paid in full. Failure to pay an invoice shall be cause for the revocation of the permit.

Maintenance of Driveways and Streets

Property owners having access to a County highway are fully responsible for the maintenance of their driveway. This maintenance responsibility includes the removal of snow and ice and keeping the portion of the driveway within the County right-of-way in a safe condition for the general public. Where the owner of a commercial or industrial property is required by the

County Engineer to construct turning lanes on the County highway, the County Engineer may in the interest of public convenience provide maintenance and remove snow and ice on the portions of those lanes constituting an integral part of the highway. Once a culvert is properly installed pursuant to a permit, it becomes public property in accordance with 605 ILCS 5/9-105 of the Illinois Highway Code and will thereafter be maintained by KDOT.

F. Access Control Regulations

The guiding philosophy of the Kane County Access Control Regulations is to “Provide safe, efficient transportation systems compatible with land use”, by controlling access on highways to minimize curb cuts and local street intersections, and maintaining existing highway capacity. The highest degree of access control shall be applied to the County freeways and major arterial roads, with lesser degrees of access control on minor arterial and collector roads.

The degree of access control shall be based on two basic criteria: (1) the size and nature of the development, which determines the volume and types of traffic generated, and (2) the existing and/or future significance of the highway being accessed. In all cases the operational characteristics of the new or improved access must meet, in the opinion of the County Engineer, traffic-engineering criteria for safe traffic operations. In many cases, highway improvements such as turning lanes, medians, turning restrictions, traffic signals, and highway lighting must be funded and constructed by the Applicant in order to ensure safe traffic operations. In the interest of public safety and general welfare, the County Engineer may restrict the location and number of access points.

The Locations of Access Points

- a. Access points shall be located along the frontage of the subject property so that ingress and egress maneuvers will not degrade safe and efficient traffic movements and operations on the highway.
- b. Access points shall be located, to the maximum extent feasible, at the point of optimum sight distance along the abutting property frontage. Placement of an access point on a horizontal curve or just below the high point of a crest vertical curve shall be avoided.
- c. Access points require provisions of the appropriate sight distance pursuant to methodology based on the AASHTO Policy On Geometric Design of Highways and Streets, most current edition. If a safe sight distance is not available at any point along the frontage of a property, one of the following procedures shall be utilized:
 - i. develop access to another highway (in case of corner properties).
 - ii. develop indirect access via a frontage road.
 - iii. develop indirect access via the acquisition of an access easement from an adjacent property.

- iv. improve the vertical and/or horizontal curvature of the roadway.
 - v. acquire additional right-of-way.
- d. Whenever possible, access should be provided via existing cross streets in lieu of additional access points to arterial or collector roads.
 - e. Access to a County highway may be prohibited when a property abutting a County highway has frontage on one or more highways and reasonable access can be safely provided from said highways.
 - f. Where a pre-existing access facility is on the opposite side of the highway from property from which access is being requested, the proposed access point shall be aligned with the pre-existing access facility whenever possible in the opinion of the County Engineer. This requirement may be waived under the following conditions:
 - i. The proposed access would not comply with other conditions of these regulations.
 - ii. The property for which access is being requested has inadequate frontage along the highway to allow for the proper alignment with the existing access facility.
 - iii. The alignment of the existing and proposed access facilities would impair traffic or be detrimental to traffic flow, result in unacceptable delays, impede traffic operations, and impair traffic safety on the highway.
 - g. Adjacent access points shall be spaced to insure that conflicting movements at adjacent access points do not overlap and that safe and efficient traffic movements and operations will be maintained.
 - h. The minimum spacing between an access point and an intersecting street or another access point shall be determined by the distance required to provide full left turn tapers and storage bays along the County highway for both the access point and the intersecting highway or adjacent access point, regardless of the present need for tapers and storage bays. Storage bay lengths should be determined by using projected traffic volume data approved by the County Engineer and allow for proper deceleration of turning vehicles so as to not impede through traffic the projected traffic volumes of the access should reflect the volumes that will be experienced when the development(s) using the access point are fully in service and include the projected growth in background traffic.
 - i. If an abutting property has inadequate frontage to meet the minimum spacing requirements, the County Board or the County Engineer as the case may be, shall determine the location of the access point using the applicable provisions of these regulations. The County Board or the County Engineer as the case may be, may require the development of joint (shared) access facilities, the development of indirect access, or the restriction of turning movements at the proposed access point.
 - j. Access points in the vicinity of interchanges, interchange ramp terminals, crossroads, frontage roads and service drive connections shall be restricted to eliminate hazardous and

congested conditions. Sufficient spacing between interchange ramps and access points or crossroad intersections shall be provided to permit the development of turning lanes and proper signing of the highway facilities. In addition, the prior approval of the agency that has jurisdiction or functional oversight of the interchange must be received in writing.

- k. Access points shall be located to provide safety and convenience for pedestrians, bicyclists, and other users of the highway right-of-way.

The Number of Access Points

- a. Each development or property, regardless of the number of parcels, shall be limited to one access point when warranted in the opinion of the County Engineer (the one access point may be restricted to a right-in/right-out).
- b. When subdividing existing developed parcels to create new lots, no additional access will be permitted. When an existing development undergoes a change in land use, the existing access point(s) may require relocation or the number of access points reduced per the requirements of the County Engineer to improve the safety of the motoring public.
- c. One additional access point may be considered by the County Board or the County Engineer as the case may be, if it is demonstrated by a traffic engineering analysis prepared by a qualified traffic engineer and approved by a Licensed Professional Engineer that the level of service at the approved access point would be substantially improved by the addition of a second access point (turning movement restrictions to be determined by the County Engineer), and that providing an additional access point will not adversely affect traffic safety or operations on the highway. Approval of an additional access shall be determined by the County Board or the County Engineer as the case may be, and shall comply with all the applicable sections of these regulations.
- d. If the approved access point is to be signalized, no additional full access points shall be permitted.
- e. For access to an abutting property located at the intersection of two County highways, access shall, whenever feasible, be restricted to one access point on the County highway having the lower volume of traffic, as determined by the County Engineer. The requirements for the access point shall comply with all applicable provisions of these permit regulations and the intersection of the two highways shall be improved by providing appropriate capacity improvements.
- f. For corner lots at an intersection where only one of the roads is a County highway, and where access is available from the other intersecting road, access to the County highway may, based upon the opinion of the County Engineer, be restricted or prohibited. The requirements for the access point if permitted, shall comply with all applicable sections of these regulations and the intersection of the two highways shall be improved by providing appropriate capacity improvements.

Internal Circulation Within Developments

- a. When property abutting a highway is to be developed, direct access to the highway shall not be used in lieu of an adequate internal traffic circulation system. The County Engineer shall approve the development planning process and internal traffic circulation.
- b. No access shall be permitted to a development if internal traffic patterns are not acceptable to the County Engineer based on overall traffic circulation, drive-in facility stacking and parking space capacities, internal turning movements, and projected trip/parking generation rates.
- c. No access shall be permitted if such access would require or otherwise cause backing or turning maneuvers onto a County highway. Provisions for turnarounds shall be made outside the County right-of-way.

Intersection Spacing and Application of Access Control Guidelines

These regulations apply different degrees or levels of access control depending on the type and operational characteristics of the highway in question, in combination with the type and intensity of the proposed land use generating the request for access. Therefore, the desirable intersection spacing and access guidelines vary according to the type of highway and the proposed land use. The Levels in these regulations are organized as follows:

Level 1 - High level of access control based upon conservative parameters of driver behavior, vehicle performance characteristics and a high margin of safety. This level of access control is applied to Major Access points on freeways, SRA's, and arterials. SRA reports developed by IDOT may be used by the County Engineer in determining guidelines.

Level 2 - Moderate level of access control based on normal or median parameters for both driver behavior and margin of safety. This level of access control is applied to Minor Access on collectors, arterials and freeways and Major Access on collectors and local roads.

Level 3 - Minimum levels of access control guidelines typically representative of physical or geometric constraints or considerations; not based on driver or vehicle performance criteria. This level of access control is applied to all Minimum Use Access on all County highways and to Minor Access on local roads.

Table 1 - Access Guidelines Application Matrix				
	Highway Classification			
Traffic Generation Movements Per Day	Local	Collector	Arterial	Freeway or SRA
Minimum Use 20 or less	Access Level 3	Access Level 3	Access Level 3	Access Level 3
Minor Access More than 20 less than 150	Access Level 3	Access Level 2	Access Level 2	Access Level 2
Major Access More than 150	Access Level 2	Access Level 2	Access Level 1	Access Level 1
Notes:				
1. "Major Access" includes most commercial accesses and public streets classified as collector or above which includes most subdivisions.				
2. The County Engineer may, at his/her discretion, elect to apply a different priority level or deviate above or below the standard for a given priority level based on unique property, site development, highway design, safety and/or traffic conditions.				

The use of a particular access control guideline is based on the type of land use generator and the classification of the highway on which the land use generator is located. The operating speed of the subject highway is built into the individual access guidelines. The use of the Access Guidelines Application Matrix shown in Table 1 is intended to give general guidance on the degree of access control and appropriate access guidelines for a particular situation. This table is intended to be used as a guide, and the County reserves the right to address unique situations in a manner different than as set forth in Table 1.

a. Signalized Full Access Intersection Spacing

An intersection spacing of one-half (1/2) mile (2640') is appropriate and optimal for rural, residential or other relatively low-density areas. The relatively low level of adjacent land development allows a minimum amount of green time to be assigned to the cross street, which provides higher progression speeds and capacity on the arterial.

On arterial highways through urban or suburban areas, however, restricting access to half-mile spacing in areas of denser traffic generators can lead to less efficient signal operation, poorer coordination, and a lower level of service, and unsafe conditions on the arterial road.

Based on the existing spacing of such signals on a County freeway and on experience with signalized intersection spacing, KDOT has developed the spacing criteria contained in Table 2. These signals will be required to be interconnected to adjacent signals within one mile (5280'). The County Board generally requires a one-third (1/3) mile (1760') spacing minimum for freeways.

Table 2 – Minimum Signalized Intersection Spacing			
Highway Classification			
Freeway & SRA* Residential	Freeway & SRA* Commercial	Rural Arterial Collector	Urban/Suburban Arterial Collector
+/- 1,760 ft. (1/3 mile) to +/- 2640 ft. (1/2 mile)	+/- 1,320 ft. (1/4 mile) to +/- 1,760 ft. (1/3 mile)	+/- 2,640 ft. (1/2 mile)	+/- 1,320 ft. (1/4 mile)
Notes: 1. Signalized spacing guidelines apply to access where signal warrants are anticipated to be met in the future as determined by KDOT. 2. The County Engineer shall determine those cases where equal spacing of adjacent signalized intersections takes precedence over the spacing guidelines shown above on the basis of a qualified traffic engineering study. 3. On the basis of a qualified traffic engineering study the County Engineer may consider spacing less than the values shown above.			

Because traffic signal warrants can be met at existing intersections via traffic growth over time, all public streets classified as “collectors” or above which intersect an arterial highway, including all County highways, should also meet the Signalized Intersection Spacing guidelines of Table 2.

b. Unsignalized Full Access Spacing

Unsignalized full access spacing is defined as the separation between two adjacent unsignalized full-access intersections or between an unsignalized full access intersection and an adjacent signalized intersection. The category of “Unsignalized Full Access” intersections does not include streets or driveways that, as determined by the County Engineer, may meet traffic signal warrants in the future.

Major Access for Level 1 highways is required to meet the signalized intersection spacing guidelines as shown previously in Table 2. Spacing for Minor and Minimum Use Access is required to meet AASHTO (2001 or as amended from time to time) intersection sight distance guidelines. Access spacing on Level 2 highways corresponds to the intersection decision sight distance requirement based on no reduction in through traffic speed. Access spacing on Level 3 highways is based on intersection sight distance, Case B1 – Left Turn From Stop.

All of the above spacing guidelines for unsignalized full access intersections are summarized in Table 3. Design speed is considered to be the posted speed limit plus five (5) mph.

Table 3 - Unsignalized Full Access Intersection Spacing				
Separation between Adjacent Full-Access Intersections				
Design Speed	Access Level 1 (ft.)	Access Level 2 (ft.)	Access Level 3 (ft.)	
			2 Lanes	4 Lanes
30 mph	Signal Spacing Guidelines Apply As Shown In Table 2	490	335	353
35 mph		590	390	412
40 mph		690	445	470
45 mph		800	500	529
50 mph		910	555	588
55 mph		1030	610	647
60 mph		1150	665	706
Note: See Table 6 for the separation between full access intersections and adjacent right-turn only driveways.		Note: A Separation, which provides for no overlap of alternating left-turn lanes, shall be provided at a minimum.		

c. Right-in/Right-out and Right-in Only Access

The use of right-in/right-out and right-in only access is left to the County Engineer's discretion and is an effective tool for managing arterial highway access and achieving the primary goal of safe and efficient through traffic movement. Right-in/right-out and right-in only access will be required in lieu of full access when intersection spacing guidelines cannot be met or when in the opinion of the County Engineer safety considerations dictate. The use of right-in/right-out and right-in only access in lieu of good internal circulation and convenient access shall not be permitted.

Each development or property, regardless of the number of parcels or size of development, shall be limited to one access point (the one access point may be subject to restrictions by the County Engineer, (i.e. a right-in/right-out or right in only). One additional access point (such as a right-in/right-out and right-in only access) may be considered by the County or the County Engineer as the case may be if it is demonstrated by a competent traffic engineering analysis prepared by a qualified Traffic Engineer and approved by a Licensed Professional Engineer that the level of service at the approved access point would be substantially improved by the addition of a second access point (turning movement restrictions to be determined by the County Engineer), and that providing an additional access point will not adversely affect traffic safety or operations on the highway.

Additional right-in/right-out and right-in only accesses are generally not permitted. Approval of any additional access shall be determined by the County Engineer and shall otherwise comply with all the applicable sections of these regulations.

d. Policies and Guidelines for Right-in/right-out and Right-in Only Access

Right-in/right-out and right-in only access serving a property or development may be considered subject to compliance with the corner clearance and un-signalized spacing guidelines contained herein, and must be consistent with good engineering judgment and practice, where the right-turn only access:

- Contributes to the measurable improvement in safety and the level of service for adjacent intersections or otherwise improve the operation of adjacent access or highways by minimizing the traffic load, approach lane queuing, mixing of residential and commercial traffic among other things.
- Are not intended as a substitute for the proper design and layout of internal connecting aisles and drives on the subject development or property.
- Are part of a clear, understandable and accepted access plan for a site and help prevent unsafe, undesirable, unexpected or illegal maneuvers such as U-turns, backing up in traffic, or cutting through neighborhood streets.
- Serve the convenience and expectations of the motoring public for auto-oriented highway land uses such as retail shopping centers, service stations, fast food restaurants, etc.

e. Right-in/right-out and Right-in Only Access Corner Clearance Guidelines

Right-in/right-out and right-in only access are often located in the vicinity of existing or future signalized intersections. In such applications, it is imperative to reduce turning conflict potential by protecting the integrity of the functional areas of the major intersection by providing “corner clearance” dimensions. Inadequate corner clearance can result in the following safety and operational problems.

- Conflict with intersection turning movements and traffic queues.
- Insufficient weaving section length
- Reduction in intersection capacity and progressive flow

The corner clearance guidelines contained in Tables 4 and 5 cover Right-in/right-out and right-in only access located both upstream (near side) and downstream (far side) of the major intersection, and are applied to any Right-in/right-out and right-in only access on a highway adjacent to a full access intersection or signalized (or future signalized) intersection.

Table 4 - Right-in/right-out and Right-in Only Access Corner Clearance at Signalized Intersections Access Level 1		
Posted Speed Limit	Upstream Clearance	Downstream Clearance
30 mph	325 ft.	275 ft
35 mph	425 ft	350 ft
40 mph	525 ft	435 ft
45 mph	630 ft	530 ft
50 mph	750 ft	640 ft
55 mph	875 ft	750 ft

Table 5 - Right-in/right-out and Right-in Only Access Corner Clearance at Signalized Intersections Access Level 2		
Posted Speed Limit	Upstream Clearance	Downstream Clearance
30 mph	215 ft	200 ft
35 mph	270 ft	250 ft
40 mph	335 ft	325 ft
45 mph	405 ft	400 ft
50 mph	480 ft	475 ft
55 mph	565 ft	550 ft

- f. Right-in / Right-out and Right-in Only Driveway Spacing from other Right-in / Right-out or Unsignalized Intersections

The spacing of right-in/right-out and right-in only access from adjacent un-signalized full access intersections or other right-turn only access clearance guidelines are established in Table 6.

Table 6 - Right-in/right-out and Right-in Only Spacing from Other Right-turn Only or Unsignalized Full Access Intersections			
Separation Between Right-in / Right-out Only Access and Adjacent Right-turn Only and Unsignalized Full Access Intersections			
	Opposite Side	Same Side	
Posted Speed Limit	All Levels (ft)	Access Level 1 (ft)	Access Level 2 (ft)
30 mph	300	275	225
35 mph		325	275
40 mph		375	300
45 mph		425	350
50 mph		475	375
55 mph		525	425

Subject to the provision that the upstream right-in / right-out only driveway does not fall within the limits of the left-turn taper and storage for the opposite side driveway.

The separation upstream or downstream from adjacent driveways or minor unsignalized intersections is based on the provision of sufficient separation to eliminate right-turn overlap conflicts. An access or intersection either upstream or downstream on the opposite side of the street may cause a potential weaving movement conflict between accesses. Additionally, in the case of a right-turn only access upstream of an opposite side full access or intersection, sufficient separation should be provided to insure that the right-turn only access does not fall within the limits of left-turn taper and storage for the opposite side access or intersection.

If it is likely the unsignalized intersection in question may be signalized in the future, the County Engineer will require the spacing to conform to the guidelines for signalized intersections.

g. Right-in / Right-out and Right-in Only Access Design

Left-turn movements from right-turn only access shall be controlled by barrier medians constructed along highway centerlines and/or by channelizing islands and signing on the access as determined by the County Engineer. Barrier medians shall be required on arterials. However, if determined by the County Engineer that a barrier median is not desirable, a right-turn only access design approved by the County Engineer and supplemented with signing may result in effective left-turn control. The entire cost of any required barrier median shall be paid by the Applicant.

Turn Lane Improvements

As determined by the County Engineer, turning lanes (consisting of an approach widening, turn bay taper, and a full width auxiliary lane) for either right or left turns into an abutting property shall be provided. While traffic studies are required and considered in the determination by the County Engineer, generally most Applicants requesting access to arterials will be required to construct turning lanes. Turning lanes are required for all Minor and Major Access requests to County freeways and all Major Access requests to County highways.

If the construction limits of an access driveway permit improvement to widen a County highway falls within 500 feet the construction limits of an existing widened section of County highway, the full width widening for the new access driveway shall be extended to meet the existing full width widened section of County highway. This is necessary to maintain continuity and lane alignment for safety of the motoring public. All turn lane improvements shall be paid by the Applicant.

a. Right-Turn Lane Warrants

Right-turn deceleration lane warrants for two-lane and four-lane highways at highway access points (driveway or street intersections) are contained in Table 7 and Table 8. These guidelines were developed for unsignalized access points and will be applied as a guideline for signalized access as well. The installation of right turn deceleration lanes will be required for all access points to a County freeway and all Major Access to any County highway.

The length of right-turn lanes (storage plus taper) for unsignalized access points, where warranted, should be based on the distance required for a vehicle traveling at the highway's posted or operating speed to reach a desirable turning speed for the right-turn maneuver (i.e. the right-turn lane functions exclusively for deceleration and hence the full length of storage and taper can be used for this purpose). In the case of a signalized access point, queuing considerations demonstrated by an Intersection Design Study prepared by a Licensed Professional Engineer will determine the length of storage and taper and typically result in higher values than those based on deceleration alone. In either case, the use of a minimum taper length of 180 feet is required, with the full width storage lane varying according to deceleration or queuing needs, with a minimum storage length of 150 feet.

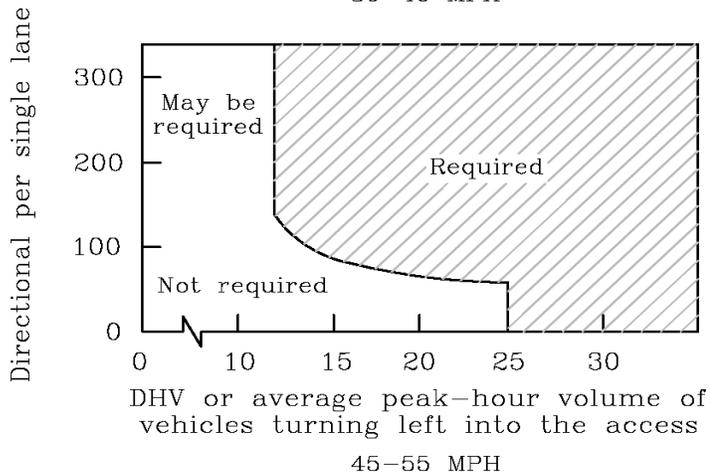
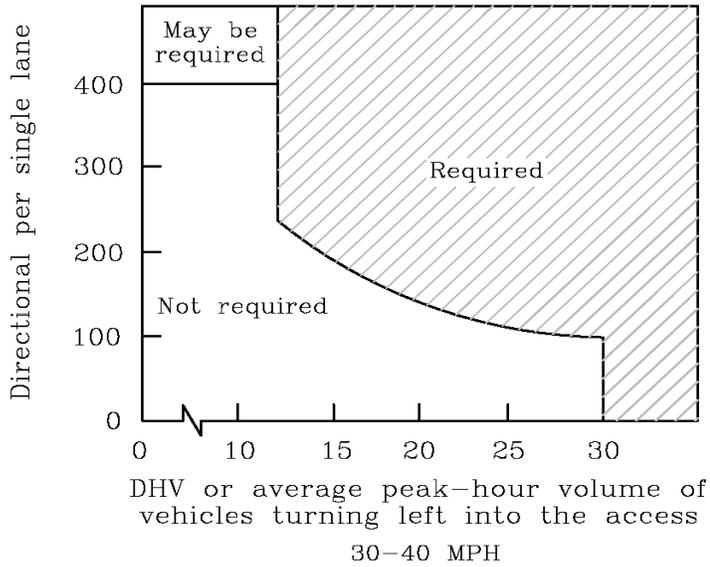
Table 7 - Right-turn Lane Guidelines for Two-Lane Highways					
Minimum Right-turn Volume Warranting Exclusive Lane (vph)					
	Posted Speed Limit – mph (km/h)				
Approach Lane Vol. (vph)	35	40	45	50	55
	(56)	(64)	(72)	(81)	(89)
200	--	--	75	35	20
300	--	120	40	25	15
400	200	50	30	20	10
500	50	25	20	15	10
600	25	15	15	10	10
800	15	10	10	10	10
1200	10	10	10	10	10

Table 8 - Right-turn Lane Guidelines for Four-Lane Highways					
Minimum Right-turn Volume Warranting Exclusive Lane (vph)					
	Posted Speed Limit – mph (km/h)				
Approach Lane Vol. (vph)	35	40	45	50	55
	(56)	(64)	(72)	(81)	(89)
300	--	--	--	75	20
400	--	40	40	40	15
500	--	40	40	30	15
600	40	40	40	25	10
800	40	35	30	20	10
1200	25	20	20	15	10
1600	15	15	15	10	5
2000	10	10	10	10	5

b. Left-turn Lane Warrants

Left-turn deceleration lane warrants for two-lane and four-lane highways at highway access points (driveway or street intersections) are contained in Table 9 and Table 10. These warrants represent the design hourly volume where the benefits of a left-turn lane (accident reduction, operating savings) exceed the cost of construction. These guidelines were developed for unsignalized access points and will be applied as a guideline for signalized access as well. The installation of left-turn deceleration lanes will be required for all full access points to a freeway. The installation of left-turn deceleration lanes will be required for all full access points to an arterial where there are more than 12 left turns per peak hour. Left turning volumes in excess of 250 vph will generally require the installation of dual left turn bays at signalized intersections.

TABLES 9 & 10
Warrant Guidelines for Left-turn Lanes



c. Driveway/Street Throat Length

Sufficient length of uninterrupted throat length for streets and driveways intersecting highways is required for:

- efficient operation of signalized access points;
- the provision of adequate distance and time for inbound drivers to react to a site's internal traffic activity; and
- to prevent spillback onto the adjacent collector or arterial highway.

Determination of driveway throat length is a function of inbound entry speed and driveway traffic volume (inbound, outbound and at internal cross-access aisles), outbound queuing or stacking demand, and various environmental factors such as driveway grade, signing, etc. A queuing analysis by means of a trip generation must be conducted for the proposed land development by a Licensed Professional Engineer.

The minimum throat length for accesses, including streets, which intersect a County highway, is shown on Table 11 below. The desirable throat length for signalized Major Access points shall be determined as the length of calculated outbound storage or stacking on the approach to the County highway. The construction of a barrier median will be required on Full Access points along a Freeway. A "No Access Easement" granted to the County shall be required to protect these throat length requirements. These throat length requirements may be reduced by the County Engineer if a Traffic Study in support of the reduction is provided by the Applicant.

Table 11 - Minimum Access / Street Throat Length		
Access Traffic Generation	Level 2 & 3 - Minimum Throat Length (ft)	Level 1 - Minimum Throat Length (ft)
Minimum Use Access Less than 20 movements / day	60	125
Right-in / Right-out Access	125	250
Full Access	300	500

Intersection Signalization and Street Lighting

a. Signals

- i. As determined by the County Engineer, with consideration of a traffic study prepared by a qualified Licensed Professional Engineer, traffic signals shall be installed at highways or driveways to facilitate outbound left turn and through traffic movements. Signalization must meet appropriate warrants set forth in the most current version of the MUTCD.
- ii. Signalized intersections shall be spaced to maintain the efficiency of traffic flow on the through highway. Signals where isolated operations are proposed shall generally be spaced one-half (1/2) mile or more apart. Signals spacing of one (1) mile or less shall be interconnected to provide an efficient traffic flow.

- iii. Where traffic signals are required to serve a private development, and are anticipated to meet traffic warrants, the entire cost for the installation, interconnection, modernization, emergency pre-emption, battery backup, maintenance, energy charges and optimization for the signals shall be the responsibility of the Applicant. However, the permit must be issued to a municipality to provide for electrical energy and /or future maintenance obligations.
- iv. To prevent excessive green time allocated to the driveway at the expense of the arterial highway through movements, vehicle detection with a presence feature shall be used on all approaches.
- v. Whenever possible, intersections to be signalized must fit into the signal progression patterns along the highway. Hence, the decisions for locations of signalized intersections should be made part of an arterial corridor plan. When modifying an existing signal system, the re-optimization of the system is the responsibility of the Applicant.

The installation of traffic signals will only be considered on the basis of the MUTCD warrant guidelines. The County Engineer will consider using IDOT District 1 procedures for adjusting right-turn approach volume depending on the type of intersection channelization, right-turn approach volume, and opposing or conflicting major street flow.

It is the responsibility (at their sole cost) of the permit Applicant or their successor to collect and submit such traffic counts or accident record analysis as may be necessary to evaluate signal warrants. This collection and submittal of data is to be performed at a minimum of six-month intervals or as requested by the County Engineer.

b. Highway Lighting

Highway lighting shall be installed by the Applicant in accordance with IDOT District 1 General Guidelines for Lighting Design and Plan Preparation and approved by the County Engineer as follows:

- i. Unsignalized intersections on County highways – beacon lighting shall be provided.
- ii. Signalized intersections on County highways, other than County freeways – provide intersection lighting with combination mast arm assemblies and poles.
- iii. Signalized intersections on County freeways – provide intersection lighting and approach lighting on all approaches.

- iv. As may be otherwise determined by the County Engineer.
- v. Continuous lighting will be provided on an approach, if the approach lighting ends within 500 feet of another lighting system.

For all signalized intersections, the permit must be issued to a municipality to provide the energy costs and future maintenance costs for the highway lighting. The performance of maintenance will be by KDOT with bills or invoices for this work forwarded to the municipality.

All materials used in the highway lighting shall be approved by the County Engineer.

c. Pedestrian / Bicycle Signal Heads with Push Button Actuation

Pedestrian / bicycle push button actuated signal heads at traffic signal installations shall be required when the MUTCD “pedestrian signal warrant” is met or as otherwise determined by the County Engineer. In addition, pedestrian actuated signal heads at traffic signal installations may be required under the following conditions:

- i. If Warrant 4 (Pedestrian Volume) or Warrant 5 (School Crossing) warrants are met.
- ii. If a protected signal phase is provided for pedestrians in one or more directions with all conflicting vehicular movements stopped.
- iii. An established school crossing at any signalized intersection where it is determined that pedestrian signal heads are required to minimize pedestrian-vehicle conflicts.
- iv. When the intersection presents visual or operational problems for use by pedestrian or bicyclists and would include; split-phase timing, no vehicular signal indications available to pedestrians (one-way streets or T-intersections), or complex, multiphase intersections, where highway geometry and channelization requires crossing the intersection in stages. These site-specific factors would include traffic signal installations with protected only (green arrow) phasing in conflict with the pedestrian crossing, wide intersections where signal indications are confusing to pedestrians or where crossing distances (and times) are large, and intersections where significant numbers of pedestrians, especially the young and the elderly, are anticipated.

Table 12 - Pedestrian or Bicyclist Actuation Installation Guidelines	
Guideline	Criteria
1. MUTCD Signal Warrants 3 or 4 Are Met	See MUTCD.
2. Minimum Pedestrian Crossing Volume	25 crossings/hr. 10 crossings/hr. (where $\geq 50\%$ of users are elderly or children)
3. Safe School Route Crossing	Designated on Safe School Route Plan.
4. Engineering Study	Complex physical or operational issues.

Abutting Property Land Use and Site Development Characteristics

The development characteristics of property adjacent to a County highway are an integral part of a safe and effective access control program. Technical and physical improvements to the highway and driveway system alone cannot ensure the orderly and safe movement of traffic when adjacent land uses have poor internal site circulation, or when such land uses generate increases in traffic volumes beyond the capacity of area highways. Cooperation between government agencies, municipalities, and communities to coordinate land use development along highways is required.

- Effective corridor development plans may be required which recognize the need for a balance of transportation and access, and the desire to minimize land use and zoning conflicts. Developing cross access easements and streets at the rear of developments, which will serve as access to store service/delivery areas, as well as providing access between adjacent developments will be required. Generally, cross access easements, streets and other collector highways will require a minimum width of 30 feet, shall be properly illuminated, striped (pavement marking), and signed.
- Corridor development in the vicinity of freeway ramp interchanges should balance the goal to yield the maximum utilization of the surrounding area's potential land use, with the need to provide access control to promote safety and traffic flow. Illinois State Toll Highway Authority input shall be required with regard to planned developments adjacent to freeway interchange ramps. Illinois State Toll Highway Authority approval is required with regard to any access request within 1000 feet of a ramp intersection.
- Potential land use should be determined from the access needs that it requires. Should projected trip generation values warrant access needs that cannot be accommodated without compromising the safety and efficiency of highway operation, a change in density or of land use should be made.

The following elements shall be reviewed as part of the access permit review process:

- Safety considerations.
 - Regional impacts to the highway system.
 - Internal circulation as it affects the ingress or egress to site.
 - Aesthetics of the improvements on the County right-of-way.
 - Right-of-way requirements
 - Pedestrian/bicycle/mass transit circulation
- a. Internal Circulation - When property abutting a highway is to be developed, direct access to a highway shall not be used in lieu of an adequate internal traffic circulation system. An internal integrated access plan should identify the internal or integrated access used (ring road, frontage road, cross access easements to and from adjacent properties, access to another highway, etc.) and should consider overall traffic circulation, drive-in facility stacking and parking space capacities, internal turning movements, and projected trip/parking generation rates. Appropriate on-site provisions for internal traffic movements to provide favorable traffic circulation, drive-in facility stacking and parking space capacities, internal turning movements, and projected trip/parking generation rates. No parking is permitted along a collector or arterial highway or within the right-of-way of a collector or arterial highway. Provisions for parking shall be made outside of the highway right-of-way.
- b. Aesthetics of the improvement on the County right-of-way - A detailed plan prepared by a qualified Licensed Professional Engineer or Licensed Landscape Architect for landscaping within the County right-of-way may be required for access permit improvements that involve substantial grading within the County right-of-way. This plan may include trees, bushes and shrubs, and the use of native plant species is required where appropriate. Use of aesthetic highway lighting poles and the underground placement of overhead utility lines may be required by the County as part of access permit construction work.

Where proposed land uses along arterial roads may conflict with the noise and vibration characteristics of the arterial, generous building setbacks and landscape buffering and screening facilities may be required to provide the appropriate noise and visual shield.

Right-of-Way

Freeways shall have a minimum right-of-way width of 170 feet to a maximum of 200 feet, (85 feet to 100 feet half right-of-way width). Arterials shall have a minimum right-of-way width of 120 feet, (60 feet half right-of-way width). However, some arterial highways may require right-of-way widths of up to 150 feet, (75 feet half right-of-way widths). Collector highways (primarily township roadways) shall have a minimum right-of-way width of 80 feet to a maximum of 120 feet, (40 feet to 60 feet half right-of-way width). Local roads shall have a minimum right-of-way width of 66 feet. Some right-of-way widths may need to be increased by

10 to 15 feet to accommodate bicycle / pedestrian improvements. For a complete list of highways in the County and their jurisdictional classification, see “Roadway Jurisdictional Classification” in Section 8 of this manual.

If property abutting a highway is to be subdivided or an access point is requested, the Applicant/owner shall be requested to convey, at no cost to the appropriate highway authority, by warranty deed or Trustee’s deed if applicable, in fee simple free of all liens and encumbrances any land necessary to satisfy the right-of-way requirements as stated herein from the centerline of the highway along the entire frontage of the property. Right-of-way conveyances shall be required to address various safety issues such as, but not limited to, the preservation of sight line distances, the establishment of required clear zones along the highway, creation of safe radius returns and maintenance of the highway facility. Where the width of the highway right-of-way is insufficient to permit the construction of a turning lane required by the proposed access or subdivision, the Applicant shall acquire and convey to the appropriate highway authority any necessary additional right-of-way to accommodate the turning lane. At intersecting right-of-way lines, a triangle of property with dimensions of 30 feet along each right-of-way line shall be provided by the property owner / Applicant for preservation of site line distances. For major access facilities, the minimum triangle at the intersecting right-of-way lines shall be 50 feet.

Upon completion of any construction work within the right-of-way, the right-of-way shall be restored to a condition acceptable to the County Engineer. No fences, trees, columns, walls, rocks, debris, or any such materials shall be permitted within the right-of-way. In those instances where additional right-of-way is being conveyed to the County as required by these regulations, brush, fences, rocks, objects, and other such obstacles shall be removed or relocated beyond the new right-of-way lines by the Applicant. However, landscaping, trees, bushes, and plantings may be installed within the right of way provided an appropriate landscape plan is provided and sight distance is not impeded, and clear zones are not violated. The landscape plan shall be approved by the County Engineer.

Highway and Utility Easements

Highway and Utility Easements with a minimum width of 15 feet may be requested along all highway rights-of-way to safely accommodate the expanding infrastructure of development and public needs.

Pedestrian/Bicycle/Mass Transit Considerations

Pedestrian traffic should be directed to and from major crossroad intersections where crossings can be accommodated by the existing traffic signals and mass transit connections can be provided from either highway. The development of sidewalks, walkways and bikeways where pedestrian and bicycle traffic between adjacent land uses is expected will be required. Internal circulation of pedestrian traffic within the development should also be encouraged. The AASHTO Bicycle Design Guide shall be used in the development of any bicycle facilities permitted within the County right-of-way.

Drainage

Storm Water Detention/Retention

Storm water Detention/retention requirements shall be in accordance with the Kane County Stormwater Ordinance. Berms and detention/retention facilities shall be located in compliance with 605 ILCS 5/9 115.1. Where access permit plans include widening or other improvements that increase the impervious area within the right-of-way, the Applicant shall demonstrate this additional increase in run-off is accommodated in the storm-water planning for the development. Along County highways, the volume of detention, provided on the site by the Applicant shall include the volume for a 100-year storm for the additional impervious surface for the 20-year planned design of the freeway or highway. For the 20-year plan design, County freeways will be considered as six (6) lane facilities and all other County highways will be considered four (4) lane facilities.

In addition to meeting the requirements of the Kane County Stormwater Ordinance, the Applicant will be required to work with KDOT on correcting existing highway flooding adjacent to the area being developed.

Compliance with the Kane County Stormwater Ordinance

The Director of KDOT is responsible for administrating the Kane County Stormwater Ordinance within the County right-of-way whether incorporated and unincorporated, and Township right-of-way. For the purposes of the Stormwater Ordinance, any impact to the right-of-way will be considered comprehensively with the other project work proposed to occur off the right-of-way. Therefore, the Applicant must secure approvals from the Director of KDOT for the right-of-way work, as well as the governing agency for the off right-of-way work, whether it be to the Water Resources Department for the unincorporated areas or a municipality for an incorporated area, in order for the proposed work to proceed under the requirements of the Kane County Stormwater Ordinance.

Crossroad Culverts

Existing corrugated metal pipe crossroad culverts shall be replaced with a new culvert constructed of reinforced concrete pipe (RCP). The new culvert shall be constructed with concrete flared end sections and grates having a minimum diameter of eighteen (18) inches.

Irrigation Systems

Irrigation systems use for watering landscaping will be allowed within the County right-of-way with the approval of the County Engineer. Irrigation systems constructed in the parkway may be of the “pop-up” type. Irrigation systems placed in the medians shall be of the “drip” type system.

All cost associated with the construction, operating and maintenance of the irrigation systems within the County right-of-way shall be by the Applicant, property owner or municipality.

Improvement of Existing Adjacent Roads

In order to provide safe highways, the County Engineer will review development traffic impacts to consider if existing infrastructure is adequate to accommodate the proposed development. When recommended by a traffic study, or as determined by the County Engineer, off-site improvements such as turn lanes, highway widening, and other improvements to address the safety and welfare of the public and to maintain the level of service, shall be provided at the Applicant's expense for highways and intersections adjacent or in close proximity to the development. If improvements cannot be immediately accommodated due to constraints such as right-of-way or other limiting factors, the County Engineer may consider other options such as the Applicant depositing funds with the County Treasurer to be utilized by KDOT for future implementation of appropriate improvements to the right-of-way or intersection in close proximity to the development.

Escrow Accounts

If it is determined that future improvements to a County highway may be necessary as a result of the construction of an access driveway (i.e. a Traffic Impact Study prepared for a development staged or phased over a period of years concludes that turn lanes at an adjacent intersection or a traffic signal/signal interconnection is not currently warranted but will be warranted as subsequent stages or phases of the development are completed), the Applicant shall be responsible for all costs of the future improvement to a County highway as a result of the access driveway. Funds sufficient for the future improvements to the County right-of-way shall be deposited with the County Treasurer in escrow to pay such costs.

The deposit shall occur prior to the issuance of any access or construction permit associated with the property. The amount to be in escrow shall be equal to the current estimated cost of the improvement plus thirty percent (30%) of the cost for the administration of the future improvement.

G. Design Requirements

Design Standards and Specification

The design of access points and accompanying highway improvements shall comply with the requirements of the County Engineer. The standards and specifications set forth in these regulations are to ensure a safe and efficient highway system for the motoring public. In the absence of specific guidance within these regulations or from the County Engineer, the most current IDOT and AASHTO policies shall govern.

IDOT Publications

- Standard Specifications for Road and Bridge Construction
- Supplemental Specifications and Recurring Special Provisions and Interim Special Provisions
- MUTCD for Streets and Highways
- IDOT, BDE Manual
- Manual of Policies and Procedures
- Administrative Policies
- Guide to the Hydraulic Design of Bridges and Culverts on Local Systems
- Manual of Instruction for the Structural Design of Flexible Pavements
- Coded Pay Item Book (Bureau of Design)
- Highway Standards
- IDOT Bicycle Policy

AASHTO Publications

- A Policy on Geometric Design of Highways and Streets (AASHTO Policy On Geometric Design of Highways and Streets, most current edition)
- Guide for Selecting, Locating and Designing Traffic Barriers
- Highway Design and Operational Practices Related to Highway Safety
- AASHTO Guide for the Development of Bicycle Facilities

Kane County Publications

- Kane County Permit Regulations
- Kane County “Year 2020 Transportation Plan”.
- Kane County “Comprehensive Stormwater Ordinance”
- Other Kane County Studies / Reports Applicable to the Proposed Access
- Kane County Subdivision Policies
- Kane County minimum Design Standards

Design Speed

The design speed to be used for designing improvements on highways shall be considered to be a value 5 MPH above the posted or regulatory speed of the highway to which the improvement is being made. The design speed may be adjusted at the discretion of the County Engineer.

Intersection and Driveway Sight Distance Requirements for Highway Access

An access shall be located at the point of optimum sight distance along a property frontage. The placement of an access on a horizontal curve or just below the high point of a crest vertical curve on the highway shall be discouraged. If sight distance is questionable, a sight distance study performed in accordance with Chapter III (Criteria for Measuring Sight Distance) of the most current edition of the AASHTO “Policy On Geometric Design of Highways And Streets” shall be submitted by the Applicant for review.

The distances listed in Table 13 shall be goals to meet or exceed when positioning an access along the property frontage. Should these sight distances be physically unobtainable, then the access shall be at a location that provides the sight distance closest to that required, provided that the minimum stopping sight distance, as listed in Table 14, is met or exceeded. In such cases where other highway variables, such as grade, highway geometrics, existing and projected traffic volume, or roadside obstacles, may influence safety, it will be at the discretion of the County Engineer to determine whether adequate sight distance exists regardless if the requirements in Table 14 are met or exceeded.

TABLE 13 - Sight Distance For Access	
Design Speed (mph)	Distance Required (feet)
30	535
35	625
40	715
45	800
50	890
55	980
60	1125

Notes:

1. Driver’s eye height shall be 3.5 feet above pavement edge
2. Driver’s eye shall be 17 feet back from pavement edge.
3. Object height (approaching vehicle) shall be 2.0 feet above center of traffic lane.
4. Sight distances are based on vehicle leaving intersection frontward (not backing onto highway).
5. Design speed is considered to be the posted speed limit plus five (5) mph.

TABLE 14 – Minimum Stopping Sight Distance For Access	
Design Speed (mph)	Distance Required (feet)
30	200
35	250
40	305
45	360
50	425
55	495
60	570

Notes:

1. Driver's eye height shall be 3.5 feet above pavement edge
2. Driver's eye shall be 17 feet back from pavement edge.
3. Object height (approaching vehicle) shall be 2.0 feet above center of traffic lane.
4. Sight distances are based on vehicle leaving intersection frontward (not backing onto highway).
5. Design speed is considered to be the posted speed limit plus five (5) mph.

The County Engineer shall review the sight distance constraints on a site-specific basis and may require the use of deceleration lanes to benefit access/highway safety operation. If it is determined that inadequate sight distance exists for any turning/crossing movement(s), the access shall be designed to prohibit such movements by the use of channelizing islands, signs, and pavement markings as may be required by the County Engineer.

If it is determined that safe sight distance is not available at any location along the frontage of a property, access may be allowed, at the Applicant's expense, in one of the following ways:

- a. Redesign or reconstruction of the existing highway to correct sight distance deficiency.
- b. Develop access to another highway (in the case of corner properties).
- c. Develop indirect access via a frontage road.
- d. Develop indirect access via the acquisition of an access easement from an adjacent property.

Access Design Widths and Standards

Access widths and radius design standards shall be appropriate for the type and volume of traffic using the access. Most Minimum Use and Minor Accesses shall have a width between 12 feet and 24 feet. The County Engineer shall approve the required width. The width should accommodate for adequate radius returns to allow for smooth ingress and egress at the highway connection. Where an Agricultural Access is to be used by large farm equipment, a width of 30 feet should be used. When applicable, permits may be issued for common residential entrances to service adjacent properties. These entrances shall be centered on the property line and shall not exceed the 24-foot maximum width. The permit will be issued jointly to the two property owners and must be executed by both owners.

Major Accesses may have a maximum width of 36 feet when undivided or, if divided by a median, the access width shall be appropriate for the type and volume of traffic using the access. The County Engineer shall approve the required width. The number of lanes exiting from the development and turning in one direction shall not exceed the number of available traffic lanes

on the highway in that direction. For example, if the exit is onto a two lane two-way pavement, no more than one lane will be allowed to exit at the same time in each direction. This may need to be factored into the intensity of land use or the Applicant may be required to widen the highway to accommodate the turning movements.

Radius Return

The radius returns used to connect the access to the highway shall fall entirely within the right-of-way. This may require additional conveyance of right-of-way. In limited cases, the radius may be permitted to go outside the right-of-way if raised curbing extends into the private property. The radii will generally be 15 feet for a Minimum Use access and between 30 and 50 feet for all other accesses, except for two or three-centered-curves, which may have larger radii. The entrance to a development shall generally require adequate radius returns, driveway widths, and deceleration / turning lanes to ensure a high quality of service for through traffic and improved safety on the highway. Smooth and unrestricted entry for driveway traffic shall be a goal. The radius will be designed to accommodate the largest vehicle expected to use the access.

The design vehicle for County freeways shall be as designated by AASHTO WB-65. The minimum design vehicle for all other County highways shall be a SU 30 (school bus) unless otherwise approved by the County Engineer.

Angle of Intersection

The access center line should generally be at a right angle to the pavement edge and follow this angle from the highway to the right-of-way line or a distance of 50 feet from the edge of pavement, whichever is greater. No access shall be placed that will have a centerline angle measured from the highway less than 80 degrees unless approved by the County Engineer. If an approach angle less than 90 degrees must be used on an access, the access return radius and/or width should be increased facilitate ingress and egress maneuvers.

Islands

Channelizing Islands - When an exclusive left turn lane is to be used for an access, channelizing islands shall be used for delineation. Median widths of 16 to 18 feet permit reasonably adequate arrangements at left turn lane facilities. The minimum width of the channelizing island shall be 4 feet. This can be provided within a median 16 to 18 feet wide and a turning lane width of 12 feet. Curb and/or painted channelizing islands may be used subject to the access width and design speed of the highway.

Island Nose Offsets - For curbed islands a minimum 4 feet for single left turn lane and minimum 6' for dual left turn lanes in width. The curbed nose can be offset from the opposing through traffic lane 2 feet or more, with gradual taper beyond to make it less vulnerable to contact by through traffic. The shape of the nose for curbed dividers 4 feet wide should be semicircular, but for wider widths, the ends are normally shaped to a bullet nose pattern to conform better to the paths of turning vehicles.

Island Visibility - Corner islands and access medians shall be visible both during day and night. The curb line of raised islands and median dividers should be painted with beaded paint. Raised reflectorized markers, object markers, and warning or regulatory signs may be required to aid in visibility and traffic channelization. There should also be a natural color contrast between the pavement and the island.

Regulatory Signing for Islands - Regulatory signing and/or pavement markings must be used along channelizing islands to effectively and legally prohibit particular vehicle movements.

Medians

Where a divided access for entering and exiting traffic is utilized, the median shall be between 4 and 18 feet wide and extend into the property as far as necessary to promote smooth traffic patterns. The median shall begin at the edge of the normal shoulder in an uncurbed section or 4 to 10 feet from the face of the curb in a curbed section. Landscaped medians will be considered if the municipality accepts all maintenance responsibilities.

Median Visibility - Channelizing medians shall be highly visible both day and night. The curbing of raised islands and median dividers should be painted with beaded paint. Raised reflectorized markers, object markers, and warning or regulatory signs may be required to aid in visibility and traffic channelization. There should also be a natural color contrast between the pavement and the median. Lighting will be permitted provided the municipality agrees to provide energy and all maintenance responsibilities.

Corner Islands and Driveway Median - At high volume major access driveways, it may be desirable to control or confine particular maneuvers by the installation of corner islands and median dividers for two-way driveways.

Access Profile, Culverts and Mailbox Turnouts

All accesses constructed in rural locations shall have a grade that slopes away from the highway surface at a rate equal to the slope of the shoulder but not less than 3/16 inch nor greater than 1 inch per foot. This slope shall continue for a distance at least equal to the prevailing shoulder width of the highway. The maximum difference between the downward cross slope of the shoulder and the upward slope of the driveway towards the right-of-way should not exceed 8.0 percent. The access should follow existing grades and slope away from the pavement. However if adjacent land is higher than the pavement it is desirable that the driveway slope upward from the edge of shoulder or the ditch centerline for rural driveways on a straight slope (no vertical curve) at least 10 feet long for residential driveways and 40 feet long for commercial and industrial access. The same physical limitations should apply to highways with a curb and gutter cross section with the driveway grade beginning at the gutter line. The grades used for rural and urban access shall permit facilities that will accommodate the flow of the drainage in the vicinity of the driveway and should be designed so that future widening would not require reconstruction of the intersection. Such facilities shall be the responsibility of the Applicant.

Mailbox turnouts shall be provided at all accesses onto County and township highways. The standard detail for a mailbox turnout is included in this section.

Culverts for access locations shall be as shown in the Minimum Culvert Size table below or as directed by the County Engineer. The table below shows the minimum culvert requirements for each of the access types.

Minimum Culvert Size For Access Locations			
Access Type	Minimum Size	Up to 24"	Over 24"
Agricultural	15"	CMP	RCP
Temporary	15"	CMP	RCP
Minimum Use	15"	CMP	RCP
Minor	18"	RCP	RCP
Major	18"	RCP	RCP
Notes:			
1. All Corrugated Metal Pipes (CMP) shall be installed with metal end sections for pipe culverts.			
2. All Reinforced Concrete Pipe (RCP) shall be installed with precast reinforced concrete flared end sections and grating.			
3. All materials shall conform to IDOT Standard Specifications.			

Shoulders, Curb and Gutters, Bikepaths and Sidewalks

The highway shoulders adjacent to driveways being constructed pursuant to the permit shall be designed to the specifications of the County Engineer. Should a commercial or industrial access connect with a highway that has an urban cross section complete with curb and gutter, the driveway shall be provided with a concrete curb and gutter per County Engineer specifications for full length of curb return to at least the right-of-way line.

All sidewalk or bike paths allowed to be constructed within the County right-of-way, shall be constructed approximately one (1) foot from the right-of-way line, follow existing land contours and elevations as closely as possible and include provisions for ramps at intersection locations that meet the requirements of the ADA.

Cross-Section and Material

a. Access Cross-Section

For public safety reasons, accesses and access returns must be surfaced and well maintained to ensure that the original profile is retained, that operational speeds are not reduced by pot holes or rough surfaces, and that no damage to or deterioration of the highway pavement is caused by the condition of the access. All accesses shall at a minimum be surfaced from the

highway edge to the right-of-way line. Additional pavement surfacing, internal to the development, shall generally be required for accesses serving developments larger than a single family home. Unsuitable material must be removed and replaced with the proper base material. The type of material and thickness shall be determined by the County Engineer and will depend primarily on the intended use of the driveway, as well as the proposed volume and types of vehicles using the access.

Minimum Use Accesses will be required, at a minimum, to be surfaced with a specified thickness of gravel or crushed stone. In urban areas, a bituminous or concrete surface shall be required for all residential and Minimum Use Accesses. All Minor and Major Accesses shall be required to have a bituminous or portland cement concrete surface on an approved base material.

b. Widening of Highways

When existing highways are to be widened to accommodate a proposed access, the design of the access and highway pavements shall be in accordance with IDOT Policies for Flexible or Concrete Pavement Designs or to the KDOT Minimum Design Standards. The final design will need to be reviewed and approved by the County Engineer. For safety reasons, all highway widening and improvements required for an access shall yield through lane widths of 12 feet. At improvements to intersections with existing lane widths less than 12 feet, widening to 12-foot lanes shall be required. An adjustment to the limits of construction on the highway may be needed to accommodate pavement width transition lengths. In addition, the following requirements shall be met:

- i. The existing edge of pavement to be widened shall be saw-cut one (1) foot to full depth to obtain a clean vertical face.
- ii. The depth of the widening shall be based on the highway classification and ADT of the highway being widened. A Geotechnical Report containing pavement core information of the existing pavement structure is required on all widening projects.
- iii. If during the design phase, the pavement investigation indicates that the existing pavement structure is less than eight (8) inches in total thickness, the Applicant shall notify and work with KDOT to determine whether or not the existing pavement structure will be adequate for the improvement being done or if corrective measures will be required to meet the minimum existing pavement structure thickness.
- iv. If a pavement investigation was not completed during the design phase and during construction it is determined that the existing pavement structure is less than eight (8) inches in total thickness, the work shall be suspended and KDOT shall be notified of this condition. The Kane County Department of Transportation may require pavement cores or opening of the highway pavement to determine the average thickness of the existing pavement structure. No work will proceed until the County

Engineer has made a determination on the adequacy of the existing pavement structure and if corrective action will be required to the existing pavement structure.

- v. When the widening will alter through traffic travel paths (i.e. turning lane improvements), the existing pavement surface shall be removed and the highway resurfaced with a minimum of 2 inches of Bituminous Concrete Surface Course, of Superpave Design, to obliterate existing wheel paths and pavement markings.
- vi. All access improvements involving the widening of a Freeway or Arterial shall require paved shoulders. Access improvements involving widening of a Collector or Local roadway shall require paved shoulders unless otherwise directed by the County Engineer.
- vii. Strip Reflective Crack Control Treatment shall be installed over the longitudinal joint of the widened pavement.
- viii. The shoulder area between driveways will be required to be widened and surfaced as required by the County Engineer.

Traffic Control

Access traffic control devices such as signs, pavement markings, raised pavement markers, and traffic signals shall be used in accordance with the MUTCD, IDOT and KDOT Policies. Stop signs shall be required for any Minor or Major Access connecting to a County or township highway. Additional guidelines on the use of traffic control devices for accesses are presented herein.

Signing - Signage for driveway operation is most beneficial when the intent of the signage is reinforced by the design and layout of the access (es) and parking areas. Access signage shall not encourage motorists to make difficult or hazardous maneuvers in to or out of the access.

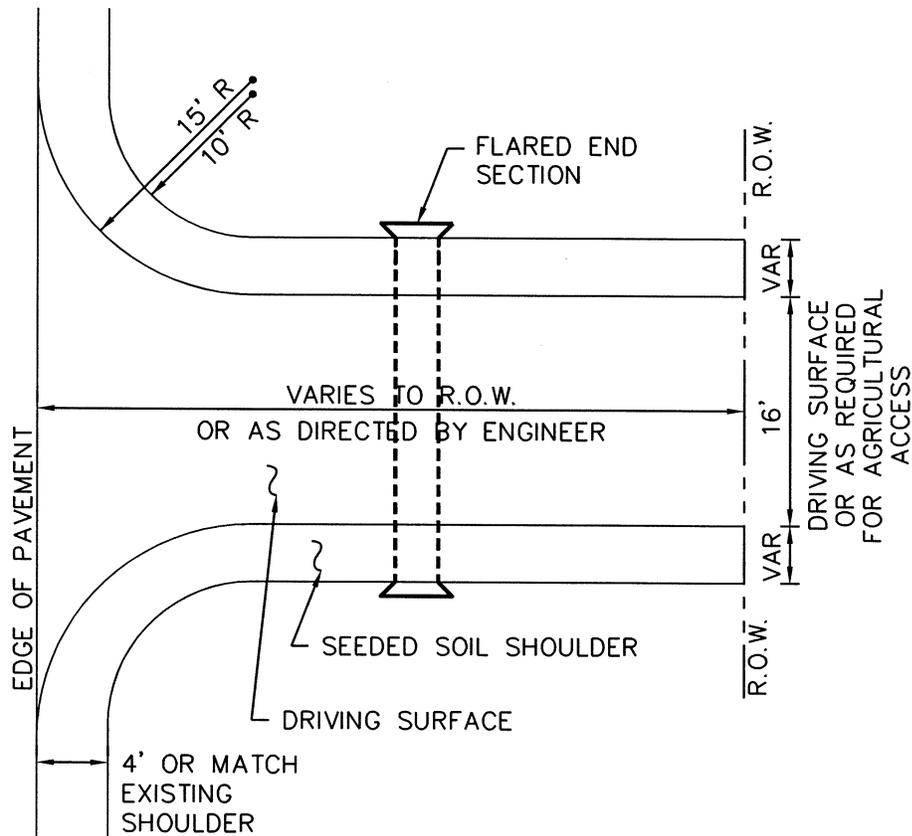
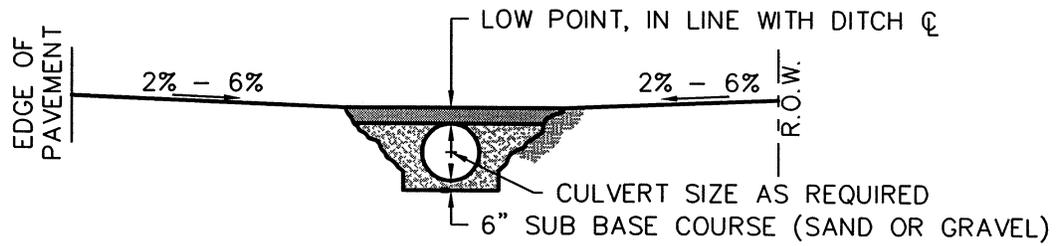
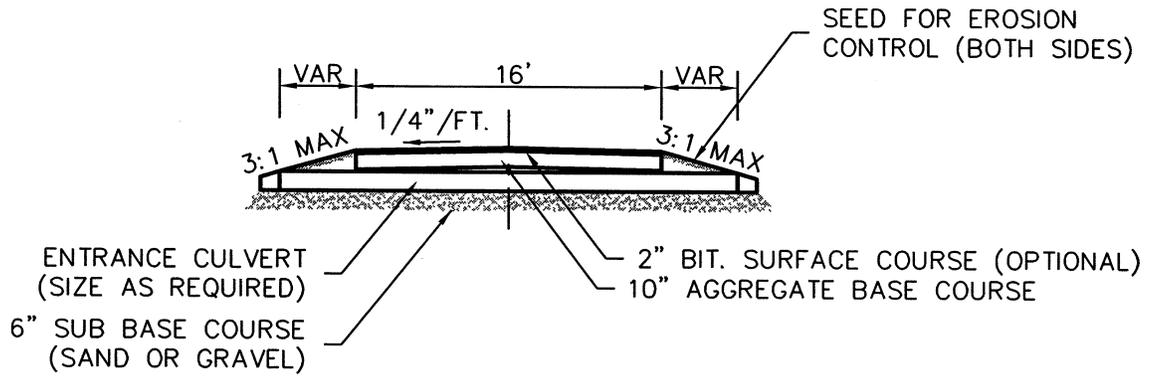
Pavement Markings - A 24 inch wide white stop bar shall be used in conjunction with stop signs at commercial, industrial, and public road accesses. For one-way exit driveways, a 24 inch wide white stop bar placed across the full width of the access shall be used to discourage illegal entries. However, due to the limited visibility of pavement markings when observed from the highway, it is recommended that signs should be used in conjunction with pavement markings to convey information to entry traffic at accesses.

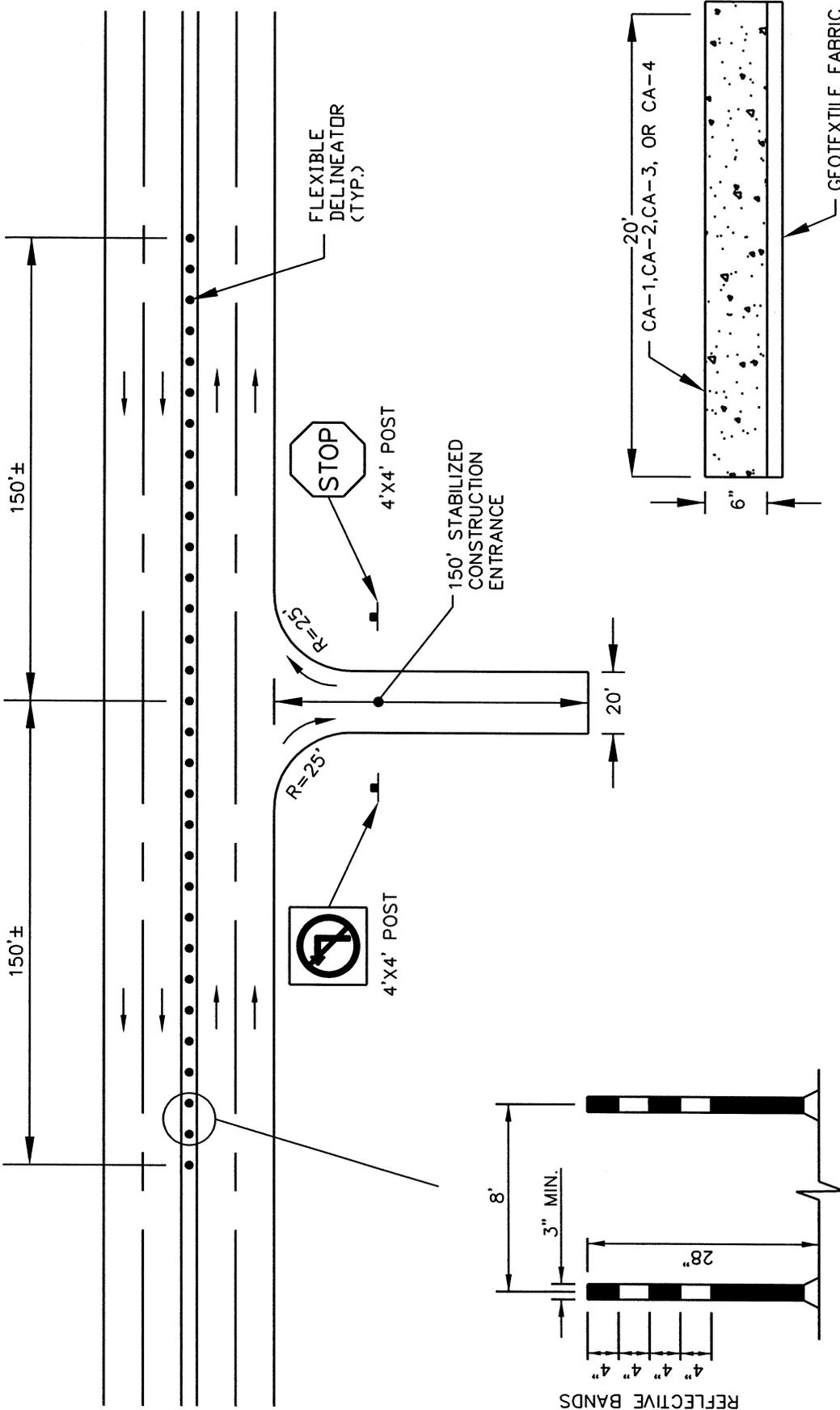
On-Site Design Elements

- a. Parking - On-site parking shall be designed so parked cars on a property do not obstruct the sight distance at a driveway or conceal a driveway to street traffic. Parking within the highway right-of-way or on the highway shoulder is prohibited.

- b. Traffic Circulation - Internal traffic patterns for a development should take into account the overall traffic circulation, drive-in facility stacking and parking space capacities, internal turning movements, and projected trip/parking generation rates. The traffic circulation pattern must be consistent with the type of access operation and should not require on-site traffic to cross or conflict with access traffic or to use the highway via an access as part of the pattern.
- c. Service Fixtures - Services Fixtures such as gasoline pumps, mailboxes, and drive-up windows, shall be placed as far from accesses as practical so that traffic using the service fixtures does not interfere with normal access operation. Adequate and well-defined stacking areas should be provided for service fixtures where the queuing of traffic may occur. These stacking areas should be positioned on the development so waiting vehicles do not block or impede the movement of access traffic.
- d. Service Stations - One of the more common and conspicuous service fixture is the gasoline pump and its foundation island. The minimum distance between the highway right-of-way line and the edge of the gasoline pump island shall be 20 feet.
- e. Drive-up Windows - Favorable operation at drive-up windows is heavily dependent on the provision of adequate and well-defined stacking areas for the drive-up window traffic. All waiting traffic must be stored on private property clear of access and circulation driveways. Applicants for access permits to County highways or freeways for developments which contain drive-in service will be required to furnish the following data, in addition to other information deemed necessary by KDOT.
 - Traffic flow pattern for the facility and, if included, of the service station operation.
 - The total number of off-street stacking spaces for the operation.
 - Information regarding the type of equipment, including the expected hourly output.
 - The number of service operations and amount of time to complete a single transaction as well as anticipated peak hour volume.
 - The hours and days of operation.

TYPICAL MINIMUM USE ACCESS OR AGRICULTURAL ACCESS DETAIL

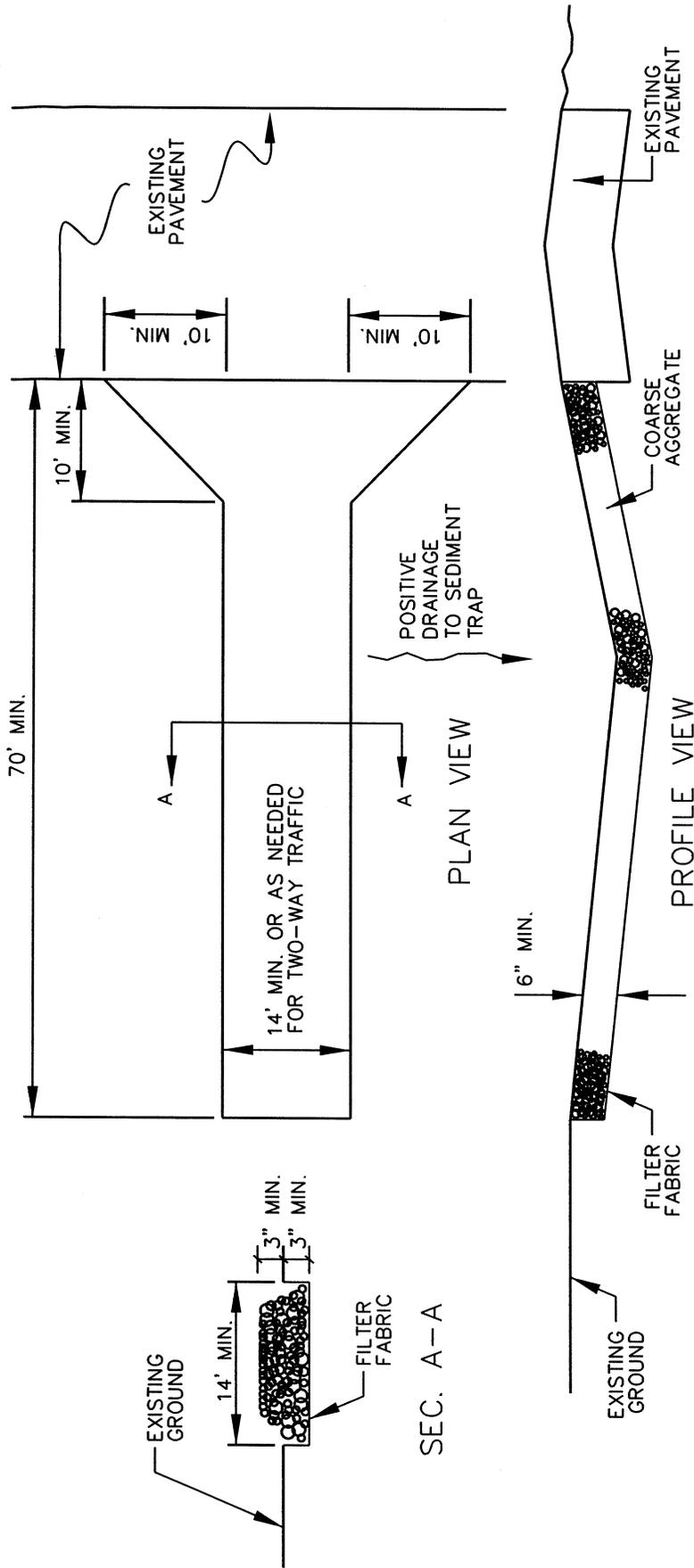




TYPICAL FLEXIBLE DELINEATOR SPACING

KANE COUNTY
 DIVISION OF TRANSPORTATION
 TEMPORARY ACCESS FOR
 COUNTY DESIGNATED FREEWAYS

NOT TO SCALE



NOTES:

1. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 GEOTEXTILE, TABLE 1 OR 2, CLASS I, II, OR IV AND SHALL BE PLACED OVER THE CLEARED AREA PRIOR TO THE PLACING OF ROCK.
2. ROCK OR RECLAIMED CONCRETE SHALL MEET ONE OF THE FOLLOWING IDOT COARSE AGGREGATE GRADATIONS, CA-1, CA-2, CA-3 OR CA-4 AND BE PLACED ACCORDING TO CONSTRUCTION SPECIFICATION 25 ROCKFILL USING PLACEMENT METHOD 1 AND CLASS III COMPACTION.
3. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHALL BE CONSTRUCTED ACCORDING TO MANUFACTURERS SPECIFICATIONS.
4. IF WASH RACKS ARE USED THEY SHALL BE INSTALLED ACCORDING TO THE MANUFACTURERS SPECIFICATIONS.
5. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE, IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
6. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
7. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
8. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

**KANE COUNTY
DIVISION OF TRANSPORTATION
STABILIZED CONSTRUCTION ENTRANCE**

NOT TO SCALE

II. PERMIT APPLICATION FEES

Agricultural Access Permit – The Kane County Division of Transportation will charge an application fee for this work. Standard application fee is \$50.

Temporary Access Permit – The Kane County Division of Transportation will charge an application fee for this work. Standard application fee is \$450.

Minimum Use Access Permit – The Kane County Division of Transportation will charge an application fee for this work. Standard application fee is \$300.

Minor Access Permit – The Kane County Division of Transportation will charge an application fee for this work. Standard application fee is \$2,500.00.

Major Access Permit – The Kane County Division of Transportation will charge an application fee for this work. Standard application fee is \$4,500.

Permit Renewal or Extension – The Kane County Division of Transportation will charge a fee for the renewal or extension of any permit. The standard fee is \$100.

Fees in the form of a check made payable to the Kane County Division of Transportation shall be included with all application.

Review Cost – Temporary and Major Access permits may require additional pass-through consultant-review costs. Permits fees may include a base fee plus other costs and must be discussed with the Permit Section Staff to determine the total fee.

Fines – In addition to the permit application fee, a fine will be assessed when work, event or activity within the County right-of-way has commenced without a permit. The fine will be assessed in the amount equal to the applicable permit fee.

III. ACCESS PERMIT PROCESS

The following steps outline the process required to acquire an Access Permit from the County.

A. Agricultural Access

1. The recommended first step is a pre-application meeting with the County Permit Section Staff to discuss the permit-application requirements. While no plans are required at this time, concept drawings are welcomed.
2. The review process begins with the Applicant submitting the Agricultural Access Permit Application (included herein) and fees.
3. The Permit Section Staff reviews the application for completeness.
4. The application will be logged into a master tracking system to show all stages of the project from the application to the issuance of the Certificate of Compliance and Final Completion. A hard copy, central file system will also be started at this point.
5. The Applicant will submit the required items discussed at the pre-application meeting to the Permit Section Staff.
6. The Permit Section Staff will review the submittal for completeness and forward it to other appropriate KDOT departments or to the consultant(s) for review.
7. KDOT staff or the consultant will review the submittal and return it with written comments to the Permit Section Staff the items that need to be corrected. The Plan Review Checklist will be utilized, but only as a guide. The checklist is included in this manual. The reviewer will also utilize his/her knowledge and expertise to ensure a thorough review.
8. The Permit Section Staff shall review all the comments and forward them to the Applicant. The Permit Section Staff will also address any questions or special requests from the Applicant.
9. The Applicant will furnish to the Permit Section Staff a revised submittal that includes a written disposition of all comments from County staff.
10. The Permit Section Staff will follow the same procedures outlined above for the revised submittal. The process will continue until the Applicant has satisfactorily addressed all comments.

11. Once the Applicant meets or exceeds the requirements of these regulations, the Permit Section Staff will be responsible for issuing a Division of Transportation Agricultural Access Permit.
12. The Applicant, the contractor, and any subcontractors will provide Certificates of Insurance to the County prior to the start of construction. A progress schedule and 24-hour phone number for the Applicant, the contractor, and any subcontractors will be provided to the Permit Section Staff.
13. The Permit Section will perform the site-observation tasks during construction.

B. Temporary Access

1. The recommended first step is a pre-application meeting with the Permit Section Staff to discuss the permit application requirements. While no plans are required at this time, concept drawings are welcomed.
2. The review process begins with the Applicant submitting the Temporary Access Permit Application (included herein) and fees.
3. The Permit Section Staff reviews the application for completeness and determines if the review is to be performed by in-house staff or by a consultant.
4. If a consultant is required, the Permit Section Staff will require a Design Review Letter of Credit. The review will not begin until the letter of credit is submitted and approved.
5. The Permit Section Staff selects the consultant(s) and enters into a contract(s). At this point, the Applicant must also sign an agreement to pay the consultant(s) for the review fees. See exhibits for each of the agreements in Section 8.
6. The application will then be logged into a master tracking system to show all stages of the project from the application to issuance of the Certificate of Compliance and Final Completion for the development. A hard copy, central file system will also be started at this point.
7. The Permit Section Staff will review other County projects and other permit projects for coordination. The Permit Section Staff will notify the Applicant if coordination with these other projects is required.
8. The Permit Section Staff will schedule an application meeting for the project and include the following:

a. Attendance

The following will be invited to attend the application meeting, as appropriate:

- County Permit Section
- County Engineering Section
- County Planning Section
- Public Works or Engineering Departments of any municipalities involved
- County Consultants
- Applicant/Developer
- Applicant's/Developer's Engineer

b. The Temporary Access Permit Application packet will be distributed and discussed.

c. Discussion to include the Required Information Checklist for the Temporary Access Permit included in this packet. County staff will give the Applicant and his Engineer direction as to which items are required. If a decision cannot be reached for an item or items at this meeting, County staff will discuss it, and a written response will be provided to the Applicant, the Applicant's Engineer, the municipality, and the County's consultant.

d. A sequence of items to be submitted will be established for the project, as illustrated on the flowchart included at the end of this section.

e. The Permit Section Staff will complete a copy of the Required Information Checklist showing the items required and the sequence of items to be submitted. The Applicant will sign a copy of this sheet to ensure that he or she understands the requirements.

9. The Applicant will submit the required items to the Permit Section Staff in the sequence established at the application meeting, including the application form signed by the Applicant and his Engineer.

10. The Permit Section Staff will review the submittal for completeness and forward it to other appropriate KDOT departments or to the consultant(s) for review.

11. KDOT staff or the consultant will review the submittal and return it with written comments to the Permit Section Staff the items that need to be corrected. The Plan Review Checklist will be utilized, but only as a guide. The checklist is included in the packet. The reviewer will also utilize his/her own knowledge and expertise to ensure a thorough review.

12. The Permit Section Staff shall review all the comments and forward them to the Applicant. The permit Section Staff will also address any questions or special requests from the Applicant.
13. The Applicant will furnish a revised submittal to the Permit Section Staff, which includes a written disposition of all comments from Permit Section Staff and the consultant(s) and is signed by the Applicant and Engineer.
14. The Permit Section Staff will follow the same procedures outlined above for the revised submittal. The process will continue until the Applicant has satisfactorily addressed all comments.
15. Once the Applicant meets or exceeds the requirements of these regulations, the Permit Section Staff will be responsible for issuing a Temporary Access Permit included herein.
16. Once the permit has been issued, a pre-construction meeting will be required prior to starting construction. The Applicant will submit a Construction Observation and Compliance Letter of Credit. The Permit Section Staff will make sure the amount of the letter of credit is adequate, including the cost for construction observation by a consultant, if required. The Applicant, the contractor, and any subcontractors shall provide Certificates of Insurance prior to the start of construction. A progress schedule and the 24-hour phone number for the Applicant, the contractor, and any subcontractors will be provided at the pre-construction meeting.
17. If consultant assistance is required during construction, the Permit Section Staff will be responsible for contracting with the consultant. The consultant will attend the pre-construction meeting and any subsequent construction meetings to ensure coordination and compliance with the permit. The Standard Contract for Construction is found as part of Section 8 included with the booklet.
18. The person performing the site-observation tasks shall ensure that the permitted plans are utilized in the field. The cover sheet on the plans will be stamped "Approved by KDOT for Construction" to ensure that the approved plans are used to construct the project.

C. Minimum Use Access

1. The recommended first step is a pre-application meeting with the Permit Section Staff to discuss the permit-application requirements. While no plans are required at this time, concept drawings are welcomed.
2. The review process begins with the Applicant submitting the Minimum Use Access Permit Application (included herein), fees and the following:

- Plat of survey with legal description and PIN number.
 - Copy of mortgage or deed.
 - Copy of site improvement plans which includes the following:
 - Proposed access location
 - Proposed building or facility location
 - Existing culvert location and size within right-of-way
 - Well location
 - Septic field location
 - At time of submittal, it is required that the desired access location be staked.
3. The Permit Section Staff reviews the application for completeness and forwards it to other appropriate KDOT departments for review.
 - 4. The application will be logged into a master tracking system to show all stages of the project from the application to issuance of the Certificate of Compliance and Final Completion. A hard copy, central file system will also be started at this point.
 5. KDOT staff or the consultant will review the submittal and return it with written comments to the Permit Section Staff the items that need to be corrected. The Plan Review Checklist will be utilized, but only as a guide. The checklist is included in this manual. The reviewer will also utilize his/her knowledge and expertise to ensure a thorough review.
 6. The Permit Section Staff shall review all the comments and forward them to the Applicant. The permit Section Staff will also address any questions or special requests from the Applicant. The County may include a request for dedication of right-of-way to the County.
 7. The Applicant will furnish to the Permit Section Staff a revised submittal, which includes a written disposition of all comments from Permit Section Staff.
 8. The Permit Section Staff will follow the same procedures outlined above for the revised submittal. The process will continue until the Applicant has satisfactorily addressed all comments.
 9. Once the Applicant meets or exceeds the requirements of the Transportation Permit Regulations, the Permit Section Staff will be responsible for issuing a Minimum Use Access Permit.
 10. The Applicant, the contractor, and any subcontractors will provide a Certificate of Insurance prior to the start of construction. A progress schedule and 24-hour phone number for the Applicant, the contractor, and any subcontractors will be provided to the Permit Section Staff.

11. The cover sheet on the plans will be stamped “Approved by KDOT for Construction”. The Kane County Division of Transportation will perform the site-observation tasks during construction.

D. Minor Access

1. The first step is a pre-application meeting with Permit Section Staff to discuss the permit-application fees and the permit process. This is required of Minor Access Permit Applicants, and Applicants for all access-permit types are also encouraged to do this.
2. The review process begins with the Applicant submitting the appropriate Access Permit application (included herein) and fees. This is illustrated on the flowchart included at the end of this section.
3. The Permit Section Staff reviews the application for completeness and determines if the review is to be performed by in-house staff or by a consultant.
4. If a consultant is needed, the Permit Section Staff will require a Design Review Letter of Credit. The review will not begin until the letter of credit is submitted and approved.
5. The Permit Section Staff selects the consultant(s) and enters into a contract(s). At this point, the Applicant must also sign an agreement to pay the consultant(s) for the review fees. See the exhibits for each of the agreements in Section 8.
6. The application will then be logged into a master tracking system to show all stages of the project, from the application to issuance of the Certificate of Compliance and Final Completion for the development. A hard copy, central file system will also be started at this point.
7. The Permit Section Staff will review other County and permit projects for coordination. The Permit Section Staff will notify the Applicant if coordination with other projects is required.
8. The Permit Section Staff will schedule an application meeting for the project and include the following:

- a. Attendance

The following will be invited to attend the application meeting, as appropriate:

- County Permit Section
- County Engineering Section
- County Planning Section

- Public Works or Engineering Departments of any municipalities involved
 - County Consultants
 - Applicant/Developer
 - Applicant's/Developer's Engineer
- b. The Minor Access Permit Application packet will be distributed and discussed.
 - c. Discussion to include the Required Information Checklist for the Minor Access Permit included in this packet. County staff will give the Applicant and his Engineer direction as to which items are required. If a decision cannot be reached for an item or items at this meeting, County staff will discuss it, and a written response will be provided to the Applicant, the Applicant's Engineer, the municipality, and the County's consultant.
 - d. A sequence of items to be submitted will be established for the project, as illustrated on the flowchart included at the end of this section.
 - e. The Permit Section Staff will complete a copy of the Required Information Checklist showing the items required and the sequence of items to be submitted. The Applicant will sign a copy of this sheet to ensure that he or she understands the requirements.
9. The Applicant will submit the required items to the Permit Section Staff in the sequence established at the application meeting, including the application form signed by the Applicant and his Engineer.
 10. The Permit Section Staff will review the submittal for completeness and forward it either to other appropriate KDOT departments or to the consultant(s) for review.
 11. KDOT staff or the consultant will review the submittal and return it with written comments to the Permit Section Staff identifying the items that need to be corrected. The Plan Review Checklist will be utilized, but only as a guide. The checklist is included in the packet. The reviewer will also utilize his/her own knowledge and expertise to ensure a thorough review.
 12. The Permit Section Staff shall review all the comments and forward them to the Applicant. The permit Section Staff will also address any questions or special requests from the Applicant.
 13. The Applicant will furnish a revised submittal to the Permit Section Staff that includes a written disposition of all comments from County staff and the consultant(s) and is signed by the Applicant and Engineer.

14. The Permit Section Staff will follow the same procedures outlined above for the revised submittal. The process will continue until the Applicant has satisfactorily addressed all comments.
15. Once the Applicant meets or exceeds the requirements of the Transportation Permit Regulations, the Permit Section Staff will be responsible for issuing a Division of Transportation Minor Access Permit included herein.
16. Once the permit has been issued, a pre-construction meeting will be held prior to starting construction. The Applicant will submit a Construction Observation and Compliance Letter of Credit. The Permit Section Staff will make sure the amount of the letter of credit is adequate, including the cost for construction observation by a consultant, if required. The Applicant, the contractor, and any subcontractors will provide Certificates of Insurance prior to the start of construction. A progress schedule and 24-hour phone number for the Applicant, the contractor, and any subcontractors will be provided at the pre-construction meeting.
17. If consultant assistance is required during construction, the Permit Section Staff will be responsible for contracting with the consultant. The consultant will attend the pre-construction meeting and any subsequent construction meetings to ensure coordination and compliance with the permit. The Standard Contract for Construction is found as part of Section 8 included with the booklet.
18. The person performing the site-observation tasks shall ensure that the permitted plans are utilized in the field. The cover sheet on the plans will be stamped "Approved by KDOT for Construction" to ensure that the approved plans are used to construct the project.

E. Major Access

1. The first step is a pre-application meeting with Permit Section Staff to discuss the permit-application fees and the permit process. This is required of Major Access Permit Applicants, and Applicants for all access-permit types are also encouraged to do this.
2. The review process begins with the Applicant submitting the appropriate Access Permit application (included herein) and fees. This is illustrated on the flowchart included at the end of this section.
3. The Permit Section Staff reviews the application for completeness and determines if the review is to be performed by in-house staff or by a consultant.
4. If a consultant is needed, the Permit Section Staff will require a Design Review Letter of Credit. The review will not begin until the letter of credit is submitted and approved.

5. The Permit Section Staff selects the consultant(s) and enters into a contract(s). At this point, the Applicant must also sign an agreement to pay the consultant(s) for the review fees. See the exhibits for each of the agreements in Section 8.
6. The application will then be logged into a master tracking system to show all stages of the project, from the application to issuance of the Certificate of Compliance and Final Completion for the development. A hard copy, central file system will also be started at this point.
7. The Permit Section Staff will review other County and permit projects for coordination. The Permit Section Staff will notify the Applicant if coordination with other projects is required.
8. The Permit Section Staff will schedule an application meeting for the project and include the following:

- a. Attendance

The following will be invited to attend the application meeting, as appropriate:

- County Permit Section
 - County Engineering Section
 - County Planning Section
 - Public Works or Engineering Departments of any municipalities involved
 - County Consultants
 - Applicant/Developer
 - Applicant's/Developer's Engineer
- b. The Major Access Permit Application packet will be distributed and discussed.
 - c. Discussion to include the Required Information Checklist for the Major Access Permit included in this packet. County staff will give the Applicant and his Engineer direction as to which items are required. If a decision cannot be reached for an item or items at this meeting, County staff will discuss it, and a written response will be provided to the Applicant, the Applicant's Engineer, the municipality, and the County's consultant.
 - d. A sequence of items to be submitted will be established for the project, as illustrated on the flowchart included at the end of this section.
 - e. The Permit Section Staff will complete a copy of the Required Information Checklist showing the items required and the sequence of items to be submitted. The Applicant will sign a copy of this sheet to ensure that he or she understands the requirements.

9. The Applicant will submit the required items to the Permit Section Staff in the sequence established at the application meeting, including the application form signed by the Applicant and his Engineer.
10. The Permit Section Staff will review the submittal for completeness and forward it either to other appropriate KDOT departments or to the consultant(s) for review.
11. KDOT staff or the consultant will review the submittal and return it with written comments to the Permit Section Staff identifying the items that need to be corrected. The Plan Review Checklist will be utilized, but only as a guide. The checklist is included in the packet. The reviewer will also utilize his/her own knowledge and expertise to ensure a thorough review.
12. The Permit Section Staff shall review all the comments and forward them to the Applicant. The permit Section Staff will also address any questions or special requests from the Applicant.
13. The Applicant will furnish a revised submittal to the Permit Section Staff that includes a written disposition of all comments from County staff and the consultant(s) and is signed by the Applicant and Engineer.
14. The Permit Section Staff will follow the same procedures outlined above for the revised submittal. The process will continue until the Applicant has satisfactorily addressed all comments.
15. Once the Applicant meets or exceeds the requirements of the Transportation Permit Regulations, the Permit Section Staff will be responsible for issuing a Division of Transportation Major Access Permit included herein.
16. Once the permit has been issued, a pre-construction meeting will be held prior to starting construction. The Applicant will submit a Construction Observation and Compliance Letter of Credit. The Permit Section Staff will make sure the amount of the letter of credit is adequate, including the cost for construction observation by a consultant, if required. The Applicant, the contractor, and any subcontractors will provide Certificates of Insurance prior to the start of construction. A progress schedule and 24-hour phone number for the Applicant, the contractor, and any subcontractors will be provided at the pre-construction meeting.
17. If consultant assistance is required during construction, the Permit Section Staff will be responsible for contracting with the consultant. The consultant will attend the pre-construction meeting and any subsequent construction meetings to ensure coordination and compliance with the permit. The Standard Contract for Construction is found as part of Section 8 included with the booklet.

18. The person performing the site-observation tasks shall ensure that the permitted plans are utilized in the field. The cover sheet on the plans will be stamped “Approved by KDOT for Construction” to ensure that the approved plans are used to construct the project.

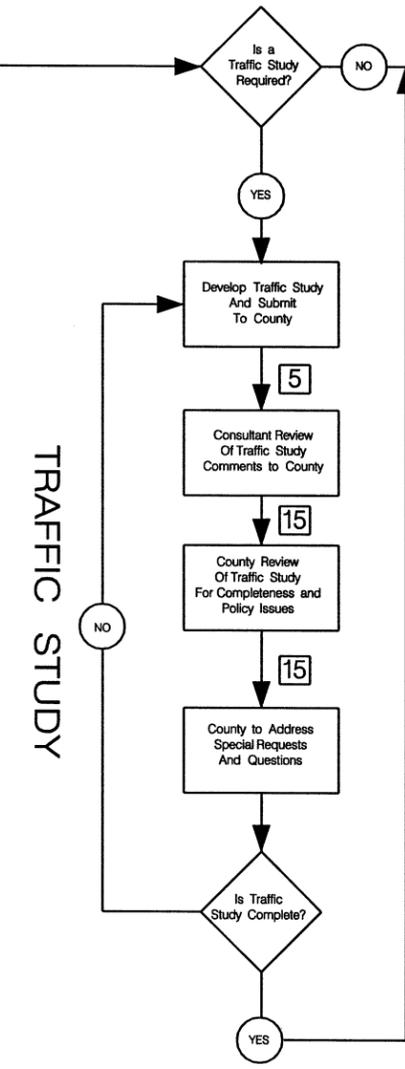
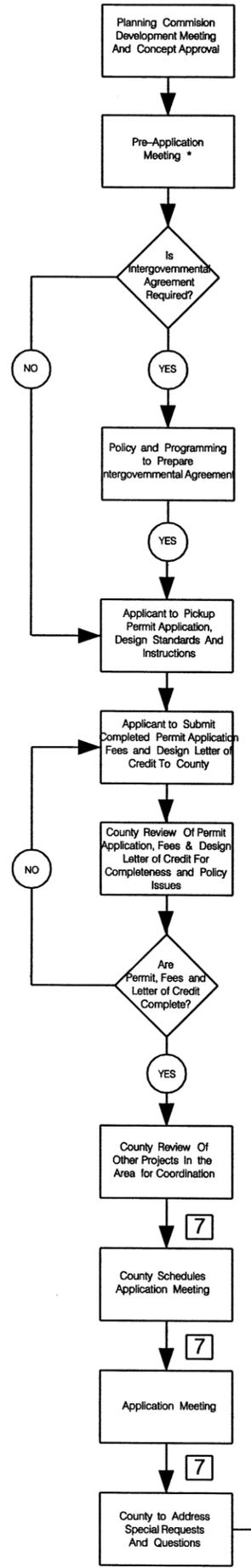
ACCESS PERMIT APPLICATION SEQUENCE OF EVENTS FLOW CHART

DATE: 11/2/03

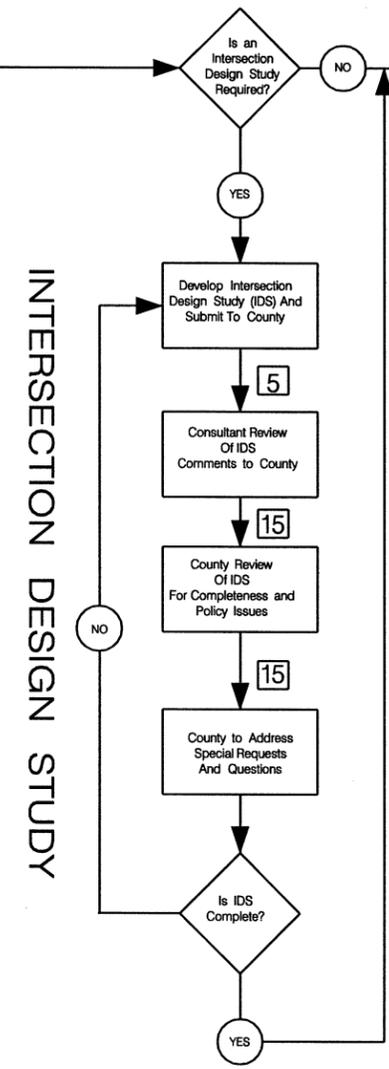
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2-59

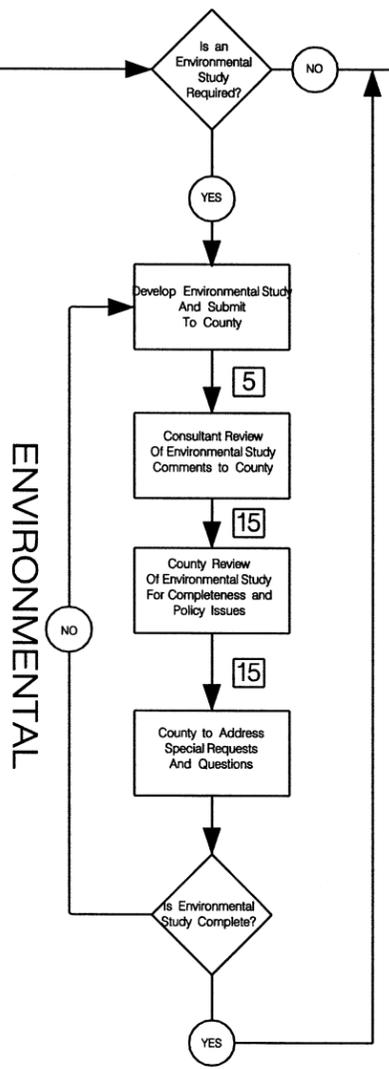
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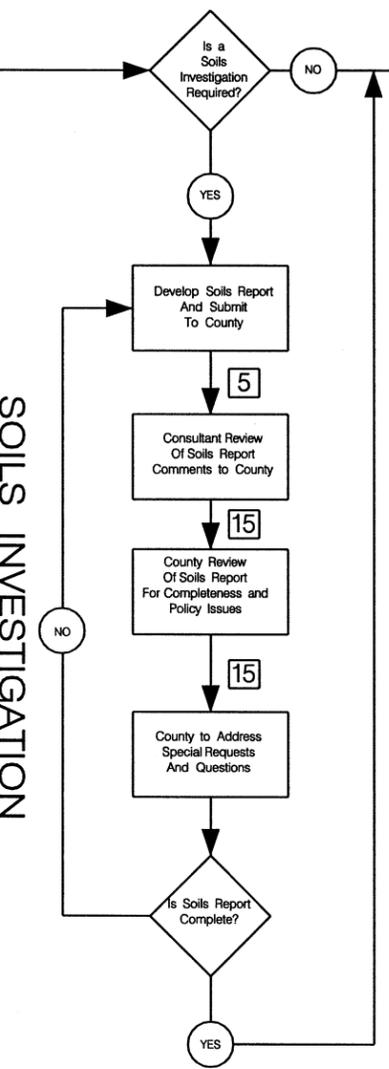
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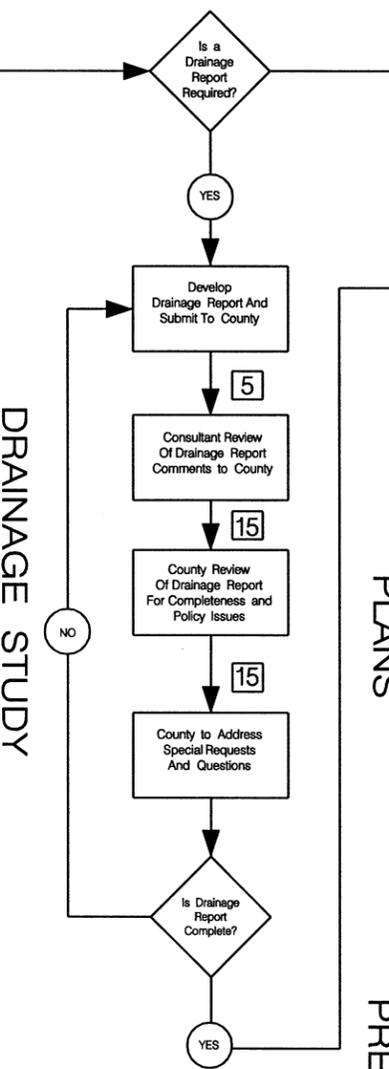
INTERSECTION DESIGN STUDY



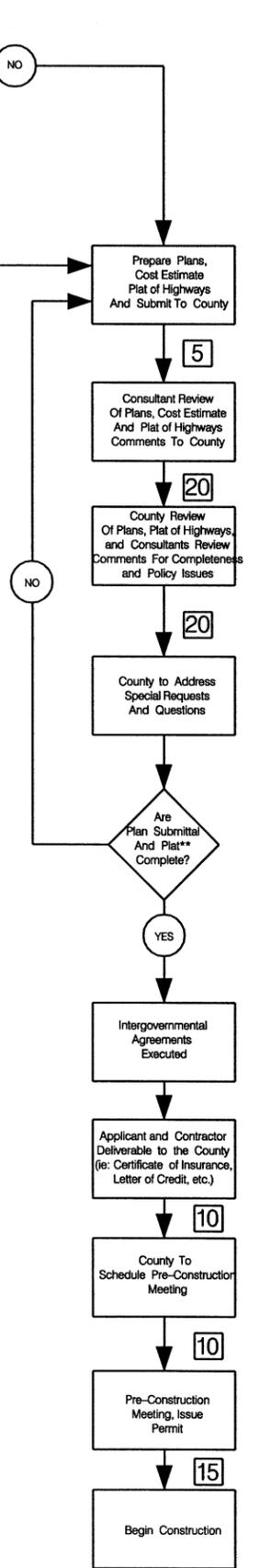
ENVIRONMENTAL



SOILS INVESTIGATION



DRAINAGE STUDY



PLANS

PRECONSTRUCTION AND PERMIT

KANE COUNTY ACCESS PERMIT APPLICATION

15 NUMBER OF WORKING DAYS

* NOTE: REQUIRED FOR MAJOR ACCESS PERMITS, ENCOURAGED FOR OTHER ACCESS PERMITS.

** NOTE: COMPLETION OF THE PLAT OF HIGHWAYS SHOULD INCLUDE CONFIRMATION THAT THE PLAT HAS BEEN RECORDED.

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IV. ACCESS PERMIT APPLICATION

County Route: _____

Location or Nearest
Cross Street _____

Project Name: _____

Type of Permit
Requested: _____

Date: _____

A. APPLICANT INFORMATION. All applicable information shall be completed.

a. Applicant

Contact Person and Firm Name

Address

Telephone Fax E-mail address

b. Attorney

Contact Person and Firm Name

Address

Telephone Fax E-mail address

c. Engineer

Contact Person and Firm Name

Address

Telephone

Fax

E-mail address

d. Surveyor

Contact Person and Firm Name

Address

Telephone

Fax

E-mail address

e. Land Planner

Contact Person and Firm Name

Address

Telephone

Fax

E-mail address

f. Soil Scientist

Contact Person and Firm Name

Address

Telephone

Fax

E-mail address

g. Landscape Architect

Contact Person and Firm Name

Address

Telephone

Fax

E-mail address

h. Other (specify)

Contact Person and Firm Name

Address

Telephone

Fax

E-mail address

i. i. Other (specify)

Contact Person and Firm Name

Address

Telephone

Fax

E-mail address

B. FEES

Application fees shall be based on the type of access permit being applied for in the amount specified in the section for Permit Application Fees (pg.2-40) and are included with this application.

- Permit Type (Check One):
- Agricultural Access
 - Temporary Access
 - Minimum Use Access
 - Minor Access
 - Major Access

C. LETTERS OF CREDIT

- a. Design Review Letter of Credit for _____
Consultant Name
- (1) Issuing institution _____
 - (2) Telephone number _____
 - (3) Letter of Credit Number _____
 - (4) Amount _____
 - (5) Expiration Date _____

b. Construction Observation and Compliance Letter of Credit

Note: This shall be provided once the permit and the estimate of cost have been approved. It shall be in the amount of the approved Estimate of Cost x 125%.

D. CERTIFICATE OF INSURANCE

The undersigned Applicant agrees to submit the required certificate of insurance prior to the issuance of this permit.

E. SCHEDULE

Construction is anticipated to begin within _____ months of the date of issuance of the permit.

F. SIGNATURES

Applicant (Signature)

Date

Applicant (Print Name)

V. REQUIRED INFORMATION CHECKLIST

1. Access information

- a. Is access requested to any of the following Limited Access County Freeways?
 - (1) Kirk Road from IL Rte. 56 (Butterfield Rd.) to Dunham Road _____
 - (2) Randall Road from East-west toll Road (I-88) to North County Line Road _____
 - (3) Fabyan Parkway from Randall Road to DuPage County line _____
 - (4) Orchard Road from U.S. Rte. 30 to Randall Road _____
 - (5) Dunham Road from Kirk to IL Rte. 25 _____

- b. Is there an intergovernmental agreement for this location? _____
- c. Permit applied for:
 - (1) Urban location _____ ; Rural location (new) _____
 - (2) Major driveway _____ ;
New street (name: _____) _____
 - (3) Residential _____ ; Commercial _____ ; Industrial _____
- d. Subdivision
 - (1) Unincorporated _____
 - (2) Incorporated _____ ; Municipality _____
 - (3) Commercial/industrial development _____
- e. Number of access points applied for: _____
- f. Location of access points

- g. Access points approved or per Intergovernmental Agreement _____

2. Subdivision/development plan

- a. Internal circulation acceptable _____
- b. Adequate parking facilities _____
- c. Existing building, signs, landscaping and/or architectural treatments, or service fixtures at proposed driveway/highway are acceptable (no interference with sight distance) _____
- d. Proposed building, signs, landscaping and/or architectural treatments, or service fixtures at proposed driveway/highway are acceptable (no interference with sight distance) _____

- e. Minimum distances to gasoline pumps met (minimum 20 feet from right-of-way to pump island) _____
- f. Pedestrian access acceptable (if required, sidewalks, crosswalks, pedestrian traffic control included) _____
- g. Location/setback from County right-of-way for berms or detention basins meets requirements _____

3. Traffic study

- a. Traffic study required _____
- b. Traffic data provided _____
- c. Existing 24-hour, peak-hour counts provided _____
- d. Source of forecasted driveway traffic data verified & checked _____
 - _____ County
 - _____ CATS
 - _____ Applicant/Consultant
- e. Traffic signal warrants analysis received _____
- f. MUTCD, latest edition, used for traffic signal warrant calculations _____
 - (1) Warrants not applicable due to CLAF or SRA routes, checked _____
 - (2) Warrants conducted for Rural or Urban settings, checked _____
 - (3) Signals shall meet warrants, checked _____
- g. Queuing Analysis (for drive-up services) required _____
 - (1) Analysis conducted using appropriate queuing software _____
 - (2) Queuing analysis output checked _____
 - (3) Trip generation rates for land use from ITE Trip Generation Manual checked _____
- h. If traffic signals warranted, signal interconnection needs to be checked _____
 - (1) Distance to nearest signalized intersection is _____ feet _____
 - (2) Distance to nearest railroad crossing with active warning devices _____
- i. Recommended interconnection for 5,280 feet (1 mi.) maximum distance to nearest signalized intersection _____
- j. Intersection Design Study required (prepared in accordance with BDE Chapter 14) _____

4. Highway Lighting

- a. Unsignalized Intersections – provide beacon lighting _____
- b. Signalized intersections on County highways (non-SRA) – provide intersection lighting with combination mast arm-assemblies and poles _____

- c. Signalized Intersections on County Limited Access Freeways – provide intersection and approach lighting _____
- d. Continuous lighting will be provided if the approach lighting ends within 500 feet of another lighting system _____

5. Sight Distance Profile and Study

- a. Sight distance profile and study required _____
- b. Sight distance study completed in accordance with AASHTO Policies _____

6. Preliminary Highway Geometric Design

When access permit improvements will be extensive, such as the widening or alteration of the County highway, Preliminary Highway Geometric Design plans shall be submitted for review. These shall be plan and profile sheets showing any widening or vertical adjustments to determine appropriate tapers, storage lengths, super-elevations, and horizontal and vertical curvatures.

- a. Preliminary highway geometric design required _____
- b. Preliminary highway geometric design completed in accordance with IDOT BDE Manuals _____

7. Drainage study

- a. Drainage study required _____
- b. Drainage study completed in accordance with IDOT Drainage Design Manual _____
- c. Drainage study completed in accordance with Kane County Regulations for County Limited Access Freeways/Kane County Storm Water Ordinance and the Kane County Stormwater Technical Manual _____

Items to be included in drainage study

- a. Study sealed by registered Illinois Professional Engineer _____
- b. Determination as to whether special management (either floodplain or wetland) areas are impacted by the work _____
- c. Subsurface drainage report _____
- d. Narrative description of the development, existing and proposed conditions, including off-site areas, and project planning principles considered, including BMP's utilized. _____

- e. Schedule for the implementation of the stormwater plan _____
- f. The plan set/drainage report submittal shall include: _____
 - (1) A vicinity topographic map _____
 - (a) Vicinity topographic map covering entire area upstream of the development site and downstream to a suitable hydraulic condition _____
 - (b) A 2' contour interval is preferred _____
 - (c) Watershed boundaries for areas upstream of the project, as well as the project itself _____
 - (d) Soil types, vegetation, and land cover affecting runoff upstream of the site for any area draining through the site _____
 - (e) Location of the project with the major watersheds _____
 - (2) A site topographical map consisting of: _____
 - (a) Map scales at 1 inch = 100 feet (or less) and accurate to +/- 0.5 feet _____
 - (b) Existing and proposed contours on-site and within 100 feet of the project _____
 - (c) Existing and proposed drainage patterns and watershed boundaries _____
 - (d) Delineation of pre-development regulatory floodplain/floodway limits _____
 - (e) Location of cross-sections and any other modeled features _____
 - (f) Location of drain tiles _____
 - (g) Location of all wetlands, lakes, ponds, etc., with normal water elevations noted. _____
 - (h) Location of all buildings on the site _____
 - (i) Nearest base flood elevation _____
 - (j) FEMA and Kane County Survey Control Network benchmark _____
 - (3) A general plan view drawing (may be more than one drawing for clarity) consisting of: _____
 - (a) Map scale at 1 inch – 100 feet (or less) and accurate to +/- 0.5 feet _____
 - (b) Existing and proposed major and minor stormwater systems _____
 - (c) Detention locations including dimensions to illustrate compliance with setback requirements _____
 - (d) Design details for stormwater facilities including: _____

- (i) Existing and proposed drainage facilities (ditches, storm sewers, detention areas, culverts, etc.) showing inverts, types and sizes _____
 - (ii) Design flows, velocities and volumes for all facilities _____
- (e) Scheduled maintenance program for permanent stormwater facilities including BMP measures _____
- (f) Planned maintenance tasks and schedule _____
- (g) Identification of persons responsible for maintenance _____
- (h) Permanent public access maintenance easements granted or dedicated to, and accepted by, a government entity _____
- (4) A sediment/erosion control plan consisting of:
 - (a) Sediment/erosion control installation measures _____
 - (b) Existing and proposed highways, structures, parking lots, driveways, sidewalks, and other impervious surfaces _____
 - (c) Limits of clearing and grading _____
 - (d) Wetland location(s) _____
 - (e) Proposed buffer location _____
 - (f) Existing soil types, vegetation and land cover conditions _____
 - (g) List of maintenance tasks and schedule for sediment/erosion control measures _____
- (5) Computations to support drainage design including:
 - (a) Calculations indexed and pages numbered _____
 - (b) Conveyance system (storm sewer, ditches, and culverts not within a regulatory floodplain) design criteria and calculations with the following given, at a minimum:
 - (i) Sizes and/or cross-sections _____
 - (ii) Hydraulic grade line/water surface elevations for or 10, 50 and 100-year event _____
 - (iii) Capacity _____
 - (iv) Velocity _____
 - (v) 10, 50 and 100-year flows _____
 - (c) Project runoff and storage calculations shall include:
 - (i) Calculation of hydraulically connected impervious area and corresponding retention volume _____
 - (ii) Documentation of the procedures/assumptions, including choice of model, used to calculate hydrologic (using Bulletin 70) and hydraulic conditions for determining the allowable release rate such as: _____

- 1) Runoff rates for the 2, 10, 50 and 100-year storms for each subwatershed on the project and upstream _____
- 2) Critical duration analysis for 10, 50 and 100-year peak flows _____
- 3) 100-year, 24-hour peak flows _____
- (iii) Documentation of the procedures/assumptions used to calculate on-site depressional storage _____
- (iv) Documentation of the procedures/assumptions used to calculate hydrologic and hydraulic conditions for determining storage volume _____
- (v) Elevation-area-storage data _____
- (vi) Elevation-discharge data _____
- (vii) Locations of all proposed detention _____
- (d) If any of the work is located within the floodplain, a floodplain submittal is required. It may consist of the following as well as additional information as required by the County Engineer:
 - (i) A regulatory floodplain boundary determination showing the appropriate FEMA map panel(s) for the project _____
 - (ii) Source of flood profile information _____
 - (iii) All hydrologic and hydraulic study information for all site-specific floodplain studies, unnumbered Zone A area elevation determinations, and floodplain map revisions. _____
 - (iv) Floodway hydrologic and hydraulic analyses for both existing and proposed conditions (land use and stream system) _____
 - (v) Tabular summary of 100-year flood elevations and discharges for existing and proposed conditions _____
 - (vi) Calculations used for the development of any hydrologic or hydraulic modeling _____
 - (vii) Floodplain fill and compensatory storage calculations for below and above the 10-year flood elevation _____
 - (viii) Tabular summary for below and about the 10-year flood elevation of fill, compensatory storage, and compensatory storage ratios provided in the proposed design _____
 - (ix) Specific details on flood easements, if required by the Kane County Stormwater Ordinance _____

- (e) If any of the work impacts wetlands, as defined by the Kane County Stormwater Ordinance, a wetland submittal is required. It may consist of the following as well as additional information as required by the County Engineer:
 - (i) Wetland delineation report (COE format) _____
 - (ii) Calculation of required buffer (including width, size, and vegetation quality) _____
 - (iii) Wetland Delineation Plan View Drawing _____
 consisting of:
 - 1) Location of existing and proposed impacted or undisturbed wetlands _____
 - 2) Location of buffers _____
 - 3) Planting plan for buffer area _____
 - 4) Identify all required wetland management activities _____
 - 5) Proof of submittal to ACOE or letter of non-jurisdiction _____

8. Environmental study review

- a. Environmental study required _____
- b. Which of the following environmental issues occurs within 300 feet of County right-of-way:
 - (1) Wetlands _____
 - (2) Stream crossing _____
 - (3) Hazardous materials _____
 - (4) Archaeological/historical _____
 - (5) Parks, land, and water conservation lands _____
 - (6) Other (septic fields, water wells, etc.) _____
- c. Was an environmental/archaeological report submitted for:
 - (1) Wetlands _____
 - (2) Hazardous materials _____
 - (3) Archaeological/historical _____
 - (4) Parks, land, and water conservation lands _____
 - (5) Other _____
- d. The following environmental/archaeological reports were reviewed:
 - (1) Wetlands _____
 - (2) Hazardous materials _____
 - (3) Archaeological/historical _____
 - (4) Parks, land, and water conservation historical properties _____
 - (5) Other _____

- e. Were appropriate permits received and checked for:
 - (1) Wetlands _____
 - (2) Stream crossings (Section 404) _____
 - (3) Hazardous materials _____
 - (4) Archaeological _____
 - (5) Historical (Section 106) _____
 - (6) Other _____
- f. Do the environmental/archaeological issues noted in the reports affect the improvement with County right-of-way and were they addressed in the engineering plans and special provisions:
 - (1) Wetlands _____
 - (2) Stream crossings _____
 - (3) Hazardous materials _____
 - (4) Archaeological _____
 - (5) Historical _____
 - (6) Parks, land, and water conservation _____
 - (7) Other _____
- g. Coordination with affected regulatory agencies received
 - (1) USEPA _____
 - (2) USCOE _____
 - (3) USF & WS _____
 - (4) IDNR _____
 - (5) IDOA _____

9. Soils survey/geotechnical report review

- a. Soil survey/geotechnical report required _____
- b. A geotechnical investigation report required for:
 - (1) County highway to be widened _____
 - (2) Bridge, retaining wall, or box culvert _____
 - (3) Other _____
- c. Report sealed by a registered Illinois Professional Engineer _____
- d. Were unsuitable materials found _____
- e. Are pavement underdrains required _____
- f. Soil boring logs shall be included in report for new or reconstructed pavements or pavement widening where the widening is 6' or more _____
- g. Were the issues noted in the report addressed in the engineering plans and special provisions _____
- h. Pavement Core data shall be included in report for all pavement-widening projects, regardless of widening width unless waived by the County Engineer. _____

10. Plat of survey, conveyance, or easement

a. Reproducible copy of the plat of conveyance or easement at 1"=100'. scale drawn preferably on 24" x 36" mylar (regulations calls for tracing cloth; state law requires minimum 8½" x 14" up to 30" x 36" maximum size) with the following information.

- (1) Accurate legal description _____
- (2) If more than one map sheet, then map key shown on first sheet, if necessary, to avoid confusion _____
- (3) North arrow and scale (preferably a graphic scale) _____
- (4) Length and direction of all exterior boundary lines are referenced to boundary controlling system in the area; i.e., true north, magnetic north, grid north, assumed north; or basis of bearings if relative to another plat or deed of record _____
- (5) Positions of all monuments and markers, lot corners, beginnings and ends of curves, and all angle points. Material and size of all monuments shall be noted. Two permanent monuments per state law. _____
- (6) "Hereby conveyed to Kane County" shown for all road right-of-way _____
- (7) County right-of-way width per re-zoning agreement or as required by the Division of Transportation _____
- (8) Dimensions to one-hundredth of a foot and degrees, minutes, and seconds (as necessary) _____
- (9) Easement dimensions, provisions, and conditions. No easements shown within County or Township right-of-way. Description on plat must match title of language. Use County standard language where appropriate. _____
- (10) Rectangular coordinates (if required) _____
- (11) Curve data for all curves and segments thereof consisting of at least the radius and arch length _____
- (12) Road names acceptable to the County _____
- (13) Adjacent road right-of-way lines in proper location _____
- (14) Adjacent recorded subdivisions and subdivision names shown in their proper location (to scale) _____
- (15) Certificates signed by all except the Plat Officer, County Engineer, Health Officer, and Recorder of Deeds _____
- (16) Original ink signature, date, seal, and certification of an Illinois Professional Land Surveyor under whose direct supervision the plat was prepared _____

- (17) Surveyor to certify the proximity of the development to special flood hazard areas as defined on the maps listed in the Kane County Code, Chapter 9, Article III, Special Flood Hazard Areas _____
- (18) Survey to certify that site is or is not within 1.5 miles of the corporate limits of a municipality or such other appropriate statement if within more than one municipal planning jurisdiction or a municipal boundary agreement exists _____

11. Engineering estimate of cost for improvements

- a. All items within the County right-of-way included _____
- b. Items for traffic control and protection included _____
- c. Item for engineering/layout/testing included _____

12. Engineering plans for improvements in County right-of-way

To provide consistency from project to project, the plan sheets shall be assembled in the sequence below. The designer should note that not all plans will have all sheets and that several sheets can be combined together. All units shall be English. The required plan sequence is as follows:

- a. Cover sheet _____
- b. Index of sheets, listing of applicable Highway Standards, General Notes _____
- c. Summary of quantities _____
- d. Typical sections _____
- e. Schedules of quantities _____
- f. Alignment, ties, and bench marks _____
- g. Suggested stages of construction and traffic control _____
- h. Plan and profile sheets _____
- i. Drainage and utilities sheets _____
- j. Right-of-way sheets _____
- k. Intersection details _____
- l. Pavement marking and sign sheets _____
- m. Landscaping details _____
- n. Traffic signal sheets _____
- o. Lighting sheets _____
- p. Erosion control sheets and Storm Water Pollution Prevention Plan (NPDES/SWPPP) _____
- q. Structural sheets _____
- r. Wetland details _____

- s. Culvert details _____
- t. IDOT District 1 Details _____
- u. Cross sections _____
- v. Highway Standards _____

13. Design Review Letter of Credit

- a. Engineering plan review _____
- b. Drainage review _____
- c. Traffic study review _____
- d. Structural review _____

VI. REQUIRED INFORMATION CHECKLIST SUMMARY

Answer yes, no, further information required, or NA.

- 1. Access information _____
- 2. Subdivision plan/development plan including landscaping and architectural plans _____
- 3. Traffic study _____
- 4. Sight Distance Profile and Study _____
- 5. Highway Lighting _____
- 6. Preliminary Highway Geometric Design _____
- 7. Drainage study _____
- 8. Environmental studies – within 300 feet of County right-of-way
 - a. Wetland study _____
 - b. Hazardous material investigation _____
 - c. Archaeological investigation _____
 - d. Other _____
- 9. Soils survey/geotechnical report _____
- 10. Plat of survey/dedication/easement _____
- 11. Engineering cost estimate for improvements within County right-of-way _____
- 12. Engineering plans for improvements within County right-of-way
 - a. Highway plans _____
 - b. Drainage plans _____
 - c. Traffic signal plans _____
 - d. Street lighting plans _____
 - e. Structural (bridge/culvert) plans _____
 - f. Erosion control plans and SWPPP (NPDES) _____
- 13. Design Review Letter(s) of Credit _____

Applicant

Date

Authorized County Officer

Date

VII. PLAN SUBMITTAL CHECK LIST FOR ACCESS PERMIT

Required Information. (Answer Yes, No, Further Information Required (FIR), or Not Applicable (NA).

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COVER SHEET

1. Index of sheets provided.	_____	_____	_____
2. Show title information in the top center of the sheet and include:	_____	_____	_____
• project route number and common name,	_____	_____	_____
• location of improvement,	_____	_____	_____
• type of improvement,	_____	_____	_____
• County, and	_____	_____	_____
• permit number (if available or applicable)	_____	_____	_____
3. Show the graphic scales used on plans, profiles, and cross sections in the lower left-hand side of the sheet.	_____	_____	_____
4. Provide address, contact name and phone number for all utilities.	_____	_____	_____
5. Provide a project layout map at bottom center of the sheet. Include on the map:	_____	_____	_____
• location of project, and north arrow,	_____	_____	_____
• beginning and end stations,	_____	_____	_____
• all important intermediate stations,	_____	_____	_____
• prominent features,	_____	_____	_____
• names for special features	_____	_____	_____
• route and street names,	_____	_____	_____
• scale of location map,	_____	_____	_____
• township and range numbers, and	_____	_____	_____
• equation stations.	_____	_____	_____
6. Provide the project gross and net lengths immediately below the layout map. Only include the mainline distances. Do not include length of intersection improvements.	_____	_____	_____
7. Include the project approval block in lower right-hand corner of the sheet and check to ensure the signatures and dates for the following are included:	_____	_____	_____

Required Information. (Answer Yes, No, Further Information Required (FIR), or Not Applicable (NA).	<u>First</u>	<u>Compliance Second</u>	<u>Third</u>
<ul style="list-style-type: none"> • County Engineer, and • local officials, where applicable. 	___	___	___
8. On consultant-designed projects, ensure that the consultant's company name, and the professional Engineer's signature, date of their license expiration, and professional stamp are shown below the client's approval box.	___	___	___
9. Show the information for "JULIE" on the cover sheet.	___	___	___
10. Show the design designation notation on the cover sheet.	___	___	___
11. Show the design traffic, road classification, etc., pavement design information on the cover sheet.	___	___	___

INDEX OF SHEETS, HIGHWAY STANDARDS, PLANS NOTES, COMMITMENT

1. Completely fill out the sheet index (On smaller projects this can be placed on the cover sheet).	___	___	___
2. Provide a list of all IDOT Highway Standards necessary to construct the project. Also, include the revision number (On smaller projects this can be placed on the cover sheet).	___	___	___
3. Include all applicable general plan notes. (Design and construction notes should be project specific.)	___	___	___
4. Show legend with applicable items.	___	___	___

SUMMARY OF QUANTITIES SHEET

1. Provide pay item number and description for each item of work.	___	___	___
2. Use the appropriate pay unit.	___	___	___
3. Fill out the total quantities column.	___	___	___
4. Provide separate schedule of quantities sheet for as many pay items as practical.	___	___	___

TYPICAL SECTION SHEET

1. Ensure that all applicable typical sections are provided.	___	___	___
--	-----	-----	-----

Required Information. (Answer Yes, No, Further Information Required (FIR), or Not Applicable (NA).	Compliance		
	<u>First</u>	<u>Second</u>	<u>Third</u>
2. Provide the mainline typical sections first, followed by other typical sections as they appear along the mainline.	_____	_____	_____
3. Note the title of the typical section and applicable station limits directly below the typical section.	_____	_____	_____
4. Ensure the following have been included on the typical section:	_____	_____	_____
• horizontal dimensions,	_____	_____	_____
• vertical dimensions,	_____	_____	_____
• the profile grade line reference, if different from the centerline,	_____	_____	_____
• types and depths of surface, base, and sub-base courses,	_____	_____	_____
• curb and gutters/medians,	_____	_____	_____
• landscaping,	_____	_____	_____
• side slopes expressed as a ratio of vertical to horizontal distances,	_____	_____	_____
• cross slopes expressed in percent,	_____	_____	_____
• percent of super-elevation, and	_____	_____	_____
• all other applicable notations.	_____	_____	_____
5. Include all notes applicable to the typical sections.	_____	_____	_____
6. Note all applicable pay items on the typical section.	_____	_____	_____
7. Include the structural pavement design information.	_____	_____	_____

ALIGNMENT, TIE, AND BENCHMARK SHEET

1. Where necessary for complex projects, include a geometric alignment figure. Also, include a coordinate layout sheet for all alignments, intersections, side roads, radius returns, and parking lots.	_____	_____	_____
2. Show schematics for reference tie locations which will include:	_____	_____	_____
• the applicable centerline station,	_____	_____	_____
• the applicable control ties, and	_____	_____	_____
• the complete description of the features used to determine the tie location.	_____	_____	_____
• All coordinate values for survey points are in Illinois State Plane System using the North American Datum (NAD83) with a 1997 HARN adjustment, Illinois East Zone 1201.	_____	_____	_____

Required Information. (Answer Yes, No, Further Information Required (FIR), or Not Applicable (NA).

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|----|---|-------|-------|-------|
| 3. | Show all mainline reference ties first, followed by those for other facilities. | _____ | _____ | _____ |
| 4. | Round all reference tie dimensions to the nearest 10 th of a foot. | _____ | _____ | _____ |
| 5. | Provide the benchmark data on this sheet and include the following information: | _____ | _____ | _____ |
| | • centerline station, | _____ | _____ | _____ |
| | • distance and direction from the centerline, | _____ | _____ | _____ |
| | • description of location, | _____ | _____ | _____ |
| | • benchmark elevation, | _____ | _____ | _____ |
| | • relationship to NAD83, and | _____ | _____ | _____ |
| | • coordinate information (if available). | _____ | _____ | _____ |

STAGES OF CONSTRUCTION AND TRAFFIC CONTROL SHEETS

- | | | | | |
|----|---|-------|-------|-------|
| 1. | Determine which <i>IDOT Highway Standards</i> and Kane County requirements are applicable for the traffic control on the project. | _____ | _____ | _____ |
| 2. | Where necessary, provide plan view sheets showing: | _____ | _____ | _____ |
| | • temporary highway horizontal alignment, | _____ | _____ | _____ |
| | • temporary pavement widths and tapers, | _____ | _____ | _____ |
| | • temporary traffic lanes, | _____ | _____ | _____ |
| | • proposed construction staging, | _____ | _____ | _____ |
| | • location of signing for work zones, | _____ | _____ | _____ |
| | • temporary pavement markings (types and sizes), | _____ | _____ | _____ |
| | • roadside safety and layouts, and | _____ | _____ | _____ |
| | • general notes for construction, closures, time frames, etc. | _____ | _____ | _____ |
| 3. | Where necessary, provide the temporary highway profile grade line on the profile sheet. | _____ | _____ | _____ |
| 4. | Utilize and reference IDOT Traffic Control Devices Standard. | _____ | _____ | _____ |

Required Information. (Answer Yes, No, Further Information Required (FIR), or Not Applicable (NA).

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PLAN/PROFILE SHEET

Plan And Profile Views

- | | | | |
|---|-------|-------|-------|
| 1. Provide the mainline plan and profile sheets first, followed by other plan and profile sheets as they appear along the centerline. | _____ | _____ | _____ |
| 2. Plot existing facilities with a light, dashed line and the proposed facilities with a solid, dark line. | _____ | _____ | _____ |
| 3. Keep all notes brief, clear, consistent and project specific. | _____ | _____ | _____ |
| 4. Label the applicable plan view stations in the title block at the lower right-hand corner on each sheet. | _____ | _____ | _____ |

Plan View

- | | | | |
|--|-------|-------|-------|
| 5. Show mainline stationing increasing from left to right (south to north or west to east). Note where the centerline is not coincident with the survey or construction line. | _____ | _____ | _____ |
| 6. Provide tic marks along the centerline at 50' intervals and note the station on every even 100' intervals and at all intersections. | _____ | _____ | _____ |
| 7. Use match lines with baseline station labeled on the match line. | _____ | _____ | _____ |
| 8. On projects where a coordinate system has been set up, show the coordinates for all control points and other critical points, such as PI's, POT's, etc. | _____ | _____ | _____ |
| 9. For rural facilities use a plan view scale of 1"=50'. For urban facilities, use a plan view scale of 1"=20'. | _____ | _____ | _____ |
| 10. Show all P.C.'s and P.T.'s along the centerline. | _____ | _____ | _____ |
| 11. Place the horizontal curve data on the inside of the curve to which it applies. Include superelevation rates and superelevation transition stations with horizontal curve information if applicable. | _____ | _____ | _____ |
| 12. Where deflection angles are used, show the angle to nearest second of a degree. Include coordinates, if available. | _____ | _____ | _____ |

Required Information. (Answer Yes, No, Further Information Required (FIR), or Not Applicable (NA)).

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- | | | | | |
|-----|--|-------|-------|-------|
| 13. | Note all pavement widths at the beginning and end of each sheet and wherever there is a change in pavement width. | _____ | _____ | _____ |
| 14. | Provide a North arrow on each sheet. | _____ | _____ | _____ |
| 15. | Ensure station call outs are provided at: | _____ | _____ | _____ |
| | • beginning and end points of the project, | _____ | _____ | _____ |
| | • matchlines with other projects, | _____ | _____ | _____ |
| | • omissions from paving and station equations, | _____ | _____ | _____ |
| | • 100' station increments, | _____ | _____ | _____ |
| | • horizontal curve points, | _____ | _____ | _____ |
| | • | _____ | _____ | _____ |
| | • beginning and ending points of tapers, radii, P.C.'s, P.T.'s, P.C.C's, etc. | _____ | _____ | _____ |
| | • construction limit locations, | _____ | _____ | _____ |
| | • right-of-way alignment breaks, | _____ | _____ | _____ |
| | • curb returns for entrances and intersections, | _____ | _____ | _____ |
| | • entrance centerlines, | _____ | _____ | _____ |
| | • special construction applications, | _____ | _____ | _____ |
| | • side street intersections, | _____ | _____ | _____ |
| | • permanent survey and right-of-way markers, | _____ | _____ | _____ |
| | • section lines, | _____ | _____ | _____ |
| | • other necessary locations, and | _____ | _____ | _____ |
| | • show all utility and drainage information. | _____ | _____ | _____ |
| 16. | If separate right-of-way sheets are included with the plans, show the existing and proposed right-or-way limits on the plans. If the right-of-way plans are not included with the plans, also incorporate the following: | _____ | _____ | _____ |
| | • dimensions of the properties to be acquired, | _____ | _____ | _____ |
| | • station ties to property lines, | _____ | _____ | _____ |
| | • property ownership lines, | _____ | _____ | _____ |
| | • parcel numbers, | _____ | _____ | _____ |
| | • property owner names, | _____ | _____ | _____ |
| | • station locations of right-of-way alignment breaks | _____ | _____ | _____ |
| | • temporary and permanent easement locations, | _____ | _____ | _____ |
| | • points where the control of access does not coincide with the right-of-way line, | _____ | _____ | _____ |

Required Information. (Answer Yes, No, Further Information Required (FIR), or Not Applicable (NA).	Compliance		
	<u>First</u>	<u>Second</u>	<u>Third</u>
<ul style="list-style-type: none"> • the existing surface material type; • any pertinent data that will affect right-of-way costs. 	___	___	___
17. Show all approved points of entry or exits across control of access lines.	___	___	___
18. Show the locations for all new and existing guardrail installations.	___	___	___
19. For entrances and side road intersections, show the following:	___	___	___
<ul style="list-style-type: none"> • the facility with the applicable street name, route number, or entrance type; • the existing surface material type; • the width of the intersecting facility; • for intersections with public roads, the angle of intersection from the side road centerline to the mainline centerline; and • direction of ditch drainage. 	___	___	___
20. Properly label all additional constructed improvements.	___	___	___

Profile View

21. Show the profile of the finished surface or top of the subgrade along the centerline for the proposed facility.	___	___	___
22. Use the same horizontal scale as shown for the plan view. The vertical scale is typically 1"=5'. Consider 1"=2' for overlay plans or flat profiles.	___	___	___
23. Show the existing ground line to the nearest 0.1' and proposed pavement surfaces to the nearest 0.01'.	___	___	___
24. Show the vertical curve data above the profile line for crest curves and below the profile line for sag curves. Include the following vertical data for each curve:	___	___	___
<ul style="list-style-type: none"> • small triangle at the VPI, • small circles at all other vertical curve control points, • the VPI station, including short segments of vertical tangents, • the vertical curve length, 	___	___	___

Required Information. (Answer Yes, No, Further Information Required (FIR), or Not Applicable (NA).	Compliance		
	<u>First</u>	<u>Second</u>	<u>Third</u>
<ul style="list-style-type: none"> • the elevation at the VPI, and • superelevation notes information if applicable. • Label station and elevation of high and low points of the vertical curve 	_____	_____	_____
25. Show tangent grades to the nearest hundredth of a percent (i.e., 0.01%). Use a “+” prefix for positive grades and “-“ prefix for negative grades.	_____	_____	_____
26. Show the elevations for the survey line and proposed centerline vertically every 20’ for urban and every 50’ for rural projects.	_____	_____	_____
27. Provide additional profiles, where necessary, for: <ul style="list-style-type: none"> • pavement edges, • drainage structures, • special ditches • side roads, and • other situations. 	_____	_____	_____
28. For bridges within the project, show elevations for: <ul style="list-style-type: none"> • abutments, • piers, • low vertical clearance points, • the high water level, and • stream bed. 	_____	_____	_____

DRAINAGE AND UTILITIES INFORMATION ON PLAN AND PROFILE SHEETS

1. For culverts, note the following on the plan view:	_____	_____	_____
<ul style="list-style-type: none"> • centerline station for the ends, • direction and distance of the ends from the centerline, • culvert type, • pipe size and length, • flow direction, • skew angle, • upstream and down stream flow elevations, 	_____	_____	_____

Required Information. (Answer Yes, No, Further Information Required (FIR), or Not Applicable (NA).

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- end section or headwall type and size, and
- all applicable construction notes.

____ ____ ____
 ____ ____ ____

2. For storm drainage pipes, show the following:

____ ____ ____

Plan View

- each run of pipe between manholes, catch basins, and inlets,
- pipe material, (class if applicable), diameter and length,
- gradient, and
- flow arrow.

____ ____ ____
 ____ ____ ____
 ____ ____ ____
 ____ ____ ____

Profile View

- diameter of pipe,
- type of pipe,
- length,
- gradient, and
- trench backfill under pavements, walks and driveways and entrances.

____ ____ ____
 ____ ____ ____
 ____ ____ ____
 ____ ____ ____
 ____ ____ ____

3. For manholes, catch basins, and inlets, show the following:

____ ____ ____

Plan View

- structure number
- centerline station and offset,
- rim elevation, or grate elevation at edge of pavement, and
- invert elevations and direction (N,S,E,W) for all pipes.

____ ____ ____
 ____ ____ ____
 ____ ____ ____
 ____ ____ ____

Profile View

- centerline station,
- direction from centerline,
- device type and size,
- invert elevations for all pipes, and
- rim elevation.

____ ____ ____
 ____ ____ ____
 ____ ____ ____
 ____ ____ ____
 ____ ____ ____

4. For end sections, show the following:

____ ____ ____

Required Information. (Answer Yes, No, Further Information Required (FIR), or Not Applicable (NA)).

Compliance
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Plan View

- centerline station and offset, _____
- type, _____
- size, and _____
- end treatment (rip rap). _____

Profile View

- centerline station, _____
 - direction from centerline, _____
 - device type and size, and _____
 - outflow elevation at the bottom of pipe. _____
5. Note special ditch locations with invert elevations at 50’ intervals and breaks in grade on the cross sections. On the profile view note: _____
- gradient percentage, _____
 - centerline station, _____
 - beginning and ending elevations, and _____
 - elevations at gradient changes. _____
6. Note all overhead utilities where they cross the centerline and the type of utility. _____
7. Show all underground utilities within the right-of-way limits affected by the construction in Plan and Profile View. _____

INTERSECTION DETAIL PLANS

1. Intersection details: _____
- pavement elevations, _____
 - lane widths, _____
 - curb or edge of pavement radii, _____
 - curb ramps, _____
 - turning radii for left-turning vehicles, _____
 - location of median noses and islands, _____
 - location of traffic signal equipment, _____
 - location of traffic signs, _____

Required Information. (Answer Yes, No, Further Information Required (FIR), or Not Applicable (NA)).

Compliance
First Second Third

- | | | | | |
|-----|--|-------|-------|-------|
| 8. | Plot the proposed cross section using a dark, solid line and show: | _____ | _____ | _____ |
| | • centerline or the profile grade line, if different, | _____ | _____ | _____ |
| | • proposed pavement structure, | _____ | _____ | _____ |
| | • all side road and entrances, | _____ | _____ | _____ |
| | • curb and gutter or shoulders, | _____ | _____ | _____ |
| | • sidewalk locations and depth, | _____ | _____ | _____ |
| | • proposed side slopes, | _____ | _____ | _____ |
| | • special fill materials, | _____ | _____ | _____ |
| | • all new drainage structures, including the following: | _____ | _____ | _____ |
| | * centerline station, | _____ | _____ | _____ |
| | * distance and direction from centerline, | _____ | _____ | _____ |
| | * description and size of structure, | _____ | _____ | _____ |
| | * top and flow line elevations, | _____ | _____ | _____ |
| | • all underground utilities affected by the construction, | _____ | _____ | _____ |
| | • special ditch elevations and drainage direction, | _____ | _____ | _____ |
| | • proposed right-of-way and easement lines, and | _____ | _____ | _____ |
| | • any other special features. | _____ | _____ | _____ |
| 9. | Provide the proposed centerline pavement surface elevation vertically on each cross section. | _____ | _____ | _____ |
| 10. | Label the side slope on the first and last cross section of each sheet and where there are changes in the slope. Show the side slope using a vertical to horizontal ratio. | _____ | _____ | _____ |
| 11. | Show the average end area cut and fill amounts, in square feet, above or beside each cross section. | _____ | _____ | _____ |
| 12. | Show all undercutting for subgrade and unsuitable material. | _____ | _____ | _____ |
| 13. | Show all earthwork pavement for temporary pavements. | _____ | _____ | _____ |
| 14. | Provide separate cross sections for all approaches including side roads and entrances, and note the approach type, direction from centerline, and station next to the cross section. | _____ | _____ | _____ |

Required Information. (Answer Yes, No, Further Information Required (FIR), or Not Applicable (NA).

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LANDSCAPING

- | | | | |
|--|-----|-----|-----|
| 1. All disturbed areas seeded with mulch or blanket or sodded. | ___ | ___ | ___ |
| 2. 6" topsoil. | ___ | ___ | ___ |
| 3. Sod adjacent to developed property. | ___ | ___ | ___ |
| 4. Salt tolerant sod adjacent to highways. | ___ | ___ | ___ |
| 5. Fertilizer. | ___ | ___ | ___ |
| 6. Erosion control blanket for all seeded area. | ___ | ___ | ___ |

EROSION CONTROL

- | | | | |
|---|-----|-----|-----|
| 1. Standard notes. | ___ | ___ | ___ |
| 2. Layout of erosion control methods (Temporary and Permanent). | ___ | ___ | ___ |
| • Perimeter erosion control barrier, | ___ | ___ | ___ |
| • Inlet & pipe protection, | ___ | ___ | ___ |
| • Ditch checks, | ___ | ___ | ___ |
| • Siltation basins. | ___ | ___ | ___ |
| 3. Properties and sensitive areas protected. | ___ | ___ | ___ |
| 4. Storm Water Pollution Prevention Plan (SWPPP) | ___ | ___ | ___ |
| 5. Completed Notice of Intent (NOI) | ___ | ___ | ___ |

SIGNING

- | | | | |
|--|-----|-----|-----|
| 1. Exist sign location shown with sheeting, post and base type. | ___ | ___ | ___ |
| 2. Post type indicated. | ___ | ___ | ___ |
| 3. Is station/offset labeled for proposed or existing sign location? | ___ | ___ | ___ |
| 4. Is reflective media specified if not in specs or general notes? | ___ | ___ | ___ |

Required Information. (Answer Yes, No, Further Information Required (FIR), or Not Applicable (NA).

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- | | | | |
|--|-------|-------|-------|
| 5. Is sign dimensions shown or MUTCD sign designation labeled? | _____ | _____ | _____ |
| 6. Is sign location in accordance with the MUTCD or IDOT standard? | _____ | _____ | _____ |
| 7. Are Appropriate KDOT Standards included? | _____ | _____ | _____ |
| 8. Is A.T.S.S.A. Certification for Traffic Contractor or Technician specified in general notes or specs? | _____ | _____ | _____ |
| 9. Are impact recovery device(s) shown per KDOT Standards? | _____ | _____ | _____ |

PAVEMENT MARKING

- | | | | |
|---|-------|-------|-------|
| 1. Note scale. | _____ | _____ | _____ |
| 2. Are all markings noted to be Polyurea and are they recessed? | _____ | _____ | _____ |
| 3. Are pavement markings in accordance with IDOT District 1 Standards for Typical Pavement Marking? | _____ | _____ | _____ |
| 4. Are reflective pavement markers shown? | _____ | _____ | _____ |
| 5. Are all stations, offsets and lanes widths marked? | _____ | _____ | _____ |
| 6. Are all storage lanes marked and taper rates labeled? | _____ | _____ | _____ |
| 7. Are KDOT Standard Details for recessed pavement markings shown? | _____ | _____ | _____ |
| 8. Are raised medians and islands shown to be epoxyed per KDOT Standards? | _____ | _____ | _____ |

TRAFFIC SIGNAL SHEETS

- | | | | |
|---|-------|-------|-------|
| 1. Was the Illinois Department of Transportation District 1 Traffic signal Design Guideline used in design process? | _____ | _____ | _____ |
|---|-------|-------|-------|

SUMMARY OF QUANTITIES SHEET(S)

- | | | | |
|---|-------|-------|-------|
| 1. Is a Summary of Quantity Table provided for each intersection? | _____ | _____ | _____ |
| 2. Is the Summary of Quantities shown on the Cable Plan sheet? | _____ | _____ | _____ |

Required Information. (Answer Yes, No, Further Information Required (FIR), or Not Applicable (NA).

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- | | | | |
|---|-----|-----|-----|
| 3. Does the Summary Table show list items in pay item code number sequence priority, with the full pay code item description? | ___ | ___ | ___ |
|---|-----|-----|-----|

DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

- | | | | |
|--|-----|-----|-----|
| 1. Are District 1 Standard Traffic Signal Design Details provided? | ___ | ___ | ___ |
|--|-----|-----|-----|

GEOMETRIC PLAN AND SIGNAL LAYOUT SHEET

- | | | | |
|--|-----|-----|-----|
| 1. North arrow up or to the right. | ___ | ___ | ___ |
| 2. Geometric layout scale: 1"=20'. | ___ | ___ | ___ |
| 3. Break lines are <u>not</u> allowed. All pavement, driveways and cross streets between the intersection and perimeter loops must be shown. | ___ | ___ | ___ |
| 4. Proposed geometrics only should be shown. | ___ | ___ | ___ |
| 5. Label and dimension R.O.W. | ___ | ___ | ___ |
| 6. Dimension pavement marking and lane widths. | ___ | ___ | ___ |
| 7. IDOT District 1 traffic signal legend provided. | ___ | ___ | ___ |
| 8. Label highway names. | ___ | ___ | ___ |
| 9. Dimension equipment locations. | ___ | ___ | ___ |
| 10. Dimension loops and their locations. | ___ | ___ | ___ |
| 11. Dimension and size conduit runs. | ___ | ___ | ___ |
| 12. Special detail sheet(s) should be referenced from this sheet. | ___ | ___ | ___ |
| 13. Curb, sidewalk, known utilities, driveways, buildings and other features adjacent to R.O.W., etc. | ___ | ___ | ___ |
| 14. Locate drainage structure(s) which may affect signal appurtenances. | ___ | ___ | ___ |
| 15. Are video detection, battery backup system and LED included per Kane County Division of Transportation Minimum Design Standards? | ___ | ___ | ___ |

Required Information. (Answer Yes, No, Further Information Required (FIR), or Not Applicable (NA).

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CABLE PLAN, SEQUENCE OF OPERATION AND SCHEDULE OF QUANTITIES SHEET(S)

- | | | | |
|---|-------|-------|-------|
| 1. North arrow up or to the right. Same orientation as the Signal Layout Sheet. | _____ | _____ | _____ |
| 2. Cable plan including signal heads. | _____ | _____ | _____ |
| 3. Cable plan legend. | _____ | _____ | _____ |
| 4. Schedule of Quantities. | _____ | _____ | _____ |
| 5. Phase Designation Diagram or Chart Sequence of Operation. If these Diagrams or Chart Sequences do not fit on this sheet, a separate sheet may be used. Also include diagram or chart sequence for emergency vehicle preemption and chart sequence for railroad preemption. | _____ | _____ | _____ |

SYSTEM INTERCONNECT SHEETS

System Interconnect Plan Sheet

- | | | | |
|---|-------|-------|-------|
| 1. North arrow up or to the right. | _____ | _____ | _____ |
| 2. Geometric layout scale: 1"=50'. | _____ | _____ | _____ |
| 3. Label and dimension R.O.W. | _____ | _____ | _____ |
| 4. Dimension and size conduit runs. | _____ | _____ | _____ |
| 5. Denote limits of system within intersections and system loops. | _____ | _____ | _____ |
| 6. Denote which intersection system detectors feed. | _____ | _____ | _____ |
| 7. Interconnect Plan Legend. | _____ | _____ | _____ |

SYSTEM INTERCONNECT SCHEMATIC

- | | | | |
|---|-------|-------|-------|
| 1. System Schedule of Quantities (Put on interconnect schematic plan) | _____ | _____ | _____ |
| 2. System detectors and what intersection they are assigned to, number of conductors to each system detector, cable between controllers, type of conductor (either copper or fiber optic) between controllers, location of the master controller and telephone service. | _____ | _____ | _____ |

Required Information. (Answer Yes, No, Further Information Required (FIR), or Not Applicable (NA)).

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MAST ARM MOUNTED SIGN DESIGN SHEET(S)

- | | | | |
|--|-------|-------|-------|
| 1. Use the District design sheet. | _____ | _____ | _____ |
| 2. Multiple intersection designs may be used on one sheet. | _____ | _____ | _____ |

DISTRICT 1 TRAFFIC SIGNAL SPECIFICATIONS

- | | | | |
|--|-------|-------|-------|
| 1. Are the latest District 1 Traffic Signal Specifications used? | _____ | _____ | _____ |
| 2. Any additions, modifications, or subtractions to the District 1 Traffic Signal Specifications must first be approved by the County. | _____ | _____ | _____ |

HIGHWAY LIGHTING SHEETS

- | | | | |
|---|-------|-------|-------|
| 1. Was the Illinois Department of Transportation District 1 "General Guidelines for Lighting Design and Plan Preparation" used in the design process. | _____ | _____ | _____ |
| 2. Highway classification and pedestrian conflict area provided. | _____ | _____ | _____ |
| 3. Basic Lighting layout showing locations of light poles, control installation, conduits and cables. | _____ | _____ | _____ |
| 4. Calculations and supporting documentation showing the levels of illuminance, luminance and veiling luminance and uniformity ratios as designated in the IES RP-8-00. | _____ | _____ | _____ |
| 5. Light pole setback and type of pole, breakaway or non-breakaway. | _____ | _____ | _____ |
| 6. Voltage drop calculations and cable sizing. | _____ | _____ | _____ |
| 7. One line diagram. | _____ | _____ | _____ |
| 8. Load tabulations for each circuit. | _____ | _____ | _____ |
| 9. Grounding scheme. | _____ | _____ | _____ |
| 10. Legend | _____ | _____ | _____ |