



**CROW WING COUNTY  
POLICY  
ACCESS MANAGEMENT FOR ROADS UNDER COUNTY JURISDICTION  
County Board Approved: April 23, 2019**

**BACKGROUND**

With road and road right of ways (ROW) safety being of the highest importance, it is the intent of the Crow Wing County (CWC) Highway Department to create an access management policy that provides consistent guidelines for reasonable accesses.

All access permit approvals and construction requirements are at the discretion of the CWC Highway Department and will be reviewed on a case by case basis.

**DEFINITIONS**

- **AASHTO** American Association of State Highway and Transportation Officials. AASHTO sets transportation standards and policy for the United States.
- **Access** refers to any connection from a property to a CWC Road, such as, but not limited to a driveway, entrance, path, trail, approach, parking area, temporary accesses etc.
- **CWC** refers to Crow Wing County.
- **CWC Road** refers to all types of roads under CWC's road authority including the road right of ways. This includes unorganized territories.
- **Traffic study** is a study of traffic movements including but not limited to traffic counts and traffic generation along a corridor of roadway and a proposed access. The study provides data and recommendations for CWC to use at its discretion to ensure the corridor's safety and to address concerns with accesses. If required by CWC, the applicant is responsible for the cost of the third party traffic study.

**PURPOSE**

The purpose of this policy is to communicate the requirements for roadway connections where one or more lots will be utilizing the road for residential, commercial, industrial, timber harvest, recreation or agricultural purposes to:

- Promote safety for roadway users;
- Reduce congestion and crashes;
- Preserve road capacity and postpone the need for roadway widening;
- Improve travel times for the delivery of goods, people and services;
- Ease movement between destinations;
- Limit and control the number of access points allowed;
- Provide guidance for turn lanes and bypass lanes;
- Support local economic development.



**PROCESS**

The process to obtain a permit to construct a new access or reconstruct an existing access is available at <http://crowwing.us/157/Permits-Fees-Services>. The Policy for Access to Roads Under County Jurisdiction details the procedure for applicants.

**REQUIREMENTS**

Approval of an access plan for an entrance or roadway connection is required prior to any one of the following events:

- Construction, reconstruction, or relocation of any new or existing public or private access to a CWC Road;
- A change in the primary use or intensity of the land that may change the amount of traffic using any existing private access to a CWC Road. This may include, but is not limited to, a change from agricultural to industrial, residential to commercial, single to multi-family, substantial building square footage increase, substantial increase in parking stalls or office to retail.

**APPROVAL CONSIDERATION GUIDELINES**

The conditions listed below will factor into the approval of the application:

**Table 1**

Safety	Number of Existing Driveways
Roadway Design (connector, dead end)	Sight Distance
Average Daily Traffic (ADT)/Trip Counts	Spacing Between Driveways
Number of Traffic Lanes	Efficiency of the System
Type of Median Treatment (none or median)	Offset Driveways and Streets
Type of Turn Lane Treatment	Restricted Movements & Median Openings
Interim Access	Shared Driveways
Traffic Study/Environmental Recommendations	Corner Clearance and Access within the Functional Area of an Intersection
Pending Roadway/Utility Improvements	Controlled Access
Comments from Other Agencies	Existing/Future Land Use
Roadway Environment (rural or urban)	Auxiliary or Turn Lanes

**NO NET GAIN ACCESSES**

Parcels or lots with existing accesses have the option to move or remove an existing approach as long as it meets the criteria set forth in this policy and has approval from CWC. The intent is to allow property owners flexibility to move or reconfigure their entrance access, without increasing the number of access points on CWC roadways.



## **PERMITS**

All permits and costs associated with the project at the time of application and future permits relating to the project's application are the applicant's responsibility.

## **MEASUREMENTS**

The spacing between accesses will be measured as follows:

- Public intersections must be measured from the centerline of the intersection under review to the centerline of the next intersection or the centerline of the next driveway.
- Private driveways must be measured from the centerline of the driveway under review to the centerline of the next driveway or the centerline of the next intersection.
- An access will be considered in compliance with spacing requirements if it does not deviate more than 5% from the spacing standards established in this policy.

## **STREET/ROADWAY CONNECTIONS**

Submission of an access plan for roadways connecting to a CWC Road shall have an Minnesota licensed engineer signed site plan, consisting of the property, the proposed lots and the surrounding area, drawn to scale and be consistent with the Land Use Ordinance.

The access plan must also provide the following information:

- The dimensions of the property and the location of public rights-of-way and property lines;
- The existing and proposed land use. For residential uses, indicate the number of units. For all other uses, indicate the specific type of use, square footage of existing and proposed structures, number of employees, and number of parking spaces;
- The location and dimensions of existing and proposed structures, accesses, parking, drive aisles, and internal circulation;
- The location of local streets and roads serving the surrounding area, the land use on adjacent parcels, and the location of and distance to public or private access serving adjacent parcels;
- If the property is planned to be developed in phases or could be further subdivided in conformance with the underlying zoning, a build-out plan specifying location, size, and timing of additional parcels and/or structures and parking;
- A traffic impact study, if requested by CWC and/or any other affected road authority;
- A signal justification report, if an intersection control is proposed as part of the plan;
- Any other information reasonably required by other affected road authorities.



**STANDARDS FOR ALL STREET/ROAD INTERSECTIONS.**

- A street/road intersection must not be located within a turn lane to another public street or a private driveway;
- The intersection must be located to provide adequate intersection sight distance, as provided in the most current AASHTO standards;
- The minimum spacing between a street intersection and the next street intersection or commercial access to a CWC Road must conform to the stopping sight distance associated with the posted speed limit, as provided by AASHTO;
- Turn lanes must be provided in accordance with CWC guidelines or as recommended by the affected road authority;
- To ensure adequate corner clearance, any public or private access to a road that intersects with a road must be located away from the roads' centerline by the minimum distance indicated in Table 2.

**Table 2  
Spacing for Streets Connecting to CWC Roads**

<b>Intersecting Street Type</b>	<b>Connecting Street Type</b>	
	<b>Two-Lane</b>	<b>Four-Lane</b>
Priority 1 (ADT>5000)	660'	660'
Priority 2 (ADT 4999-500)	660'	660'
Priority 3 (ADT 499-1)	300'	300'

\*This applies to street to road connections, not road to entrances



## **PRIVATE ACCESS REQUIREMENTS**

- Access permitting of a parcel with one private access to a CWC Road will take place only if a reasonably convenient and suitable alternative access is not available or attainable from the local road network or by a shared access with an adjacent parcel.
- Consideration of a private access designed to serve four or more residential lots will defer to the requirements for a public street connection and the guidelines set forth in the Land Use ordinance;
  - If future development takes place, a new access plan application will be required, superseding the previous access plans or permits.
- To maintain minimum safe spacing between commercial accesses as future development occurs, a commercial access may be required to serve adjacent property via a shared entrance located on the common property line or a cross access easement.
- When required to provide a shared entrance or cross access easement, the agreeing parties must record an easement with CWC, allowing cross access to and from the properties served by the shared driveway or cross access. The easement should include a joint maintenance agreement defining the responsibilities of the property owners.
- Turn lanes must be provided as required by CWC or the affected road authority, and costs will follow the road authorities most current cost/fee schedule;
- Residential access design must provide adequate space on the property for vehicles to turn around without backing on to a CWC Road;
- The Approving Authority may attach conditions to the approval as deemed necessary to promote the spirit and intent of this policy. The access may be approved as an interim access to be phased out at a future time or condition;
- Turning movement to and from the access may be restricted at the time of construction or at a future date, based upon existing or anticipated traffic volumes;
- The access may be required to serve existing or future adjacent property by a shared entrance or cross access easement as described in this document; or
- Other conditions may be required based on the conclusions and recommendations of a traffic study and/or the review by CWC or another affected road authorities.
- If a lot split is pending, submitting a recorded document with the application is required.
- All culverts placed within the CWC Road (ROW) must receive approval from the CWC Highway Department before installation.
- An access permit is required if a property changes use and the change involves increased traffic counts and/or relocation of the entrance and/or modification.
- All accesses shall be at right angles to the highway for a distance of at least 15 feet from the shoulder line of the road.



- Residential accesses shall not exceed 20 feet in width, measured at right angles to the center of the access's ditch bottom.
- Commercial accesses shall not exceed 32 feet in width, measured at right angles to the center of the access ditch bottom.
- In cases where it is practical, multiple lots will share the same access to a CWC Road. This is to limit the number of access points and maintain adequate ditch storm water capacity and retention. The area on the ROW, other than that of the access itself, will be in the form of a ditch.
- In urban areas (curb & gutter), the applicant is responsible for any removal and installation of conforming surmountable/drive over curb and curb ends. All curbs must meet and be constructed in accordance with CWC standards and specifications and be constructed with certified 4000 lb. air entrained concrete. Complete removal of the entire curb and gutter in the affected area is required when changing the curb type.
- Wedges installed along the curb's gutter can only be temporary for thirty days.
- Installation of a surmountable drive over curb is required for new driveway/entrances with existing curb lines. On urban roadways (concrete curb & gutter), any proposed driveway/entrance shall be located to avoid drainage structure (catch basin, manholes, etc.) locations.
- Where practical, accesses shall drain away from the road's shoulder for a distance of 15 feet with a fall of six (6) inches. Hard surfaced accesses (asphalt or concrete must slope away from the roadway.
- The access's side slopes (top of the access to the ditch bottom) shall have a minimum slope no steeper than one foot vertically to four feet horizontally (1:4).
- The finished side slopes shall have a minimum of four (4) inches of topsoil, with a seed mixture meeting specifications.
- Erosion control must be used and remain in place until substantial vegetation is established.
- Substantial vegetation is vegetation that completely covers all disturbed areas within the road right of way, excluding the driving surface. Substantial vegetation is dense vegetation that stands four inches tall and will reasonably withstand washouts caused by rain or snow runoff.
- The surface of the access must contain at least three (3) inches of compacted Class #5 or #1 gravel base. Recycled asphalt, recycled concrete, iron ore tailings and granite chip products are acceptable. Finished surfaces of asphalt or concrete are acceptable as long as they have a minimum of three (3) inches of gravel base under them.
- No foreign material, such as dirt, gravel or bituminous, shall be left or deposited on the road during construction of accesses or installation of drainage facilities.
- Debris removal and roadside cleaning must take place each day after work is complete. If vehicle tracking of material onto CWC Road's from the access or site occurs, a rock or woodchip top layer is required to reduce tracking onto the roadway.



### **ADDITIONAL CONSIDERATIONS**

The County Highway Department can authorize a permit when encountering certain hardships such as water crossings, landlocked property, temporary access, safety concerns, etc.

Authorizing these requests is on a case-by-case basis and can take extra time to determine the appropriate solution. Criteria for authorizing an additional access may be based on the considerations below:

- Average daily traffic counts;
- System continuity;
- Dead end roads/roads with no outlet;
- Adequacy of storm water/snow storage needs;
- Public safety;
- Lot/parcel configuration;
- Availability of accesses;
- Alternative accesses;
- Internal continuity and operation;
- Environmental & site specific situations;
- Access to agricultural lands for limited agricultural use only. These accesses are for limited, intermittent farm use implements and not frequent ingress and egress.
- Any and all others circumstances may be considerations.

The process to apply for an additional approach will follow the guidelines of the Entrance Permit Application for Permit to Construct a Driveway/Entrance.

### **CONSTRUCTION: CULVERTS**

- All new roadway connections require a reinforced concrete culvert with aprons, when CWC determines a culvert is needed. Costs, delivery and installation of a reinforced concrete culvert is the applicants' sole responsibility. CWC will supply and deliver a non-concrete culvert for new or reconstructed private accesses.
- The CWC Highway Department will supply and replace existing county approved culverts that fail because of normal use and life expectancy, at no cost to property owner;
- If a property owner wishes to lengthen the culvert, they must complete an Application for Permit to Construct an Access <http://crowwing.us/157/Permits-Fees-Services>.
- If extensions to existing culverts are required, the cost of the culvert extensions will be deducted from the access applicant's security deposit.
- Construction of an access is the responsibility of the applicant, including all costs for design, construction and materials.



## TURN & BYPASS LANES

A **Turn Lane** is an auxiliary lane designed to separate turning vehicles from through-traffic. Turn lanes may be used on both divided and undivided highways (see Figure 1).

A **Right-Turn Treatment** is a modification to the roadway shoulder to accommodate right-turning vehicles (see Figure 1). A right-turn treatment may be used on divided or undivided highways and includes all of the following modifications to the outside shoulder:

- Removal of existing shoulder and construction of a new turn lane at a pavement seam or just outside the fog line;
- Removing conflicting striping and shoulder rumble strips;
- Prohibiting on-street parking on the widened shoulder; and,
- Adding pavement thickness on the shoulder.

A **Left-Turn Treatment** is a modification to the center of a roadway to accommodate left-turning vehicles. A left-turn treatment may be used on divided or undivided highways and includes all of the following modifications:

- Widening of the road in the turn lane area;
- Removing conflicting striping and rumble strips.

A **Bypass Lane** is an auxiliary lane on a two-lane undivided highway designed to guide through-traffic around left-turning vehicles stopped in the through-lane (see Figure 1).

In no case shall a turn or bypass lane affect a ditch's drainage capacity or storage. If a turn or bypass lane does affect a ditch's capacity, widening of the ditch to accommodate storm water runoff will be required. All site storm water drainage must remain onsite and not add to the public ditch.

## GUIDANCE AND EXAMPLES

Turn lanes should be provided at public street connections and private accesses as determined by CWC, with the guidance below:

**Left-Turn Lanes** – A left-turn lane should be provided when there is a site-specific geometric or safety concern, as indicated below, or if the traffic volume levels warrant one.

**Right-Turn Lanes** – A right-turn lane should be provided when there is a site-specific geometric or safety concern, as indicated below, or if the traffic volume levels warrant one.

**Bypass Lanes** – A bypass lane may be considered when a left-turn lane is warranted but where its construction is not practical (due to limited right of way, steep terrain, existing structures, wetlands, or other protected features,). The bypass lane is for use at "T" intersections where no other public street connection or driveway will be located in the bypass lane or corresponding





tapers. Right-turn/bypass lanes at four-legged intersections should be used only after all other solutions have been found impractical and where the cross-street volume is low.

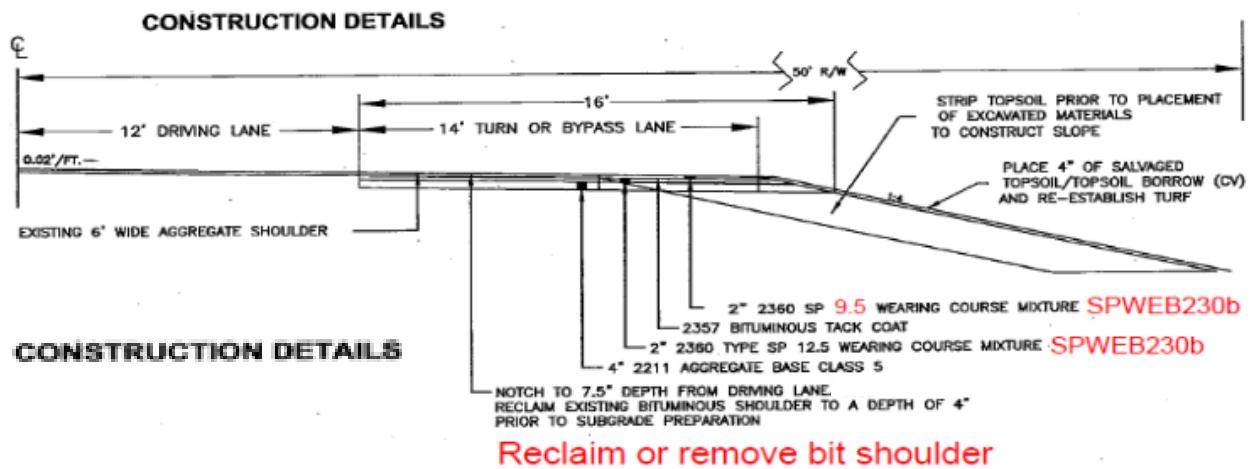
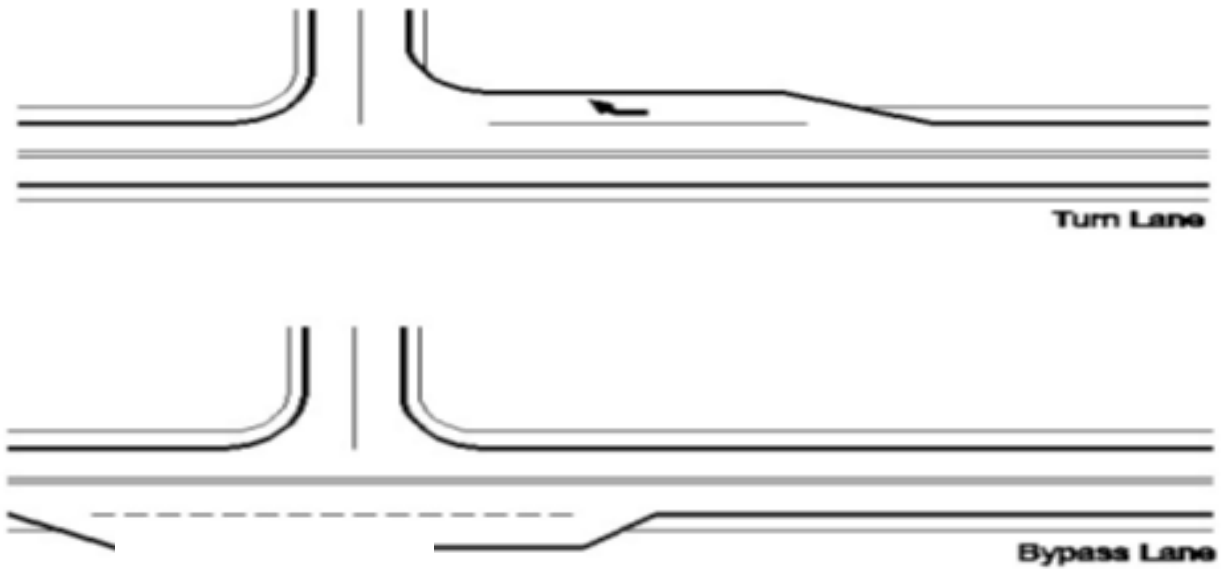
Turn-Lanes for highways are shown in Figure 1. The following may also apply to both left and right turn lanes as well as bypass lanes:

- **Passing Lane/Climbing Lane** – At high-volume accesses (> 100 trips per day) and all public street connections located on highway segments where passing lanes or climbing lanes are present in the approach direction.
- **Limited Sight Distance/Terrain** – At all accesses and public street connections with inadequate stopping sight distance or located on short vertical curves or steep grades. Designers may consider alternative options, such as access relocation, vegetation removal, and spot grading as alternatives to building turn lanes.
- **Railroad Crossings** – At high-volume accesses (> 100 trips per day) and all public street connections where a railroad is parallel to the highway and where the potential exists for vehicles delayed by a train to back up into the through-lanes of the highway, creating both safety and operational problems. At these locations, the queuing of traffic caused by train movements should be considered. If the cross street between the railroad and the highway does not provide adequate storage, then a turn lane or turn-lane treatment should be considered on the highway to provide the additional storage needed.
- **Intersection Controlled Intersections** – At all intersection controlled public street connections.
- **Heavy-Vehicle Traffic** – At all accesses and public street connections on high-speed highways (posted speed  $\geq$  45 mph) where the heavy-vehicle turning volume is 15 or more vehicles per hour for at least eight hours a day for four months or more per year. Examples of this include gravel operations, large grain elevators, or large distribution centers.
- **School Entrances** – At public and private school accesses on high-speed highways (posted speed  $\geq$  45 mph) used by school traffic.
- **Crash History** – At high-volume accesses (>100 trips per day) and all public street connections that demonstrate a history of crashes of the type suitable to correction by a turn lane or turn-lane treatment (typically three or more correctable crashes in one year), or where adequate trial of other remedies has failed to reduce the crash frequency.
- **Corridor Crash Experience** – On highway corridors that demonstrate a history of similar crash types suitable to correction by providing corridor-wide consistency in turn-lane use.
- **Vehicular Volume** -At high-volume accesses (>100 trips per day) and all public street connections on high-speed highways (posted speed  $\geq$  45 mph).



**TURN LANE TREATMENTS, BYPASS LANE AND CONSTRUCTION EXAMPLES (FIGURE 1)**

**\*Contingent on CWC Highway approval & field conditions**





### **REQUIREMENTS AFTER THE APPLICATION'S APPROVAL: CONSTRUCTION**

If the proposed development requires any additional approval according to the underlying Zoning, Subdivision, Variance Request or Land Use Ordinance, the Access Plan review will be a supplement to those requirements and according to the procedures established for the related application. If the proposed development does not require additional review and approval, the CWC Highway Department must review and approve or deny the access plan.

### **COSTS AND RESPONSIBILITIES**

The applicant is responsible for all costs associated with implementation and construction of the access and the access plan beyond the most current CWC Cost Share Agreement and fee schedule, including the improvements required to meet any conditions of approval.

Improvements may include a traffic study, construction of the access or intersection, turn lanes, medians, connecting roadways or driveways, drainage devices and structures, associated grading and site restoration, intersection control and the acquisition and/or dedication of necessary right-of-way as permitted by law, etc.

### **SECURITY DEPOSIT/BONDING**

The applicant must provide a security deposit and fee, in compliance with CWC's Fee Schedule, to guarantee completion of any required improvements associated with the approved access application. Once construction is complete, there is substantial vegetation, meaning 80% of the disturbed areas have a minimum 4" tall vegetation growing, and there is no chance of washouts from heavy rains, the security deposit will be returned to the party who finished or authorized the completion of the work. A surety bond may be required at the discretion of the County Engineer to ensure protection of the public's investments.

### **CONSTRUCTION STANDARDS**

Typical construction standards shall follow Attachment A of this policy and CWC's Road Construction Specification Policy. Additional requirements may also be required as conditions to the permit.

### **COMPLIANCE**

The intersection or access must be constructed in complete compliance with the approved access plan. If the CWC Highway Department finds the construction has not been completed as approved, the security deposit may be used to complete or repair the access and/or any required improvements in compliance with the approved access plan. Costs associated with noncompliance not covered by the security deposit may be subject to direct invoicing for the work and/or other means by CWC. Substantial completion of all entrance work must take place within one year of the application date. If the project is not complete or does not meet standards within one year, forfeiture of the deposit takes place, the entrance permit becomes void and the access becomes non-compliant unless CWC issues a completion extension. Removal of non-compliant accesses may take place if deemed a hazard by CWC. If the cost is greater than the deposit, the applicant is subject to direct invoicing for the work and/or other means by CWC.



### **CHANGE IN CONDITIONS**

If conditions change and affect the nature, scope or circumstances of the application and/or access permit, the applicant must notify the CWC Highway Department immediately and may be required to cease and desist all activities until a formal resolution is determined.

### **DURATION OF APPROVAL**

If the access has not been constructed or utilized within one year after approval of the access permit, the approval expires, unless the original Approving Authority grants a written time extension. The security deposit will be refunded, less any monies required to complete the work. To request an extension, a written request explaining the need for the extension must be submitted to the CWC Highway Department at least 30 days before the expiration of the original approval. The original approving authority must determine whether to grant the extension or require a new application.

### **COORDINATION WITH AFFECTED ROAD AUTHORITIES**

The CWC Highway Department may notify and consult with any affected road authorities regarding the proposed access plan and will consider their comments and recommendations in the review of the access plan. Review and approval of an access plan required under this policy does not substitute for compliance with the access permit regulations of any other affected road authority.

### **APPLICANT APPEAL DECISION**

An applicant whose access plan is not approved, or is approved with conditions not agreed to by the applicant, shall have 30 calendar days to appeal the decision in writing to the CWC Highway Engineer, stating the reasons for which an appeal should be approved.

### **INSPECTION/TESTING**

Crow Wing County has the right to inspect and test all materials on projects within the CWC Road ROWs and during construction of projects that may be petitioned for CWC takeover.

**\*This policy is not intended to address road takeovers.**

### **SPECIAL CIRCUMSTANCES**

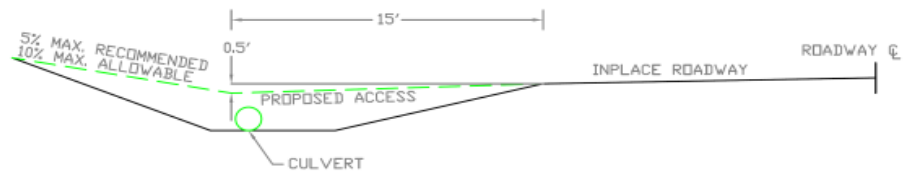
The local agency may impose conditions on the approval of any appeal as necessary to effect compliance with the spirit and intent of this policy.



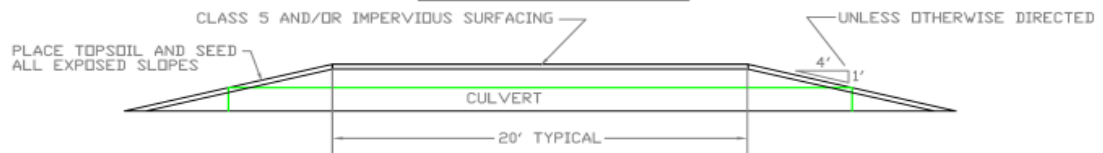
## ATTACHMENT A

### CROW WING COUNTY HIGHWAY DEPARTMENT ENTRANCE CONSTRUCTION INFORMATION

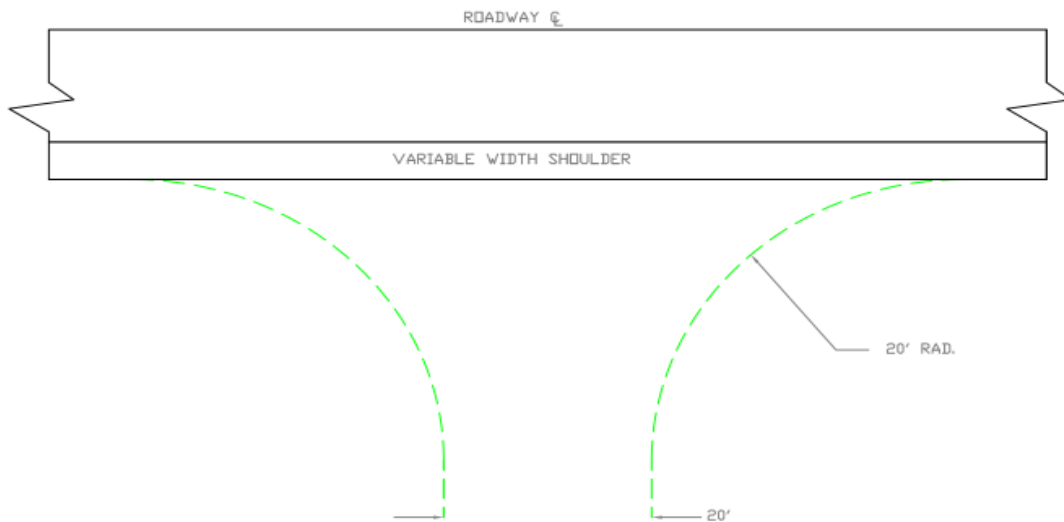
#### COUNTY JURISDICTION ROADWAY CROSS-SECTION



#### ENTRANCE CROSS-SECTION



#### PLAN VIEW



NOTE: Dependent upon roadway shoulder width, topography and other variables, Crow Wing County may require or allow dimensions different than those shown.

September, 2013



### **Works Cited**

Department of Transportation. "Access Management." [www.dot.state.mn.us](http://www.dot.state.mn.us). Minnesota Department of Transportation. 2017 Web. 21 August 2017.

MN/DOT Access Management Manual Chapter 3. "Guidelines for Public Street and Driveway Connections." [www.dot.state.mn.us](http://www.dot.state.mn.us). Minnesota Department of Transportation. 2017 Web. 21 August 2017.

MN/DOT "Road Design Manual." Minnesota Department of Transportation. <https://roaddesign.dot.state.mn.us/roaddesign.aspx>. Web. 29 November 2017.