KANE COUNTY DIVISION of TRANSPORTATION

Carl Schoedel, P.E. Director of Transportation County Engineer



41W011 Burlington Road St. Charles, IL 60175 Phone: (630) 584-1170 Fax: (630) 584-5265

INVITATION TO BID

ROUTE AND LIMITS: Burlington Road over Virgil Ditch No. 3 North and South

SCOPE: The work to be performed under this contract consists of reconstruction of two box culvert structures, earth excavation, pavement, pavement markings and guardrail. Plans and proposal forms are available online at http://www.countyofkane.org/Pages/countybids.aspx. Bidding instructions attached.

LOCAL BID OPENING DATE & LOCATION: Sealed bids will be received only at the <u>Kane County</u> <u>Division of Transportation</u> until the public bid opening on Tuesday, March 10, 2020 at 9 A.M. at the <u>Kane County Division of Transportation at 41W011 Burlington Road, St. Charles, IL 60175</u>.

<u>GENERAL REQUIREMENTS</u> This project is also advertised through the Illinois Department of Transportation, Bureau of Local Roads and Streets' current Contractors Bulletin. Visit <u>IDOT's Notice</u> to Contractors Bulletin for Local Public Agencies for additional project information.

CONTACT INFORMATION:

Jennifer O'Connell Senior Project Manager OConnellJennifer@co.kane.il.us (630) 406-7333

Bidding Instructions

- Bid packets (including, among other things, plans, special provisions, prequalification requirements, addendums, proposal forms, etc.) shall only be available on-line, at: <u>http://www.countyofkane.org/Pages/countybids.aspx.</u>
- Addendums to the bid packet may be made at any time by the County prior to bid opening. Bidders may be added to our email notification list for future Addendums and a bidders list by emailing KDOT_bidders_list@co.kane.il.us referencing (*Burlington Road over Virgil Ditch No. 3 #14-00437-00-BR*) in the subject line, but this should not be relied upon solely for Addendum notifications. It is still the Bidder's continuing responsibility to regularly check and verify on-line at: <u>http://www.countyofkane.org/Pages/countybids.aspx</u> for any addendums to the bid packet prior to the bid opening.
- Prequalification is required of all bidders. All qualified bidders must meet the requirements specified in the subject bid proposal Special Provisions. Prequalification should be submitted with proposals and placed <u>on the outside</u> of the sealed proposal packet for convenient verification before proposals are opened and publicly read, but will be accepted up to 24 hours after the bid opening.



Local Public Agency Formal Contract Proposal

PROPOSAL S	SUBMITTED BY	
Contractor's Name		
Street		P.O. Box
City	State	Zip Code

STATE OF ILLINOIS

COUNTY OF	Kane	
	Kane County Div	vision of Transportation
	(Name of City, Village, To	wn or Road District)
	FOR THE IMPROVE	EMENT OF
STREET NAME OR ROU	TE NO. Burl	ington Road
SECTIO	ON NO. 14-0	00437-00-BR
TYPE OF I	FUNDS Loc	al (Non-MFT)
SPECIFICATIONS (required)	✓ PLANS (required)	
Eas Municipal Ducio		
Submitted/Approved/Pa	ussed	Department of Transportation
Mayor President of Board of Trustees	Municipal Official	Regional Engineer
Date		Date
For County and Road Distric	t Projects	
Submitted/Approve	d	
Highway Comissioner		
Date Submitted/Approver County Engineer/Superintender 2 . (E . 26 2 Date	nt of Highways	

Note: All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed

RETURN WITH BID

		County		Kane	
NOTICE TO BIDDERS	Local Put	lic Agency		Kane Coun	ty
	Secti	on Number		14-00437-0	0-BR
		Route		Burlington	Road
Sealed proposals for the improvement described below will be received	ived at the office o	of the	County E	Ingineer	
41W011 Burlington Road, St. Charles, IL	un	til 9:00 AM	on	March 10), 2020
Address		Time		Dat	е
Sealed proposals will be opened and read publicly at the office of	Kane	County Divi	sion of T	ransportatio	n
41W011 Burlington Road, St. Charles, IL	a	9:00 AM	on	March 10), 2020
Address		Time		Dat	е
DESCRIPTION	OF WORK				
Name Burlington Road over Virgil Ditch No. 3 North and South	n Length:	1808.80	feet (0.3410	miles)
Location Burlington Road betwee	n Rohrsen Rd an	d Plato Rd	_ `_		
Proposed Improvement <u>Reconstruction of two box culvert structu</u>	res, earth excava	ion, paveme	ent,		
pavement markings, and guardrail.					
1. Plans and proposal forms will be available on-line only at: <u>http:/</u>	/www.countyofkar	ne.org/Pages	s/countyb	oids.aspx	
			NO CI	HARGE FOR P	ROPOSAL
2 Project contact: Jenniter O'Connell at	OConneliJenni	ter@co.kane	e.II.us		
If checked, the 2 low bidders must file within 24 hours after the le duplicate, showing all uncompleted contracts awarded to them ar Municipal and private work. One original shall be filed with the Av Office.	etting an "Affidavit nd all low bids per varding Authority a	of Availabilit iding award f and one origi	ty" (Form for Feder inal with	n BC 57), in ral, State, Co the IDOT Di	ounty, strict
 The Awarding Authority reserves the right to waive technicalities Special Provision for Bidding Requirements and Conditions for C 	and to reject any o ontract Proposals	or all proposa	als as pr	ovided in BL	RS
4. The following BLR Forms shall be returned by the bidder to the A	warding Authority	:			
 a. BLR 12200: Local Public Agency Formal Contract Proposal b. BLR 12200a Schedule of Prices c. BLR 12230: Proposal Bid Bond (if applicable) d. BLR 12325: Apprenticeship or Training Program Certification e. BLR 12326: Affidavit of Illinois Business Office 	n (do not use for	federally fu	nded pr	ojects)	
5. The quantities appearing in the bid schedule are approximate and the Contractor will be made only for the actual quantities of work according to the contract. The scheduled quantities of work to be decreased or omitted as hereinafter provided.	d are prepared for performed and ac done and materia	the compar cepted or ma als to be furn	ison of b aterials f ished ma	ids. Paymer furnished ay be increa	it to sed,
6. Submission of a bid shall be conclusive assurance and warranty requirements for the performance of work. The bidder will be resp failure or neglect to conduct an in depth examination. The Award costs, expenses, losses or changes in anticipated profits resultin	the bidder has ex ponsible for all err ing Authority will, g from such failure	amined the p ors in the pro n no case be or neglect o	olans and oposal re e respon of the bio	d understand esulting from sible for any dder.	ls all

- 7. The bidder shall take no advantage of any error or omission in the proposal and advertised contract.
- 8. If a special envelope is supplied by the Awarding Authority, each proposal should be submitted in that envelope furnished by the Awarding Agency and the blank spaces on the envelope shall be filled in correctly to clearly indicate its contents. When an envelope other than the special one furnished by the Awarding Authority is used, it shall be marked to clearly indicate its contents. When sent by mail, the sealed proposal shall be addressed to the Awarding Authority at the address and in care of the official in whose office the bids are to be received. All proposals shall be filled prior to the time and at the place specified in the Notice to Bidders. Proposals received after the time specified will be returned to the bidder unopened.
- 9. Permission will be given to a bidder to withdraw a proposal if the bidder makes the request in writing or in person before the time for opening proposals.

KANE COUNTY DIVISION OF TRANSPORTATION SECTION NUMBER 14-00437-00-BR BURLINGTON ROAD CULVERT IMPROVEMENTS OVER VIRGIL DITCH NO. 3 (NORTH AND SOUTH)

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CHECK SHEET FOR RECURRING SPECIAL PROVISIONS

CHECK SHEET FOR LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

BDE SPECIAL PROVISIONS

 Route:
 Burlington Road

 Description:
 Burlington Road Over Virgil Ditch No. 3 (North and South)

 Section:
 14-00437-00-BR

 County:
 Kane

KANE COUNTY DIVISION OF TRANSPORTATION SECTION NUMBER 14-00437-00-BR BURLINGTON ROAD CULVERT IMPROVEMENTS OVER VIRGIL DITCH NO. 3 (NORTH AND SOUTH)

The following Special Provisions supplement the Illinois Department of Transportation "Standard Specifications for Road and Bridge Construction," adopted January 1, 2016 (hereinafter referred to as the "Standard Specifications"); the most recent "Supplemental Specifications and Recurring Special Provisions"; and the latest edition of the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways" in effect on the date of invitation for bids; all of which apply to and govern the construction of Burlington Road over Virgil Ditch No. 3 (North and South), and in case of conflict with any part or parts of said Specifications, these Special Provisions shall take precedence and shall govern.

LOCATION OF THE IMPROVEMENTS

This project is located at the on Burlington Road (CH 2) between Rohrsen Road and Plato Road within the limits of Kane County, Illinois. Improvements include two culverts carrying Virgil Ditch No. 3 and extend each direction along Burlington Road for a total distance of 1800 feet.

DESCRIPTION OF THE IMPROVEMENTS

This is a reconstruction project and the work to be performed under this contract consists of construction of box culvert structures, earth excavation, bituminous concrete pavement, pavement markings and all incidental and collateral work necessary to complete the project as shown on the plans and as described herein.

COMPLETION DATE PLUS WORKING DAYS

Effective: September 30, 1985 Revised: January 1, 2007

Revise Article 108.05 (b) of the Standard Specifications as follows:

"When a completion date plus working days is specified, the Contractor shall complete all contract items and safely open all roadways to traffic by 11:59 PM on Thursday, August 8, 2019, except as specified herein.

The Contractor will be allowed to complete all clean-up work and punch list items within 5 working days after the completion date for opening the roadway to traffic. Under extenuating circumstances the Engineer may direct that certain items of work, not affecting the safe opening of the roadway to traffic, may be completed within the working days allowed for clean up work and punch list items. Temporary lane closures for this work may be allowed at the discretion of the Engineer.

Article 108.09 or the Special Provision for "Failure to Complete the Work on Time", if included in this contract, shall apply to both the completion date and the number of working days.

DEFINITION OF TERMS

This special provision amends the provisions of the Standard Specifications and shall be construed to be a part thereof, superseding any conflicting provisions thereof application to the work under the contract.

Revise the third paragraph of Article 101.16 of the Standard Specifications to read:

"The term Engineer shall apply to the awarding authority. In this case, the term Engineer applies to Kane County."

Add the following paragraph after the first paragraph of Article 101.19 of the Standard Specifications:

"The term Inspector shall apply to the person or persons assigned by the Engineer to make detailed observations of any or all portions of the work or material."

Revise Article 101.34 of the Standard Specifications to read:

"The term Resident Engineer/Resident Technician shall apply to Kane County. The term Resident Engineer shall not mean Engineer."

AUTOMATIC CLEARING HOUSE (ACH)

Revised on: 2/6/2015

The Contractor shall use the County of Kane's Automatic Clearing House (ACH) payment program. The following internet link shall be used to complete the vendor (CONTRACTOR) agreement:

http://www.countyofkane.org/Documents/Finance%20Department/Vendor%20Information/New Vendor Packet REQUIRED.pdf

BIDDING PROCESS AND AWARD OF CONTRACT (COUNTY)

Revised on: 3/12/2019

The bidding documents for this project are available online at the Kane County Division of Transportation (KDOT) website:

http://www.countyofkane.org/Pages/countybids.aspx

If any addendums are necessary, they will be posted on the KDOT website listed above in this section. It is the Contractors or subcontractors responsibility to continuously verify if any addendums have been issued by KDOT.

Construction prequalification will be verified. It is the Contractors and/or subcontractors responsibility to ensure all prequalifications which are called out in the contract and other bid documents are met.

Note: The entire bid packet does not need to be submitted for the letting. Only the required papers need to be included with Bid Bond and proposal Schedule of Prices.

The Contractor is asked to please tab the Bid Bond and Bid Estimate, included in the bid packet submitted, for easier and faster bid letting/reading.

The award of this contract will be made to the lowest responsible qualified bidder. The County reserves the right to reject any or all non-conforming, non-responsive, unbalanced, or conditioned bids, and to reject the bid of any bidder if the County believes that it would be in the best interest of the County not to award to that bidder. The County also has the right to award this contract with the deletion or reduction of any item in its entirety or partially without claim by the Contractor for loss of profit or overhead.

PROSECUTION OF WORK

Revised on: 11/24/2014

Add the following paragraph to Article 108.02 of the standard specifications:

"The Contractor shall maintain throughout the course of the project, and provide to the Engineer, at the Engineer's request, a detailed progress schedule of planned construction related tasks and locations that projects a minimum of 2 weeks in to the future. At the Engineer's request, schedules of 4 weeks may be required."

At the Pre-Construction Meeting, the Contractor shall submit a draft progress schedule, ready for review and approval, and a prepared list of subcontractors, which will both be discussed and approved by the Engineer. This project schedule shall show all routes to be worked on and an anticipated estimate of time (in working days) to accomplish each item, as well as sequence of operations. All work shall be coordinated with the Engineer so that all work is completed prior to proposed striping or other Kane County projects.

The progress schedule may be on IDOT form BC 255 or a detailed Gantt Charts-type schedule.

DELETION AND REDUCTION OF PLAN QUANTITIES (COUNTY)

Revised on: 1/02/2015

The County reserves the right to add, delete and/or reduce the awarded (plan) quantity of any item in its entirety or partially without claim by the Contractor for loss of profit or overhead. Additional routes may be added in addition to those listed in the schedule of quantities.

MODIFICATION OF PROJECT SCOPE

The Highway Commissioner (or County Engineer) has the ability to reduce or increase the quantity for any pay item with no change in unit for any and all proposed work as he sees fit.

 Route:
 Burlington Road

 Description:
 Burlington Road Over Virgil Ditch No. 3 (North and South)

 Section:
 14-00437-00-BR

 County:
 Kane

MATERIAL TESTING DAILY NOTIFICATION (COUNTY)

Revised on: 06/10/2019

The County has retained the services of a testing agency to sample and test asphalt and concrete mix designs for County and Township projects. Contact information provided in memorandum '2019 QC TESTING REQUIREMENTS AND PROCEDURE', dated June 10, 2019, shall be followed for these services.

Tim Dunne, Rubino Engineering Phone: 847-343-0749 Email: Tim.dunne@rubinoeng.com

In order to ensure that samples will be drawn, Contractors or their Subcontractors must alert the testing agency as well as the Engineer or his representative assigned to the project on days when material will be placed on these jobs. This is similar to the IDOT Materials testing procedure. Calls must be placed at least one day prior to any placement before 12:00 pm, noon. *In the event that testing has been scheduled and weather is unfavorable the Contractor will be responsible to alert a representative of the testing agency as soon as the decision not to place material <i>is made.* It is understood that these decisions are made in the early hours of the day. The purpose of this policy is to make sure that testing is conducted and to stop scheduled testing on days when work is canceled.

At the preconstruction meeting, roles, responsibilities, and 24 hour contact information will be established and exchanged between the Engineer and the Contractor.

In the event that the testing representative cannot be reached the Contractor will call the County Chief of Construction at 630-816-9680 or via e-mail at: *boeschdavid@co.kane.il.us*

CONTRACTOR'S DAILY NOTIFICATION

Revised on: 12/29/2014

The Contractor shall notify the Engineer and /or his designated representative prior to the beginning of each day's work as to the location and type of work that is scheduled to be performed that day. The Contractor's notification shall be at least 48 hours prior to the day of actual work.

SPECIAL PROVISION FOR CLEAN CONSTRUCTION AND DEMOLITION DEBRIS

Earthwork operations for this project shall be completed in accordance with Section 202 of the Standard Specifications and material properly disposed of in accordance with Article 202.03.

This special provision only applies if the Contractor chooses to dispose of material at a permitted CCDD or registered uncontaminated soil fill facility. The Contractor is advised to consider the cost of disposing of all surplus materials off-site and properly reflect those costs in their bids for earthwork and removal items. The Contractor must be thoroughly familiar with the provisions of the environmental Protection Act as it relates to proper disposal of excavated material and construction debris.

Should the Contractor choose to dispose of materials at a permitted CCDD or registered uncontaminated soil fill facility, the Contractor shall be responsible for the lawful removal of all excavated soil, material and other clean construction or demolition debris in compliance with Public Act 96-1416. Disposal of materials at a permitted CCDD or registered uncontaminated soil fill facility will require that Form LPC-663 be submitted to the operator of that location before any materials can be disposed of at that site. Each certification covers only material from that specified job site. The Contractor shall be responsible for having the required analysis of soil materials completed and the Form 663 adequately completed and signed by a Professional Engineer or Geologist licensed in the State of Illinois.

The Contractor is not responsible for the cost of soil remediation. In the event material is rejected it will be returned to the site where the extent of additional effort required to dispose of the material will be determined. The cost of returning rejected material will be the responsibility of the Contractor. The extent of additional effort for disposal or use of rejected material will be coordinated between the Engineer and the Contractor.

It should be noted that "Unsuitable Material" defined in these special provisions for Removal and Disposal of Unsuitable Material should not be confused with "contaminated" or "hazardous" materials.

SPECIAL PROVISION FOR INSURANCE (COUNTY)

Revised on: 4/13/2016

The Contractor shall obtain and keep in full force the following insurance coverages:

POLICY: Contractor's Commercial General Liability

> ADDITIONAL NAMED INSURED: The County of Kane, its officers, employees, consultants and agents.

All other provisions of Article 107.27 of the Standard Specifications shall apply.

PREQUALIFICATION OF BIDDERS

Revised on: 11/10/2014

PREQUALIFICATION OF BIDDERS in accordance with Section 102.01 of the Standard Specifications will be required of all bidders on this proposal. The primary Contractor will be required to meet all of the following prequalification code(s) for the discipline of work to be completed:

001 – Earthwork 009 – Structures (Highway)

The Subcontractor will be required to meet the prequalification code for the discipline of work they will be responsible for completing.

CONTRACTOR DISCLOSURE ACKNOWLEDGEMENT

Revised on: 4/13/2016

KANE COUNTY CODE, ARTICLE III, DIVISION 3, SECTION 2-211

- 1. Prior to award, every Contractor or vendor who is seeking or who has obtained contracts or change orders to contracts or two (2) or more individual contracts with KANE COUNTY resulting in an amount greater than Fifteen Thousand Dollars (\$15,000) shall disclose to the Kane County Purchasing Department, in writing all cumulative campaign contributions, (which includes multiple candidates) made within the previous twelve (12) months of awarding of the contract made by that Contractor, union, or vendor to any current officer or countywide elected officer whose office the contract to be awarded will benefit. Disclosure shall be updated annually during the term of a multi-year contract and prior to any change order or renewal requiring Board level approval. For purposes of this disclosure requirement, "Contractor or vendor" shall include owners, officers, managers, insurance brokers, lobbyists, agents, consultants, bond counsel and underwriters counsel, subcontractors, corporations, partnerships, associations, business trusts, estates, trustees, and/or beneficiaries under the control of the contracting person, and political action committees to which the contracting person has made contributions.
- 2. All Contractors and vendors who have obtained or are seeking contracts with Kane County must disclose the following information which shall be certified and attached to the application or document. Penalties for knowingly violating disclosure requirements will potentially result in immediate cancellation of the contract, and possible disbarment from future County contracts:
 - A. Name, address and percentage of ownership interest of each individual or entity having a legal or a beneficial interest of more than five percent (5%) in the applicant. Any entity required by law to file a statement providing substantially the information required by this paragraph with any other government agency may file a duplicate of such statement;
 - B. Names and contact information of their lobbyists, agents and representatives and all individuals who are or will be having contact with County employees or officials in relation to the contract or bid. This information disclosure must be updated when any changes to the information occurs.
 - C. Whenever any interest required to be disclosed in paragraph (A) above is held by an agent or agents, or a nominee or nominees, the principals for whom such agents or nominees hold such interest shall also be disclosed. The application of a spouse or any other party, if constructively controlled by another person, or legal entity as set forth above, shall state the name and address and percentage of beneficial interest of such person or entity possessing such constructive control and the relationship under which such control is being or may be exercised. Whenever a stock or beneficial interest is held by a corporation or other legal entity, such shareholder or beneficiary shall also make disclosure as required by paragraph (A) above.

- D. A statement under oath that the applicant has withheld no disclosures as to economic interests in the undertaking nor reserved any information, data or plan as to the intended use or purpose for which it seeks County Board or other county agency action.
- 3. All disclosures and information shall be current as of the date upon which the application is presented and shall be maintained current until such time as Kane County shall take action on the application. Furthermore, this information shall be maintained in a database by the Purchasing Department, and made available for public viewing.
- 4. Notwithstanding any of the above provisions, the County Purchasing Department with respect to contracts awarded may require any such additional information from any applicant which is reasonably intended to achieve full disclosure relevant to the application for action by the County Board or any other County agency.
- 5. Any failure to comply with the provisions of this section shall render any ordinance, ordinance amendment, County Board approval or other County action in behalf of the applicant failing to comply voidable at the option of the County Board or other County agency involved upon the recommendation of the County Board Chairman or the majority of the County Board.
- 6. Contractor Disclosure information shall be sent to the Kane County Purchasing Department and the Kane County Division of Transportation at the following address, or via email, prior to Transportation Committee of the Kane County Board:

Kane County Government CenterKane County Division of TransportationPurchasing Department, Bldg. A41W011 Burlington Road719 S. Batavia Ave. Geneva, IL 60134St. Charles, IL 60175purchasing@countyofkane.orgkdotcomments@co.kane.il.us

FIELD MEASUREMENTS

Revised on: 11/1/2016

The Contractor is advised that it shall be its full responsibility to verify all dimensions, conditions, materials, and details before ordering materials. The Contractor shall verify the dimensions shown on the plans with those actually existing on the structure to determine if any discrepancies exist. Any discrepancies discovered by the Contractor shall be immediately reported to the Engineer in writing for revisions to plans, quantities and/or details as required.

No additional compensation will be allowed to the Contractor for complying with the above verification requirements. Any revisions to dimensions or details resulting from the required field verifications or for any delays due to required revisions shall be approved by the Engineer.

PREVAILING WAGES

Revised on: 04/13/2016

By submitting a bid, bidder expressly agrees to comply with all applicable State and Federal Prevailing Rate of Wage Laws, and all steps necessary to be in compliance therewith.

Prevailing Wage Rates: It is the policy of the State of Illinois as declared in "AN ACT regulating wages of laborers, mechanics and other workman employed in any public works by the State, County, City or any political subdivision or by any work under construction for public works" approved June 26, 1941, that a wage of no less that the general prevailing hourly rate as paid for work of a similar character in a locality in which work is performed, shall be paid to all laborers, workmen and mechanics employed by and on behalf of any and all public body engaged in public works, exclusive of maintenance work.

The responsive Bidder must include with their bid a separate sheet showing trades to be employed and wage rates to be paid. Prevailing wage rates are subject to revision monthly and the responsive bidder is responsible for any future adjustment thereof. Copies of the current prevailing wage rates are always available from the Illinois Department of Labor on their website.

The Contractor shall pay the current Illinois Department of Labor Prevailing Wage Rates for any and all projects worked on for the COUNTY OF KANE. The undersigned also agrees to provide the Kane County Division of Transportation a sheet showing trades to be employed and wage rates to be paid for each construction or repair project bid on or contracted for.

PROGRESS SCHEDULE

Revised on: 11/10/2014

Add the following paragraph to Article 108.02 of the Standard Specifications:

"The Contractor shall maintain throughout the course of the project, and provide to the Engineer at the Engineer's request, a detailed progress schedule of planned construction related tasks and locations that projects a minimum of 6 weeks in to the future."

PROGRESS/COORDINATION MEETINGS

Revised on: 12/30/2014

The Contractor shall be required to attend a bi-weekly progress/coordination meeting with the Engineer and/or his representatives to be held at a location to be specified at the pre-construction meeting.

COOPERATION WITH UTILITIES

The Contractor is responsible for verifying the nature and status of all utility relocation work prior to beginning construction. The Contractor shall take appropriate measures to ensure that construction operations do not interfere with utility facilities and relocation work. The Contractor shall be required to adjust the order of its work from time to time and to coordinate same with utility relocation work.

The following persons have been contacted in reference to utilities they own and operate within the right of way limits for this project. All known data from these agencies has been incorporated into the plans. It is, however, the Contractor's responsibility to confirm or establish the existence of all utility facilities and their exact locations, whether contained in the data submitted by these agencies or not, and to safely schedule all utility relocations.

ANR Pipeline Company Contact Ken Van Haitsma Telephone Number 815-786-3422

AT&T (Distribution) Contact Larry Smith Telephone Number 630-576-7094

ComEd Contact Design Stage Locate Line Telephone Number 630-576-7094

Frontier Communications Contact Kalin Hinshaw Telephone Number 815-895-1515

Kane County Division of Transportation Contact Kurt Nika Telephone Number 630-406-7372

Enbridge Energy Partners LP Contact Mike Price Telephone Number 219-922-7015

Nicor Contact Utility Consultant GO3W Telephone Number 630-388-2362

Mediacom Contact Matt Forgas Telephone Number 815-597-5103

The above represents the best information available to the County and is included for the convenience of the bidder. Before starting excavation, the Contractor shall call "JULIE" at 800-892-0123 for field locations of buried electric, telephone, gas and cable television facilities. The contractor will be responsible to ascertain the exact location of the facilities and exercise care during construction operations so as not to damage them.

ITEMS AS ORDERED BY THE ENGINEER

Revised on: 11/10/2014

When additional work, not indicated in the Contract or on the Contract drawings, is requested in writing by the Engineer during construction, this additional work shall be measured and paid for as described in Articles 104.02 and 109.04 of the Standard Specifications.

Basis of Payment. Payment for all additional work shall be made from the ITEMS AS ORDERED BY THE ENGINEER pay item, which shall be in units of one dollar (\$1.00).

MOBILIZATION

This contract contains no provision for Mobilization. Therefore, Section 671 of the Standard Specifications is deleted.

PUBLIC CONVENIENCE AND SAFETY (DIST 1)

Effective: May 1, 2012 Revised: July 15, 2012

Add the following to the end of the fourth paragraph of Article 107.09:

"If the holiday is on a Saturday or Sunday, and is legally observed on a Friday or Monday, the length of Holiday Period for Monday or Friday shall apply."

Add the following sentence after the Holiday Period table in the fourth paragraph of Article 107.09:

"The Length of Holiday Period for Thanksgiving shall be from 5:00 AM the Wednesday prior to 11:59 PM the Sunday After"

Delete the fifth paragraph of Article 107.09 of the Standard Specifications:

"On weekends, excluding holidays, roadways with Average Daily Traffic of 25,000 or greater, all lanes shall be open to traffic from 3:00 P.M. Friday to midnight Sunday except where structure construction or major rehabilitation makes it impractical."

MAINTENANCE OF ROADWAYS

Effective: September 30, 1985 Revised: November 1, 1996

Beginning on the date that work begins on this project, the Contractor shall assume responsibility for normal maintenance of all existing roadways within the limits of the improvement. This normal maintenance shall include all repair work deemed necessary by the Engineer, but shall not include snow removal operations. Traffic control and protection for maintenance of roadways will be provided by the Contractor as required by the Engineer.

If items of work have not been provided in the contract, or otherwise specified for payment, such items, including the accompanying traffic control and protection required by the Engineer, will be paid for in accordance with Article 109.04 of the Standard Specifications.

 Route:
 Burlington Road

 Description:
 Burlington Road Over Virgil Ditch No. 3 (North and South)

 Section:
 14-00437-00-BR

 County:
 Kane

AGGREGATE SUBGRADE IMPROVEMENT (D-1)

Effective: February 22, 2012 Revised: April 1, 2016

Add the following Section to the Standard Specifications:

"SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

303.01 Description. This work shall consist of constructing an aggregate subgrade improvement.

303.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	
(b) Reclaimed Asphalt Pavement (RAP) (Notes 1, 2 and 3)	

Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradation CS 01 but shall not exceed 40 percent by weight of the total product. The top size of the Coarse RAP shall be less than 4 in. (100 mm) and well graded.

Note 2. RAP having 100 percent passing the 1 1/2 in (37.5 mm) sieve and being well graded, may be used as capping aggregate in the top 3 in. (75 mm) when aggregate gradation CS 01 is used in lower lifts. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders. The final product shall not contain more than 40 percent by weight of RAP.

Note 3. The RAP used for aggregate subgrade improvement shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".

303.03 Equipment. The vibratory machine shall be according to Article 1101.01, or as approved by the Engineer. The calibration for the mechanical feeders shall have an accuracy of ± 2.0 percent of the actual quantity of material delivered.

303.04 Soil Preparation. The stability of the soil shall be according to the Department's Subgrade Stability Manual for the aggregate thickness specified.

303.05 Placing Aggregate. The maximum nominal lift thickness of aggregate gradation CS 01 shall be 24 in. (600 mm).

303.06 Capping Aggregate. The top surface of the aggregate subgrade shall consist of a minimum 3 in. (75 mm) of aggregate gradations CA 06 or CA 10. When Reclaimed Asphalt Pavement (RAP) is used, it shall be crushed and screened where 100 percent is passing the 1 1/2 in. (37.5 mm) sieve and being well graded. RAP that has been fractionated to size will not be permitted for use in capping. Capping aggregate will not be required when the aggregate subgrade improvement is used as a cubic yard pay item for undercut applications. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders.

303.07 Compaction. All aggregate lifts shall be compacted to the satisfaction of the Engineer. If the moisture content of the material is such that compaction cannot be obtained, sufficient water shall be added so that satisfactory compaction can be obtained.

303.08 Finishing and Maintenance of Aggregate Subgrade Improvement. The aggregate subgrade improvement shall be finished to the lines, grades, and cross sections shown on the plans, or as directed by the Engineer. The aggregate subgrade improvement shall be maintained in a smooth and compacted condition.

303.09 Method of Measurement. This work will be measured for payment according to Article 311.08.

303.10 Basis of Payment. This work will be paid for at the contract unit price per cubic yard (cubic meter) for AGGREGATE SUBGRADE IMPROVEMENT or at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE IMPROVEMENT, of the thickness specified.

Add the following to Section 1004 of the Standard Specifications:

"**1004.07 Coarse Aggregate for Aggregate Subgrade Improvement.** The aggregate shall be according to Article 1004.01 and the following.

- (a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete. The top 12 inches of the aggregate subgrade improvement shall be 3 inches of capping material and 9 inches of crushed gravel, crushed stone or crushed concrete. In applications where greater than 36 inches of subgrade material is required, rounded gravel, meeting the CS01 gradation, may be used beginning at a depth of 12 inches below the bottom of pavement.
- (b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials. Non-mechanically blended RAP may be allowed up to a maximum of 5.0 percent.

- (c) Gradation.
 - (1) The coarse aggregate gradation for total subgrade thicknesses of 12 in. (300 mm) or greater shall be CS 01.

	COARSE AGGREGATE SUBGRADE GRADATIONS							
Grad No	Sieve Size and Percent Passing							
Giau No.	8" 6" 4" 2" #4							
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20			

	COARSE AGGREGATE SUBGRADE GRADATIONS (Metric)							
Cred No.	Sieve Size and Percent Passing							
Grau No.	200 mm 150 mm 100 mm 50 mm 4.75 mm							
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20			

(2) The 3 in. (75 mm) capping aggregate shall be gradation CA 6 or CA 10.

 Route:
 Burlington Road

 Description:
 Burlington Road Over Virgil Ditch No. 3 (North and South)

 Section:
 14-00437-00-BR

 County:
 Kane

HOT-MIX ASPHALT BINDER AND SURFACE COURSE (D-1)

Effective: November 1, 2019

<u>Description</u>. This work shall consist of constructing a hot-mix asphalt (HMA) binder and/or surface course on a prepared base. Work shall be according to Sections 406 and 1030 of the Standard Specifications, except as modified herein.

Materials. Revise Article 1004.03(c) to read:

"(c) Gradation. The coarse aggregate gradations shall be as listed in the following table.

Use	Size/Application	Gradation No.
Class A-1, A-2, & A-3	3/8 in. (10 mm) Seal	CA 16 or CA 20
Class A-1	1/2 in. (13 mm) Seal	CA 15
Class A-2 & A-3	Cover Coat	CA 14
	IL-19.0;	CA 11 ^{1/}
	Stabilized Subbase IL-19.0	
	SMA 12.5 ^{2/}	CA 13 ^{4/} , CA 14, or CA 16
HIVIA HIGH ESAL	SMA 9.5 ^{2/}	CA 13 ^{3/4/} or CA 16 ^{3/}
	IL-9.5	CA 16
	IL-9.5FG	CA 16
HMA Low ESAL	IL-19.0L	CA 11 ^{1/}
	IL-9.5L	CA 16

- 1/ CA 16 or CA 13 may be blended with the CA 11.
- 2/ The coarse aggregates used shall be capable of being combined with stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation and mineral filler to meet the approved mix design and the mix requirements noted herein.
- 3/ The specified coarse aggregate gradations may be blended.
- 4/ CA 13 shall be 100 percent passing the 1/2 in. (12.5mm) sieve."

Revise Article 1004.03(e) of the Supplemental Specifications to read:

"(e) Absorption. For SMA the coarse aggregate shall also have water absorption ≤ 2.0 percent."

HMA Nomenclature. Revise the "High ESAL" portion of the table in Article 1030.01 to read:

"High ESAL	Binder Courses	IL-19.0, IL-9.5, IL-9.5FG, IL-4.75, SMA 12.5, Stabilized Subbase IL-19.0
Ū	Surface Courses	IL-9.5, IL-9.5FG, SMA 12.5, SMA 9.5"

Revise Article 1030.02 of the Standard Specifications and Supplemental Specifications to read:

"1030.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	
(b) Fine Aggregate	
(c) RAP Material	
(d) Mineral Filler	
(e) Hydrated Lime	
(f) Slaked Quicklime (Note 1)	
(g) Performance Graded Asphalt Binder (Note 2)	
(h) Fibers (Note 3)	
(i) Warm Mix Asphalt (WMA) Technologies (Note 4)	

Note 1. Slaked quicklime shall be according to ASTM C 5.

- Note 2. The asphalt binder shall be an SBS PG 76-28 when the SMA is used on a full-depth asphalt pavement and SBS PG 76-22 when used as an overlay, except where modified herein. The asphalt binder shall be an Elvaloy or SBS PG 76-22 for IL-4.75, except where modified herein. The elastic recovery shall be a minimum of 80.
- Note 3. A stabilizing additive such as cellulose or mineral fiber shall be added to the SMA mixture according to Illinois Modified AASHTO M 325. The stabilizing additive shall meet the Fiber Quality Requirements listed in Illinois Modified AASHTO M 325. Prior to approval and use of fibers, the Contractor shall submit a notarized certification by the producer of these materials stating they meet these requirements. Reclaimed Asphalt Shingles (RAS) may be used in Stone Matrix Asphalt (SMA) mixtures designed with an SBA polymer modifier as a fiber additive if the mix design with RAS included meets AASHTO T305 requirements. The RAS shall be from a certified source that produces either Type I or Type 2. Material shall meet requirements noted herein and the actual dosage rate will be determined by the Engineer.
- Note 4. Warm mix additives or foaming processes shall be selected from the Department's Qualified Producer List, "Technologies for the Production of Warm Mix Asphalt (WMA)"."

High ESAL, MIXTURE COMPOSITION (% PASSING) ^{1/}										
Sieve	IL-19.0	mm	SMA	12.5	SMA	۹.5	IL-9	9.5mm	IL-4.7	'5 mm
Size	min	max	min	max	min	max	min	max	min	max
1 1/2 in										
(37.5 mm)										
(25 mm)		100								
(23 mm) 3/4 in										
(19 mm)	90	100		100						
1/2 in.	75	89	80	100		100		100		100
(12.5 mm)	10	00	00	100		100		100		100
3/8 in. (9.5 mm)				65	90	100	90	100		100
#4										
(4.75 mm)	40	60	20	30	36	50	34	69	90	100
#8		10	40		40	001/	015/	50 2/	70	
(2.36 mm)	20	42	16	24 *	16	324	34 3/	52 27	70	90
#16	15	30					10	30	50	65
(1.18 mm)	15	50					10	52	50	05
#30			12	16	12	18				
(600 µm)			12		12					
#50	6	15					4	15	15	30
(300 µm)		10								
(150 µm)	4	9					3	10	10	18
<u> </u>										
(75 μm)	3	6	7.0	9.0 3/	7.5	9.5 ^{3/}	4	6	7	9 ^{3/}
#635										
(20 μm)			≤ ;	3.0	≤ ;	3.0				
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0

<u>Mixture Design</u>. Revise Article 1030.04(a)(1) of the Standard Specifications and the Supplemental Specifications to read:

- 1/ Based on percent of total aggregate weight.
- 2/ The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with Ndesign = 90.
- 3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.
- 4/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above the percentage stated on the table.
- 5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.

Revise Article 1030.04(b)(1) of the Standard Specifications to read:

"(1) High ESAL Mixtures. The target value for the air voids of the HMA shall be 4.0 percent, for IL-4.75 it shall be 3.5 percent and for Stabilized Subbase it shall be 3.0 percent at the design number of gyrations. The voids in the mineral aggregate (VMA) and voids filled with asphalt binder (VFA) of the HMA design shall be based on the nominal maximum size of the aggregate in the mix and shall conform to the following requirements.

	VOLUMETRIC REQUIREMENTS High ESAL							
	Voids in the	Voids Filled with Asphalt Binder						
Ndesign	IL-19.0; Stabilized Subbase IL- 19.0	(VFA), %						
50			18.5	65 – 78 ^{2/}				
70	13.5	65 75						
90	10.0	10.0		00-75				

- 1/ Maximum draindown for IL-4.75 shall be 0.3 percent.
- 2/ VFA for IL-4.75 shall be 72-85 percent."

Revise the table in Article 1030.04(b)(3) to read:

"VOLUMETRIC REQUIREMENTS, SMA 12.5 ^{1/} and SMA 9.5 ^{1/}			
Ndesign	Design Air Voids Target %	Voids in the Mineral Aggregate (VMA), % min.	Voids Filled with Asphalt (VFA), %
80 4/	3.5	17.0 ^{2/} 16.0 ^{3/}	75 - 83

- 1/ Maximum draindown shall be 0.3 percent. The draindown shall be determined at the JMF asphalt binder content at the mixing temperature plus 30 °F.
- 2/ Applies when specific gravity of coarse aggregate is \geq 2.760.
- 3/ Applies when specific gravity of coarse aggregate is < 2.760.
- 4/ Blending of different types of aggregate will not be permitted. For surface course, the coarse aggregate can be crushed steel slag, crystalline crushed stone or crushed sandstone. For binder course, coarse

aggregate shall be crushed stone (dolomite), crushed gravel, crystalline crushed stone, or crushed sandstone.

Add to the end of Article 1030.05 (d) (2) a. of the Standard Specifications:

"During production, the Contractor shall test SMA mixtures for draindown according to AASHTO T305 at a frequency of 1 per day of production."

Revise the last paragraph of Article 1102.01 (a) (5) of the Standard Specifications to read:

"IL-4.75 and Stone Matrix Asphalt (SMA) mixtures which contain aggregate having absorptions greater than or equal to 2.0 percent, or which contain steal slag sand, shall have minimum surge bin storage plus haul time of 1.5 hours."

<u>Quality Control/Quality Assurance (QC/QA)</u>. Revise the third paragraph of Article 1030.05(d)(3) to read:

"If the Contractor and Engineer agree the nuclear density test method is not appropriate for the mixture, cores shall be taken at random locations determined according to the QC/QA document "Determination of Random Density Test Site Locations". Core densities shall be determined using the Illinois Modified AASHTO T 166 or T 275 procedure."

Add the following paragraphs to the end of Article 1030.05(d)(3):

"Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4 in. (100 mm), from each pavement edge (i.e. for a 5 in. (125 mm) lift the near edge of the density gauge or core barrel shall be within 5 in. (125 mm) from the edge of pavement). Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

- a. Confined Edge. Each confined edge density shall be represented by a oneminute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
- b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced 10 ft (3 m) apart longitudinally along the unconfined pavement edge and centered at the random density test location.

When a longitudinal joint sealant (LJS) is applied, longitudinal joint density testing will not be required on the joint(s) sealed."

Revise the second table in Article 1030.05(d)(4) and its notes to read:

"DENSITY CONTROL LIMITS				
Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density, minimum	
IL-4.75	Ndesign = 50	93.0 – 97.4 % ^{1/}	91.0%	
IL-9.5FG	Ndesign = 50 - 90	93.0 - 97.4 %	91.0%	
IL-9.5	Ndesign = 90	92.0 - 96.0 %	90.0%	
IL-9.5, IL-9.5L,	Ndesign < 90	92.5 – 97.4 %	90.0%	
IL-19.0	Ndesign = 90	93.0 - 96.0 %	90.0%	
IL-19.0, IL-19.0L	Ndesign < 90	93.0 ^{2/} – 97.4 %	90.0%	
SMA	Ndesign = 80	93.5 – 97.4 %	91.0%	

- 1/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge.
- 2/ 92.0 % when placed as first lift on an unimproved subgrade."

Equipment. Add the following to Article 1101.01 of the Standard Specifications:

- "(h) Oscillatory Roller. The oscillatory roller shall be self-propelled and provide a smooth operation when starting, stopping, or reversing directions. The oscillatory roller shall be able to operate in a mode that will provide tangential impact force with or without vertical impact force by using at least one drum. The oscillatory roller shall be equipped with water tanks and sprinkling devices, or other approved methods, which shall be used to wet the drums to prevent material pickup. The drum(s) amplitude and frequency of the tangential and vertical impact force shall be approximately the same in each direction and meet the following requirements:
 - (1) The minimum diameter of the drum(s) shall be 42 in. (1070 mm);
 - (2) The minimum length of the drum(s) shall be 57 in. (1480 mm);
 - (3) The minimum unit static force on the drum(s) shall be 125 lb/in. (22 N/m); and
 - (4) The minimum force on the oscillatory drum shall be 18,000 lb (80 kN)."

Construction Requirements.

Add the following to Article 406.03 of the Standard Specifications:

Revise the third paragraph of Article 406.05(a) to read:

"All depressions of 1 in. (25 mm) or more in the surface of the existing pavement shall be filled with binder. At locations where heavy disintegration and deep spalling exists, the area shall be cleaned of all loose and unsound material, tacked, and filled with binder (hand method)."

Revise Article 406.05(c) to read.

"(c) Binder (Hand Method). Binder placed other than with a finishing machine will be designated as binder (hand method) and shall be compacted with a roller to the satisfaction of the Engineer. Hand tamping will be permitted when approved by the Engineer."

Revise the special conditions for mixture IL-4.75 in Article 406.06(b)(2)e. to read:

"e. The mixture shall be overlaid within 5 days of being placed."

Revise Article 406.06(d) to read:

"(d) Lift Thickness. The minimum compacted lift thickness for HMA binder and surface courses shall be as follows.

MINIMUM COMPACTED LIFT THICKNESS		
Mixture Composition	Thickness, in. (mm)	
IL-4.75	3/4 (19) - over HMA surfaces ^{1/} 1 (25) - over PCC surfaces ^{1/}	
IL-9.5FG	1 1/4 (32)	
IL-9.5, IL-9.5L	1 1/2 (38)	
SMA 9.5	1 3/4 (45)	
SMA 12.5	2 (51)	
IL-19.0, IL-19.0L	2 1/4 (57)	

1/ The maximum compacted lift thickness for mixture IL-4.75 shall be 1 1/4 in. (32 mm)."

Revise Table 1 and Note 3/ of Table 1 in Article 406.07(a) of the Standard Specifications to read:

"TABLE 1 - MINIMUM ROLLER REQUIREMENTS FOR HMA				
	Breakdown Roller (one of the following)	Intermediate Roller	Final Roller (one or more of the following)	Density Requirement
Binder and Surface ^{1/}	V _D , P ^{3/} , T _B , 3W, O _T , O _B	Р ^{3/} , О _Т , О _В	Vs, Tb, T _F , Ot	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).
IL-4.75 and SMA 4/ 5/	T _{Β,} 3W, O _T		T_F , 3W, O_T	
Bridge Decks ^{2/}	Тв		T _F	As specified in Articles 582.05 and 582.06.

3/ A vibratory roller (V_D) or oscillatory roller (O_T or O_B) may be used in lieu of the pneumatictired roller on mixtures containing polymer modified asphalt binder."

Add the following to EQUIPMENT DEFINITION in Article 406.07(a) contained in the Errata of the Supplemental Specifications:

- "O_T Oscillatory roller, tangential impact mode. Maximum speed is 3.0 mph (4.8 km/h) or 264 ft/min (80 m/min).
- O_B Oscillatory roller, tangential and vertical impact mode, operated at a speed to produce not less than 10 vertical impacts/ft (30 impacts/m)."

Delete last sentence of the second paragraph of Article 1102.01(a) (4) b. 2.

Add to the end of Article 1102.01 (a) (4) b. 2.:

"As an option, collected dust (baghouse) may be used in lieu of manufactured mineral filler according to the following:

- (a.) Sufficient collected dust (baghouse) is available for production of the SMA mix for the entire project.
- (b.) A mix design was prepared based on collected dust (baghouse).

Revise Article 1030.04 (d) of the Standard Specifications to read:

"(d) Verification Testing. High ESAL, IL-4.75, and SMA mix designs submitted for verification will be tested to ensure that the resulting mix designs will pass the required criteria for the Hamburg Wheel Test (IL mod AASHTO T-324) and the Tensile Strength Test (IL mod AASHTO T-283). The Department will perform a verification test on gyratory specimens compacted by the Contractor. If the mix fails the Department's verification test, the Contractor shall make the necessary changes

to the mix and resubmit compacted specimens to the Department for verification. If the mix fails again, the mix design will be rejected.

All new mix designs will be required to be tested, prior to submittal for Department verification and shall meet the following requirements:

(1)Hamburg Wheel Test criteria. The maximum allowable rut depth shall be 0.5 in. (12.5 mm). The minimum number of wheel passes at the 0.5 in. (12.5 mm) rut depth criteria shall be based on the high temperature binder grade of the mix as specified in the mix requirements table of the plans.

Asphalt Binder Grade	# Repetitions	Max Rut Depth (mm)
PG 70 -XX (or higher)	20,000	12.5
PG 64 -XX (or lower)	10,000	12.5

Illinois Modified AASHTO T 324 Requirements ^{1/}

- 1/ When produced at temperatures of 275 ± 5 °F (135 ± 3 °C) or less, loose Warm Mix Asphalt shall be oven aged at 270 ± 5 °F (132 ± 3 °C) for two hours prior to gyratory compaction of Hamburg Wheel specimens.
- Note: For SMA Designs (N-80) the maximum rut depth is 6.0 mm at 20,000 repetitions. For IL 4.75mm Designs (N-50) the maximum rut depth is 9.0mm at 15,000 repetitions.
- (2) Tensile Strength Criteria. The minimum allowable conditioned tensile strength shall be 60 psi (415 kPa) for non-polymer modified performance graded (PG) asphalt binder and 80 psi (550 kPa) for polymer modified PG asphalt binder. The maximum allowable unconditioned tensile strength shall be 200 psi (1380 kPa)."

<u>Production Testing</u>. Revise first paragraph of Article 1030.06(a) of the Standard Specifications to read:

"(a) High ESAL, IL-4.75, WMA, and SMA Mixtures. For each contract, a 300 ton (275 metric tons) test strip, except for SMA mixtures it will be 400 ton (363 metric ton), will be required at the beginning of HMA production for each mixture at the beginning of each construction year according to the Manual of Test Procedures for Materials "Hot Mix Asphalt Test Strip Procedures". At the request of the Producer, the Engineer may waive the test strip if previous construction during the current construction year has demonstrated the constructability of the mix using Department test results."

Add the following after the sixth paragraph in Article 1030.06 (a) of the Standard Specifications:

"The Hamburg Wheel test shall also be conducted on all HMA mixtures from a sample taken within the first 500 tons (450 metric tons) on the first day of production or during start up with a split reserved for the Department. The mix sample shall be tested according to the Illinois Modified AASHTO T 324 and shall meet the requirements specified herein. Mix production

shall not exceed 1500 tons (1350 metric tons) or one day's production, whichever comes first, until the testing is completed and the mixture is found to be in conformance. The requirement to cease mix production may be waived if the plant produced mixture demonstrates conformance prior to start of mix production for a contract. If the mixture fails to meet the Hamburg Wheel criteria, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria"

Method of Measurement:

Add the following after the fourth paragraph of Article 406.13 (b):

"The plan quantities of SMA mixtures shall be adjusted using the actual approved binder and surface Mix Design's G_{mb} ."

<u>Basis of Payment</u>. Replace the second through the fifth paragraphs of Article 406.14 with the following:

"HMA binder and surface courses will be paid for at the contract unit price per ton (metric ton) for MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS; HOT-MIX ASPHALT BINDER COURSE (HAND METHOD), of the Ndesign specified; HOT-MIX ASPHALT BINDER COURSE, of the mixture composition and Ndesign specified; HOT-MIX ASPHALT SURFACE COURSE, of the mixture composition, friction aggregate, and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT BINDER COURSE (HAND METHOD), of the Ndesign specified; POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, of the mixture composition and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, of the mixture composition and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, of the mixture composition and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, of the mixture composition, friction aggregate, and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT, of the mixture composition and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT, of the mixture composition and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT, of the mixture composition and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, of the mixture composition and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, of the mixture composition, friction aggregate, and Ndesign specified."

FRICTION AGGREGATE (D-1)

Effective: January 1, 2011 Revised: November 1, 2019

Revise Article 1004.03(a) of the Standard Specifications to read:

"1004.03 Coarse Aggregate for Hot-Mix Asphalt (HMA). The aggregate shall be according to Article 1004.01 and the following.

(a) Description. The coarse aggregate for HMA shall be according to the following table.

Use	Mixture	Aggregates Allowed	
Class A	Seal or Cover	Allowed Alone or in Combination ^{5/} : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete	
HMA Low ESAL	Stabilized Subbase or Shoulders	Allowed Alone or in Combination ^{5/} : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{1/} Crushed Concrete	
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L SMA Binder	Allowed Alone or in Combination ^{5/6/} : Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete ^{3/}	

Use	Mixture	Aggregates Allowed	
HMA High ESAL Low ESAL	C Surface and Binder IL-9.5 or IL-9.5L SMA Ndesign 50 Surface	Allowed Alone or in Co Crushed Gravel Carbonate Crushed S Crystalline Crushed S Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}	ombination ^{5/} : tone ^{2/} tone
HMA High ESAL	D Surface and Binder IL-9.5 SMA Ndesign 50 Surface	Allowed Alone or in Co Crushed Gravel Carbonate Crushed S Limestone) ^{2/} Crystalline Crushed S Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}	ombination ^{5/} : tone (other than tone
		Other Combinations A	llowed: With
		25% Limestone	Dolomite
		50% Limestone	Any Mixture D aggregate other than Dolomite
		75% Limestone	Crushed Slag (ACBF) or Crushed Sandstone
HMA High ESAL	E Surface IL-9.5	Allowed Alone or in Combination ^{5/6/} :	
	SMA Ndesign 80 Surface	Crystalline Crushed S Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.	tone
		Other Combinations Allowed:	
		Up to	With
		50% Dolomite ^{2/}	Any Mixture E aggregate

Use	Mixture	Aggregates Allowed		
		75% Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone	
		75% Crushed Gravel ^{2/} or Crushed Concrete ^{3/}	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag	
HMA High ESALF Surface IL-9.5Allowed Alone or Crystalline Crush Crushed Sandsto Crushed Slag (Ad Crushed Steel SI No Limestone.HMA High ESALF SurfaceCrystalline Crush Crushed Slag (Ad Crushed Steel SI No Limestone.		Allowed Alone or in C	Combination ^{5/ 6/} :	
		Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.		
		Other Combinations Allowed:		
		Up to	With	
		50% Crushed Gravel ^{2/} , Crushed Concrete ^{3/} , or Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone	

- 1/ Crushed steel slag allowed in shoulder surface only.
- 2/ Carbonate crushed stone (limestone) and/or crushed gravel shall not be used in SMA Ndesign 80. In SMA Ndesign 50, carbonate crushed stone shall not be blended with any of the other aggregates allowed alone in Ndesign 50 SMA binder or Ndesign 50 SMA surface.
- 3/ Crushed concrete will not be permitted in SMA mixes.
- 4/ Crushed steel slag shall not be used as leveling binder.
- 5/ When combinations of aggregates are used, the blend percent measurements shall be by volume."
- 6/ Combining different types of aggregate will not be permitted in SMA Ndesign 80."

 Route:
 Burlington Road

 Description:
 Burlington Road Over Virgil Ditch No. 3 (North and South)

 Section:
 14-00437-00-BR

 County:
 Kane

RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (D-1)

Effective: November 1, 2012 Revise: November 1, 2019

Revise Section 1031 of the Standard Specifications to read:

"SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES

1031.01 Description. Reclaimed asphalt pavement and reclaimed asphalt shingles shall be according to the following.

- (a) Reclaimed Asphalt Pavement (RAP). RAP is the material resulting from cold milling or crushing an existing hot-mix asphalt (HMA) pavement. RAP will be considered processed FRAP after completion of both crushing and screening to size. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.
- (b) Reclaimed Asphalt Shingles (RAS). Reclaimed asphalt shingles (RAS). RAS is from the processing and grinding of preconsumer or post-consumer shingles. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable material, as defined in Central Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources", by weight of RAS. All RAS used shall come from a Central Bureau of Materials approved processing facility where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 90 percent passing the #4 (4.75 mm) sieve. RAS shall meet the testing requirements specified herein. In addition, RAS shall meet the following Type 1 or Type 2 requirements.
 - (1) Type 1. Type 1 RAS shall be processed, preconsumer asphalt shingles salvaged from the manufacture of residential asphalt roofing shingles.
 - (2) Type 2. Type 2 RAS shall be processed post-consumer shingles only, salvaged from residential, or four unit or less dwellings not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP).
- **1031.02 Stockpiles.** RAP and RAS stockpiles shall be according to the following.
- (a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. Additional processed RAP (FRAP) shall be stockpiled in a separate working pile, as designated in the QC Plan, and only added to the sealed stockpile when test results for the working pile are complete and are found to meet tolerances specified herein for the original sealed FRAP stockpile. Stockpiles shall be sufficiently separated to prevent intermingling at the base. All stockpiles (including unprocessed RAP and FRAP) shall be identified by signs indicating the type as listed below (i.e. "Non- Quality, FRAP -#4 or Type 2 RAS", etc...).
 - (1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall

be at least C quality. All FRAP shall be processed prior to testing and sized into fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass the maximum sieve size specified for the mixture composition of the mix design.

- (2) Restricted FRAP (B quality) stockpiles shall consist of RAP from Class I, HMA (High ESAL), or HMA (High ESAL). If approved by the Engineer, the aggregate from a maximum 3.0 in. (75 mm) single combined pass of surface/binder milling will be classified as B quality. All millings from this application will be processed into FRAP as described previously.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed (FRAP) prior to testing. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from HMA shoulders, bituminous stabilized subbases or HMA (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP or FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, plant cleanout etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.

(b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall be sufficiently separated to prevent intermingling at the base. Each stockpile shall be signed indicating what type of RAS is present.

However, a RAS source may submit a written request to the Department for approval to blend mechanically a specified ratio of Type 1 RAS with Type 2 RAS. The source will not be permitted to change the ratio of the blend without the Department prior written approval. The Engineer's written approval will be required, to mechanically blend RAS with any fine aggregate produced under the AGCS, up to an equal weight of RAS, to improve workability. The fine aggregate shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The fine aggregate shall be one that is approved for use in the HMA mixture and accounted for in the mix design and during HMA production.

Records identifying the shingle processing facility supplying the RAS, RAS type, and lot number shall be maintained by project contract number and kept for a minimum of three years.

1031.03 Testing. FRAP and RAS testing shall be according to the following.

- (a) FRAP Testing. When used in HMA, the FRAP shall be sampled and tested either during processing or after stockpiling. It shall also be sampled during HMA production.
 - (1) During Stockpiling. For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).
 - (2) Incoming Material. For testing as incoming material, washed extraction samples shall be run at a minimum frequency of one sample per 2000 tons (1800 metric tons) or once per week, whichever comes first.
 - (3) After Stockpiling. For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

Before extraction, each field sample of FRAP, shall be split to obtain two samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedure. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

- (b) RAS Testing. RAS shall be sampled and tested during stockpiling according to Central Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources". The Contractor shall also sample as incoming material at the HMA plant.
 - (1) During Stockpiling. Washed extraction and testing for unacceptable materials shall be run at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 1000 tons (900 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a ≤ 1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS shall be in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.
 - (2) Incoming Material. For testing as incoming material at the HMA plant, washed extraction shall be run at the minimum frequency of one sample per 250 tons (227 metric tons). A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). The incoming material test results shall meet the tolerances specified herein.

The Contractor shall obtain and make available all test results from start of the initial stockpile sampled and tested at the shingle processing facility in accordance with the facility's QC Plan.

Before extraction, each field sample shall be split to obtain two samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedures. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

1031.04 Evaluation of Tests. Evaluation of test results shall be according to the following.

(a) Evaluation of FRAP Test Results. All test results shall be compiled to include asphalt binder content, gradation and, when applicable (for slag), G_{mm}. A five test average of results from the original pile will be used in the mix designs. Individual extraction test results run thereafter, shall be compared to the average used for the mix design, and will be accepted if within the tolerances listed below.

Parameter	FRAP
No. 4 (4.75 mm)	± 6 %
No. 8 (2.36 mm)	± 5 %
No. 30 (600 μm)	± 5 %
No. 200 (75 μm)	\pm 2.0 %
Asphalt Binder	± 0.3 %
G _{mm}	\pm 0.03 ^{1/}

1/ For stockpile with slag or steel slag present as determined in the current Manual of Test Procedures Appendix B 21, "Determination of Reclaimed Asphalt Pavement Aggregate Bulk Specific Gravity".

If any individual sieve and/or asphalt binder content tests are out of the above tolerances when compared to the average used for the mix design, the FRAP stockpile shall not be used in Hot-Mix Asphalt unless the FRAP representing those tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

The Contractor shall maintain a representative moving average of five tests to be used for Hot-Mix Asphalt production.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the ITP, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)" or Illinois Modified AASHTO T-164-11, Test Method A.

(b) Evaluation of RAS Test Results. All of the test results, with the exception of percent unacceptable materials, shall be compiled and averaged for asphalt binder content and gradation. A five test average of results from the original pile will be used in the mix
designs. Individual test results run thereafter, when compared to the average used for the mix design, will be accepted if within the tolerances listed below.

Parameter	RAS
No. 8 (2.36 mm)	± 5 %
No. 16 (1.18 mm)	± 5 %
No. 30 (600 μm)	±4%
No. 200 (75 μm)	± 2.5 %
Asphalt Binder Content	± 2.0 %

If any individual sieve and/or asphalt binder content tests are out of the above tolerances when compared to the average used for the mix design, the RAS shall not be used in Hot-Mix Asphalt unless the RAS representing those tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

(c) Quality Assurance by the Engineer. The Engineer may witness the sampling and splitting conduct assurance tests on split samples taken by the Contractor for quality control testing a minimum of once a month.

The overall testing frequency will be performed over the entire range of Contractor samples for asphalt binder content and gradation. The Engineer may select any or all split samples for assurance testing. The test results will be made available to the Contractor as soon as they become available.

The Engineer will notify the Contractor of observed deficiencies.

Differences between the Contractor's and the Engineer's split sample test results will be considered acceptable if within the following limits.

Test Parameter	Acceptable Limits of Precision			
% Passing: ^{1/}	FRAP	RAS		
1/2 in.	5.0%			
No. 4	5.0%			
No. 8	3.0%	4.0%		
No. 30	2.0%	4.0%		
No. 200	2.2%	4.0%		
Asphalt Binder Content	0.3%	3.0%		
G _{mm}	0.030			

1/ Based on washed extraction.

In the event comparisons are outside the above acceptable limits of precision, the Engineer will immediately investigate.

(d) Acceptance by the Engineer. Acceptable of the material will be based on the validation of the Contractor's quality control by the assurance process.

1031.05 Quality Designation of Aggregate in RAP and FRAP.

- (a) RAP. The aggregate quality of the RAP for homogeneous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.
 - (1) RAP from Class I, HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
 - (2) RAP from HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.
 - (3) RAP from Class I, HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.
 - (4) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.
- (b) FRAP. If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer.

If the quality is not known, the quality shall be determined as follows. Fractionated RAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5,000 tons (4,500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant laboratory prequalified by the Department for the specified testing. The consultant laboratory shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the Central Bureau of Materials Aggregate Lab for MicroDeval Testing, according to ITP 327. A maximum loss of 15.0 percent will be applied for all HMA applications. The fine aggregate portion of the fractionated RAP shall not be used in any HMA mixtures that require a minimum of "B" quality aggregate or better, until the coarse aggregate fraction has been determined to be acceptable thru a MicroDeval Testing.

1031.06 Use of FRAP and/or RAS in HMA. The use of FRAP and/or RAS shall be the Contractor's option when constructing HMA in all contracts.

- (a) FRAP. The use of FRAP in HMA shall be as follows.
 - (1) Coarse Aggregate Size (after extraction). The coarse aggregate in all FRAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
 - (2) Steel Slag Stockpiles. FRAP stockpiles containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in HMA (High ESAL and Low ESAL) mixtures regardless of lift or mix type.

- (3) Use in HMA Surface Mixtures (High and Low ESAL). FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall have coarse aggregate that is Class B quality or better. FRAP shall be considered equivalent to limestone for frictional considerations unless produced/screened to minus 3/8 inch.
- (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP in which the coarse aggregate is Class C quality or better.
- (5) Use in Shoulders and Subbase. FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, Restricted FRAP, conglomerate, or conglomerate DQ.
- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.
- (c) FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with FRAP in HMA mixtures up to a maximum of 5.0 percent by weight of the total mix.

When FRAP is used alone or FRAP is used in conjunction with RAS, the percent of virgin asphalt binder replacement (ABR) shall not exceed the amounts listed below for a given N Design.

HMA Mixtures	Maximum % ABR				
Ndesign	Binder ^{5/}	Surface ^{5/}	Polymer Modified ^{3/}		
30L	50	40	30		
50	40	35	30		
70	40	30	30		
90	40	30	30		
SMA			30		
IL-4.75			40		

Maximum Asphalt Binder Replacement (ABR) for FRAP with RAS Combination

1/ For Low ESAL HMA shoulder and stabilized subbase, the percent asphalt binder replacement shall not exceed 50 % of the total asphalt binder in the mixture.

2/ When the binder replacement exceeds 15 % for all mixes, except for SMA and IL-4.75, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 % binder replacement using a virgin asphalt binder grade of PG64-22 will be reduced to a PG58-28). When constructing full depth HMA and the ABR is less than 15 %, the required virgin asphalt binder grade shall be PG64-28.

- 3/ When the ABR for SMA or IL-4.75 is 15 % or less, the required virgin asphalt binder shall be SBS PG76-22 and the elastic recovery shall be a minimum of 80. When the ABR for SMA or IL-4.75 exceeds 15%, the virgin asphalt binder grade shall be SBS PG70-28 and the elastic recovery shall be a minimum of 80.
- 4/ When FRAP or RAS is used alone, the maximum percent asphalt binder replacement designated on the table shall be reduced by 10 %.
- 5/ When the mix has Illinois Flexibility Index Test (I-FIT) requirements, the maximum percent asphalt binder replacement designated on the table may be increased by 5%.

1031.07 HMA Mix Designs. At the Contractor's option, HMA mixtures may be constructed utilizing FRAP and/or RAS material meeting the detailed requirements specified herein.

- (a) FRAP and/or RAS. FRAP and /or RAS mix designs shall be submitted for verification. If additional FRAP or RAS stockpiles are tested and found to be within tolerance, as defined under "Evaluation of Tests" herein, and meet all requirements herein, the additional FRAP or RAS stockpiles may be used in the original design at the percent previously verified.
- (b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design.

The RAP, FRAP and RAS stone specific gravities (G_{sb}) shall be according to the "Determination of Aggregate Bulk (Dry) Specific Gravity (G_{sb}) of Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)" procedure in the Department's Manual of Test Procedures for Materials.

1031.08 HMA Production. HMA production utilizing FRAP and/or RAS shall be as follows.

A scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAS and FRAP feed system to remove or reduce oversized and agglomerated material.

If during mix production, corrective actions fail to maintain FRAP, RAS or QC/QA test results within control tolerances or the requirements listed herein, the Contractor shall cease production of the mixture containing FRAP or RAS and conduct an investigation that may require a new mix design.

- (a) FRAP. The coarse aggregate in all FRAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.
- (b) RAS. RAS shall be incorporated into the HMA mixture either by a separate weight depletion system or by using the RAP weigh belt. Either feed system shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes. The portion of RAS shall be controlled accurately to within ± 0.5 percent of the amount of RAS utilized. When using the weight depletion system, flow indicators or sensing devices shall be provided and interlocked with the plant controls such that the mixture production is halted when RAS flow is interrupted.

- (c) HMA Plant Requirements. HMA plants utilizing FRAP and/or RAS shall be capable of automatically recording and printing the following information.
 - (1) Dryer Drum Plants.
 - a. Date, month, year, and time to the nearest minute for each print.
 - b. HMA mix number assigned by the Department.
 - c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - d. Accumulated dry weight of RAS and FRAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
 - f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
 - g. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.
 - h. Aggregate RAS and FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAS and FRAP are printed in wet condition.)
 - i. When producing mixtures with FRAP and/or RAS, a positive dust control system shall be utilized.
 - j. Accumulated mixture tonnage.
 - k. Dust Removed (accumulated to the nearest 0.1 ton (0.1 metric ton))
 - (2) Batch Plants.
 - a. Date, month, year, and time to the nearest minute for each print.
 - b. HMA mix number assigned by the Department.
 - c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
 - d. Mineral filler weight to the nearest pound (kilogram).
 - e. RAS and FRAP weight to the nearest pound (kilogram).
 - f. Virgin asphalt binder weight to the nearest pound (kilogram).

g. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.

The printouts shall be maintained in a file at the plant for a minimum of one year or as directed by the Engineer and shall be made available upon request. The printing system will be inspected by the Engineer prior to production and verified at the beginning of each construction season thereafter.

1031.09 RAP in Aggregate Surface Course and Aggregate Wedge Shoulders, Type B. The use of RAP in aggregate surface course and aggregate shoulders shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply. RAP used shall be according to the current Central Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".
- (b) Gradation. The RAP material shall meet the gradation requirements for CA 6 according to Article 1004.01(c), except the requirements for the minus No. 200 (75 μm) sieve shall not apply. The sample for the RAP material shall be air dried to constant weight prior to being tested for gradation."

TEMPORARY BRIDGE TRAFFIC SIGNALS

Description. This work shall be done according to Section 701 of the Standard Specifications, Standard 701321, and modified as described herein.

Microwave detectors shall be installed instead of the induction loop detectors shown on Standard 701321 according to the following:

Materials. The controller shall provide actuated operation for the number of phases required with full menu driven format for ease of data entry. The controller shall show all the timers operating simultaneously.

The microwave detector shall be a Microwave Sensors 26B or an approved equal. The microwave detector shall be designed to detect moving vehicles at a maximum range of 200 feet (60 m). The microwave detector shall have an ability to accurately discriminate between vehicles arriving and departing. The Contractor shall supply the type of lead-in cable recommended by the manufacturer for his microwave detector.

Construction Requirements. The Contractor shall mount a metal arm to each near right signal post (an arm for a light fixture would be acceptable). The arm shall be reasonably stationary to prevent false calls on the microwave sensor. The final mounting height of the microwave detector shall be 17.5 feet (5.33 m) plus or minus 0.5 feet (0.15 m). The microwave detector shall be horizontally positioned somewhere between the center of the driving lane and 2 feet (600 mm) from the edge of the driving lane. The microwave detector shall be aimed to a 6 feet (1.8 m) height at the stop bar at the center of the driving lane.

The microwave detector voltage shall be the highest allowed by the manufacturer.

At the time of inspection and programming of the controller, one of the Contractor's employees or representatives at the inspection shall be capable of doing all cabinet wiring or controller programming necessary to accomplish the type of operation desired or to modify the cabinet for any unusual conditions.

No vehicle, trailer, or other large object may be parked between the microwave detector and 500 feet (150 m) in the direction of approaching traffic.

The Contractor shall be required to restore all original traffic control when the temporary bridge signals are removed.

Temporary Signals. The Contractor will be required to have someone available at all times to receive phone calls during non-work hours and who is able to reach the job site within one hour of being called. This person will be able to repair the temporary signals or will be able to have flaggers on site within another hour to flag traffic until the signals are again in operation. Failure to have a person on site within an hour after the initial call out will result in the Contractor being charged liquidated damages by the County of One Thousand Dollars (\$1,000). Failure to have traffic restored either with repaired signals or with flaggers within two hours after the initial call out will result in the Contractor being charged liquidated damages by the County of One Thousand Dollars (\$1,000) per hour until traffic is restored. The Contractor may use a traffic control subcontractor for the first call, however this does not relieve the prime Contractor from having a person on call.

Basis of Payment. This work will be paid at the contract unit price per each for TEMPORARY BRIDGE TRAFFIC SIGNALS, which price includes furnishing, installing, providing power, energy charges, maintaining and removing all signal and ancillary equipment needed to provide signalized traffic control in accordance with IDOT Standard 701321 and Section 701 of the Standard Specifications at each bridge location specified.

REMOVE EXISTING FLARED END SECTION

Description. This work shall consist of the removal of existing flared end sections (FES) at the locations shown on the plans and as directed by the Engineer.

General. Existing FESs shall be removed so that all FESs considered suitable by the Engineer for reuse shall be salvaged. All work shall otherwise conform to the applicable articles of Section 551.

Basis of Payment. This work will be paid for at the contract unit price per each for REMOVE EXISTING FLARED END SECTION, regardless of size and material.

DEWATERING

Description. This work shall consist of furnishing all labor, tools, equipment, and materials to install, maintain, and operate all necessary dewatering systems to divert, or remove water from the work area. The dewatering system shall be designed to control sediment discharge in dewatering applications where water is being pumped for the construction of the proposed drainage structure improvements, headwalls, stone rip rap channel lining and other work located within the top of banks to ensure that work can be completed in the dry or in manageable conditions as approved by the Engineer.

This item will also consist of constructing a dewatering filtering system consisting of filtration or sediment bags for collecting sediment from pumping operations within cofferdams and sump pits. Construction waters will include, but not be limited to, all waters generated from the installation of drainage structures, earthwork and ancillary construction items.

Prior to any drainage structure or channel work associated with the project, Contractor shall identify the proposed dewatering and/or diversion/isolation method to be used and obtain approval from the Engineer prior to starting work. Drainage structure work shall take place only during low flow conditions unless otherwise allowed by the Engineer. Concentrated flow shall be isolated from the work area. Dewatering shall comply with all requirements contained in the plan.

The Contractor is ultimately responsible for the choice of the product(s) and equipment; for and subsequent removal of dewatering systems and their safety and conformity with local codes, regulations, and these Specifications, as well as "means and methods" for the Site Dewatering and Diversion Work to be performed. The Contractors "means and methods" are subject to the review of the County. All products and "means and methods" selected shall be adequate for the intended use/application and within the construction limits represented on the plans.

The Contractor shall submit to the Engineer for review a description of dewatering techniques and equipment to be used, together with detail drawings showing items such as, but not limited to type of pumps, pump size, lengths and sizes of discharge piping and points(s) of discharge including erosion control procedures. Changes to the site dewatering and/or diversion plan(s) are to be approved by the Engineer. The review of dewatering techniques and equipment shall in no way be construed as creating any obligation on the part of County for same.

The Contractor shall select the pumps he/she desires to use and the rate at which the pumps discharge, but adequate protection at the pump discharge shall be provided by the Contractor, subject to review by the Engineer. The Contractor shall ensure that downstream water quality and further erosion shall not be impaired.

Water pumped or drained from the work required for this Contract shall be disposed of in a safe and suitable manner without damage to adjacent property or streets or to other work under construction. Water shall not be discharged onto roadways without adequate protection of the surface at the point of discharge. No water shall be discharged into sanitary sewers. No water containing settleable solids shall be discharged. Any and all damages caused by dewatering and/or diversion operations will be promptly repaired by the Contractor. Conditions and deficiency deductions as specified in Article 105.03(a) of the Standard Specifications shall apply. The Contractor is responsible for providing any and all labor, materials and equipment needed for the dewatering and/or diversion of waters in order to meet the scheduled completion of the project.

Method of Measurement. This item will be measured as Lump Sum for DEWATERING. The Contractor will not be due additional compensation for delay, lost productivity, or for reestablishing and maintaining the dewatered and/or diversion condition in the event the capacity of the system is exceeded. The payment under this item is for the duration of the contract, regardless of conditions encountered.

Basis of Payment. This work required for construction of dewatering and/or diversion systems and dewatering/diversion for the construction of all structures, channel and bank stabilization shall be paid for at the contract Lump Sum price for DEWATERING, which work shall include cofferdams, barrier wall, filter fabric, piping, pumping, foundation preparation, framing and supports, dewatering filtering system consisting of filtration or sediment bags, installation, maintenance, removal of systems and all labor, material, and equipment needed to perform the work described herein and as specified on the plans.

TRAFFIC CONTROL AND PROTECTION, (SPECIAL)

Description. Traffic Control shall be according to the applicable sections of the Standard Specifications for Road and Bridge Construction, the applicable guidelines contained in the National Manual on Uniform Traffic Control Devices for Streets and Highways, Illinois Supplement to the National Manual on Uniform Traffic Control Devices, these special provisions, and any special details and Highway Standards contained herein and in the plans.

Special attention is called to Articles 107.09 and 107.14 and Division 700 of the Standard Specifications and the following Highway Standards, Details, Quality Standard for Work Zone Traffic Control Devices, Supplemental Specifications and Recurring Special Provisions, and Special Provisions contained herein, relating to traffic control.

Standards:

701001	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY
701006	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT
	EDGE
701011	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701301	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701901	TRAFFIC CONTROL DEVICES
704001	TEMPORARY CONCRETE BARRIER

Special Provisions:

Traffic Control Deficiency Deduction

Details:

Signs. No bracing shall be allowed on post-mounted signs.

The Contractor shall remove or cover all conflicting existing signs for the duration of the construction. Plate altering signs shall have the same sheeting as the base sign. No more than one plate shall be used to alter a sign.

Any post stubs without a sign in place and visible shall have a reflector placed on each post.

The Contractor shall be responsible for and replace any signs that are supplied by others and damaged by the Contractor's workforce or its Subcontractors during relocation or construction operations.

The Contractor shall maintain the signs in a straight and neat condition for the duration of the temporary mounting.

All signs for the work noted herein shall be considered included in the Traffic Control and Protection, (Special) pay item.

Surveillance. The Contractor is required to conduct routine inspections of the worksite at a frequency that will allow for the prompt replacement of any traffic control device that has become displaced, worn or damaged to the extent that it no longer conforms to the shape, dimensions, color and operational requirements of the MUTCD, the Traffic Control Highway Standards or will no longer present a neat appearance to motorists. A sufficient quantity of replacement devices, based on vulnerability to damage, shall be readily available to meet this requirement.

The Contractor shall ensure that all traffic control devices installed by him are operational, functional and effective 24 hours a day, including Sundays and holidays.

The Contractor shall provide the Engineer a telephone number where a responsible individual can be contacted on a 24-hour-a-day basis to receive notification of any deficiencies regarding traffic control and protection. The Contractor shall dispatch men, materials and equipment to correct any such deficiencies. The Contractor shall respond to any call from the Engineer concerning any request for improving or correcting traffic control devices and begin making the requested repairs within two hours from the time notification.

Flaggers. Flaggers shall comply with all requirements contained in the Department's "Flagger Handbook" dated September 2011. The flagger equipment listed for flaggers employed by the Illinois Department of Transportation shall apply to all flaggers.

All workers and flaggers shall wear ANSI Class E pants and an ANSI Class 2 vest that in combination meet the requirements of ANSI/ISEA 107-2004 for Conspicuity Class 3 garments during hours of darkness.

Pavement Marking. All temporary pavement markings that will be operational during the winter months (December through March) shall be paint.

Short term pavement markings on a milled surface shall be paint.

Treatment of "T" Crossing Near Standard 701321. The signal indications and detection of the intersecting street or driveway near the standard 701321 traffic control installation shall be as follows:

Two signal heads shall be provided for each mainline approach and for each sideroad within the designated work area. Each signal shall consist of one red section, one yellow section, one green left arrow section, and one green right arrow section with back plates.

Detection for sideroads shall consist of one microwave detector or 5 foot x 5 foot loop detector. The microwave detector shall be mounted 14 feet to 18 feet high on the near right post for the sideroad. The detector loop shall be installed at the stop bar. The side road shall be a phase separate from the cross traffic.

All signing and pavement marking on the sideroad shall be as shown on standard 701321.

"NO TURN ON RED" (R10-11B24) signs shall be installed on sideroads in which a right turn would turn traffic into the one lane section.

All cost involved in conforming with this provision shall be considered a part of TRAFFIC CONTROL AND PROTECTION STANDARD 701321, except the traffic signals will be paid for as one Each for TEMPORARY BRIDGE TRAFFIC SIGNALS, which shall include all signals within the designated work area.

Basis of Payment. All traffic control and protection indicated on the Traffic Control plans and specified in the Special Provisions, and/or required by the Engineer, for the locations specified above will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL) which price shall be payment in full for all labor, equipment, materials, transportation, handling and incidental work necessary to furnish, install, maintain, clean, relocate,

and remove all traffic control devices, including but not limited to barricades; cones; standard signs; detour signs; warning lights; and arrow boards; required, as indicated on the Plans and approved by the Engineer.

TRAFFIC CONTROL DEFICIENCY DEDUCTION

Revised on: 01/01/2015

When the Engineer is notified or determines a deficiency exists, he/she shall be the sole judge as to whether the deficiency is an immediate safety hazard. The Contractor shall dispatch sufficient resources within two (2) hours of notification to make needed corrections of deficiencies that constitute an immediate safety hazard. Other deficiencies shall be corrected within twelve (12) hours. If the Contractor fails to restore the required traffic control and protection within the time limits specified above, the Engineer shall impose a daily monetary deduction for each twenty-four (24) hour period (or portion thereof) that the deficiency exists. The time period will begin with the time of notification to the Contractor and end with the Engineer's acceptance of the corrections. For this project the deduction shall be \$<u>*</u> per calendar day. In addition, if the Contractor fails to respond, the Engineer may correct the deficiencies and the cost thereof shall be deducted from monies due or which may become due to the Contractor. This corrective action will in no way relieve the Contractor of his/her contractual requirements or responsibilities.

* The cost of the daily deduction shall be calculated by dividing five percent (5%) of the awarded contract price by the number of calendar days anticipated for this project. The number of calendar days anticipated for this project is 55. This procedure is to be followed regardless of whether the contract is based upon working days, contains a completion date, or has an incentive/disincentive clause.

Basis of Payment: This work shall be paid for at the contract unit price per lump sum for TRAFFIC CONTROL AND PROTECTION (SPECIAL), which price shall be payment in full for all labor, materials, and equipment necessary to complete the work described above.

 Route:
 Burlington Road

 Description:
 Burlington Road Over Virgil Ditch No. 3 (North and South)

 Section:
 14-00437-00-BR

 County:
 Kane

RIGHT OF WAY MARKERS

Revised on: 11/10/2014

Description: This work shall be done in accordance with Section 666 of the Standard Specifications and as modified herein.

The right-of-way markers will only be required at the "proposed" property corners shown on the Plat of Highways included in the plans. The right-of-way markers will be placed under the direction of a Registered Land Surveyor of the State of Illinois. Monument records will not be required.

Basis of Payment: The work of furnishing and installing property markers will be paid for at the contract unit price per each for FURNISHING AND ERECTING RIGHT OF WAY MARKERS which price shall include furnishing the concrete marker, rebar, labor, tools, equipment and incidentals required to complete this work as specified.

Supervision by a registered Land Surveyor and all collateral work necessary to establish the rightof-way markers and property corners (if required by Contractor's operations), will not be measured separately for payment but shall be included in the cost for FURNISHING AND ERECTING RIGHT OF WAY MARKERS.

RECESSED REFLECTIVE PAVEMENT MARKER

Revised on: 11/10/2014

Description: This work shall consist of setting reflective pavement markers in a recessed groove in the pavement. The recessed pavement markers shall be used to supplement other pavement markings, similar to the use of Raised Reflective Pavement Markers.

Materials: The reflective pavement marker shall be a 3M 190 series pavement marker or Engineer approved equivalent. The reflector holder shall be a MarkerOne Series R100 reflector holder or Engineer approved equivalent. The epoxy used shall be as recommended by the pavement marker manufacturer.

Installation: Spacing and orientation of the pavement markers shall be as detailed in the plans or as directed by the Engineer.

The recessed groove shall be cleaned free of all loose material, and dry before the placement of the pavement marker. All excess material resulting from the construction of the recessed area shall be completely removed from the surface of the roadway by means of vacuum sweeper truck. The pavement marker shall be cemented with epoxy in the center of the 0.9" deep recessed groove.

Inspection: A straight edge shall be placed across the recess to check that the top of the marker is below the pavement. Inspection and acceptance shall be according to Article 781.04 of the Standard Specifications.

Basis of Payment: This work will be paid for at the contract unit price each for RECESSED REFLECTIVE PAVEMENT MARKER, which price shall be payment in full for all labor, equipment, and materials necessary to complete the work as specified.

PIPE UNDERDRAIN REMOVAL

Add the following to Article 501.06 of the Standard Specifications:

"Removal of existing pipe underdrains will be measured for payment in place, in feet along the invert of the pipe underdrain."

Add the following to Article 501.07 of the Standard Specifications:

"Removal of existing pipe underdrains will be paid for at the contract unit price per foot for PIPE UNDERDRAIN REMOVAL."

 Route:
 Burlington Road

 Description:
 Burlington Road Over Virgil Ditch No. 3 (North and South)

 Section:
 14-00437-00-BR

 County:
 Kane

TEMPORARY PAVEMENT

Effective: March 1, 2003 Revised: April 10, 2008

<u>Description</u>. This work shall consist of constructing a temporary pavement at the locations shown on the plans or as directed by the engineer.

The contractor shall use either Portland cement concrete according to Sections 353 and 354 of the Standard Specifications or HMA according to Sections 355, 356, 406 of the Standard Specifications, and other applicable HMA special provisions as contained herein. The HMA mixtures to be used shall be specified in the plans. The thickness of the Temporary Pavement shall be as described in the plans. The contractor shall have the option of constructing either material type if both Portland cement concrete and HMA are shown in the plans.

Articles 355.08 and 406.11 of the Standard Specifications shall not apply.

The removal of the Temporary Pavement, if required, shall conform to Section 440 of the Standard Specification.

<u>Method of Measurement</u>. Temporary pavement will be measured in place and the area computed in square yards (square meters).

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per square yard (square meter) for TEMPORARY PAVEMENT and TEMPORARY PAVEMENT (INTERSTATE).

Removal of temporary pavement will be paid for at the contract unit price per square yard (square meter) for PAVEMENT REMOVAL.



The Following Recurring Special Provisions Indicated By An "X" Are Applicable To This Contract And Are Included By Reference:

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The Following Local Roads And Streets Recurring Special Provisions Indicated By An "X" Are Applicable To This Contract And Are Included By Reference:

Local Roads And Streets Recurring Special Provisions

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BDE SPECIAL PROVISIONS For the January 17, 2020 and March 6, 2020 Lettings

The following special provisions indicated by a "check mark" are applicable to this contract and will be included by the Project Coordination and Implementation Section of the BD&E. An * indicates a new or revised special provision for the letting.

800991Accessible Pedestrian Signals (APS)April 1, 2003Jan. 1, 2014802742Aggregate Subgrade ImprovementApril 1, 2016801923Automated Flagger Assistance DeviceJan. 1, 2008801734Bituminous Materials Cost AdjustmentsNov. 2, 2006Aug. 1, 2017804265Bituminous Surface Treatment with Fog SealJal. 1, 2020802416Bridge Demolition DebrisJuly 1, 2009502617Building Removal-Case I (Non-Friable Asbestos)Sept. 1, 1990504818Building Removal-Case II (Non-Friable Asbestos)Sept. 1, 1990504919Building Removal-Case IV (No Asbestos)Sept. 1, 19905053110Building Removal-Case IV (No Asbestos)Sept. 1, 19905053110Building Removal-Case IV (No Asbestos)Sept. 1, 19908042511Cape SealJan. 1, 20108038412Completion Date (via calendar days)April 1, 20188019914Completion Date (via calendar days)April 1, 20188019914Concrete Box Culverts with Skews > 30 Degrees and Design Fills 5 5 FeetApril 1, 2013802717Concrete Mix Design – Department ProvidedJan. 1, 20148027117Concrete Mix Design – Department ProvidedJan. 1, 20178027118Construction Air Quality – Diesel RetrofitJune 1, 20108037116Construction Air Quality – Diesel RetrofitJune 1, 20108042719Disadvantaged Bus	<u>File Name</u>	#	<u>t</u>	Special Provision Title	Effective	Revised
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Design Fills ≤ 5 Feet Solution Jan. 1, 2013 April 1, 2016 80277 17 Concrete End Sections for Pipe Culverts Jan. 1, 2012 April 1, 2016 80261 18 Construction Air Quality – Diesel Retrofit June 1, 2010 Nov. 1, 2014 80387 19 Contrast Preformed Plastic Pavement Marking Nov. 1, 2017 March 2, 2019 80029 20 Disadvantaged Business Enterprise Participation Sept. 1, 2000 March 2, 2019 80402 21 Disposal Fees Nov. 1, 2017 Jan. 1, 2017 Jan. 1, 2017 80378 22 Dowel Bar Inserter Jan. 1, 2017 Jan. 1, 2019 Jan. 1, 2019 * 80421 24 Electric Service Installation Jan. 1, 2020 80415 25 Emulsified Asphalts Aug. 1, 2019 * 80423 26 Engineer's Field Office and Laboratory Jan. 1, 2020 80388 27 Equipment Parking and Storage Nov. 1, 2017 80417 29 Geotechnical Fabric for Pipe Underdrains and French Drains Nov. 1, 2019 80420 30 Geotecknical Fabric for Pipe Underdrains and French Drains Nov.	80293	15	5	Concrete Box Culverts with Skews > 30 Degrees and	April 1, 2012	July 1, 2016
8031116Concrete End Sections for Pipe CulvertsJan. 1, 2013April 1, 20168027717Concrete Mix Design – Department ProvidedJan. 1, 2012April 1, 20168026118Construction Air Quality – Diesel RetrofitJune 1, 2010Nov. 1, 20148038719Contrast Preformed Plastic Pavement MarkingNov. 1, 2017Nov. 1, 20178002920Disadvantaged Business Enterprise ParticipationSept. 1, 2000March 2, 20198040221Disposal FeesNov. 1, 2018Jan. 1, 2017Jan. 1, 20188040223Elastomeric BearingsJan. 1, 2019Jan. 1, 2019*8042124Electric Service InstallationJan. 1, 20208041525Emulsified AsphaltsAug. 1, 20178022928Fuel Cost AdjustmentApril 1, 2009Aug. 1, 20178041729Geotechnical Fabric for Pipe Underdrains and French DrainsNov. 1, 20198042030Grooving for Recessed Pavement MarkingsNov. 1, 2012Nov. 1, 2017				Design Fills ≤ 5 Feet		
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8026118Construction Air Quality – Diesel RetrofitJune 1, 2010Nov. 1, 20148038719Contrast Preformed Plastic Pavement MarkingNov. 1, 2017March 2, 20198002920Disadvantaged Business Enterprise ParticipationSept. 1, 2000March 2, 20198040221Disposal FeesNov. 1, 2017Jan. 1, 2017Jan. 1, 20178040523Elastomeric BearingsJan. 1, 2017Jan. 1, 20188041525Emulsified AsphaltsAug. 1, 2019*8042326Engineer's Field Office and LaboratoryJan. 1, 20178022928Fuel Cost AdjustmentApril 1, 2009Aug. 1, 20178041729Geotechnical Fabric for Pipe Underdrains and French DrainsNov. 1, 20198030431Grooving for Recessed Pavement MarkingsNov. 1, 2012Nov. 1, 2017	80277	17	7	Concrete Mix Design – Department Provided	Jan. 1, 2012	April 1, 2016
8038719□Contrast Preformed Plastic Pavement MarkingNov. 1, 20178002920□Disadvantaged Business Enterprise ParticipationSept. 1, 2000March 2, 20198040221□Disposal FeesNov. 1, 2018Jan. 1, 2017Jan. 1, 20178037822□Dowel Bar InserterJan. 1, 2017Jan. 1, 20188040523□Elastomeric BearingsJan. 1, 2019*8042124□Electric Service InstallationJan. 1, 20208041525□Emulsified AsphaltsAug. 1, 2019*8042326□Engineer's Field Office and LaboratoryJan. 1, 20208038827□Equipment Parking and StorageNov. 1, 20178022928□Fuel Cost AdjustmentApril 1, 2009Aug. 1, 20178041729□Geotechnical Fabric for Pipe Underdrains and French DrainsNov. 1, 20198030431☑Grooving for Recessed Pavement MarkingsNov. 1, 2012Nov. 1, 2017	80261	18	8 🗌	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
8002920Disadvantaged Business Enterprise ParticipationSept. 1, 2000March 2, 20198040221Disposal FeesNov. 1, 2018Jan. 1, 2017Jan. 1, 2017Jan. 1, 20188037822Dowel Bar InserterJan. 1, 2017Jan. 1, 2019Jan. 1, 2019*8042124Electric Service InstallationJan. 1, 2020Jan. 1, 20208041525Emulsified AsphaltsAug. 1, 2019*8042326Engineer's Field Office and LaboratoryJan. 1, 20208038827Equipment Parking and StorageNov. 1, 20178022928Fuel Cost AdjustmentApril 1, 2009Aug. 1, 20178041729Geotechnical Fabric for Pipe Underdrains and French DrainsNov. 1, 20198030431Grooving for Recessed Pavement MarkingsNov. 1, 2012Nov. 1, 2017	80387	19	9 🗌	Contrast Preformed Plastic Pavement Marking	Nov. 1, 2017	
8040221Disposal FeesNov. 1, 20188037822Dowel Bar InserterJan. 1, 2017Jan. 1, 20188040523Elastomeric BearingsJan. 1, 2019Jan. 1, 2019*8042124Electric Service InstallationJan. 1, 20208041525Emulsified AsphaltsAug. 1, 2019*8042326Engineer's Field Office and LaboratoryJan. 1, 20208038827Equipment Parking and StorageNov. 1, 20178022928Fuel Cost AdjustmentApril 1, 2009Aug. 1, 20178041729Geotechnical Fabric for Pipe Underdrains and French DrainsNov. 1, 20198030431Grooving for Recessed Pavement MarkingsNov. 1, 2012Nov. 1, 2017	80029	20	0	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	March 2, 2019
8037822Dowel Bar InserterJan. 1, 2017Jan. 1, 20188040523Elastomeric BearingsJan. 1, 2019*8042124Electric Service InstallationJan. 1, 20208041525Emulsified AsphaltsAug. 1, 2019*8042326Engineer's Field Office and LaboratoryJan. 1, 20208038827Equipment Parking and StorageNov. 1, 20178022928Fuel Cost AdjustmentApril 1, 2009Aug. 1, 20178041729Geotechnical Fabric for Pipe Underdrains and French DrainsNov. 1, 20198030431Grooving for Recessed Pavement MarkingsNov. 1, 2012Nov. 1, 2017	80402	21	1	Disposal Fees	Nov. 1, 2018	
8040523Elastomeric BearingsJan. 1, 2019*8042124Electric Service InstallationJan. 1, 20208041525Emulsified AsphaltsAug. 1, 2019*8042326Engineer's Field Office and LaboratoryJan. 1, 20208038827Equipment Parking and StorageNov. 1, 20178022928Fuel Cost AdjustmentApril 1, 2009Aug. 1, 20178041729Geotechnical Fabric for Pipe Underdrains and French DrainsNov. 1, 20198042030Geotextile Retaining WallsNov. 1, 20198030431Grooving for Recessed Pavement MarkingsNov. 1, 2012	80378	22	2 🗌	Dowel Bar Inserter	Jan. 1, 2017	Jan. 1, 2018
* 80421 24 □ Electric Service Installation Jan. 1, 2020 80415 25 □ Emulsified Asphalts Aug. 1, 2019 * 80423 26 □ Engineer's Field Office and Laboratory Jan. 1, 2020 80388 27 □ Equipment Parking and Storage Nov. 1, 2017 80229 28 □ Fuel Cost Adjustment April 1, 2009 Aug. 1, 2017 80417 29 □ Geotechnical Fabric for Pipe Underdrains and French Drains Nov. 1, 2019 80420 30 □ Geotextile Retaining Walls Nov. 1, 2019 Nov. 1, 2017 80304 31 ☑ Grooving for Recessed Pavement Markings Nov. 1, 2012 Nov. 1, 2017	80405	23	3 📋	Elastomeric Bearings	Jan. 1, 2019	
8041525Emulsified AsphaltsAug. 1, 2019*8042326Engineer's Field Office and LaboratoryJan. 1, 20208038827Equipment Parking and StorageNov. 1, 20178022928Fuel Cost AdjustmentApril 1, 20098041729Geotechnical Fabric for Pipe Underdrains and French DrainsNov. 1, 20198042030Geotextile Retaining WallsNov. 1, 20198030431Grooving for Recessed Pavement MarkingsNov. 1, 2012	* 80421	24	4 📋	Electric Service Installation	Jan. 1, 2020	
* 80423 26 □ Engineer's Field Office and Laboratory Jan. 1, 2020 80388 27 □ Equipment Parking and Storage Nov. 1, 2017 80229 28 □ Fuel Cost Adjustment April 1, 2009 Aug. 1, 2017 80417 29 □ Geotechnical Fabric for Pipe Underdrains and French Drains Nov. 1, 2019 80420 30 □ Geotextile Retaining Walls Nov. 1, 2019 80304 31 ☑ Grooving for Recessed Pavement Markings Nov. 1, 2012 Nov. 1, 2017	80415	25	5 📋	Emulsified Asphalts	Aug. 1, 2019	
8038827Equipment Parking and StorageNov. 1, 20178022928Fuel Cost AdjustmentApril 1, 2009Aug. 1, 20178041729Geotechnical Fabric for Pipe Underdrains and French DrainsNov. 1, 2019Aug. 1, 20178042030Geotextile Retaining WallsNov. 1, 2019Nov. 1, 2019Nov. 1, 20198030431Grooving for Recessed Pavement MarkingsNov. 1, 2012Nov. 1, 2017	* 80423	26	6 📋	Engineer's Field Office and Laboratory	Jan. 1, 2020	
8022928IFuel Cost AdjustmentApril 1, 2009Aug. 1, 20178041729IGeotechnical Fabric for Pipe Underdrains and French DrainsNov. 1, 20198042030IGeotextile Retaining WallsNov. 1, 20198030431IGrooving for Recessed Pavement MarkingsNov. 1, 2012Nov. 1, 2017	80388	27	7	Equipment Parking and Storage	Nov. 1, 2017	
80417 29 Geotechnical Fabric for Pipe Underdrains and French Drains Nov. 1, 2019 80420 30 Geotextile Retaining Walls Nov. 1, 2019 80304 31 Grooving for Recessed Pavement Markings Nov. 1, 2012	80229	28	18 <u> </u>	Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
80420 30Geotextile Retaining WallsNov. 1, 201980304 31Grooving for Recessed Pavement MarkingsNov. 1, 2012Nov. 1, 2012Nov. 1, 2017	80417	29	9 <u> </u>	Geotechnical Fabric for Pipe Underdrains and French Drains	Nov. 1, 2019	
80304 31 🖄 Grooving for Recessed Pavement Markings Nov. 1, 2012 Nov. 1, 2017	80420	30		Geotextile Retaining Walls	Nov. 1, 2019	
	80304	31	1 🛛	Grooving for Recessed Pavement Markings	Nov. 1, 2012	Nov. 1, 2017
* 80422 32 High Tension Cable Median Barrier Reflectors Jan. 1, 2020	* 80422	32	2	High Tension Cable Median Barrier Reflectors	Jan. 1, 2020	
80416 33 Hot-Mix Asphalt – Binder and Surface Course July 2, 2019 Nov. 1, 2019	80416	33	3	Hot-Mix Asphalt – Binder and Surface Course	July 2, 2019	Nov. 1, 2019
80398 34 📋 Hot-Mix Asphalt – Longitudinal Joint Sealant 🛛 Aug. 1, 2018 Nov. 1, 2019	80398	34	4	Hot-Mix Asphalt – Longitudinal Joint Sealant	Aug. 1, 2018	Nov. 1, 2019
80406 35 I Hot-Mix Asphalt – Mixture Design Verification and Production Jan. 1, 2019 Nov. 1, 2019 (Modified for I-FIT Projects)	80406	35	5 🗌	Hot-Mix Asphalt – Mixture Design Verification and Production (Modified for I-FIT Projects)	Jan. 1, 2019	Nov. 1, 2019
80347 36 Hot-Mix Asphalt – Pay for Performance Using Percent Nov. 1, 2014 July 2, 2019 Within Limits – Jobsite Sampling	80347	36	6	Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Nov. 1, 2014	July 2, 2019
80383 37 🔲 Hot-Mix Asphalt – Quality Control for Performance April 1, 2017 July 2, 2019	80383	37	7	Hot-Mix Asphalt – Quality Control for Performance	April 1, 2017	July 2, 2019
80411 38 🔲 Luminaires, LED April 1, 2019	80411	38	8	Luminaires, LED	April 1, 2019	•
80393 39 🗍 Manholes, Valve Vaults, and Flat Slab Tops Jan. 1, 2018 March 1, 2019	80393	39	9	Manholes, Valve Vaults, and Flat Slab Tops	Jan. 1, 2018	March 1, 2019
80045 40 🗍 Material Transfer Device June 15, 1999 Aug. 1, 2014	80045	40	0	Material Transfer Device	June 15, 1999	Aug. 1, 2014
80418 41 🗍 Mechanically Stabilized Earth Retaining Walls Nov. 1, 2019	80418	41	1	Mechanically Stabilized Earth Retaining Walls	Nov. 1, 2019	0
* 80424 42 🔲 Micro-Surfacing and Slurry Sealing Jan. 1, 2020	* 80424	42	2	Micro-Surfacing and Slurry Sealing	Jan. 1, 2020	
80165 43 🗌 Moisture Cured Urethane Paint System Nov. 1, 2006 Jan. 1, 2010	80165	43	3	Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
80412 44 🗌 Obstruction Warning Luminaires, LED Aug. 1, 2019	80412	44	4	Obstruction Warning Luminaires, LED	Aug. 1, 2019	
80349 45 🗌 Pavement Marking Blackout Tape Nov. 1, 2014 April 1, 2016	80349	45	5	Pavement Marking Blackout Tape	Nov. 1, 2014	April 1, 2016

	80371 80389 80359 80300 80328 34261 80157 80306	46 47 48 49 50 51 52 53		Pavement Marking Removal Portland Cement Concrete Portland Cement Concrete Bridge Deck Curing Preformed Plastic Pavement Marking Type D - Inlaid Progress Payments Railroad Protective Liability Insurance Railroad Protective Liability Insurance (5 and 10) Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	July 1, 2016 Nov. 1, 2017 April 1, 2015 April 1, 2012 Nov. 2, 2013 Dec. 1, 1986 Jan. 1, 2006 Nov. 1, 2012	Nov. 1, 2019 April 1, 2016 Jan. 1, 2006 July 2, 2019
*	80407	54		Removal and Disposal of Regulated Substances	Jan. 1, 2019	Jan. 1, 2020
	80419	55		Silt Fence, Ground Stabilization and Riprap Filter Fabric	Nov. 1, 2019	
	80395	56		Sloped Metal End Section for Pipe Culverts	Jan. 1, 2018	
	80340	57		Speed Display Trailer	April 2, 2014	Jan. 1, 2017
	80127	58		Steel Cost Adjustment	April 2, 2004	Aug. 1, 2017
	80408	59		Steel Plate Beam Guardrail Manufacturing	Jan. 1, 2019	
	80413	60		Structural Timber	Aug. 1, 2019	
	80397	61		Subcontractor and DBE Payment Reporting	April 2, 2018	
	80391	62		Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
	80317	63		Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	Aug. 1, 2019
	80298	64		Temporary Pavement Marking	April 1, 2012	April 1, 2017
	80403	65		Traffic Barrier Terminal, Type 1 Special	Nov. 1, 2018	
	80409	66		Traffic Control Devices - Cones	Jan. 1, 2019	
*	80410	67		Traffic Spotters	Jan. 1, 2019	
	20338	68		Training Special Provisions	Oct. 15, 1975	
	80318	69	Ц	Traversable Pipe Grate for Concrete End Sections	Jan. 1, 2013	Jan. 1, 2018
	80288	70	Ц	Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
	80302	71	Ц	Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
	80414	72	Ц	Wood Fence Sight Screen	Aug. 1, 2019	
	80071	73		Working Days	Jan. 1, 2002	

The following special provisions are in the 2020 Supplemental Specifications and Recurring Special Provisions.

File Name	Special Provision Title	New Location(s)	Effective	Revised
80404	Coarse Aggregate Quality for	Article 1004.01(b)	Jan. 1, 2019	
	Micro-Surfacing and Cape Seals			
80392	Lights on Barricades	Articles 701.16, 701.17(c)(2) &	Jan. 1, 2018	
		603.07		
80336	Longitudinal Joint and Crack Patching	Check Sheet #36	April 1, 2014	April 1, 2016
80400	Mast Arm Assembly and Pole	Article 1077.03(b)	Aug. 1, 2018	
80394	Metal Flared End Section for Pipe Culverts	Articles 542.07(c) and 542.11	Jan. 1, 2018	April 1, 2018
80390	Payments to Subcontractors	Article 109.11	Nov. 2, 2017	April 1, 2017

The following special provisions require additional information from the designer. The additional information needs to be submitted as a separate document. The Project Coordination and Implementation section will then include the information in the applicable special provision.

- Bridge Demolition Debris
- Building Removal Case I
- Building Removal Case II
- Building Removal Case III
- Building Removal-Case IV
- Completion Date
- Completion Date Plus Working Days
- DBE Participation

- Material Transfer Device
- Railroad Protective Liability Insurance
- Training Special Provisions
- Working Days

GROOVING FOR RECESSED PAVEMENT MARKINGS (BDE)

Effective: November 1, 2012 Revised: November 1, 2017

<u>Description</u>. This work shall consist of grooving the pavement surface in preparation for the application of recessed pavement markings.

Equipment. Equipment shall be according to the following.

- (a) Preformed Plastic Pavement Marking Installations. The grooving equipment shall have a free-floating saw blade cutting head equipped with gang-stacked diamond saw blades. The diamond saw blades shall be of uniform wear and shall produce a smooth textured surface. Any ridges in the groove shall have a maximum height of 15 mils (0.38 mm).
- (b) Liquid and Thermoplastic Pavement Marking Installations. The grooving equipment shall be equipped with either a free-floating saw blade cutting head or a free-floating grinder cutting head configuration with diamond or carbide tipped cutters and shall produce an irregular textured surface.

CONSTRUCTION REQUIREMENTS

<u>General</u>. The Contractor shall supply the Engineer with a copy of the pavement marking material manufacturer's recommendations for constructing a groove.

<u>Pavement Grooving Methods</u>. The grooves for recessed pavement markings shall be constructed using the following methods.

- (a) Wet Cutting Head Operation. When water is required or used to cool the cutting head, the groove shall be flushed with high pressure water immediately following the cut to avoid build up and hardening of slurry in the groove. The pavement surface shall be allowed to dry for a minimum of 24 hours prior to the final cleaning of the groove and application of the pavement marking material.
- (b) Dry Cutting Head Operation. When used on HMA pavements, the groove shall be vacuumed or cleaned by blasting with high-pressure air to remove loose aggregate, debris, and dust generated during the cutting operation. When used on PCC pavements, the groove shall be flushed with high pressure water or shot blasted to remove any PCC particles that may have become destabilized during the grooving process. If high pressure water is used, the pavement surface shall be allowed to dry for a minimum of 24 hours prior to the final cleaning of the groove and application of the pavement marking material.

<u>Pavement Grooving</u>. Grooving shall not cause ravels, aggregate fractures, spalling or disturbance of the joints to the underlying surface of the pavement. Grooves shall be cut into

the pavement prior to the application of the pavement marking material. Grooves shall be cut such that the width is 1 in. (25 mm) greater than the width of the pavement marking line as specified on the plans. Grooves for letters and symbols shall be cut in a square or rectangular shape so that the entire marking will fit within the limits of the grooved area. The position of the edge of the grooves shall be a minimum of 2 in. (50 mm) from the edge of all longitudinal joints. The depth of the groove shall not be less than the manufacturer's recommendations for the pavement marking material specified, but shall be installed to a minimum depth of 110 mils (2.79 mm) and a maximum depth of 200 mils (5.08 mm) for pavement marking tapes thermoplastic markings and a minimum depth of 40 mils (1.02 mm) and a maximum depth of 80 mils (2.03 mm) for liquid markings. The cutting head shall be operated at the appropriate speed in order to prevent undulation of the cutting head and grooving at an inconsistent depth.

At the start of grooving operations, a 50 ft (16.7 m) test section shall be installed and depth measurements shall be made at 10 ft (3.3 m) intervals within the test section. The individual depth measurements shall be within the allowable ranges according to this Article. If it is determined the test section has not been grooved at the appropriate depth or texture, adjustments shall be made to the cutting head and another 50 ft (16.7 m) test section shall be installed and checked. This process shall continue until the test section meets the requirements of this Article.

For new HMA pavements, grooves shall not be installed within 10 days of the placement of the final course of pavement.

<u>Final Cleaning</u>. Immediately prior to the application of the pavement marking material or primer sealer, the groove shall be cleaned with high-pressure air blast.

<u>Method of Measurement</u>. This work will be measured for payment in place, in feet (meter) for the groove width specified.

Grooving for letter, numbers and symbols will be measured in square feet (square meters).

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per foot (meter) for GROOVING FOR RECESSED PAVEMENT MARKING of the groove width specified, and per square foot (square meter) for GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS AND SYMBOLS.

The following shall only apply when preformed plastic pavement markings are to be recessed:

Add the following paragraph after the first paragraph of Article 780.07 of the Standard Specifications.

"The markings shall be capable of being applied in a grooved slot on new and existing portland cement concrete and HMA surfaces, by means of a pressure-sensitive, precoated adhesive, or liquid contact cement which shall be applied at the time of installation. A primer sealer shall be applied with a roller and shall cover and seal the entire bottom of the groove.

		County	Kane
	PROPOSAL	Local Public Agency	Kane County
	TROFOGAL	Section Number	14-00437-00-BR
		Route	Burlington Road
1.	Proposal of		
	for the improvement of the above section by the construction of		
	Reconstruction of two box culvert structures, earth excavation, pa	avement,	
	pavement markings, and guardrail.		
	a total distance of <u>1808.8</u> feet, of which a distance of	<u>1808.8</u> feet, (0.3410 mil	les) are to be improved.
2.	The plans for the proposed work are those prepared by and approved by the Department of Transportation on	RS&H, Inc	
3.	The specifications referred to herein are those prepared by the D "Standard Specifications for Road and Bridge Construction" and Provisions" thereto, adopted and in effect on the date of invitation	Department of Transportation a the "Supplemental Specificati n for bids.	and designated as ons and Recurring Special
4.	The undersigned agrees to accept, as part of the contract, the ap Sheet for Recurring Special Provisions" contained in this propose	plicable Special Provisions inc al.	licated on the "Check
5.	The undersigned agrees to complete the work within <u>55</u> unless additional time is granted in accordance with the specifica	working days or by ations.	Monday Aug 10, 2020
6.	A proposal guaranty in the proper amount, as specified in BLRS Conditions for Contract Proposals, will be required. Bid Bonds Accompanying this proposal is either a bid bond if allowed, on De complying with the specifications, made payable to:	Special Provision for Bidding willbe allowed as pr epartment form BLR12230 or	Requirements and oposal guaranty. a proposal guaranty check,
	County Treasurer of	Kane	
	The amount of the check is		()
7.	In the event that one proposal guaranty check is intended to cov the sum of the proposal guaranties, which would be required for is placed in another proposal, it will be found in the proposal for:	er two or more proposals, the each individual proposal. If the Section Number14-004	amount must be equal to e proposal guaranty check 437-00-BR

- 8. The successful bidder at the time of execution of the contract will be required to deposit a contract bond for the full amount of the award. When a contract bond is not required, the proposal guaranty check will be held in lieu therefore. If this proposal is accepted and the undersigned fails to execute a contract and contract bond as required, it is hereby agreed that the Bid Bond or check shall be forfeited to the Awarding Authority.
- 9. Each pay item should have a unit price and a total price. If no total price is shown or if there is a discrepancy between the product of the unit price multiplied by the quantity, the unit price shall govern. If a unit price is omitted, the total price will be divided by the quantity in order to establish a unit price.

10. A bid will be declared unacceptable if neither a unit price nor a total price is shown.

- 11. The undersigned submits herewith the schedule of prices on BLR 12200a covering the work to be performed under this contract.
- 12. The undersigned further agrees that if awarded the contract for the sections contained in the combinations on BLR 12200a, the work shall be in accordance with the requirements of each individual proposal for the multiple bid specified in the Schedule for Multiple Bids below.



SCHEDULE OF PRICES

A bid will be declared unacceptable if neither a unit price nor total price is shown.

	County	Kane
	Local Public Agency	Kane County DOT
	Section	14-00437-00-BR
	Route	Burlington Road
Schedule for Mu	Itiple Bids	
Combination Letter	Sections Included in Combinations	Total

Schedule for Single Bid

(For complete information covering these items, see plans and specifications)

Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
20200100	EARTH EXCAVATION	CU YD	3,252		
20800150	TRENCH BACKFILL	CU YD	13		
21000300	GRANULAR EMBANKMENT, SPECIAL	TON	81		
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	86		
21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	6,886		
25000210	SEEDING, CLASS 2A	ACRE	0.75		
25000310	SEEDING, CLASS 4	ACRE	1.50		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	184		
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	184		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	184		
25100630	EROSION CONTROL BLANKET	SQ YD	7,434		
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	2,440		
28000305	TEMPORARY DITCH CHECKS	FOOT	169		
28000400	PERIMETER EROSION BARRIER	FOOT	2,488		
28000500	INLET AND PIPE PROTECTION	EACH	3		
28100107	STONE RIPRAP, CLASS A4	SQ YD	92		
28200200	FILTER FABRIC	SQ YD	92		
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	78		
31101400	SUBBASE GRANULAR MATERIAL, TYPE B 6"	SQ YD	1,313		
35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SQ YD	68		
35501314	HOT-MIX ASPHALT BASE COURSE, 7 1/2"	SQ YD	160		
35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	59		
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	127		
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	6,308		
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	28		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	29		
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	24		
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	612		
44000100	PAVEMENT REMOVAL	SQ YD	498		
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	4,729		
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	135		
44201761	CLASS D PATCHES, TYPE I, 10 INCH	SQ YD	50		
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	50		
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	3,482		
48101600	AGGREGATE SHOULDERS, TYPE B 8"	SQ YD	1,473		
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	1,366		

Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	2		
50104400	CONCRETE HEADWALL REMOVAL	EACH	2		
50105220	PIPE CULVERT REMOVAL	FOOT	142		
50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS FOR STRUCTURES	CU YD	76.7		
50800205	REINFORCING BARS, EPOXY COATED	POUND	30,370		
50800515	BAR SPLICERS	EACH	166		
51500100	NAME PLATES	EACH	2		
52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	463		
54003000	CONCRETE BOX CULVERTS	CU YD	121.8		
542A0220	PIPE CULVERTS, CLASS A, TYPE 1 15"	FOOT	55		
542A0223	PIPE CULVERTS, CLASS A, TYPE 1 18"	FOOT	33		
54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	4		
54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	2		
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A. 6 FOOT POSTS	FOOT	250		
63000350	LONG-SPAN GUARDRAIL OVER CULVERT, 12 FT 6 IN SPAN	FOOT	75		
63100169	TRAFFIC BARRIER TERMINAL. TYPE 1 (SPECIAL) FLARED	EACH	4		
63200310	GUARDRAIL REMOVAL	FOOT	1.498		
66600105	FURNISHING AND ERECTING ROW MARKERS	EACH	4		
66600205	REFRECTING RIGHT OF WAY MARKERS	FACH	2		
70100405	TRAFFIC CONTROL AND PROTECTION STANDARD 701321	FACH	1		
70100500	TRAFFIC CONTROL & PROTECTION STANDARD 701326	LSUM	1		
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	FACH	1		
70300100	SHORT TERM PAVEMENT MARKING	FOOT	1 531		
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SOFT	3 601		
70300220		FOOT	10 515		
70300220	TEMPORARY PAVEMENT MARKING - 24"	FOOT	48		
70300200		FOOT	1 200		
70400200		FOOT	1,200		
70400200		FUUT	475		
70600260	TEST LEVEL 3	FOOT	8		
70600332	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	FOOT	4		
72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	1		
72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	3		
72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	1		
72400710	RELOCATE SIGN PANEL - TYPE 1	SQ FT	3		
72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	42		
73100100	BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	3		
78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	8,420		
78200420	GUARDRAIL REFLECTORS, TYPE B	EACH	14		
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	46		
X0322936	REMOVE EXISTING FLARED END SECTION	EACH	4		
X0327979	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	406		
X0426200	DEWATERING	L SUM	1		
X4400110	TEMPORARY PAVEMENT REMOVAL	SQ YD	1,753		
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1		
X7810300	RECESSED REFLECTIVE PAVEMENT MARKER	EACH	46		
X7830070	GROOVING FOR RECESSED PAVEMENT MARKING 5"	FOOT	8,420		
XXXXXXX1	ITEMS AS ORDERED BY THE ENGINEER	UNIT	100,000		
Z0013798	CONSTRUCTION LAYOUT	L SUM	1		
Z0040530	PIPE UNDERDRAIN REMOVAL	FOOT	650		
Z0062456	TEMPORARY PAVEMENT	SQ YD	1,753		
•				Total Project Cost	

Total Project Cost

	County	Kane
CONTRACTOR CERTIFICATIONS	Local Public Agency	Kane County
	Section Number	14-00437-00-BR
	Route	Burlington Road

The certifications herinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder.

- 1. **Debt Deliquency.** The bidder or contractor or subcontractor, respectively, certifies that it is not delinquent in the payment of any tax administered by the Department of Revenue unless the individual or other entity is contesting, in accordance with the procedures established by the appropriate revenue Act, its liability for the tax or the amount of tax. Making a false statement voids the contract and allows the Department to recover all amounts paid to the idividual or entity under the contract in a civil action.
- 2. **Bid-Rigging or Bid Rotating.** The bidder or contractor or subcontractor, respectively, certifies that it is not barred from contracting with the Department by reason of a violation of either 720 ILCS 5/33E-3 or 720 ILCS 5/33E-4.

A violation of Section 33E-3 would be represented by a conviction of the crime of bid-rigging which, in addition to Class 3 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be barred for 5 years from the date of conviction from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government. No corporation of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporaton if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

- 3. **Bribery.** The bidder or contractor or subcontractor, respectively, certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois or any unit of local government, nor has the firm made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a responsible offical of the firm.
- 4. Interim Suspension or Suspension. The bidder or contractor or subcontractor, respectively, certifies that it is not currently under a suspension as defined in Subpart I of Title 44 Subtitle A Chapter III Part 6 of the Illinois Administrative Code. Furthermore, if suspended prior to completion of this work, the contract or contracts executed for the completion of this work may be cancelled.

	County	Kane
SIGNATURES	Local Pulic Agency	Kane County
GIGINATOREO	Section Number	14-00437-00-BR
	Route	Burlington Road
(If an individual)		
Signature of Bidder		
Business Address		
(If a partnership)		
Signed By		
Business Address		
-		
Γ -		
Insert Names and Addressed of All Partners		
L_		
(If a corporation) Corporate Name		
Signed By		
		President
Business Address		
-		
President		
Insert Names of Officers		
Treasurer		
Atta at.		
Allesi Secretary		



Springfield, Illinois 62764

Instructions: Complete this form by either typing or using black ink. "Authorization to Bid" will not be issued unless both sides of this form are completed in detail. Use additional forms as needed to list all work.

Part I. Work Under Contract

List below all work you have under contract as either a prime contractor or a subcontractor. It is required to include all pending low bids not yet awarded or rejected. In a joint venture, list only that portion of the work which is the responsibility of your company. The uncompleted dollar value is to be based upon the most recent engineer's or owners estimate, and must include work subcontracted to others. If no work is contracted, show **NONE**.

	1	2	3	4	Awards Pending	
Contract Number						
Contract With						
Estimated Completion Date						
Total Contract Price						Accumulated Totals
Uncompleted Dollar Value if Firm is the Prime Contractor						
Uncompleted Dollar Value if Firm is the Subcontractor						
				Total Value	of All Work	

Part II. Awards Pending and Uncompleted Work to be done with your own forces.

List below the uncompleted dollar valu subcontracted to others will be listed on the company. If no work is contracted, show N	e of work for each reverse of this f ONE.	ch contract and awar form. In a joint ventu	rds pending to be cou ire, list only that port	mpleted with your ow ion of the work to be	vn forces. All work done by your	Accumulated Totals
Earthwork						
Portland Cement Concrete Paving						
HMA Plant Mix						
HMA Paving						
Clean & Seal Cracks/Joints						
Aggregate Bases & Surfaces						
Highway, R.R. and Waterway Structures						
Drainage						
Electrical						
Cover and Seal Coats						
Concrete Construction						
Landscaping						
Fencing						
Guardrail						
Painting						
Signing						
Cold Milling, Planning & Rotomilling						
Demolition						
Pavement Markings (Paint)						
Other Construction (List)						
						\$ 0.00
Totals						

Disclosure of this information is **REQUIRED** to accomplish the statutory purpose as outlined in the "Illinois Procurement Code." Failure to comply will result in non-issuance of an "Authorization To Bid." This form has been approved by the State Forms Management Center.

Part III. Work Subcontracted to Others.

For each contract described in Part I, list all the work you have subcontracted to others.

	1	2	3	4	Awards Pending
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Total Uncompleted					

I, being duly sworn, do hereby declare that this affidavit is a true and correct statement relating to ALL uncompleted contracts of the undersigned for Federal, State, County, City and private work, including ALL subcontract work, ALL pending low bids not yet awarded or rejected and ALL estimated completion dates.

Subscribed and sworn to before me

this day of

Type or Print Name

Officer or Director

Notary Public

My commission expires

Company

Signed

(Notary Seal)

Address

Title



Substance Abuse Prevention Program Certification

Letting Da	ate:	3/10/2020	Item No.:	
Contract	No.:			
Route:	Burli	ngton Road		
Section:	14-0	0437-00-BR		
Job No.:				
County:	Kane	e		

The Substance Abuse Prevention on Public Works Act, Public Act 95-0635, prohibits the use of drugs and alcohol, as defined in the Act, by employees of the Contractor and by employees of all approved Subcontractors while performing work on a public works project. The Contractor/Subcontractor herewith certifies that it has a superseding collective bargaining agreement or makes the public filing of its written substance abuse prevention program for the prevention of substance abuse among its employees who are not covered by a collective bargaining agreement dealing with the subject as mandated by the Act.

A. The undersigned representative of the Contractor/Subcontractor certifies that the contracting entity has signed collective bargaining agreements that are in effect for all of its employees, and that deal with the subject matter of Public Act 95-0635.

Contractor/Subcontractor

Name of Authorized Representative (type or print)

Title of Authorized Representative (type or print)

Signature of Authorized Representative

Date

B. The undersigned representative of the Contractor/Subcontractor certifies that the contracting entity has in place for all of its employees not covered by a collective bargaining agreement that deals with the subject of the Act, the attached substance abuse prevention program that meets or exceeds the requirements of Public Act 95-0635.

Contractor/Subcontractor

Name of Authorized Representative (type or print)

Title of Authorized Representative (type or print)

Signature of Authorized Representative



Local Agency Proposal Bid Bond

RETURN WITH BID

Route	Burlington Road
County	Kane
Local Agency	Kane County DOT
Section	14-00437-00-BR

Burlington Road

= PAPER BID BOND

WE	as PRINCIPAL,
and	as SURETY.

are held jointly, severally and firmly bound unto the above Local Agency (hereafter referred to as "LA") in the penal sum of 5% of the total bid price, or for the amount specified in the proposal documents in effect on the date of invitation for bids whichever is the lesser sum. We bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly pay to the LA this sum under the conditions of this instrument.

WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said PRINCIPAL is submitting a written proposal to the LA acting through its awarding authority for the construction of the work designated as the above section.

THEREFORE if the proposal is accepted and a contract awarded to the PRINCIPAL by the LA for the above designated section and the PRINCIPAL shall within fifteen (15) days after award enter into a formal contract, furnish surety guaranteeing the faithful performance of the work, and furnish evidence of the required insurance coverage, all as provided in the "Standard Specifications for Road and Bridge Construction" and applicable Supplemental Specifications, then this obligation shall become void; otherwise it shall remain in full force and effect.

IN THE EVENT the LA determines the PRINCIPAL has failed to enter into a formal contract in compliance with any requirements set forth in the preceding paragraph, then the LA acting through its awarding authority shall immediately be entitled to recover the full penal sum set out above, together with all court costs, all attorney fees, and any other expense of recovery.

IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their

respective officers this day of

Principal

(Company Name)	(Company Name)
By:	By:
(Signature and Title)	(Signature and Title)
(If PRINCIPAL is a joint venture of two or more contractors, the com	pany names, and authorized signatures of each contractor must be affixed.)
	Surety
	By:
(Name of Surety)	(Signature of Attorney-in-Fact)
STATE OF ILLINOIS,	
COUNTY OF	
, a No	tary Public in and for said county,
do hereby certify that	
(Insert names	of individuals signing on behalf of PRINCIPAL & SURETY)
SURETY, appeared before me this day in person and acknowledged revoluntary act for the uses and purposes therein set forth.	spectively, that they signed and delivered said instruments as their free and
Given under my hand and notanial sear this	
My commission expires	
	(Notary Public)
ELECTR	ONIC BID BOND
☐ Electronic bid bond is allowed (box must be checked b The Principal may submit an electronic bid bond, in lieu of com an electronic bid bond ID code and signing below, the Principa the Principal and Surety are firmly bound unto the LA under the venture of two or more contractors, an electronic bid bond ID c contractor in the venture.)	y LA if electronic bid bond is allowed) pleting the above section of the Proposal Bid Bond Form. By providing I is ensuring the identified electronic bid bond has been executed and conditions of the bid bond as shown above. (If PRINCIPAL is a joint ode, company/Bidder name title and date must be affixed for each
Electronic Bid Bond ID Code	(Company/Bidder Name)
-	(Signature and Title) Date



	Information Required Prior To Advertisement						
	PS&E Approval Date 2/2/2	2018	ROW Status	ar			
	11 Day Requirement Fulfilled	Y (Yes or No)	Funding Typeo	cal (Non-MFT)			
Kane (City or County)	<u>1 4 - 0 0 4</u> (Secti	<u>4 3 7 - 0 0 - B R</u> ion Number)	<u>09</u> : <u>00</u> <u>A</u> (Time)	<u>0 3 - 1 0 - 2 0 2 (</u> (Date)	0 41W011 Burlington Rd. (Place)		
Kane County]***		PROPOSALS AVAIL			
	(0)	Desc	ription	(01			
EARTH EXCAVATION (3	,252 SQ YD), TOPSOIL FURI	NISH AND PLACE 6" (6,3	386 SQ YD), STONE RI	PRAP, CLASS A4 (92 SQ `	YD),		
AGGREGATE SUBGRA	DE IMPROVEMENT (78 CU Y	D), HMA BASE COURSE	<u>E 7 1/2" (160 SQ YD), H</u>	MA BINDER COURSE IL-1	9.0 N50 (24 TONS),		
HMA SURFACE COURS	E MIX "D" N50 (612 TON), PA	VEMENT REMOVAL (49	98 SQ YD), HMA SURF.	ACE REMOVAL 2" (4,729 S	SQ YD),		
AGGREGATE SHOULDE	RS TYPE B 8" (1,473 SQ YD), HMA SHOULDERS 8"	(1,366 SQ YD), REINFO	ORCING BARS EPOXY CC	DATED (30,370 POUNDS),		
CONCRETE BOX CULV	ERTS (121.8 CU YD), PIPE CI	ULVERTS CLASS A TYP	PE 1 15" (55 FT), PIPE (CULVERTS CLASS A TYPE	E 1 18" (33 FT),		
TRAFFIC BARRIER TER	MINAL TYPE 1 SPECIAL FLA	RED (4 EA), etc.					
Location <u>Burlingtor</u>	Road between Rohrsen Rd a	nd Plato Rd					
Note: <u>Proposals av</u>	ailable at: http://www.count Agency/ Firm I	yofkane.org/Pages/coun _{Name}	tybids.aspx () Phone	 Number			
, City, State Zip							
Additional In	formation: Proposals available	on-line only. No charge	for proposal.	Prepared _Je	ennifer O'Connell		
				Date <u>Februa</u>	ry 19, 2020		


Return with Bid

Route County Local Agency Section

-

All contractors are required to complete the following certification:

 \boxtimes For this contract proposal or for all groups in this deliver and install proposal.

☐ For the following deliver and install groups in this material proposal:

Illinois Department of Transportation policy, adopted in accordance with the provisions of the Illinois Highway Code, requires this contract to be awarded to the lowest responsive and responsible bidder. The award decision is subject to approval by the Department. In addition to all other responsibility factors, this contract or deliver and install proposal requires all bidders and all bidders' subcontractors to disclose participation in apprenticeship or training programs that are (1) approved by and registered with the United States Department of Labor's Bureau of Apprenticeship and Training, and (2) applicable to the work of the above indicated proposals or groups. Therefore, all bidders are required to complete the following certification:

- I. Except as provided in paragraph IV below, the undersigned bidder certifies that it is a participant, either as an individual or as part of a group program, in an approved apprenticeship or training program applicable to each type of work or craft that the bidder will perform with its own employees.
- II. The undersigned bidder further certifies for work to be performed by subcontract that each of its subcontractors submitted for approval either (A) is, at the time of such bid, participating in an approved, applicable apprenticeship or training program; or (B) will, prior to commencement of performance of work pursuant to this contract, establish participation in an approved apprenticeship or training program applicable to the work of the subcontract.
- III. The undersigned bidder, by inclusion in the list in the space below, certifies the official name of each program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's employees. Types of work or craft that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category for which there is no applicable apprenticeship or training program available.

IV. Except for any work identified above, any bidder or subcontractor that shall perform all or part of the work of the contract or deliver and install proposal solely by individual owners, partners or members and not by employees to whom the payment of prevailing rates of wages would be required, check the following box, and identify the owner/operator workforce and positions of ownership.

The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project is accounted for and listed. The Department at any time before or after award may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. In order to fulfill the participation requirement, it shall not be necessary that any applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract or deliver and install proposal.

Bidder:	By:	
		(Signature)
Address:	Title:	



Affidavit of Illinois Business Office

		County	Kane
	Loca	I Public Agency	Kane County DOT
	:	Section Number	14-00437-00-BR
		Route	Burlington Road
State	e of <u>Illinois</u>)) ss.		
Couri	(Kane)		
I,	(Name of Affiant) Of (Cit	v of Affiant)	,, (State of Affiant,
being	g first duly sworn upon oath, states as follows:	, .. ,	
1.	. That I am the	of	<u>.</u>
	officer or position		bidder
2.	. That I have personal knowledge of the facts herein sta	ated.	
3.	. That, if selected under this proposal,	(bidder)	, will maintain a
bu	usiness office in the State of Illinois which will be located	in	County, Illinois.
4.	. That this business office will serve as the primary plac construction contemplated by this proposal.	e of employmen	t for any persons employed in the
5.	. That this Affidavit is given as a requirement of state law Procurement Code.	w as provided in	Section 30-22(8) of the Illinois
			(Signature)
			(Print Name of Affiant)

This instrument was acknowledged before me on

day of _____ , _____ .

(SEAL)

(Signature of Notary Public)

PROJECT IS LOCATED IN UNINCORPORATED KANE COUNTY

INDEX OF SHEETS

DESCRIPTION <u>SHEET No.</u> COVER SHEET HIGHWAY STANDARDS AND GENERAL NOTES 2 SUMMARY OF QUANTITIES 3-4 5 TYPICAL SECTIONS 6-7 SCHEDULE OF QUANTITIES 8-9 ALIGNMENT, TIES, AND BENCHMARKS 10-16 SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL REMOVAL PLAN 17-18 19-22 PLAN AND PROFILE 23 ROADWAY DETAILS DRAINAGE PLAN AND PROFILE 24-27 28-29 PAVEMENT MARKING AND LANDSCAPING PLAN 30-33 EROSION CONTROL PLAN 34-39 STRUCTURE 045-3184 SHEETS STRUCTURE 045-3183 SHEETS 40-45 46-48 IDOT DISTRICT 1 DETAILS 49-58 CROSS SECTIONS HIGHWAY STANDARDS

PLANS FOR PROPOSED **BURLINGTON ROAD CULVERT IMPROVEMENTS OVER VIRGIL DITCH NO. 3 NORTH AND SOUTH**



BURLINGTON ROAD (CH-2) 2011 ADT = 3,000DESIGN SPEED = 45 MPHDESIGN VEHICLE = WB-50

VERTICAL SCALE IN FEET HORIZONTAL SCALE IN FEET

SCALE IN FEET

BURLINGTON ROAD STA. 536 + 18.21

STRUCTURE NO. 045-3184-STA. 539+92.25

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT **CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS** ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

CONSULTANT: RS&H, INC. CLIENT CONTACT: JENNIFER O'CONNELL

 \bigcirc

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STATE OF ILLINOIS

COUNTY HIGHWAY NO. 2 SECTION NO. 14–00437–00–BR



COUNTY HWY Route no.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2	14-00437-00-BR	KANE	58	1

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES (48 HOURS NOTIFICATION IS REQUIRED).

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST STANDARD OF THE DEPARTMENT AS SHOWN.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS. THE ENGINEER, OR AN AUTHORIZED SURVEYOR OR AGENT WILL WITNESS OR OTHERWISE REFERENCE AND RESET MONUMENTS AS NECESSARY. ALL PROPERTY CORNERS EXCEPT THOSE WITHIN AREAS WHERE THE SCHEDULE SHOWS PLACEMENT OF R.O.W. MARKERS SHALL REMAIN UNDISTURBED.

THE CONTRACTOR, AS REQUIRED, SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO COMMENCING WITH CONSTRUCTION.

THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH STATE AND LOCAL REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION.

ACCESS SHALL BE PROVIDED AT ALL TIMES TO PROPERTIES ABUTTING THE PROPOSED IMPROVEMENT.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXISTING LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LIMITS SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST.

SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.

THE CONTRACTOR'S OPERATIONS AND TEMPORARY STORAGE ACTIVITIES SHALL BE LIMITED TO THE WORK AREA AND/OR CONSTRUCTION LIMITS. ANY ADDITIONAL STAGING AREAS ADJACENT TO THE PROJECT ARE SUBJECT TO PRIOR APPROVAL BY THE ENGINEER. NO ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR COMPLIANCE WITH THIS THE ABOVE REQUIREMENT.

THE CONTRACTOR'S PERSONNEL SHALL NOT BE ALLOWED TO PARK THEIR PERSONAL VEHICLES IN THE WORK AREA AND/OR CONSTRUCTION LIMITS.

WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AS WELL AS THE ADJOINING RESIDENTIAL AREAS.

TREES AND SHRUBS UNDER 6 UNITS WITHIN THE PROJECT LIMITS SHALL BE REMOVED ACCORDING TO SECTION 201 OF THE STANDARD SPECIFICATIONS AND WILL BE INCLUDED IN THE UNIT PRICE FOR EARTH EXCAVATION (20200100).

GENERAL NOTES – ROADWAY

SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE INCLUDED IN THE COST OF THE ITEM BEING REMOVED.

THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS WHICH WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY HIM AT HIS OWN EXPENSE.

THE REMOVAL OF SINGLE RAIL, DOUBLE RAIL, RUB RAIL, AND TERMINAL SECTIONS (TAPERS AND END SECTIONS) SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE COST PER FOOT FOR GUARDRAIL REMOVAL.

THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS BITUMINOUS LIFTS.

THE REMOVAL OF ALL EXISTING SIGNS AND THE INSTALLATION OF ALL PROPOSED SIGNS (AS SPECIFIED IN THE PLANS AND AS DIRECTED THE KDOT TRAFFIC) SHALL BE PERFORMED BY THE KDOT SIGN SHOP. THE CONTRACTOR SHALL CONTACT - KDOT TRAFFIC - 630 406-7356 48 HOURS PRIOR TO THE REMOVAL OF EXISTING SIGNS AND TWO WEEKS PRIOR TO THE INSTALLATION OF ALL NEW SIGNS.

GENERAL NOTES – ROADWAY (CONTINUED)

THE LIMITS AND QUANTITY OF UNDERCUT EXCAVATION AND REPLACEMENT WITH GRANULAR EMBANKMENT SHOWN IN THE PLANS ARE BASED ON THE BORING DATA AND MAY BE MODIFIED BY THE RESIDENT ENGINEER TO ACCOUNT FOR THE ACTUAL FIELD CONDITIONS.

GENERAL NOTES – DRAINAGE

THE COST OF MAKING ANY CONNECTIONS TO EXISTING DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.

LENGTHS AND SIZES OF STORM SEWERS AS SHOWN ON THE PLANS AND DRAINAGE STRUCTURE ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO INSTALLATION OF DRAINAGE ITEMS. ELEVATIONS OF SEWER LINES WERE DETERMINED FROM AVAILABLE AS-BUILT PLANS. THE INVERTS OF THE PROPOSED DRAINAGE STRUCTURES MAY REQUIRE REVISIONS TO MEET EXISTING FIELD CONDITIONS. ANY ADJUSTMENTS SHALL BE AS DIRECTED BY THE ENCINEER BY THE ENGINEER.

UNLESS OTHERWISE NOTED, ALL STATIONS, OFFSETS, AND ELEVATIONS SHALL BE TO THE CENTER OF THE DRAINAGE STRUCTURE. STATIONS, OFFSETS, AND ELEVATIONS OF FLARED END SECTIONS AND HEADWALLS SHALL BE TO WHERE THE PIPE CONNECTS TO THE FLARED END SECTION.

THE CONTRACTOR SHALL MAINTAIN THE SURFACE DRAINAGE OF THE ROAD DURING CONSTRUCTION OF THIS PROJECT. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS, INLETS OR CATCH BASINS. HE SHALL PROVIDE AND MAINTAIN A TEMPORARY OUTLET, AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL SUCH A TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

STORM SEWER SHALL BE BACKFILLED IN ACCORDANCE WITH ARTICLE 550.07 METHOD 1 ONLY.

ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DITCHES, CUTTERS, CROSSROAD PIPES, OR DRAINAGE STRUCTURES DUE TO CONSTRUCTION OPERATIONS SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

BEFORE ORDERING STORM SEWERS, CATCH BASINS, PIPE CULVERTS, PIPE DRAINS, AND MANHOLES, THE CONTRACTOR SHALL CONTACT THE ENGINEER AS TO THE EXACT LENGTH AND QUANTITY REQUIRED.

GENERAL NOTES – TRAFFIC CONTROL

FLUORESCENT VESTS AND HARD HATS: ALL CONSTRUCTION PERSONNEL WILL BE REQUIRED TO WEAR FLUORESCENT ORANGE, FLUORESCENT YELLOW/GREEN OR A COMBINATION OF FLUORESCENT ORANGE AND FLUORESCENT YELLOW/GREEN VESTS AND HARD HATS AT ALL TIMES WHILE ON THE CONSTRUCTION SITE. COMPLIANCE WITH THIS REQUIREMENT SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

THE CONTRACTOR IS ADVISED THAT IN THE EVENT OF SNOW, HE WILL BE RESPONSIBLE FOR THE IMMEDIATE REMOVAL OF ANY MAINTENANCE OF TRAFFIC PROTECTIVE DEVICES REQUIRED FOR HIS OPERATIONS THAT WOULD INTERFERE WITH SNOW REMOVAL OPERATIONS PERFORMED BY THE STATE OR LOCAL AGENCY.

THE CONTRACTOR SHALL NOT MOUNT SIGNS ON EXISTING SIGNS.

GENERAL NOTES – UTILITIES

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE RESPECTIVE UTILITIES AND THE COUNTY.

GENERAL NOTES – EROSION AND SEDIMENT CONTROL

HIGHWAY STANDARDS

Joi 1000-02 Joi 1000-07 280001-07 442201-03 482001-02 515001-04 542301-03 501001-05 501001-02 530001-02 530001-02 530106-02 530301-09 701001-02 701001-04 701301-04 701311-03 701321-18 701326-04	AREAS OF R DECIMAL OF TEMPORARY MAILBOX TU CLASS C AN HMA SHOULD NAME PLATE PRECAST RE PIPE UNDER CONCRETE H STEEL PLAT LONG-SPAN SHOULDER W OFF-RD OPE OFF-RD OPE OFF-RD MOV LANE CLOSU LANE CLOSU LANE CLOSU LANE CLOSU CR EQUAL T
701901-08	TRAFFIC CO
704001-08	TEMPORARY
720001-01	SIGN PANEL
720006-04	SIGN PANEL
72001-01	METAL POST
725001-01	OBJECT AND
780001-01	APPLICATIOI
780001-04	TYPICAL PA
782006-01	GUARDRAIL

	DISTRICT O
BD-01	DRIVEWAY
TC-11	TYPICAL A
TC-13	DISTRICT (

KDOT DETAILS

RS&H	USER NAME = RiemannA	DESIGNED - MJM	REVISED -		BURLINGTON ROAD OVER VIRGIL DITCH NO.3 (NORTH AND SOUTH)	C.H. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
		DRAWN - MJM	REVISED -	KANE COUNTY DIVISION OF TRANSPORTATION	HIGHWAY STANDARDS AND GENERAL NOTES	2	14-00437-00-BR	KANE	58	2
	PLOT SCALE = 10.0000 '/ in.	CHECKED – JRS	REVISED -			_				
	PLOT DATE = 12/12/2019	DATE - 03/07/2017	REVISED -		SCALE: NA SHEET 1 OF 1 SHEETS STA. TO STA.					



THE CONTRACTOR SHALL PROTECT EXISTING AND NEW UTILITIES. WHEN REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL BRACE AND SUPPORT THE UTILITIES PROPERLY IN ORDER TO PREVENT SETTLEMENT, DISPLACEMENT, OR DAMAGE TO THE UTILITIES. THE PROTECTION OF THE UTILITIES AS SPECIFIED HEREIN WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING FACILITIES SO THE UTILITIES AND THEIR APPURTENANCES MAY BE LOCATED AND ADJUSTED OR MOVED. TF NECESSARY, PRIOR TO THE START OF CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE STANDARD SPECIFICATIONS.

ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND OF THE APPLICABLE STATE STANDARDS FOR THE ENTIRE DURATION OF THE CONTRACT, OR UNTIL SUCH A TIME AS DIRECTED BY THE ENGINEER.

THIS PROJECT WILL REQUIRE AUTHORIZATION UNDER SWPPP PERMIT

000001-07 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS REINFORCEMENT BARS AN INCH AND OF A FOOT EROSION CONTROL SYSTEMS JRNOUT D D PATCHES DER ADJACENT TO FLEXIBLE PAVEMENT FOR BRIDGES INFORCED CONCRETE FLARED END SECTION DRAINS EADWALL FOR PIPE UNDERDRAINS E BEAM GUARDRAIL GUARDRAIL OVER CULVERT VIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS WIDENING FOR THEET (SPECIAL) GUARDRAIL TERMINALS ERATIONS, 2L, 2W, MORE THAN 15' AWAY ERATIONS, 2L, 2W, 15' (4.5m) TO 24'' (600mm) FROM PAVEMENT EDGE VING OPERATIONS, 2L, 2W, DAY ONLY JRE, 2L, 2W, SHORT TIME OPERATIONS JRE, 2L, 2W, MOVING OPERATIONS - DAY ONLY JRE, 2L, 2W, BRIDGE REPAIR WITH BARRIER JRE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS GREATER THAN [0 45 MPH NTROL DEVICES CONCRETE BARRIER MOUNTING DETAILS ERECTION DETAILS TS FOR SIGNS, MARKERS & DELINEATORS D TERMINAL MARKERS NS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS) VEMENT MARKINGS PLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

AND BARRIER WALL REFLECTOR MOUNTING DETAILS

NE STANDARD DETAILS

DETAIL - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & HOULDER GREATER THAN OR EQUAL TO 15' (4.5m) PPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-STANT) ONE TYPICAL PAVEMENT MARKINGS

SPECIFICATIONS TELESCOPING SIGN POST & SOIL BASES SPECIFICATIONS CONCRETE AND ASPHALT BASES

S.P.	ITEM NO.	DESCRIPTION	UNIT	QUANTITY	
	20200100	EARTH EXCAVATION	CU YD	3,252	
	20800150	TRENCH BACKFILL	CU YD	13	
	21000300	GRANULAR EMBANKMENT, SPECIAL	TON	81	
	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	86	
	21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	6,886	
	25000210	SEEDING, CLASS 2A	ACRE	0.75	-
	25000310	SEEDING, CLASS 4	ACRE	1.50	
	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	184	
	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	184	·
	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	184	
	25100630	EROSION CONTROL BLANKET	SQ YD	7,434	
	25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	2,440	
	28000305	TEMPORARY DITCH CHECKS	FOOT	169	
	28000400	PERIMETER EROSION BARRIER	FOOT	2,488	-
	28000500	INLET AND PIPE PROTECTION	EACH	3	
	28100107	STONE RIPRAP, CLASS A4	SQ YD	92	
	28200200	FILTER FABRIC	SQ YD	92	
*	30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	78	
	31101400	SUBBASE GRANULAR MATERIAL, TYPE B 6"	SQ YD	1,313	
	35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SQ YD	68	
	35501314	HOT-MIX ASPHALT BASE COURSE, 7 1/2"	SQ YD	160	
	35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	59	
	40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	127	
	40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	6,308	
	40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	28	
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	29	
*	40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	24	
*	40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	612	
	44000100	PAVEMENT REMOVAL	SQ YD	498	
	44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	4,729	
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	135	
	44201761	CLASS D PATCHES, TYPE I, 10 INCH	SQ YD	50	
	44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	50	
	44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	3,482	-

S.P.	ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RECORD QUANTITY
	48101600	AGGREGATE SHOULDERS, TYPE B 8"	SQ YD	1,473	
	48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	1,366	
	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	2	
	50104400	CONCRETE HEADWALL REMOVAL	EACH	2	
	50105220	PIPE CULVERT REMOVAL	FOOT	142	
	50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS FOR STRUCTURES	CU YD	76.7	
	50800205	REINFORCING BARS, EPOXY COATED	POUND	30,370	
	50800515	BAR SPLICERS	EACH	166	
	51500100	NAME PLATES	EACH	2	
	52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	463	
	54003000	CONCRETE BOX CULVERTS	CU YD	121.8	
	542A0220	PIPE CULVERTS, CLASS A, TYPE 1 15"	FOOT	55	
	542A0223	PIPE CULVERTS, CLASS A, TYPE 1 18"	FOOT	33	
_	54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	4	
	54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	2	
	63000001	STEEL PLATE BEAM GUARDRAIL. TYPE A. 6 FOOT POSTS	FOOT	250.0	
	63000350	LONG-SPAN GUARDRAIL OVER CULVERT, 12 FT 6 IN SPAN	FOOT	75.0	
	63100169	TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) FLARED	FACH	4	
	63200210		FOOT	1 409	
_	65200310		54.611	1,450	· ·
	66600105	FURNISHING AND ERECTING ROW MARKERS	EACH	4	
	66600205	REERECTING RIGHT OF WAY MARKERS	EACH	2	
	70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	
	70100500	TRAFFIC CONTROL & PROTECTION, STANDARD 701326	LSUM	1	
•	70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	1,531	
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	3,601	
	70300220	TEMPORARY PAVEMENT MARKING - 4"	FOOT	10,515	
	70300280	TEMPORARY PAVEMENT MARKING - 24"	FOOT	48	
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	1,200	
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	475	
	70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	8	
	70600332	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4	
	72400100	REMOVE SIGN PANEL ASSEMBLY - TYPF A	EACH	1	



H	USER NAME = RiemannA	DESIGNED - MJM	REVISED -		BURLINGTON ROAD OVER VIRGIL DITCH NO.3 (NORTH AND SOUTH) SUMMARY OF QUANTITIES			C.H. RTF.	SECTION	COUNTY	TOTAL SHEET			
		DRAWN - MJM	REVISED -	KANE COUNTY				2	14-00437-00-BR	KANE	58 3			
	PLOT SCALE = 10.0000 ' / in.	CHECKED – JRS	REVISED -	DIVISION OF TRANSPORTATION										
	PLOT DATE = 12/12/2019	DATE - 03/07/2017	REVISED -		SCALE: NA	SHEET	1 OF 2	SHEETS	S STA.	TO STA.				

S.P.	ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RECORD QUANTITY
	72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	3	
	72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	1	
	72400710	RELOCATE SIGN PANEL - TYPE 1	SQ FT	3	
	72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	42	
	73100100	BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	3	
	78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	8,420	
	78200006	GUARDRAIL REFLECTORS, TYPE B	EACH	14	
	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	46	
*	X0322936	REMOVE EXISTING FLARED END SECTION	EACH	4	
*	X0327979	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	406	
*	X0426200	DEWATERING	LSUM	1	
*	X4400110	TEMPORARY PAVEMENT REMOVAL	SQ YD	1,753	
*	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1	
*	X7810300	RECESSED REFLECTIVE PAVEMENT MARKER	EACH	46	
*	X7830070	GROOVING FOR RECESSED PAVEMENT MARKING 5"	FOOT	8,420	
*	XXXXXXX1	ITEMS AS ORDERED BY THE ENGINEER	UNIT	100,000	
*	Z0013798	CONSTRUCTION LAYOUT	LSUM	1	
*	Z0040530	PIPE UNDERDRAIN REMOVAL	FOOT	650	
*	Z0062456	TEMPORARY PAVEMENT	SQ YD	1,753	



CI	H NO, 3 (NORTH AND SOUTH)	C.H. RTE.	SECTION	COUNTY TOTAL SHE SHEETS NO			
U.	ANTITIES	2	14-00437-00-BR	KANE	58	4	
_							
s	STA. TO STA.						



PROPOSED LEGEND

(1)	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (40603335), 2"
2	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 (40603080), 2.5" $\!\!\!\!\!\!\!$
3	LEVELING BINDER (MACHINE METHOD), N50 (40600625), SEE NOTE 2
4	HOT-MIX ASPHALT BASE COURSE, 7 1/2" (35501314)
5	HOT-MIX ASPHALT SHOULDERS, 8" (48203029), SEE NOTE 3
	5A) -HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2"
	5B -HOT-MIX ASPHALT BASE COURSE, 6"
6	SAW CUTS
7	LONG-SPAN GUARDRAIL OVER CULVERT, 25 FT SPAN FOOT (63000370)
8	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS (63000001)
9	AGGREGATE SUBGRADE IMPROVEMENT (30300001)
	${\scriptstyle \scriptsize \textcircled{9A}}$ -Capping aggregate, minimum 3" and varies under shoulders
	9B -COURSE AGGREGATE, 9"
(10)	SUBBASE GRANULAR MATERIAL, TYPE B 6" (31101400)
(11)	AGGREGATE SHOULDERS, TYPE B 8" (48101600)
(12)	TOPSOIL FURNISH AND PLACE, 6" (21101625)

CONTRACTOR SHALL VERIFY EXISTING PAVEMENT STRUCTURE THICKNESS PRIOR TO CONSTRUCTION.

IF EXISTING CROSS SLOPE IS GREATER THAN 2% LEVELING BINDER SHALL BE USED TO ATTAIN 2% PRIOR TO PLACEMENT OF SURFACE COURSE.

3. ALL LIFTS OF BASE COURSE AND SURFACE COURSE ON HMA SHOULDERS SHALL BE INCLUDED IN THE PRICE FOR HMA SHOULDERS, 8".

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @ Ndes
ING	
T SURFACE COURSE, MIX "D", N50 (IL-9.5 mm)	4% @ 50 Gyr.
R (MACHINE METHOD), IL-4.75, N50	3.5% @ 50 Gyr.
NT RECONSTRUCTION	
T SURFACE COURSE, MIX "D", N50 (IL-9.5 mm)	4% @ 50 Gyr.
T BINDER COURSE, IL-19.0, N50	4% @ 50 Gyr.
T BASE COURSE (HMA BINDER IL-19 mm)	4% @ 50 Gyr.
T SURFACE COURSE, MIX "D", N50 (IL-9.5 mm)	4% @ 50 Gyr.
T BASE COURSE (HMA BINDER IL-19 mm)	4% @ 50 Gyr.
T SURFACE COURSE, MIX "D", N50 (IL-9.5 mm)	4% @ 50 Gyr.
T BASE COURSE (HMA BINDER IL-19 mm)	4% @ 50 Gyr.
S (HMA BINDER IL-19 mm)	4% @ 70 Gyr.
Т	
T SURFACE COURSE, MIX "D", N50 (IL-9.5 mm)	4% @ 50 Gyr.
SED TO CALCULATE ALL HMA SURFACE MIXTURE QUAI IN.	NTITIES
POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG	76-22"

AND FOR NON-POLYMERIZED HMA THE "AC TYPE" CHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

FOR TEMPORARY PAVEMENT STRUCTURE SEE SPECIAL PROVISIONS.

NO.3 (NORTH AND SOUTH)	C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TIONS	2	14-00437-00-BR	KANE	58	5
S STA. TO STA.					

GUARDRAIL SCHEDULE

			63000001	63000350	63100169	78200006	72501000
STATION	STATION	OFFSET	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	LONG-SPAN GUARDRAIL OVER CULVERT, 12 FT 6 IN FT SPAN	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	GUARDRAIL REFLECTORS, TYPE B	TERMINAL MARKER - DIRECT APPLIED
			FOOT	FOOT	EACH	EACH	EACH
538+61.00	539+11.00	RT			1	1	1
539+11.00	539+73.50	RT	62.5			2	
539+73.50	540+11.00	RT		37.5		1	
540+11.00	540+73.50	RT	62.5			2	
540+73.50	541+23.50	RT			1	1	1
549+12.67	549+62.67	RT			1	1	1
549+62.67	550+25.17	RT	62.5			2	
550+25.17	550+62.67	RT		37.5		1	
550+62.67	551+25.17	RT	62.5			2	
551+25.17	551+75.17	RT			1	1	1
		TOTAL:	250.0	75.0	4	14	4



USER NAME = GirgisM	DESIGNED - MJM	REVISED -		BUBUINGTON		VER VIE		H NO 3 /N	ORTH AND SOUTH	C.H.	SECTION	COUNTY	TOTAL '	SHEET
	DRAWN – MJM	REVISED -	KANE COUNTY	Boneingron						2	14-00437-00-BR	KANF	58	6
PLOT SCALE = 10.0000 '/ in.	CHECKED – JRS	REVISED -	DIVISION OF TRANSPORTATION		3	υπεροι	LE UF UL	JANTITES						
PLOT DATE = 11/22/2019	DATE - 03/07/2017	REVISED -		SCALE: NA	SHEET 1	0F 2	SHEETS	STA.	TO STA.					\rightarrow

EARTHWORK SCHEDULE

STATION	СИТ	FILL	TOPSOIL	DISTANCE	EARTH EXCAVATION 20200100	EXCAVATION ADJUSTED FOR SHRINKAGE (20%)	EMBANKMENT	EARTHWORK BALANCE WASTE(+) OR SHORTAGE(-)	TOPSOIL FURNISH AND PLACE, 6" 21101625
	SQUARE FEET	SQUARE FEET	FEET	FEET	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD	SQUARE YARD
536+18.21	6.31	0.00	15.80						
				31.79	7.11	5.69	3.41	2.28	67.20
536+50.00	5.78	5.79	22.25						
	12/12/21		100.00	50.00	14.27	11.42	12.79	-1.37	131.53
537+00.00	9.64	8.03	25.10	50.00	26.00		45.40	5.05	452.20
527,50.00	10.20	8.60	20.75	50.00	26.80	21.44	15.48	5.96	152.36
337+30.00	19.50	0.09	23.75	50.00	40.60	32.48	18.48	14.00	165 64
538+00.00	24.55	11.27	29.88	50100		- OLITO	20110	21100	100101
				50.00	46.65	37.32	32.14	5.18	183.56
538+50.00	25.84	23.45	36.20						
				50.00	40.38	32.30	41.64	-9.34	184.67
539+00.00	17.77	21.53	30.28	2				7210-121	
	10.00		25.00	50.00	33.88	27.10	56.61	-29.51	184.06
539+50.00	18.82	39.61	35.98	20.25	222.41	265.02	22.10	222.74	112.22
539+88.25	450 47	5.84	16.83	36.23	332.41	205.95	32.19	233.74	112.22
555100.25	450.47	5.04	10.05	8.00	138.05	110.44	2.06	108.38	14.96
539+96.25	481.38	8.10	16.83						
				3.75	36.00	28.80	5.01	23.80	8.88
540+00.00	37.08	63.99	25.79				0		
				50.00	52.67	42.14	96.11	-53.97	178.61
540+50.00	19.81	39.81	38.51						
E 41 - 00 00	22.64	20.67	24.04	50.00	40.23	32.18	65.26	-33.08	204.03
541+00.00	23.04	30.67	34.94	50.00	57 32	45.86	48.17	-2 31	190 78
541+50.00	38.27	21.35	33.74	50.00	57.52	45.00	40.17	2.51	150.70
	Costro, Urc			36.00	59.34	47.47	24.99	22.48	107.48
541+86.00	50.74	16.14	20.00						
				14.00	27.17	21.74	8.00	13.74	41.04
542+00.00	54.07	14.71	32.77						
542,50.00	70.42	10.00	34.03	50.00	115.27	92.21	23.69	68.53	187.78
542+50.00	70.42	10.00	54.65	50.00	126 79	101.43	19.07	82.36	194 39
543+00.00	66.51	9.72	35.15	50.00	120.75	101.45	15.07	02.50	154.55
				50.00	117.14	93.71	17.32	76.39	192.33
543+50.00	60.00	8.99	34.09						
				50.00	109.77	87.81	16.38	71.43	188.56
544+00.00	58.55	8.71	33.79	00772	22500	10000000		1227003	
E44150.00	42.25	6.05	30.61	50.00	93.33	74.67	14.22	60.44	173.33
544+50.00	42.25	0.65	28.61	50.00	66.26	52.01	9.44	43.56	144.25
545+00.00	29.31	3.55	23.32	50.00	00.20	55.01	5,44	43.30	144.23
				21.65	25.96	20.77	2.13	18.64	38.79
545+21.65	35.45	1.77	8.93						
				28.35	32.09	25.67	1.36	24.31	46.08
545+50.00	25.68	0.83	20.33	2.0.000	1 1991 - 1991 - 1991	in the second		Constantion of	13 1319500000
F46.00.05	40.00	0.00	44.53	50.00	41.95	33.56	1.40	32.16	96.94
546+00.00	19.63	0.69	14.57	50.00	46.25	27.01	1.44	25.57	51 11
546+50.00	30.34	0.87	3.83	50.00	40.20	57.01	1.44	33.37	51.11
510.50.00	50.04	0.07	5.05	5.34	6.08	4.86	0.17	4,69	2.13
546+55.34	31.11	0.83	3.34						
				41.06	63.11	50.49	1.03	49.45	7.62
546+96.40	51.89	0.54	0.00						
<i>a</i> .				3.60	6.89	5.51	0.07	5.44	0.00

					2252		0	1641	6006
		L		TOTAL	3251.72		0	1540.57	6885.20
554+18.96	34.88	7.35	70.95						
FF4-40-65	24.00	7.05	70.05	18.96	26.52	21.22	3.46	17.75	153.23
554+00.00	40.66	2.52	74.52						
	201211-02-04			50.00	85.64	68.51	3.78	64.74	376.83
553+50.00	51.84	1.57	61.14						
				50.00	90.42	72.33	8.06	64.28	345.86
553+00.00	45.81	7.14	63.37						
				50.00	88.14	70.51	19.02	51.49	353.39
552+50.00	49.39	13.41	63.85	1000000	1.Nalo-0031				
				50.00	77.15	61.72	26.13	35.60	369.36
552+00.00	33.94	14.81	69.12	50.00	04.33	51.07	50.55	21.32	570.52
331+30.00	33.62	17.90	07.29	50.00	64 59	51.67	30.35	21.32	378 92
551+50.00	25.92	17.09	57.20	50.00	44.22	35.38	68.64	-33.2/	368.25
551+00.00	11.95	56.16	65.28	50.00	44.22	25.20	CD CA	22.27	269.25
	44.05		65.00	50.00	67.79	54.23	159.50	-105.27	234.06
550+50.00	61.27	116.10	18.98						
				1.58	11.88	9.50	3.55	5.95	2.92
550+48.42	344.73	5.37	14.34						
				9.00	117.48	93.98	1.73	92.25	14.34
550+39.42	360.16	5.03	14.34						
				39.42	311.06	248.85	26.23	222.62	118.04
550+00.00	65.95	30.90	39.56	50100	00/10	00151	ion a	LUILU	201105
345730.00	27.08	21.71	35.10	50.00	86.13	68.91	48.71	20.20	207.39
5/0+50.00	27.08	21.71	35.10	50.00	/4.00	33.74	20.05	51.09	205.11
549+00.00	53.58	8.59	38.02	50.00	71 69	50.74	29.05	21.60	202.11
540,00.00	52.50	0.50	20.02	40.65	93.24	74.59	28.79	45.81	96.59
548+59.35	70.29	29.65	4.75						
			-	9.35	20.63	16.50	7.70	8.80	19.54
548+50.00	48.84	14.81	32.86						
				50.00	78.97	63.18	18.41	44.77	212.61
548+00.00	36.46	5.08	43.68						
547150.00	10.14	1.00	10.04	50.00	47.77	38.21	6.42	31.79	150.89
547+50.00	15.14	1.86	10.64	50.00	01.05	45.51	2.20	47.11	23.30
547+00.00	51.45	0.52	0.00	50.00	61.63	40.21	2.20	47.11	20.56
E 47:00 00	SQUARE FEET	SQUARE FEET	FEET	FEEI	COBIC YARD	CUBIC YARD	CUBIC YARD	COBIC YARD	SQUARE YARI
	COLUMPS STOT	COULDE FEFT	FFFT	FFFT	20200100	CUDICNARD	CUDIC VADD		21101625
					20202100	(20%)		SHORTAGE(-)	
		and a second			EXCAVATION	SHRINKAGE		WASTE(+) OR	PLACE, 6"
STATION	сит	FILL	TOPSOIL	DISTANCE	EARTH	ADJUSTED FOR	EMBANKMENT	BALANCE	FURNISH AND
						L. C.		LANTINOIN	TOPSOIL



CH NO.3 (NORTH AND SOUTH)	C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IANTITIES		14-00437-00-BR	KANE	58	7
S STA. TO STA.					



RS&H. PLOT	USER NAME = GirgisM	DESIGNED - MJM	REVISED -		BURLINGTON ROAD OVER VIRGIL DITCH NO.3 (NORTH AND SOUTH)	C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - MJM	REVISED -		ALIGNMENTS, TIES, AND BENCHMARKS	2	14-00437-00-BR	KANE	58	8
	PLOT SCALE = 200.0000 7 In. PLOT DATE = 11/22/2019	DATE - 03/07/2017	REVISED -	DIVISION OF TRANSPORTATION	SCALE: 1" = 200' SHEET 1 OF 2 SHEETS STA. TO STA.	-				

BUR	BURLINGTON ROAD ALIGNMENT COORDINATES										
NORTHING EASTING STATION											
POT	1,854,384.495	935,955.332	500+00.00								
PC	1,950,028.524	939,631.678	557+00.00								
PI	1,949,795.874	939,828.031	560+04.43								
PT	1,949,536.729	939,987.794	563+07.75								
POT	1,946,938.031	941,562.159	593+07.75								

SCALE IN FEET



STA. 547+09.32, 31.96′ LT N 1950806.22 E 939017.14 BENCHMARK ELEV. 947.76

STA. 552+49.67 , 25.53' RT N 1950356.20 E 939321.72 BENCHMARK ELEV. 943.98



_	USER NAME = GirgisM	DESIGNED – MJM	REVISED -		BUBLINGTON	BOAD OVER VIRGIL DITCH NO 3 (NORTH AND SOUTH)	C.H. RTF.	SECTION	COUNTY	TOTAL SHE	ET 0.
		DRAWN – MJM	REVISED -	KANE COUNTY	Domentarion	ALIGNMENT TIES AND BENCHMARKS	2	14-00437-00-BR	KANE	58 9	3
	PLOT SCALE = 150.0000 '/ in.	CHECKED – JRS	REVISED -	DIVISION OF TRANSPORTATION		ALIGINIMENT, TIES, AND DENGRIMARKS					_
	PLOT DATE = 11/22/2019	DATE - 03/07/2017	REVISED -		SCALE: NTS	SHEET 2 OF 2 SHEETS STA. TO STA.					-

STA. 538+21.58, 21.90' RT N 1951449.88 E 938403.42 BENCHMARK ELEV. 927.02



SEQUENCE OF CONSTRUCTION

PRESTAGE CONSTRUCTION (NOT SHOWN ON PLANS):

PRESTAGE TRAFFIC (NOT SHOWN ON PLANS):

EXCAVATING AND PAVING OPERATIONS.

STAGE 1 CONSTRUCTION:

- SAW CUT AT WESTBOUND EDGE OF PAVEMENT.

- PAVEMENT RECONSTRUCTION.

STAGE 1 TRAFFIC:

TRAFFIC AND THE WORK ZONE AS SHOWN ON PLANS.

STAGE 2 CONSTRUCTION:

- SAW CUT AT EASTBOUND EDGE OF PAVEMENT.

- PAVEMENT RECONSTRUCTION.

STAGE 2 TRAFFIC:

TEMPORARY CONCRETE BARRIER AS SHOWN ON PLANS.

STAGE 3 CONSTRUCTION (NOT SHOWN ON PLANS):

- CONSTRUCT WESTBOUND AGGREGATE SHOULDER.

STAGE 3 TRAFFIC (NOT SHOWN ON PLANS):

MARKING PLACEMENT.

NOTES:

BURLINGTON ROAD OVER VIRGIL DITCH SUGGESTED STAGES OF CONSTRUCT SCALE: NA SHEET 1 OF 7 SHEET

1. PLACE TEMPORARY PAVEMENT AT EASTBOUND EDGE OF PAVEMENT.

TRAFFIC IS IN THE EXISTING CONFIGURATION. UTILIZE HIGHWAY STANDARD 701311 FOR TRAFFIC CONTROL AND PROTECTION DURING PAVEMENT MILLING OPERATIONS. UTILIZE HIGHWAY STANDARD 701326 FOR TRAFFIC CONTROL AND PROTECTION DURING

REMOVE WESTBOUND PAVEMENT WITHIN RECONSTRUCTION LIMITS. REMOVE AND REPLACE THE WESTBOUND PORTION OF BOX CULVERTS. PLACE SUBGRADE AND CONSTRUCT BASE COURSE AND BINDER COURSE OF WESTBOUND PLACE SUBGRADE AND CONSTRUCT BASE COURSE FOR WESTBOUND PAVED SHOULDER. 6. CONSTRUCT TEMPORARY PAVEMENT TO THE LIMITS SHOWN ON THE PLANS.

PROVIDE ONE TEN FOOT LANE THROUGH THE PROJECT LIMITS ON EXISTING PAVEMENT AND TEMPORARY PAVEMENT. UTILIZE HIGHWAY STANDARD 701321 AND TEMPORARY TRAFFIC SIGNALS FOR TRAFFIC CONTROL AND PROTECTION. UTILIZE TEMPORARY CONCRETE BARRIER BETWEEN

REMOVE TEMPORARY PAVEMENT CONSTRUCTED IN PRESTAGE. REMOVE EASTBOUND PAVEMENT WITHIN RECONSTRUCTION LIMITS. REMOVE AND REPLACE THE EASTBOUND PORTION OF BOX CULVERTS. PLACE SUBGRADE AND CONSTRUCT BASE COURSE AND BINDER COURSE OF EASTBOUND PLACE SUBGRADE AND CONSTRUCT BASE COURSE FOR EASTBOUND PAVED SHOULDER (SEE NOTE 1). CONSTRUCT EASTBOUND AGGREGATE SHOULDER AND GUARDRAIL INSTALLATIONS. CONSTRUCT ENTRANCES ON EASTBOUND SIDE.

PROVIDE TWO TEN FOOT LANES THROUGH THE PROJECT LIMITS ON EXISTING MILLED PAVEMENT SURFACE AND ON PREVIOUSLY CONSTRUCTED PROPOSED AND TEMPORARY PAVEMENTS. UTILIZE

REMOVE TEMPORARY PAVEMENT CONSTRUCTED IN STAGE 1. MILL 2" OFF EXISTING PAVEMENT WITHIN RESURFACING LIMITS. CONSTRUCT SURFACE COURSE ON ALL PAVEMENT AND PAVED SHOULDERS. 5. FINALIZE PERMANENT GRADING AND CONSTRUCTION OF ENTRANCES ON WESTBOUND SIDE. PLACE PERMANENT PAVEMENT MARKINGS AND RELOCATED SIGNS AND MAILBOXES.

TRAFFIC IS IN THE PROPOSED CONFIGURATION. UTILIZE HIGHWAY STANDARD 701311 FOR TRAFFIC CONTROL AND PROTECTION DURING PAVING OPERATIONS, SHOULDER CONSTRUCTION, AND PAVEMENT

1. DURING EXCAVATION AND CONSTRUCTION OF THE EASTBOUND PAVED SHOULDER, A DROP-OFF EXCEEDING 2" WILL NOT BE PERMITTED FOR LONGER THAN 14 CALENDAR DAYS UNLESS SHIELDED BY TEMPORARAY CONCRETE BARRIER.

H NO.3 (NORTH AND SOUTH)	C.H. RTE.	SECTION	COUNTY TOTAL SHEE SHEETS NO				
ION AND TRAFFIC CONTROL	2	14-00437-00-BR	KANE	58	10		
S STA. TO STA.							

LEGEND CONSTRUCT → DIRECTION TEMPORARY O DRUM WITH F TRAFFIC C C→→ TEMPORARY (EXACT LO	TION WORK ZONE OF TRAFFIC Y PAVEMENT (ZOO62456) I STEADY BURN BI-DIRECTIONAL LIC ONTROL SIGN Y BRIDGE TRAFFIC SIGNAL LOCATIO CATION AND LAYOUT TO BE DETERM	NOTE GHT N MINED IN THE FIELD)	SEE HIGHWAY STANDARD 701321 AND TEMPORARY BRIDGE TRAFFIC SIGNAL	SPECIAL PROVISIONS FOR DETAILS.	TEMPORARY PAVEMENT 24" WHITE (70	MARK ING	EXISTING AERIAL L CONTRACTOR TO TAKE CAUT TEMPORARY PAVEMENT MARKING 4" SOLID WHITE (70300220)
529				BURLINGTON ROAD	500' 500' 500' 0NE LANE ROAD W12-1102(0)-48 W12-1102(0)-48	20-4(0)-48 1(0)-2424 BURLINCTON BOAD OVER DITC	EXIST. R.O.W. EXIST. R.O.W. EXIST. R.O.W. EXIST. R.O.W. SEE HIGHWAY STAN
RS&H	PLOT DATE = 11/22/2019	DRAWN - MJM CHECKED - JRS DATE - 03/07/201	REVISED - REVISED - 17 REVISED -	KANE DIVISION OF 1	COUNTY RANSPORTATION	SUGGESTED STAGES OF CONSTRU- STAGE STAGES STAGE STAGE STAGE STAGE SCALE: 1" = 20' SHEET 2 OF 7 SH	I LOUIS AND TRAFFIC CONTROL I PLAN EETS STA. 529+00.00 TO STA. 535+00.00











PLOT SCALE = 20.0000 ' / in.

PLOT DATE = 11/22/2019

CHECKED -

DATE

JRS

- 03/07/2017

REVISED

REVISED

	、 、
	×
	0 20' 40' 60'
	HORIZONTAL SCALE IN FEET
562	
	56
NO. 3 (NORTH AND SOUTH)	C.H. SECTION COUNTY TOTAL SHEET NO.
TION AND TRAFFIC CONTROL PLAN	2 14-00437-00-BR KANE 58 14
S STA. 557+00.00 TO STA. 563+00.00	
	-





٢S	STA. 546+20.00	TO STA.556+00.00	





N	O.3 (NORTH ANI An	AND SOUTH)	C.H. RTE.	SECTION	COUNTY TOTAL SHEETS					
LAN		,	2	14-00437-00-BR	KANE	58	18			
sl	STA. 546+20.00	TO STA.557+00.00								









s	STA.5	51+80.	.00	TO S	TA.555	5+40 . 00				1	ILLINOIS	FED. A	ID PROJ	ECT		
'RO	OFILE							2 14-00437-00-BR KANE 58 CONTRACT NO.					22			
N	D.3 (NORT	TH AI	ND S	OUTH	I)	C. R	C.H. SECTION			D	CO	UNTY	TOTA SHEET	L SHEET NO.	
																J20
																920
																925
																300
																070
																935
																940
																0.40
																945
																950
																200
																955
																960

RIZONTAL SCALE IN FE

VERTICAL SCALE IN FEET

**



BUTT JOINT AND HMA TAPER

S:
THE BUT
PLACINO
INSTALL
IN COST
SEE ART
"HMA AN

PLOT SCALE =	USER NAME = GirgisM	DESIGNED - MJM	REVISED -		BURLINGTON ROAD OVER VIRGIL DITCH NO.3 (NORTH AND SOUTH)	C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	IEET
PSSH		DRAWN - MJM	REVISED -		ROADWAY DETAILS	2	14-00437-00-BR	KANE	58	23
	PLOT DATE = 11/22/2019	DATE - 03/07/2017	REVISED -	DIVISION OF TRANSPORTATION	SCALE: NA SHEET 1 OF 1 SHEETS STA. TO STA.	_				

TT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO
G THE PROPOSED HMA COURSES.
LATION AND REMOVAL OF THE 4.5' TEMPORARY RAMP IS INCLUDED
T OF HMA SURFACE REMOVAL - BUTT JOINT
TICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR
ND/OR PCC SURFACE REMOVAL, BUTT JOINT''.









(DHORIZ	ONTAL	20' SCALE	IN FEE	40'		60' •									
IOTI	VERTI	CAL SC	SALE IN	FEET												
	REF MAT THE EXA SHA UND UND	ER T ERIA LIM CT L LL B ERDR ESS	O SHE L ANE ITS O IMITS E VEF AIN S OTHEF	EETS DEQU FTHE OF RIFIED GYSTE RWISE	49-58 IPMEN E PRO THE E) IN 1 M IDE DIRE	FOR TSTA POSED XISTIN THE FI NTIFIN CTED	DIT AGIN NG F ELD ED I BY	CH C G AR GHT YIPE . THE N TH THE	ROSS EAS N OF WA UNDER E FULL E FIEI ENGINI	SECTION ST B ST ST ST ST ST ST ST ST ST ST ST ST ST	DNS. E LOO TO E NT O ALL B	CATED BE REI F THE E REN	WITH MOVE PIPE MOVED	HIN D E		960
																955
																950
																945
																940
																935
																930
																925
																920
N0 & s	. 3 (PRO	NOR 0FILE	TH A	ND S	SOUTH	1) 5+40.00		С.н. RTE. 2		SECT 4-0043	ION 7-00-E	BR	CO K CON ID_PROJ	UNTY ANE ITRAC	TOT. SHEE 58 T NO.	AL SHEET TS NO. 27





SUGGESTED CONSTRUCTION SEQUENCING (EACH SIDE)

- INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES 1. INCLUDING PERIMETER EROSION BARRIER.
- PERFORM CLEARING AND GRUBBING OPERATIONS. 2.
- 3. PERFORM ROADWAY DEMOLITION.
- 4. DIVERT FLOW AROUND EXISTING CULVERT STRUCTURE.
- 5. REMOVE EXISTING PIPE CULVERT. CONSTRUCT PROPOSED CULVERT STRUCTURE.
- 6. DIVERT FLOW INTO PROPOSED CULVERT STRUCTURE.
- BEGIN EARTHWORK AND DITCH SHAPING. INSTALL TEMPORARY 8. DITCH CHECKS UPON COMPLETION.
- COMPLETE PROPOSED ROADWAY IMPROVEMENTS INCLUDING PAVING 9. AND SHOULDERS.
- PERFORM FINAL EARTHWORK AND INSTALL TOPSOIL, EROSION CONTROL 10. BLANKET AND SEEDING.
- NOTE: SUGGESTED CONSTRUCTION SEQUENCING IS PROVIDED FOR REFERENCE ONLY. THE CONTRACTOR MAY ALTER SEQUENCING AS APPROVED BY THE ENGINEER.

SUGGESTED CONSTRUCTION SEQUENCING FOR IN-STREAM WORK

- WORK WITHIN VIRGIL DITCH SHOULD BE TIMED TO TAKE PLACE DURING LOW OR NO FLOW 1. CONDITIONS. LOW FLOW CONDITIONS ARE FLOW AT OR BELOW THE NORMAL WATER ELEVATION.
- THE PLAN WILL BE DESIGNED TO ALLOW FOR THE CONVEYANCE OF THE 2-YEAR PEAK FLOW PAST THE 2. WORK AREA WITHOUT OVERTOPPING THE COFFERDAM. THE CORPS HAS THE DISCRETION TO REDUCE THIS REQUIREMENT IF DOCUMENTED BY THE APPLICANT TO BE INFEASIBLE OR UNNECESSARY.
- 3. WATER SHALL BE ISOLATED FORM THE IN-STREAM WORK AREA USING A COFFERDAM CONSTRUCTED OF NON-ERODIBLE MATERIALS (STEEL SHEETS, AQUA BARRIERS, RIP RAP AND GEOTEXTILE LINER, ETC.). EARTHEN COFFERDAMS ARE NOT PERMISSIBLE. EXACT MEANS AND METHODS SHOULD BE DISCUSSED DURING A SHEDULED-PRE-CONSTRUCTION MEETING.
- 4. THE COFFERDAM MUST BE CONSTRUCTED FROM THE UPLAND AREA AND NO EQUIPTMENT MAY ENTER FLOWING WATER AT ANY TIME. IF THE INSTALLATION OF THE COFFERDAM CANNOT BE COMPLETED FROM SHORE AND ACCESS IS NEEDED TO REACH THE AREA TO BE COFFERED. OTHER MEASURES, SUCH AS THE CONSTRUCTION OF A CAUSEWAY, WILL BE NECESSARY TO ENSURE THAT EQUIPTMENT DOES NOT ENTER THE WATER. ONCE THE COFFERDAM IS IN PLACE AND THE ISOLATED AREA IS DEWATERED, EQUIPMENT MAY ENTER THE COFFERED AREA TO PERFORM THE REQUIRED WORK.
- IF BYPASS PUMPING IS NECESSARY, THE INTAKE HOSE SHALL BE PLACED ON A STABLE SURFACE 5. OR FLOATED TO PREVENT SEDIMENT FROM ENTERING THE HOSE. THE BYPASS DISCHARGE SHALL BE PLACED ON A NON-ERODIBLE, ENERGY DISSIPATING SURFACE PRIOR TO REJOINIG THE STREAM FLOW AND SHALL NOT CAUSE EROSION. FILTERING OF BYPASS WATER IS NOT NECESSARY UNLESS THE BYPASS WATER HAS BECOME SIDIMENT-LADEN AS A RESULT OF THE CURRENT CONSTRUCTION ACTIVITIES.
- DURING DEWATERING OF THE COFFERED WORK AREA, ALL SEDIMENT-LADEN WATER MUST BE 6. FILTERED TO REMOVE SEDIMENT. POSSIBLE OPTIONS FOR SEDIMENT REMOVAL INCLUDE BAFFLE SYSTEMS, ANIONIC POLYMERS SYSTEMS, DEWATERING BAGS, OR OTHER APPROPRIATE METHODS. WATER SHALL HAVE SEDIMENT REMOVED PRIOR TO BEING RE-INTRODUCED TO THE DOWNSTREAM WATERWAY. A STABILIZED CONVEYANCE FROM THE DEWATERING DEVICE TO THE WATERWAY MUST BE IDENTIFIED IN THE PLAN. DISCHARGED WATER IS CONSIDERED CLEAN IF IT DOES NOT RESULT IN VISUALLY IDENTIFIABLE DEGRADATION OF WATER CLARITY.
- THE AREA FROM THE TOE TO THE TOP OF THE SIDE SLOPE SHALL BE TEMPORARILY STABILIZED 8. DURING CONSTRUCTION TO REDUCE THE POTENTIAL FOR EROSION. ALL AREAS DISTURBED DUE TO CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO PROPOSED CONDITIONS AND FULLY STABILIZED PRIOR TO ACCEPTING FLOWS.

CONTRACTOR CERTIFICATION STATEMENT

"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (ILR10) THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION."

SIGNED

EROSION STABILIZATION MEASURES SCHEDULE

STABILIZATION TYPE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
SEEDING CLASS 2A (SALT TOLERANT ROADSIDE)					7777				7777	7777	7777		200 LB/ACRE
SEEDING CLASS 4 (NATIVE GRASS)											7777	4	83 LB/ACRE
SEEDING CLASS 7 (TEMPORARY TURF COVER)				777	7777				7777	7777	7777	1	114 LB/ACRE
EROSION CONTROL BLANKET TEMP. PROTECTIVE BLANKET					7777				7777	7777	7777		



USER NAME = GirgisM	DESIGNED – MJM	REVISED -		BUBUINGTON	BOAD OVER VIRGIL DITCH NO 3 (NORTH AND SOUTH)	C.H.	SECTION	COUNTY	TOTAL	SHEET
	DRAWN – MJM	REVISED -	KANE COUNTY	DONLINGTON	EDOCION CONTROL DIAN	2	14-00437-00-BR	KANF	58	30
PLOT SCALE = 10.0000 '/ in.	CHECKED – JRS	REVISED -	DIVISION OF TRANSPORTATION		ERUSIUN CUNTRUL PLAN					
 PLOT DATE = 11/22/2019	DATE - 03/07/2017	REVISED -		SCALE: NA	SHEET 1 OF 4 SHEETS STA. TO STA.					\rightarrow





GENERAL NOTES - SOIL EROSION AND SEDIMENT CONTROL

ALL ADJACENT STREETS MUST BE KEPT CLEAR OF DEBRIS, INSPECTED DAILY AND CLEANED WHEN NECESSARY.

ALL EROSION CONTROL BLANKETS SHOULD BE INSTALLED ON ALL SLOPES 4:1 OR GREATER.

ALL EROSION CONTROL MEASURES MUST BE INSPECTED EVERY 7 CALENDAR DAYS AND AFTER EACH 0.5-INCH RAIN EVENT.

USE OF SILT FENCE FOR THE PROTECTION OF FLARED END SECTIONS WILL BE PERMITTED IF WOVEN MONOFILAMENT FABRIC IS USED.

ALL DISTURBED AREAS AND WORK AREAS MUST BE ISOLATED FROM DITCH FLOWS AT ALL TIMES. THE DIVERSION/ISOLATION OF THE DITCH FLOWS MUST BE CONSTRUCTED FROM NON-ERODIBLE MATERIALS. THE KDSWCD MUST BE IN AGREEMENT WITH OVERALL EXACT METHOD OF DIVERSION/ISOLATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

DITCHLINES WHICH FLOW DIRECTLY INTO THE CREEK SHOULD BE STRIPPED OR OTHERWISE DISTURBED UNTIL ABSOLUTELY NECESSARY.

STABILIZATON OF DISTURBED AREAS MUST BE INITIATED WITHIN 1 WORKING DAY OF PERMANENT OR TEMPORARY CESSATION OF EACH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE BUT NOT LONGER THAN 14 DAYS FROM THE INITIATOIN OF THE STABILIZING WORK IN AN AREA.

STOCKPILES OF SOIL AND OTHER BUILDING MATERIALS TO REMAIN IN PLACE MORE THAN THREE (3) DAYS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES (I.E. PERIMETER SILT FENCE). STOCKPILES, NOT BEING ACTIVELY WORKED AND TO REMAIN IN PLACE FOR 14 DAYS OR MORE SHALLRECEIVE TEMPORARY SEEDING. STOCKPILES SHOULD NOT BE LOCATED IN WETLANDS OR FLOODPLAIN AREAS UNLESS ADDITIONAL PROTECTION IS PROVIDED.

KANE-DUPAGE SOIL AND WATER CONSERVATION DISTRICT NOTES

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL, REVISED FEBRUARY 2002.

THE KANE-DUPAGE SOIL AND WATER CONSERVATION DISTRICT (KDSWCD) MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.

A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO, ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS) A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED TO THE OWNER FOR REVIEW BY THE KDSWCD.

THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE KDSWCD.

IT IS THE RESPONSIBILITY OF THE LANDOWNER AND/OR GENERAL CONTRACTOR TO INFORM ANY SUB-CONTRACTOR(S) WHO MAY PERFORM WORK ON THIS PROJECT, OF THE REQUIREMENTS IN IMPLEMENTING AND MAINTAINING THESE EROSION CONTROL PLANS AND THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS SET FORTH BY THE ILLINOIS EPA.









RS&H PLOT	USER NAME = GirgisM	DESIGNED -	МЈМ	REVISED -		BUBLINGTON BOAD OVER VIRGIL DITCH NO 3 (NORTH AND SOUTH)							SECTION	COUNTY	TOTAL	L SHEET
		DRAWN -	MJM	REVISED -	KANE COUNTY							2	14-00437-00-BR	KANE	58	33
	PLOT SCALE = 10.0000 ' / in.	CHECKED -	JRS	REVISED -	DIVISION OF TRANSPORTATION			LNUG								
	PLOT DATE = 11/22/2019	DATE –	03/07/2017	REVISED -		SCALE: NA	SHEET	4 C	OF 4 S	HEETS STA.	TO STA.					






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CHECKED

- TLR	06-2015	REVISED	KANE COUNTY DIVISION OF TRANSPORTATION	GENERAL DATA	C.H.	SECTION	COUNTY	TOTAL	SHEET NO.
- JLR	06-2015	REVISED			2	14-00437-00-BR	KANE	58	35
- TLR	06-2015	REVISED		STRUCTURE NU. 045-3184					
- JLR	06-2015	REVISED		SHEET NO. 2 OF 6 SHEETS	ILLINOIS FED. AID PROJECT		D PROJECT		





CHECKED - JLR

06-2015 REVISED

SHEET NO. 4 OF

<u>BAR LIST</u>								
Bar	Shape							
a1(E)	234	8	9′-4″	Ŋ				
a2(E)	39	5	7′-8″					
a3(E)	30	4	7′-8″					
d1(E)	18	4	4′-6″					
h1(E)	68	5	31′-6″					
h2(E)	68	5	27'-4"					
h3(E)	10	4	31′-6″					
h4(E)	10	4	27'-0"					
h5(E)	40	8	10'-1"					
h6(E)	28	8	8'-0"					
h7(E)	8	8	7'-6"					
h8(E)	14	6	7'-4"					
s1(E)	16	4	4′-5″	۵				
v1(F)	160	.5	5′-9″					
v2(E)	24	4	8'-3"					
Concret	e		Cu Yd	53.1				
BOX CU Reinfor Epoxy	iveris cement Coated	Bars,	Pound	14,010				
Tempor Retentio	ary Soil on Syste	e <i>m</i>	Sq Ft	301.0				
Bar Sp	licers		Each	78				







- 1	

TAILS	C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
045-3184	2 14-00437-00-BR		KANE	58	37
010 0101					
6 SHEETS		ILLINOIS FED. AI	ID PROJECT		



Threaded splicer bar length = min. lap length + $1_2^{\prime\prime}$ + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum Iap length
Top Slab	#5	34	3'-2"
Bottom Slab	#5	34	3'-2"
Side Walls	#4	10	2'-7"



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt. "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



6-8-15

	USER NAME = KlenckJ	ZR NAME = KlenckJ DESIGNED - TLR 06-2015 REVISED		BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS		SECTION	COUNTY	TOTAL SHEETS	SHEET		
PLOT DATE = 2/18/2020		CHECKED - JLR	06-2015	REVISED		STRUCTURE NO 045-3184	2	14-00437-00-BR	KANE	58	38
N J M I		DRAWN - TLR CHECKED - JLR	06-2015	REVISED	DIVISION OF TRANSPORTATION	SHEET NO. 5 OF 6 SHEETS		ILLINOIS FED. A			
								12211010 201	10		



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

<u>NOTES</u>

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications. See approved list of bar splicer assemblies and mechanical splicers for alternatives.







OGS	C.H. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
045-3184	2	14-00437-00-BR		KANE	58	39
	1					
6 SHEETS		ILLINOIS F	ED. AI	D PROJECT		





SHEET NO. 2 OF

ΔΤΑ	C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
045-3183	2	14-00437-00-BR	KANE	58	41
043-3103					
6 SHEETS		ILLINOIS FED. A	ID PROJECT		





CHECKED - JLR

06-2015 REVISED

SHEET NO. 4 OF

BAR LISI								
Bar	No.	Size	Length	Shape				
al(E)	224	8	10′-6″					
a2(E)	37	5	8′-8″					
a3(E)	29	4	8′-8″					
d1(E)	20	4	4'-6"					
h1(E)	76	5	29'-6"					
h2(E)	76	5	27'-7"					
h3(E)	12	4	29'-6"					
h4(E)	h4(E) 12		26'-6"					
h5(E)	48	8	11'-9"					
h6(E)	36	8	8'-0"					
h7(E)	12	8	8'-6"					
h8(E)	14	6	9'-1"					
				.				
<u>s1(E)</u>	18	4	5'-5"	<u> </u>				
	0.70	5	C / 11"					
VI(E)	230	- 5	0'-5"					
VZ(L)	20	4	9-5					
Concret Box Cu	'e Iverts		Cu Yd	68.7				
Reinfor Epoxy	cement Coated	Bars,	Pound	16,360				
Tempor Retentio	ary Soil on Syste	em	Sq Ft	162.0				
Bar Sp	licers		Each	88				







<u>BARS h5(E)</u>,









SECTION THRU HEADWALL

(Up Stream End Only)

TAILS		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0/15-2183	2	14-00437-00-BR	KANE	58	43
045-5105					
6 SHEETS		ILLINOIS FED. AI	D PROJECT		



Threaded splicer bar length = min. lap length + $1_2^{\prime\prime}$ + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum Iap length
Top Slab	#5	38	3'-2"
Bottom Slab	#5	38	3'-2"
Side Walls	#4	12	2'-7"



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt. "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



BSD-1

6-8-15

	USER NAME = KlenckJ	DESIGNED - TLR	06-2015	REVISED		BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS	C.H. RTE.	SECTION	COUNTY	TOTAL SHEET	L SHEET
RS8M	PLOT DATE = 2/18/2020	CHECKED - JLR DRAWN - TLR	06-2015	REVISED	DIVISION OF TRANSPORTATION	STRUCTURE NO. 045–3183		14-00437-00-BR	KANE	58	44
		CHECKED - JLR	06-2015	REVISED		SHEET NO. 5 OF 6 SHEETS		ILLINOIS FED. A	D PROJECT		



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

<u>NOTES</u>

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications. See approved list of bar splicer assemblies and mechanical splicers for alternatives.





	USER NAME = KlenckJ	DESIGNED - TLR	06-2015 REVISED		BORING LOGS	C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
RS&M	PLOT DATE = 2/18/2020	CHECKED - JLR DRAWN - TLR	06-2015 REVISED 06-2015 REVISED	DIVISION OF TRANSPORTATION	STRUCTURE NO. 045–3183					45
		CHECKED - JLR	06-2015 REVISED		SHEET NO. 6 OF 6 SHEETS		ILLINOIS FED. A	ID PROJECT		



REVISED - R. BORO 09-06-11 SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA.



USER NAME = footemj	DESIGNED -	REVISED - T. RAMMACHER 03-12-99			ТҮР	CAL APPLI	CATIONS		F.A. RTE	SECTION	COUNTY	TOTAL SHEE SHEETS NO.	ET).
	DRAWN -	REVISED -T. RAMMACHER 01-06-00	STATE OF ILLINOIS	DAIGED DEEL			EDE (CNOW) DI			14-00437-00-BR	KANE	58 47	<i>,</i>
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED C. JUCIUS 09-09-09	DEPARTMENT OF TRANSPORTATION	NAIJED NEFL	LECTIVE PAVEIVI			W RESISTANT		TC-11	CONTRAC	T NO.	_
PLOT DATE = 3/4/2019	DATE -	REVISED - C. JUCIUS 07-01-13		SCALE: NONE	SHEET 1 OF	1 SHEET	S STA.	TO STA.		ILLINOIS FED. A	D PROJECT		

LANE MARKER NOTES



GENERAL NOTES

- 1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
- 2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
- MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.
- 4. MARKERS ARE TO BE USED ADJACENT TO BOTH SOLID WHITE LINES IN DUAL LEFT TURN LANES
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

SYMBOLS

- _____ YELLOW STRIPE
- WHITE STRIPE
- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (W/O) ⊲
- TWO-WAY AMBER MARKER ٠

DESIGN NOTES

- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
- 4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

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





U-TURN



LANE REDUCTION TRANSITION

lane reduction arrows required at speeds of 45 MPH or greater or when specified in plans.

LINE	PATTERN	COLOR	SPACING /REMARKS
	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
	SOLID	YELLOW	11 (280) C-C
	SOL ID SOL ID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
EWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
BEING	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
ULL & .4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
1	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN
ARROW		WHITE	MARKING DETAIL
	SOL ID SOL ID SOL ID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
	SOLID	WHITE	PLACE 4' (1,2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESINED STOPPING POINT: PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
TH NALS USED FOR MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
2 (300) 5°	SOL ID	WHITE	DIAGONALS: 15'(4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20'(6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30'(9 m) C-C (0VER 45MPH (70 km/h))
VERSE 6' (1.8 m) DO)	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO. FT. (0.33 m ²) EACH "X"=54.0 SO. FT. (5.0 m ²)
	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (0VER 45MPH (70 km/h))
	SOLID	WHITE	16.3 SF
	SOLID	WHITE	30.4 SF

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

DNE E MARKINGS		F.A. RTE.	SECT	LION		COUNTY	TOTAL SHEETS	SHEET NO.	
			14-0043	37-00-E	BR	KANE	58	48	
	MAININGS			TC-13			CONTRACT	NO.	
s	STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT		



















ABV	ABOVE
A/C	
A/C	
AC	ACKL
ADJ	
AS	AERIAL SURVEYS
AGG	AGGREGATE
AH	AHEAD
APT	APARTMENT
ASPH	ASPHALT
AUX	AUXILIARY
AGS	AUXILIARY GAS VALVE (SERVICE)
AVE	AVENUE
AX	AXIS OF ROTATION
ВК	ВАСК
B-B	ΒΑCΚ ΤΟ ΒΑCΚ
BKPI	BACKPLATE
B	BARN
BARR	BARRICADE
BGN	BEGIN
DGN	
BIND	BINDER
BII	BITUMINOUS
BIM	BOLLOM
BLVD	BOULEVARD
BRK	BRICK
BROX	BUFFALO BOX
BLDG	BUILDING
CIP	CAST IRON PIPE
СВ	CATCH BASIN
C-C	CENTER TO CENTER
CL	CENTERLINE OR CLEARANCE
CL-E	CENTERLINE TO EDGE
CL-F	CENTERLINE TO FACE
CTS	CENTERS
CERT	CERTIFIED
CHSLD	CHISELED
CS	CITY STREET
CP	CLAY PIPE
CLSD	CLOSED
CLID	CLOSED LID
СТ	COAT OR COURT
СОМВ	COMBINATION
С	COMMERCIAL BUILDING
CE	COMMERCIAL ENTRANCE
CONC	CONCRETE
CONST	CONSTRUCT
CONTD	CONTINUED
CONT	CONTINUOUS
COR	CORNER
CORR	CORRUGATED
CMP	CORRUGATED METAL PIPE
CNTY	COUNTY
CH	COUNTY HIGHWAY
CSE	COURSE
XSECT	CROSS SECTION
m ³	CUBIC METER
mm ³	
111115	CODIC MILLIMETEN

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GALVGALVANIZEDGGARAGEGMGASAGEGWGAS WETERGVGAS VALVEGRANGRANULARGRGRAVELGNDGROUNDGUTGUTTERGPGUY POLEGWGUY WIREHHHANDHOLEHATCHHATCHING	GAL	GALLON
GGARAGEGMGAS METERGVGAS VALVEGRANGRANULARGRGRATEGRUGRAVELGNDGRUNDGUTGUTTERGPGUY POLEGWGUY WIREHHHANDHOLEHATCHHATCHING	GALV	GALVANIZED
GMGAS METERGVGAS VALVEGRANGRANULARGRGRATEGRVLGRAVELGNDGROUNDGUTGUTTERGPGUY POLEGWGUY WIREHHHANDHOLEHATCHHATCHING	G	GARAGE
GVGAS VALVEGRANGRANULARGRGRATEGRVLGRAVELGNDGROUNDGUTGUTTERGPGUY POLEGWGUY WIREHHHANDHOLEHATCHHATCHING	GM	GAS METER
GRANGRANULARGRGRATEGRVLGRAVELGNDGROUNDGUTGUTTERGPGUY POLEGWGUY WIREHHHANDHOLEHATCHHATCHING	GV	GAS VALVE
GRGRATEGRVLGRAVELGNDGROUNDGUTGUTTERGPGUY POLEGWGUY WIREHHHANDHOLEHATCHHATCHING	GRAN	GRANULAR
GRVLGRAVELGNDGROUNDGUTGUTTERGPGUY POLEGWGUY WIREHHHANDHOLEHATCHHATCHING	GR	GRATE
GNDGROUNDGUTGUTTERGPGUY POLEGWGUY WIREHHHANDHOLEHATCHHATCHING	GRVL	GRAVEL
GUTGUTTERGPGUY POLEGWGUY WIREHHHANDHOLEHATCHHATCHING	GND	GROUND
GPGUY POLEGWGUY WIREHHHANDHOLEHATCHHATCHING	GUT	GUTTER
GW GUY WIRE HH HANDHOLE HATCH HATCHING	GP	GUY POLE
HH HANDHOLE HATCH HATCHING	GW	GUY WIRE
HAICH HATCHING	HH	HANDHOLE
	HATCH	HAICHING

HD	HEAD
HDW	HEADWALL
HDUTY	HEAVY DUTY
ha	HECTARE
НМА	HOT MIX ASPHALT
HWY	HIGHWAY
HORIZ	HORIZONTAL
HSE	HOUSE
IL	ILLINOIS
IMP	IMPROVEMENT
IN DIA	INCH DIAMETER
INL	INLET
INST	INSTALLATION
IDS	INTERSECTION DESIGN STUDY
INV	INVERT
IP	IRON PIPE
IR	IRON ROD
JT	JOINT
kg	KILOGRAM
km	KILOMETER
LS	LANDSCAPING
LGT	
LGI	LINEAL FEFT OR LINEAR FEFT
L	LITER OR CURVE LENGTH
LC	LONG CHORD
LNG	LONGITUDINAL
L SUM	LUMP SUM
MACH	MACHINE
MB	MAIL BOX
MH	MANHOLE
MATL	MATERIAL
MED	MEDIAN
m	METER
METH	METHOD
IMI	
mm mm DIA	MILLIMETER DIAMETER
MRH	MOBILE HOME
MOD	MODIFIED
MFT	MOTOR FUEL TAX
N & BC	NAIL & BOTTLE CAP
N & C	NAIL & CAP
N & W	NAIL & WASHER
NOAA	NATIONAL OCEANIC ATMOSPHERIC
	ADMINISTRATION
NC	NORMAL CROWN
NB	NORTHBOUND
NE	NORTHEAST
NW	
PM	PAVEMENT MARKING
1.121	

PED	PEDESTAL	STD	STANDARD
PNT	POINT	SBI	STATE BOND ISSUE
PC	POINT OF CURVATURE	SR	STATE ROUTE
PI	POINT OF INTERSECTION OF HORIZONTAL	STA	STATION
	CURVE	SPBGR	STEEL PLATE BEAM GUARDRAIL
PRC	POINT OF REVERSE CURVE	SS	STORM SEWER
PT	POINT OF TANGENCY	STY	STORY
POT	POINT ON TANGENT	ST	STREET
POLYETH	POLYETHYLENE	STR	STRUCTURE
PCC	PORTLAND CEMENT CONCRETE	e	SUPERELEVATION RATE
PP	POWER POLE OR PRINCIPAL POINT	S.E. RUN.	SUPERELEVATION RUNOFF LENGTH
PRM	PRIME	SURF	SURFACE
PE	PRIVATE ENTRANCE	SMK	SURVEY MARKER
PROF	PROFILE	Т	TANGENT DISTANCE
PGL	PROFILE GRADELINE	T.R.	TANGENT RUNOUT DISTANCE
PROJ	PROJECT	TEL	TELEPHONE
P.C.	PROPERTY CORNER	ТВ	TELEPHONE BOX
PL	PROPERTY LINE	ТР	TELEPHONE POLE
PR	PROPOSED	TEMP	TEMPORARY
R	RADIUS	твм	TEMPORARY BENCH MARK
RR	RAILROAD	TD	TILE DRAIN
RRS	RAILROAD SPIKE	TBE	TO BE EXTENDED
RPS	REFERENCE POINT STAKE	TBR	TO BE REMOVED
REF	REFLECTIVE	TBS	TO BE SAVED
RCCP	REINFORCED CONCRETE CULVERT PIPE	TWP	TOWNSHIP
REINF	REINFORCEMENT	TR	TOWNSHIP ROAD
REM	REMOVAL	TS	TRAFFIC SIGNAL
RC	REMOVE CROWN	TSCB	TRAFFIC SIGNAL CONTROL BOX
REP	REPLACEMENT	TSC	TRAFFIC SYSTEMS CENTER
REST	RESTAURANT	TRVS	TRANSVERSE
RESURF	RESURFACING	TRVL	TRAVEL
RET	RETAINING	TRN	TURN
RT	RIGHT	ΤY	TYPE
ROW	RIGHT-OF-WAY	T-A	ΤΥΡΕ Α
RD	ROAD	ТҮР	TYPICAL
RDWY	ROADWAY	UNDGND	UNDERGROUND
RTE	ROUTE	USGS	U.S. GEOLOGICAL SURVEY
SAN	SANITARY	USEL	UPSTREAM ELEVATION
SANS	SANITARY SEWER	USFL	UPSTREAM FLOWLINE
SEC	SECTION	UTIL	UTILITY
SEED	SEEDING	VBOX	VALVE BOX
SHAP	SHAPING	VV	VALVE VAULT
S	SHED	VLT	VAULT
SH	SHEET	VEH	VEHICLE
SHLD	SHOULDER	VP	VENT PIPE
SW	SIDEWALK OR SOUTHWEST	VERT	VERTICAL
SIG	SIGNAL	VC	VERTICAL CURVE
SOD	SODDING	VPC	VERTICAL POINT OF CURVATURE
SM	SOLID MEDIAN	VPI	VERTICAL POINT OF INTERSECTION
SB	SOUTHBOUND	VPT	VERTICAL POINT OF TANGENCY
SE	SOUTHEAST	WM	WATER METER
SPL	SPECIAL	WV	WATER VALVE
SD	SPECIAL DITCH	WMAIN	WATER MAIN
SQ FT	SQUARE FEET	WB	WESTBOUND
m²	SQUARE METER	WILDFL	WILDFLOWERS
mm ²	SQUARE MILLIMETER	W	WITH
SQ YD	SQUARE YARD	WO	WITHOUT
STB	STABILIZED		

DATE	REVIS
1-1-19	Added new symb
1-1-11	Updated abbrevia
	and symbols.

Illinois Department of Transportation

SIONS bols. ations

ADJUSTMENT ITEMS EX	PR	ALIGNMENT ITEMS	EX	PR	DRAINA
Structure To Be Adjusted	ADJ	Baseline			Channel or Stream
		Centerline			Culvert Line
Structure To Be Cleaned	С	Centerline Break Circle	0	\odot	Grading & Shaping
Main Structure To Be Filled	FM	Baseline Symbol	١	١	Drainage Boundary
		Centerline Symbol	۹ <u>ـ</u>	Ę	Paved Ditch
Structure To Be Filled		PI Indicator	Δ	Δ	Aggregate Ditch
Structure To Be Filled Special	FSP	Point Indicator	0	0	Pipe Underdrain
Structure To Be Removed	R	Horizontal Curve Data	CURVE P.I. STA=	CURVE P.I. STA=	Storm Sewer
		(Hall Size)	D= R= T=	D= R= T=	Flowline
Structure To Be Reconstructed	REC		L= E= e= T.R.=	L= E= e= T.R.=	Ditch Check
Structure To Be Reconstructed Special	RSP		S.E. RUN= P.C. STA= P.T. STA=	S.E. RUN= P.C. STA= P.T. STA=	Headwall
Frame and Grate		BOUNDARIES ITEMS	EX	PR	Inlet
To Be Adjusted	A	Dashed Property Line			Manhole
Frame and Lid To Be Adjusted	A	Solid Property/Lot Line			Summit
Domestic Service Box		Section/Grant Line			Roadway Ditch Flov
To Be Adjusted	Ă	Quarter Section Line			Swale
Valve Vault To Be Adjusted	A	Quarter/Quarter Section Line			Catch Basin
Special Adjustment	(SP)	County/Township Line			Culvert End Section
		State Line			Water Surface Indic
Item To Be Abandoned	AB	Iron Pipe Found	0		Riprap
Item To Be Moved	M	Iron Pipe Set	•		HYDRAUL
		Survey Marker			Overflow
Item To Be Relocated		Property Line Symbol	P		Sheet Flow
and Replacement		Same Ownership Symbol (Half Size)	_		
		Northwest Quarter Corper	E		Hydrant Outlet
		(Half Size)			
PASSED January 1, 2019		Section Corner (Half Size)			
ENGINEER OF POLICY AND PROCEDURES		Southeast Quarter Corner			
ENGINEER OF DÉSIGN AND ENVIRONMENT		(Half Size)	(<u>)-(</u> [[⁺]]		

EROSION & SEDIMENT CONTROL ITEMS	<u>EX</u>	PR	<u>NON-HIGHWAY</u> IMPROVEMENT ITEMS	<u>EX</u>	PR	EX LANDSCA
Cleaning & Grading Limits Dike			Noise Attn./Levee			<u>(c</u>
Erosion Control Fence		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		_		Seeding Class 5
Perimeter Erosion Barrier			Field Line	Ł		Seeding Class 7
Temporary Fence		— XXX — XXX — XXX — XXX - XXX -	Fence	— x — x — x — x — x —		Seeding Class 7
Ditch Check Temporary			Base of Levee			Seedlings Type 1
Ditch Check Permanent		_♦	Mailbox	\triangleright		Seedlings Type 2
Inlet & Pipe Protection		\Leftrightarrow	Multiple Mailboxes	$\mathbb{P}^{\mathbb{P}}$		Sodding
Sediment Basin		\bigcirc	Pay Telephone			Mowstake w/Sign
Erosion Control Blanket			Advertising Sign	þ		Tree Trunk Protect
Fabric Formed Concrete Revetment Mat			ITS [*] Camera	Ó		Evergreen Tree
Turf Reinforcement Mat			Wind Turbine			
Mulch Temporary			Cellular Tower	(g) Å		Shade Tree
Mulch Method 1		+ X + X +] + + + + +]	LANDSCAPING ITEMS	<u>EX</u>	PR	
Mulch Method 2 Stabilized		4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Fence		- x x x	Duct
Mulch Method 3 Hydraulic		4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Shrubs			Conduit Electrical Aerial Ca
CONTOUR ITEMS	FX	PR	Mowline			
Approx. Index Line –		<u> </u>	Perennial Plants			Electrical Buried C
Approx. Intermediate Line –			Seeding Class 2			Underpass Lumina
Index Contour –			Seeding Class 24			Power Pole
Intermediate Contour –						
PASSED January 1. 2019			Seeding Class 4			
APPROVED Z019			Seeding Class 4 & 5 Combined			

ISTING APING ITEMS <u>EX</u> <u>PR</u> contd.) ction = E ß E) +**IGHTING** <u>EX</u> <u>PR</u> able Cable \bowtie 2727 aire -D---STANDARD SYMBOLS, **ABBREVIATIONS** AND PATTERNS (Sheet 3 of 9)

LIGHTING (contd.)	EX	PR	PAVEMENT MARKINGS	<u>EX</u>
Pull Point	P	®	Handicap Symbol	
Handhole			RR Crossing	
Heavy Duty Handhole		H		
Junction Box		Ø	Raised Marker Amber 1 Way	
Light Unit Comb.	0		Raised Marker Amber 2 Way	
Electrical Ground	<u> </u>	<u> </u>	Raised Marker Crystal 1 Way	\triangleleft
Traffic Flow Arrow High Mast Pole (Half Size)		→ **	Two Way Turn Left	
Light Unit-1	o—◯	• •	Shoulder Diag. Pattern	
PAVEMENT (MISC.)	<u>EX</u>	<u>PR</u>	Skip-Dash White	
Keyed Long. Joint		_^^	Skip-Dash Yellow	
Keyed Long. Joint w/Tie Bars Sawed Long. Joint w/Tie Bars			Stop Line	
Bituminous Shoulder			Solid Line	
Bituminous Taper			Double Centerline	
Stabilized Driveway			Dotted Lines	
Widening				
Illinois Department of Transportation PASSED January 1, 2019 ENGINEER OF POLICY AND PROCEDURES APPROVED Inductor January 1, 2019 ENGINEER OF DESIGN AND ENVIRONMENT				

PAVEMENT MARKINGS		EX		PR		RAILROAD ITEMS	<u>EX</u>	PR
						Abandoned Railroad	====	
CL 2Ln 2Way RRPM 12.2 m (40') o.c.			- +	- +		Railroad		
CL 2Ln 2Way RRPM 80' (24.4 m) o.c.			• <u> </u>		*	Railroad Point	0	
CL Multilane Div.						Control Box		
RRPM 40' (12.2 m) o.c.			<	< □	4	Crossing Gate	<u>xox</u> >	202 -
CL Multilane Div.			4		4	Flashing Signal	XoX	X oX
KKEN 80 (24.4 III) U.C.						Railroad Cant. Mast Arm	X CZ X X	Xez X
CL Multilane Div. Dbl. RRPM 80' (24.4 m) o.c.			< ────		4	Crossbuck	×	Þ
						REMOVAL ITEMS	EX	<u>PR</u>
CL Multilane Undiv.			<u> </u>	•	<u> </u>	Removal Tic		<u> </u>
Two Way Turn Left Line			*	•	*	Bituminous Removal		
Urban Combination Left	÷	alifa Alifa		1		Hatch Pattern		
Urban Combination Right	:			Σ		Tree Removal Single		\otimes
Urban Left Turn Arrow	and and			<u>ح</u>		RIGHT OF WAY ITEMS	EX	PR
Urban Right Turn Arrow				ר		Future ROW Corner Monument		
	۰۰» روید در			•		ROW Marker	\boxtimes	•
Urban Left Turn Only			NLY	1		ROW Line		
Urban Right Turn Only			ONLY	ノ		Easement		/////////////////////////////////////
Urban Thru Only			ONLY	\rightarrow		Temporary Easement		- <i>TT TT TT TT</i>
PASSED January 1, 2019 ENGINEER OF POLICY AND PROCEDURES Image: Second seco							STANDARI ABBRE AND PA	D SYMBOLS, VIATIONS ATTERNS (Sheet 5 of 9)
ENGINEER OF DESIGN AND ENVIRONMENT							STANDA	KD 000001-07

<u>PAVEMENT MARKINGS</u> (contd.)		<u>EX</u>	PR	
Urban U-Turn	< 		←)
Urban Combined U-Turn	<		←	ン
Rural Combination Left		de fra. Al heitige son		\$
Rural Combination Right				
Rural Left Turn Arrow				
Rural Right Turn Arrow	£1			
Rural Left Turn Only			ONLY	ſ
Rural Right Turn Only			ONLY	J
Rural Thru Only			ONLY	\rightarrow
Bike Lane Symbol			0.33.	→
Bike Lane Text				
Bike Path Shared				承 》
Bike Shared Roadway				\$ ~ .}
PASSED January 1. 2019 15000000000000000000000000000000000000				

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS (Sheet 6 of 9)

RIGHT OF WAY ITEMS (contd.)	EX	PR	ROADWAY PROFILES	EX	PR	<u>SIGNI</u> (c
Access Control Line		— AC —	P.I. Indicator Point Indicator	۵ ٥	<u>م</u> ٥	Reverse Left W (Half Size)
Access Control Line & ROW — - Access Control Line & x ROW with Fence	AC — AC — ···	- AC AC	Earthworks Balance Point		Ð	Reverse Right V
Excess ROW Line	-	— XS — — —	Begin Point			(Half Size)
Cable Barrier	<u>EX</u>	<u>PR</u>	Vert. Curve Data	VPI = ELEV= =	VPI = ELEV= I =	Two Way Traffic (Half Size)
Concrete Barrier Edge of Pavement			Ditch Profile Left Side – Ditch Profile Right Side –	È = 	Ē = 	Detour Ahead W (Half Size)
Bit Shoulders, Medians and C&G Line Aggregate Shoulder			Roadway Profile Line-Storm Sewer Profile Left Side-Storm Sewer Profile Right Side-			Left Lane Closec (Half Size)
Sidewalks, Driveways			SIGNING ITEMS	EX	PR	Right Lane Close
Guardrail			Cone. Drum or Barricade		0	
Traffic Sign	þ	۲	Barricade Type II			Road Closed Ahe (Half Size)
Corrugated Median			Barricade Type III			Road Constructio (Half Size)
Impact Attenuator		268880 268880				
North Arrow with District Office (Half Size)	N ∲		Barricade With Edge Line		0 0	Single Lane Ahe (Half Size)
Match Line		STA. 45+00	Flashing Light Sign		0	Transition Left W
Slope Limit Line			Panels I			(nair size)
Typical Cross-Section Line			Panels II			Transition Right (Half Size)
Illinois Department of Transportation	on		Direction of Traffic			
PASSED January 1, 2019 Mark January 1, 2019 ENGINEER OF POLICY AND PROCEDURES APPROVED January 1, 2019 ENCINEER OF OFFICE AND FRANCES	ISSUED 1-1-97		Sign Flag (Half Size)		\Diamond	

IING ITEMS contd.)

<u>EX</u>

W1-4L

W1-4R

fic Sign W6-3

W20-2(O)

ed Ahead W20-5L(O)

osed Ahead W20-5R(O)

head W20-3(O)

tion Ahead W20-1-(O)

nead

W4-2L

nt W4**-**2R

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS (Sheet 7 of 9)

<u>SIGNING ITEMS</u> (contd.)	<u>EX</u>	PR	STRUCTURES ITEMS	<u>EX</u>	<u>PR</u>	TRAFFIC SHEET ITEMS	<u>EX</u>	PR
One Way Arrow Lrg. W1-6-(O) (Half Size)			Box Culvert Barrel			Cable Number		Ø
Two Way Arrow Large W1-7-(O) (Half Size)			Box Culvert Headwall Bridge Pier			Left Turn Green	I − ¬ L←G	- -G
Detour M4-10L-(O) (Half Size)		DETOUR	Bridge			Left Turn Yellow	— ¬ ← YI ∟ _	~ Y
Detour M4-10R-(O) (Half Size)		DETOUR	Retaining Wall			Signal Backplate	ے ہے۔ ابال ابطار	
One Way Left R6-1L (Half Size)		ONE WAY	Temporary Sheet Piling		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		الہ _ار ار _ار 1	
One Way Right R6-1R (Half Size)		ONE WAY				Signal Section 8" (200 mm)		
Left Turn Lane R3-I100L (Half Size)		LEFT TURN LANE				Signal Section 12" (300 mm)		
Keep Left R4-7AL (Half Size)		KEEP				Walk/Don't Walk Letters		D W W
Keep Left R4-7BL (Half Size)		KEEP LEFT				Walk/Don't Walk Symbols		₩ *
Keep Right R4-7AR (Half Size)		KEEP RIGHT				<u>TRAFFIC SIGNAL</u> <u>ITEMS</u>	<u>EX</u>	<u>PR</u>
Keep Right R4-7BR (Half Size)		KEEP RIGHT				Galv. Steel Conduit		
Stop Here On Red R10-6-AL (Half Size)		STOP HERE FON RED				Underground Cable	<u> </u>	
Stop Here On Red R10-6-AR		STOP HERE				Detector Loop Line		
(nail size)		RED				Detector Loop Large	·······	
No Left Turn R3-2 (Half Size)		\bigcirc				Detector Loop Small		
No Right Turn R3-1 (Half Size)		\bigcirc				Detector Loop Quadrapole	14 6	
Road Closed R11-2 (Half Size)		ROAD CLOSED						
Road Closed Thru Traffic R11-2 (Half Size)		ROAD CLOSED TO THRU TRAFFIC						
PASSED January 1. 2019							ABBREVI AND PAT	ATIONS TERNS
APPROVED January 1, 2019							STANDARI	(Sheet 8 of 9)

TRAFFIC SIGNAL ITEMS (contd.)	EX	PR	UNDERGROUND UTILITY ITEMS	PR	ABANDONED	UTILITY ITEMS (contd.)
Detector Raceway	"E"[Cable TV —— CTV ——	CTV	CTV	Traffic Signal
,			Electric Cable — — — — — — — — — — — — — — — — — — —	— — E — —	— —/ — E — — / —	Traffic Signal Control Box
Aluminum Mast Arm	0		Fiber Optic — F0 —	F0	— — FO — — / —	Water Meter
Steel Mast Arm	0	•	Gas Pipe ————————————————————————————————————	— — G — — — — — — — — — — — — — — — — —	— —/ — I G I — — / —	Water Meter Valve Box
			Oil Pipe ────────────────────────────────────	0	- -/10 /	Profile Line —
Veh. Detector Magnetic			Sanitary Sewer —))	->- ->>->- >->->		Aerial Power Line —
Conduit Splice	•	•	Telephone Cable	T	- T	
Controller			Water Pipe → W →	W ⊢	— — / — H W H — – / — – – – – – – – – – – – – – – – –	VEGETATION TIEMS
Gulfbox Junction	0	0				Deciduous Tree
Wood Pole	\otimes	٩	UTILITIES ITEMS	EX	<u>PR</u>	Bush or Shrub
Temp. Signal Head		->-	Controller	\boxtimes		Evergreen Tree
Handhole			Double Handhole			Stump
Double Handhole			Fire Hydrant	Ŭ	۲	Orchard/Nursery Line — -
Heavy Duty Handhole		Η	GuyWire or Deadman Anchor	\rightarrow		Vegetation Line
Junction Box	\bigcirc	J	Handhole			Woods & Bush Line
Ped. Pushbutton Detector	©	©	Heavy Duty Handhole			WATER FEATURE ITEMS
Ped. Signal Head	-0	-1	Junction Box	Q	٥	Stream or Drainage Ditch
Power Pole Service	-[]-	+	Light Pole	¤	×	Waters Edge
Priority Veh. Detector	\supset	•◄	Manhole	Ø	\odot	Water Surface Indicator
Signal Head	->	+	Monitoring Well (Gasoline)	(10)		Water Point
Signal Head w/Backplate	+⇔	+	Pipeline Warning Sign	þ		Disannearing Ditch
Signal Post	0	•	Power Pole	-D-	+	March
Closed Circuit TV		C	Power Pole with Light	\$		March/Swamp Roundary
Video Detector System		$\overline{\mathbb{V}}$	Sanitary Sewer Cleanout	D		Maisil/Swamp boundary
			Splice Box Above Ground		-	ST
Illinois Department of Transportation			Telephone Splice Box	\blacksquare		
PASSED January 1. 2019 PASSED January 1. 2019 ENGINEER OF POLICY AND PROCEDURES			Telephone Pole	-0-	-•-	
APPROVED January 1, 2019	1-07					

ED	<u>UTILITY ITEMS</u> <u>(contd.)</u>	<u>EX</u>	PR
_/	Traffic Signal	¢	•
_/	Traffic Signal Control Box	₽ S	
_/	Water Meter	Ц	
-/	Water Meter Valve Box	0	•
/	Profile Line		
	Aerial Power Line	——————————————————————————————————————	—— A ——— A
	VEGETATION ITEMS	<u>EX</u>	<u>PR</u>
	Deciduous Tree	\odot	
	Bush or Shrub	0	
	Evergreen Tree	Ũ	
	Stump	寙	
	Orchard/Nursery Line -		
	Vegetation Line		
	Woods & Bush Line		
	<u>WATER FEATURE</u> <u>ITEMS</u>	<u>EX</u>	<u>PR</u>
	Stream or Drainage Ditch -		
	Waters Edge -		
	Water Surface Indicator		
	Water Point	\odot	
	Disappearing Ditch	<	
	Marsh	يتللس	
	Marsh/Swamp Boundary -		
	S	TANDARD S ABBREVIA AND PAT1	SYMBOLS, TIONS TERNS (Sheet 9 of 9)
		STANDARD	000001-07

						RE	INFORCEM	ENT BARS	5 - ENGLIS	H (METRIC	2)						
Bar Size	Dia.	Cross- Sectional	Weight							SPACING,	in.(mm)						
5.20	in.	Area	lbs./ft.	4 (100)	4½ (115)	5 (125)	5½ (140)	6 (150)	6½ (165)	7 (175)	7½ (190)	8 (200)	8½ (215)	9 (225)	10 (250)	11 (275)	12 (300)
(metric)	mm	(sq. mm)	kg/m					ARI	EA OF STEEL	PER FOOT (METER), sq.	in. (sq. mm)				
3	0.375	0.110	0.376	0.330	0.293	0.264	0.240	0.220	0.203	0.189	0.176	0.165	0.155	0.147	0.132	0.120	0.110
(10)	(9.5)	(71)	(0.560)	(710)	(617)	(568)	(507)	(473)	(430)	(406)	(374)	(355)	(330)	(316)	(284)	(258)	(237)
4	0.500	0.196	0.668	0.588	0.523	0.470	0.428	0.392	0.362	0.336	0.314	0.294	0.277	0.261	0.235	0.214	0.196
(13)	(12.7)	(129)	(0.944)	(1290)	(1122)	(1032)	(921)	(860)	(782)	(737)	(679)	(645)	(600)	(573)	(516)	(469)	(430)
5	0.625	0.307	1.043	0.921	0.819	0.737	0.670	0.614	0.567	0.526	0.491	0.461	0.433	0.409	0.368	0.335	0.307
(16)	(15.9)	(199)	(1.552)	(1990)	(1730)	(1592)	(1421)	(1327)	(1206)	(1137)	(1047)	(995)	(926)	(884)	(796)	(724)	(663)
6	0.750	0.442	1.502	1.326	1.179	1.061	0.964	0.884	0.816	0.758	0.707	0.663	0.624	0.589	0.530	0.482	0.442
(19)	(19.1)	(284)	(2.235)	(2840)	(2470)	(2272)	(2029)	(1893)	(1721)	(1623)	(1495)	(1420)	(1321)	(1262)	(1136)	(1033)	(947)
7	0.875	0.601	2.044	1.803	1.603	1.442	1.311	1.202	1.110	1.030	0.962	0.902	0.848	0.801	0.721	0.656	0.601
(22)	(22.2)	(387)	(3.042)	(3870)	(3365)	(3096)	(2764)	(2580)	(2345)	(2211)	(2037)	(1935)	(1800)	(1720)	(1548)	(1407)	(1290)
8	1.000	0.785	2.670	2.355	2.093	1.884	1.713	1.570	1.449	1.346	1.256	1.178	1.108	1.047	0.942	0.856	0.785
(25)	(25.4)	(510)	(3.973)	(5100)	(4435)	(4080)	(3543)	(3400)	(3091)	(2914)	(2684)	(2550)	(2372)	(2267)	(2040)	(1855)	(1700)
9	1.128	1.000	3.400	3.000	2.667	2.400	2.182	2.000	1.846	1.714	1.600	1.500	1.412	1.333	1.200	1.091	1.000
(29)	(28.7)	(645)	(5.060)	(6450)	(5609)	(5160)	(4607)	(4300)	(3909)	(3686)	(3395)	(3225)	(3000)	(2867)	(2580)	(2345)	(2150)
10	1.270	1.267	4.303	3.801	3.379	3.041	2.764	2.534	2.339	2.172	2.027	1.901	1.789	1.689	1.520	1.382	1.267
(32)	(32.3)	(819)	(6.404)	(8190)	(7122)	(6552)	(5850)	(5460)	(4964)	(4680)	(4311)	(4095)	(3809)	(3640)	(3276)	(2978)	(2730)
11	1.410	1.561	5.313	4.683	4.163	3.746	3.406	3.122	2.882	2.676	2.498	2.342	2.204	2.081	1.873	1.703	1.561
(36)	(35.8)	(1006)	(7.907)	(10060)	(8748)	(8048)	(7186)	(6707)	(6097)	(5749)	(5295)	(5030)	(4679)	(4471)	(4024)	(3658)	(3353)

Illinois D	epartment of T	ransportal	ion
PASSED	January 1, HESHX JCY AND PROCEDURE	2009	ISSUED
APPROVED	January 1, n E Han SIGN AND ENVIRONMI	2009	1-1-97

DATE	REVIS
1-1-09	Switched units to
	English (metric).
1-1-07	Deleted metric ta
	Soft converted Er
	table.

SIONS
)
able.
nglish

AREAS OF REINFORCEMENT BARS

							DECIMAL OF A	N INCH	and oi	F A FOOT							
A B		В	A		BA		А	В		A B			A			А	В
₩4	0.0052 0.0104 0.015625 0.0208	¹ / ₁₆ ¹ / ₈ ³ / ₁₆ ¹ / ₄	¹ ¹ / ₆₄ ³ / ₁₆	0.171875 0.1771 0.1823 0.1875	$2\frac{1}{16}$ $2\frac{1}{8}$ $2\frac{3}{16}$ $2\frac{1}{4}$	¹ 1 ₃₂	0.3385 0.34375 0.3490 0.3542	$ \begin{array}{c} 4\frac{1}{16} \\ 4\frac{1}{8} \\ 4\frac{3}{16} \\ 4\frac{1}{4} \end{array} $	33/64	0.5052 0.5104 0.515625 0.5208	6½ 6½ 6¾ 6¾ 6¼	⁴³ ⁄ ₆₄	0.671875 0.6771 0.6823 0.6875	8½6 8½8 8¾6 8¼	²⁷ / ₃₂	0.8385 0.84375 0.8490 0.8542	$ \begin{array}{c} 10 \frac{1}{10} \\ 10 \frac{1}{8} \\ 10 \frac{3}{16} \\ 10 \frac{1}{4} \end{array} $
⅓₂	0.0260 0.03125 0.0365 0.0417	5⁄16 ⅔ 7⁄16 ½	¹³ ⁄64	0.1927 0.1979 0.203125 0.2083	25/ ₁₆ 2¾ 2½ ₆ 2½	²³ ⁄64	0.359375 0.3646 0.3698 0.3750	4½ 4¾ 4½ 4½	¹ 7⁄ ₃₂	0.5260 0.53125 0.5365 0.5417	6¾ 6¾ 6¾ 6½	⁴⁵ ⁄64	0.6927 0.6979 0.703125 0.7083	85⁄16 8¾ 87⁄16 8½	⁵⁵ %4	0.859375 0.8646 0.8698 0.8750	105/ ₁₆ 10務 107/ ₁₆ 10½
¾4 1√16	0.046875 0.0521 0.0573 0.0625	%16 5⁄8 ™16 3⁄4	7∕₃₂	0.2135 0.21875 0.2240 0.2292	2% ₁₆ 2% 2 ¹ % ₁₆ 2¾	²⁵ ⁄64	0.3802 0.3854 0.390625 0.3958	4% 4% 4 ¹ % 4 ¹ % 4 ³ ⁄ ₄	³⁵ ⁄64 %16	0.546875 0.5521 0.5573 0.5625	$6\%_{16}$ $6\%_{8}$ $6^{1}\%_{16}$ $6\%_{4}$	²³ / ₃₂	0.7135 0.71875 0.7240 0.7292	8%16 8% 81½16 8¾	⁵ 7⁄64	0.8802 0.8854 0.890625 0.8958	$10\frac{1}{10}$
5⁄64	0.0677 0.0729 0.078125 0.0833	¹³ / ₁₆ 7/8 ¹⁵ / ₁₆ 1	¹⁵ ⁄64 1⁄4	0.234375 0.2396 0.2448 0.2500	2 ¹³ / ₁₆ 2 ⁷ / ₈ 2 ¹⁵ / ₁₆ 3	¹ 3⁄32	0.4010 0.40625 0.4115 0.4167	$\begin{array}{c} 4^{13}\!$	37/64	0.5677 0.5729 0.578125 0.5833	6^{13}_{16} $6\frac{7}{8}$ 6^{15}_{16} 7	47/64 3/4	0.734375 0.7396 0.7448 0.7500	8 ¹³ ⁄ ₁₆ 87⁄8 8 ¹⁵ ⁄ ₁₆ 9	² % ₂	0.9010 0.90625 0.9115 0.9167	$ \begin{array}{c} 10^{13}_{16} \\ 10\% \\ 10^{15}_{16} \\ 11 \end{array} $
∛32	0.0885 0.09375 0.0990 0.1042	1½ 1½ 1¾ 1¾ 1¼	17/64	0.2552 0.2604 0.265625 0.2708	3½6 3½ 3¾6 3¼	²⁷ ⁄ ₆₄	0.421875 0.4271 0.4323 0.4375	5 ¹ ⁄ ₁₆ 5 ¹ ⁄ ₈ 5 ³ ⁄ ₁₆ 5 ¹ ⁄ ₄	¹ % ₃₂	0.5885 0.59375 0.5990 0.6042	7½ ₁₆ 7½ 7¾ 7¾ 7¼	⁴⁹ %4	0.7552 0.7604 0.765625 0.7708	9½6 9½ 9¾ 9¾ 9¼	⁵⁹ ⁄64	0.921875 0.9271 0.9323 0.9375	11⅓ 11⅓ 11¾ 11¾ 11¼
%4 ⅓	0.109375 0.1146 0.1198 0.1250	15⁄ ₁₆ 1⅔ 17⁄ ₁₆ 1½	⅔2	0.2760 0.28125 0.2865 0.2917	3⁵⁄ ₁₆ 3¾ 37⁄ ₁₆ 3½	²⁹ ⁄64	0.4427 0.4479 0.453125 0.4583	5⁵⁄16 5¾ 57⁄16 5½	³⁹ ⁄64 5⁄8	0.609375 0.6146 0.6198 0.6250	7⁵⁄ ₁₆ 7¾ 7⅓ ₆ 7½	²⁵ ⁄ ₃₂	0.7760 0.78125 0.7865 0.7917	95⁄16 93⁄8 97⁄16 91⁄2	⁶ 1⁄ ₆₄	0.9427 0.9479 0.953125 0.9583	115/16 113/8 117/16 111/2
% ₄	0.1302 0.1354 0.140625 0.1458	1% ₁₆ 1% 1 ¹ % ₁₆ 1¾	¹⁹ %4	0.296875 0.3021 0.3073 0.3125	3%16 35% 3 ¹¹ /16 3 ³ /4	15/32	0.4635 0.46875 0.4740 0.4792	5% 5% 5 ¹ ⅓ ₆ 5¾	⁴ 1⁄64	0.6302 0.6354 0.640625 0.6458	7% 7% 7 ¹ ½ 7¾	⁵ 1⁄ ₆₄	0.796875 0.8021 0.8073 0.8125	9%16 9% 9 ¹ % 9 ³ ⁄ ₄	³ 1/ ₃₂	0.9635 0.96875 0.9740 0.9792	$\begin{array}{c c}11\%\\11\%\\111\%\\11^{1}\%\\11^{1}\%\\113\%\end{array}$
5⁄ ₃₂	0.1510 0.15625 0.1615 0.1667	$ \begin{array}{c} 1^{13}_{16} \\ 1\frac{1}{8} \\ 1^{15}_{16} \\ 2 \end{array} $	² 1/ ₆₄	0.3177 0.3229 0.328125 0.3333	3 ¹³ / ₁₆ 37/ ₈ 3 ¹⁵ / ₁₆ 4	³ 1 ₆₄	0.484375 0.4896 0.4948 0.5000	5^{13}_{16} $5\frac{7}{8}$ 5^{15}_{16} 6	² 1/ ₃₂	0.6510 0.65625 0.6615 0.6667	$7^{13}_{16} \\ 7^{7}_{8} \\ 7^{15}_{16} \\ 8$	⁵³ ⁄64	0.8177 0.8229 0.828125 0.8333	9 ¹³ / ₁₆ 97/8 9 ¹⁵ / ₁₆ 10	⁶³ ⁄ ₆₄	0.984375 0.9896 0.9948 1.0000	$ \begin{array}{c} 11^{13}_{16} \\ 117_{8} \\ 11^{15}_{16} \\ 12 \end{array} $

DATE	REVISIONS
-1-97	New Standard.

A = Fractions of Inch or Foot

B = Inch Equivalents to Foot Fractions

Illinois Department of Transportation

DECIMAL OF AN INCH AND OF A FOOT

STANDARD 001006




GENERAL NOTES

The installation details and dimensions shown for perimeter erosion barriers shall also apply for inlet and pipe protection.

All dimensions are in inches (millimeters) unless otherwise shown

TEMPORARY EROSION CONTROL SYSTEMS (Sheet 1 of 2)

STANDARD 280001-07





DIMENSIONS - ^{ft.} (m)			
Width of Shoulder	4-8 (1.2-2.4)	10 (3.0)	
Width of Turnout (Y)	8 (2.4)	8-10 (2.4-3.0)	
L 1	32 (9.5)	32 (9.5)	
L ₂	20 (6.0)	20 (6.0)	

GENERAL NOTES

Mailboxes shall be mounted such that the face of the mailbox is 6 (150) to 12 (300), and the post a minimum of 24 (600), from the edge of the turnout surfacing.

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

SIONS	MAILBOX TURNOUT
2171-1.	
arding	STANDARD 406201-01
roads	





- Variable slope

GENERAL NOTES

Except as noted or shown the dimensions and notes specified for the shoulder of tangent pavement are typical for the shoulders of superelevated pavement.

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

IONS	
lix	

HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT

STANDARD 482001-02





Lettering for





5⁄16 (8)

<u>716</u> (11)

STANDARD 515001-04



A	В	С	D	E	G	R	APPROX. SLOPE
4	24	4'-0%"	6'-0%"	24	2	9	1:2.4
(102)	(610)	(1.241 m)	(1.851 m)	(610)	(51)	(229)	
6	27	3'-10"	6'-1"	30	2¼	11	1:2.4
(152)	(686)	(1.168 m)	(1.854 m)	(762)	(57)	(280)	
9	27	3'-10"	6'-1"	36	2½	12	1:2.4
(229)	(686)	(1.168 m)	(1.854 m)	(914)	(64)	(305)	
9	35	38	6'-1"	3'-6"	2¾	13	1:2.4
(229)	(889)	(965)	(1.854 m)	(1.067 m)	(70)	(330)	
9½	3'-7½''	30	6'-1½"	4'-0"	3	14	1:2.5
(241)	(1.105 m)	(762)	(1.867 m)	(1.219 m)	(76)	(356)	
10½	4'-0"	25½	6'-1½"	4'-6"	3¼	14½	1:2.4
(267)	(1.219 m)	(648)	(1.867 m)	(1.372 m)	(83)	(368)	
12	4'-6"	19¾	6'-1¾''	5'-0"	3½	15	1:2.5
(305)	(1.375 m)	(502)	(1.874 m)	(1.524 m)	(89)	(381)	
13½	4'-10½''	39¼	8'-1¾"	5'-6"	3¾	17½	1:2.5
(343)	(1.486 m)	(997)	(2.483 m)	(1.676 m)	(95)	(445)	
15	5'-3"	34¾	8'-1¾"	6'-0"	4	20	1:2.5
(381)	(1.6 m)	(883)	(2.483 m)	(1.829 m)	(102)	(508)	
21	5'-3"	35	8'-2"	6'-6"	4½	22	1:2.5
(533)	(1.6 m)	(889)	(2.489 m)	(1.981 m)	(114)	(559)	
24	6'-0 "	26	8'-2"	7'-0"	5	22	1:2.5
(610)	(1.829 m)	(660)	(2.489 m)	(2.134 m)	(127)	(559)	
27	5'-5"	35	8'-4"	7'-6"	5½	24	1:2.0
(686)	(1.651 m)	(889)	(2.54 m)	(2.286 m)	(140)	(610)	
35 (889)	5'-0 " (1.524 m)	39 (991)	8'-3" (2.515 m)	8'-0" (2.438 m)	5 (127)	*	1:1.9
30 (762)	6'-0 " (1.829 m)	27 (686)	8'-3" (2.515 m)	8'-6" (2.591 m)	5½ (140)	*	1:1.7
36 (914)	6'-6" (1.981 m)	21 (533)	8'-3" (2.514 m)	9'-0" (2.743 m)	6 (152	*	1:1.8
36 (914)	7'-6" (2.286 m)	21 (533)	9'-3" (2.819 m)	9'-6" (2.896 m)	6½ (165)	*	1:1.8
36 (914)	7'-6½'' (2.299 m)	21 (533)	9'-3½" (2.832 m)	10'-0" (3.048 m)	6½ (165)	*	1:1.6

* Radius as furnished by manufacturer

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

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

I	0	N	S	

PRECAST REINFORCED **CONCRETE FLARED END SECTION**

STANDARD 542301-03





CONCRETE HEADWALL FOR PIPE UNDERDRAINS





ELEVATION

TYPE A 6'-3" (1.905 m) Typical post spacing





SECTION B-B

** When connecting Type D guardrail to an impact attenuator, adjust this dimension to match over a distance of 25'-0" (7.62 m) from point of connection if necessary.





DATE	REVISIONS
1-1-18	Revised steel post to hav
	four holes in each flange.
1-1-17	Added detail for leave-out
	Rev. 'D' to less than 6 (1
	for guardrail behind curb.







FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED, but do

STEEL PLATE BEAM GUARDRAIL

(Sheet 4 of 4)

STANDARD 630001-12





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IONS	
notes.	



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sign	
with	
RKERS'	

OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) **FROM PAVEMENT EDGE**



TYPE A

TYPE B

	а	b	с	Sx-x in.³ (mm³)	lbs./ft. (kg/m)
Steel	3 1⁄16	1¼	1½6	0.223	2.00
	(78)	(32)	(37)	(3,654)	(2.98)
Aluminum	3½	1%	1%	0.435	0.90
	(89)	(41)	(48)	(7,128)	(1.34)
Steel	3∛16	1¼	1½	0.341	3.00
	(81)	(32)	(38)	(5,588)	(4.46)
Aluminum	4%	2¼	2∛8	0.888	1.30
	(118)	(57)	(60)	(14,552)	(1.93)

🛞 Illinois	Department of Tra	nsportat	ion
PASSED _	January 1, Scort 2556 X	2009	ISSUE
ENGINEER OF	FOLICY AND PROCEDURES	2009	0 1-1
	Ere E Han DESIGN AND ENVIRONMENT	_ 2003	-97

DATE REVISI 1-1-09 Switched units to English (metric). 1-1-97 Renum. Standard

pecified)

otherwise

7-0" (2.1 m) (Unless





GENERAL NOTES

Dimensions shown for cross sections are minimum.

All holes are ¾ (10).

Sx-x is the minimum section modulus about the x-x axis of the post as shown. For posts in which holes are punched or drilled for more than half their length, Sx-x shall be computed for the net section.

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

ONS
2350-4.

METAL POSTS FOR SIGNS, MARKERS & DELINEATORS

STANDARD 720011-01





TYPE 2



<u> TYPE 3</u>

GENERAL NOTES

See detail on Standard 729001 for mounting markers to posts.

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

OBJECT AND TERMINAL MARKERS

STANDARD 725001-01

Т Ground surface 6 (61 1 m) Ty. A 0 (1 2 m) Ty B

ONE POST INSTALLATION

W

TWO POST INSTALLATION

W

0.50W

12 (300)

min.

0.25W

 \cap

0.25W

< 100

3 6 (1 1 m) Ty 4 0 (1 2 m) Ty



For diamond shaped sign with side S as shown, use required post size for a sign with W = 0.7Sand D = 1.4S.

Illinois Department of Transportation				
PASSED January 1, 2009	ISI			
ENGINEER OF POLICY AND PROCEDURES	SUED			
APPROVED January 1, 2009	1-1-9			
ENGINEER OF DESIGN AND ENVIRONMENT	74			

SIGN DEPTH	н	NC F). AND OR SIC	TYPE Gn Wie	OF PC DTH (V	9S⊤ V)
(D)		12 (300)	18 (450)	24 (600)	30 (750)	36 (900)
	5'-0" (1.5 m)	Α	(130) A	Α	(, 30) A	Δ
	5'-6" (1.7 m)	A	A	A	A	A
	6'-0" (1.8 m)	A	A	A	A	B
	6'-6" (2.0 m)	A	A	A	A	B
18	7'-0" (2.1 m)	A	A	A	A	B
(450)	7'-6" (2.3 m)	A	A	A	A	B
	8'-0" (2.4 m)	A	A	A	A	B
	8'-6" (2.6 m)	A	A	A	B	B
	9'-0" (2.7 m)	A	A	A	B	B
	5 5 (21, 11)	7.	,,	7.		
	5'-0" (1.5 m)	Α	А	Α	А	В
	5'-6" (1.7 m)	A	A	A	A	В
	6'-0" (1.8 m)	Α	A	Α	В	В
	6'-6" (2.0 m)	A	A	A	B	B
24	7'-0" (2.1 m)	A	A	A	B	B
(600)	7'-6" (2.3 m)	A	A	A	B	B
	8'-0" (2.4 m)	A	A	A	B	2A
	8'-6" (2.6 m)	Δ	Δ	B	B	24
	9'-0" (2.7 m)	A	A	B	B	2A
	3 3 (21, 11)		,,			
	5'-0" (1.5 m)	Δ	Δ	Δ	В	В
-	5'-6" (1.7 m)	A	A	A	B	2A
	6'-0" (1.8 m)	Δ	Δ	Δ	B	24
	6'-6" (2.0 m)	Δ	Δ	Δ	B	24
30	7'-0" (2.1 m)	Δ	Δ	B	B	24
(750)	7'-6" (2.3 m)	Δ	Δ	B	B	24
	8'-0" (2.4 m)	Δ	Δ	B	B	2/1
	8'-6" (2.6 m)	Δ	Δ	B	24	2/1
	9'-0" (2.7 m)	Δ	Δ	B	24	24
	5 6 (2.7 11)	,,		D	273	273
	5'-0" (1.5 m)	Δ	Δ	В	В	24
	5'-6" (1.7 m)	Α	Δ	B	B	24
	6'-0" (1.8 m)	A	Α	B	B	24
	6'-6" (2.0 m)	Α	A	B	24	24
36	7'-0" (2.1 m)	A	A	B	2A	2A
(900)	7'-6" (2.3 m)	A	A	B	2A	2A
	8'-0" (2.4 m)	A	В	B	2A	2A
	8'-6" (2.6 m)	A	B	B	2A	2B
	9'-0" (2.7 m)	A	B	2A	2A	2B
	(,					
	5'-0" (1.5 m)	Α	А	В	2A	2A
	5'-6" (1.7 m)	A	В	В	2A	2A
	6'-0" (1.8 m)	A	B	В	2A	2A
	6'-6" (2.0 m)	A	B	2A	2A	2B
4'-0"	7'-0" (2.1 m)	A	B	2A	2A	2B
(1.2 m)	7'-6" (2.3 m)	A	B	2A	2B	2B
	8'-0" (2.4 m)	A	B	2A	2B	2B
	8'-6'' (2.6 m)	В	B	2B	2B	2B
	9'-0" (2.7 m)	B	2A	2B	2B	2B

DATE REVISI 1-1-09 Switched units to English (metric). 1-1-97 Renum. Standard



DETAIL OF MOUNTING SIGN TO POST

NOTE: Minimum of 2 bolts per post required.

GENERAL NOTES

DESIGN: Current AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals

LOADING: for 60 mph (95 km/h) wind velocity with 30% gust factor, normal to sign.

SOIL PRESSURE: Minimum allowable soil pressure 1.25 tsf (120 kPa).

See Standard 720011 for details of Types A and B posts.

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

IONS	
2363 - 2.	

APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)

STANDARD 729001-01



IONS
Revised
sed note
crossing
I. Renamed
W' detail to
ARROW'.







STANDARD 780001-05

(Sheet 2 of 3)

TYPICAL PAVEMENT MARKINGS

LETTER AND ARROW GRID SCALE

The space between adjacent letters or numerals should be approximately 3 (75) for 6' (1.8 m) legend and 4 (100) for 8' (2.4 m) legend.

Legend Height	Arrow Size	a
6'(1.8 m)	Small	2.9 (74)
8' (2.4 m)	Large	3.8 (96)







TYPICAL PAVEMENT MARKINGS

(Sheet 3 of 3)

STANDARD 780001-05



Reduce to 40' (12.2 m) o.c. on curves with posted or advisory speeds of 45 mph (70 km/h) or less.

TWO-LANE / TWO-WAY





*,** See MULTI LANE DIVIDED detail for lane marker notes.

MULTI-LANE UNDIVIDED



 * $\,$ Reduce to 40' (12.2 m) o.c. on curves where advisory speeds are 10 mph (15 km/h) lower than posted speeds.

W4-2

** Where double lane line markers are specified, they shall be spaced as shown.



MULTI-LANE DIVIDED





*,** See MULTI LANE DIVIDED detail for lane marker notes.

TWO-WAY LEFT TURN







Illinois Department of Transportat	ion
PASSED January 1, 2020	ISSUED
APPROVED January 1, 2020	1-1-2000

GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

(Sheet 3 of 3)

STANDARD 782006-01



SIONS	
sign	UFF-RD WOVING OPERATIONS,
with	
	\neg $ZL, ZW, DAT UNLT$
RKERS'	
	STANDARD 701011-04



LANE CLOSURE, 2L, 2W, **SHORT TIME OPERATIONS**

STANDARD 701301-04



ENGINE

SIONS	
Omitted	
gn.	
ctions	

STANDARD 701311-03



IONS
hape to
rapet.
tangents.
hts to
s Revised

BRIDGE REPAIR WITH BARRIER



TRAFFIC SIGNAL SEQUENCE						
PHASE		А			В	
INTERVAL	1	2	3	4	5	6
NORTHBOUND OR EASTBOUND	G	Y	R	R	R	R
SOUTHBOUND OR WESTBOUND	R	R	R	G	Y	R









TEMPORARY PAVEMENT MARKING



TEMPORARY CONCRETE	BARRIER
NORMAL POSTED SPEED	TAPER RATIO
40 mph AND ABOVE	12:1
BELOW 40 mph	8:1

ADVISORY SPEED LIMIT	
NORMAL POSTED SPEED	ADVISORY SPEED
55 - 45 mph	40 mph
40 mph	35 mph
35 - 30 mph	30 mph

GENERAL NOTES

This Standard is used where, at any time, any vehicle, equipment, workers, or their activities will encroach on one lane of a bridge. Traffic signals and a positive barrier are required.

Traffic signals shall be operational only when all traffic controls are in place. When traffic signals are not in operation, flaggers shall be used and traffic control shall conform to Standard 701201 or 701206.

Temporary concrete barrier shall be according to Standard 704001.

Existing or temporary pavement markings shall be on both sides of open lane from stop bar to stop bar.

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

LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER

(Sheet 2 of 2)

STANDARD 701321-18



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G20-I104(0)-6036

G20-I105(0)-6024

This signing is required for all projects 2 miles (3200 m) or more in length.

ROAD CONSTRUCTION NEXT X MILES sign shall be placed 500' (150 m) in advance of project limits.

END CONSTRUCTION sign shall be erected at the end of the job unless another job is within 2 miles (3200 m).

Dual sign displays shall be utilized on multilane highways.

WORK LIMIT SIGNING



Sign assembly as shown on Standards or as allowed by District Operations.



G20-I103-6036

This sign shall be used when the above sign assembly is used.

HIGHWAY CONSTRUCTION SPEED ZONE SIGNS

**** R10-I108p shall only be used along roadways under the juristiction of the State.

TRAFFIC CONTROL DEVICES

(Sheet 2 of 3)

STANDARD 701901-08







