



PROPOSAL SUBMITTED BY		
Chicagoland Paving Contractors, Inc.		
Contractor's Name		
225 Telser Road		
Street		P.O. Box
Lake Zurich	IL	60047
City	State	Zip Code

STATE OF ILLINOIS

COUNTY Cook/Lake  
Village of Buffalo Grove  
 (Name of City, Village, Town or Road District)

FOR THE IMPROVEMENT OF

STREET NAME OR ROUTE Various  
 SECTION NO. N/A  
 TYPES OF FUNDS Local

- SPECIFICATIONS (required)       PLANS (required)       CONTRACT BOND (when required)

**For Municipal Projects**  
 Submitted/Approved/Passed  
  
 Mayor  President of Board of Trustees  Municipal Official  
 Date 3/18/19

**Department of Transportation**  
 Concurrence in approval of award  
 \_\_\_\_\_  
 Regional Engineer  
 Date

**For County and Road District Projects**  
 Submitted/Approved  
 \_\_\_\_\_  
 Highway Commissioner  
 \_\_\_\_\_  
 Date  
 Submitted/Approved  
 \_\_\_\_\_  
 County Engineer/Superintendent of Highways  
 \_\_\_\_\_  
 Date

County Cook/Lake  
Local Public Agency V. of Buffalo Grove  
Section Number N/A  
Route Various

1. THIS AGREEMENT, made and concluded the 18th day of March, 2019,  
Month and Year  
between the Village of Buffalo Grove  
acting by and through its President and Board of Trustees known as the party of the first part, and  
Chicagoland Paving Contractors, Inc. his/their executors, administrators, successors or assigns,  
known as the party of the second part.
2. Witnesseth: That for and in consideration of the payments and agreements mentioned in the Proposal hereto attached, to  
be made and performed by the party of the first part, and according to the terms expressed in the Bond referring to these  
presents, the party of the second part agrees with said party of the first part at his/their own proper cost and expense to do  
all the work, furnish all materials and all labor necessary to complete the work in accordance with the plans and  
specifications hereinafter described, and in full compliance with all of the terms of this agreement and the requirements of  
the Engineer under it.
3. And it is also understood and agreed that the LPA Formal Contract Proposal, Special Provisions, Affidavit of Illinois  
Business Office, Apprenticeship or Training Program Certification, and Contract Bond hereto attached, and the Plans for  
Section \_\_\_\_\_, in the Village of Buffalo Grove  
approved by the Illinois Department of Transportation on \_\_\_\_\_, are essential documents of this  
Date  
contract and are a part hereof.
4. IN WITNESS WHEREOF, The said parties have executed these presents on the date above mentioned.

Attest:  
*Janet M. Sorensen* Clerk  
(Seal)

The Village of Buffalo Grove  
By *Beverly Sussman* Party of the First Part  
(If a Corporation)

Corporate Name *Chicagoland Paving*  
By *[Signature]* v.p. Party of the Second Part  
v. President  
(If a Co-Partnership)

Attest:  
*[Signature]*  
Secretary

Partners doing Business under the firm name of  
Party of the Second Part  
(If an individual)  
Party of the Second Part





Contract Bond

Route	<u>Various</u>
County	<u>Cook/Lake</u>
Local Agency	<u>V. of Buffalo Grove</u>
Section	<u>N/A</u>

We , Chicagoland Paving Contractors, Inc.

225 Telser Road, Lake Zurich, IL 60047

a/an)  Individual  Co-partnership  Corporation organized under the laws of the State of Illinois ,

as PRINCIPAL, and West Bend Mutual Insurance Company, PO Box 620976, Middleton, WI 53562

as SURETY,

are held and firmly bound unto the above Local Agency (hereafter referred to as "LA") in the penal sum of One Hundred Twelve Thousand Nine Hundred Fifty Dollars and 00/100 -----

----- Dollars ( \$112,950.00 ), lawful money of the United States, well and truly to be paid unto said LA, for the payment of which we bind ourselves, our heirs, executors, administrators, successors, jointly to 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 has entered into a written contract with the LA acting through its awarding authority for the construction of work on the above section, which contract is hereby referred to and made a part hereof, as if written herein at length, and whereby the said Principal has promised and agreed to perform said work in accordance with the terms of said contract, and has promised to pay all sums of money due for any labor, materials, apparatus, fixtures or machinery furnished to such Principal for the purpose of performing such work and has further agreed to pay all direct and indirect damages to any person, firm, company or corporation suffered or sustained on account of the performance of such work during the time thereof and until such work is completed and accepted; and has further agreed that this bond shall inure to the benefit of any person, firm, company or corporation to whom any money may be due from the Principal, subcontractor or otherwise for any such labor, materials, apparatus, fixtures or machinery so furnished and that suit may be maintained on such bond by any such person, firm, company or corporation for the recovery of any such money.

NOW THEREFORE, if the said Principal shall well and truly perform said work in accordance with the terms of said contract, and shall pay all sums of money due or to become due for any labor, materials, apparatus, fixtures or machinery furnished to him for the purpose of constructing such work, and shall commence and complete the work within the time prescribed in said contract, and shall pay and discharge all damages, direct and indirect, that may be suffered or sustained on account of such work during the time of the performance thereof and until the said work shall have been accepted, and shall hold the LA and its awarding authority harmless on account of any such damages and shall in all respects fully and faithfully comply with all the provisions, conditions and requirements of said contract, then this obligation to be void; otherwise to remain in full force and effect.



IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this 20th day of March A.D. 2019

**PRINCIPAL**

Chicagoland Paving Contractors, Inc. \_\_\_\_\_  
(Company Name) \_\_\_\_\_ (Company Name)  
By: [Signature] V.P. \_\_\_\_\_  
(Signature & Title) \_\_\_\_\_ (Signature & Title)  
Attest: Chris Keller witness \_\_\_\_\_  
(Signature & Title) \_\_\_\_\_ (Signature & Title)

(If PRINCIPAL is a joint venture of two or more contractors, the company names and authorized signature of each contractor must be affixed.)

STATE OF ILLINOIS,  
COUNTY OF Cook

I, Julie Heiderman, a Notary Public in and for said county, do hereby certify that

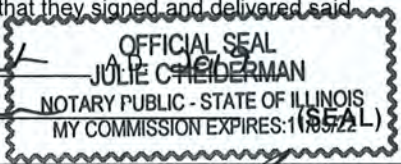
William R. Bowes + Chris Keller  
(Insert names of individuals signing on behalf or PRINCIPAL)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instrument as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this 19 day of March

My commission expires 11/2/22

[Signature]  
Notary Public



**SURETY**

West Bend Mutual Insurance Company  
(Name of Surety)

By: [Signature]  
Luke F. Praxmarer (Signature of Attorney-in-Fact)  
(SEAL)

STATE OF ILLINOIS,  
COUNTY OF Cook

I, Dorothy R. Sommers, a Notary Public in and for said county, do hereby certify that

Luke F. Praxmarer  
(Insert names of individuals signing on behalf or SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instrument as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this 20th day of March

My commission expires July 27, 2022

[Signature]  
Notary Public



Approved this 18th day of MARCH, A.D. 2019

Attest: [Signature]  
Village Clerk

[Signature]  
(Awarding Authority)  
(Chairman/Mayor/President)



**POWER OF ATTORNEY**

Know all men by these Presents, That West Bend Mutual Insurance Company, a corporation having its principal office in the City of West Bend, Wisconsin does make, constitute and appoint:

LUKE F PRAXMARER

lawful Attorney(s)-in-fact, to make, execute, seal and deliver for and on its behalf as surety and as its act and deed any and all bonds, undertakings and contracts of suretyship, provided that no bond or undertaking or contract of suretyship executed under this authority shall exceed in amount the sum of: Seven Million Five Hundred Thousand Dollars (\$7,500,000)

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of West Bend Mutual Insurance Company at a meeting duly called and held on the 21<sup>st</sup> day of December, 1999.

*Appointment of Attorney-In-Fact. The president or any vice president, or any other officer of West Bend Mutual Insurance Company may appoint by written certificate Attorneys-In-Fact to act on behalf of the company in the execution of and attesting of bonds and undertakings and other written obligatory instruments of like nature. The signature of any officer authorized hereby and the corporate seal may be affixed by facsimile to any such power of attorney or to any certificate relating therefore and any such power of attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the company, and any such power so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the company in the future with respect to any bond or undertaking or other writing obligatory in nature to which it is attached. Any such appointment may be revoked, for cause, or without cause, by any said officer at any time.*

In witness whereof, the West Bend Mutual Insurance Company has caused these presents to be signed by its president undersigned and its corporate seal to be hereto duly attested by its secretary this 22nd day of September, 2017.

Attest Christopher C. Zwygart  
Christopher C. Zwygart  
Secretary



Kevin A. Steiner  
Kevin A. Steiner  
Chief Executive Officer/President

State of Wisconsin  
County of Washington

On the 22nd day of September, 2017, before me personally came Kevin A. Steiner, to me known being by duly sworn, did depose and say that he resides in the County of Washington, State of Wisconsin; that he is the President of West Bend Mutual Insurance Company, the corporation described in and which executed the above instrument; that he knows the seal of the said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the board of directors of said corporation and that he signed his name thereto by like order.



Juli A. Benedum  
Juli A. Benedum  
Senior Corporate Attorney  
Notary Public, Washington Co., WI  
My Commission is Permanent

The undersigned, duly elected to the office stated below, now the incumbent in West Bend Mutual Insurance Company, a Wisconsin corporation authorized to make this certificate, Do Hereby Certify that the foregoing attached Power of Attorney remains in full force effect and has not been revoked and that the Resolution of the Board of Directors, set forth in the Power of Attorney is now in force.

Signed and sealed at West Bend, Wisconsin this 20th day of March, 2019.



Heather A. Dunn  
Heather Dunn  
Vice President – Chief Financial Officer

**Notice:** Any questions concerning this Power of Attorney may be directed to the Bond Manager at NSI, a division of West Bend Mutual Insurance Company.





**Illinois Department of Transportation**

**Local Public Agency  
Formal Contract Proposal**

PROPOSAL SUBMITTED BY

Chicagoland Paving Contractors Inc.  
225 Telser Road  
Lake Zurich, IL 60047

ox

de

STATE OF ILLINOIS

COUNTY OF Cook/Lake

Village of Buffalo Grove

(Name of City, Village, Town or Road District)

FOR THE IMPROVEMENT OF

STREET NAME OR ROUTE NO. 2019 Winter Repairs Project

SECTION NO. N/A

TYPES OF FUNDS General (Local)

SPECIFICATIONS (required)

PLANS (required)

**For Municipal Projects**

Submitted/Approved/Passed

Mayor  President of Board of Trustees  Municipal Official

Date

**Department of Transportation**

Released for bid based on limited review

Regional Engineer

Date

**For County and Road District Projects**

Submitted/Approved

Highway Commissioner

Date

Submitted/Approved

County Engineer/Superintendent of Highways

Date

*P-92 6143413 2-28-19*  
BID DATE: *2-28-19*  
BID TIME: *11:00*  
WITH PRINTS: *LG SM NO*  
COMPLETE DATE/DAYS: *10/90*

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



**ADDENDUM 01**  
**FOR**  
**2019 WINTER REPAIRS PROJECT**  
**VILLAGE OF BUFFALO GROVE, IL**  
**GHA Project #: 4798.037**

Date of Addendum: Monday, February 25, 2019

**Bid Due Date:** 11:00 AM Thursday, February 28, 2019

**Description of Addendum:**

The following items provide additional clarification and modifications to the bid documents and are made a part of the bid documents for the Village of Buffalo Grove's '2019 Winter Repairs Project'. It is the bidder's responsibility to review all bid documents thoroughly in preparation of their bid.

Additionally, this addendum shall be attached to the bid proposal and if not, the bid may be disqualified.

**Project Specification Revisions and Clarifications:**

1. Delete 'Class A' in the first sentence in paragraph three of Special Provision 2 '*Aggregate Base Course, Type B*' and replace with 'Class B'.

End of Addendum 01

**NOTICE TO BIDDERS**

County Cook/Lake  
 Local Public Agency V. of Buffalo Grove  
 Section Number N/A  
 Route Various

Sealed proposals for the improvement described below will be received at the office of Village of Buffalo Grove,  
Attn: Village Clerk, 50 Raupp Boulevard, Buffalo Grove, Illinois 60089 until 11:00 AM on February 28, 2019  
Address Time Date

Sealed proposals will be opened and read publicly at the office of Village of Buffalo Grove  
Council Chambers, 50 Raupp Boulevard, Buffalo Grove, Illinois 60089 at 11:00 AM on February 28, 2019  
Address Time Date

**DESCRIPTION OF WORK**

Name 2019 Winter Repairs Project Length: 0.00 feet ( 0.00 miles)  
 Location Various Street Segments and Parking Lots Within the Village Limits  
 Proposed Improvement HMA Pavement Patching; Curb & Gutter Removal and Replacement; Driveway Pavement Removal and Replacement; Landscape Restoration; and other associated improvements.

1. Plans and proposal forms will be available in the office of Gewalt Hamilton Associates, Inc.  
http://www.gha-engineers.com/bidding-info (Download Fee: \$20)  
Address

2.  Prequalification  
 If checked, the 2 low bidders must file within 24 hours after the letting an "Affidavit of Availability" (Form BC 57), in duplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work. One original shall be filed with the Awarding Authority and one original with the IDOT District Office.

3. The Awarding Authority reserves the right to waive technicalities and to reject any or all proposals as provided in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals.

4. The following BLR Forms shall be returned by the bidder to the Awarding 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 (do not use for federally funded projects)~~
  - e. BLR 12326: Affidavit of Illinois Business Office

5. The quantities appearing in the bid schedule are approximate and are prepared for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as hereinafter provided.

6. Submission of a bid shall be conclusive assurance and warranty the bidder has examined the plans and understands all requirements for the performance of work. The bidder will be responsible for all errors in the proposal resulting from failure or neglect to conduct an in depth examination. The Awarding Authority will, in no case be responsible for any costs, expenses, losses or changes in anticipated profits resulting from such failure or neglect of the bidder.

7. The bidder shall take no advantage of any error or omission in the proposal and advertised contract.

8. Each proposal should be submitted in an opaque envelope and shall be marked to clearly indicate its contents. When sent by mail, the sealed proposal shall be addressed to the Village of Buffalo Grove at the address and in care of the official in whose office the bids are to be received. All proposals shall be filed 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.

10. All bidders are prohibited from making any contact with the Village President, Trustees, or any other official or employee of the Village (collectively, 'Municipal Personnel') with regard to the Project, other than in the manner and to the person(s) designated herein. The Buffalo Grove Village Manger reserves the right to disqualify any bidder that is found to have contacted Municipal Personnel in any manner with regard to the Project. Additionally, if the Buffalo Grove Village Manager determines that the contact with Municipal Personnel was in violation of any provision of 720 ILCS 5/33E, the matter will be turned over to the State's Attorney for review and prosecution.
11. All bidders are required to register with the Village of Buffalo Grove at:  
<https://vrapp.vendorregistry.com/Vendor/Register/Index/buffalo-grove-village-of-il-vendor-registration>  
OR  
[www.vbg.org/bids](http://www.vbg.org/bids)
12. Any interpretation of the Contract Documents will be made only by an addendum duly issued by the Engineer. No requests received after 3:00 PM on Friday, February 22, 2019 will be considered.

All communication during the bid process shall be directed to:

Gewalt Hamilton Associates, Inc.  
Attn: Brian Wesolowski, PE  
625 Forest Edge Drive  
Vernon Hills, Illinois 60061  
(847) 821-6235  
[bwesolowski@gha-engineers.com](mailto:bwesolowski@gha-engineers.com)

PROPOSAL

County	<u>Cook/Lake</u>
Local Public Agency	<u>V. of Buffalo Grove</u>
Section Number	<u>N/A</u>
Route	<u>Various</u>

1. Proposal of chicagoland Paving

for the improvement of the above section by the construction of HMA Pavement Patching; Curb & Gutter Removal and Replacement; Driveway Pavement Removal & Replacement; Landscape Restoration;  
and other associated improvements for

a total distance of 0.00 feet, of which a distance of 0.00 feet, ( 0.000 miles) are to be improved.

2. The plans for the proposed work are those prepared by Gewalt Hamilton Associates, Inc.  
and approved by the Department of Transportation on \_\_\_\_\_

3. The specifications referred to herein are those prepared by the Department of Transportation and designated as "Standard Specifications for Road and Bridge Construction" and the "Supplemental Specifications and Recurring Special Provisions" thereto, adopted and in effect on the date of invitation for bids.

4. The undersigned agrees to accept, as part of the contract, the applicable Special Provisions indicated on the "Check Sheet for Recurring Special Provisions" contained in this proposal.

5. The undersigned agrees to complete the work within \_\_\_\_\_ working days or by (See General Conditions) unless additional time is granted in accordance with the specifications.

6. A proposal guaranty in the proper amount, as specified in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals, will be required. Bid Bonds will be allowed as a proposal guaranty. Accompanying this proposal is either a bid bond if allowed, on Department form BLR 12230 or a proposal guaranty check, complying with the specifications, made payable to:

Village \_\_\_\_\_ Treasurer of Buffalo Grove

The amount of the check is Bid Bond (10% of Total Bid) ( \_\_\_\_\_ )

7. 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. 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.

8. 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.

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

10. The undersigned submits herewith the schedule of prices on BLR 12200a covering the work to be performed under this contract.





**CONTRACTOR CERTIFICATIONS**

County	<u>Cook/Lake</u>
Local Public Agency	<u>V. of Buffalo Grove</u>
Section Number	<u>N/A</u>
Route	<u>Various</u>

The certifications hereinafter 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 Delinquency.** 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 individual 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 as a result of a conviction under this Section 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 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.

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 official 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.

5. **Conflict of Interest.** The Village of Buffalo Grove Municipal Code requires the following verification relative to conflict of interest and compliance with general ethics requirements of the Village:

The undersigned supplier hereby represents and warrants to the Village of Buffalo Grove as a term and condition of acceptance of the this (bid or purchase order) that none of the following Village Officials are either an officer or director of supplier or owns five percent (5%) or more of the Supplier: the Village President, the members of the Village Board of Trustees, the Village Clerk, the Village Treasurer, the members of the Planning & Zoning Commission, the Village Manager and his Assistant or Assistants, or the heads of the various departments of the Village of Buffalo Grove.

If the foregoing representation and warranty is inaccurate, state the name of the Village official who either is an officer or director of your business entity or owns five percent (5%) or more thereof:

(Official) \_\_\_\_\_

SIGNATURES

County Cook/Lake  
 Local Public Agency V. of Buffalo Grove  
 Section Number N/A  
 Route Various

(If an individual)

Signature of Bidder \_\_\_\_\_

Business Address \_\_\_\_\_

(If a partnership)

Firm Name \_\_\_\_\_

Signed By \_\_\_\_\_

Business Address \_\_\_\_\_

Inset Names and Addressed of All Partners



(If a corporation)

Corporate Name chicagoland Paving

Signed By WR Bauer V.P. VP  
V. President

Business Address 225 Telser Rd  
Lake Zurich IL 60047

Inset Names of Officers

President Kevin Meertz  
 Secretary v.p. William R. Bowes  
 Treasurer \_\_\_\_\_

Attest: J. Carter Asst. Secretary





Route Various
County Cook/Lake
Local Agency V. of Buffalo Grove
Section N/A

RETURN WITH BID

PAPER BID BOND

WE Chicagoland Paving Contractors, Inc., 225 Telser Road, Lake Zurich, IL 60047 as PRINCIPAL,
and West Bend Mutual Insurance Company, PO Box 620976, Middleton, WI 53562 as SURETY,

are held jointly, severally and firmly bound unto the above Local Agency (hereafter referred to as "LA") in the penal sum of 10% 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 28 day of February 2019

Principal

Chicagoland Paving Contractors, Inc.
(Company Name)

(Company Name)

By: [Signature] v.p.
(Signature and Title)

By:
(Signature and Title)

(If PRINCIPAL is a joint venture of two or more contractors, the company names, and authorized signatures of each contractor must be affixed.)

West Bend Mutual Insurance Company
(Name of Surety)

Surety

By: [Signature]
(Signature of Attorney-in-Fact)

STATE OF ILLINOIS,

COUNTY OF Cook

I, Alexandra Tisma, a Notary Public in and for said county,

do hereby certify that [Signatures] and Luke Praxmarer

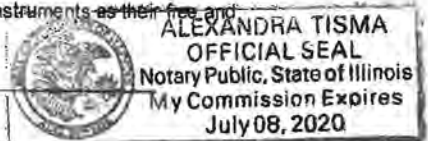
(Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instruments as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this 28th day of February

My commission expires July 8, 2020

[Signature]
(Notary Public)



ELECTRONIC BID BOND

[ ] Electronic bid bond is allowed (box must be checked by LA if electronic bid bond is allowed)

The Principal may submit an electronic bid bond, in lieu of completing the above section of the Proposal Bid Bond Form. By providing an electronic bid bond ID code and signing below, the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the LA under the conditions of the bid bond as shown above. (If PRINCIPAL is a joint venture of two or more contractors, an electronic bid bond ID code, company/Bidder name title and date must be affixed for each contractor in the venture.)

Electronic Bid Bond ID Code input field

Electronic Bid Bond ID Code

(Company/Bidder Name)

(Signature and Title)

Date





THE SILVER LINING®

Bond No. 2404153

POWER OF ATTORNEY

Know all men by these Presents, That West Bend Mutual Insurance Company, a corporation having its principal office in the City of West Bend, Wisconsin does make, constitute and appoint:

LUKE F PRAXMARER

lawful Attorney(s)-in-fact, to make, execute, seal and deliver for and on its behalf as surety and as its act and deed any and all bonds, undertakings and contracts of suretyship, provided that no bond or undertaking or contract of suretyship executed under this authority shall exceed in amount the sum of: Seven Million Five Hundred Thousand Dollars (\$7,500,000)

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of West Bend Mutual Insurance Company at a meeting duly called and held on the 21st day of December, 1999.

Appointment of Attorney-In-Fact. The president or any vice president, or any other officer of West Bend Mutual Insurance Company may appoint by written certificate Attorneys-In-Fact to act on behalf of the company in the execution of and attesting of bonds and undertakings and other written obligatory instruments of like nature. The signature of any officer authorized hereby and the corporate seal may be affixed by facsimile to any such power of attorney or to any certificate relating therefore and any such power of attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the company, and any such power so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the company in the future with respect to any bond or undertaking or other writing obligatory in nature to which it is attached. Any such appointment may be revoked, for cause, or without cause, by any said officer at any time.

In witness whereof, the West Bend Mutual Insurance Company has caused these presents to be signed by its president undersigned and its corporate seal to be hereto duly attested by its secretary this 22nd day of September, 2017.

Attest Christopher C. Zwygart
Christopher C. Zwygart
Secretary



Kevin A. Steiner
Chief Executive Officer/President

State of Wisconsin
County of Washington

On the 22nd day of September, 2017, before me personally came Kevin A. Steiner, to me known being by duly sworn, did depose and say that he resides in the County of Washington, State of Wisconsin; that he is the President of West Bend Mutual Insurance Company, the corporation described in and which executed the above instrument; that he knows the seal of the said corporation; that the seal affixed to said instrument is such corporate seal; that is was so affixed by order of the board of directors of said corporation and that he signed his name thereto by like order.



Juli A. Benedum
Senior Corporate Attorney
Notary Public, Washington Co., WI
My Commission is Permanent

The undersigned, duly elected to the office stated below, now the incumbent in West Bend Mutual Insurance Company, a Wisconsin corporation authorized to make this certificate, Do Hereby Certify that the foregoing attached Power of Attorney remains in full force effect and has not been revoked and that the Resolution of the Board of Directors, set forth in the Power of Attorney is now in force.

Signed and sealed at West Bend, Wisconsin this 28th day of February, 2019



Heather Dunn
Vice President - Chief Financial Officer

Notice: Any questions concerning this Power of Attorney may be directed to the Bond Manager at NSI, a division of West Bend Mutual Insurance Company.

CHICAGOLAND PAVING CONTRACTORS, INC.  
225 TELSER ROAD  
LAKE ZURICH, IL 60047  
Tel: 847-550-9681 Fax: 847-550-9684  
Office@chicagolandpaving.com

*Certificate of Resolution*

*I, Kevin Meartz, President of CHICAGOLAND PAVING CONTRACTORS, Inc., an Illinois corporation (the Corporation) hereby certifies that the following resolutions were unanimously adopted by the Shareholders and Directors of the Corporation by consent of the Shareholders and Directors dated May 26, 1988:*

*RESOLVED, that CHICAGOLAND PAVING CONTRACTORS, INC., an Illinois Corporation (the Corporation) authorizes William R. Bowes, to have the authority to sign and enter into a contract on behalf of CHICAGOLAND PAVING CONTRACTORS, Inc.*

*FURTHER RESOLVED, that any one or more of the President and any Secretary or Assistant Secretary of the Corporation are authorized, empowered and directed to execute and deliver on behalf of the Corporation, such documents and agreements as they or any of them determine to be necessary or advisable to effectuate the foregoing resolutions.*

*Executed in Lake Zurich, IL on May 26, 1988.*



By: \_\_\_\_\_  
Kevin Meartz, President

Affidavit of Illinois Business Office

County Cook/Lake  
Local Public Agency V. of Buffalo Grove  
Section Number N/A  
Route Various

State of IL )  
 ) ss.  
County of Cook )

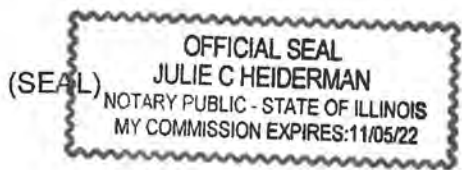
I, William R. Bowas of Kildeer, IL  
(Name of Affiant) (City of Affiant) (State of Affiant)

being first duly sworn upon oath, states as follows:

1. That I am the V.P. of Chicagoland Paving  
officer or position bidder
2. That I have personal knowledge of the facts herein stated.
3. That, if selected under this proposal, Chicagoland Paving, will maintain a  
(bidder)  
business office in the State of Illinois which will be located in Lake County, Illinois.
4. That this business office will serve as the primary place of employment for any persons employed in the construction contemplated by this proposal.
5. That this Affidavit is given as a requirement of state law as provided in Section 30-22(8) of the Illinois Procurement Code.

WR Bowas  
(Signature)  
William R. Bowas  
(Print Name of Affiant)

This instrument was acknowledged before me on 28 day of Feb, 2019.



Julie C Heiderman  
(Signature of Notary Public)



# Illinois Department of Transportation

Bureau of Construction  
 2300 South Dirksen Parkway/Room 322  
 Springfield, Illinois 62764

## Affidavit of Availability For the Letting of \_\_\_\_\_

(Letting date)

**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	IDOT/61E39	IDOT/61E43				
Estimated Completion Date	11/30/2018	11/15/2018				
Total Contract Price	89,900.00	224,900.00				Accumulated Totals
Uncompleted Dollar Value if Firm is the Prime Contractor	89,900.00	169,915.00				259,815.00
Uncompleted Dollar Value if Firm is the Subcontractor						0.00
						259,815.00

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

List below the uncompleted dollar value of work for each contract and awards pending to be completed with your own forces. All work subcontracted to others will be listed on the reverse of this form. In a joint venture, list only that portion of the work to be done by your company. If no work is contracted, show NONE.

					Accumulated Totals
Earthwork	42,000.00	54,985.00			96,985.00
Portland Cement Concrete Paving					0.00
HMA Plant Mix		7,500.00			7,500.00
HMA Paving		12,550.00			12,550.00
Clean & Seal Cracks/Joints					0.00
Aggregate Bases & Surfaces	30,796.00	39,000.00			69,796.00
Highway, R.R. and Waterway Structures					0.00
Drainage					0.00
Electrical					0.00
Cover and Seal Coats					0.00
Concrete Construction					0.00
Landscaping					0.00
Fencing					0.00
Guardrail					0.00
Painting					0.00
Signing					0.00
Cold Milling, Planning & Rotomilling					0.00
Demolition					0.00
Pavement Markings (Paint)					0.00
Other Construction (List)					0.00
Allowance					0.00
FABRIC					0.00
<b>Totals</b>	<b>72,796.00</b>	<b>114,035.00</b>			<b>186,831.00</b>

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.

					Awards Pending
Subcontractor	Galaxy	Galaxy			
Type of Work	sewer	sewer			
Subcontract Price	7,800.00	9,710.00			
Amount Uncompleted	7,800.00	9,710.00			
Subcontractor	McGinty	Carrera			
Type of Work	Landscape	Concrete			
Subcontract Price	4,014.00	6,110.00			
Amount Uncompleted	4,014.00	6,110.00			
Subcontractor	No. Contractors	Schollmeyer			
Type of Work	bollards	Landscape			
Subcontract Price	5,290.00	40,061.00			
Amount Uncompleted	5,290.00	40,061.00			
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					
<b>Total Uncompleted</b>	<b>17,104.00</b>	<b>55,881.00</b>			

I, being duly sworn, do hereby declare 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 28 day of Feb, 2019.

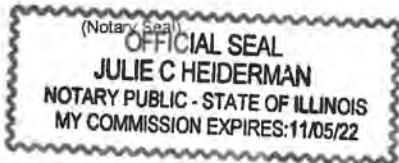
*Julie C. Heiderman*  
 Notary Public  
 My commission expires: 11/5/2022

Type or Print Name William R. Bowes, V.P.  
 Officer or Director Title

Signed *W.R. Bowes*

Company Chicagoland Paving Contractors, Inc.

Address 225 Telser Road  
Lake Zurich, IL 60047



# VILLAGE OF BUFFALO GROVE PUBLIC CONTRACT STATEMENTS

The Village of Buffalo Grove is required to obtain certain information in the administration and awarding of public contracts. The following Public Contract Statements shall be executed and notarized.

## PUBLIC CONTRACT STATEMENTS

### CERTIFICATION OF CONTRACTOR/CONSULTANT

In order to comply with 720 Illinois Compiled Statutes 5/33 E-1 et seq., the Village of Buffalo Grove requires the following certification be acknowledged:

The below-signed Contractor/Consultant hereby certifies that it is not barred from Bidding or supplying any goods, services or construction let by the Village of Buffalo Grove with or without Bid, due to any violation of either Section 5/33 E-3 or 5/33 E-4 of Article 33E, Public Contracts, of the Chapter 720 of the Illinois Compiled Statutes, as amended. This act relates to interference with public contracting, Bid rigging and rotating, kickbacks, and Bidding.

### CERTIFICATION RELATIVE TO 65 ILCS 5/11-42.1.1

In order to comply with 65 Illinois Compiled Statutes 5/11-42.1.1, the Village of Buffalo Grove requires the following certification:

The undersigned Contractor/Consultant does hereby swear and affirm that it is not delinquent in the payment of any tax administered by the Illinois Department of Revenue unless it is contesting, in accordance with the procedures established by the appropriate revenue Act, its liability for the tax or the amount of the tax. The undersigned further understands that making a false statement herein: (1) is a Class A Misdemeanor, and (2) voids the contract and allows the Village to recover all amounts paid to it under the contract.

### CONFLICT OF INTEREST

The Village of Buffalo Grove Municipal Code requires the following verification relative to conflict of interest and compliance with general ethics requirements of the Village:

The undersigned Contractor/Consultant hereby represents and warrants to the Village of Buffalo Grove as a term and condition of acceptance of this (Proposal or purchase order) that none of the following Village Officials is either an officer or Manager of Firm or owns five percent (5%) or more of the Supplier: the Village President, the members of the Village Board of Trustees, the Village Clerk, the Village Treasurer, the members of the Zoning Board of Appeals and the Plan Commission, the Village Manager and his Assistant or Assistants, or the heads of the various departments within the Village.

If the foregoing representation and warranty is inaccurate, state the name of the Village official who either is an officer or Manager of your business entity or owns five percent (5%) or more thereof:

(Official) Chicago Road Paving

William R. Bowes

Print Name of Contractor/Consultant

WR Bau

Signature

v.p.

Title

Subscribed and Sworn to before me this 28 day of Feb, 2019.

Notary Public Julie C. Heiderman





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

Recurring Special Provisions

<u>Check Sheet #</u>		<u>Page No.</u>
1	<input type="checkbox"/> Additional State Requirements for Federal-Aid Construction Contracts	75
2	<input type="checkbox"/> Subletting of Contracts (Federal-Aid Contracts)	78
3	<input type="checkbox"/> EEO	79
4	<input type="checkbox"/> Specific EEO Responsibilities Non Federal-Aid Contracts	89
5	<input type="checkbox"/> Required Provisions - State Contracts	94
6	<input type="checkbox"/> Asbestos Bearing Pad Removal	100
7	<input type="checkbox"/> Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal	101
8	<input type="checkbox"/> Temporary Stream Crossings and In-Stream Work Pads	102
9	<input type="checkbox"/> Construction Layout Stakes Except for Bridges	103
10	<input type="checkbox"/> Construction Layout Stakes	106
11	<input type="checkbox"/> Use of Geotextile Fabric for Railroad Crossing	109
12	<input type="checkbox"/> Subsealing of Concrete Pavements	111
13	<input type="checkbox"/> Hot-Mix Asphalt Surface Correction	115
14	<input type="checkbox"/> Pavement and Shoulder Resurfacing	117
15	<input type="checkbox"/> Patching with Hot-Mix Asphalt Overlay Removal	118
16	<input type="checkbox"/> Polymer Concrete	120
17	<input type="checkbox"/> PVC Pipeliner	122
18	<input type="checkbox"/> Bicycle Racks	123
19	<input type="checkbox"/> Temporary Portable Bridge Traffic Signals	125
20	<input type="checkbox"/> Work Zone Public Information Signs	127
21	<input type="checkbox"/> Nighttime Inspection of Roadway Lighting	128
22	<input type="checkbox"/> English Substitution of Metric Bolts	129
23	<input type="checkbox"/> Calcium Chloride Accelerator for Portland Cement Concrete	130
24	<input type="checkbox"/> Quality Control of Concrete Mixtures at the Plant	131
25	<input type="checkbox"/> Quality Control/Quality Assurance of Concrete Mixtures	139
26	<input type="checkbox"/> Digital Terrain Modeling for Earthwork Calculations	155
27	<input type="checkbox"/> Reserved	157
28	<input type="checkbox"/> Preventive Maintenance - Bituminous Surface Treatment	158
29	<input type="checkbox"/> Reserved	164
30	<input type="checkbox"/> Reserved	165
31	<input type="checkbox"/> Reserved	166
32	<input type="checkbox"/> Temporary Raised Pavement Markers	167
33	<input type="checkbox"/> Restoring Bridge Approach Pavements Using High-Density Foam	168
34	<input type="checkbox"/> Portland Cement Concrete Inlay or Overlay	171
35	<input type="checkbox"/> Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	175



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

<u>Check Sheet #</u>		<u>Page No.</u>
LRS 1	<b>Reserved</b>	179
LRS 2	<input type="checkbox"/> Furnished Excavation	180
LRS 3	<input checked="" type="checkbox"/> Work Zone Traffic Control Surveillance	181
LRS 4	<input checked="" type="checkbox"/> Flaggers in Work Zones	182
LRS 5	<input checked="" type="checkbox"/> Contract Claims	183
LRS 6	<input checked="" type="checkbox"/> Bidding Requirements and Conditions for Contract Proposals	184
LRS 7	<input type="checkbox"/> Bidding Requirements and Conditions for Material Proposals	190
LRS 8	<b>Reserved</b>	196
LRS 9	<input type="checkbox"/> Bituminous Surface Treatments	197
LRS 10	<b>Reserved</b>	198
LRS 11	<input checked="" type="checkbox"/> Employment Practices	199
LRS 12	<input checked="" type="checkbox"/> Wages of Employees on Public Works	201
LRS 13	<input checked="" type="checkbox"/> Selection of Labor	203
LRS 14	<input type="checkbox"/> Paving Brick and Concrete Paver Pavements and Sidewalks	204
LRS 15	<input checked="" type="checkbox"/> Partial Payments	207
LRS 16	<input type="checkbox"/> Protests on Local Lettings	208
LRS 17	<input type="checkbox"/> Substance Abuse Prevention Program	209
LRS 18	<input type="checkbox"/> Multigrade Cold Mix Asphalt	210



Local Public Agency	County	Section Number
Village of Buffalo Grove	Cook	N/A

The following Special Provision supplement the "Standard Specifications for Road and Bridge Construction", adopted

April 1, 2016, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures of Materials" in effect on the date of invitation of bids, and the Supplemental Specification and Recurring Special Provisions indicated on the Check Sheet included here in which apply to and govern the construction of the above named section, and in case of conflict with any parts, or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

2019 Winter Repairs Project

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FOR CONTRACT GENERAL CONDITIONS AND SPECIAL PROVISIONS**

**General Conditions**

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2. Definition of Village of Buffalo Grove
3. JULIE Notification
4. Prequalification of Bidders
5. Completion Date
6. Existing Hardscape
7. Construction Work Periods
8. Sub-Contracting
9. Authority of the Engineer
10. Pre-Construction Meeting
11. Maintenance of Roadways and Erosion Control
12. Traffic Control and Protection
13. Period of Establishment
14. Protection of Mailboxes
15. Construction Staging and Maintenance of Base Course
16. Use of Fire Hydrants
17. Clean Construction and Demolition (CCDD) Material Disposal
18. Insurance Requirements
19. Certified Payroll Reports
20. Monetary Penalties
21. Maintenance Bond
22. Saw Cutting
23. Earth Excavation
24. Retainage and Waivers
25. Final Site Inspection

**Special Provisions**

1. Furnished Excavation
2. Aggregate Base Course, Type B
3. Portland Cement Concrete Driveway Pavement
4. Portland Cement Concrete Sidewalk
5. Hot-Mix Asphalt Driveway Pavement
6. General Landscape Restoration (Special)
7. Combination Concrete Curb and Gutter
8. Class D Patches



**IDOT District One - Special Provisions**

1. Friction Aggregate (D-1)
2. HMA Mixture Design Requirements (D-1)
3. Reclaimed Asphalt Pavement and Reclaimed Asphalt Shingles (D-1)

## General Conditions

### 1. Scope of Work

The provisions of Article 104.02 of the Standard Specifications are hereby amended as follows: **"The Village of Buffalo Grove (Village) expressly reserves the right to remove from or add to the project any portions thereof included in the 2019 Winter Repairs Project. Such reductions, if any, shall be made in writing by the Village prior to execution of the Contract Documents. Any reduction in the scope of work required by the Village prior to the execution of the Contract Documents shall result in an adjustment to the contract or to the price originally bid."**

### 2. Definition of Village of Buffalo Grove

All references in the Contract relating to the Department, Awarding Authority, Village of Buffalo Grove, Village, etc. shall mean the Village of Buffalo Grove.

### 3. JULIE Notification

The Contractor shall call the Joint Utility Locating Information for Excavators (JULIE) (1-800-892-0123 or 811), a minimum of forty-eight (48) hours in advance of work being done in the area in accordance with Article 107.39 of the Standard Specifications.

For utilities which are not members, excluding homeowners, the Contractor shall contact the owners directly. The Contractor will be required to cooperate with all utility companies and municipal agencies involved in connection with the removal, temporary relocation, reconstruction or abandonment by these agencies of any and all services.

No additional compensation will be allowed the Contractor for any expense incurred by complying with these requirements, or because of delays, inconvenience or interruptions in his work resulting from the failure of the municipal agencies or utility company to remove, relocate, reconstruct or abandon their services.

### 4. Prequalification of Bidders

All bidders must submit with their bid, a resume of five (5) similar projects performed; enumerated as to location, type of work, approximate completion date, and contact information for the supervising engineering or architectural firm. Additionally, all bidders must submit a list of equipment owned, or available to them, for the efficient pursuance of this project.

**All bidders are required to fully register with the Village of Buffalo Grove, including IRS Form W-9, at:**

<https://vrapp.vendorregistry.com/Vendor/Register/Index/buffalo-grove-village-of-il-vendor-registration>

OR

[www.vbg.org/bids](http://www.vbg.org/bids)

Select the link 'Register My Business'

Please contact Vendor Registry at (844) 802-9202 for assistance in the registration process.

The Village of Buffalo Grove reserves the right to reject any or all proposals if the bidder does not comply with the requirements as stated herein.

### 5. Completion Date

This Contract shall be completed at two times during the year as a maintenance repair program at various locations throughout the Village.

#### **Phase I:**

The Contractor shall commence the work to be performed under this phase on or near Monday, April 15, 2019 and complete all work within **15 working days** as defined in Article 108.04 of the Standard Specifications. At the discretion of the Village, working days may be

suspended due to, but not limited to, the following asphalt suppliers availability: Arrow Road Construction Healy Asphalt Company, LLC, Peter Baker & Son Co, Builders Asphalt LLC, or Allied Asphalt, Inc.

#### **Phase II:**

The Contractor shall commence the work to be performed under this phase on or near Monday, October 21, 2019 and complete all work within **10 working days** as defined in Article 108.04 of the Standard Specifications.

The above-mentioned commencement dates for each phase could be modified by the Village due to anticipated weather concerns or unforeseen circumstances. The work shall be prosecuted in such a manner and with such a supply of materials, equipment and labor as considered necessary to ensure its completion according to the time specified in the Contract.

In case of failure to complete the work on time, the provisions of Article 108.09 of the Standard Specifications shall apply, **except regardless of the Contract amount, the daily charge shall be \$1,000 per calendar day overrun.** Landscape restoration planting times shall follow Article 250.07 of the Standard Specifications.

The estimated Village Board award date for this project is Monday, March 18, 2019.

#### **6. Existing Hardscape**

Any damage to existing hardscape from tracked equipment or due to the Contractor's negligence, workmanship, or neglect shall be replaced at the Contractor's expense. It is recommended rubber tired or rubber tracked equipment is used. Any unwarranted disturbance to the existing hardscape to remain will warrant repairs made joint to joint and in conformance with the bid documents with limits specified in the Maintenance Letter of Credit general condition. The Engineer and Village shall determine the limit of removal and replacement operations, and all work shall be completed to the satisfaction of the Engineer.

#### **7. Construction Work Periods**

Construction operations shall be completed in accordance with Article 107.09 of the Standard Specifications. All work shall be confined to the period beginning at 7:00 AM and ending at 6:00 PM on weekdays. No work shall be done on Sundays or legal holiday periods as defined in article 107.09 of the Standard Specifications.

No work shall be permitted on Saturday's unless prior written approval is granted by the Village. If work is allowed it shall be confined to the period beginning at 8:30 AM to 6:00 PM. The completion date shall be reduced by one (1) full calendar day for each Saturday the Contractor elects to work, regardless if the Saturday worked is a full or partial working day.

Any work outside the allowed time periods in accordance with the Village Ordinance, including but not limited to material deliveries, mobilization of equipment, warming up machinery, or truck staging, shall be imposed a \$1,000 monetary penalty for each occurrence.

The work zone shall be maintained in accordance with Section 701 of the Standard Specifications. Negligence by the Contractor to follow these minimum guidelines that result in or cause damage to Village equipment during snow fall removal or any other similar Village operation will be the direct responsibility of the Contractor to repair. The repair will be completed by the Village and the cost of the repair will be deducted off the next pay request due to the Contractor.

#### **8. Sub-Contracting**

Add the following to the end of ARTICLE 108.01 SUBCONTRACTING.

"The apparent low Bidder on a "Request for Approval of a Subcontractor" (BC 260a) form shall submit to the office of Engineer within ten (10) calendar days after the receipt of bids, a list of the names of Bidder's proposed subcontractors along with a description of the work to be performed by each. The Village will then review and reserves the right to reject the use of any subcontractor on the project due to past performance or the apparent inability to properly perform the item of work."

#### **9. Authority of the Engineer**

Revise ARTICLE 105.01 AUTHORITY OF ENGINEER to read:



"All work shall be done in accordance with the requirements of the Contract, the Engineer shall have the right, but not the obligation, to observe all work. The Engineer shall decide all questions that arise as to the interpretation of the Plans and Specifications and as to disputes and mutual rights between Contractors under the Specifications. The Engineer shall advise the Village of Buffalo Grove as to the quality and acceptability of materials furnished and work performed, rate of progress of the work, and acceptable fulfillment of the Contract. The Engineer will determine the amount of materials furnished and work performed. The Engineer's advice and determinations shall be conditions precedent to the right of the Contractor to receive money due the Contractor under the Contract."

"The Engineer will notify the Contractor in writing if the work is to be suspended by the Village of Buffalo Grove wholly or in part due to the failure of the Contractor to carry out provisions of the contract; for failure to carry out orders; for such periods due to unsuitable weather; for conditions considered unsuitable for the prosecution of the work or for any other condition or reason deemed to be in the public interest."

"In case of failure on the part of the Contractor to execute work as directed by the Engineer, the Village of Buffalo Grove may, at the expiration of a period of 48 hours after giving notice in writing to the Contractor, proceed to execute such work as may be deemed necessary, and the cost thereof shall be deducted from compensation due or which may become due to the Contractor under the contract."

The Engineer shall not assume any of the responsibilities of the Contractor's superintendent or of subcontractors; shall not expedite the work for the Contractor; and shall not advise on, or issue directions concerning aspects of construction means, methods, techniques, sequences or procedures, or safety precautions in connection with the work.

#### **10. Pre-Construction Meeting**

Prior to commencing any construction operations, there shall be a pre-construction meeting. The Owner or Engineer will set the time and date of the meeting following Contract award.

The following shall be submitted by the Contractor for review at the pre-construction meeting:

A Progress Schedule in accordance with Article 108.02.

The 24-hour emergency phone number and contact information of the assigned Contractor's superintendent, or otherwise.

The name and 24-hour emergency phone number of the person in the direct employ of the Contractor who is responsible for administering the Traffic Control and Protection on the Contract

A list of subcontractors with contact information, including but not limited to name, phone number, and email address, and include quantity and type of work to be sublet for each respective subcontractor in accordance with Article 108.01 of the Standard Specifications.

A list of proposed sources of material.

Hot-mix asphalt and concrete mix designs, and respective quality control plans.\*

Any applicable shop drawing submittals.\*

\*Shop drawings and mix designs for concrete and bituminous items to be installed on the project shall be submitted to the Village no less than ten (10) calendar days from the effective notice to proceed dated letter or the scheduled date of the pre-construction meeting, whichever occurs earlier. A monetary penalty of \$500 may be imposed for each required submittal thereafter.

#### **11. Maintenance of Roadways and Erosion Control**

Beginning on the date that the Contractor begins work on this project, he shall assume responsibility for normal maintenance of all existing roadways and trenches 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 contract documents.

The Contractor shall be required to control dust or air-borne dirt resulting from construction operations by utilizing a mechanical street sweeper on all pavement within or adjacent to the project work zone. The resulting debris shall be disposed of off-site in accordance with

Article 202.03 of the Standard Specifications. Individual fire hydrant use shall not be permitted to control dust at specific locations. The Contractor shall provide dust control operations daily or as directed by the Engineer.

The cost of this work shall be included in the unit prices bid and no additional compensation shall be allowed to control dust as specified herein.

Any excavation left open during non-work hours shall be filled, whether permanent or temporarily, within 24 hours of the completion of excavation operations at each specific location. The excavated area shall be adequately protected from the public and approved by the Village.

Prior to proposed material installation, the Contractor shall notify the Engineer of any specific locations that additional settlement may be expected in the future. If the Contractor fails to comply with this requirement, and future settlement occurs, the Contractor shall be responsible for making the necessary repairs in accordance with the Maintenance Bond and as specified herein.

If items of work have not been provided for 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.

## **12. Traffic Control and Protection**

Traffic control shall be in accordance with the applicable sections of the Standard Specifications for Road and Bridge Construction, the applicable guidelines contained in the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, these special provisions, and any special details and Highway Standards herein and in the plans, if applicable, and the Standard Specifications for Traffic Control Items. Special attention is called to the following sections of the Standard Specifications, the Highway Standards, and the special provisions relating to traffic control:

Delays to the Contractor caused by complying with these requirements will be considered included in the cost of the Contract, and no additional compensation will be allowed.

### **Standards**

701001, 701006, 701011, 701301, 701311, 701501, 701801 and 701901

### **Details**

TC-10 Traffic Control and Protection for Side Roads, Intersections and Driveways

### **Special Provisions**

Maintenance of Roadways

Traffic Control Plan

No roads or segments shall be closed without prior written approval from the Engineer. The Contractor must present to the Engineer, a detour plan with a detailed description addressing how resident access will be maintained and all applicable signage. Submittal of a road closure request to the Engineer does not guarantee approval. Any additional traffic control devices required for road closures per the Contractor's request shall not be paid for separately but shall be included in the cost of the contract.

The Contractor shall be properly advised of the regulated weight limits within the surrounding areas of the project. No additional compensation in time or monetary value will be allowed. The Village of Buffalo Grove Police Department requires permits for Overweight/Over-Sized Trucks or Vehicles. The Contractor can find additional information at [www.vbg.org/645/Truck-Enforcement](http://www.vbg.org/645/Truck-Enforcement) or by calling (847) 459-2560.

Temporary "No Parking" signs must be approved by the Engineer prior to installation and the Village must be notified for each individual use or occurrence. The temporary signs must be POSTED AND DATED at least 24 hours before the intended date of use and shall be a minimum size of 8.5"x11", with a contrasting background and be lathe or post mounted. Any signage that is posted without the Engineer's approval will be assessed a monetary penalty of \$500 per day until removed. **The Contractor shall not tow or move any vehicles.**

The cost of this work shall be included in the unit prices bid and no additional compensation shall be allowed as specified herein.

### **13. Protection of Mailboxes**

The Contractor shall take all necessary precautions when working near mailboxes within or adjacent to the project limits. If at the Contractor's discretion, a mailbox will interfere with construction operations, a temporary mailbox shall be located per the United States Postal Service requirements and the permanent mailbox reinstalled following said operation. At no time shall a resident be without a mailbox or not receive mail due to a mailbox being removed, replaced or damaged. The Contractor shall replace, at no additional cost to the Owner, any mailbox or post which has been damaged by the Contractor's operations due to neglect, misconduct or poor workmanship. The cost of all materials required and all labor necessary to comply with the above Provisions will not be paid for separately, but shall be considered as included in the unit bid prices of the contract, and no additional compensation will be allowed.

The Contractor shall refer to the mailbox installation detail included in appendix A for installation requirements.

The Contractor must maintain access for both residents and mail carriers to all mailboxes throughout the duration of the project.

### **14. Construction Staging and Maintenance of Base Course**

All pavement removal, curb installation, and hot-mix asphalt binder installation shall be completed in accordance with Section(s) 202, 406, 423, 440, and 606 of the Standard Specifications and as specified herein.

**There shall be no placement of hot-mix asphalt permitted on scheduled days of refuse pickup.** The Contractor shall be responsible for determining the current refuse schedule and incorporating it into their progress schedule accordingly.

No resident shall be without driveway access and no sidewalk shall be barricaded or closed for more than seven (7) calendar days unless specifically listed otherwise in the plans or herein.

Prior to driveway access impediment due to proposed curb and gutter or driveway pavement operations, the Contractor shall notify the Village within 48 hours of disturbance in order to provide proper notification to the affected residence or business owner. After the new concrete curb has set, the Contractor shall install all required forms for installation of the driveway pavement for inspection by the Engineer. The Contractor is required to install curb and driveway pavement within two (2) calendar days of each other. Example: If the curb is poured on Monday the driveways will be required to be poured on the same day after the curb is set or on Tuesday. If the curb in front of the resident is not being replaced the Contractor shall frame and pour the driveway on the same day. The driveways shall be properly barricaded until the concrete is sufficiently cured. If, at the discretion of the Engineer, the driveway requires that the old aggregate base course be removed and replaced, it shall be completed prior to pouring the new concrete combination curb & gutter or not until after it has been allowed to cure for a minimum of three (3) calendar days, or after the concrete has reached 2,500 psi as verified by cylinder breaks. Any additional cylinders cast and testing costs associated with this verification shall be included in the cost of the contract.

If the Contractor does not install proposed concrete curb and driveway in the time frame specified herein, a monetary penalty of \$250 per calendar day will be imposed for each day, and each occurrence the work is not completed.

The Contractor shall make themselves aware of the surroundings and of private property. The Village will not tolerate entering private property or driving equipment/vehicles on a driveway within the public right of way to remain for any reason during construction unless prior approval has been granted by the property Owner. The Contractor will incur a monetary penalty of \$500 per occurrence as determined by the Engineer for violation of this requirement.

### **15. Use of Fire Hydrants**

The indiscriminate use of fire hydrants is strictly prohibited. The Contractor can obtain non-potable water in bulk at no charge at the Buffalo Grove Public Works Department, 51 Raupp Blvd. The Contractor shall provide a water truck or containment and driver to obtain and transport the water. All water obtained from the Village shall be used for this project only. If deemed necessary, the Village reserves the right to restrict or refuse the use of Village water. The Contractor will be responsible for executing the required paperwork and follow all requirements of the Village. If it is determined that the Contractor or its subcontractors operate or use a Village fire hydrant, a monetary penalty of \$1,000 per occurrence that will be imposed.

### **16. Clean Construction and Demolition Debris (CCDD) Material Disposal**

Work under this item shall be performed in compliance with the Illinois Environmental Protection Agency (IEPA) guidelines in effect at the time of construction.



The Contractor will be required to make all arrangements for coordination and submission of the necessary documents with their chosen CCDD or other suitable disposal facility. Written confirmation of preliminary approval must be provided from the disposal facility and confirmed by the Owner as acceptable.

All surplus, clean material generated from the Contractor's activities must be disposed of at an IEPA permitted CCDD or otherwise acceptable facility. The Contractor is responsible for providing documentation to the Owner for each load hauled off-site showing the quantity of material and the location the material was disposed of.

Disposal of clean material not in compliance with these requirements will constitute breach of contract. If the Contractor fails to provide adequate documentation supporting the legal disposal of clean material according to this special provision, the Contractor shall be fined \$1,000 per load of material and will assume all liability associated with material disposed of not in compliance with this special provision.

No extra compensation will be allowed to the Contractor for any expenses incurred complying with these requirements including but not limited to: delays, inconvenience, or interruptions in the work resulting from compliance with these requirements. All costs associated with material disposal shall be included into the appropriate unit bid prices for the work.

## **17. Insurance Requirements**

### 12.04.080 - Insurance.

A. Required Coverages and Limits. Unless otherwise provided by franchise, license, or similar agreement, each Contractor occupying right-of-way or constructing any facility in the right-of-way shall secure and maintain the following liability insurance policies insuring the Contractor as named insured and naming the Village, and its elected and appointed officers, officials, agents, and employees and Gewalt Hamilton Associates, Inc. and employees as additional insureds on the policies listed in subsection (A)(1) and (A)(2) of this section:

1. Commercial general liability insurance, including premises-operations, explosion, collapse, and underground hazard (commonly referred to as "X," "C," and "U" coverages) and products-completed operations coverage with limits not less than:
  - a. Five million dollars for bodily injury or death to each person,
  - b. Five million dollars for property damage resulting from any one accident, and
  - c. Five million dollars for all other types of liability;
2. Automobile liability for owned, non-owned and hired vehicles with a combined single limit of one million dollars for personal injury and property damage for each accident;
3. Worker's compensation with statutory limits; and
4. Employer's liability insurance with limits of not less than one million dollars per employee and per accident.

If the Contractor is not providing such insurance to protect the contractors and subcontractors performing the work, then such contractors and subcontractors shall comply with this section.

B. Excess or Umbrella Policies. The coverages required by this section may be in any combination of primary, excess, and umbrella policies. Any excess or umbrella policy must provide excess coverage over underlying insurance on a following-form basis such that when any loss covered by the primary policy exceeds the limits under the primary policy, the excess or umbrella policy becomes effective to cover such loss.

C. **Copies Required. The Contractor shall provide copies of any of the policies including all endorsements or certificates required by this section to the Village within ten calendar days following receipt of a written request therefor from the Village.**

D. Maintenance and Renewal of Required Coverages. The insurance policies required by this section shall contain the following endorsement:

"It is hereby understood and agreed that this policy may not be canceled nor the intention not to renew be stated until thirty (30) calendar days after receipt by the Village, by registered mail or certified mail, return receipt requested, of a written notice addressed to the Village Manager of such intent to cancel or not to renew."

Within ten (10) calendar days after receipt by the Village of said notice, and in no event later than ten (10) calendar days prior to said cancellation, the Contractor shall obtain and furnish to the Village evidence of replacement insurance policies meeting the requirements of this section.

- E. **Self-Insurance.** A Contractor may self-insure all or a portion of the insurance coverage and limit requirements required by subsection A of this section. A Contractor that self-insures is not required, to the extent of such self-insurance, to comply with the requirement for the naming of additional insureds under subsection A of this section, or the requirements of subsections B through D of this section. A Contractor that elects to self-insure shall provide to the Village evidence sufficient to demonstrate its financial ability to self-insure the insurance coverage and limit requirements required under subsection A of this section, such as evidence that the Contractor is a "private self-insurer" under the Workers Compensation Act.
- F. **Effect of Insurance and Self-Insurance on Contractor's Liability.** The legal liability of the Contractor to the Village and any person for any of the matters that are the subject of the insurance policies or self-insurance required by this section shall not be limited by such insurance policies or self-insurance or by the recovery of any amounts thereunder.
- G. **Insurance Companies.** All insurance provided pursuant to this section shall be effected under valid and enforceable policies, issued by insurers legally able to conduct business with the licensee in the State of Illinois. All insurance carriers and surplus line carriers shall be rated "A-" or better and of a class size "X" or higher by A.M. Best Company.

Nothing contained herein is intended to constitute, nor shall it constitute a waiver of the rights, defenses and/or other immunities provided or available to the Village under law including, but not limited to, the Local Governmental and Governmental Employees Tort Immunity Act.

**18. Certified Payroll Reports**

The Village of Buffalo Grove requests that the Contractor submit all certified payroll reports, including subcontractors, and EEO reporting be sent electronically in separate files for each respective Contractor/subcontractor with the weeks ending date in the file name to [kjohnson@vbg.org](mailto:kjohnson@vbg.org) (i.e. Contractor Name\_Week Ending.pdf) as shown in the sample letter in Appendix A.

The Contractor is responsible for providing all records in accordance with the Illinois Department of Labor's (IDOL) requirements pertaining to the Prevailing Wage Act on the standard IDOL form. Only the last four (4) digits of the employee's social security number will be required; the remaining digits shall be "X" or redacted. To complete the certified payroll request for release of payment, the Contractor must supply a signed and notarized written statement that all necessary documentation has been turned over for the pay period pertaining to that payment requested.

Under P.A. 98-0328, the public body must retain copies of the certified payroll for 5 years rather than 3 years as was the case previously. The Illinois Department of Labor (IDOL) has created model certified payroll forms which can be found at the IDOL website [www.illinois.gov/idol](http://www.illinois.gov/idol). The new form consists of three pages identified as the "certified transcript of payroll affidavit" and "certified transcript of payroll instructions". The new forms on the IDOL website can be filled in online and then printed out. Under P.A. 98-0482, contractors and subcontractors will have to provide additional information with respect to working hours, wage rates, overtime rates and fringe benefits. The IDOL's model certified payroll forms are the most current forms for compliance with P.A. 98-0482 and should be used in public works contracts.

**19. Monetary Penalties**

All work shall be completed in accordance with the Contract Documents in a reasonable and timely manner. For each occurrence that work is not completed in a reasonable and timely manner, a monetary penalty will be deducted from the final pay application. The Contractor shall make themselves and all subcontractors aware of the following deficiency and deductions:

Description	Penalty	Per Occurrence
Failure to Sweep Roadway	\$250	Calendar Day
Failure to Maintain Trench	\$250	Calendar Day
Failure to Adhere to Period of Establishment Requirements	\$250	Calendar Day
Distributing Unapproved Resident Notices	\$100	Household
Failure to Distribute Notices in a Timely Manner	\$100	Household
Failure to Distribute Notice to Resident	\$100	Household
Failure to Provide Access in a Timely Manner	\$250	Household Per Day

Failure to Provide Weekly Update to Engineer	\$1,000	Per Occurrence
Failure to Attend a Scheduled Weekly Meeting	\$1,000	Per Occurrence
Failure to Respond in a Timely Manner to a Resident	\$250	Calendar Day
Failure to Ramp Roadway or Driveway	\$250	Household/Roadway Per Day
Use of Fire Hydrant or Valve	\$1,000	Each
Failure to Provide Maintenance of Roadway in a Timely Manner as Determined by the Engineer	\$1,000	Calendar Day
Entering Private Property	\$500	Per Occurrence
Failure to Provide Portable Facilities	\$100	Calendar Day
Illicit Discharge of Silt or Construction Debris	\$1,000	Per Occurrence
Failure to Submit Shop Drawings on Time	\$500	Per Occurrence
Failure to Maintain Erosion and/or Sediment Control Devices	\$1,000	Per Occurrence
Working Outside Allowable Work Hours	\$1,000	Per Occurrence

At the discretion of the Engineer and without notice, the Contractor shall have deducted the monetary penalty amount as listed above for each occurrence on the final pay application.

**20. Maintenance Bond**

The Contractor will be required to post a Maintenance Bond for a period of One Year (1-yr) from date of final acceptance by the Village. Final acceptance will be the date the Final Payment is made to the Contractor. The bond shall be in a form acceptable to the Village in the amount of 10% (ten percent) of the awarded contract value. Unless under emergency situations, the Village will offer the Contractor the ability to fix or repair any item prior to the bond being called. If the Contractor elects to perform the repairs themselves, all work must be complete within 14 calendar days of notice from the Village or the Village reserves the right to perform the repairs themselves.

The Maintenance Bond shall cover all necessary repairs or replacements as deemed necessary by the Village due to poor workmanship, failed materials, settlement of trenches, excessively spalled, chert popped or cracked concrete, storm and water main failures, restoration establishment, and other items as completed by the Contractor.

All required pavement repairs shall be from curb line to the nearest cold joint. Pavement repairs shall have all joints routed and filled with crack seal material including along the edge of pavement 1 month after installation.

If the Contractor elects to not perform the repairs or does not perform them in the time allotted the Village will perform the work and collect from the bond any damages incurred by the Village to perform the repairs.

**21. Saw Cutting**

The Contractor shall be required to perform a perpendicularly straight joint by full-depth machine sawing of all proposed items to be removed prior to removal operations to prevent damage or spalling to existing hardscape to remain. Simple or partial depth scoring shall not be permitted. Saw cut locations may or may not be shown on the plans, however, shall be required in the field. All sawcut slurry, regardless of the amount, shall be promptly removed to prevent tracking. Any slurry tracked or left on surfaces to remain shall be thoroughly cleaned or replaced, at the direction of the Village or Engineer, by the Contractor at no additional cost to the Village.

The Contractor shall replace, at no additional cost to the Village, any hardscape, outside of the limit of improvements, damaged by the Contractor's operations due to neglect, misconduct, or poor workmanship.

**22. Earth Excavation**

All earth excavation required to complete this project to the proposed lines, grades, and cross sections shall be in accordance with Section 202 of the Standard Specifications. Earth excavation will not be paid for separately but shall be included in the cost of the item requiring the excavation. All surplus excavated material shall be disposed of off-site in accordance with Article 202.03 of the Standard Specifications. If at the discretion of the Contractor, the existing excavated spoils material can be reused on-site but must be compacted as specified herein. Furthermore, if future settlement occurs where existing excavated spoils material was reused, the Contractor shall be

responsible for making the necessary repairs in accordance with the Maintenance Bond and as specified herein.

**23. Retainage and Waivers**

The Village of Buffalo Grove has the option to retain from the amount due to the Contractor a maximum of (ten) 10% from each pay request. The Contractor may request the retainage be reduced and provide reasoning for such reduction in writing to the Village. The Village has the option to accept or deny the request and shall be considered final. The retainage may be held until the Village determines the project to be final and accepted, at which time any warranty or maintenance period shall begin.

The Contractor shall submit, for each pay request submittal, original partial or final waivers from all subcontractors and material suppliers for the work payment is requested from the Village; trailing waivers will not be permitted. The Village will not remit payment to the Contractor until all waivers for the work the Contractor is requesting payment for are received and reviewed. To help expedite the process, the Village is willing to review draft waivers after the invoice has been submitted for the pay request. When the draft waivers are reviewed and found acceptable, and the check is cut according to the Village's Warrant schedule, then the check and final waivers can be exchanged.

**24. Final Site Inspection**

After the Contractor has submitted the notice of final completion to the Village, the Contractor shall schedule a final site inspection with the Engineer. At this time, the Contractor shall open all structures within the project limits, whether new or old, in the presence of the Engineer.

Upon completion of the final site inspection, the Engineer will provide the Contractor a list of any deficiencies documented. The Contractor will have fourteen (14) calendar days to correct any deficiencies following the scheduled final inspection and punch list submittal by the Engineer.



## Special Provisions

### 1. Furnished Excavation

This work shall include all labor, material, and equipment necessary to furnish, place, and compact suitable excavated material within the parkway repair locations to the depth specified in accordance with Section 204 of the Standard Specifications and as specified herein.

The existing parkway material within the utility trench shall be excavated to a depth of 18" and disposed of off-site in accordance with Article 202.03 of the Standard Specifications. The remaining subgrade shall be compacted with a steel plate vibratory machine to the satisfaction of the Engineer.

The furnished material shall then be placed and compacted to a depth of 14" from finish grade and shall have a Standard Dry Density of not less than 90 lb/cu ft when tested according to AASHTO T 99 (Method C) and shall not possess an organic content greater than ten percent when tested according to AASHTO T 194. Parkway restoration shall be completed in accordance with the General Landscape Restoration pay item and applicable special provision.

This work will be measured in place and paid for at the contract unit price per cubic yard (CY) for FURNISHED EXCAVATION, which shall include all labor, material, and equipment required to complete the work as specified herein.

### 2. Aggregate Base Course, Type B

This work shall include all labor, material, and equipment necessary to furnish and place aggregate base course on a prepared subgrade or subbase in accordance with Section 351 of the Standard Specifications and as specified herein.

Following removal operations, the subgrade shall be prepared according to Section 301, except Article 301.12 will not apply. Any additional aggregate material shall be placed and compacted to meet the proposed adjacent lines and grades as directed by the Engineer.

The material used for this item shall be exclusively IDOT certified Class A course aggregate material meeting the gradation of CA-6 in accordance with Section 1004 of the Standard Specifications. Crushed concrete may be used as specified herein but shall be an IDOT approved material.

All aggregate shall be compacted to 95% modified proctor density conforming to ASTM D-1557 or AASHTO T-180.

This work will be measured in place and paid for at the contract unit price per ton (TN) for AGGREGATE BASE COURSE, TYPE B, which price shall include all labor, material, and equipment required to complete the work as specified herein.

### 3. Portland Cement Concrete Driveway Pavement

This work shall include all labor, material, and equipment necessary to construct portland cement concrete driveway pavement, of the depth specified, on a prepared subgrade where marked by the Engineer and in accordance with Section 423 of the Standard Specifications and as specified herein.

The proposed concrete driveway pavement shall be poured within 24 hours following the completion of removal operations at each respective location.

At points where the proposed concrete driveway pavement abuts existing sidewalk and curb, #4 smooth epoxy coated dowel bars at 24" on center and ½ in preformed expansion joint filler shall be installed. The expansion joint filler shall extend the entire depth of the concrete driveway edging. No expansion joint or dowel bars shall be required along the edge of abutting existing driveway pavement.

The proposed driveway pavement material shall be portland cement concrete in accordance with Section 1020 of the Standard Specifications.

This work will be measured in place and paid for at the contract unit price per square yard (SY) for PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, of the depth specified, which shall include all labor, material, and equipment required to complete the work as specified herein.

**4. Portland Cement Concrete Sidewalk**

This work shall include all labor, material, and equipment necessary to construct portland cement concrete sidewalk and sidewalk accessibility ramps, of the depth specified, on a prepared subgrade where marked by the Engineer and in accordance with Section 424 of the Standard Specifications and as specified herein.

The proposed concrete sidewalk shall be poured within 24 hours following the completion of removal operations at each respective location.

If no existing expansion joint exists within 50 ft in either direction of the spot repair location, a ½ in preformed expansion joint filler shall be installed at the direction of the Engineer. Transverse expansion joints shall be placed at maximum intervals of 50 ft in the sidewalk. The expansion joint filler shall extend the entire depth of the concrete driveway edging. #4 smooth epoxy coated dowel bars shall be installed at 24" on center at sidewalk accessibility ramps between the keystone and curb.

The proposed sidewalk material shall be portland cement concrete in accordance with Section 1020 of the Standard Specifications.

This work will be measured in place and paid for at the contract unit price per square foot (SF) for PORTLAND CEMENT CONCRETE SIDEWALK, of the depth specified, which shall include all labor, material, and equipment required to complete the work as specified herein.

**5. Hot-Mix Asphalt Driveway Pavement**

This work shall include all labor, material, and equipment necessary to furnish and install hot-mix asphalt driveway pavement in accordance with the applicable portions of Sections 355 and 406 of the Standard Specifications and the detail shown herein.

The proposed driveway pavement, of the specified thickness, shall be exclusively Hot-Mix Asphalt, Mix "D", N50, in accordance with the Hot-Mix Asphalt Mixture Requirements table as described herein and Section 1030 of the Standard Specifications.

<b>HMA – MIXTURE REQUIREMENTS</b>	
<b>MIXTURE TYPE</b>	<b>AIR VOIDS @ Npdes</b>
DRIVEWAY	
HMA Surface Course, Mix D, N50 (IL 9.5mm) 3"	4% @ 50 Gyr.

This work will be measured in place and paid for at the contract unit price per square yard (SY) for HOT-MIX ASPHALT DRIVEWAY PAVEMENT, of the depth specified, which shall include all labor, material, and equipment required to complete the work as specified herein.

**6. General Landscape Restoration (Special)**

This work shall include all labor, material, and equipment necessary to furnish, place, and maintain pulverized topsoil, seed, fertilizer nutrients, and erosion control blanket in accordance with Section(s) 211, 250, and 251 of the Standard Specifications and as specified herein.

Pulverized topsoil shall be placed to a maximum depth of four (4) inches and not be placed until the area has been shaped, trimmed, and finished to the lines and grades as directed by the Engineer. All irregularities, depressions, or high points in the surface shall be filled or smoothed out before topsoil is placed. The surface of the topsoil shall be blended to match the existing terrain and adjacent hardscape, and be free from clods, stones, sticks, and debris.

The Contractor shall furnish and place IDOT Class 1A salt tolerant lawn mixture, produced and tested in the current year, be of good quality, and free of weeds. Nitrogen and potassium fertilizer nutrients shall be applied at a 1:1 ratio in accordance with Article 250.04 of the Standard Specifications (phosphorus is not permitted). Within 24 hours of seed placement, erosion control blanket shall be installed in accordance with Article 251.04 of the Standard Specifications.

It is recommended that the Contractor water the area every other day at a rate of three (3) gallons per square yard, however, it is the sole and exclusive responsibility of the Contractor to make required adjustments to the watering rate or schedule.

To be acceptable for final payment, the landscaped areas shall undergo a 30-day period of establishment beginning on the last day that seed is sowed. During this period, the Contractor shall be responsible for, at no additional cost to the Village, watering, removing weeds and maintaining the seeded areas and repairing any damage to the seeded areas due to but not limited to, errant vehicles, severe weather or all other causes. At the end of the 30-day period of establishment, the Owner or Engineer will inspect the landscaped area and if deemed unsatisfactory, the Contractor shall be required to provide means and methods necessary to establish a live, healthy turf area. Should the seed not germinate because of prevailing cool weather, the period of establishment may be adjusted as determined by the Engineer. It shall be the sole and exclusive responsibility of the Contractor, not the Engineer, for maintaining and monitoring the landscape restoration during the period of establishment. If the placed landscape restoration has not been approved by the Owner or Engineer sixty (60) calendar days following installation, the Contractor will incur a monetary penalty of \$250 per calendar day.

**Planting times shall be April 1 to June 15 and August 1 to November 1 in accordance with Article 250.07 of the Standard Specifications.**

The Contractor shall provide the Engineer with proper documentation on the landscaping materials supplied to the project such as topsoil source, topsoil certification, fertilizer bags, seed tags, and seed bags.

Upon placement of topsoil, seed, fertilizer nutrients, and mulch, 75 percent of each respective pay item will be paid. Upon final acceptance of the topsoil, seed, fertilizer nutrients, and mulch placed, the remaining 25 percent of each respective pay item will be paid.

At the discretion of the Village, working days and permanent seeding may be suspended due to, but not limited to, anticipated weather concerns, frozen ground conditions, or topsoil availability.

This work will be measured in place and paid for at the contract unit price per square yard (SY) for GENERAL LANDSCAPE RESTORATION (SPECIAL), which shall include all labor, material, and equipment required to complete the work as specified herein.

#### **7. Combination Concrete Curb and Gutter**

This work shall include all labor, material, and equipment necessary to construct combination concrete curb and gutter, of the type specified, as marked by the Engineer in accordance with Section 606 of the Standard Specifications and as specified herein.

The Contractor shall closely match the existing combination concrete curb and gutter style type of the adjacent existing curb and gutter. This work shall include the installation of two #4 continuous reinforcing bars as shown on the Engineering plans along the full length of the new curb and gutter. Where new curb and gutter abuts existing concrete, two (2) smooth epoxy coated #4 dowel bars shall be installed. The depth of the proposed concrete curb and gutter shall match the existing adjacent depth.

The proposed curb and gutter material shall be portland cement concrete in accordance with Section 1020 of the Standard Specifications.

This work will be measured in place and paid for at the contract unit price per foot (FT) for COMBINATION CONCRETE CURB AND GUTTER, of the type specified, which shall include all labor, material, and equipment required to complete the work as specified herein.

#### **8. Class D Patches**

This work shall include all labor, material, and equipment necessary to complete the removal and replacement of hot-mix asphalt pavement and/or aggregate subbase material to a minimum depth where marked by the Engineer in accordance with Section 442 of the Standard Specifications and as specified herein.

The exact location and dimension of the patches will be determined by the Engineer in the field.

These pavement patches shall be considered 'finish' or 'surface' patches and the final replacement material shall be four (4) inches of hot-mix asphalt binder course and two (2) inches of hot-mix asphalt surface course in accordance with the Hot-Mix Asphalt Mixture Requirements table as described herein and Section 1030 of the Standard Specifications.

#### **Hot Mix Asphalt Construction**

1. Tack coat all longitudinal joints (hot and cold) and curb faces.
2. Pneumatic tired roller is required on all lifts, all mixes, except surface courses.
3. Auger extensions are required on all lifts, all mixes.

4. Reverse augers must be installed properly.
5. Roll (compact) the confined and curb line longitudinal joint by overlapping by 6" from the hot to cold side of mat and / or curbing.
6. Paving of the full roadway width shall be completed at the end of each day. Longitudinal joints shall be closed daily and within one truck load of HMA to prevent cold joints. Any violation shall require saw cutting edge back 3" to expose straight edge, shall be tack coated twice, and will be straight and uniform.
  - a) The Village may consider allowing a full road closure with detours at the Contractors request in order to allow for full width surface paving to facilitate this requirement on 24' wide roads. However, detour and/or additional traffic control devices will be at Contractors expense.
7. Asphalt along the curb line shall be compacted such that the asphalt is 1/4" above the flag of gutter.
8. Temporary ramps, regardless of material, shall be removed prior to placement of the next pavement course.

**HMA – MIXTURE REQUIREMENTS**

<b>MIXTURE TYPE</b>	<b>AIR VOIDS @ Npdes</b>
PATCHING	
HMA Binder Course, IL-19.0, N50 4"	4% @ 50 Gyr.
HMA Surface Course, Mix D, N50 (IL 9.5mm) 2"	4% @ 50 Gyr.

This work will be measured in place and paid for at the contract unit price per square yard (SY) for CLASS D PATCHES, of the type and depth specified, (SPECIAL), which shall include all labor, material, and equipment required to complete the work as specified herein.



## IDOT District One - Special Provisions

### 1. Friction Aggregate (D-1)

Effective: January 1, 2011  
 Revised: April 29, 2016

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	<u>Allowed Alone or in Combination</u> <sup>5/</sup> : 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	<u>Allowed Alone or in Combination</u> <sup>5/</sup> : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>1/</sup> Crushed Concrete
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L  SMA Binder	<u>Allowed Alone or in Combination</u> <sup>5/ 6/</sup> : Crushed Gravel Carbonate Crushed Stone <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete <sup>3/</sup>
HMA High ESAL Low ESAL	C Surface and Leveling Binder IL-9.5 or IL-9.5L  SMA Ndesign 50 Surface	<u>Allowed Alone or in Combination</u> <sup>5/</sup> : Crushed Gravel Carbonate Crushed Stone <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>4/</sup> Crushed Concrete <sup>3/</sup>

Use	Mixture	Aggregates Allowed			
HMA High ESAL	D Surface and Leveling Binder IL-9.5  SMA Ndesign 50 Surface	<u>Allowed Alone or in Combination</u> <sup>5/</sup> : Crushed Gravel Carbonate Crushed Stone (other than Limestone) <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>4/</sup> Crushed Concrete <sup>3/</sup>			
		<u>Other Combinations Allowed:</u> <table border="1" data-bbox="656 611 1250 646"> <tr> <td><i>Up to...</i></td> <td><i>With...</i></td> </tr> </table>	<i>Up to...</i>	<i>With...</i>	
		<i>Up to...</i>	<i>With...</i>		
		<table border="1" data-bbox="656 646 954 695"> <tr> <td>25% Limestone</td> <td>Dolomite</td> </tr> </table>	25% Limestone	Dolomite	
		25% Limestone	Dolomite		
<table border="1" data-bbox="656 695 954 772"> <tr> <td>50% Limestone</td> <td>Any Mixture D aggregate other than Dolomite</td> </tr> </table>	50% Limestone	Any Mixture D aggregate other than Dolomite			
50% Limestone	Any Mixture D aggregate other than Dolomite				
<table border="1" data-bbox="656 772 954 848"> <tr> <td>75% Limestone</td> <td>Crushed Slag (ACBF) or Crushed Sandstone</td> </tr> </table>	75% Limestone	Crushed Slag (ACBF) or Crushed Sandstone			
75% Limestone	Crushed Slag (ACBF) or Crushed Sandstone				
HMA High ESAL	E Surface IL-9.5  SMA Ndesign 80 Surface	<u>Allowed Alone or in Combination</u> <sup>5/ 6/</sup> : Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag  No Limestone.			
		<u>Other Combinations Allowed:</u> <table border="1" data-bbox="656 1222 1250 1257"> <tr> <td><i>Up to...</i></td> <td><i>With...</i></td> </tr> </table>	<i>Up to...</i>	<i>With...</i>	
		<i>Up to...</i>	<i>With...</i>		
		<table border="1" data-bbox="656 1257 954 1306"> <tr> <td>50% Dolomite<sup>2/</sup></td> <td>Any Mixture E aggregate</td> </tr> </table>	50% Dolomite <sup>2/</sup>	Any Mixture E aggregate	
		50% Dolomite <sup>2/</sup>	Any Mixture E aggregate		
<table border="1" data-bbox="656 1306 954 1446"> <tr> <td>75% Dolomite<sup>2/</sup></td> <td>Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone</td> </tr> </table>	75% Dolomite <sup>2/</sup>	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone			
75% Dolomite <sup>2/</sup>	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone				
<table border="1" data-bbox="656 1446 954 1583"> <tr> <td>75% Crushed Gravel<sup>2/</sup> or Crushed Concrete<sup>3/</sup></td> <td>Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag</td> </tr> </table>	75% Crushed Gravel <sup>2/</sup> or Crushed Concrete <sup>3/</sup>	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag			
75% Crushed Gravel <sup>2/</sup> or Crushed Concrete <sup>3/</sup>	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag				
HMA High ESAL	F Surface IL-9.5  SMA Ndesign 80 Surface	<u>Allowed Alone or in Combination</u> <sup>5/ 6/</sup> : Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.			
		<u>Other Combinations Allowed:</u> <table border="1" data-bbox="656 1883 1250 1904"> <tr> <td><i>Up to...</i></td> <td><i>With...</i></td> </tr> </table>	<i>Up to...</i>	<i>With...</i>	
<i>Up to...</i>	<i>With...</i>				

Use	Mixture	Aggregates Allowed	
		50% Crushed Gravel <sup>2/</sup> , Crushed Concrete <sup>3/</sup> , or Dolomite <sup>2/</sup>	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.”

**2. HMA Mixture Design Requirements (D-1)**

Effective: January 1, 2013  
 Revised: January 1, 2018

**1) Design Composition and Volumetric Requirements**

Revise the table in Article 406.06(d) of the Standard Specifications to read:

"MINIMUM COMPACTED LIFT THICKNESS	
Mixture Composition	Thickness, in. (mm)
IL-4.75	3/4 (19)
SMA-9.5, IL-9.5, IL-9.5L	1 1/2 (38)
SMA-12.5	2 (50)
IL-19.0, IL-19.0L	2 1/4 (57)"

Revise the table in Article 1004.03(c) of the Standard Specifications to read:

"Use	Size/Application	Gradation No.
Class A-1, 2, & 3	3/8 in. (10 mm) Seal	CA 16
Class A-1	1/2 in. (13 mm) Seal	CA 15
Class A-2 & 3	Cover	CA 14
HMA High ESAL	IL-19.0	CA 11 <sup>1/</sup>
	IL-9.5	CA 16, CA 13 <sup>3/</sup>
HMA Low ESAL	IL-19.0L	CA 11 <sup>1/</sup>
	IL-9.5L	CA 16
SMA <sup>2/</sup>	Stabilized Subbase or Shoulders	
	1/2 in. (12.5mm) Binder & Surface	CA13 <sup>3/</sup> , CA14 or CA16
	IL 9.5 Surface	CA16, CA 13 <sup>3/</sup>

- 1/ CA 16 or CA 13 may be blended with the gradations listed.
- 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/ 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  $\leq 2.0$  percent.”

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 steel slag sand, shall have minimum surge bin storage plus haul time of 1.5 hours.”

Revise the nomenclature table in Article 1030.01 of the Standard Specifications to read:

“High ESAL	IL-19.0 binder; IL-9.5 surface; IL-4.75; SMA-12.5, SMA-9.5
Low ESAL	IL-19.0L binder; IL-9.5L surface; Stabilized Subbase (HMA) <sup>1/</sup> ; HMA Shoulders <sup>2/</sup>

1/ Uses 19.0L binder mix.

2/ Uses 19.0L for lower lifts and 9.5L for surface lift.”

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 .....	1004.03
(b) Fine Aggregate .....	1003.03
(c) RAP Material .....	1031
(d) Mineral Filler .....	1011
(e) Hydrated Lime .....	1012.01
(f) Slaked Quicklime (Note 1)	
(g) Performance Graded Asphalt Binder (Note 2) .....	1032
(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 current Bureau of Materials and Physical Research Approved List, “Warm Mix Asphalt Technologies”.

Revise Article 1030.04(a)(1) of the Standard Specifications and the Supplemental Specifications to read:



“(1) High ESAL Mixtures. The Job Mix Formula (JMF) shall fall within the following limits.

High ESAL, MIXTURE COMPOSITION (% PASSING) <sup>1/</sup>										
Sieve Size	IL-19.0 mm		SMA <sup>4/</sup> IL-12.5 mm		SMA <sup>4/</sup> IL-9.5 mm		IL-9.5 mm		IL-4.75 mm	
	min	max	min	max	min	max	min	max	min	max
1 1/2 in. (37.5 mm)										
1 in. (25 mm)		100								
3/4 in. (19 mm)	90	100		100						
1/2 in. (12.5 mm)	75	89	80	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 (2.36 mm)	20	42	16	24 <sup>5/</sup>	16	32 <sup>5/</sup>	34 <sup>6/</sup>	52 <sup>2/</sup>	70	90
#16 (1.18 mm)	15	30					10	32	50	65
#30 (600 μm)			12	16	12	18				
#50 (300 μm)	6	15					4	15	15	30
#100 (150 μm)	4	9					3	10	10	18
#200 (75 μm)	3	6	7.0	9.0 <sup>3/</sup>	7.5	9.5 <sup>3/</sup>	4	6	7	9 <sup>3/</sup>
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0

- 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/ The maximum percent passing the #635 (20 μm) sieve shall be ≤ 3 percent.
- 5/ 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.
- 6/ 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 and for IL-4.75 it shall be 3.5 percent at the design number of gyrations. The VMA and 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				
Ndesign	Voids in the Mineral Aggregate (VMA), % minimum			Voids Filled with Asphalt Binder (VFA), %
	IL-19.0	IL-9.5	IL-4.75 <sup>1/</sup>	
50	13.5	15.0	18.5	65 – 78 <sup>2/</sup>
70			65 - 75	
90				

1/ Maximum Draindown for IL-4.75 shall be 0.3 percent

2/ VFA for IL-4.75 shall be 72-85 percent”

Replace Article 1030.04(b)(3) of the Standard Specifications with the following:

“(3) SMA Mixtures.

Volumetric Requirements SMA <sup>1/</sup>			
Ndesign	Design Air Voids Target %	Voids in the Mineral Aggregate (VMA), % min.	Voids Filled with Asphalt (VFA), %
80 <sup>4/</sup>	3.5	17.0 <sup>2/</sup>	75 - 83
		16.0 <sup>3/</sup>	

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 ≥ 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.”

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).

**2) Design Verification and Production**

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 and renewal 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.

Illinois Modified AASHTO T 324 Requirements <sup>1/</sup>

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

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).”

Production Testing. 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<sub>mb</sub>."

Basis of Payment.

Replace the fourth paragraph of Article 406.14 of the Standard Specifications with the following:

"Stone matrix asphalt will be paid for at the contract unit price per ton (metric ton) for POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, of the mixture composition and Ndesign specified; and POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, STONE MATRIX ASPHALT, of the mixture composition and Ndesign specified."

**3. Reclaimed Asphalt Pavement and Reclaimed Asphalt Shingles (D-1)**

Effective: November 1, 2012

Revised: January 1, 2018

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 mix the FRAP will be used in.
- (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  $\leq 1000$  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)	$\pm 6 \%$
No. 8 (2.36 mm)	$\pm 5 \%$
No. 30 (600 $\mu$ m)	$\pm 5 \%$
No. 200 (75 $\mu$ m)	$\pm 2.0 \%$
Asphalt Binder	$\pm 0.3 \%$
$G_{mm}$	$\pm 0.03$ <sup>1/</sup>

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	
	FRAP	RAS
% Passing: <sup>1/</sup>		
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 <sub>mm</sub>	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 indicated in the table below for a given N Design.

Max Asphalt Binder Replacement for FRAP with RAS Combination

HMA Mixtures <sup>1/ 2/ 4/</sup>	Maximum % ABR		
	Binder/Leveling Binder	Surface	Polymer Modified <sup>3/</sup>
30L	50	40	30
50	40	35	30
70	40	30	30
90	40	30	30
4.75 mm N-50			40
SMA N-80			30

- 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 %.

**1031.07 HMA Mix Designs.** At the Contractor's option, HMA mixtures may be constructed utilizing RAP/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 ( $G_{sb}$ ) or 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.

To remove or reduce agglomerated material, 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 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) 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  $\pm 0.5$  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.
- (b) 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).
  - f. RAS and FRAP weight to the nearest pound (kilogram).
  - g. Virgin asphalt binder weight to the nearest pound (kilogram).
  - h. 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 or FRAP 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".
- (c) 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  $\mu$ m) sieve shall not apply. The sample for the RAP material shall be air dried to constant weight prior to being tested for gradation."

BDE SPECIAL PROVISIONS  
For the January 18, 2019 and March 8, 2019 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.

File Name	#		Special Provision Title	Effective	Revised
	80099	1	<input type="checkbox"/> Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
	80274	2	<input type="checkbox"/> Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
	80192	3	<input type="checkbox"/> Automated Flagger Assistance Device	Jan. 1, 2008	
	80173	4	<input type="checkbox"/> Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
	80241	5	<input type="checkbox"/> Bridge Demolition Debris	July 1, 2009	
	50261	6	<input type="checkbox"/> Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	50481	7	<input type="checkbox"/> Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	50491	8	<input type="checkbox"/> Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	50531	9	<input type="checkbox"/> Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
*	80404	10	<input type="checkbox"/> Coarse Aggregate Quality for Micro-Surfacing and Cape Seals	Jan. 1, 2019	
	80384	11	<input checked="" type="checkbox"/> Compensable Delay Costs	June 2, 2017	
	80198	12	<input type="checkbox"/> Completion Date (via calendar days)	April 1, 2008	
	80199	13	<input type="checkbox"/> Completion Date (via calendar days) Plus Working Days	April 1, 2008	
	80293	14	<input type="checkbox"/> Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	July 1, 2016
	80311	15	<input type="checkbox"/> Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
	80277	16	<input type="checkbox"/> Concrete Mix Design – Department Provided	Jan. 1, 2012	April 1, 2016
	80261	17	<input checked="" type="checkbox"/> Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
	80387	18	<input type="checkbox"/> Contrast Preformed Plastic Pavement Marking	Nov. 1, 2017	
	80029	19	<input type="checkbox"/> Disadvantaged Business Enterprise Participation	Sept. 1, 2000	April 2, 2018
	80402	20	<input checked="" type="checkbox"/> Disposal Fees	Nov. 1, 2018	
	80378	21	<input type="checkbox"/> Dowel Bar Inserter	Jan. 1, 2017	Jan. 1, 2018
*	80405	22	<input type="checkbox"/> Elastomeric Bearings	Jan. 1, 2019	
	80388	23	<input checked="" type="checkbox"/> Equipment Parking and Storage	Nov. 1, 2017	
	80229	24	<input type="checkbox"/> Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
	80304	25	<input type="checkbox"/> Grooving for Recessed Pavement Markings	Nov. 1, 2012	Nov. 1, 2017
	80246	26	<input checked="" type="checkbox"/> Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	Aug. 1, 2018
*	80406	27	<input type="checkbox"/> Hot-Mix Asphalt – Mixture Design Verification and Production (Modified for I-FIT Projects)	Jan. 1, 2019	
*	80398	28	<input type="checkbox"/> Hot-Mix Asphalt – Longitudinal Joint Sealant	Aug. 1, 2018	Jan. 1, 2019
	80399	29	<input checked="" type="checkbox"/> Hot-Mix Asphalt – Oscillatory Roller	Aug. 1, 2018	Nov. 1, 2018
	80347	30	<input type="checkbox"/> Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Nov. 1, 2014	Aug. 1, 2018
*	80383	31	<input type="checkbox"/> Hot-Mix Asphalt – Quality Control for Performance	April 1, 2017	Jan. 1, 2019
	80376	32	<input checked="" type="checkbox"/> Hot-Mix Asphalt – Tack Coat	Nov. 1, 2016	
	80392	33	<input checked="" type="checkbox"/> Lights on Barricades	Jan. 1, 2018	
	80336	34	<input type="checkbox"/> Longitudinal Joint and Crack Patching	April 1, 2014	April 1, 2016
*	80393	35	<input type="checkbox"/> Manholes, Valve Vaults, and Flat Slab Tops	Jan. 1, 2018	Jan. 1, 2019
	80400	36	<input type="checkbox"/> Mast Arm Assembly and Pole	Aug. 1, 2018	
	80045	37	<input type="checkbox"/> Material Transfer Device	June 15, 1999	Aug. 1, 2014
	80394	38	<input type="checkbox"/> Metal Flared End Section for Pipe Culverts	Jan. 1, 2018	April 1, 2018
	80165	39	<input type="checkbox"/> Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
	80349	40	<input type="checkbox"/> Pavement Marking Blackout Tape	Nov. 1, 2014	April 1, 2016
	80371	41	<input type="checkbox"/> Pavement Marking Removal	July 1, 2016	
	80390	42	<input checked="" type="checkbox"/> Payments to Subcontractors	Nov. 2, 2017	
	80389	43	<input checked="" type="checkbox"/> Portland Cement Concrete	Nov. 1, 2017	
	80359	44	<input type="checkbox"/> Portland Cement Concrete Bridge Deck Curing	April 1, 2015	Nov. 1, 2017
	80401	45	<input type="checkbox"/> Portland Cement Concrete Pavement Connector for Bridge Approach Slab	Aug. 1, 2018	



80300	46	<input type="checkbox"/>	Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
80328	47	<input checked="" type="checkbox"/>	Progress Payments	Nov. 2, 2013	
34261	48	<input type="checkbox"/>	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157	49	<input type="checkbox"/>	Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
* 80306	50	<input checked="" type="checkbox"/>	Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	Jan. 1, 2019
* 80407	51	<input checked="" type="checkbox"/>	Removal and Disposal of Regulated Substances	Jan. 1, 2019	
80395	52	<input type="checkbox"/>	Sloped Metal End Section for Pipe Culverts	Jan. 1, 2018	
80340	53	<input type="checkbox"/>	Speed Display Trailer	April 2, 2014	Jan. 1, 2017
80127	54	<input type="checkbox"/>	Steel Cost Adjustment	April 2, 2004	Aug. 1, 2017
* 80408	55	<input type="checkbox"/>	Steel Plate Beam Guardrail Manufacturing	Jan. 1, 2019	
80397	56	<input type="checkbox"/>	Subcontractor and DBE Payment Reporting	April 2, 2018	
80391	57	<input checked="" type="checkbox"/>	Subcontractor Mobilization Payments	Nov. 2, 2017	
80317	58	<input type="checkbox"/>	Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	April 1, 2016
80298	59	<input type="checkbox"/>	Temporary Pavement Marking	April 1, 2012	April 1, 2017
20338	60	<input type="checkbox"/>	Training Special Provisions	Oct. 15, 1975	
80403	61	<input type="checkbox"/>	Traffic Barrier Terminal, Type 1 Special	Nov. 1, 2018	
* 80409	62	<input checked="" type="checkbox"/>	Traffic Control Devices - Cones	Jan. 1, 2019	
* 80410	63	<input type="checkbox"/>	Traffic Spotters	Jan. 1, 2019	
80318	64	<input type="checkbox"/>	Traversable Pipe Grate for Concrete End Sections	Jan. 1, 2013	Jan. 1, 2018
80288	65	<input type="checkbox"/>	Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
80302	66	<input type="checkbox"/>	Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
80071	67	<input type="checkbox"/>	Working Days	Jan. 1, 2002	

The following special provisions are in the 2019 Supplemental Specifications and Recurring Special Provisions.

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location(s)</u>	<u>Effective</u>	<u>Revised</u>
80382	Adjusting Frames and Grates	Articles 602.02(s) and (t), 1043.04, and 1043.05	April 1, 2017	
80366	Butt Joints	Article 406.08(c)	July 1, 2016	
80386	Calcium Aluminate Cement for Class PP-5 Concrete Patching	Article 1001.01(e)	Nov. 1, 2017	
80396	Class A and B Patching	Articles 442.06(a)(1) and (2)	Jan. 1, 2018	Nov. 1, 2018
80377	Portable Changeable Message Signs	Articles 701.20(h) and 1106.02(i)	Nov. 1, 2016	April 1, 2017
80385	Portland Cement Concrete Sidewalk	Article 424.12	Aug. 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

## **COMPENSABLE DELAY COSTS (BDE)**

Effective: June 2, 2017

Revise Article 107.40(b) of the Standard Specifications to read:

“(b) Compensation. Compensation will not be allowed for delays, inconveniences, or damages sustained by the Contractor from conflicts with facilities not meeting the above definition; or if a conflict with a utility in an unanticipated location does not cause a shutdown of the work or a documentable reduction in the rate of progress exceeding the limits set herein. The provisions of Article 104.03 notwithstanding, compensation for delays caused by a utility in an unanticipated location will be paid according to the provisions of this Article governing minor and major delays or reduced rate of production which are defined as follows.

- (1) Minor Delay. A minor delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two hours, but not to exceed two weeks.
- (2) Major Delay. A major delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two weeks.
- (3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the rate of production on the work in conflict with the utility in an unanticipated location decreases by more than 25 percent and lasts longer than seven calendar days.”

Revise Article 107.40(c) of the Standard Specifications to read:

“(c) Payment. Payment for Minor, Major, and Reduced Rate of Production Delays will be made as follows.

- (1) Minor Delay. Labor idled which cannot be used on other work will be paid for according to Article 109.04(b)(1) and (2) for the time between start of the delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.

Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).

- (2) Major Delay. Labor will be the same as for a minor delay.

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to two weeks plus the cost of move-out to either the Contractor’s yard or another job and the cost to re-mobilize, whichever is less.

Rental equipment may be paid for longer than two weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.

- (3) Reduced Rate of Production Delay. The Contractor will be compensated for the reduced productivity for labor and equipment time in excess of the 25 percent threshold for that portion of the delay in excess of seven calendar days. Determination of compensation will be in accordance with Article 104.02, except labor and material additives will not be permitted.

Payment for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be determined according to Article 109.13.”

Revise Article 108.04(b) of the Standard Specifications to read:

“(b) No working day will be charged under the following conditions.

- (1) When adverse weather prevents work on the controlling item.
- (2) When job conditions due to recent weather prevent work on the controlling item.
- (3) When conduct or lack of conduct by the Department or its consultants, representatives, officers, agents, or employees; delay by the Department in making the site available; or delay in furnishing any items required to be furnished to the Contractor by the Department prevents work on the controlling item.
- (4) When delays caused by utility or railroad adjustments prevent work on the controlling item.
- (5) When strikes, lock-outs, extraordinary delays in transportation, or inability to procure critical materials prevent work on the controlling item, as long as these delays are not due to any fault of the Contractor.
- (6) When any condition over which the Contractor has no control prevents work on the controlling item.”

Revise Article 109.09(f) of the Standard Specifications to read:

- “(f) Basis of Payment. After resolution of a claim in favor of the Contractor, any adjustment in time required for the work will be made according to Section 108. Any adjustment in the costs to be paid will be made for direct labor, direct materials, direct equipment, direct jobsite overhead, direct offsite overhead, and other direct costs allowed by the resolution. Adjustments in costs will not be made for interest charges, loss of anticipated profit, undocumented loss of efficiency, home office overhead and unabsorbed overhead

other than as allowed by Article 109.13, lost opportunity, preparation of claim expenses and other consequential indirect costs regardless of method of calculation.

The above Basis of Payment is an essential element of the contract and the claim cost recovery of the Contractor shall be so limited.”

Add the following to Section 109 of the Standard Specifications.

**“109.13 Payment for Contract Delay.** Compensation for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be allowed when such costs result from a delay meeting the criteria in the following table.

Contract Type	Cause of Delay	Length of Delay
Working Days	Article 108.04(b)(3) or Article 108.04(b)(4)	No working days have been charged for two consecutive weeks.
Completion Date	Article 108.08(b)(1) or Article 108.08(b)(7)	The Contractor has been granted a minimum two week extension of contract time, according to Article 108.08.

Payment for each of the various costs will be according to the following.

- (a) Escalated Material and/or Labor Costs. When the delay causes work, which would have otherwise been completed, to be done after material and/or labor costs have increased, such increases will be paid. Payment for escalated material costs will be limited to the increased costs substantiated by documentation furnished by the Contractor. Payment for escalated labor costs will be limited to those items in Article 109.04(b)(1) and (2), except the 35 percent and 10 percent additives will not be permitted.
- (b) Extended Project Overhead. For the duration of the delay, payment for extended project overhead will be paid as follows.
  - (1) Direct Jobsite and Offsite Overhead. Payment for documented direct jobsite overhead and documented direct offsite overhead, including onsite supervisory and administrative personnel, will be allowed according to the following table.

Original Contract Amount	Supervisory and Administrative Personnel
Up to \$5,000,000	One Project Superintendent
Over \$ 5,000,000 - up to \$25,000,000	One Project Manager, One Project Superintendent or Engineer, and One Clerk
Over \$25,000,000 - up to \$50,000,000	One Project Manager, One Project Superintendent, One Engineer, and



	One Clerk
Over \$50,000,000	One Project Manager, Two Project Superintendents, One Engineer, and One Clerk

(2) Home Office and Unabsorbed Overhead. Payment for home office and unabsorbed overhead will be calculated as 8 percent of the total delay cost.

(c) Extended Traffic Control. Traffic control required for an extended period of time due to the delay will be paid. For working day contracts the payment will be made according to Article 109.04. For completion date contracts, an adjustment will be determined as follows.

Extended Traffic Control occurs between April 1 and November 30:

$$\text{ETCP Adjustment (\$)} = \text{TE} \times (\% / 100 \times \text{CUP} / \text{OCT})$$

Extended Traffic Control occurs between December 1 and March 31:

$$\text{ETCP Adjustment (\$)} = \text{TE} \times 1.5 (\% / 100 \times \text{CUP} / \text{OCT})$$

Where: TE = Duration of approved time extension in calendar days.

% = Percent maintenance for the traffic control, % (see table below).

CUP = Contract unit price for the traffic control pay item in place during the delay.

OCT = Original contract time in calendar days.

Original Contract Amount	Percent Maintenance
Up to \$2,000,000	65%
\$2,000,000 to \$10,000,000	75%
\$10,000,000 to \$20,000,000	85%
Over \$20,000,000	90%

When an ETCP adjustment is paid under this provision, an adjusted unit price as provided for in Article 701.20(a) for increase or decrease in the value of work by more than ten percent will not be paid.

Upon payment for a contract delay under this provision, the Contractor shall assign subrogation rights to the Department for the Department's efforts of recovery from any other party for monies paid by the Department as a result of any claim under this provision. The Contractor shall fully cooperate with the Department in its efforts to recover from another party any money paid to the Contractor for delay damages under this provision."

## CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010

Revised: November 1, 2014

The reduction of emissions of particulate matter (PM) for off-road equipment shall be accomplished by installing retrofit emission control devices. The term “equipment” refers to diesel fuel powered devices rated at 50 hp and above, to be used on the jobsite in excess of seven calendar days over the course of the construction period on the jobsite (including rental equipment).

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted using the phased in approach shown below. Equipment that is of a model year older than the year given for that equipment’s respective horsepower range shall be retrofitted:

Effective Dates	Horsepower Range	Model Year
June 1, 2010 <sup>1/</sup>	600-749	2002
	750 and up	2006
June 1, 2011 <sup>2/</sup>	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 <sup>2/</sup>	50-99	2004
	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006

1/ Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.

2/ Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

- a) Included on the U.S. Environmental Protection Agency (USEPA) *Verified Retrofit Technology List* (<http://www.epa.gov/cleandiesel/verification/verif-list.htm>), or verified by the California Air Resources Board (CARB) (<http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>); or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

### **Diesel Retrofit Deficiency Deduction**

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected.

Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

80261



## **DISPOSAL FEES (BDE)**

Effective: November 1, 2018

Replace Articles 109.04(b)(5) – 109.04(b)(8) of the Standard Specifications with the following:

- “(5) Disposal Fees. When the extra work performed includes paying for disposal fees at a clean construction and demolition debris facility, an uncontaminated soil fill operation or a landfill, the Contractor shall receive, as administrative costs, an amount equal to five percent of the first \$10,000 and one percent of any amount over \$10,000 of the total approved costs of such fees.
- (6) Miscellaneous. No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.
- (7) Statements. No payment will be made for work performed on a force account basis until the Contractor has furnished the Engineer with itemized statements of the cost of such force account work. Statements shall be accompanied and supported by invoices for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor’s stock, then in lieu of the invoices, the Contractor shall furnish an affidavit certifying that such materials were taken from his/her stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

Itemized statements at the cost of force account work shall be detailed as follows.

- a. Name, classification, date, daily hours, total hours, rate, and extension for each laborer and foreman. Payrolls shall be submitted to substantiate actual wages paid if so requested by the Engineer.
  - b. Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
  - c. Quantities of materials, prices and extensions.
  - d. Transportation of materials.
  - e. Cost of property damage, liability and workmen’s compensation insurance premiums, unemployment insurance contributions, and social security tax.
- (8) Work Performed by an Approved Subcontractor. When extra work is performed by an approved subcontractor, the Contractor shall receive, as administrative costs, an amount equal to five percent of the total approved costs of such work with the minimum payment being \$100.

- (9) All statements of the cost of force account work shall be furnished to the Engineer not later than 60 days after receipt of the Central Bureau of Construction form "Extra Work Daily Report". If the statement is not received within the specified time frame, all demands for payment for the extra work are waived and the Department is released from any and all such demands. It is the responsibility of the Contractor to ensure that all statements are received within the specified time regardless of the manner or method of delivery."

80402

## **EQUIPMENT PARKING AND STORAGE (BDE)**

Effective: November 1, 2017

Replace the first paragraph of Article 701.11 of the Standard Specifications with the following.

**“701.11 Equipment Parking and Storage.** During working hours, all vehicles and/or nonoperating equipment which are parked, two hours or less, shall be parked at least 8 ft (2.5 m) from the open traffic lane. For other periods of time during working and for all nonworking hours, all vehicles, materials, and equipment shall be parked or stored as follows.

- (a) When the project has adequate right-of-way, vehicles, materials, and equipment shall be located a minimum of 30 ft (9 m) from the pavement.
- (b) When adequate right-of-way does not exist, vehicles, materials, and equipment shall be located a minimum of 15 ft (4.5 m) from the edge of any pavement open to traffic.
- (c) Behind temporary concrete barrier, vehicles, materials, and equipment shall be located a minimum of 24 in. (600 mm) behind free standing barrier or a minimum of 6 in. (150 mm) behind barrier that is either pinned or restrained according to Article 704.04. The 24 in. or 6 in. measurement shall be from the base of the non-traffic side of the barrier.
- (d) Behind other man-made or natural barriers meeting the approval of the Engineer.”

80388

## HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010

Revised: August 1, 2018

Description. This work shall consist of testing the density of longitudinal joints as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). Work shall be according to Section 1030 of the Standard Specifications except as follows.

Quality Control/Quality Assurance (QC/QA). Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

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

“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 one-minute 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 Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

“Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density Minimum
IL-4.75	Ndesign = 50	93.0 – 97.4% <sup>1/</sup>	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 <sup>2/</sup> – 97.4%	90.0%

SMA	Ndesign = 50 & 80	93.5 – 97.4%	91.0%”
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80246



**HOT-MIX ASPHALT – OSCILLATORY ROLLER (BDE)**

Effective: August 1, 2018  
 Revised: November 1, 2018

Add the following to Article 406.03 of the Standard Specifications:

“(j) Oscillatory Roller .....1101.01”

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
Level Binder: (When the density requirements of Article 406.05(c) do not apply.)	P <sup>3/</sup>	--	V <sub>S</sub> , P <sup>3/</sup> , T <sub>B</sub> , T <sub>F</sub> , 3W, O <sub>T</sub>	To the satisfaction of the Engineer.
Binder and Surface <sup>1/</sup>  Level Binder <sup>1/</sup> : (When the density requirements of Article 406.05(c) apply.)	V <sub>D</sub> , P <sup>3/</sup> , T <sub>B</sub> , 3W, O <sub>T</sub> , O <sub>B</sub>	P <sup>3/</sup> , O <sub>T</sub> , O <sub>B</sub>	V <sub>S</sub> , T <sub>B</sub> , T <sub>F</sub> , O <sub>T</sub>	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).
IL-4.75 and SMA <sup>4/ 5/</sup>	T <sub>B</sub> , 3W, O <sub>T</sub>	--	T <sub>F</sub> , 3W, O <sub>T</sub>	
Bridge Decks <sup>2/</sup>	T <sub>B</sub>	--	T <sub>F</sub>	As specified in Articles 582.05 and 582.06.

3/ A vibratory roller (V<sub>D</sub>) or oscillatory roller (O<sub>T</sub> or O<sub>B</sub>) may be used in lieu of the pneumatic-tired 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<sub>T</sub> - Oscillatory roller, tangential impact mode. Maximum speed is 3.0 mph (4.8 km/h) or 264 ft/min (80 m/min).

O<sub>B</sub> - Oscillatory roller, tangential and vertical impact mode, operated at a speed to produce not less than 10 vertical impacts/ft (30 impacts/m).”

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)48 in. (1200 mm);
- (2) The minimum length of the drum(s) shall be 57 in. (1480 mm)66 in. (1650 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).”; and
- (5) Self-adjusting eccentrics, and reversible eccentrics on non-driven drum(s).”

## **HOT-MIX ASPHALT – TACK COAT (BDE)**

Effective: November 1, 2016

Revise Article 1032.06(a) of the Standard Specifications to read:

“(a) Anionic Emulsified Asphalt. Anionic emulsified asphalts shall be according to AASHTO M 140. SS-1h emulsions used as a tack coat shall have the cement mixing test waived.”

80376

## LIGHTS ON BARRICADES (BDE)

Effective: January 1, 2018

Revise Article 701.16 of the Standard Specifications to read:

**“701.16 Lights.** Lights shall be used on devices as required in the plans, the traffic control plan, and the following table.

Circumstance	Lights Required
Daylight operations	None
First two warning signs on each approach to the work involving a nighttime lane closure and “ROUGH GROOVED SURFACE” (W8-I107) signs	Flashing mono-directional lights
Devices delineating isolated obstacles, excavations, or hazards at night (Does not apply to patching)	Flashing bi-directional lights
Devices delineating obstacles, excavations, or hazards exceeding 100 ft (30 m) in length at night (Does not apply to widening)	Steady burn bi-directional lights
Channelizing devices for nighttime lane closures on two-lane roads	None
Channelizing devices for nighttime lane closures on multi-lane roads	None
Channelizing devices for nighttime lane closures on multi-lane roads separating opposing directions of traffic	None
Channelizing devices for nighttime along lane shifts on multilane roads	Steady burn mono-directional lights
Channelizing devices for night time along lane shifts on two lane roads	Steady burn bi-directional lights
Devices in nighttime lane closure tapers on Standards 701316 and 701321	Steady burn bi-directional lights
Devices in nighttime lane closure tapers	Steady burn mono-directional lights
Devices delineating a widening trench	None
Devices delineating patches at night on roadways with an ADT less than 25,000	None
Devices delineating patches at night on roadways with an ADT of 25,000 or more	None

Batteries for the lights shall be replaced on a group basis at such times as may be specified by the Engineer.”

Delete the fourth sentence of the first paragraph of Article 701.17(c)(2) of the Standard Specifications.

Revise the first paragraph of Article 603.07 of the Standard Specifications to read:

**“603.07 Protection Under Traffic.** After the casting has been adjusted and Class SI concrete has been placed, the work shall be protected by a barricade for at least 72 hours.”

80392



## **PAYMENTS TO SUBCONTRACTORS (BDE)**

Effective: November 2, 2017

Add the following to the end of the fourth paragraph of Article 109.11 of the Standard Specifications:

“If reasonable cause is asserted, written notice shall be provided to the applicable subcontractor and/or material supplier and the Engineer within five days of the Contractor receiving payment. The written notice shall identify the contract number, the subcontract or material purchase agreement, a detailed reason for refusal, the value of payment being withheld, and the specific remedial actions required of the subcontractor and/or material supplier so that payment can be made.”

80390

## PORTLAND CEMENT CONCRETE (BDE)

Effective: November 1, 2017

Revise the Air Content % of Class PP Concrete in Table 1 Classes of Concrete and Mix Design Criteria in Article 1020.04 of the Standard Specifications to read:

"TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA		
Class of Conc.	Use	Air Content %
PP	Pavement Patching	4.0 - 8.0"
	Bridge Deck Patching (10)	
	PP-1	
	PP-2	
	PP-3	
	PP-4	
PP-5		

Revise Note (4) at the end of Table 1 Classes of Concrete and Mix Design Criteria in Article 1020.04 of the Standard Specifications to read:

"(4) For all classes of concrete, the maximum slump may be increased to 7 in (175 mm) when a high range water-reducing admixture is used. For Class SC, the maximum slump may be increased to 8 in. (200 mm). For Class PS, the maximum slump may be increased to 8 1/2 in. (215 mm) if the high range water-reducing admixture is the polycarboxylate type."

80389

## **PROGRESS PAYMENTS (BDE)**

Effective: November 2, 2013

Revise Article 109.07(a) of the Standard Specifications to read:

“(a) Progress Payments. At least once each month, the Engineer will make a written estimate of the quantity of work performed in accordance with the contract, and the value thereof at the contract unit prices. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1000.00 will be approved for payment other than the final payment.

Progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics' Lien Act, 770 ILCS 60/23(c).

If a Contractor or subcontractor has defaulted on a loan issued under the Department's Disadvantaged Business Revolving Loan Program (20 ILCS 2705/2705-610), progress payments may be reduced pursuant to the terms of that loan agreement. In such cases, the amount of the estimate related to the work performed by the Contractor or subcontractor, in default of the loan agreement, will be offset, in whole or in part, and vouchered by the Department to the Working Capital Revolving Fund or designated escrow account. Payment for the work shall be considered as issued and received by the Contractor or subcontractor on the date of the offset voucher. Further, the amount of the offset voucher shall be a credit against the Department's obligation to pay the Contractor, the Contractor's obligation to pay the subcontractor, and the Contractor's or subcontractor's total loan indebtedness to the Department. The offset shall continue until such time as the entire loan indebtedness is satisfied. The Department will notify the Contractor and Fund Control Agent in a timely manner of such offset. The Contractor or subcontractor shall not be entitled to additional payment in consideration of the offset.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved.”

## RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (BDE)

Effective: November 1, 2012

Revise: January 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 produced by cold milling or crushing an existing hot-mix asphalt (HMA) pavement. 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 93 percent passing the #4 (4.75 mm) sieve based on a dry shake gradation. RAS shall be uniform in gradation and asphalt binder content and 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. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. "Homogeneous Surface").

Prior to milling, the Contractor shall request the District provide documentation on the quality of the RAP to clarify the appropriate stockpile.

- (1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, HMA (High and Low ESAL) 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 fractionated prior to testing by screening into a minimum of two size 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 shall pass the sieve size specified below for the mix into which the FRAP will be incorporated.

Mixture FRAP will be used in:	Sieve Size that 100 % of FRAP Shall Pass
IL-19.0	1 1/2 in. (40 mm)
IL-9.5	3/4 in. (20 mm)
IL-4.75	1/2 in. (13 mm)

- (2) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogeneous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) 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 prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag.
- (4) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP/FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, 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 not be intermingled. Each stockpile shall be signed indicating what type of RAS is present.

Unless otherwise specified by the Engineer, mechanically blending manufactured sand (FM 20 or FM 22) up to an equal weight of RAS with the processed RAS will be permitted to improve workability. The sand shall be "B Quality" or better from an



approved Aggregate Gradation Control System source. The sand shall be 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.** RAP/FRAP and RAS testing shall be according to the following.

(a) RAP/FRAP Testing. When used in HMA, the RAP/FRAP shall be sampled and tested either during or after stockpiling.

(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) 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.

Each sample shall be split to obtain two equal 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 or RAS blended with manufactured sand shall be sampled and tested during stockpiling according to Central Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Source".

Samples shall be collected during stockpiling 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 250 tons (225 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a  $\leq 1000$  ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS or RAS blended with manufactured sand shall be stockpiled 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.

Before testing, each sample shall be split to obtain two test samples. One of the two test samples from the final split shall be labeled and stored for Department use. The

Contractor shall perform a washed extraction and test for unacceptable materials on 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.

If the sampling and testing was performed at the shingle processing facility in accordance with the QC Plan, the Contractor shall obtain and make available all of the test results from start of the initial stockpile.

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

- (a) Evaluation of RAP/FRAP Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation, and when applicable  $G_{mm}$ . Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	FRAP/Homogeneous/ Conglomerate
1 in. (25 mm)	
1/2 in. (12.5 mm)	± 8 %
No. 4 (4.75 mm)	± 6 %
No. 8 (2.36 mm)	± 5 %
No. 16 (1.18 mm)	
No. 30 (600 μm)	± 5 %
No. 200 (75 μm)	± 2.0 %
Asphalt Binder	± 0.4 % <sup>1/</sup>
$G_{mm}$	± 0.03

1/ The tolerance for FRAP shall be ± 0.3 %.

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, the RAP/FRAP shall not be used in HMA unless the RAP/FRAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

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)".

- (b) Evaluation of RAS and RAS Blended with Manufactured Sand 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. Individual test results, when compared to the averages, 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)	± 2.0 %
Asphalt Binder Content	± 1.5 %

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, or if the percent unacceptable material exceeds 0.5 percent by weight of material retained on the # 4 (4.75 mm) sieve, the RAS or RAS blend shall not be used in Department projects. All test data and acceptance ranges shall be sent to the District for evaluation.

**1031.05 Quality Designation of Aggregate in RAP/FRAP.**

(a) RAP. The aggregate quality of the RAP for homogeneous and conglomerate 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, Superpave/HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.

(2) RAP from Class I binder, Superpave/HMA (High ESAL) binder, or (Low ESAL) IL-19.0L binder mixtures are designated as containing Class C 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. Coarse and fine FRAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5000 tons (4500 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.

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

(a) RAP/FRAP. The use of RAP/FRAP in HMA shall be as follows.

(1) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.

- (2) Steel Slag Stockpiles. Homogeneous RAP stockpiles containing steel slag will be approved for use in all HMA (High ESAL and Low ESAL) Surface and Binder Mixture applications.
- (3) Use in HMA Surface Mixtures (High and Low ESAL). RAP/FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be FRAP or homogeneous in which the coarse aggregate is Class B quality or better. FRAP from Conglomerate stockpiles shall be considered equivalent to limestone for frictional considerations. Known frictional contributions from plus #4 (4.75 mm) homogeneous FRAP stockpiles will be accounted for in meeting frictional requirements in the specified mixture.
- (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP/FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP, homogeneous, or conglomerate, in which the coarse aggregate is Class C quality or better.
- (5) Use in Shoulders and Subbase. RAP/FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, homogeneous, or conglomerate.
- (6) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in Article 1031.06(c)(1) below for a given Ndesign.
- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.
- (c) RAP/FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with RAP or FRAP in HMA mixtures up to a maximum of 5.0 percent by weight of the total mix.
- (1) RAP/RAS. When RAP is used alone or RAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the Max RAP/RAS ABR table listed below for the given Ndesign.

**RAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage**

HMA Mixtures <i>1/, 2/</i>	RAP/RAS Maximum ABR %		
	Binder/Leveling Binder	Surface	Polymer Modified
30	30	30	10
50	25	15	10
70	15	10	10
90	10	10	10

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the RAP/RAS ABR shall not exceed 50 percent of the mixture.
  - 2/ When RAP/RAS ABR exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28). If warm mix asphalt (WMA) technology is utilized and production temperatures do not exceed 275 °F (135 °C), the high and low virgin asphalt binder grades shall each be reduced by one grade when RAP/RAS ABR exceeds 25 percent (i.e. 26 percent RAP/RAS ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).
- (2) FRAP/RAS. When FRAP is used alone or FRAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the FRAP/RAS table listed below for the given Ndesign.

**FRAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage**

HMA Mixtures <i>1/, 2/</i>	FRAP/RAS Maximum ABR %						
	Ndesign	Binder/Leveling Binder		Surface		Polymer Modified	
		w/o I-FIT	with I-FIT	w/o I-FIT	with I-FIT	w/o I-FIT	with I-FIT
30	50	55	40	45	10	15	
50	40	45	35	40	10	15	
70	40	45	30	35	10	15	
90	40	45	30	35	10	15	
SMA	--	--	--	--	20	25	
IL-4.75	--	--	--	--	30	35	

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When FRAP/RAS ABR exceeds 20 percent for all mixes, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28). If warm mix asphalt (WMA) technology is utilized and production temperatures do not exceed 275 °F (135 °C), the high and low virgin asphalt binder grades shall each be reduced by one grade when FRAP/RAS ABR exceeds 25 percent (i.e. 26 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).

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



- (a) RAP/FRAP and/or RAS. RAP/FRAP and/or RAS mix designs shall be submitted for verification. If additional RAP/FRAP and/or RAS stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP/FRAP and/or RAS stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP/FRAP and/or RAS stockpiles may be used in the original mix 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 bulk 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 RAP/FRAP and/or RAS shall be as follows.

- (a) RAP/FRAP. The coarse aggregate in all RAP/FRAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

To remove or reduce agglomerated material, a scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAP feed system to remove or reduce oversized material.

If the RAP/FRAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP/FRAP and either switch to the virgin aggregate design or submit a new RAP/FRAP design.

- (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  $\pm 0.5$  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) RAP/FRAP and/or RAS. HMA plants utilizing RAP/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 RAP/FRAP/RAS 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 RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.
- h. Aggregate and RAP/FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP/FRAP are printed in wet condition.)

(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. RAP/FRAP/RAS weight to the nearest pound (kilogram).
- f. Virgin asphalt binder weight to the nearest pound (kilogram).
- g. Residual asphalt binder in the RAP/FRAP/RAS 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 (temporary access entrances only) and aggregate wedge shoulders, Type B 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. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

80306

## REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)

Effective: January 1, 2019

Revise Section 669 of the Standard Specifications to read:

### “SECTION 669. REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

**669.01 Description.** This work shall consist of the transportation and proper disposal of contaminated soil and groundwater. This work shall also consist of the removal, transportation, and proper disposal of underground storage tanks (UST), their content and associated underground piping to the point where the piping is above the ground, including determining the content types and estimated quantities.

**669.02 Equipment.** The Contractor shall notify the Engineer of the delivery of all excavation, storage, and transportation equipment to a work area location. The equipment shall comply with OSHA and American Petroleum Institute (API) guidelines and shall be furnished in a clean condition. Clean condition means the equipment does not contain any residual material classified as a non-special waste, non-hazardous special waste, or hazardous waste. Residual materials include, but are not limited to, petroleum products, chemical products, sludges, or any other material present in or on equipment.

Before beginning any associated soil or groundwater management activity, the Contractor shall provide the Engineer with the opportunity to visually inspect and approve the equipment. If the equipment contains any contaminated residual material, decontamination shall be performed on the equipment as appropriate to the regulated substance and degree of contamination present according to OSHA and API guidelines. All cleaning fluids used shall be treated as the contaminant unless laboratory testing proves otherwise.

**669.03 Pre-construction Submittals.** Prior to beginning this work, or working in areas with regulated substances, the Contractor shall submit a Regulated Substance Pre-Construction Plan (RSPCP) to the Engineer for review and approval using form BDE 2730. The form shall be signed by an Illinois licensed Professional Engineer or Professional Geologist.

As part of the RSPCP, the qualifications of Contractor(s) or firm(s) performing the following work shall be listed.

- (a) On-Site Monitoring. Qualification for on-site monitoring of regulated substance work and on-site monitoring of UST removal requires either pre-qualification in Hazardous Waste by the Department or demonstration of acceptable project experience in remediation and special waste operations for contaminated sites in accordance with applicable Federal, State, or local regulatory requirements.

Qualification for each individual performing on-site monitoring requires a minimum of one-year of experience in similar activities as those required for the project.

(b) Underground Storage Tank. Qualification for underground storage tank (UST) work requires licensing and certification with the Office of the State Fire Marshall (OSFM) and possession of all permits required to perform the work. A copy of the permit shall be provided to the Engineer prior to tank removal.

The qualified Contractor(s) or firm(s) shall also document it does not have any current or former ties with any of the properties contained within, adjoining, or potentially affecting the work.

The Engineer will require up to 30 calendar days for review of the RSPCP. The review may involve rejection or revision and resubmittal; in which case, an additional 30 days will be required for each subsequent review. Work shall not commence until the RSPCP has been approved by the Engineer. After approval, the RSPCP shall be revised as necessary to reflect changed conditions in the field.

## **CONSTRUCTION REQUIREMENTS**

**669.04 Contaminated Soil and/or Groundwater Monitoring.** Prior to beginning excavation, the Contractor shall mark the limits of removal for approval by the Engineer. Once excavation begins, the work and work area involving regulated substances shall be monitored by qualified personnel. The qualified personnel shall be on-site continuously during excavation and loading of material containing regulated substances. The qualified personnel shall be equipped with either a photoionization detector (PID) (minimum 10.6eV lamp), or a flame ionization detector (FID), and other equipment, as appropriate, to monitor for potential contaminants associated with volatile organic compounds (VOCs) or semi-volatile organic compounds (SVOCs). The PID or FID meter shall be calibrated on-site and background level readings taken and recorded daily, and as field and weather conditions change. Any field screen reading on the PID or FID in excess of background levels indicates the potential presence of contaminated material requiring handling as a non-special waste, special waste, or hazardous waste. PID or FID readings may be used as the basis of increasing the limits of removal with the approval of the Engineer but shall in no case be used to decrease the limits.

The qualified personnel shall document field activities using form BDE 2732 (Regulated Substances Monitoring Daily Record) including the name(s) of personnel conducting the monitoring, weather conditions, PID or FID calibration records, a list of equipment used on-site, a narrative of activities completed, photo log sheets, manifests and landfill tickets, monitoring results, how regulated substances were managed and other pertinent information.

Samples will be collected in accordance with the RSPCP. Samples shall be analyzed for the contaminants of concern (COCs), including pH, based on the property's land use history, the encountered abnormality and/or the parameters listed in the maximum allowable concentration (MAC) for chemical constituents in uncontaminated soil established pursuant to Subpart F of 35 Ill. Adm. Code 1100.605. The analytical results shall serve to document the level of contamination.

Samples shall be grab samples (not combined with other locations). The samples shall be taken with decontaminated or disposable instruments. The samples shall be placed in sealed containers and transported in an insulated container to the laboratory. The container shall maintain a temperature of 39 °F (4 °C). All samples shall be clearly labeled. The labels shall indicate the sample number, date sampled, collection location and depth, and any other relevant observations.

The laboratory shall use analytical methods which are able to meet the lowest appropriate practical quantitation limits (PQL) or estimated quantitation limit (EQL) specified in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", EPA Publication No. SW-846; "Methods for the Determination of Organic Compounds in Drinking Water", EPA, EMSL, EPA-600/4-88/039; and "Methods for the Determination of Organic Compounds in Drinking Water, Supplement III", EPA 600/R-95/131, August 1995. For parameters where the specified cleanup objective is below the acceptable detection limit (ADL), the ADL shall serve as the cleanup objective. For other parameters the ADL shall be equal to or below the specified cleanup objective.

**669.05 Contaminated Soil and/or Groundwater Management and Disposal.** The management and disposal of contaminated soil and/or groundwater shall be according to the following:

- (a) Soil Analytical Results Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels exceed the most stringent maximum allowable concentration (MAC) for chemical constituents in uncontaminated soil established pursuant to Subpart F of 35 Illinois Administrative Code 1100.605, the soil shall be managed as follows:
  - (1) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC but they are still considered within area background levels by the Engineer, the excavated soil can be utilized within the construction limits as fill, when suitable. If the soils cannot be utilized within the construction limits, they shall be managed and disposed of off-site as a non-special waste, special waste, or hazardous waste as applicable.
  - (2) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for a Metropolitan Statistical Area (MSA) County, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a clean construction and demolition debris (CCDD) facility or an uncontaminated soil fill operation (USFO) within an MSA County provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
  - (3) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, or the MAC within the Chicago corporate limits, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an USFO within an MSA County excluding Chicago or within



the Chicago corporate limits provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.

- (4) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an USFO within an MSA County excluding Chicago provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
  - (5) When the Engineer determines soil cannot be managed according to Articles 669.05(a)(1) through (a)(4) above, the soil shall be managed and disposed of off-site as a non-special waste, special waste, or hazardous waste as applicable.
- (b) Soil Analytical Results Do Not Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels do not exceed the most stringent MAC, the excavated soil can be utilized within the construction limits or managed and disposed off-site as "uncontaminated soil" according to Article 202.03. However, the excavated soil cannot be taken to a CCDD facility or an USFO for any of the following reasons.
- (1) The pH of the soil is less than 6.25 or greater than 9.0.
  - (2) The soil exhibited PID or FID readings in excess of background levels.
- (c) Soil Analytical Results Exceed Most Stringent MAC but Do Not Exceed Tiered Approach to Corrective Action Objectives (TACO) Residential. When the soil analytical results indicate that detected levels exceed the most stringent MAC but do not exceed TACO Tier 1 Soil Remediation Objectives for Residential Properties pursuant to 35 IAC 742 Appendix B Table A, the excavated soil can be utilized within the right-of-way or managed and disposed off-site as "uncontaminated soil" according to Article 202.03. However, the excavated soil cannot be taken to a CCDD facility or an USFO.
- (d) Groundwater. When groundwater analytical results indicate the detected levels are above Appendix B, Table E of 35 Illinois Administrative Code 742, the most stringent Tier 1 Groundwater Remediation Objectives for Groundwater Component of the Groundwater Ingestion Route for Class 1 groundwater, the groundwater shall be managed off-site as a special waste. The groundwater shall be containerized and trucked to an off-site treatment facility or may be discharged to a sanitary sewer or combined sewer when permitted by the local sewer authority. Groundwater discharged to a sewer shall be pre-treated to remove particulates and measured with a calibrated flow meter to comply with applicable discharge limits. A copy of the permit shall be provided to the Engineer prior to discharging groundwater to the sewer.

All groundwater encountered within trenches may be managed within the trench and allowed to infiltrate back into the ground. If the groundwater cannot be managed within the trench it must be removed as a special or hazardous waste. The Contractor is

prohibited from managing groundwater within the trench by discharging it through any existing or new storm sewer. The Contractor shall install backfill plugs within the area of groundwater contamination.

One backfill plug shall be placed down gradient to the area of groundwater contamination. Backfill plugs shall be installed at intervals not to exceed 50 ft (15 m). Backfill plugs are to be 4 ft (1.2 m) long, measured parallel to the trench, full trench width and depth. Backfill plugs shall not have any fine aggregate bedding or backfill, but shall be entirely cohesive soil or any class of concrete. The Contractor shall provide test data that the material has a permeability of less than  $10^{-7}$  cm/sec according to ASTM D 5084, Method A or per another test method approved by the Engineer.

The Contractor shall use due care when transferring contaminated material from the area of origin to the transporter. Should releases of contaminated material to the environment occur (i.e., spillage onto the ground, etc.), the Contractor shall clean-up spilled material and place in the appropriate storage containers as previously specified. Clean-up shall include, but not be limited to, sampling beneath the material staging area to determine complete removal of the spilled material.

The Contractor shall be responsible for transporting and disposing all material classified as a non-special waste, special waste, or hazardous waste from the job site to an appropriately permitted landfill facility. The transporter and the vehicles used for transportation shall comply with all federal, state, and local rules and regulations governing the transportation of non-special waste, special waste, or hazardous waste.

All equipment used by the Contractor to haul contaminated material to the landfill facility shall be lined with a 6 mil (150 micron) polyethylene liner and securely covered during transportation. The Contractor shall obtain all documentation including any permits and/or licenses required to transport the contaminated material to the disposal facility.

The Contractor shall provide engineered barriers, when required, and shall include materials sufficient to completely line excavation surfaces, including sloped surfaces, bottoms, and sidewall faces, within the areas designated for protection.

The Engineer shall coordinate with the Contractor on the completion of all documentation. The Contractor shall make all arrangements for collection and analysis of landfill acceptance testing. The Contractor shall coordinate for waste disposal approval with the disposal facility. After the Contractor completes these activities and upon receipt of authorization from the Engineer, the Contractor shall initiate the disposal process.

The Contractor shall provide the Engineer with all transport-related documentation within two days of transport or receipt of said document(s). The Engineer shall maintain the file for all such documentation. For management of special or hazardous waste, the Contractor shall provide the Engineer with documentation the Contractor (or subcontractor, if a subcontractor is used for transportation) is operating with a valid Illinois special waste transporter permit at least two weeks before transporting the first load of contaminated material.

The Contractor shall schedule and arrange the transport and disposal of each load of contaminated material produced. The Contractor shall make all transport and disposal arrangements so no contaminated material remains within the project area at the close of business each day. Exceptions to this specification require prior approval from the Engineer within 24 hours of close of business. The Contractor shall be responsible for all other pre-disposal/transport preparations necessary daily to accomplish management activities.

Any waste generated as a special or hazardous waste from a non-fixed facility shall be manifested off-site using the Department's county generator number. An authorized representative of the Department shall sign all manifests for the disposal of the contaminated material and confirm the Contractor's transported volume. Any waste generated as a non-special waste may be managed off-site without a manifest, a special waste transporter, or a generator number.

The Contractor shall select a landfill mandated by definition of the contaminant within the State of Illinois. The Department will review and approve or reject the facility proposed by the Contractor to use as a landfill. The Contractor shall verify whether the selected disposal facility is compliant with those applicable standards as mandated by definition of the contaminant and whether the disposal facility is presently, has previously been, or has never been, on the United States Environmental Protection Agency (U.S. EPA) National Priorities List or the Resource Conservation and Recovery Act (RCRA) List of Violating Facilities. The Contractor shall be responsible for coordinating permits with the IEPA. The use of a Contractor selected landfill shall in no manner delay the construction schedule or alter the Contractor's responsibilities as set forth.

**669.06 Non-Special Waste Certification.** An authorized representative of the Department shall sign and date all non-special waste certifications. The Contractor shall be responsible for providing the Engineer with the required information that will allow the Engineer to certify the waste is not a special waste.

(a) Definition. A waste is considered a non-special waste as long as it is not:

- (1) a potentially infectious medical waste;
- (2) a hazardous waste as defined in 35 IAC 721;
- (3) an industrial process waste or pollution control waste that contains liquids, as determined using the paint filter test set forth in subdivision (3)(A) of subsection (m) of 35 IAC 811.107;
- (4) a regulated asbestos-containing waste material, as defined under the National Emission Standards for Hazardous Air Pollutants in 40 CFR 61.141;
- (5) a material containing polychlorinated biphenyls (PCB's) regulated pursuant to 40 CFR Part 761;

- (6) a material subject to the waste analysis and recordkeeping requirements of 35 IAC 728.107 under land disposal restrictions of 35 IAC 728;
  - (7) a waste material generated by processing recyclable metals by shredding and required to be managed as a special waste under Section 22.29 of the Environmental Protection Act; or
  - (8) an empty portable device or container in which a special or hazardous waste has been stored, transported, treated, disposed of, or otherwise handled.
- (b) Certification Information. All information used to determine the waste is not a special waste shall be attached to the certification. The information shall include but not be limited to:
- (1) the means by which the generator has determined the waste is not a hazardous waste;
  - (2) the means by which the generator has determined the waste is not a liquid;
  - (3) if the waste undergoes testing, the analytic results obtained from testing, signed and dated by the person responsible for completing the analysis;
  - (4) if the waste does not undergo testing, an explanation as to why no testing is needed;
  - (5) a description of the process generating the waste; and
  - (6) relevant material safety data sheets.

**669.07 Temporary Staging.** The Contractor shall excavate and dispose of all waste material as mandated by the contaminants without temporary staging. If circumstances require temporary staging, he/she shall request in writing, approval from the Engineer.

When approved, the Contractor shall prepare a secure location within the project area capable of housing containerized waste materials. The Contractor shall contain all waste material in leak-proof storage containers such as lined roll-off boxes or 55 gal (208 L) drums, or stored in bulk fashion on storage pads. The design and construction of such storage pad(s) for bulk materials shall be subject to approval by the Engineer. The Contractor shall place the staged storage containers on an all-weather gravel-packed, asphalt, or concrete surface. The Contractor shall maintain a clearance both above and beside the storage units to provide maneuverability during loading and unloading. The Contractor shall provide any assistance or equipment requested by the Engineer for authorized personnel to inspect and/or sample contents of each storage container. All containers and their contents shall remain intact and undisturbed by unauthorized persons until the manner of disposal is determined. The Contractor shall keep the storage containers covered, except when access is requested by authorized personnel of the Department. The Engineer shall authorize any additional material added to the contents of any storage container before being filled.

The Contractor shall ensure the staging area is enclosed (by a fence or other structure) to ensure direct access to the area is restricted, and he/she shall procure and place all required regulatory identification signs applicable to an area containing the waste material. The Contractor shall be responsible for all activities associated with the storage containers including, but not limited to, the procurement, transport, and labeling of the containers. The Contractor shall clearly mark all containers in permanent marker or paint with the date of waste generation, location and/or area of waste generation, and type of waste (e.g., decontamination water, contaminated clothing, etc.). The Contractor shall place these identifying markings on an exterior side surface of the container. The Contractor shall separately containerize each contaminated medium, i.e. contaminated clothing is placed in a separate container from decontamination water. Containers used to store liquids shall not be filled in excess of 80 percent of the rated capacity. The Contractor shall not use a storage container if visual inspection of the container reveals the presence of free liquids or other substances that could classify the material as a hazardous waste in the container.

The Department will not be responsible for any additional costs incurred, if mismanagement of the staging area, storage containers, or their contents by the Contractor results in excess cost expenditure for disposal or other material management requirements.

**669.08 Underground Storage Tank Removal.** For the purposes of this section, an underground storage tank (UST) includes the underground storage tank, piping, electrical controls, pump island, vent pipes and appurtenances.

Prior to removing an UST, the Engineer shall determine whether the Department is considered an "owner" or "operator" of the UST as defined by the UST regulations (41 Ill. Adm. Code Part 176). Ownership of the UST refers to the Department's owning title to the UST during storage, use or dispensing of regulated substances. The Department may be considered an "operator" of the UST if it has control of, or has responsibility for, the daily operation of the UST. The Department may however voluntarily undertake actions to remove an UST from the ground without being deemed an "operator" of the UST.

In the event the Department is deemed not to be the "owner" or "operator" of the UST, the OSFM removal permit shall reflect who was the past "owner" or "operator" of the UST. If the "owner" or "operator" cannot be determined from past UST registration documents from OSFM, then the OSFM removal permit will state the "owner" or "operator" of the UST is the Department. The Department's Office of Chief Counsel (OCC) will review all UST removal permits prior to submitting any removal permit to the OSFM. If the Department is not the "owner" or "operator" of the UST then it will not register the UST or pay any registration fee.

The Contractor shall be responsible for obtaining all permits required for removing the UST, notification to the OSFM, using an OSFM certified tank contractor, removal and disposal of the UST and its contents, and preparation and submittal of the OSFM Site Assessment Report in accordance with 41 Ill. Adm. Code Part 176.330.

The Contractor shall contact the Engineer and the OSFM's office at least 72 hours prior to removal to confirm the OSFM inspector's presence during the UST removal. Removal, transport,

and disposal of the UST shall be according to the applicable portions of the latest revision of the "American Petroleum Institute (API) Recommended Practice 1604".

The Contractor shall collect and analyze tank content (sludge) for disposal purposes. The Contractor shall remove as much of the regulated substance from the UST system as necessary to prevent further release into the environment. All contents within the tank shall be removed, transported and disposed of, or recycled. The tank shall be removed and rendered empty according to IEPA definition.

The Contractor shall collect soil samples from the bottom and sidewalls of the excavated area in accordance with 35 Ill. Adm. Code Part 734.210(h) after the required backfill has been removed during the initial response action, to determine the level of contamination remaining in the ground, regardless if a release is confirmed or not by the OSFM on-site inspector.

In the event the UST is designated a leaking underground storage tank (LUST) by the OSFM's inspector, or confirmation by analytical results, the Contractor shall notify the Engineer and the DESU. Upon confirmation of a release of contaminants from the UST and notifications to the Engineer and DESU, the Contractor shall report the release to the Illinois Emergency Management Agency (IEMA) (e.g., by telephone or electronic mail) and provide them with whatever information is available ("owner" or "operator" shall be stated as the past registered "owner" or "operator", or the IDOT District in which the UST is located and the DESU Manager);

The Contractor shall perform the following initial response actions if a release is indicated by the OSFM inspector:

- (a) Take immediate action to prevent any further release of the regulated substance to the environment, which may include removing, at the Engineer's discretion, and disposing of up to 4 ft (1.2 m) of the contaminated material, as measured from the outside dimension of the tank
- (b) Identify and mitigate fire, explosion and vapor hazards;
- (c) Visually inspect any above ground releases or exposed below ground releases and prevent further migration of the released substance into surrounding soils and groundwater; and
- (d) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors and free product that have migrated from the UST excavation zone and entered into subsurface structures (such as sewers or basements).

The UST excavation shall be backfilled according to applicable portions of Sections 205, 208, and 550 with a material that will compact and develop stability. The material shall be approved prior to placement. All uncontaminated concrete and soil removed during tank extraction may be used to backfill the excavation, at the discretion of the Engineer.

After backfilling the excavation, the site shall be graded and cleaned.



**669.09 Regulated Substance Final Construction Report.** Not later than 90 days after completing this work, the Contractor shall submit a Regulated Substance Final Construction Report (RSFCR) to the Engineer using form BDE 2733 and required attachments. The form shall be signed by an Illinois licensed Professional Engineer or Professional Geologist.

**669.10 Method of Measurement.** Non-special waste, special waste, and hazardous waste soil will be measured for payment according to Article 202.07(b) when performing earth excavation, Article 502.12(b) when excavating for structures, or by computing the volume of the trench using the maximum trench width permitted and the actual depth of the trench.

Groundwater containerized and transported off-site for management, storage, and disposal will be measured for payment in gallons (liters).

Backfill plugs will be measured in cubic yards (cubic meters) in place, except the quantity for which payment will be made shall not exceed the volume of the trench, as computed by using the maximum width of trench permitted by the Specifications and the actual depth of the trench, with a deduction for the volume of the pipe.

Engineered Barriers will be measured for payment in square yards (square meters).

**669.11 Basis of Payment.** The work of preparing, submitting and administering a Regulated Substances Pre-Construction Plan will be paid for at the contract lump sum price for REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN.

On-site monitoring of regulated substances, including completion of form BDE 2732 for each day of work, will be paid for at the contract unit price per calendar day, or fraction thereof, for ON-SITE MONITORING OF REGULATED SUBSTANCES.

The installation of engineered barriers will be paid for at the contract unit price per square yard (square meter) for ENGINEERED BARRIER.

The work of removing a UST, soil excavation, soil and content sampling, and the excavated soil, UST content, and UST disposal will be paid for at the contract unit price per each for UNDERGROUND STORAGE TANK REMOVAL.

The transportation and disposal of soil and other materials from an excavation determined to be contaminated will be paid for at the contract unit price per cubic yard (cubic meter) for NON-SPECIAL WASTE DISPOSAL, SPECIAL WASTE DISPOSAL, or HAZARDOUS WASTE DISPOSAL.

The transportation and disposal of groundwater from an excavation determined to be contaminated will be paid for at the contract unit price per gallon (liter) for SPECIAL WASTE GROUNDWATER DISPOSAL or HAZARDOUS WASTE GROUNDWATER DISPOSAL. When groundwater is discharged to a sanitary or combined sewer by permit, the cost will be paid for according to Article 109.05.

Backfill plugs will be paid for at the contract unit price per cubic yard (cubic meter) for BACKFILL PLUGS.

Payment for temporary staging, if required, will be paid for according to Article 109.04.

Payment for accumulated stormwater removal and disposal will be according to Article 109.04. Payment will only be allowed if appropriate stormwater and erosion control methods were used.

Payment for decontamination, labor, material, and equipment for monitoring areas beyond the specified areas, with the Engineer's prior written approval, will be according to Article 109.04.

The sampling and testing associated with this work will be paid for as follows.

- (a) BETX Soil/Groundwater Analysis. When the contaminants of concern are gasoline only, soil or groundwater samples shall be analyzed for benzene, ethylbenzene, toluene, and xylenes (BETX). The analysis will be paid for at the contract unit price per each for BETX SOIL ANALYSIS and/or BETX GROUNDWATER ANALYSIS using EPA Method 8021B.
- (b) BETX-PNAS Soil/Groundwater Analysis. When the contaminants of concern are middle distillate and heavy ends, soil or groundwater samples shall be analyzed for BETX and polynuclear aromatics (PNAS). The analysis will be paid for at the contract unit price per each for BETX-PNAS SOIL ANALYSIS and/or BETX-PNAS GROUNDWATER ANALYSIS using EPA Method 8021B for BETX and EPA Method 8310 for PNAs.
- (c) Priority Pollutants Soil Analysis. When the contaminants of concern are used oils, soil samples shall be analyzed for priority pollutant VOCs, priority pollutants SVOCs, and priority pollutants metals. The analysis will be paid for at the contract unit price per each for PRIORITY POLLUTANTS SOIL ANALYSIS using EPA Method 8260B for VOCs, EPA Method 8270C for SVOCs, and using an ICP instrument and EPA Methods 6010B and 7471A for metals.
- (d) Priority Pollutant Groundwater Analysis. When the contaminants of concern are used oils, non-petroleum material, or unknowns, groundwater samples shall be analyzed for priority pollutant VOCs, priority pollutants SVOCs, and priority pollutants metals. The analysis will be paid for at the contract unit price per each for PRIORITY POLLUTANTS GROUNDWATER ANALYSIS using EPA Method 8260B for VOCs, EPA Method 8270C for SVOCs, and EPA Methods 6010B and 7470A for metals.
- (e) Target Compound List (TCL) Soil Analysis. When the contaminants of concern are unknowns or non-petroleum material, soil samples shall be analyzed for priority pollutant VOCs, priority pollutants SVOCs, priority pollutants metals, pesticides, and Resource Conservation and Recovery Act (RCRA) metals by the toxicity characteristic leaching procedure (TCLP). The analysis will be paid for at the contract unit price per each for TCL SOIL ANALYSIS using EPA Method 8260B for VOCs, EPA Method 8270C for SVOCs,

EPA Method 8081 for pesticides, and ICP instrument and EPA Methods 6010B, 7471A, 1311 (extraction), 6010B, and 7470A for metals.

- (f) Soil Disposal Analysis. When the waste material for disposal requires sampling for disposal acceptance, the samples shall be analyzed for TCLP VOCs, SVOCs, RCRA metals, pH, ignitability, and paint filter test. The analysis will be paid for at the contract unit price per each for SOIL DISPOSAL ANALYSIS using EPA Methods 1311 (extraction), 8260B for VOCs, 8270C for SVOCs, 6010B and 7470A for RCRA metals, 9045C for pH, 1030 for ignitability, and 9095A for paint filter.

The work of preparing, submitting and administering a Regulated Substances Final Construction Report will be paid for at the contract lump sum price REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT.”

80407

## **SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)**

Effective: November 2, 2017

Replace the second paragraph of Article 109.12 of the Standard Specifications with the following:

“This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be at the following percentage of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor’s work.

Value of Subcontract Reported on Form BC 260A	Mobilization Percentage
Less than \$10,000	25%
\$10,000 to less than \$20,000	20%
\$20,000 to less than \$40,000	18%
\$40,000 to less than \$60,000	16%
\$60,000 to less than \$80,000	14%
\$80,000 to less than \$100,000	12%
\$100,000 to less than \$250,000	10%
\$250,000 to less than \$500,000	9%
\$500,000 to \$750,000	8%
Over \$750,000	7%”

80391

## **TRAFFIC CONTROL DEVICES - CONES (BDE)**

Effective: January 1, 2019

Revise Article 701.15(a) of the Standard Specifications to read:

“(a) Cones. Cones are used to channelize traffic. Cones used to channelize traffic at night shall be reflectorized; however, cones shall not be used in nighttime lane closure tapers or nighttime lane shifts.”

Revise Article 1106.02(b) of the Standard Specifications to read:

“(b) Cones. Cones shall be predominantly orange. Cones used at night that are 28 to 36 in. (700 to 900 mm) in height shall have two white circumferential stripes. If non-reflective spaces are left between the stripes, the spaces shall be no more than 2 in. (50mm) in width. Cones used at night that are taller than 36 in. (900 mm) shall have a minimum of two white and two fluorescent orange alternating, circumferential stripes with the top stripe being fluorescent orange. If non-reflective spaces are left between the stripes, the spaces shall be no more than 3 in. (75 mm) in width.

The minimum weights for the various cone heights shall be 4 lb for 18 in. (2 kg for 450 mm), 7 lb for 28 in. (3 kg for 700 mm), and 10 lb for 36 in. (5 kg for 900 mm) with a minimum of 60 percent of the total weight in the base. Cones taller than 36 in. shall be weighted per the manufacturer’s specifications such that they are not moved by wind or passing traffic.”

80409

**Prevailing Wage Rates for Cook County (Updated 12/26/2018)**

Trade Title	Region	Type	Class	Base Wage	Preman Wa	OT M-F	OT Sa	OT Su	OT Hol	H/W	Pension	Vacation	Training	Fringe Benefit
ASBESTOS ABT-GEN	All	ALL		42.72	43.72	1.5	1.5	2	2	14.90	12.57	0.00	0.72	0.00
ASBESTOS ABT-MEC	All	BLD		37.88	40.38	1.5	1.5	2	2	12.92	11.82	0.00	0.72	0.00
BOILERMAKER	All	BLD		49.46	53.91	1.5	1.5	2	2	6.97	20.40	0.00	1.60	0.00
BRICK MASON	All	BLD		46.19	50.81	1.5	1.5	2	2	10.65	17.92	0.00	0.92	0.00
CARPENTER	All	ALL		47.35	49.35	1.5	1.5	2	2	11.79	20.41	0.00	0.63	0.00
CEMENT MASON	All	ALL		45.25	47.25	2	1.5	2	2	14.25	17.03	0.00	1.10	1.36
CERAMIC TILE FNSHER	All	BLD		39.56	39.56	1.5	1.5	2	2	10.75	12.02	0.00	0.77	0.00
COMM. ELECT.	All	BLD		43.96	46.76	1.5	1.5	2	2	9.85	13.26	1.25	0.85	0.00
ELECTRIC PWR EQMT OP	All	ALL		51.90	56.90	1.5	1.5	2	2	12.04	17.18	0.00	3.23	0.00
ELECTRIC PWR GRNDMAN	All	ALL		40.48	56.90	1.5	1.5	2	2	9.39	13.40	0.00	2.51	0.00
ELECTRIC PWR LINEMAN	All	ALL		51.90	56.90	1.5	1.5	2	2	12.04	17.18	0.00	3.23	0.12
ELECTRICIAN	All	ALL		48.35	51.35	1.5	1.5	2	2	15.13	16.52	1.25	1.28	0.00
ELEVATOR CONSTRUCTOR	All	BLD		54.85		2	2	2	2	15.43	16.61	4.39	0.61	0.00
FENCE ERECTOR	All	ALL		40.88	42.88	1.5	1.5	2	1.5	13.59	14.76	0.00	0.65	0.00
GLAZIER	All	BLD		43.85	45.35	1.5	2	2	2	14.37	21.11	0.00	0.94	0.00
HT/FROST INSULATOR	All	BLD		50.50	53.00	1.5	1.5	2	2	12.92	13.16	0.00	0.87	0.00
IRON WORKER	All	ALL		48.33	51.83	2	2	2	2	14.15	23.28	0.00	0.35	0.00
LABORER	All	ALL		42.72	43.47	1.5	1.5	2	2	14.90	12.57	0.00	0.72	0.00
LATHER	All	ALL		47.35	49.35	1.5	1.5	2	2	11.79	20.41	0.00	0.63	0.00
MACHINIST	All	BLD		48.38	50.88	1.5	1.5	2	2	7.23	8.95	1.85	1.32	0.00
MARBLE FINISHERS	All	ALL		34.65	47.70	1.5	1.5	2	2	10.65	16.46	0.00	0.49	0.00
MARBLE MASON	All	BLD		45.43	49.97	1.5	1.5	2	2	10.65	17.39	0.00	0.61	0.00
MATERIAL TESTER I	All	ALL		32.72	32.72	1.5	1.5	2	2	14.90	12.57	0.00	0.72	0.00
MATERIALS TESTER II	All	ALL		40.37		1.5	1.5	2	2	18.55	8.85	0.00	1.10	1.50
MILLWRIGHT	All	ALL		46.35	48.35	1.5	1.5	2	2	13.05	18.87	0.00	0.00	0.00
OPERATING ENGINEER	All	BLD	1	51.10	55.10	2	2	2	2	19.65	15.10	2.00	1.40	0.00
OPERATING ENGINEER	All	BLD	2	49.80	55.10	2	2	2	2	19.65	15.10	2.00	1.40	0.00
OPERATING ENGINEER	All	BLD	3	47.25	55.10	2	2	2	2	19.65	15.10	2.00	1.40	0.00
OPERATING ENGINEER	All	BLD	4	45.50	55.10	2	2	2	2	19.65	15.10	2.00	1.40	0.00
OPERATING ENGINEER	All	BLD	5	54.85	55.10	2	2	2	2	19.65	15.10	2.00	1.40	0.00
OPERATING ENGINEER	All	BLD	6	53.10		2	2	2	2	0.00	0.00	0.00	0.00	36.45
OPERATING ENGINEER	All	BLD	7	54.10	55.10	2	2	2	2	19.65	15.10	2.00	1.40	0.00
OPERATING ENGINEER	All	FLT	1	57.05	57.05	1.5	1.5	2	2	18.80	14.35	2.00	1.30	0.00
OPERATING ENGINEER	All	FLT	2	55.55	57.05	1.5	1.5	2	2	18.80	14.35	2.00	1.30	0.00
OPERATING ENGINEER	All	FLT	3	49.45	57.05	1.5	1.5	2	2	18.80	14.35	2.00	1.30	0.00
OPERATING ENGINEER	All	FLT	4	41.10	57.05	1.5	1.5	2	2	18.80	14.35	2.00	1.30	0.00
OPERATING ENGINEER	All	FLT	5	58.55	57.05	1.5	1.5	2	2	18.80	14.35	2.00	1.30	0.00
OPERATING ENGINEER	All	FLT	6	38.00	57.05	1.5	1.5	2	2	18.80	14.35	2.00	1.30	0.00
OPERATING ENGINEER	All	HWY	1	49.30	53.30	1.5	1.5	2	2	19.65	15.10	2.00	1.40	1.13
OPERATING ENGINEER	All	HWY	2	48.75	53.30	1.5	1.5	2	2	19.65	15.10	2.00	1.40	0.00
OPERATING ENGINEER	All	HWY	3	46.70	53.30	1.5	1.5	2	2	19.65	15.10	2.00	1.40	0.00
OPERATING ENGINEER	All	HWY	4	51.20		1.5	1.5	2	2	18.00	21.28	1.50	0.15	0.00
OPERATING ENGINEER	All	HWY	5	44.10	53.30	1.5	1.5	2	2	19.65	15.10	2.00	1.40	0.00



## Prevailing Wage Rates for Cook County (Updated 12/26/2018)

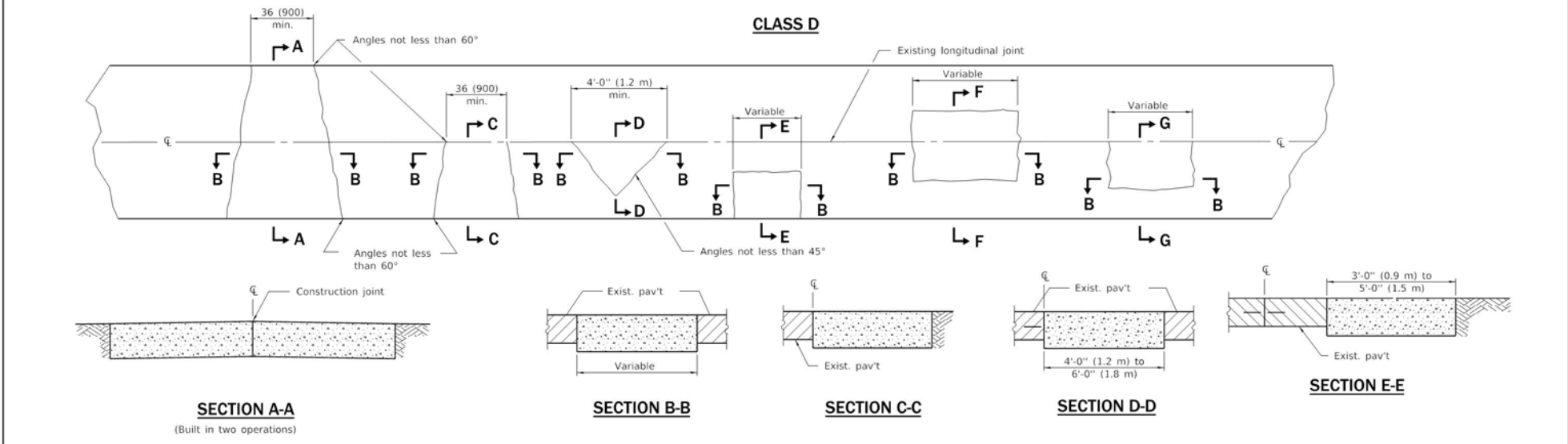
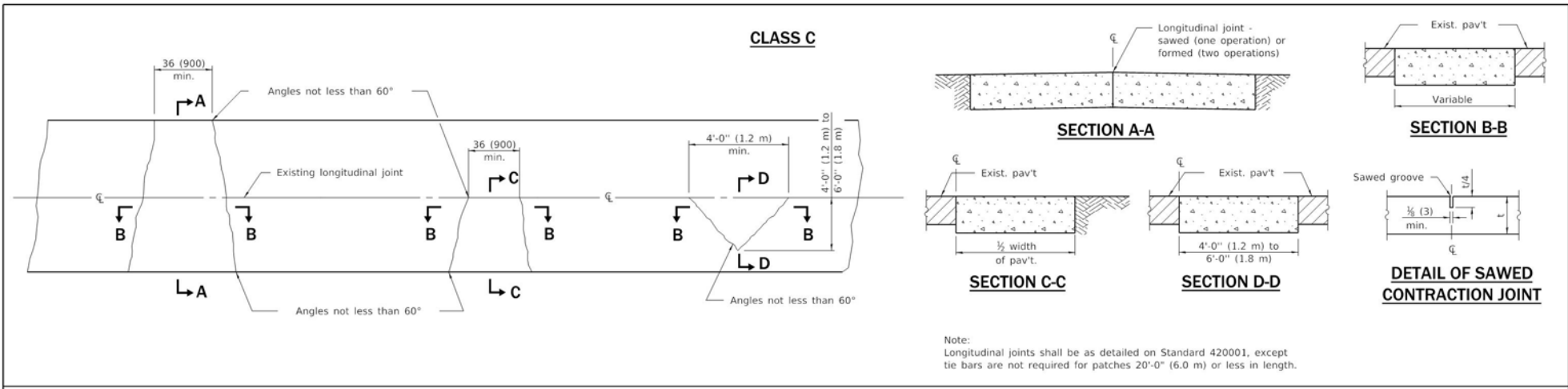
Trade Title	Region	Type	Class	Base Wage	Preman Wa	OT M-F	OT Sa	OT Su	OT Hol	H/W	Pension	Vacation	Training	Fringe Benefit
OPERATING ENGINEER	All	HWY	6	52.30	53.30	1.5	1.5	2	2	19.65	15.10	2.00	1.40	0.00
OPERATING ENGINEER	All	HWY	7	50.30	53.30	1.5	1.5	2	2	19.65	15.10	2.00	1.40	0.00
ORNAMNTL IRON WORKER	All	ALL		48.05	50.55	2	2	2	2	14.09	20.59	0.00	1.25	0.38
PAINTER	All	ALL		46.55	52.36	1.5	1.5	1.5	2	11.81	11.94	0.00	1.87	0.00
PAINTER SIGNS	All	BLD		39.24	0.00	1.5	1.5	1.5	2	2.60	3.18	0.00	0.00	0.00
PILEDRIVER	All	ALL		47.35	49.35	1.5	1.5	2	2	11.79	20.41	0.00	0.63	0.00
PIPEFITTER	All	BLD		48.50	51.50	1.5	1.5	2	2	10.05	18.85	0.00	2.54	0.00
PLASTERER	All	BLD		43.25	45.85	1.5	1.5	2	2	14.25	16.69	0.00	1.35	0.00
PLUMBER	All	BLD		50.25	53.25	1.5	1.5	2	2	14.34	14.42	0.00	1.31	0.00
ROOFER	All	BLD		43.65	47.65	1.5	1.5	2	2	9.73	12.44	0.00	0.53	0.00
SHEETMETAL WORKER	All	BLD		44.25	47.79	1.5	1.5	2	2	11.35	24.68	0.00	1.68	0.00
SIGN HANGER	All	BLD		31.31		1.5	1.5	2	2	4.85	3.28	0.00	0.00	0.00
SPRINKLER FITTER	All	BLD		48.10	50.60	1.5	1.5	2	2	13.25	15.90	0.00	0.68	0.00
STEEL ERECTOR	ALL	ALL		42.07	44.07	2	2	2	2	13.45	19.59	0.00	0.35	
STONE MASON	All	BLD		46.19	50.81	1.5	1.5	2	2	10.65	17.92	0.00	0.92	0.00
TERRAZZO FINISHER	All	BLD		41.54	44.54	1.5	1.5	2	2	10.75	13.71	0.00	0.86	0.00
TERRAZZO MASON	All	BLD		45.38	48.88	1.5	1.5	2	2	10.75	15.17	0.00	0.89	0.00
TILE MASON	All	BLD		46.49	50.49	1.5	1.5	2	2	10.75	14.99	0.00	0.90	0.00
TRAFFIC SAFETY WRKR	All	HWY		37.00	38.60	1.5	1.5	2	2	8.90	9.27	0.00	0.50	0.00
TRUCK DRIVER	E	ALL	1	35.60		1.5	1.5	2	2	8.60	10.61	1.00	0.15	1.00
TRUCK DRIVER	E	ALL	2	36.70	37.10	1.5	1.5	2	2	9.68	13.25	0.00	0.15	0.00
TRUCK DRIVER	E	ALL	3	36.90		1.5	1.5	2	2	9.68	13.25	0.00	0.15	0.00
TRUCK DRIVER	E	ALL	4	37.10		1.5	1.5	2	2	9.68	13.25	0.00	0.15	0.00
TRUCK DRIVER	W	ALL	1	37.69		1.5	1.5	2	2	10.50	8.50	0.00	0.15	0.00
TRUCK DRIVER	W	ALL	2	36.13		1.5	1.5	2	2	18.85	8.85	0.00	2.60	0.00
TRUCK DRIVER	W	ALL	3	40.34		1.5	1.5	2	2	10.47	12.50	0.00	0.50	2.81
TRUCK DRIVER	W	ALL	4	38.16		1.5	1.5	2	2	8.90	11.16	0.00	0.50	0.00
TUCKPOINTER	All	BLD		46.00	48.00	1.5	1.5	2	2	8.34	16.81	0.00	0.93	0.00

**Prevailing Wage Rates for Lake County (Updated 12/26/2018)**

Trade Title	Region	Type	Class	Base Wage	Preman Wa	OT M-F	OT Sa	OT Su	OT Hol	H/W	Pension	Vacation	Training	Fringe Benefit
ASBESTOS ABT-GEN	All	ALL		42.72	43.72	1.5	1.5	2	2	14.90	12.57	0.00	0.72	0.00
ASBESTOS ABT-MEC	All	BLD		37.88	40.38	1.5	1.5	2	2	12.92	11.82	0.00	0.72	0.00
BOILERMAKER	All	BLD		49.46	53.91	2	2	2	2	6.97	20.41	0.00	0.40	0.00
BRICK MASON	All	BLD		46.19	50.81	1.5	1.5	2	2	10.65	17.92	0.00	0.92	0.00
CARPENTER	All	ALL		47.35	49.35	1.5	1.5	2	2	11.79	20.41	0.00	0.63	0.00
CEMENT MASON	All	ALL		45.53		2	1.5	2	2	10.25	22.38	0.00	0.59	0.00
CERAMIC TILE FNSHER	All	BLD		39.56	39.56	1.5	1.5	2	2	10.75	12.02	0.00	0.77	0.00
COMMUNICATION TECH	All	BLD		36.95	39.55	1.5	1.5	2	2	11.72	7.35	2.17	0.55	7.94
ELECTRIC PWR EQMT OP	All	ALL		42.59	57.95	1.5	1.5	2	2	5.75	13.21	0.00	0.75	0.00
ELECTRIC PWR EQMT OP	ALL	HWY		41.45	56.38	1.5	1.5	2	2	5.50	12.87	0.00	0.73	
ELECTRIC PWR GRNDMAN	All	ALL		32.86	57.95	1.5	1.5	2	2	5.75	10.20	0.00	0.58	0.00
ELECTRIC PWR GRNDMAN	ALL	HWY		32.00	56.38	1.5	1.5	2	2	5.50	9.92	0.00	0.66	
ELECTRIC PWR LINEMAN	All	ALL		51.06	57.95	1.5	1.5	2	2	5.75	15.85	0.00	0.90	0.00
ELECTRIC PWR LINEMAN	ALL	HWY		49.67	56.38	1.5	1.5	2	2	5.50	15.40	0.00	0.88	
ELECTRIC PWR TRK DRV	All	ALL		34.03	57.95	1.5	1.5	2	2	5.75	10.55	0.00	0.60	0.00
ELECTRIC PWR TRK DRV	ALL	HWY		33.14	56.38	1.5	1.5	2	2	5.50	10.29	0.00	0.59	
ELECTRICIAN	All	BLD		40.00	44.00	1.5	1.5	2	2	14.10	20.29	6.00	0.65	0.00
ELEVATOR CONSTRUCTOR	All	BLD		54.85	61.71	1.5	2	2	2	15.43	9.71	4.39	0.61	6.90
FENCE ERECTOR	All	ALL		39.58		1.5	1.5	2	2	13.40	13.90	0.00	0.40	0.00
GLAZIER	All	BLD		43.85	45.35	1.5	2	2	2	14.17	21.11	0.00	0.94	0.00
HT/FROST INSULATOR	All	BLD		50.50	53.00	1.5	1.5	2	2	12.92	13.16	0.00	0.72	0.00
IRON WORKER	All	ALL		48.83	52.83	2	2	2	2	14.15	23.28	4.00	0.35	0.00
LABORER	All	ALL		42.72		1.5	1.5	2	2	13.77	13.70	0.00	0.96	0.00
LATHER	All	ALL		47.35	49.35	1.5	1.5	2	2	11.79	20.41	0.00	0.63	0.00
MACHINIST	All	BLD		48.38	50.88	1.5	1.5	2	2	7.23	8.95	1.85	1.47	0.00
MARBLE FINISHERS	All	ALL		34.65	47.70	1.5	1.5	2	2	10.65	16.46	0.00	0.49	0.00
MARBLE MASON	All	BLD		45.43	49.97	1.5	1.5	2	2	10.65	17.39	0.00	0.61	0.00
MATERIAL TESTER I	All	ALL		32.72		1.5	1.5	2	2	14.90	12.57	0.00	0.72	0.00
MATERIALS TESTER II	All	ALL		37.72	37.72	1.5	1.5	2	2	14.90	12.57	0.00	0.72	0.00
MILLWRIGHT	All	ALL		47.35	49.35	1.5	1.5	2	2	11.79	20.41	0.00	0.63	0.00
OPERATING ENGINEER	All	BLD	1	50.10		1.5	1.5	2	2	18.80	14.35	2.00	1.30	0.00
OPERATING ENGINEER	All	BLD	2	48.80		1.5	1.5	2	2	18.80	14.35	2.00	1.30	0.00
OPERATING ENGINEER	All	BLD	3	47.25	55.10	2	2	2	2	19.65	15.10	2.00	1.40	0.00
OPERATING ENGINEER	All	BLD	4	45.50	55.10	2	2	2	2	19.65	15.10	2.00	1.40	0.00
OPERATING ENGINEER	All	BLD	5	54.85	55.10	2	2	2	2	19.65	15.10	2.00	1.40	0.00
OPERATING ENGINEER	All	BLD	6	52.10	55.10	2	2	2	2	19.65	15.10	2.00	1.40	0.00
OPERATING ENGINEER	All	BLD	7	53.10		2	2	2	2	0.00	0.00	0.00	0.00	36.45
OPERATING ENGINEER	All	FLT	1	57.05	57.05	1.5	1.5	2	2	18.80	14.35	2.00	1.30	0.00
OPERATING ENGINEER	All	FLT	2	55.55	57.05	1.5	1.5	2	2	18.80	14.35	2.00	1.30	0.00
OPERATING ENGINEER	All	FLT	3	49.45	57.05	1.5	1.5	2	2	18.80	14.35	2.00	1.30	0.00
OPERATING ENGINEER	All	FLT	4	40.25		1.5	1.5	1.5	1.5	18.05	13.60	1.90	1.30	0.00
OPERATING ENGINEER	All	FLT	5	58.55	57.05	1.5	1.5	2	2	18.80	14.35	2.00	1.30	0.00
OPERATING ENGINEER	All	FLT	6	38.00	57.05	1.5	1.5	2	2	18.80	14.35	2.00	1.30	0.00

## Prevailing Wage Rates for Lake County (Updated 12/26/2018)

Trade Title	Region	Type	Class	Base Wage	preman Wa	OT M-F	OT Sa	OT Su	OT Hol	H/W	Pension	Vacation	Training	Fringe Benefit
OPERATING ENGINEER	All	HWY	1	49.30	53.30	1.5	1.5	2	2	19.65	15.10	2.00	1.40	0.00
OPERATING ENGINEER	All	HWY	2	48.75	53.30	1.5	1.5	2	2	19.65	15.10	2.00	1.40	0.00
OPERATING ENGINEER	All	HWY	3	46.70	53.30	1.5	1.5	2	2	19.65	15.10	2.00	1.40	0.00
OPERATING ENGINEER	All	HWY	4	44.30		1.5	1.5	2	2	18.80	14.35	2.00	1.30	0.00
OPERATING ENGINEER	All	HWY	5	43.10		1.5	1.5	2	2	7.48	4.50	1.50	0.10	22.87
OPERATING ENGINEER	All	HWY	6	52.30	53.30	1.5	1.5	2	2	19.65	15.10	2.00	1.40	0.00
OPERATING ENGINEER	All	HWY	7	50.30	53.30	1.5	1.5	2	2	19.65	15.10	2.00	1.40	0.00
ORNAMNTL IRON WORKER	All	ALL		48.05	50.55	2	2	2	2	14.09	20.59	0.00	1.25	0.00
PAINTER	All	ALL		46.55	52.36	1.5	1.5	1.5	2	11.81	11.94	0.00	1.87	0.00
PAINTER SIGNS	All	BLD		38.20	43.25	1.5	1.5	2	2	2.60	3.25	0.00	0.00	0.00
PILEDRIVER	All	ALL		47.35	49.35	1.5	1.5	2	2	11.79	20.41	0.00	0.63	0.00
PIPEFITTER	All	BLD		48.50	51.50	1.5	1.5	2	2	10.05	18.85	0.00	2.54	0.00
PLASTERER	All	BLD		45.40	47.40	2	1.5	2	2	10.25	22.68	0.00	0.50	0.00
PLUMBER	All	BLD		50.25	53.25	1.5	1.5	2	2	14.35	14.42	0.00	1.31	0.00
ROOFER	All	BLD		43.65	47.65	1.5	1.5	2	2	9.73	12.44	0.00	0.53	0.00
SHEETMETAL WORKER	All	BLD		44.25		1.5	1.5	2	2	11.35	24.68	0.00	0.81	0.00
SIGN HANGER	All	BLD		45.75	47.25	1.5	1.5	2	2	5.87	11.26	0.00	0.49	3.20
SPRINKLER FITTER	All	BLD		48.10	50.60	1.5	1.5	2	2	12.75	13.65	0.00	0.55	0.00
STEEL ERECTOR	ALL	ALL		42.07	44.07	2	2	2	2	13.45	19.59	0.00	0.35	
STONE MASON	All	BLD		46.19	50.81	1.5	1.5	2	2	10.65	17.92	0.00	0.92	0.00
TERRAZZO FINISHER	All	BLD		41.54	44.54	1.5	1.5	2	2	10.75	13.71	0.00	0.86	0.00
TERRAZZO MASON	All	BLD		45.38	48.88	1.5	1.5	2	2	10.75	15.17	0.00	0.89	0.00
TILE MASON	All	BLD		46.49	50.49	1.5	1.5	2	2	10.75	14.99	0.00	0.90	0.00
TRAFFIC SAFETY WRKR	All	HWY		36.00	37.60	1.5	1.5	2	1.5	7.05	8.00	1.70	1.20	0.00
TRUCK DRIVER	All	ALL	1	37.05		1.5	1.5	2	2	8.60	10.61	1.00	0.15	0.00
TRUCK DRIVER	All	ALL	2	37.20		1.5	1.5	2	2	9.50	7.50	0.00	0.15	0.00
TRUCK DRIVER	All	ALL	3	40.34		1.5	1.5	2	2	10.47	12.50	0.00	0.50	2.81
TRUCK DRIVER	All	ALL	4	37.10		1.5	1.5	2	2	9.68	13.25	0.00	0.20	0.00
TUCKPOINTER	All	BLD		46.00	47.00	1.5	1.5	2	2	8.34	16.81	0.00	0.93	0.00



#### GENERAL NOTES

Existing tie bars shall be either cut or removed. Marginal bars shall be cut.

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

DATE	REVISIONS
1-1-08	Switched units to English (metric).
1-1-07	Revised Note for Class C patches.

## CLASS C and D PATCHES

**STANDARD 442201-03**

Illinois Department of Transportation

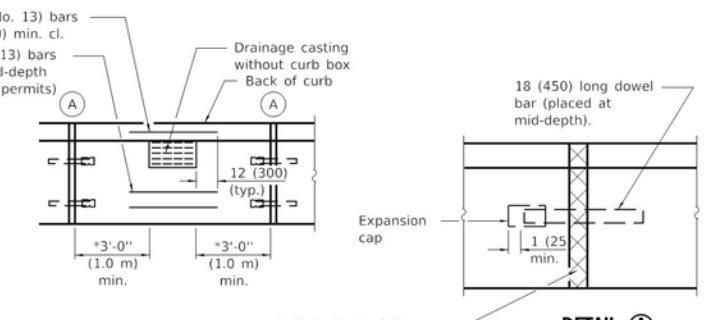
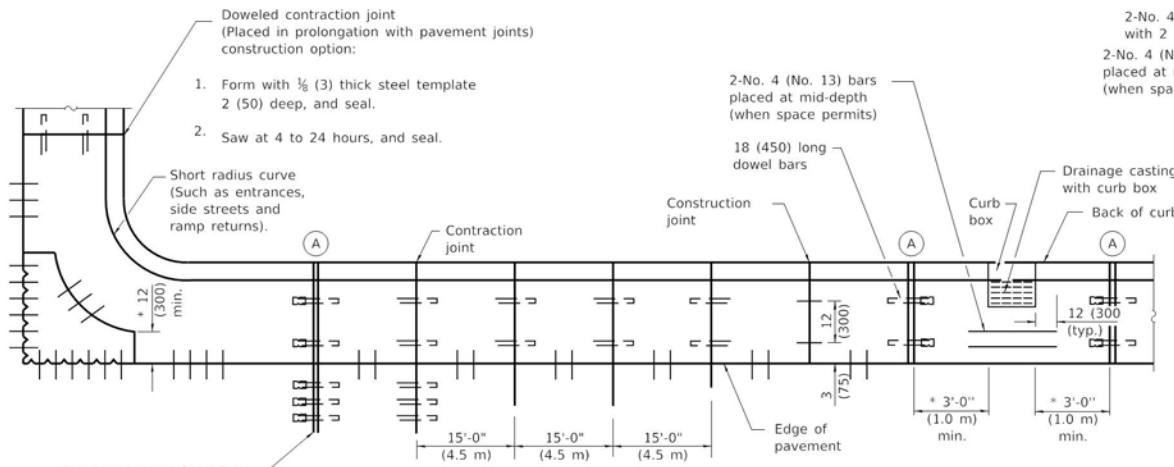
PASSED January 1, 2008

ENGINEER OF POLICY AND PROCEDURES

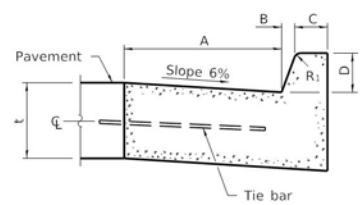
APPROVED January 1, 2008

ENGINEER OF DESIGN AND ENVIRONMENT

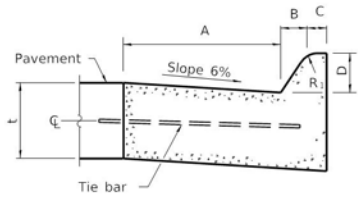
ISSUED 1-1-97



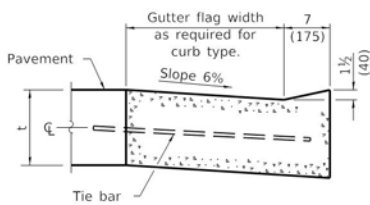
**PLAN**  
**ADJACENT TO PCC PAVEMENT OR PCC BASE COURSE**



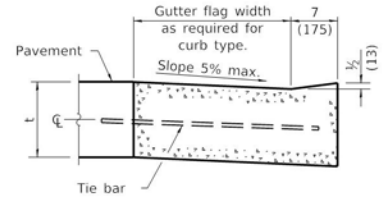
**BARRIER CURB**



**MOUNTABLE CURB**



**DEPRESSED CURB (TYPICAL)**



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

**GENERAL NOTES**

The bottom slope of combination curb and gutter constructed adjacent to pcc pavement shall be the same slope as the subbase or 6% when subbase is omitted.  
t = Thickness of pavement.

Longitudinal joint tie bars shall be No. 6 (No. 19) at 36 (900) centers in accordance with details for longitudinal construction joint shown on Standard 420001.

A minimum clearance of 2 (50) between the end of the tie bar and the back of the curb shall be maintained.

The dowel bars shown in contraction joints will only be required for monolithic construction.

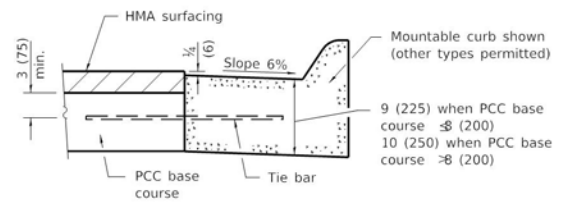
See Standard 606301 for details of corner islands.

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

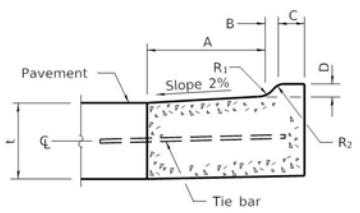
TABLE OF DIMENSIONS BARRIER CURB					
TYPE	A	B	C	D	R <sub>1</sub>
B-6.06 *	6	1	6	6	1
(B-15.15)	(150)	(25)	(150)	(150)	(25)
B-6.12	12	1	6	6	1
(B-15.3)	(300)	(25)	(150)	(150)	(25)
B-6.18	18	1	6	6	1
(B-15.45)	(450)	(25)	(150)	(150)	(25)
B-6.24	24	1	6	6	1
(B-15.60)	(600)	(25)	(150)	(150)	(25)
B-9.12	12	2	5	9	1
(B-22.30)	(300)	(50)	(125)	(225)	(25)
B-9.18	18	2	5	9	1
(B-22.45)	(450)	(50)	(125)	(225)	(25)
B-9.24	24	2	5	9	1
(B-22.60)	(600)	(50)	(125)	(225)	(25)

\* For corner islands only.

TABLE OF DIMENSIONS MOUNTABLE CURB						
TYPE	A	B	C	D	R <sub>1</sub>	R <sub>2</sub>
M-2.06	6	2	4	2	3	2
(M-5.15)	(150)	(50)	(100)	(50)	(75)	(50)
M-2.12	12	2	4	2	3	2
(M-5.30)	(300)	(50)	(100)	(50)	(75)	(50)
M-4.06	6	4	3	4	3	NA
(M-10.15)	(150)	(100)	(75)	(100)	(75)	NA
M-4.12	12	4	3	4	3	NA
(M-10.30)	(300)	(100)	(75)	(100)	(75)	NA
M-4.18	18	4	3	4	3	NA
(M-10.45)	(450)	(100)	(75)	(100)	(75)	NA
M-4.24	24	4	3	4	3	NA
(M-10.60)	(600)	(100)	(75)	(100)	(75)	NA
M-6.06	6	6	2	6	2	NA
(M-15.15)	(150)	(150)	(50)	(150)	(50)	NA
M-6.12	12	6	2	6	2	NA
(M-15.30)	(300)	(150)	(50)	(150)	(50)	NA
M-6.18	18	6	2	6	2	NA
(M-15.45)	(450)	(150)	(50)	(150)	(50)	NA
M-6.24	24	6	2	6	2	NA
(M-15.60)	(600)	(150)	(50)	(150)	(50)	NA



**ADJACENT TO PCC BASE COURSE WITH HMA SURFACING**



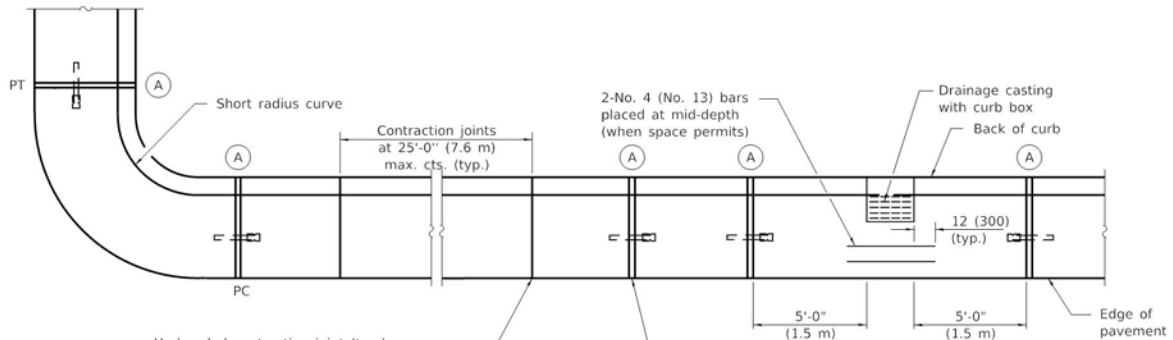
**M-2.06 (M-5.15) and M-2.12 (M-5.30)**

DATE	REVISIONS
1-1-18	Revised General Note for tie bar spacing to 36 (900) cts.
1-1-15	Added B-6.06 (B-15.15) barrier curb and gutter to table (corner islands only).

**CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER**  
(Sheet 1 of 2)

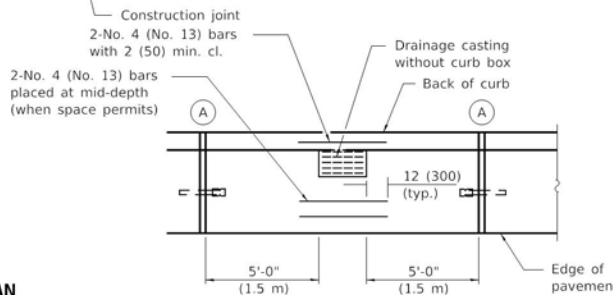
**STANDARD 606001-07**

Illinois Department of Transportation  
 PASSED January 1, 2018  
 Michael Beard  
 ENGINEER OF POLICY AND PROCEDURES  
 APPROVED January 1, 2018  
 Matthew M. Bello  
 ENGINEER OF DESIGN AND ENVIRONMENT

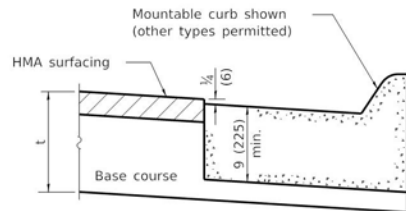


Undoweled contraction joint (typ.) construction options:

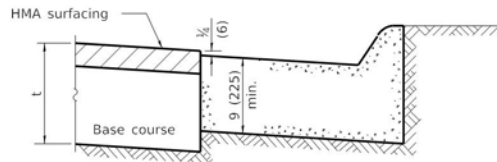
1. Form with  $\frac{3}{8}$  (3) thick steel template 2 (50) deep, and seal.
2. Saw 2 (50) deep at 4 to 24 hours, and seal.
3. Insert  $\frac{3}{4}$  (20) thick preformed joint filler full depth and width.



**PLAN**

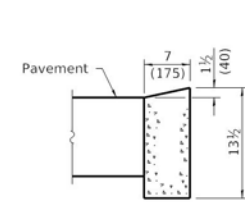


**ON DISTURBED SUBGRADE**

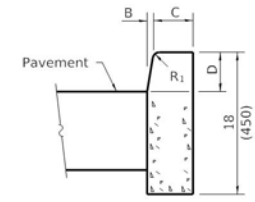


**ON UNDISTURBED SUBGRADE**

**ADJACENT TO FLEXIBLE PAVEMENT**

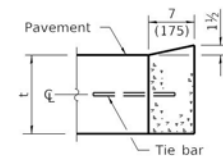


**DEPRESSED CURB**

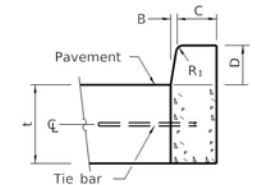


**BARRIER CURB**

**ADJACENT TO FLEXIBLE PAVEMENT**



**DEPRESSED CURB**



**BARRIER CURB**

**ADJACENT TO PCC PAVEMENT OR PCC BASE COURSE**

**CONCRETE CURB TYPE B**

**CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER**  
(Sheet 2 of 2)

STANDARD 606001-07

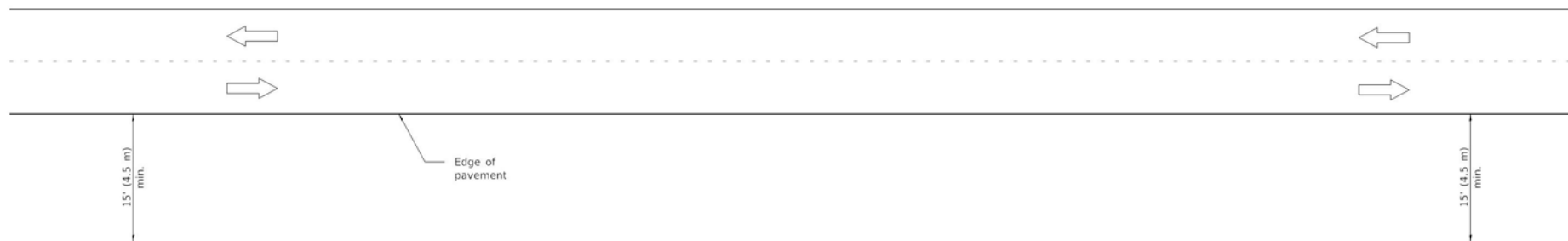
Illinois Department of Transportation

PASSED January 1, 2018  
*Michael Beard*  
 ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 2018  
*Manuel M. Pablos*  
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-17  
 497





**TYPICAL APPLICATIONS**

- Landscaping work
- Utility work
- Fencing contracts and maintenance
- Cleaning culverts

**GENERAL NOTES**

This Standard is used where at all times all vehicles, equipment, workers or their activities are more than 15' (4.5 m) from the edge of pavement.

When the work operation requires that two or more work vehicles cross the 15' (4.5 m) clear zone in any one hour, traffic control shall be according to Standard 701006.

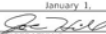
All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-09	Switched units to English (metric).
1-1-05	Revised title and notes.

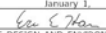
**OFF-RD OPERATIONS,  
2L, 2W, MORE THAN  
15' (4.5 m) AWAY**

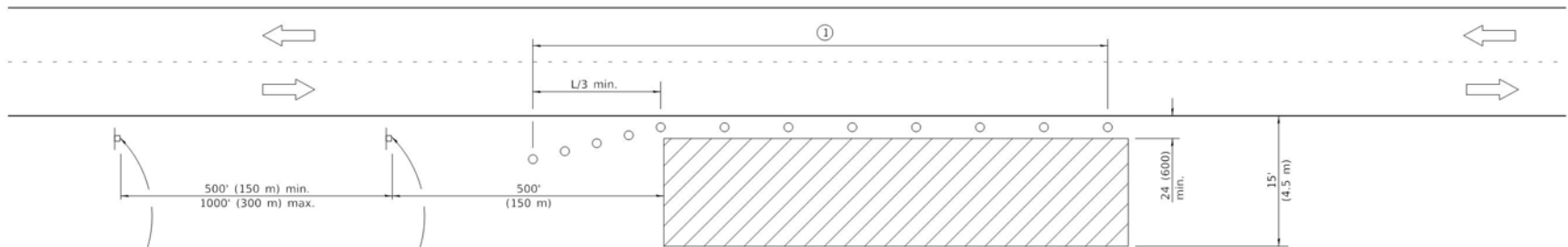
**STANDARD 701001-02**

Illinois Department of Transportation

PASSED January 1, 2009  
  
 ENGINEER OF OPERATIONS

ISSUED 1-1-97

APPROVED January 1, 2009  
  
 ENGINEER OF DESIGN AND ENVIRONMENT



For contract construction projects

ROAD CONSTRUCTION AHEAD

W20-1103(0)-48



For maintenance and utility projects

ROAD WORK AHEAD

W20-1(0)-48

### TYPICAL APPLICATIONS

Utility operations  
 Culvert extensions  
 Side slope changes  
 Guardrail installation and maintenance  
 Delineator installation  
 Landscaping operations  
 Shoulder repair  
 Sign installation and maintenance

### SYMBOLS

- Work area
- Sign
- Cone, drum or barricade

① When the work operation exceeds one hour, cones, drums or barricades shall be placed at 25' (8 m) centers for L/3 distance, and at 50' (15 m) centers through the remainder of the work area.

### GENERAL NOTES

This Standard is used where any vehicles, equipment, workers or their activities will encroach in the area 15' (4.5 m) to 24' (600) from the edge of pavement.

Calculate L as follows:

SPEED LIMIT	FORMULAS	
	English	(Metric)
40 mph (70 km/h) or less:	$L = \frac{WS^2}{60}$	$L = \frac{WS^2}{150}$
45 mph (80 km/h) or greater:	$L = (W)(S)$	$L = 0.65(W)(S)$

W = Width of offset in feet (meters).  
 S = Normal posted speed mph (km/h).

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

DATE	REVISIONS
1-1-14	Revised workers sign number to agree with current MUTCD.
1-1-13	Omitted text 'WORKERS' sign.

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

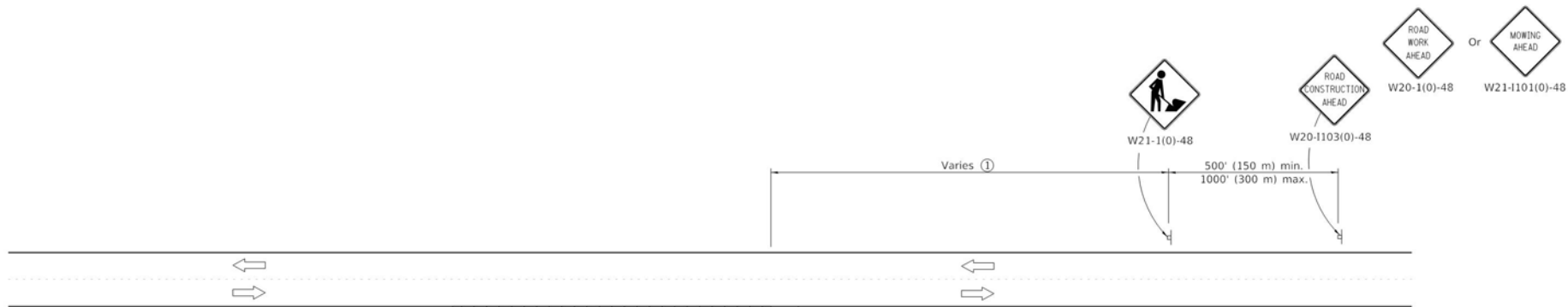
**STANDARD 701006-05**

Illinois Department of Transportation

PASSED January 1, 2014  
 ENGINEER OF SAFETY ENGINEERING

APPROVED January 1, 2014  
 ENGINEER OF DESIGN AND ENVIRONMENT

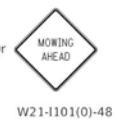
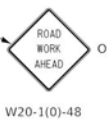
ISSUED 1-1-97



For contract construction projects



For maintenance and utility projects



**TYPICAL APPLICATIONS**

Shoulder work  
Utility operations

**SYMBOLS**



Work area



Sign



Flagger with traffic control sign when required

① Minimum distance is 200' (60 m). Maximum distance to be determined by the Engineer but should not exceed 1/2 the length required for one normal working day's operation, or 4 miles (6.4 km) whichever is less.

**GENERAL NOTES**

This Standard is used where at any time, any vehicle, equipment, workers or their activities require an intermittent or continuous moving operation on the shoulder, where the average speed is 1 mph (2 km/h) or less.

When the work operation does not exceed 60 minutes, traffic control may be according to Standard 701301.

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

DATE	REVISIONS
1-1-14	Revised workers sign number to agree with current MUTCD.
1-1-13	Omitted text 'WORKERS' sign.

**OFF-RD MOVING OPERATIONS,  
2L, 2W, DAY ONLY**

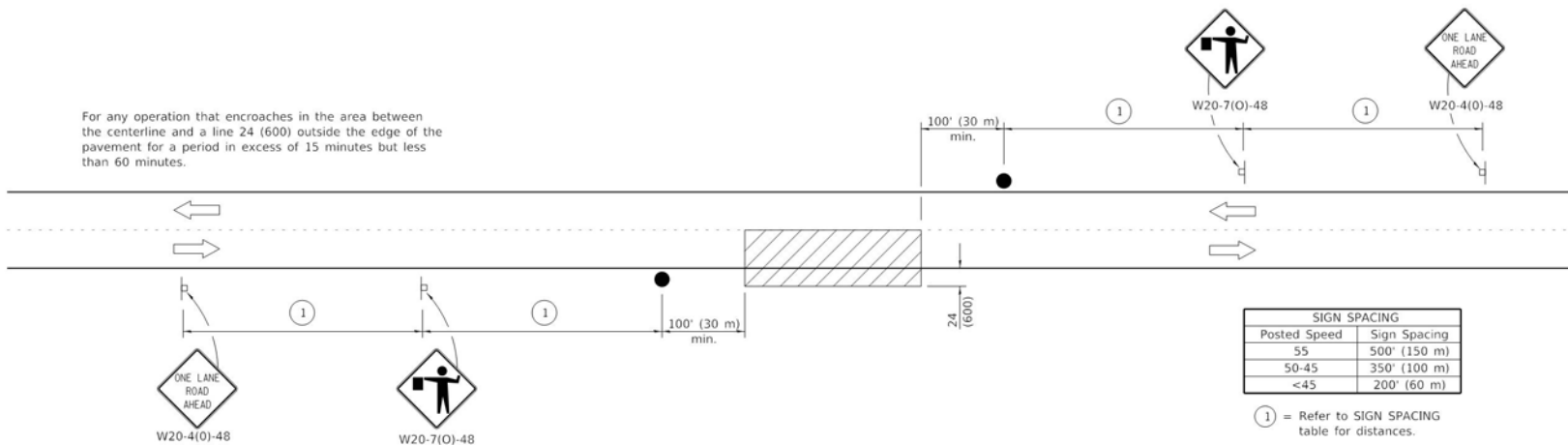
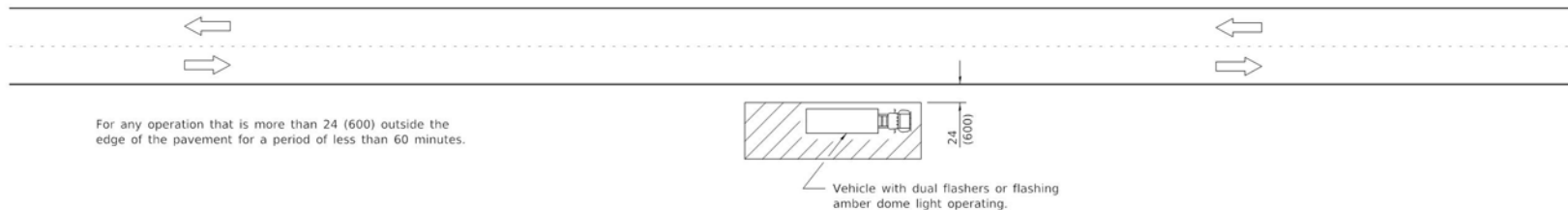
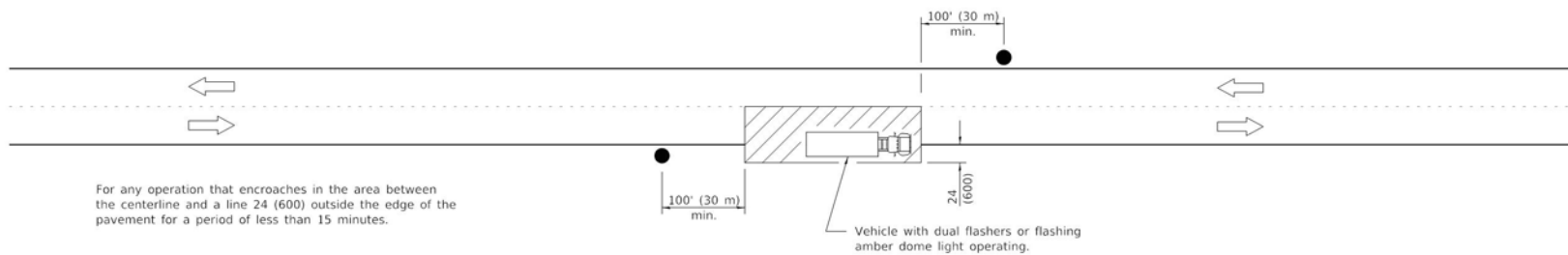
**STANDARD 701011-04**

Illinois Department of Transportation

PASSED January 1, 2014  
ENGINEER OF SAFETY ENGINEERING

APPROVED January 1, 2014  
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97



**TYPICAL APPLICATIONS**

- Marking patches
- Field survey
- String line
- Utility operations
- Cleaning up debris on pavement

**SYMBOLS**

- Work area
- Sign on portable or permanent support
- Flagger with traffic control sign

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

DATE	REVISIONS
1-1-11	Revised flagger sign.
1-1-09	Switched units to English (metric).

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

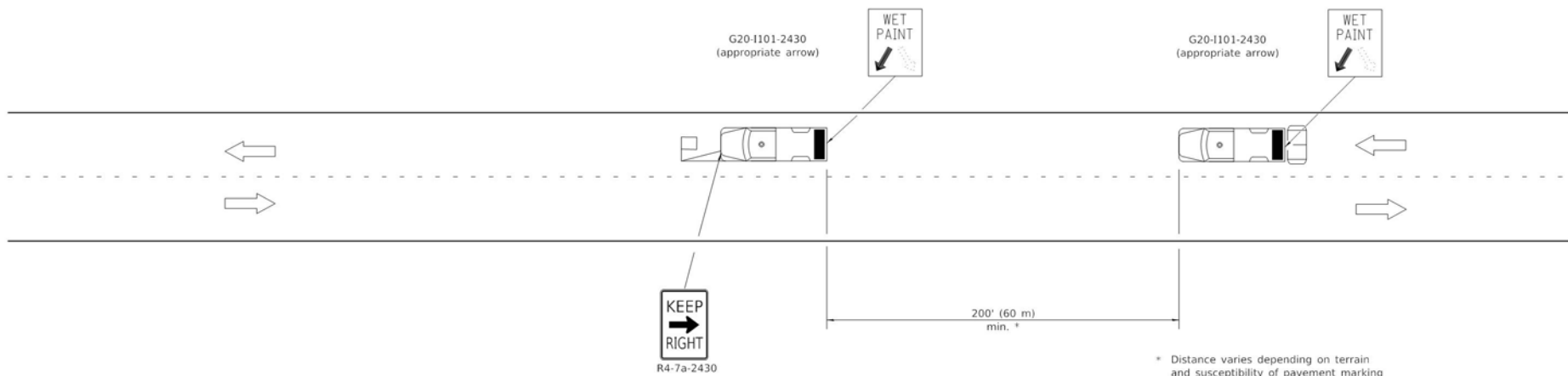
**STANDARD 701301-04**

Illinois Department of Transportation

PASSED January 1, 2011  
  
 ENGINEER OF SAFETY ENGINEERING

APPROVED January 1, 2011  
  
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97



**TYPICAL APPLICATIONS**

- Landscaping work
- Utility work
- Pavement marking
- Weed spraying
- Roadometer measurements
- Debris cleanup
- Crack pouring

**SYMBOLS**

- Arrow board (Hazard Mode only)
- Truck with headlights, emergency flashers and flashing amber light. (visible from all directions)
- 18x18 (450x450) min. orange flag (use when guide wheel is used)
- Truck mounted attenuator

**GENERAL NOTES**

This Standard is used where any vehicle, equipment, workers or their activities will require a continuous moving operation where the average speed is greater than 3 mph (5 km/h).

For shoulder operations not encroaching on the pavement, use DETAIL A, Standard 701426.

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

DATE	REVISIONS
1-1-09	Switched units to English (metric). Omitted Pass With Care sign.
1-1-00	Elim. speed restrictions in Standard title.

**LANE CLOSURE 2L, 2W  
MOVING OPERATIONS-  
DAY ONLY**

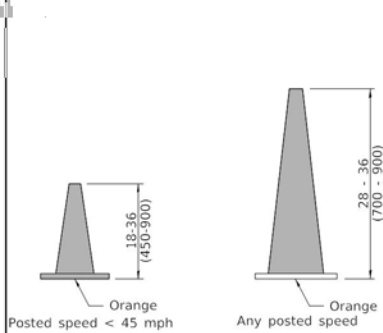
**STANDARD 701311-03**

Illinois Department of Transportation

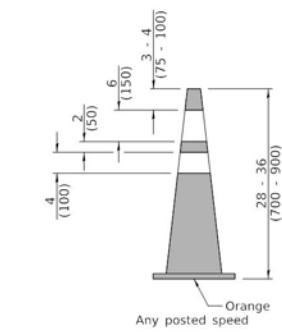
PASSED January 1, 2009  
ENGINEER OF OPERATIONS

APPROVED January 1, 2009  
ENGINEER OF DESIGN AND ENVIRONMENT

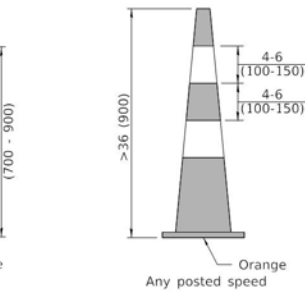
ISSUED 1-1-97



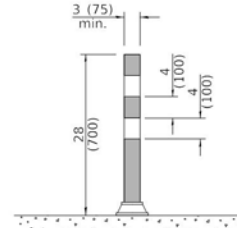
**DAYTIME USE**



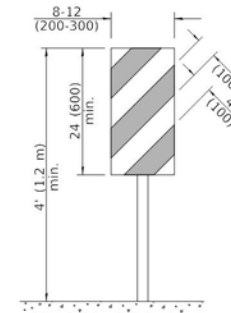
**CONES**



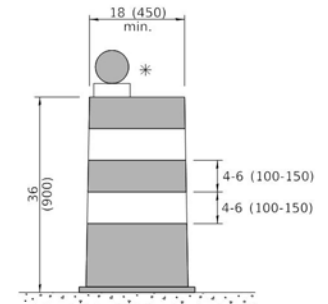
**DAY OR NIGHTTIME USE**



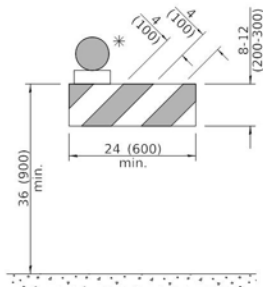
**TUBULAR MARKER**



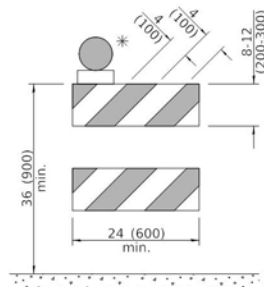
**VERTICAL PANEL  
POST MOUNTED**



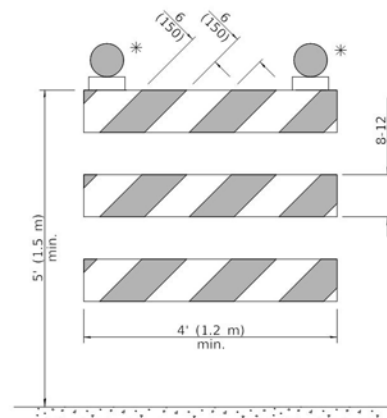
**DRUM**



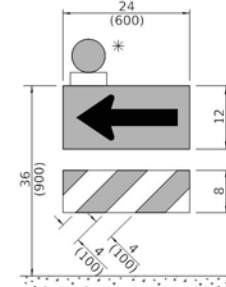
**TYPE I BARRICADE**



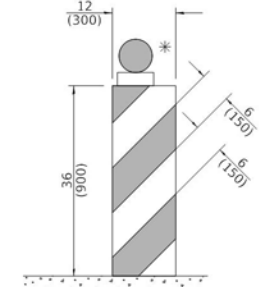
**TYPE II BARRICADE**



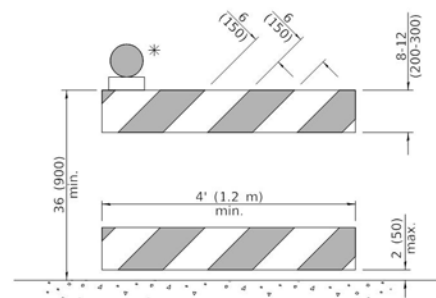
**TYPE III BARRICADE**



**DIRECTION INDICATOR  
BARRICADE**



**VERTICAL BARRICADE**



**DETECTABLE PEDESTRIAN  
CHANNELIZING BARRICADE**

\* Warning lights (if required)

**GENERAL NOTES**

All heights shown shall be measured above the pavement surface.

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


DATE	REVISIONS
1-1-19	Revised cone usage and added cones >36" (900 m) height.
1-1-18	Revised END WORK ZONE SPEED LIMIT sign from orange to white background.


**TRAFFIC CONTROL DEVICES**

(Sheet 1 of 3)

**STANDARD 701901-08**

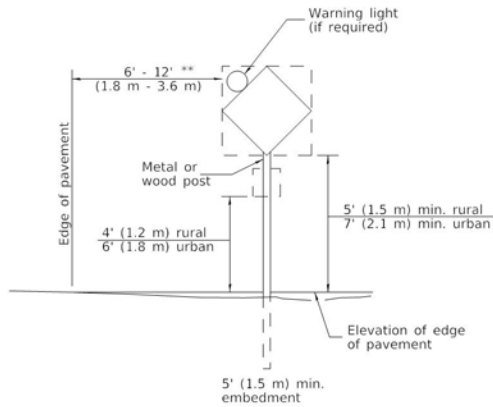
Illinois Department of Transportation

APPROVED January 1, 2019  
  
 ENGINEER OF SAFETY PROG. AND ENGINEERING

APPROVED January 1, 2019  
  
 ENGINEER OF DESIGN AND ENVIRONMENT

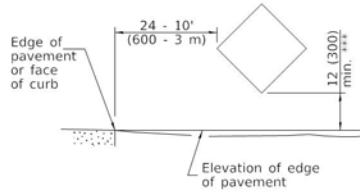
ET-11 03/ISS1





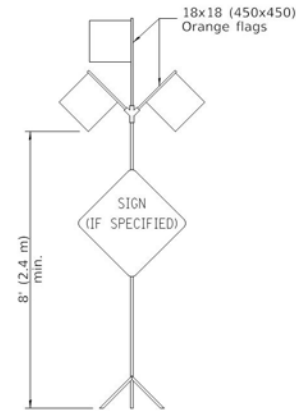
**POST MOUNTED SIGNS**

\*\* When curb or paved shoulder are present this dimension shall be 24 (600) to the face of curb or 6' (1.8 m) to the outside edge of the paved shoulder.



**SIGNS ON TEMPORARY SUPPORTS**

\*\*\* When work operations exceed four days, this dimension shall be 5' (1.5 m) min. If located behind other devices, the height shall be sufficient to be seen completely above the devices.



**HIGH LEVEL WARNING DEVICE**

ROAD  
CONSTRUCTION  
NEXT X MILES  
G20-1104(0)-6036

END  
CONSTRUCTION  
G20-1105(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 multi-lane highways.

**WORK LIMIT SIGNING**

WORK ZONE	W21-1115(0)-3618
SPEED LIMIT XX	R2-1-3648
PHOTO ENFORCED	R10-1108p-3618 ****
\$XXX FINE MINIMUM	R2-1106p-3618

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

END WORK ZONE SPEED LIMIT	G20-1103-6036
---------------------------	---------------

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

**HIGHWAY CONSTRUCTION SPEED ZONE SIGNS**

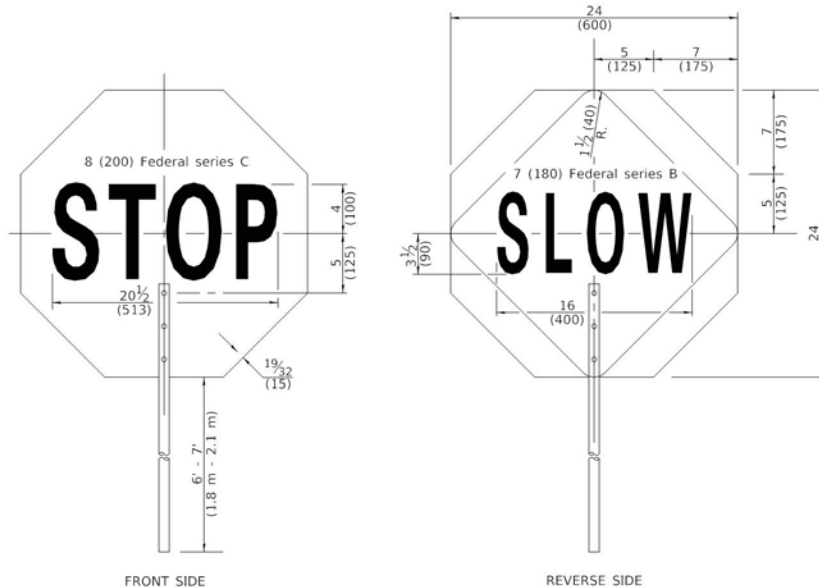
\*\*\*\* R10-1108p shall only be used along roadways under the jurisdiction of the State.



W12-1103-4848

**WIDTH RESTRICTION SIGN**

XX'-XX" width and X miles are variable.



**FLAGGER TRAFFIC CONTROL SIGN**

**TRAFFIC CONTROL DEVICES**

(Sheet 2 of 3)

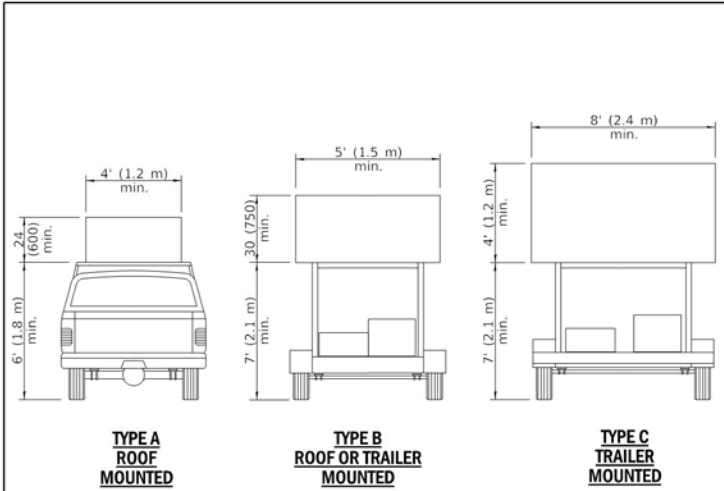
**STANDARD 701901-08**

Illinois Department of Transportation

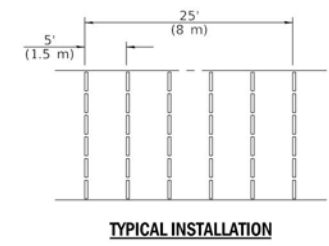
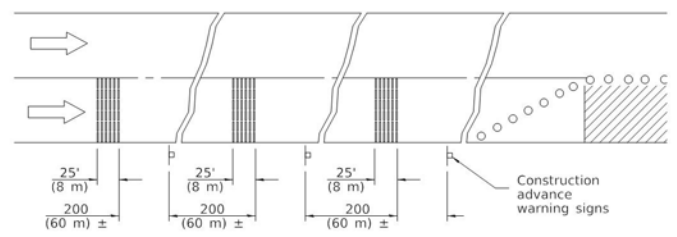
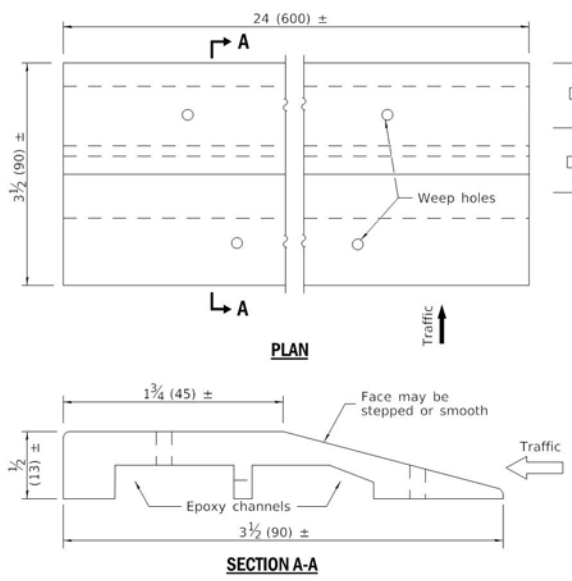
APPROVED January 1, 2019  
*Cynthia A. ...*  
 ENGINEER OF SAFETY PROG. AND ENGINEERING

APPROVED January 1, 2019  
*J. ...*  
 ENGINEER OF DESIGN AND ENVIRONMENT

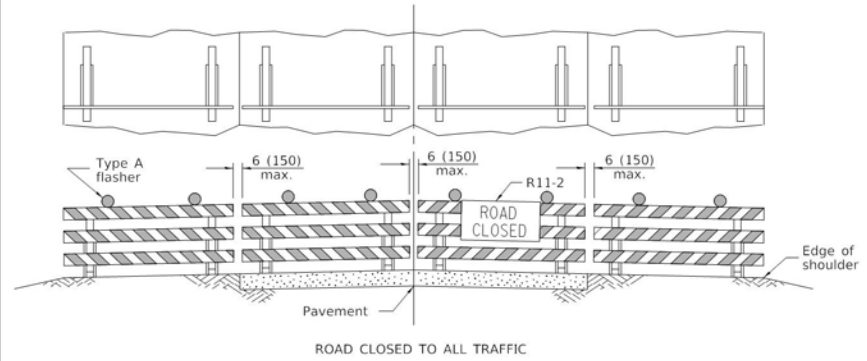
15255  
 61-1-1 GENISS



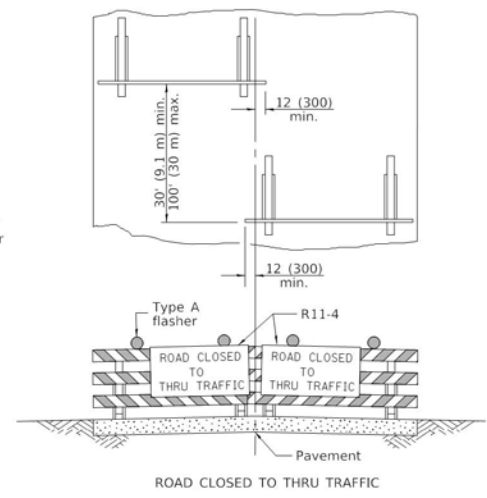
**ARROW BOARDS**



**TEMPORARY RUMBLE STRIPS**



Reflectorized striping may be omitted on the back side of the barricades. If a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the sign may be mounted on an NCHRP 350 temporary sign support directly in front of the barricade.



Reflectorized striping shall appear on both sides of the barricades. If a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the signs may be mounted on NCHRP 350 temporary sign supports directly in front of the barricade.

**TYPICAL APPLICATIONS OF TYPE III BARRICADES CLOSING A ROAD**

Illinois Department of Transportation

APPROVED January 1, 2019  
*Cynthia A. ...*  
 ENGINEER OF SAFETY PROG. AND ENGINEERING

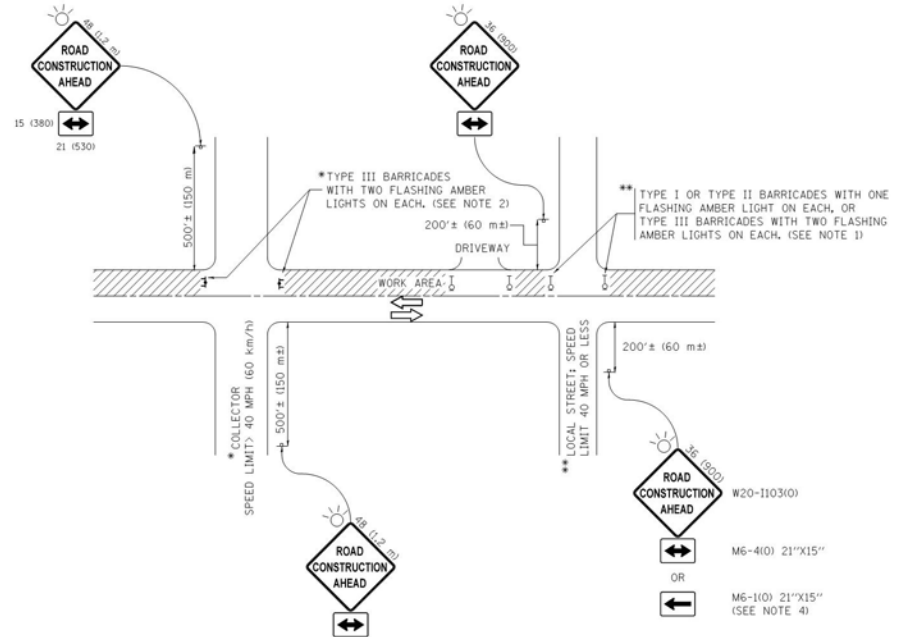
APPROVED January 1, 2019  
*J. ...*  
 ENGINEER OF DESIGN AND ENVIRONMENT

ET-11 (03/05)

**TRAFFIC CONTROL DEVICES**

(Sheet 3 of 3)

**STANDARD 701901-08**



**NOTES:**

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1) OR (M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME =	USER NAME = fsootm_j	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
pw\1184EBIDINTEG\Illinois.gov\FWIDOT\Documents\DOT Offices\District 17\Projects\Dist	Documents\DOT Offices\District 17\Projects\Dist	062009\CADData\CADsheets\sc18.dgn	REVISED - T. RAMMACHER 01-06-00
PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED - A. SCHUETZ 07-01-13	
PLOT DATE = 9/15/2016	DATE = 06-89	REVISED - A. SCHUETZ 09-15-16	

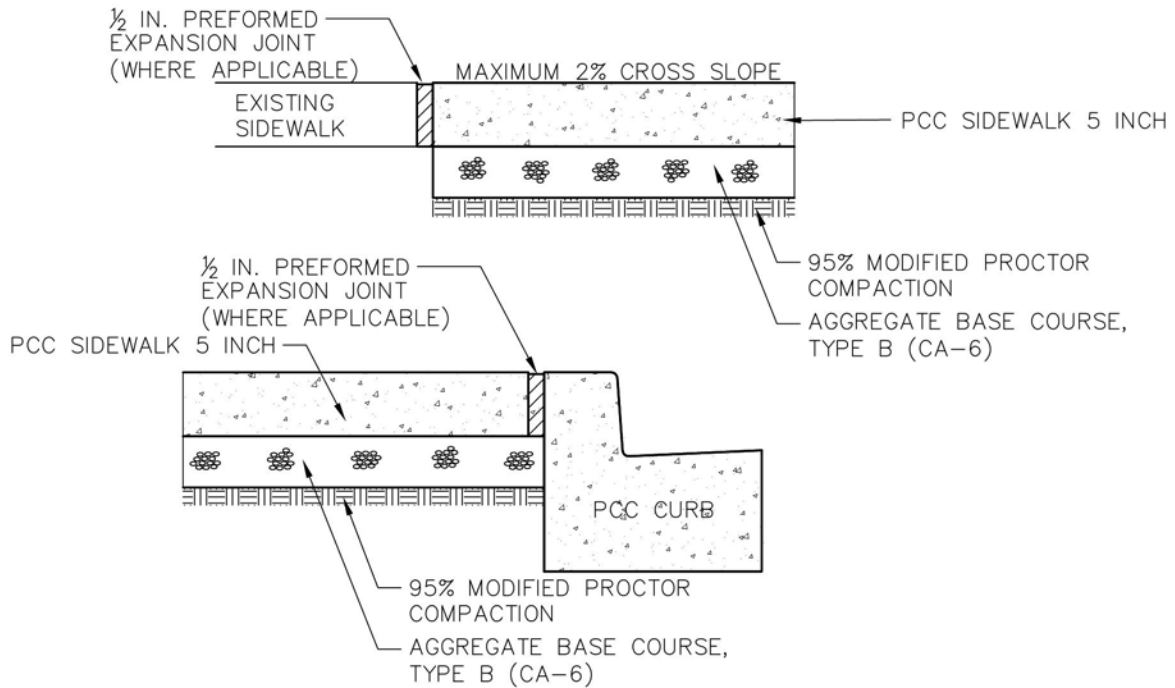
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.	F.I.D. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
						TC-10		CONTRACT NO.			
(ILLINOIS) FED. AID PROJECT											

NOTES:

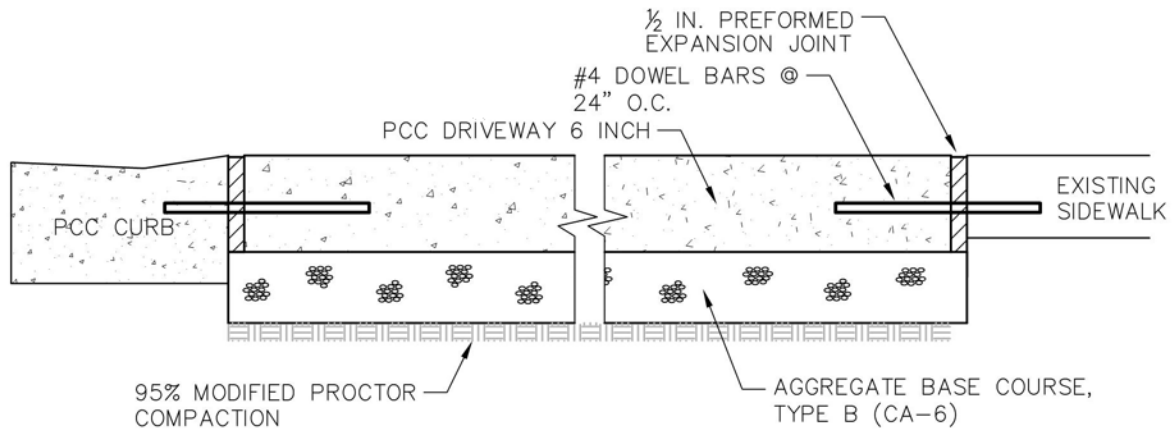
1. REMOVE EXISTING COLD PATCH AND CA-6 AGGREGATE MATERIAL TO A DEPTH OF TEN (10) IN. BELOW GRADE.
2. FURNISH, PLACE, AND COMPACT FIVE (5) IN. OF CA-6 AGGREGATE MATERIAL, IF APPLICABLE.
3. IF NO EXISTING EXPANSION JOINT EXISTS WITHIN 50 FT IN EITHER DIRECTION OF THE SPOT REPAIR, A ½ IN. PREFORMED EXPANSION JOINT SHALL BE INSTALLED, OR AT THE DIRECTION OF THE ENGINEER.
4. CONTROL JOINTS SHALL EXTEND TO ¼ THE DEPTH OF THE SIDEWALK, AND SHALL BE ⅛ IN. TO ¼ IN. IN WIDTH. THE EDGE OF THE CONTROL JOINTS SHALL BE GIVEN A ¼ IN. RADIUS.
5. IF APPLICABLE, #4 EPOXY COATED DOWEL BARS SHALL BE INSTALLED AT 24 IN. ON CENTER AT SIDEWALK ACCESSIBILITY RAMP BETWEEN THE KEYSTONE AND THE CURB.
6. SIDEWALK WIDTH AS SHOWN ON PLANS.
7. SIDEWALK JOINTS SHALL MATCH CURB CONTROL AND CONSTRUCTION JOINTS, IF APPLICABLE.



DETAIL SHEET 1 OF 4

NOTES:

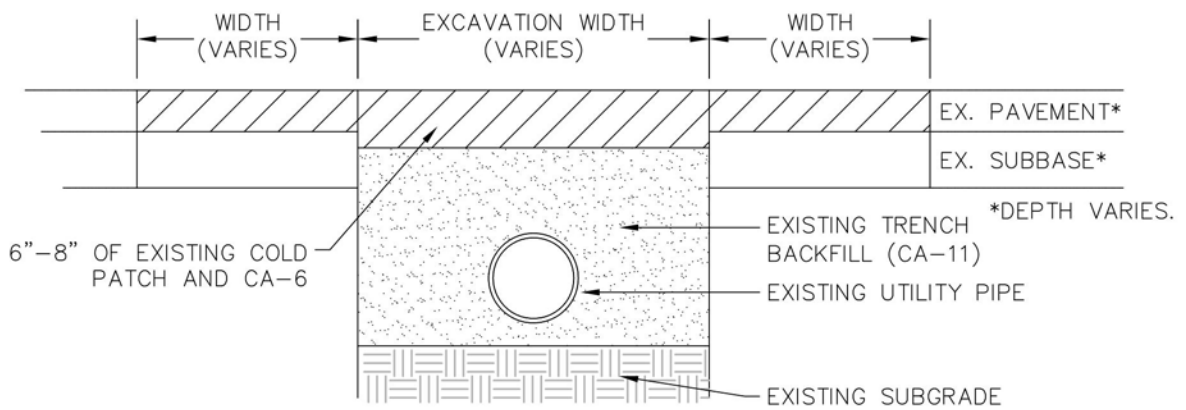
1. REMOVE EXISTING COLD PATCH AND CA-6 AGGREGATE MATERIAL TO A DEPTH OF ELEVEN (11) IN. BELOW GRADE.
2. FURNISH, PLACE, AND COMPACT FIVE (5) IN. OF CA-6 AGGREGATE MATERIAL, IF APPLICABLE.
3. SET ½ IN. PREFORMED EXPANSION JOINT FILLER WHERE THE DRIVEWAY PAVEMENT ABUTS EXISTING SIDEWALK AND CURB. NO EXPANSION JOINT SHALL BE REQUIRED ALONG THE EDGE OF EXISTING DRIVEWAY PAVEMENT.
4. CONTROL JOINTS SHALL EXTEND TO ¼ THE DEPTH OF THE SIDEWALK, AND SHALL BE ⅛ IN. TO ¼ IN. IN WIDTH. THE EDGE OF THE CONTROL JOINTS SHALL BE GIVEN A ¼ IN. RADIUS.
5. #4 EPOXY COATED DOWEL BARS SHALL BE INSTALLED AT 24 IN. ON CENTER WHERE THE DRIVEWAY PAVEMENT ABUTS EXISTING SIDEWALK AND CURB. NO DOWEL BARS SHALL BE REQUIRED ALONG THE EXISTING DRIVEWAY PAVEMENT.
6. DRIVEWAY PAVEMENT SHALL MATCH THE EXISTING WIDTH.



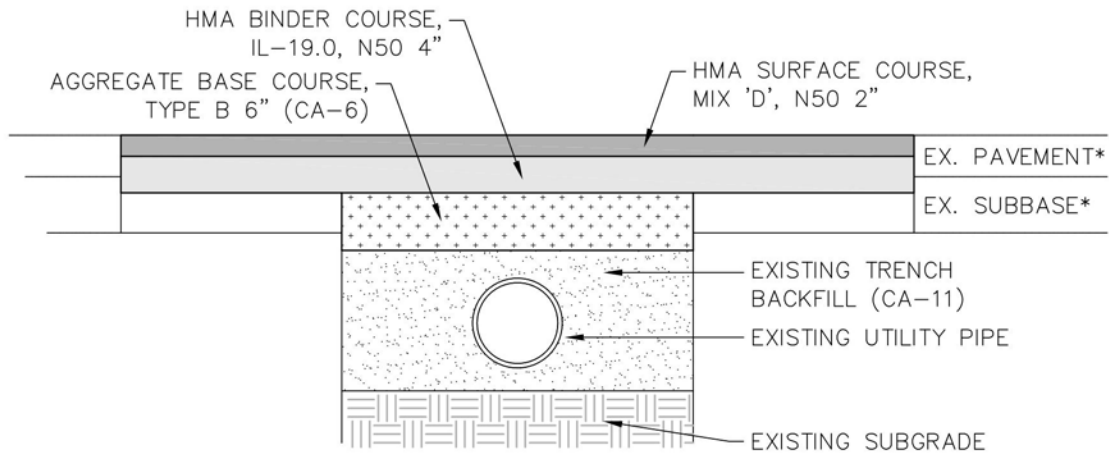
DETAIL SHEET 2 OF 4

NOTES:

1. REMOVE EXISTING COLD PATCH AND CA-6 AGGREGATE MATERIAL WITHIN THE TRENCH.
2. REMOVE EXISTING TRENCH BACKFILL MATERIAL TO A DEPTH OF TWELVE (12) IN. BELOW FINISH GRADE.
3. FURNISH, PLACE, AND COMPACT SIX (6) IN. OF CA-6 AGGREGATE MATERIAL.
4. REMOVE ADJACENT EXISTING PAVEMENT AS MARKED BY THE ENGINEER TO A DEPTH OF SIX (6) IN. BELOW FINISH GRADE. COMPACT THE EXISTING SUBBASE MATERIAL.
5. INSTALL 4" OF HMA BINDER COURSE, N50.
6. INSTALL 2" OF HMA SURFACE COURSE, N50.



**EXISTING PAVEMENT SECTION**



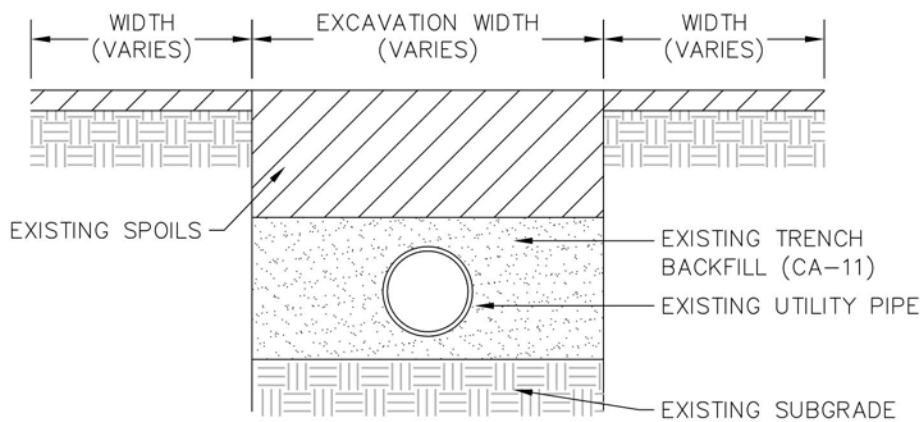
**PROPOSED PAVEMENT SECTION**

DETAIL SHEET 3 OF 4

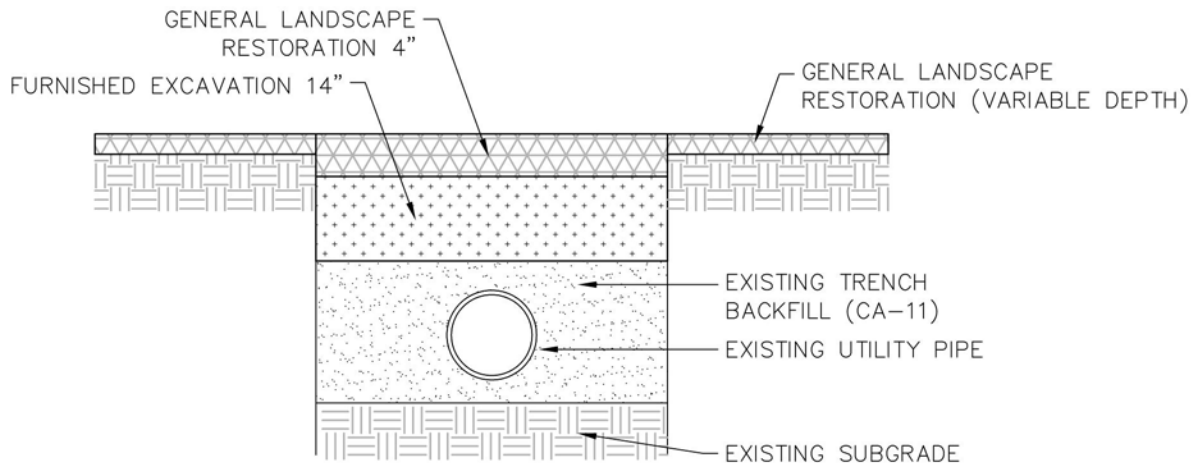


NOTES:

1. REMOVE EXISTING TRENCH SPOILS WITHIN THE TRENCH TO A DEPTH OF EIGHTEEN (18) IN. BELOW FINISH GRADE AND COMPACT THE REMAINING MATERIAL.
2. FURNISH AND COMPACT FOURTEEN (14) IN. OF SUITABLE MATERIAL.
3. EXCAVATE AND PREPARE THE SUBGRADE OF THE ADJACENT DISTURBED PARKWAY AS MARKED BY THE ENGINEER.
4. INSTALL FOUR (4) IN. OF PULVERIZED TOPSOIL WITHIN THE TRENCH WIDTH AND VARIABLE DEPTH ADJACENT TO MATCH THE EXISTING TERRAIN.
5. INSTALL SEED, FERTILIZER, AND EROSION CONTROL BLANKET.



**EXISTING PARKWAY SECTION**



**PROPOSED PARKWAY SECTION**

DETAIL SHEET 4 OF 4