

CITY OF MCHENRY NOTICE TO BIDDERS

The City of McHenry is soliciting bids for the VENICE AVENUE IMPROVEMENTS. The proposed improvements include: 944 FT of Storm Sewers, 1,146 FT of Sanitary Sewers, 1,064 FT of Combination Concrete Curb & Gutter, 1,023 FT of Concrete Gutter, 7,732 SF of PCC Sidewalk, 5,120 SY of HMA Surface Removal, 582 TONS of HMA Binder Course, and 453 TONS of HMA Surface Course.

The bid documents will be available on the City's website on April 10, 2025. Questions are due to Jeff Strzalka, telephone (815)759-8359, email jstrzalka@hrgreen.com, no later than 12:00 p.m. (CST) on May 1, 2025.

Sealed proposals are due and will be received at the City of McHenry Public Works Department: 1415 Industrial Drive, McHenry, IL 60050 until 11:00 AM on THURSDAY, MAY 8, 2025.

All proposals shall be submitted in a sealed envelope titled "Bid for VENICE AVENUE IMPROVEMENTS" on forms furnished by the City of McHenry Public Works Department which may be obtained at the offices of HR Green, Inc. at 1391 Corporate Drive, McHenry, IL 60050 and on the City website located at: http://www.cityofmchenry.org/bids_rfqs_rfqs. The City of McHenry reserves the right to reject any or all proposals and to waive technicalities.

Prior to submitting a bid, a firm interested in submitting a bid as a Prime Contractor must complete and return a Notification of Intent to Bid form no less than three calendar days prior to the bid opening. Notification of Intent to Bid submittals will not be processed by the City after 3:30 PM three (3) calendar days preceding the published letting date. Submittal of the Notification of Intent to Bid shall confirm the bidder's intention to submit a bid and shall serve as the bidder's request for the City's Authorization to Bid. **NO BIDS SHALL BE ACCEPTED UNLESS THE CONTRACTOR HAS SUBMITTED THE NOTIFICATION OF INTENT TO BID FORM.**

IF CHECKED or specified in the Contract Specifications, THIS PROJECT IS SUBJECT TO THE ILLINOIS PREVAILING WAGE ACT, 820 ILCS 130, and Contractors shall comply with all requirements of the Prevailing Wage Act. Prevailing wage rates and certified payroll requirements are available at the Illinois Department of labor website at the following location: www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx.

The City, in accordance with the laws of the State of Illinois, hereby notifies all Bidders that it will affirmatively ensure that the contract(s) entered into pursuant to this Notice will be awarded to the successful Bidders without discrimination on the ground of race, color, religion, sex, age, sexual orientation, marital status, disability, familial status or national origin. The City reserves the right to reject any or all submittals or to accept the submittal(s) deemed most advantageous to the City.

Dated at McHenry, Illinois, 10th day of April, 2025.

/s/

Office of the City Clerk



NOTIFICATION OF INTENT TO BID

Prior to submitting a bid, a firm interested in submitting a bid as a Prime Contractor must complete and return this *Notification of Intent to Bid* form no less than three calendar days prior to the bid opening. *Notification of Intent to Bid* submittals will not be processed by the City after 3:30 PM three (3) calendar days preceding the published letting date. Submittal of the *Notification of Intent to Bid* shall confirm a Bidder's intention to submit a bid and shall serve as the Bidder's request for the City's Authorization to Bid. **NO BIDS SHALL BE ACCEPTED UNLESS THE BIDDER HAS SUBMITTED THE NOTIFICATION OF INTENT TO BID FORM.**

For bids requiring IDOT Prequalification, firms shall submit their IDOT Certification of Prequalification along with their Notification of Intent to Bid form.

The bidder shall complete and return this form to the following email address: ggruen@cityofmchenry.org. This form shall also be utilized to designate a point of contact for issuing addenda. Upon receipt of the *Notification of Intent to Bid* form, the City will acknowledge its receipt and provide the City's *Authorization to Bid* via e-mail.

Project Venice Avenue Reconstruction

Bidding Contractor _____

Contact Name & Title _____

Signature _____

Email _____

Phone _____

Date _____



VENICE AVENUE IMPROVEMENTS
CITY OF MCHENRY, ILLINOIS
SECTION NUMBER: 25-00000-00-FP

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RETURN WITH BID

NOTICE TO BIDDERS

County MCHENRY
Local Public Agency CITY OF MCHENRY
Section Number 25-00000-00-FP
Route VENICE AVENUE

Sealed proposals for the improvement described below will be received at the office of City of McHenry Public Works
Department, 1415 Industrial Drive, McHenry, IL 60050 until 11:00 AM on May 8, 2025

Sealed proposals will be opened and read publicly at the office of City of McHenry Public Works Department,
1415 Industrial Drive, McHenry, IL 60050 at 11:00 AM on May 8, 2025

DESCRIPTION OF WORK

Name Venice Avenue Improvements Length: 1,898 feet (0.36 miles)
Location Venice Avenue from Green Street to Riverside Drive within the City of McHenry
Proposed Improvement Consists of storm sewers, sanitary sewers, concrete curb and gutter, sidewalks, hot-mix asphalt binder course, hot-mix asphalt surface course, and all necessary and collateral work to construct the improvements.

- 1. Plans and proposal forms will be available Electronically via email by contacting Christine Borgerding at christine.borgerding@hrgreen.com or at 815-759-8361.
2. [X] Prequalification
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.
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.
7. The bidder shall take no advantage of any error or omission in the proposal and advertised contract.
8. If a special envelope is supplied by the Awarding Authority, each proposal should be submitted in that envelope furnished by the Awarding Agency and the blank spaces on the envelope shall be filled in correctly to clearly indicate its contents.
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.

RETURN WITH BID

PROPOSAL

County MCHENRY
Local Public Agency CITY OF MCHENRY
Section Number 25-00000-00-FP
Route VENICE AVENUE

1. Proposal of _____

for the improvement of the above section by the construction of Consists of storm sewers, sanitary sewers, concrete curb and gutter, sidewalks, hot-mix asphalt binder course, hot-mix asphalt surface course, and all necessary and collateral work to construct the improvements.

a total distance of 1,898 feet, of which a distance of 1,898 feet, (0.36 miles) are to be improved.

2. The plans for the proposed work are those prepared by HR Green, Inc., 1391 Corporate Drive, McHenry, IL 60050 and approved by the Department of Transportation on NA

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 September 26, 2025 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:

City Treasurer of McHenry

The amount of the check is 5% of Bid Amount (_____).

7. In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to the sum of the proposal guaranties, which would be required for each individual proposal. If the proposal guaranty check is placed in another proposal, it will be found in the proposal for: Section Number _____.

8. The successful bidder at the time of execution of the contract will be required to deposit a contract bond for the full amount of the award. When a contract bond is not required, the proposal guaranty check will be held in lieu thereof. If this proposal is accepted and the undersigned fails to execute a contract and contract bond as required, it is hereby agreed that the Bid Bond or check shall be forfeited to the Awarding Authority.

9. Each pay item should have a unit price and a total price. If no total price is shown or if there is a discrepancy between the product of the unit price multiplied by the quantity, the unit price shall govern. If a unit price is omitted, the total price will be divided by the quantity in order to establish a unit price.

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

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

12. The undersigned further agrees that if awarded the contract for the sections contained in the combinations on BLR 12200a, the work shall be in accordance with the requirements of each individual proposal for the multiple bid specified in the Schedule for Multiple Bids below.



Schedule of Prices

Contractor's Name

Contractor's Address

City

State

Zip Code

Local Public Agency

County

Section Number

Route(s) (Street/Road Name)

Venice Avenue

Schedule for Multiple Bids

Combination Letter	Sections Included in Combinations	Total

Schedule for Single Bid

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

Item Number	Items	Unit	Quantity	Unit Price	Total
1	TEMPORARY FENCE	FOOT			
2	TREE ROOT PRUNING	EACH			
3	EARTH EXCAVATION	CU YD			
4	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS	CU YD			
5	FURNISHED EXCAVATION	CU YD			
6	TRENCH BACKFILL	CU YD			
7	TOPSOIL FURNISH AND PLACE, 4"	SQ YD			
8	SEEDING, CLASS 1A	SQ YD			
9	NITROGEN FERTILIZER NUTRIENT	POUND			
10	POTASSIUM FERTILIZER NUTRIENT	POUND			
11	TEMPORARY DITCH CHECKS	FOOT			
12	PERIMETER EROSION BARRIER	FOOT			
13	INLET FILTERS	EACH			
14	AGGREGATE BASE COURSE, TYPE B, 4"	SQ YD			
15	AGGREGATE BASE COURSE, TYPE B, 6"	SQ YD			
16	AGGREGATE BASE COURSE, TYPE B, 8"	SQ YD			
17	AGGREGATE BASE COURSE, TYPE B	TON			
18	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON			
19	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX D, N50	TON			
20	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD			
21	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 4 INCH	SQ YD			
22	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT			
23	DETECTABLE WARNINGS	SQ FT			
24	HOT-MIX ASPHALT SURFACE REMOVAL, 4", SPECIAL	SQ YD			
25	DRIVEWAY PAVEMENT REMOVAL	SQ YD			
26	COMBINATION CURB AND GUTTER REMOVAL	FOOT			
27	SIDEWALK REMOVAL	SQ FT			
28	CLASS D PATCHES, TYPE IV, 6 INCH	SQ YD			
29	TEMPORARY PATCHING	SQ YD			
30	STORM SEWER REMOVAL 6"	FOOT			
31	STORM SEWER REMOVAL 10"	FOOT			
32	STORM SEWER REMOVAL 12"	FOOT			
33	DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED	EACH			
34	CATCH BASINS, TYPE C, TYPE 1 FRAME, CLOSED LID	EACH			
35	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH			
36	INLETS, TYPE A, TYPE 8 GRATE	EACH			
37	INLETS, TYPE A, TYPE 10 FRAME & GRATE	EACH			
38	INLETS, TYPE A, TYPE 11 FRAME & GRATE	EACH			
39	MANHOLES TO BE ADJUSTED	EACH			
40	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH			
41	VALVE VAULTS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH			
42	TEMPORARY BYPASS PUMPING SYSTEM	L SUM			

RETURN WITH BID

CONTRACTOR CERTIFICATIONS

County	<u>MCHENRY</u>
Local Public Agency	<u>CITY OF MCHENRY</u>
Section Number	<u>25-00000-00-FP</u>
Route	<u>VENICE AVENUE</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.

RETURN WITH BID

SIGNATURES

County MCHENRY
Local Public Agency CITY OF MCHENRY
Section Number 25-00000-00-FP
Route VENICE AVENUE

(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)

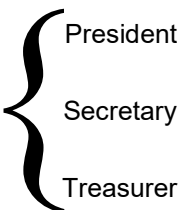
Corporate Name

Signed By

President

Business Address

Inset Names of Officers



President

Secretary

Treasurer

Attest: Secretary



Local Agency Proposal Bid Bond

Route VENICE AVENUE
County MCHENRY
Local Agency CITY OF MCHENRY
Section 25-00000-00-FP

RETURN WITH BID

PAPER BID BOND

WE _____ as PRINCIPAL,
and _____ as SURETY,

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

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

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

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

IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this _____ day of _____

Principal

By: _____ (Company Name)
By: _____ (Company Name)
(Signature and Title) (Signature and Title)

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

Surety

By: _____ (Name of Surety)
(Signature of Attorney-in-Fact)

STATE OF ILLINOIS,
COUNTY OF _____
I, _____, a Notary Public in and for said county,
do hereby certify that _____

(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 _____ day of _____

My commission expires _____ (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 (grid)

Electronic Bid Bond ID Code

(Company/Bidder Name)

(Signature and Title)

Date



Apprenticeship or Training Program Certification

RETURN WITH BID

Route VENICE AVENUE
County MCHENRY
Local Agency CITY OF MCHENRY
Section 25-00000-00-FP

All contractors are required to complete the following certification:

- For this contract proposal or for all groups in this deliver and install proposal.
For the following deliver and install groups in this material proposal:

Blank lines for listing deliver and install groups.

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

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

Blank lines for listing program sponsors and subcontracted work.

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

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

Bidder: _____

By: _____

(Signature)

Address: _____

Title: _____



Affidavit of Availability

For the Letting of



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

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

Part I. Work Under Contract

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

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

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

List below the uncompleted dollar 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.

Earthwork						
Portland Cement Concrete Paving						
HMA Plant Mix						
HMA Paving						
Clean & Seal Cracks/Joints						
Aggregate Bases, Surfaces						
Highway, R.R., Waterway Struc.						
Drainage						
Electrical						
Cover and Seal Coats						
Concrete Construction						
Landscaping						
Fencing						
Guardrail						
Painting						
Signing						
Cold Milling, Planning, Rotomilling						
Demolition						
Pavement Markings (Paint)						
Other Construction (List)						
Totals						

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

Part III. Work Subcontracted to Others.

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

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

Notary

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.

Officer or Director

Title

Signature

Date

Company

Address

City

State

Zip Code

Subscribed and sworn to before me

this _____ day of _____, _____

(Signature of Notary Public)

My commission expires _____

(Notary Seal)

Add pages for additional contracts



Affidavit of Availability

For the Letting of

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

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

Part I. Work Under Contract

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

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

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

List below the uncompleted dollar 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.

Earthwork						
Portland Cement Concrete Paving						
HMA Plant Mix						
HMA Paving						
Clean & Seal Cracks/Joints						
Aggregate Bases, Surfaces						
Highway, R.R., Waterway Struc.						
Drainage						
Electrical						
Cover and Seal Coats						
Concrete Construction						
Landscaping						
Fencing						
Guardrail						
Painting						
Signing						
Cold Milling, Planning, Rotomilling						
Demolition						
Pavement Markings (Paint)						
Other Construction (List)						
Totals						

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

Part III. Work Subcontracted to Others.

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

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

Notary

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Officer or Director

Title

Signature

Date

Company

Address

City

State

Zip Code

Subscribed and sworn to before me

this _____ day of _____, _____

(Signature of Notary Public)

My commission expires _____

(Notary Seal)

Add pages for additional contracts



Affidavit of Availability

For the Letting of

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

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

Part I. Work Under Contract

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

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

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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.

Earthwork						
Portland Cement Concrete Paving						
HMA Plant Mix						
HMA Paving						
Clean & Seal Cracks/Joints						
Aggregate Bases, Surfaces						
Highway, R.R., Waterway Struc.						
Drainage						
Electrical						
Cover and Seal Coats						
Concrete Construction						
Landscaping						
Fencing						
Guardrail						
Painting						
Signing						
Cold Milling, Planning, Rotomilling						
Demolition						
Pavement Markings (Paint)						
Other Construction (List)						
Totals						

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

Part III. Work Subcontracted to Others.

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

	1	2	3	4	Awards Pending
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
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Check Sheet for Recurring Special Provisions

Local Public Agency	County	Section Number
City of McHenry	McHenry	25-00000-00-FP

Check this box for lettings prior to 01/01/2025

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>
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2	<input type="checkbox"/> Subletting of Contracts (Federal-Aid Contracts)	82
3	<input type="checkbox"/> EEO	83
4	<input type="checkbox"/> Specific EEO Responsibilities Non Federal-Aid Contracts	93
5	<input type="checkbox"/> Required Provisions - State Contracts	98
6	<input type="checkbox"/> Asbestos Bearing Pad Removal	104
7	<input type="checkbox"/> Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal	105
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12	<input type="checkbox"/> Hot-Mix Asphalt Surface Correction	116
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14	<input type="checkbox"/> Patching with Hot-Mix Asphalt Overlay Removal	119
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21	<input type="checkbox"/> Calcium Chloride Accelerator for Portland Cement Concrete	130
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30	<input type="checkbox"/> Longitudinal Joint and Crack Patching	168
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Local Public Agency

County

Section Number

City of McHenry

McHenry

25-00000-00-FP

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

Local Roads And Streets Recurring Special Provisions

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LRS 3	<input checked="" type="checkbox"/> Work Zone Traffic Control Surveillance	175
LRS 4	<input checked="" type="checkbox"/> Flaggers in Work Zones	176
LRS 5	<input type="checkbox"/> Contract Claims	177
LRS 6	<input checked="" type="checkbox"/> Bidding Requirements and Conditions for Contract Proposals	178
LRS 7	<input type="checkbox"/> Bidding Requirements and Conditions for Material Proposals	184
LRS 8	Reserved	190
LRS 9	<input type="checkbox"/> Bituminous Surface Treatments	191
LRS 10	Reserved	195
LRS 11	<input checked="" type="checkbox"/> Employment Practices	196
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SPECIAL PROVISIONS

The following Special Provisions supplement the Illinois Department of Transportation's (IDOT) "Standard Specifications for Road and Bridge Construction," adopted April 1, 2016 (hereinafter referred to as the "Standard Specifications"); the "Manual on Uniform Traffic Control Devices for Streets and Highways" the "Manual of Test Procedures of Materials", in effect on the date of invitation for bids; the Standard Specifications for Sewer and Main Construction in Illinois, latest edition; and the "Supplemental Specifications and Recurring Special Provisions," latest edition as indicated on the Check Sheet included herein, which apply to and govern the construction of the City of McHenry's Venice Avenue Improvements, Section 25-00000-00-FP, McHenry County, Illinois. In case of conflict with any part or parts of the Standard Specifications, these Special Provisions shall take precedence and shall govern.

LOCATION OF WORK

This project consists of storm sewer replacement, sanitary sewer replacement, new concrete curb and gutters, new sidewalks, hot-mix asphalt binder course, and hot-mix asphalt surface course on Venice Avenue and Court Street in the City of McHenry as shown on the plans and in the summary of quantities. The total length of the improvement is 1,898 feet or 0.36 miles.

DESCRIPTION OF WORK

The work shall include, but not limited to, storm sewer replacement, sanitary sewer replacement, new concrete curb and gutters, new sidewalks, hot-mix asphalt binder course, and hot-mix asphalt surface course, and all incidental and collateral work necessary to complete the project as described here.

LIEN WAIVERS

End of Contract final waivers from all sub-contractors and material suppliers that perform work or provide materials under this contract shall be submitted before final payment shall be made. Partial waivers shall be submitted for work completed to date prior to approval of partial payment estimates.

PREVAILING WAGE & CERTIFIED PAYROLL REQUIREMENTS

The Contractor shall abide by the Illinois Prevailing Wage Act, 820 ILCS 130, and must submit certified payroll records with all payment requests. Any request for payment submitted without certified payroll records will not be processed by the City Accounts Payable Department.

RECORD DRAWINGS

The CONTRACTOR shall provide the CITY with record drawings and field notes detailing the work and denoting any changes from the design as shown on the plan sheets. The CITY requires that record drawings be submitted as two (2) D size (22"x 34") hard copies, and one (1) electronic version (.pdf). All utilities shall have rim and invert information (simple strike and re-write). The record drawing shall show building, sidewalks, and edge of pavement outlines. The record drawing shall be stamped and approved by licensed surveyor or civil engineer. Spot grades are not required for the foundation, sidewalk, curbs,

or other hardscapes. Constructed items required to have rim & invert information captured by survey include: Sanitary Manholes, Grease Traps, Clean Outs, Water Valve Vaults, Water Service Boxes (b-box), Storm Manholes, Catch Basins, Inlets, Overflow Structures, & Flared End Sections. All pipes shall have material, slope, and length checked (simple strike & re-write). The cost for providing this information will be considered incidental to the project.

MAINTENANCE OF ROADWAYS

Effective: September 30, 1985

Revised: November 1, 1996

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

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

COMPLETION DATE

The substantial completion date for the contract shall be September 5, 2025. This contract shall be completed, including all punchlist items, by **September 26, 2025**. Substantial completion represents construction of all contract work items.

After a walkthrough conducted with the City, on August 29, 2025, the Engineer will provide the contractor with a complete project punchlist. The contractor will be allotted 2 weeks to complete any punchlist items to ensure 100% project completion on, or prior to September 12, 2025.

Should the Contractor fail to complete the work on or before the completion dates as specified, or within such extended time as may have been allowed by the City, the Contractor shall be liable to the City in the amount of \$2,500, not as a penalty but as liquidated damages, for each calendar day or a portion thereof of overrun in the contract time or such extended time as may have been allowed.

The Contractor will not be provided additional compensation for material or labor increases over the duration of the contract.

The City shall not be required to provide any actual loss in order to recover these liquidated damages provided herein. Furthermore, no provision of this clause shall be construed as a penalty, as such is not the intention of the parties.

A calendar day is every day shown on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four hours later.

REDUCTION IN THE SCOPE OF WORK

The Project Summary is a listing of work to be completed. However, due to budgetary constraints the awarding authority reserves the right to reduce the scope of work to be completed under the contract in accordance with Article 104.02 of the Standard Specifications. No allowance will be made for delay or anticipated profits as the result of a decrease in the quantities of work to be performed or the reduction in asphalt thickness up to a half inch (1/2").

CLEAN CONSTRUCTION AND DEMOLITION DEBRIS

In addition to the requirements of Section 107.01 of the Standard Specifications, the Contractor shall be responsible for the proper removal and disposal of excavated materials from the project site. The Contractor will meet all requirements set forth by the IEPA and Public Act 96-1416 in regards to Clean Construction and Demolition Debris which may include, but not limited to, field and laboratory analyses, certification from a licensed Professional Engineer, dumping fees and documentation. This work shall not be paid for separately, but will be included in the cost of the contract. No additional compensation will be provided.

MOBILIZATION

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

TRAFFIC CONTROL AND PROTECTION

All roads shall be kept open to traffic. The Contractor should take particular note of the applicable portions of Article 107.14 of the Standard Specifications. All signs, except those referring to daily lane closures, shall be post mounted in accordance with Standard 701901 for all projects that exceed four-day duration. Construction signs referring to daytime lane closures during working hours shall be removed, covered or turned away from the view of the motorists during non-working hours.

The Contractor shall furnish, erect, maintain and remove all signs, barricades, flaggers and other traffic control devices as may be necessary for the purpose of regulating, warning or guiding traffic. Placement and maintenance of all traffic control devices shall be in accordance with the applicable parts of Section 701 of the Standard Specifications, the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways and the Highway Standard contained herein.

Special attention is called to Article 107.09 and Section 701 of the Standard Specifications and the following Highways Standards, Supplemental Specifications, Details, Quality Standard for Work Zone Traffic Control Devices, Recurring Special Provisions, and Special Provisions contained herein relating to traffic control. It should be noted that Type I or Type II barricades will be required adjacent to the pavement in areas where a drop off of 3" or more occurs in accordance with Article 701.07.

STANDARDS:

701301, 701311, 701501, 701701, 701801 and 701901

DETAILS:

TC-10 (Traffic Control and Protection for Side Roads, Intersections, and Driveways)
TC-13 (District One Typical Pavement Markings)

SPECIAL PROVISIONS:

Maintenance of Roadways (D-1)
Public Convenience and Safety (D-1)
Vehicle and Equipment Warning Lights (BDE 80439)
Work Zone Traffic Control Devices (BDE 80427)
Plan General Notes
Work Zone Traffic Control (LRS#3)
Flaggers in Work Zones (LRS#4)

The Contractor shall contact the City of McHenry Public Works Department at least 72 hours in advance of beginning work. Construction operations shall be conducted in a manner such that streets will be open to traffic at all times, and access to abutting property shall be maintained.

The Contractor shall be responsible for providing a proposed scheduling, phasing and traffic control plan. The City will review these plans and provide the contractor with any necessary modifications in writing. The Contractor will then be responsible for incorporating these changes into the proposed scheduling, phasing and traffic control plan.

At the preconstruction meeting, the Contractor shall furnish the name and telephone number where he may be reached during non-working hours of the individual in his direct employ that is to be responsible for the installation and maintenance of the traffic control of this project. If the actual installation and maintenance are to be accomplished by a subcontractor, consent shall be requested of the Engineer at the time of the preconstruction meeting in accordance with Article 108.01 of the Standard Specifications. This shall not relieve the Contractor of the requirements to have a responsible individual in his direct employ supervise this work.

This work will be paid for separately at the LUMP SUM cost for TRAFFIC CONTROL AND PROTECTION.

DETECTABLE WARNINGS

Description.

This work shall consist of the installation of pre-fabricated replaceable panel of truncated domes on concrete pads at locations as directed by the Engineer.

Truncated domes shall be in accordance with Article 424.09 of the Standard Specifications. The domes shall parallel the pavement crosswalk in accordance with the latest Highway Standard. The panel shall be Red. The panel shall meet the requirements of ASTM C1028 – Slip Resistance and ASTM G155 – Accelerated Weathering.

Materials.

The Detectable Warning Panel shall be one of the following products.

Duratek tile available from
Detectile Corporation
P.O. Box 3513
Oak Brook, IL 60523
Phone: (630) 734-0277

OR

High-Impact Polymer Wet-Set tile available from
TufTile, Inc.
1200 Flex Court
Lake Zurich, IL 60047
Phone: (888) 960-8897

OR

Armor-Tile Replaceable Cast-In Place System available from
White Cap Construction Supply
8124 W. 188th Street
Mokena, IL 60448

Phone: (815) 464-8828

The product and method used for installing detectable warnings shall come with the following documents which shall be given to the Engineer prior to installation:

- (a) Manufacturer's certification stating the product is fully compliant with ADAAG.
- (b) Manufacturer's specifications stating the required materials, equipment, installation procedures and conformance to ASTM C1028

Measurement and Basis of Payment.

This work will be paid for at the contract unit price per SQUARE FOOT for DETECTABLE WARNINGS which price shall include all equipment, labor and materials required to complete the work as shown on the plans and as described herein. Concrete pad will be measured and paid for separately.

COMBINATION CONCRETE CURB AND GUTTER REMOVAL

Description.

This work shall consist of the removal of existing concrete curb and gutter at locations as determined by the Engineer. This work shall be done in accordance with Section 440 of the Standard Specifications.

Construction.

Add the following to Article 440.03:

“The Contractor shall perform his work in a manner causing minimal inconvenience to the residents and motoring public. The trenches created by the removal operations in front of the driveways shall be filled with aggregate to provide access to the residents to their driveways, except for curb and gutter replacement when the driveways will be closed to the residents for 72 hours.

Reinforcing bars may be embedded in old concrete curb. Sawing, removal, and disposal of reinforcing bars will not be paid for separately but shall be included in the cost of the item removed.

Additional excavation noted by the Engineer in the field to provide a suitable granular sub-base will be performed by the Contractor at no expense to the Contract.

Removal of the existing pavement will be required in order to install a full front face form.”

Measurement and Basis of Payment.

This work shall be measured and paid for at the contract unit price per FOOT for COMBINATION CONCRETE CURB AND GUTTER REMOVAL.

**COMBINATION CONCRETE CURB AND GUTTER
CONCRETE GUTTER, TYPE B**

Description.

This work shall consist of new combination concrete curb and gutter, of the type specified, at locations as shown on the plans. This work shall be done in accordance with Section 606 of the Standard Specifications and the plan details.

Construction.

Add the following to Article 606.05:

“The minimum gutter flag depth of the new curb and gutter will be nine inches (9”) regardless of the size and type of the existing curb and gutter.

Removal of the existing pavement will be required in order to install a full front face form or to accommodate slip form installation. When framing a full lumber setup will be required for forming. The area between the edge of the existing pavement and the face of the new gutter shall be cleaned of all loose material and shall be filled with Class PV/ SI concrete to a minimum of six-inch (6") width."

Add the following to Article 606.06:

"The Contractor shall limit driveway closures to 72 hours; the Contractor shall have the option to use accelerating admixtures or Class PP concrete to meet this requirement."

Add the following to Article 606.07:

"Where new curb and gutter meets existing curb and gutter to remain, the gutters shall be connected with two 5/8" diameter reinforcing bars, twelve inches (12") long. Holes 5/8" in diameter shall be drilled six inches (6") into the existing concrete curb and gutter prior to driving reinforcing bars into place.

Contraction joints shall be provided at uniform intervals not to exceed twelve feet (12'). Construction joints with dowel bars shall be provided at the end of a day's pour. Expansion joints shall be constructed at intervals not to exceed sixty feet (60') or as determined by the Engineer and shall consist of a minimum of one inch (1") thick preformed expansion joint filler conforming to the cross-section of the curb and gutter and shall be provided with two (2) No. 5 (#5) by eighteen inch (18") coated smooth dowel bars conforming to Article 1006.11(b) of the Standard Specifications. The dowel bars shall be fitted with a cap having a pinched stop that will provide a minimum of one inch (1") of expansion."

Revise Article 606.13 to read:

"After the concrete has obtained the specified strength, the spaces in back of the construction shall be backfilled to the required elevation with pulverized topsoil (no stones), compacted, neatly graded for positive drainage."

Measurement and Basis of Payment.

This work shall be measured and paid for at the contract unit price per FOOT for COMBINATION CONCRETE CURB AND GUTTER, regardless of type, or per FOOT for CONCRETE GUTTER, TYPE B. The Contractor shall note that the Engineer will measure the curb and gutter as marked for replacement prior to removal of the existing curb. This measurement, as marked, will be the final payment quantity and shall be verified by the Contractor prior to removal.

The Contractor will be paid at the rate of 90% for COMBINATION CONCRETE CURB AND GUTTER, or CONCRETE GUTTER, TYPE B, upon installation. The remaining 10% of payment shall be approved upon the Engineer's receipt of testing reports.

PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH

Description.

This work shall be done in accordance with Section 424 of the Standard Specifications and the concrete shall meet the requirements of Class SI concrete.

Add the following to Article 424.04:

"Sidewalk shall include the installation of Portland Cement Concrete sidewalk to a minimum thickness of five inches (5"), and six inches (6") across the driveway aprons. The Contractor shall fill the voids created by the removal of sidewalk at the location of the driveways with crushed aggregate so that the residents can use their driveways until the start of sidewalk replacement operations. If filling is required in the sidewalk subgrade, it shall consist of placing and compacting an approved granular material to the satisfaction of the Engineer as included in the cost of the sidewalk installation."

Add the following to Article 424.06:

“No stamps advertising the Contractor, construction companies, or other private concerns shall be placed in the concrete.”

Add the following to Article 424.08:

“Any parkway area disturbed shall be restored in kind.”

Add the following to Article 424.10

“At sidewalk ramp locations side curbs or flares may be required to meet ADA requirements. When a flare or curb is constructed it shall meet the three foot (3’) minimum curb transition.”

Construction.

Alignment, slope, and grades of the formwork will be verified by the Engineer upon a minimum of 24 hours’ notice by the Contractor before pouring concrete. No concrete shall be placed without prior approval of the formwork by the Engineer.”

Measurement and Basis of Payment.

This work will be paid for at the contract unit price per SQUARE FOOT for PORTLAND CEMENT CONCRETE SIDEWALK, of the depth specified, which price shall include additional concrete thickness across driveway entrances, all equipment, labor and materials required to complete the work as shown on the plans and as described herein.

The Contractor will be paid at the rate of 90% for PORTLAND CEMENT CONCRETE SIDEWALK upon installation. The remaining 10% of payment shall be approved upon the Engineer’s receipt of testing reports.

**FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)
VALVE VAULTS TO BE ADJUSTED WITH NEW TYPE 1 FRAME CLOSED LID**

Description.

This work shall be performed in accordance with Sections 602 and 603 of the Standard Specifications and the Standard IDOT District One Detail for ‘Details for Frames and Lids Adjustment with Milling’ (BD-8) and the City standard construction details.

There are four (4) sanitary manholes to receive FRAMES AND LIDS TO BE ADJUSTED (SPECIAL).

There are two (2) storm structures to receive FRAMES AND LIDS TO BE ADJUSTED (SPECIAL).

There are two (2) valve vaults to receive VALVE VAULTS TO BE ADJUSTED WITH NEW TYPE 1 FRAME CLOSED LID.

Materials.

Revise Article 603.08 to read:

“The use of steel rings for adjustment will not be allowed.

Adjustment of sanitary manholes and valve vaults must include new chimney seals in accordance with the City standard details.”

Measurement and Basis of Payment.

This work will be paid for at the contract unit price per EACH for FRAMES AND LIDS TO BE ADJUSTED (SPECIAL) or per EACH for VALVE VAULTS TO BE ADJUSTED WITH NEW TYPE 1 FRAME CLOSED LID.

This work will not be paid for until after construction of the hot-mix asphalt surface course; at which time the Contractor and Engineer shall open each lid and visually determine whether construction debris or asphalt has entered the structure during construction activities. In the event construction debris is found within the structure, the Contractor shall clean out the structure at no additional cost to the contract.

MANHOLES TO BE ADJUSTED

Description.

This work shall be performed in accordance with Sections 602 and 603 of the Standard Specifications and consist of the adjustment of frames and grates or frames and lids within the project, outside of the pavement area, as directed by the Engineer, with new concrete adjusting rings. Mortar joints may require small pieces of brick to properly establish a solid joint with appropriate casting slope. Mortar shall be finished smooth to the satisfaction of the Engineer.

Cleaning of Existing Structures.

In addition to the requirements as described in Section 602 of the Standard Specifications, it shall be the responsibility of the contractor to clean ALL existing structures that are to be adjusted or reconstructed. The cleaning shall consist of the removal of all debris from inside the structure to the satisfaction of the Engineer.

Measurement and Basis of Payment.

This work will be paid for at the contract unit price per EACH for MANHOLES TO BE ADJUSTED.

This work will not be paid for until after construction of the hot-mix asphalt surface course; at which time the Contractor and Engineer shall open each casting and visually determine whether construction debris or asphalt has entered the structure during construction activities. In the event construction debris is found within the structure, the Contractor shall clean out the structure at no additional cost to the contract.

DRAINAGE STRUCTURE REPAIR

Description.

This work shall be performed in accordance with Sections 602 and 603 of the Standard Specifications and the Standard Details, and as directed by the Engineer except that manholes, catch basins, and inlets shall all be considered as DRAINAGE STRUCTURES. This work includes the replacement of mortar between the casting and precast barrel section of the drainage structure.

Riser rings and castings shall remain in place. Mortar joints may require small pieces of brick to properly re-establish a solid joint. Mortar shall be finished smooth to the satisfaction of the Engineer.

Measurement and Basis of Payment.

This work will be paid for at the contract unit price per EACH for DRAINAGE STRUCTURE REPAIR, which shall include all labor, material, and equipment to complete the work as specified above.

DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED

Description of Work.

This work shall consist of adjusting to grade, water boxes, buffalo boxes, or valve boxes, encountered on the job, and if necessary, the replacement of defective or damaged parts of the water box.

Water boxes or buffalo boxes are defined as a three-piece casting consisting of a stem or hip, a neck and a lid. Adjustment is attained by turning the neck of the casting, either clockwise or counterclockwise until

the required grade is attained. Excavation of approximately 3 to 3 ½ feet of base and sub-base material is to be anticipated to facilitate replacement of the valve box.

All excavated sub-base material shall be replaced with trench backfill and compacted in accordance with Article 550.07 of the Standard Specifications. The excavated base material shall be replaced in accordance with appropriate articles of section 602 of the Standard Specification.

The Contractor shall ensure that the valve box is cleaned of all debris and shall be keyable.

Basis of Payment

This work will be paid for at the contract unit price per each for DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED, which price shall be payment in full for performing the work as specified herein including trench backfill.

CLASS D PATCHES

Description.

Revise Article 442.01 to read:

“This work shall consist of removal of the existing pavement, the necessary excavation and replacement with a Hot-Mix Asphalt Binder and Hot-Mix Asphalt Surface Course material as detailed, and in accordance with applicable articles of Section 442 of the Standard Specifications.

Exact quantities and locations of patching will be determined by the Engineer.”

Measurement and Basis of Payment.

This work will be paid for at the contract unit price per SQUARE YARD for CLASS D PATCHES, of the type and depth specified, which price shall include full depth saw cutting, pavement removal, necessary excavation, furnishing, placing and compacting the Hot-Mix Asphalt patching mixture to the depth indicated, and the removal and disposal of any surplus material. Because of the limited area of patching, the requirement for cores and density testing is deleted.

DRIVEWAY PAVEMENT REMOVAL

Description.

This work shall be done in accordance with Section 440 of the Standard Specifications. This work shall be done at locations shown on the plans and where directed by the Engineer.

Revise the third paragraph of Article 440.03 to read:

“Driveway material types may include Portland Cement Concrete, Hot-Mix Asphalt and Aggregate. Additional compensation will NOT be allowed for varying materials types or thicknesses comprising of the existing driveway approach.”

Add the following to Article 440.03:

“The Contractor shall be responsible for maintaining traffic control and protection to prevent traffic from using the driveways during construction. The Contractor shall not be allowed to close a driveway entrance for more than 72 hours under any circumstance.

Reinforcing bars may be embedded in old concrete driveways. Sawing, removal, and disposal of reinforcing bars will not be paid for separately but shall be included in the cost of the item removed.

Additional excavation noted by the Engineer in the field to provide a suitable granular sub-base will be performed by the Contractor at no expense to the Contract.

The Contractor shall form a perpendicular straight joint by full depth machine sawing at the end of the portion to be removed to prevent surface spalling. These areas must be marked and measured for payment by the Engineer prior to removal. The Contractor at his/her expense shall repair any driveway pavement damaged by the Contractor beyond the limits marked by the Engineer.”

Measurement and Basis of Payment.

This work will be paid for at the contract unit price per SQUARE YARD for DRIVEWAY PAVEMENT REMOVAL, which price shall include saw cutting and the removal and disposal of the existing driveway pavement.

HOT-MIX ASPHALT DRIVEWAY PAVEMENT

Revise Article 406.01 to read:

Description.

This work shall consist of the construction of Hot-Mix Asphalt Driveway Pavement on a prepared sub-base behind the back of curb in accordance with applicable articles of Section 406 and 482 of the Standard Specifications, Special Provisions for Hot-Mix Asphalt, and as detailed on the plans.”

Revise Article 406.05, 406.06, 406.07, 406.08, 406.09, 406.10 and 406.11 to read:

Materials.

Materials for the hot-mix asphalt driveway pavement shall consist of the following:

One and three quarter inches (1 $\frac{3}{4}$ ”) of Hot-Mix Asphalt Surface Course, Mix D, N50, and two and one quarter inches (2 $\frac{1}{4}$ ”) of Hot-Mix Asphalt Binder Course, IL-19.0, N50, as specified herein for hot-mix asphalt.

Construction.

The hot-mix asphalt driveway surface shall produce a tight surface conforming to the grade of the adjacent area. The hot-mix asphalt surface to remain shall be saw-cut in a neat, straight line.

Prior to replacement with the hot-mix asphalt, the exposed base course shall be shaped, compacted, and primed including the exposed edge of the hot-mix asphalt surface remaining to the satisfaction of the Engineer. Additional crushed aggregate (CA-6 gradation) base course may be required in the preparation of the base course as indicated above. Any additional aggregate base course required for the preparation of the base and filling of depressions created by the removal of driveway or curb shall be considered included in this pay item.”

Measurement and Basis of Payment.

This work shall be paid for at the contract unit price per SQUARE YARD for HOT-MIX ASPHALT DRIVEWAY PAVEMENT of the depth specified, measured in place, which price shall include aggregate base course where unsuitable materials are found and all incidental work.

PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT

Description.

This work shall consist of Portland Cement Concrete driveway pavement constructed on a prepared sub-base and in accordance with requirements of Section 423 in so far as they apply and the concrete shall meet the requirements of Article 1020.04 for Class SI concrete.

Add the following to Article 423.02:

“The Contractor shall use High Early Strength Concrete in order to limit driveway closure to 72 hours.”

Add the following to Article 423.04:

“Any necessary preparation of the sub-grade including excavation and disposal of materials shall be paid for as DRIVEWAY PAVEMENT REMOVAL.”

Add the following to Article 423.06:

“Materials.

Portland Cement Concrete Driveway Pavement shall be six inches (6") in thickness.

Construction.

At points where the proposed driveway pavement abuts a concrete gutter crossing, 3/4" preformed expansion joint filler shall be placed between the concrete driveway and the gutter. The expansion joint filler shall extend the entire depth and width of the driveway. Preformed expansion joint filler of 1/2" thickness shall be placed between the new concrete and all structures which extend through the driveway, including, but not limited to, utility manholes.

Alignment, slope, and grades of the formwork will be verified by the Engineer upon a minimum of 24 hours notice by the Contractor before pouring concrete. No concrete shall be placed without prior approval of the formwork by the Engineer.

Prior to replacement with the Portland cement concrete, the exposed base course shall be shaped and compacted to the satisfaction of the Engineer. Additional crushed aggregate (CA-6 gradation) base course may be required in the preparation of the base course as indicated above. Any additional aggregate base course required for the preparation of the base and filling of depressions created by the removal of driveway / installation of pipe culverts or storm sewers shall be considered included to this pay item.”

Measurement and Basis of Payment.

This work will be paid for at the contract unit price per SQUARE YARD for PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, of the depth specified, measured in place, which price shall include additional cost for the use of High Early Strength Concrete, and all incidental work.

No stamps advertising the Contractor, construction companies, or other private concerns shall be placed in the concrete.

WASHOUT BASIN

Description.

This work consists of installation, maintenance and subsequent removal and disposal of a concrete washout basin and shall be done in accordance with Sections 280 of the Standard Specifications and as shown on the plans. The washout basin shall be removed after concrete items have been installed.

A concrete washout basin shall be supplied as necessary to accommodate concrete delivery operations. The washout basin location(s) must be approved by the Engineer prior to installation.

Measurement and Basis of Payment.

This work will be paid for at the contract LUMP SUM price for WASHOUT BASIN, which price shall be payment in full for all of the work as specified above.

FULL-DEPTH RECLAMATION WITH CEMENT

All references to Divisions, Sections, and Articles in this specification shall be construed to mean specific Divisions, Sections, and Articles in the Standard Specifications for Road and Bridge Construction adopted by the Department of Transportation.

Description. This work shall consist of cold milling and pulverizing all of the existing bituminous layers and/or portions of the aggregate base material to a specified depth and maximum size; mixing cement, water and additives with the recycled material; and spreading and compacting the mixture.

Materials. Materials shall be according to the following Articles of Division 1000 – Materials.

Item	Article/Section	
(a)	Portland Cement (Note 1).....	1001
(b)	Water... 1002 (c) Fine Aggregate (Note 2)	1003
(d)	Coarse Aggregate (Note 2).....	1004
(e)	Reclaimed Asphalt Pavement (Note 3)	1031
(f)	Cold Pulverized Material (Note 4)	
(g)	Mix Design (Note 5)	

Note 1 Limit. The type and allowable percentage will be described in the mix design.

Note 2 The mix design will specify gradation and quality of any additional aggregate. Any additional fine aggregate shall meet Class B quality as a minimum. Any additional coarse aggregate shall meet Class C quality as a minimum.

Note 3 The Engineer may allow reclaimed asphalt pavement (RAP) from Conglomerate “D” Quality or better RAP stockpiles as specified in Article 1031.02 or from millings of the existing highway. The RAP material shall not exceed the maximum size requirement of the cold pulverized material, and when blended with the cold pulverized material, shall produce a product which meets the specifications of the mix design.

Note 4 After pulverization, the gradation of the cold pulverized material shall meet the following requirements.

COLD PULVERIZED MATERIAL GRADATIONS				
Grad No.	Sieve Size and Percent Passing			
	3 in. (75 mm)	2 in. (50 mm)	1 ½ in. (37.5 mm)	No 4 (4.75 mm)
PM 3		100	100-97	
PM 4	100	95		55

Note 5 A mix design for each distinct section shall be submitted to the Department prior to construction using actual materials (in-situ sampled by the Contractor and new materials from the Contractor’s material suppliers) proposed for the project. The job mix formula shall meet the criteria in Attachment II-C (Cement) of Illinois Department of Transportation’s Geotechnical Manual and shall be approved by the Engineer.

FDR WITH CEMENT MIX DESIGN REQUIREMENTS	
Test Method	Requirement
Gradation for Design Millings, AASHTO T 27	Report
Liquid Limit, AASHTO T 89	Report
Plasticity Index,	Report

AASHTO T 90	
Sand Equivalent, ASTM D2419, Method B	Report
Moisture Density Relationship	Report
Compressive Strength, 3 day, (psi) Compressive Strength, 7 day, (psi)	300 min 500 min
Freeze Thaw Durability, Vacuum Saturation Test, 7 day (psi)	350 min
Additional Additives(s) Coarse Aggregate Fine Aggregate RAP	Report Report Report
Cement Percentage	Report

Notes: 1. Report shall include type/gradation and producer/supplier.

Equipment. Equipment shall be according to the following Articles of Division 1100 – Equipment.

- (a) Vibratory Roller (Note 1).....1101.01(g)
- (b) Mechanical Sweeper 1101.03
- (c) Motor Grader..... 1101.05
- (d) Self-Propelled Milling Machine.....1101.06(a)
- (e) Mechanical Spreader (Note 2)
- (f) Self-Propelled Reclaimer (Note 3)
- (g) Self-Propelled Vibratory Padfoot Roller (Note 4)
- (h) Water Truck (Note 5)

Note 1. The double drum vibratory steel roller shall have a gross weight of not less than 10 tons (9 metric tons).

Note 2. Spreaders or distributors used to apply the stabilization chemical for FDR shall be cyclone, screw type or pressure manifold type. Spreaders or distributors used shall be able to demonstrate a consistent and accurate application rate while minimizing dust during construction. Imported granular material used for FDR may be tailgated with end dumps and spread to a uniform thickness with a motor grader or it may be spread with mechanical spreader or placed with a conventional paver.

Note 3. The self-propelled reclaimer shall be capable of fully pulverizing the existing pavement to the depth required mix the materials to produce a homogeneous material. The self-propelled reclaimer shall be capable of mixing in place to a minimum depth of 12 in. should be used. The cutting drum should be fitted with cutting teeth capable of trimming earth, aggregate and bituminous mixtures, and so designed that they may be accurately adjusted vertically and held in place. The machine shall weigh at least 12.5 tons (11.5 metric tons) and shall have such strength and rigidity that it will not develop a center deflection of more than 1/8 in (0.125 mm). Disc harrows, bucket teeth and other equipment that do not meet the above requirements shall not be used.

Note 4. The self-propelled vibratory pad foot roller shall have 84 in. (2133 mm) wide drums and gross weight of not less than 10 tons (9 metric tons). A front mounted blade is recommended for back-dragging. A self-propelled vibratory pad foot roller shall be required for each self-propelled reclaimer.

Note 5. Water trucks shall be set up for a controlled spray.

CONSTRUCTION REQUIREMENTS

General Conditions. This work consisting of cement application, mixing, spreading, compacting, and finishing shall be continuous and completed within 2 hours from the start of mixing. Any processed material that has not been compacted and finished shall not be left undisturbed for longer than 30 minutes.

Weather Limitations. This work shall be performed when the atmospheric temperature in the shade and away from artificial heat is 40° F (10 °C) and rising.

Pre-pulverization and Initial Shaping. Moisture content shall be within \pm 2.0 percent from the optimum moisture content determined by the mix design. If the moisture content is too low, water shall be added directly by a water truck. The existing pavement shall be pre-pulverized by the self-propelled reclaimer and/or shaped by the motor grader to correct for profile, crown, and contour, according to the plans, before the addition of the cement. Water, coarse aggregate, RAP Material, or other additives required may be added during this operation. The pre-pulverized and shaped material shall be compacted with a vibratory roller in static mode to support equipment and/or traffic and to provide depth control during processing. Depth of pre-pulverization and shaping shall be 1 in. (25 mm) to 2 in. (50 mm) less than the depth of final processing.

Processing. The quantity of cement specified in the mix design shall be spread o the finished surface of the pre-pulverized material using a mechanical spreader. If a slurry is being applied, the finished surface of the pre-pulverized material shall be scarified prior to spreading of the slurry to prevent excessive runoff or ponding.

Mixing shall begin as soon as possible after the cement has been spread; however, the time from cement placement on the finished surface of the pre-pulverized material shall not exceed 60 minutes. Mixing shall continue until the entire mixture is pulverized so that the mixed material passes the gradation specified.

The final test shall be made at the conclusion of mixing operations. Prior to compaction, the mixture shall be at the required moisture content throughout. If using dry cement, water application shall only be done through the self-propelled reclaimer integrated fluid injection system during mixing.

Compaction. The recycled material shall be compacted according to the following.

- (a) Growth Curve. Compaction shall be accomplished by performing a growth curve within the first one-half mile of production. If an adjustment is made to the cement or recycled depth, the Engineer reserves the right to request an additional growth curve. The growth curve, consisting of a plot of lb/cu-ft (kg/cu-m) versus number of passes with the project breakdown roller, shall be developed. Roller speed during the growth curve testing shall be the same as the normal paving operation. This curve shall be established by use of a nuclear gauge. Tests shall be taken after each pass until the highest lb/cu ft (kg/cu m) is obtained. This value shall be the target density.

A new growth curve is required if the rollers used on the growth curve are replaced with a new roller during production. The target density shall apply only to the specific gauge used. If additional gauges are to be used to determine density specification compliance, the Contractor shall establish a unique minimum allowable target density from the growth curve location for each gauge.

- (b) Rollers. Immediately after processing and final shaping the recycled material shall be compacted with equipment meeting the following requirements.

MINIMUM ROLLER REQUIREMENTS FOR FDR			
Breakdown Roller (one of the following)	Intermediate Roller ¹	Final Roller (one or more of the following) ¹	Density Requirement
P ¹ , PF ²	P, V _D	P, V _S	95 – 102 percent of the target density obtained on the growth curve

Notes(s): 1. *Equipment definitions in Table 1 of Article 406.07.*
 2. *PF – Self-propelled vibratory padfoot roller for breakdown rolling.*

(c) Rolling. The breakdown roller shall be 500 ft (150 m) or less behind all self-propelled reclaimer units. The recycled material shall be compacted by the padfoot roller, applying high amplitude and low frequency, or the pneumatic-tired roller. Breakdown rolling shall be performed until the breakdown roller walks out of the material. Walking out for the padfoot roller is defined as light being clearly evident between all of the pads at the material-padfoot drum interface and being no more than 3/16 in. (5 mm) deep. Walking out for the pneumatic-tired roller is defined as no significant wheel impressions being left on the surface.

After the completion of breakdown rolling, the motor grader shall be used to cut the recycled material no deeper than necessary to remove breakdown roller marks from the initial compaction and to achieve desired cross slope.

The bladed recycled material shall be compacted by the intermediate and final rollers. The number of passes and order of rollers may be altered to meet compaction requirements. Finish rolling shall not be done in vibratory mode. Water may be lightly sprayed by a water truck to aid in improving final density and appearance. A second water truck is required if water is also being added at the reclaimer.

Curing. Finished portions of the FDR base that are traveled on by equipment used in constructing an adjoining section shall be protected in such a manner as to prevent equipment from marring or damaging completed work.

Sufficient protection from freezing shall be given the chemically stabilized material for 7 days after its construction or as approved by the engineer.

Micro Cracking. If a cementitious stabilizing agent is used, the surface course is thin, and the compressive strength of the FDR is not limited, micro cracking shall be used to help prevent shrinkage cracking and reduce reflective cracking in the final surface course.

A target compressive strength of 300 to 500 psi is typically selected for stabilized base strength. After the initial 24 hour cure period, the FDR should be tested to determine the stiffness modulus using an approved device. Note 1 If the initial readings are below the required stiffness the FDR section should be allowed to cure for an additional 24 hours prior to additional stiffness readings. If above the require stiffness, micro cracking of the FDR should be accomplished by a 12 ton steel drum vibratory roller. The roller should travel at a speed of approximately 2 mph and vibrating at maximum amplitude and lowest frequency, or as directed by the Engineer.

For reference:		
<u>UCS</u>	<u>Stiffness, K</u>	<u>Micro Cracking</u>
300 to 500 psi	50+ MN/m (285.5 k lbf/in)	Yes

The section should have 100% coverage of the micro cracking process, exclusive of the outside 1 foot, so as to induce minute cracks in the FDR section. After one pass of the vibratory roller the stiffness of the FDR section should be determined. Additional passes of the steel drum roller may be required to achieve the desired crack pattern or section modulus. After each pass the stiffness of the section should be determined and the micro cracking operations terminated when a minimum 40% reduction in the stiffness is achieved when compared to the initial readings. In the absence of measurement by a stiffness gauge, micro cracking should be terminated when the desired crack pattern is achieved. Typically 1 to 4 passes of the roller is required to achieve the required reduction in stiffness.

After the micro cracking operations, intermediate curing shall be continued. If the FDR section was previously moist cured, mist curing shall continue for an additional 2 to 4 days. As an alternative, the stabilized surface can be moist cured for an additional 2 to 4 hours and then a bituminous fog seal applied.

Opening to Traffic. Completed portions of FDR base may be opened immediately to low speed local traffic and to construction equipment, provided the curing material or moist curing operations are not impaired and provided the FDR base is sufficiently stable to withstand marring or permanent deformation. The section can be opened up to all traffic after the FDR base has received a curing compound or subsequent surface and is sufficiently stable to withstand marring or permanent deformation. If continuous moist curing is employed in lieu of a curing compound or subsequent surfacing within 7 days, the FDR base can be opened to all traffic after the 7 day moist curing period, provided the FDR base has hardened sufficiently to prevent marring or permanent deformation.

Maintenance. The finished surface shall be maintained in good condition until all work is completed and accepted. Immediate repairs of any defects that may occur shall be done at the contractor's expense. If it is necessary to replace any processed material, the replacement shall be for full depth, with vertical cuts, using an approved material. No skin patches shall be permitted.

Quality Control/Quality Assurance (QC/QA)

(a) Quality Control by the Contractor. The Contractor shall perform or have performed the inspection and tests required to assure conformance to contract requirements. Control includes the recognition of obvious defects and their immediate correction. This may require increased testing, communication of test results to the job site, modification of operations, suspension of the work, or other actions as appropriate.

The Engineer shall be immediately notified of any failing tests and subsequent remedial action. Passing tests shall be reported to the Engineer no later than the start of the next work day.

(b) Quality Assurance by the Engineer. The materials testing Engineer will conduct independent assurance tests on split samples taken by the Contractor for quality control testing. In addition, the materials testing Engineer will witness the sampling and splitting of these samples and will immediately retain witnessed split samples for quality assurance testing.

(c) Tests Methods and Frequency

1. Depth of Pulverization (Milling). The nominal depth at the centerline shall be required. Anytime depth changes are made or equipment is idle, a depth check shall be taken.

2. Pulverized Material Sizing and Gradation. A sample shall be obtained before cement addition and screened using a 3.0 in. (37.5 mm) sieve (or smaller sieve if required) to determine if meeting the maximum particle size requirement. Gradations shall be performed each day on the moist millings using the following sieves: 2.0, in. 1.5 in., 1.0 in., $\frac{3}{4}$ in., $\frac{1}{2}$ in., $\frac{3}{8}$ in., No. 4, No. 8, No. 16, and No. 30. The resulting gradation shall be compared to the mix design gradations to determine any necessary changes to cement content.

Sampling procedures shall generally be in accordance with ASTM D 979 or AASHTO T 168.

3. **Cement Application Rate.** The Engineer shall be notified any time cement application rate is changed. The cement application rate shall be checked and recorded for each segment in which the percentage is changed.
4. **Water Content.** The Engineer shall be notified any time the water content is changed. Water content at the milling head shall be checked and recorded for each segment in which the percentage is changed. This information shall be gathered from the water metering device, which can be checked from the belt scale totalizer to verify daily quantities used. Water content changes shall be made based on mixture consistency, coating, and dispersion of the recycled materials.
5. **Compacted Density.** A dry density shall be determined using a nuclear moisture-density gauge generally following the procedures for ASTM D 2950, direct transmission measurement. This measurement shall be compared to the target density obtained by the growth curve.
6. **Frequency.** The following table provides the minimum frequency for tests; however, the Engineer may increase the testing frequency if the construction process is experiencing problems or unknown conditions are encountered.

QC/QA TESTING FREQUENCY		
Test	QC Frequency ¹	QA Frequency ¹
Depth of Pulverization	1 per 500 ft (150 m)	1 per 1000 feet (300 m)
Pulverized Material Gradation	1 per 0.5 day of production	1 per day of production
Cement Application Rate	1 per 500 ft (150 m)	1 per 1000 feet (300 m)
Water Content	1 per 500 feet (150 m)	1 per 1000 feet (300 m)
Compacted Density	1 per 0.25-mile (0.4 km)	1 per mile (1.6 km)
Compacted Strength ²	1 per 0.5 day of production	not required

Note: 1. The Contractor shall perform all quality control tests within the first 500 ft (150 m) after startup or any change in the mix. The Department will also run the split samples at these locations.
 2. Strength specimens prepared in the field for testing after 3 days and 7 days cure or as prescribed by the engineer. Tests are for information only, not acceptance.

Measurement and Basis of Payment.

This work will be measured and paid for at the contract unit price per SQUARE YARD for FULL-DEPTH RECLAMATION, 10".

The CEMENT material and application shall be measured and paid for at the contract unit price per TON, which shall also include the mix design. The cement percentage used for quantities is 5% with an application rate of 50 lbs/sy, and may be adjusted based upon the mix design. Mix design by the Contractor shall be supplied to the Engineer for review and approval two weeks prior to construction.

In some cases, it may be necessary to add aggregate base course materials in order to establish the proposed base course elevation. If additional coarse aggregate is needed, it will be paid per TON for AGGREGATE BASE COURSE, TYPE B.

HOT-MIX ASPHALT SURFACE REMOVAL, 4", SPECIAL

Description.

Hot-Mix Asphalt Surface Removal shall consist of the removal of the existing asphalt pavement and portions of the aggregate base over the full-width of the roadway in order to profile the roadway and establish proper crown. It is anticipated that in some sections the entire asphalt pavement will be removed in addition to a portion of the aggregate base course, exposing the base course.

It will be the Contractor's responsibility to determine the removal depth required, and to anticipate the amount of swelling to occur following cement stabilization operations. Any base course removal, following the initial milling operations, required to achieve the proper elevations will not be paid for separately. The intent is to lower the profile of the roadway pavement approximately one inch (1") below the existing pavement elevation.

Construction.

All areas in the roadway that are generally loose aggregate shall be, shaped, water added if necessary, and compacted as shown on the plans and to the satisfaction of the Engineer. It may be necessary to grade and shape the existing aggregate base course in order to establish the proposed base course elevation.

The average depth to be removed is four inches (4") as shown on the plans, however, no additional compensation will be granted for removal of asphalt surface for variance in thickness (some areas may require 3" to 5 1/2" of asphalt surface removal) or excavation and disposal of excess material. It is the intent to remove the pavement surface as required, so as to profile the street. The method of performing this work shall be reviewed with and acceptable to the Engineer and the profiling shall be acceptable to the Engineer before the proposed asphalt binder course can be placed. Excess asphalt or aggregate material resulting from grading of the base course to accommodate the proposed cement stabilization and hot-mix asphalt thickness shall be hauled away at contractor's expense. Any additional aggregate required to bring the Aggregate Base Course to proper grade will be CA-6 crushed, and will be paid for separately per TON.

Temporary Ramps.

The Contractor shall provide and maintain temporary asphalt ramps at both upstream and downstream ends of the pavement area removed. The temporary ramps shall be constructed immediately upon completion of the removal operation by leveling and filling with bituminous material, as necessary. Ramps shall have a minimum taper rate of three foot (3') per one inch (1") of thickness and shall be removed prior to placing the proposed surface course. Temporary ramps will not be paid for separately but shall be considered incidental to the bid price per square yard for Hot-Mix Asphalt Surface Removal. Saw cutting shall be considered incidental.

Measurement.

Hot-Mix Asphalt Surface Removal will be measured in place and the area computed in square yards.

Basis of Payment.

This work will be paid for at the contract unit price per SQUARE YARD for HOT-MIX ASPHALT SURFACE REMOVAL, 4", SPECIAL.

AGGREGATE BASE COURSE, TYPE B

Description.

This work shall be performed in accordance with the applicable articles of Section 351 of the Standard Specifications. AGGREGATE BASE COURSE, TYPE B will be used as directed by the Engineer in conjunction with pre-pulverization and preparation of base.

Construction Requirements.

As directed by the Engineer, the aggregate will be distributed in existing areas lacking sufficient aggregate and in existing areas where it may be necessary to slightly raise the existing roadway profile. The aggregate shall be distributed and spread in conjunction with full-depth reclamation operations.

Materials.

Materials shall be in conformance with the applicable articles of Section 1004 of the Standard Specifications with the following exceptions:

Revise Article 1004.04 (c), paragraph 5 to read: "For granular aggregate, gradation CA 6 crushed gravel, crushed stone, RAP, or recycled concrete may be used."

Method of Measurement.

This work shall be measured for payment in TONS.

An estimated tonnage for AGGREGATE BASE COURSE, TYPE B has been shown in the Summary of Quantities to establish a unit price, and payment shall be based on actual material delivered without change in unit price because of adjustment in plan quantities.

Basis of Payment.

This work will be paid for at the contract unit price per TON for AGGREGATE BASE COURSE, TYPE B.

AGGREGATE BASE COURSE REMOVAL & REPLACEMENT, 12 INCH

Description.

This work shall consist of the removal of the existing aggregate base course to a minimum depth of 12 inches (12"), disposal of surplus material, compacting the subgrade and installation of Aggregate Base Course Type B to a minimum compacted thickness of 12 inches (12").

Construction.

After the subgrade has been brought to a smooth grade and proper shape, it shall be compacted by use of vibratory rollers and/or compactors.

Replacement shall consist of installing CA-6 crushed aggregate. This work shall be done in accordance with the applicable articles of Section 351 of the Standard Specifications. This item shall also be used for subgrade removal and replacement.

Measurement and Basis of Payment.

This work will be paid for at the contract unit price per SQUARE YARD for AGGREGATE BASE COURSE REMOVAL AND REPLACEMENT, 12 INCH, which price shall include all equipment, labor and materials required to complete this work.

EXPLORATION TRENCH, SPECIAL

Description.

This work shall be in accordance with Section 213 of the Standard Specifications insofar as applicable and noted herein.

Revise Article 213.01 to read:

"This work shall consist of excavating a trench at locations as directed by the Engineer for the purpose of locating existing sewer lines, water mains, sanitary sewers and other utilities within or adjacent to the proposed project limits."

Revise the second paragraph of Article 213.02 to read:

“The trench shall be deep enough to expose the sewer lines, water mains, sanitary sewers or other utilities. The width of the trench shall be sufficient to allow proper investigation to determine if the existing facility needs to be adjusted.

The Contractor shall familiarize himself with the locations of all underground utilities of facilities as outlined in applicable Articles 105 of the Standard Specifications and shall save such facilities from damage.”

Revise the fourth paragraph of Article 213.02 to read:

“The exploration trench shall be backfilled with trench backfill meeting the requirements of the Standard Specifications, the cost of which shall be included in the item Exploration Trench, Special.”

Method of Measurement.

This work shall be measured in place and measured per lineal foot. Payment shall be based on actual length of trench explored without change in unit price because of adjustment in plan quantities due to field conditions.

An estimated length of EXPLORATION TRENCH, SPECIAL has been shown in the Summary of Quantities to establish a unit price, and payment shall be based on actual length of trench explored without change in unit price because of adjustment in plan quantities. This work shall be measured in accordance with Article 213.03.

Basis of Payment.

This work will be paid for at the contract unit price per foot for EXPLORATION TRENCH, SPECIAL and no extra compensation will be allowed for any delays, inconvenience or damage sustained by the Contractor in performing this work. This price shall include excavation, backfill, and disposal of excess material.

EROSION CONTROL BLANKET (SPECIAL)

Description.

This work shall be performed in accordance with applicable portions of Section 251 of the Standard Specifications, and as directed by the Engineer.

Materials.

Netless erosion control blanket type shall be used on the areas identified to be restored with turf grass seed as indicated on the plans. Cover seeded surfaces with erosion control blanket. This erosion control blanket shall be installed in the areas identified to be seeded.

Metal pins shall be in accordance with the blanket manufacturer's specifications.

Submittals.

The Contractor shall supply the City with copies of the manufacturer's product data sheets. Additionally, a sample of the netless blanket shall be provided to the City upon request.

Method of Measurement.

This work shall be measured for payment in SQUARE YARDS.

Basis of Payment.

This work shall be paid for at the contract unit price per SQUARE YARD for EROSION CONTROL BLANKET (SPECIAL), which price shall include all of items listed in the Standard Specifications.

TREE ROOT PRUNING

Description.

This work shall be performed in accordance with Section 201 of the Standard Specifications.

Add the following to Article 201.06 (a):

“Root pruning shall be performed by an arborist for trees at the locations where proposed gutter, sidewalk, storm sewer installation and/or proposed curb and gutter operations necessitate. A chemical agent approved by an arborist shall be applied to improve the tree’s ability to recover from root loss. All varying diameters of root size shall be combined under this pay item.”

Measurement and Basis of Payment.

TREE ROOT PRUNING will be measured per EACH tree, and paid for at the contract unit price per EACH for TREE ROOT PRUNING.

CATCH BASIN, TYPE C INLET, TYPE A MANHOLE, TYPE A

Description.

This work shall be done in accordance with Section 602 of the Standard Specifications, except as noted herein, and the Village Standard Details, and as directed by the Engineer.

Add the following to Article 602.07

“All new storm sewer structures shall be constructed using precast reinforced concrete sections. External structure joints shall receive a polyethylene wrap. Final adjustments will be made using precast concrete adjusting rings and external chimney seals. A maximum of eight inches (8”) of adjusting rings will be permitted.

Add the following to Article 602.11

“Frame and grates or lids of the type specified in the plans will be included in the various storm sewer structures pay items in the contract.”

Add the following to Article 602.13:

“During the installation of the storm structures it may be necessary to connect existing storm sewer pipes into the new structures. Generally, the existing storm sewer pipes have been located and sized as shown on the plans. Connections of existing storm sewer pipes to the proposed drainage structures shall be included in the contract unit price for the structure being installed.”

Measurement and Basis of Payment.

This work will be paid for at the contract unit price per EACH for MANHOLE, per EACH for CATCH BASIN, and per EACH for INLET of the type specified, with specified Frame and Grate/Lid or Grate, which shall include all labor, material, and equipment to complete the work as specified above.

TEMPORARY PATCHING

Description

This work shall consist of constructing a temporary patch, upon City request, at locations marked by the Engineer, over storm sewer or sanitary sewer crossings in which the pavement will be open to traffic in accordance with applicable portions of Section 442 of the Standard Specifications.

Construction Requirements

The trenches created by storm sewer or sanitary sewer installation operations shall be immediately filled with TRENCH BACKFILL to the top of the trench. The trench will be driveable in both directions at the end of each day. The Contractor will be responsible for maintaining the temporary aggregate surface until the temporary patch can be constructed. This work will be paid for separately at the contract unit price per CU YD for TRENCH BACKFILL. In all other instances TRENCH BACKFILL will be measured for payment based on invert depth to sub-grade.

The Contractor shall remove the existing pavement and trench backfill, the necessary excavation and replacement with Hot-Mix Asphalt Binder Course (4") material as detailed in the plans. Sawcutting will not be required at the sole discretion of the Engineer, as long as a smooth transition is provided between the existing pavement to remain and the temporary patch.

The Contractor will be required to complete TEMPORARY PATCHING on the prepared aggregate surface within 5 calendar days upon receiving request from the City. Failure to do so shall result in a charge of \$1,000 per each calendar day over the above specified time.

Method of Measurement

This work will be measured for payment, complete in place in square yards.

Basis of Payment:

This work will be paid for at the contract unit price per SQUARE YARD for TEMPORARY PATCHING. Price shall include but not be limited to pavement removal, necessary excavation, furnishing, placing and compacting the Hot-Mix Asphalt patching mixture to the depth indicated, the removal and disposal of any surplus material and all labor, equipment and materials necessary to complete the work as specified herein.

TEMPORARY BYPASS PUMPING SYSTEM

Description.

This work shall consist of trench dewatering during installation of sanitary and storm sewers. The bypass pumping system may be utilized to allow for the required work to be completed. This TEMPORARY BYPASS PUMPING SYSTEM must be in place only when work is being completed. A temporary trench dewatering site will be available at the City's lift station property. Discharge of trench dewatering into the City's sanitary sewer system will not be allowed.

Construction Requirements.

All perimeter erosion barriers, siltation bags, sandbags, and other erosion control measures shall remain in place until the entire site is stabilized. The Engineer will have no control over the means and methods used by the Contractor to complete the work. Under no circumstances may trench dewatering be discharged directly into adjacent waters.

The bypass discharge shall be placed on a non-erodible, energy dissipating surface prior to discharge and shall not cause erosion.

During dewatering, all water must be filtered to remove sediment. Water shall have sediment removed prior to being re-introduced to the downstream waterway. Discharge water is considered clean if it does not result in a visually identifiable degradation of water clarity.

The Contractor shall be responsible for paying close attention to trench conditions and weather forecasts during pipe construction and temporary bypass pumping. If heavy rains or a flood event are forecasted it shall be the Contractor's responsibility to remove the pumping system prior to the storm or flood. No additional compensation will be paid for delays or additional work required to remove and reinstate the bypass pumping due to weather.

Measurement and Basis of Payment.

This work shall be measured for payment in LUMP SUM. This work will be paid for at the contract unit price per LUMP SUM for TEMPORARY BYPASS PUMPING SYSTEM, which includes all materials, equipment and labor necessary for installation, maintain, and removal of materials and equipment including the erosion and sediment control installation and maintenance.

STORM SEWER, DUCTILE IRON PIPE, 12”

Description.

This work shall consist of constructing ductile iron storm sewers at the locations indicated in the plans or as directed by the Engineer. Ductile iron pipe shall be water main quality, and being implemented on this project to accommodate shallow pipe depths.

Materials.

The water main shall be "Ductile Iron," ANSI thickness Class 52 with metallic zinc coating layer (ISO 2004) and asphalt seal coat (min. 1 mil thickness), single gasket, double dealing pipe per AWWA 151/ANSI A21.51 (latest edition) with cement mortar lining per AWWA C104/ANSI A21.4 (latest edition). The manufacturer shall be Griffin, Clow, American Cast Iron Pipe Co. or U.S. Pipe & Foundry.

Ductile iron pipe joints shall conform to AWWA C111/A21.11 (latest revision). Ductile Iron Pipe joints shall be push-on type. All mechanical joint fittings, valves, and hydrants shall be restrained with retainer glands. All mechanical joints shall have coated stainless steel, washers, bolts and nuts.

At least 30 calendar days prior to installation of water mains covered in these specifications, the Contractor shall submit to the Engineer shop drawings of all items to be installed. The manufacturer's catalog description of all fittings and other related items shall also be submitted for review and approval.

Construction Requirements.

Proper and suitable tools and appliances for the safe and convenient handling and laying of the pipe shall be used. Bedding material and haunching material to one foot (1') above the main shall be selected granular backfill, CA-11 washed (non-limestone). All open trenches shall be backfilled by the end of the day. The Contractor shall limit the amount excavated to the length of pipe that can be laid in the same day or the amount of acceptable trench backfill material available.

Where water is encountered in the trench, it shall be removed during pipe laying and jointing operations.

Method of Measurement.

This work shall be measured per linear FOOT for STORM SEWER, DUCTILE IRON PIPE installed, regardless of type, of the size specified. The length measured will include granular bedding and haunching materials.

Basis of Payment.

This work will be paid for at the contract unit price per linear FOOT for STORM SEWER, DUCTILE IRON PIPE, of the size specified. This price shall include the excavation of the trench, removal of surplus material, trench shoring, installation of pipe, bedding six inches (6") below the pipe, granular backfill to the level of one foot (1') above the top of the pipe, and other work necessary to complete this item.

ABANDON EXISTING SANITARY SEWER, FILL WITH CLSM

Description and Materials.

This work shall consist of the abandonment of existing sanitary sewers, and filling with controlled low strength material (flowable fill). The work shall be performed in accordance with Article 551 and 605 of the

Standard Specifications, Division IV of the Standard Specifications for Water and Sewer Main Construction in Illinois (Latest Edition), except as revised herein.

Existing sanitary sewers shall be abandoned only after all new services have been transferred over to the new main and the new main is in operation.

Sanitary sewers shall be mechanically capped on each end of the abandoned section. The cap shall not be paid for separately and shall be considered included in the cost of the work.

Method of Measurement.

This work shall be measured per linear foot for water main and sanitary sewer to be abandoned.

Basis of Payment.

This work will be paid for at the contract unit price per linear FOOT for ABANDON EXISTING SANITARY SEWER, FILL WITH CLSM

SANITARY SEWER

Description.

This work consists of the installation of Sanitary Sewer of the size shown on the plans. The Sanitary Sewer shall be constructed with Polyvinyl Chloride (PVC) pipe and fittings conforming to ASTM D3034, and elastomeric gasket joints per ASTM D3212 and complying with F-477. Installation shall be in accordance with applicable information from Standard Specifications, Division III Section 30 of the Standard Specifications for Water and Sewer Main Construction in Illinois.

Materials.

PVC pipe thickness shall be SDR 26. PVC piping shall be protected from sunlight and either covered or stored indoors.

Construction.

Excavation and backfill for Sanitary Sewer shall conform to the provisions of Sections 20 of the Standard Specifications for Water & Sewer Main Construction in Illinois. Bedding class shall be Type II. Minimum burial cover shall be 42".

Earthen backfill shall be compacted in lifts not exceeding 2 feet (loose measure) to a minimum 85% modified proctor density (ASTM D-1551). (Not including topsoil placement)

When water is encountered in the trench, it shall be removed during pipe laying and jointing operations. Provisions shall be made to prevent floating of the pipe.

Dewatering, if required, shall be paid for separately as TEMPORARY BYPASS PUMPING SYSTEM.

The Contractor shall furnish to the Engineer the required documentation, test results, etc., required by the IEPA for placing the sanitary sewer. This work will not be paid for separately and shall be considered included in the cost of SANITARY SEWER.

Method of Measurement.

This work shall be measured per lineal FOOT of SANITARY SEWER of the size specified.

Basis of Payment.

This work will be paid for at the contract unit price per linear FOOT for SANITARY SEWER, of the size specified. The price shall include all labor, tools, equipment and material including PVC pipe of size and class specified, excavation, backfilling, and disposal of waste excavated material, any necessary adapters and all other material necessary to complete the work as specified.

SANITARY SEWER BYPASS PUMPING

Description.

This work includes the bypass pumping of sanitary sewer flow. The anticipated bypass pumping locations include:

- between Green Street (sanitary manhole #I-01) and Riverside Drive (sanitary manhole #I-05).

It is anticipated that the proposed sanitary sewers will impact the existing sanitary sewers at these locations. Therefore to provide uninterrupted service, bypass pumping will be required. The Contractor shall be responsible for determining the method of routing and providing all labor and material necessary to complete bypass pumping.

At all other sanitary sewer installations, the existing sanitary sewers must be maintained in fully operational condition until the new sanitary sewer system has been installed, tested, and approved by the Engineer.

The Contractor shall be responsible for paying close attention to weather forecasts while the bypass is in place. If heavy rains or a flood event are forecast, it shall be the Contractor's responsibility to adjust the pumping operations as needed to maintain uninterrupted service. No additional compensation will be paid for delays or additional work required to remove and reinstate the sanitary sewer bypass pumping system.

Measurement and Basis of Payment.

This work shall be measured for payment in LUMP SUM. This work will be paid for at the contract unit price per LUMP SUM for SANITARY SEWER BYPASS PUMPING, which includes all materials, equipment and labor necessary for installation, maintain, and removal of materials and equipment including the temporary bypass pumping.

MANHOLES, SANITARY, TYPE 1 FRAME, CLOSED LID DROP SANITARY MANHOLES, TYPE 1 FRAME, CLOSED LID

Description.

This work consists of the installation of sanitary manholes and drop sanitary manholes of the size and type shown on the plans.

This work shall be performed in accordance with the Standard Specifications for Water and Sewer Main Construction in Illinois latest edition and the City of McHenry Construction Details.

All new sanitary sewer structures shall be constructed using precast reinforced concrete sections with factory applied bituminous coating. External structure joints shall receive a polyethylene wrap. Final adjustments will be made using precast concrete adjusting rings and chimney seals. A maximum of eight inches (8") of recycled rubber adjusting rings will be permitted.

Frame and lids of the type specified in the plans will be included in the various sanitary sewer structures pay items in the contract.

During the installation of the manhole structures it may be necessary to connect existing sanitary sewer pipes into the new structures. Generally, the existing sanitary sewer pipes have been located and sized as shown on the plans. Connections of existing sanitary sewer pipes to the proposed structures shall be included in the contract unit price for the structure being installed.

Method of Measurement.

This work shall be measured per each sanitary manhole.

Basis of Payment.

This work shall be paid for at the contract unit price per each for MANHOLES, SANITARY, of the specified size, and type of frame and lid, and per each for DROP SANITARY MANHOLES, of the type of frame and lid. Price shall include all of the work as specified above including heavy duty frame and lid, and chimney seals as shown in the details. The price shall also include all labor, tools, equipment and material including excavation, backfilling, disposal of waste excavated material and all other material necessary to complete the work as specified.

SANITARY MANHOLES TO BE REMOVED

Description.

This item shall consist of the removal of existing sanitary and combination manholes as shown on the plans. Removal shall include the excavation and physical removal and disposal of the manhole structures.

For sanitary structures located outside the limits of the roadway, the removal shall include the excavation and physical removal of the manhole structures and backfilling the void left by the removal with earthen backfill.

For sanitary structures located within the limits of the roadway, the removal and replacement of the asphalt pavement shall be paid for separately at the contract unit price of the required items. Trench Backfill needed to complete the removal shall be considered included in the cost of SANITARY MANHOLES TO BE REMOVED.

Method of Measurement.

This work shall be measured per EACH sanitary manhole removed.

Basis of Payment.

This work will be paid for at the contract unit price per EACH for SANITARY MANHOLES TO BE REMOVED.

SANITARY SEWER REMOVAL

Description.

This work consists of the removal of sanitary sewer of the size shown on the plans regardless of type.

Sanitary sewer removal shall be performed in accordance with all applicable articles of Section 551 of the Standard Specifications.

Excavation and backfill for sanitary sewer removal shall conform to the typical sections shown in the plans and shall conform to the provisions of Sections 20 of the Standard Specifications for Water & Sewer Main Construction in Illinois (latest edition).

Trench backfill will be paid for separately.

Method of Measurement.

This work shall be measured per linear foot for the specified size of sanitary sewer to be removed.

Basis of Payment.

This work will be paid for at the contract unit price per linear foot for SANITARY SEWER REMOVAL for specified diameter. The price shall include all labor, tools, plug, mortar, equipment and material including excavation, disposal of waste excavated material and all other material necessary to complete the work as specified.

SANITARY SEWER CONNECTION

Description.

This work shall be performed in accordance with Section 31 of the Standard Specifications for Water and Sewer Main Construction (latest edition), and applicable portions of Section 563 of the Standard Specifications, except as modified herein. This work shall be performed according to the City's Specifications and Construction Details.

The Contractor shall perform connections to the existing sanitary sewer at locations shown on the drawings. The work shall consist of connecting existing sanitary sewer pipes to proposed manholes, and proposed pipes to existing manholes.

In no case, shall a customer(s) be out of service overnight.

Materials.

The Contractor shall obtain the necessary materials required to make a proper connection. The Contractor shall not proceed until he has all the required materials on site.

Construction.

At the approach to the manhole the sewer mainline will be removed, replaced, and reconnected as well as sufficient length of the sanitary sewer (2-feet min.) to provide the proper connection and maintain the integrity of the connection. The new pipe shall be polyvinyl chloride pipe, of the class specified. Existing manhole invert opening, in most cases, will require to be enlarged to accommodate the proposed pipe. Fittings shall be of the size necessary to accommodate the existing sewers/sewer services that will connect to the fitting and Contractor shall be responsible for determination of necessary fitting size.

Pipe connection between dissimilar pipe types shall be made using non-sheer couplings with full-width stainless steel bands. Pipe shall be laid at a minimum grade of 1.0%. Pipe will be laid under 12" minimum cover CA-6 granular backfill. 4" CA-6 granular backfill required under pipe.

The slope from the existing service pipe to remain to the mainline sewer connection shall be continuous and constant, except as otherwise authorized by the Engineer. The Contractor shall be responsible for verifying the elevation and slope of the proposed pipe prior to connection.

All customers shall be notified by the Contractor 48 hours prior to the interruption of the service. Reconnections to the sanitary sewer shall be made in as short a time as possible. Full operating sanitary service must be restored so that no service is interrupted for more than four (4) hours.

Any damage to the sanitary connection by the Contractor caused by the Contractor's failure to properly locate the sanitary connection shall be repaired by the Contractor at his own expense to the satisfaction of the Engineer.

Dewatering, if required, shall be considered included in the cost of SANITARY SEWER CONNECTION.

Method of Measurement.

This work shall be measured per each connection.

Basis of Payment.

This work will be paid for at the contract unit price per each for SANITARY SEWER CONNECTION, which price shall include all equipment, labor, disposal of abandoned pipe, rounded stone bedding, backfilling the void left, and other materials (not listed for payment separately) required to properly connect with the existing sanitary sewer. Trench backfill used while connecting to the existing sanitary sewer shall be considered included in the contract unit price for SANITARY SEWER CONNECTION.

REMOVAL OF LANDSCAPING WALLS

Description.

This work shall consist of the removal of existing landscape walls, including but not limited to paver type stones and timber edging, and shall be performed in accordance with Article 201.01(a) of the Standard Specifications.

Basis of Payment.

This work will not be paid for separately but included in the contract unit price per CUBIC YARD for EARTH EXCAVATION, as specified, regardless of type and size, which price shall include all excavation and backfilling, and removing and disposing of structure as necessary.

BRUSH REMOVAL

Description.

This work shall consist of clearing existing vegetation in accordance with Article 201.01(a) of the Standard Specifications.

Basis of Payment.

This work will not be paid for separately but included in the contract unit price per CUBIC YARD for EARTH EXCAVATION, as specified, regardless of type and size, which price shall include all removing and disposing of excess materials as necessary.

WOOD FENCE TO BE REMOVED AND RE-ERECTED

Description.

This work shall consist of removing and re-erecting wood fences, including rails and posts that conflict with the proposed improvement. Fence material types include wood of varying types and heights. Additional compensation will NOT be allowed for varying materials types or heights comprising of the existing fences to be removed or re-erected. It is intended that sections of the removed fence will be re-erected at the same location of the pre-construction condition.

The removed fence(s) shall be stacked at each property location on a palette provided by the Contractor.

It will be the Contractor's responsibility to determine the type of fence and materials required to complete each relocation.

Method of Measurement.

This work shall be measured in place and measured per lineal foot. Payment shall be based on actual length of fence re-erected without change in unit price because of adjustment in plan quantities due to field conditions.

Basis of Payment.

This work will be paid for at the contract unit price per FOOT for WOOD FENCE TO BE REMOVED AND RE-ERECTED which price shall include connections to existing and proposed fence(s), post foundations (if required), post excavation and all equipment, labor and materials required to complete this work.

FENCE REMOVAL

Description.

This work includes the removal and disposal the existing fence, regardless of material type and height, including rails and posts at the locations shown on the plans and as directed by the Engineer that conflict with the proposed improvements. The limits of removal must be marked and measured for payment by the Engineer prior to removal. The Contractor at his/her expense shall repair any fence damaged or property damaged outside the removal limits.

Measurement and Basis of Payment.

This work will be paid for at the contract unit price per FOOT for FENCE REMOVAL, which price shall include removal of the existing fence as well as all equipment, labor and materials required to complete the fence removal.

RELOCATE SIGN PANEL AND POST

Description.

This work includes the removal and relocation of existing sign panels and posts that conflict with the installation of the proposed improvements. All other necessary sign relocations to accommodate contractor operations will proceed in accordance with Article 107.25 of the Standard Specifications.

Construction.

Sign panels and posts will be re-established at their permanent location at the proposed location as directed by the Engineer as soon as the construction operations permit. Additional compensation will not be allowed for varying post types or heights. Additional compensation will not be allowed for varying sign panel sizes. It will be the Contractor's responsibility to determine the type of materials required to complete each relocation.

Any sign panels or posts damaged by the Contractor shall be replaced at no additional cost.

Measurement and Basis of Payment.

This work will be paid for at the contract unit price per EACH for RELOCATE SIGN PANEL AND POST, which price shall be payment in full for all of the work as specified above.

PARKING BUMPER REMOVAL & REPLACEMENT

Description.

All existing concrete parking bumpers within the disturbed area that interfere with the work shall be carefully removed and re-installed to its preconstruction condition or to the satisfaction of the Engineer. The Contractor shall replace at his expense, any parking bumper that has been damaged by the contractor's operations. Removal and the disposal of the existing parking bumpers shall be included in the cost for PARKING BUMPER REMOVAL & REPLACEMENT.

Measurement and Basis of Payment.

This work will be paid for at the contract unit price per each for PARKING BUMPER REMOVAL & REPLACEMENT, which price shall include all labor, material and equipment necessary to perform the work.

DIRECTIONAL DRILLING

Description.

This section covers the construction of the sanitary mains using directional drilling methods. The CONTRACTOR shall be sufficiently trained and knowledgeable of the construction techniques required by use of this methodology. The CONTRACTOR shall furnish all directional drilling equipment, qualified laborers and equipment operators, and materials necessary to complete the required work in accordance with these specifications, related contract documents and associated drawings. Work shall include and not be limited to proper installation, testing, restoration of underground utilities and environmental protection and restoration.

Those involved with directional borings shall be knowledgeable about the methods to locate existing underground utilities both vertically and horizontally. The CONTRACTOR shall be able to interpret all available data so the completed sanitary main installation is accomplished safely and without damage to existing utilities, private well and septic systems, and all in accordance with these Contract Documents.

The term directional drilling shall mean the drilling of a pilot hole, by means of horizontal directional drilling equipment, enlarging the pilot hole to a diameter suitable (no large than 1.5 times the outside diameter of the product pipe). The completed hole for pipe installation shall not be significantly bigger than necessary to pull the pipe including pipe bells and joints into the enlarged hole.

Submittals.

The CONTRACTOR shall submit data, shop drawings, for the new pipe material, installation procedure, equipment to be used data, proof of licensure and experience, and other appurtenant materials or related information as requested by the ENGINEER.

The CONTRACTOR, unless otherwise necessary, is to use the directional boring method and equipment they deem appropriate for the installation of the specified sanitary mains, provided that the proposed method and equipment is approved by the ENGINEER. The ENGINEER's approval, however, shall in no way relieve the CONTRACTOR of their responsibility for completing the work satisfactorily and meeting the criteria set forth in these Contract Documents. Only workmen that have horizontal directional drilling experience shall be used in completing this work. The CONTRACTOR shall submit a statement of qualifications of the on-site foreman or the equipment operator to the ENGINEER for review and approval. The CONTRACTOR and his foreman/operator shall have at least 20,000 lineal feet of project equivalent diameter or larger.

Equipment.

Directional drilling CONTRACTOR shall maintain equipment in good working condition, at all times during the project, and shall use all reasonable means to prevent and control the loss of circulation and to protect the pilot hole.

Directional drilling equipment shall have the capability of meeting the minimum lbs/pullback for the installation conditions and pipe size. The CONTRACTOR shall adhere to the pipe manufacturer's most current calculations regarding tensile load limitations for trenchless installation. These calculations or data shall be part of the required shop drawing submittal for the pipe.

Direction control and sensing system shall be either a fixed or remote directional control system which is capable of monitoring and transmitting key equipment signals such as pitch, roll and azimuth. Walkover tracking systems or other types of location sensing systems shall be used to track the downhole assembly and shall be capable of pin-pointing the steering mechanism both horizontally and vertically and determining its depth, azimuth, pitch (inclination), roll and left/right deviations.

The steering tool, as well as other back-up tools used on this project, shall have been recently calibrated in the shop to ensure the equipment is within the manufacturer's specified tolerances before the start of directional drilling operation. An on-site roll calibration check shall be carried out. Roll checks shall have a minimum of eight points checked. Occasional shoot-ins should be performed, at various locations along the drill path to check for magnetic changes and to confirm the course direction. All data received during these checks should be recorded and submitted for comparison during drilling operations.

The drilling fluid system shall meet all EPA and related requirements and shall be self contained, transportable, and have the necessary capacity to meet the planned drilling operation. The fluid shall be non-toxic and suitable for its intended use. The drilling fluid shall be used for hole support, pipe lubricity, and preservation of in-situ soil permeability and porosity. The CONTRACTOR shall submit manufacturer's literature on the drilling equipment, and drilling fluid for review before directional drilling activities commence.

The drilling fluid pressure and flow rates shall be continuously monitored to prevent any slurry migration. Any migration or spilling of drilling slurry shall be promptly stopped or contained and cleaned up. The CONTRACTOR shall place a silt fence between all drilling operations and any drainage, waterways, or other area designated for such protection by state, federal, or local regulations. Additional environmental protection necessary to contain any hydraulic or drilling fluid spills shall be put in place, including berms, liners, turbidity curtains, and other measures. Upon completion of the directional drill project, the drilling mud and cuttings shall be disposed of by the CONTRACTOR at an approved dump site. The CONTRACTOR may use clean out locations as drilling mud pressure relief points by excavating pits at each location where the slurry may be collected.

All drilling equipment including drill pipe, reamers, bits, etc., shall be suitably sized to meet the sanitary main requirements and specific drilling location requirements. When in operation, the drilling machine shall be anchored to the ground to withstand the pulling, pushing, and rotating pressure required to complete the installation. The drilling rig shall have a system to monitor and record maximum pull-back pressures during pull-back operations.

Drilling CONTRACTOR's insurance shall cover any damage or destruction of surface or in-hole equipment, including, but not limited to, drill pipe, motors, bits, and reamers, regardless of when or how such damage or destruction occurs.

Installation.

The CONTRACTOR shall install the sanitary mains at the planned locations and depths as noted on the Plans, and related materials or equipment.

The CONTRACTOR may vary the depth of the force main installed by directional drilling methods to miss both public and private utilities; however, minimum bury depths identified on the plans shall be adhered to throughout the project as well as gravity main requirements. Minimum slope requirements must be met.

The CONTRACTOR shall prevent drilling fluids from entering the manholes, sanitary and storm sewers, other drainage systems and any Waters of the United States including creeks and streams.

The CONTRACTOR shall be responsible for the restoration of all areas uplifted (pavement heaving, sidewalk uplifting, etc.) or significant settling areas that are a direct result of the directional drilling pipe installation method over the entire warranty period for the project.

The CONTRACTOR shall stop the directional drilling if pavement heaving begins. The OWNER or ENGINEER also has the option to stop the directional drilling if pavement heaving is evident.

The CONTRACTOR shall coordinate proposed drilling pit locations with the ENGINEER prior to excavating the drilling pit. If the CONTRACTOR intends to install the force main by a combination of open cut and directional drilling techniques, they shall coordinate these varied installation methods with the ENGINEER prior to beginning work in each respective area.

Should the pilot hole, at any point during the CONTRACTOR's performance of work, deviate excessively from the running line or inclination, the CONTRACTOR agrees to restore the hole to a condition satisfactory to the ENGINEER either by conventional open-cut methods and procedures, modifications of the drilling head alignment while drilling ahead, or by re-drilling. CONTRACTOR shall expose all pipeline or conduits, in advance of directional drilling work, that are to be crossed. These locations shall be checked, and changes made to the proposed sanitary main vertical alignment to provide a minimum of 9 inches clearance except at water main crossings which require additional clearance requirements. Vertical alignment changes shall be made gradually and shall not exceed the pipe manufacturer's recommendations for bends.

If a substance or formation is encountered which precludes the typical guidance of the drilling assembly by means of jetting, the CONTRACTOR may, at their discretion, obtain suitable downhole tools necessary to the drilling of the pilot hole through the formation of substance. The CONTRACTOR may, in the event subsurface conditions encountered make drilling, reaming or product installation abnormally difficult, choose to install the sanitary main by open-cut methods unless otherwise specified.

Should the hole, for any cause attributable to be directional drilling CONTRACTOR's operations, be lost or damaged while they are engaged in the performance of the work, all such loss or damage to the hole shall be borne by the CONTRACTOR. The CONTRACTOR shall remedy the specific situation to the satisfaction of the ENGINEER or commence the drilling of a new hole at the CONTRACTOR's cost. The drilling of the new hole shall be completed under the same requirements of these contract documents as though it were the first hole. All redrilling costs are to be borne by the CONTRACTOR.

Unless otherwise provided herein, the drilling CONTRACTOR shall assume all responsibility for, including control and removal of, and shall protect, defend, and indemnify the OWNER and ENGINEER from and against all claims, demands, and causes of action of every kind and character arising from pollution or contamination, which originates above the surface of the land or water from spills of fuels, lubricants, motor oils, pipe dope, paints, solvents, ballast, bilge, and garbage wholly in the drilling CONTRACTOR's possession and control and directly associated with the drilling CONTRACTOR's equipment and facilities.

Upon completion of each directional drilling installation, the CONTRACTOR shall verify that all private and public utilities (including well and septic systems) still function. The CONTRACTOR shall arrive at a satisfactory method of checking that utility service is still available to each customer.

The CONTRACTOR shall make the necessary allowances for thermal expansion or contraction of pipe "on hot days" by bunching up the installed pipe. This shall be done in accordance with pipe manufacturer's recommendations.

Site Restoration.

Following drilling operations, the CONTRACTOR will demobilize equipment and restore the work site to the original condition or better. All excavations will be backfilled and compacted according to these specifications.

Measurement and Basis of Payment.

This work shall be measured and paid for per linear FOOT for DIRECTIONAL DRILLING, of the size pipe specified. Pit excavation, material disposal, restoration and other related Work shall not be paid for separately, but shall be considered included in the contract unit price.

ADJUSTMENTS AND RECONSTRUCTIONS

Effective: March 15, 2011

Revise the first paragraph of Article 602.04 to read:

“602.04 Concrete. Cast-in-place concrete for structures shall be constructed of Class SI concrete according to the applicable portions of Section 503. Cast-in-place concrete for pavement patching around adjustments and reconstructions shall be constructed of Class PP-1 concrete, unless otherwise noted in the plans, according to the applicable portions of Section 1020.”

Revise the third, fourth and fifth sentences of the second paragraph of Article 602.11(c) to read:

“Castings shall be set to the finished pavement elevation so that no subsequent adjustment will be necessary, and the space around the casting shall be filled with Class PP-1 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b.”

Revise Article 603.05 to read:

“603.05 Replacement of Existing Flexible Pavement. After the castings have been adjusted, the surrounding space shall be filled with Class PP-1 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b.”

Revise Article 603.06 to read:

“603.06 Replacement of Existing Rigid Pavement. After the castings have been adjusted, the pavement and HMA that was removed, shall be replaced with Class PP-1 concrete, unless otherwise noted in the plans, not less than 9 in. (225 mm) thick. The pavement may be opened to traffic according to Article 701.17(e)(3)b.

The surface of the Class PP concrete shall be constructed flush with the adjacent surface.”

Revise the first sentence of Article 603.07 to read:

“603.07 Protection Under Traffic. After the casting has been adjusted and the Class PP concrete has been placed, the work shall be protected by a barricade and two lights according to Article 701.17(e)(3)b.”

PUBLIC CONVENIENCE AND SAFETY (DIST 1)

Effective: May 1, 2012

Revised: July 15, 2012

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

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

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

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

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

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

FRICITION AGGREGATE (D1)

Effective: January 1, 2011

Revised: December 1, 2021

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> ^{5/} : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete
HMA Low ESAL	Stabilized Subbase or Shoulders	<u>Allowed Alone or in Combination</u> ^{5/} : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{1/} Crushed Concrete
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L SMA Binder	<u>Allowed Alone or in Combination</u> ^{5/ 6/} : Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete ^{3/}
HMA High ESAL Low ESAL	C Surface and Binder IL-9.5 IL-9.5FG or IL-9.5L	<u>Allowed Alone or in Combination</u> ^{5/} : Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}

Use	Mixture	Aggregates Allowed	
HMA High ESAL	D Surface and Binder IL-9.5 or IL-9.5FG	<u>Allowed Alone or in Combination</u> ^{5/} :	
		Crushed Gravel Carbonate Crushed Stone (other than Limestone) ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/}	
		<u>Other Combinations Allowed:</u>	
		<i>Up to...</i>	<i>With...</i>
		25% Limestone	Dolomite
HMA High ESAL	E Surface IL-9.5 SMA Ndesign 80 Surface	<u>Allowed Alone or in Combination</u> ^{5/ 6/} :	
		Crushed Gravel Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.	
		<u>Other Combinations Allowed:</u>	
		<i>Up to...</i>	<i>With...</i>
		50% Dolomite ^{2/}	Any Mixture E aggregate
75% Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone		
75% Crushed Gravel ^{2/}	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag		

Use	Mixture	Aggregates Allowed		
HMA High ESAL	F Surface IL-9.5 SMA Ndesign 80 Surface	<u>Allowed Alone or in Combination</u> ^{5/ 6/} :		
		Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.		
		<u>Other Combinations Allowed:</u>		
		<table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: left;"><i>Up to...</i></th> <th style="text-align: left;"><i>With...</i></th> </tr> </thead> <tbody> <tr> <td>50% Crushed Gravel^{2/} or Dolomite^{2/}</td> <td>Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone</td> </tr> </tbody> </table>	<i>Up to...</i>	<i>With...</i>
<i>Up to...</i>	<i>With...</i>			
50% Crushed Gravel ^{2/} or Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone			

- 1/ Crushed steel slag allowed in shoulder surface only.
- 2/ Carbonate crushed stone (limestone) and/or crushed gravel shall not be used in SMA Ndesign 80.
- 3/ Crushed concrete will not be permitted in SMA mixes.
- 4/ Crushed steel slag shall not be used as 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.”

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

Effective: November 1, 2019

Revised: January 1, 2025

Revise Article 1004.03(c) to read:

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

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

1/ CA 16 or CA 13 may be blended with the CA 11

2/ The coarse aggregates used shall be capable of being combined with the fine aggregates and mineral filler to meet the approved mix design and the mix requirements noted herein.

3/ The specified coarse aggregate gradations may be blended.

4/ CA 13 shall be 100 percent passing the 1/2 in. (12.5mm) sieve.”

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

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

Revise the “High ESAL” portion of the table in Article 1030.01 to read:

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

Revise Note 2. and add Note 6 to Article 1030.02 of the Standard Specifications to read:

“Item	Article/Section
(g)Performance Graded Asphalt Binder (Note 6)	1032
(h)Fibers (Note 2)	

Note 2. 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 1 or Type 2. Material shall meet requirements noted herein and the actual dosage rate will be determined by the Engineer.

Note 6. 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 a SBS PG 76-22 for IL-4.75, except where modified herein..”.

Revise table in Article 1030.05(a) of the Standard Specifications to read:

"MIXTURE COMPOSITION (% PASSING) ^{1/}												
Sieve Size	IL-19.0 mm		SMA 12.5		SMA 9.5		IL-9.5mm		IL-9.5FG		IL-4.75 mm	
	min	max	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		100
3/8 in. (9.5 mm)				65	90	100	90	100	90	100		100
#4 (4.75 mm)	40	60	20	30	36	50	34	69	60	75 ^{6/}	90	100
#8 (2.36 mm)	20	42	16	24 ^{4/}	16	32 ^{4/}	34 ^{5/}	52 ^{2/}	45	60 ^{6/}	70	90
#16 (1.18 mm)	15	30					10	32	25	40	50	65
#30 (600 μm)			12	16	12	18			15	30		
#50 (300 μm)	6	15					4	15	8	15	15	30
#100 (150 μm)	4	9					3	10	6	10	10	18
#200 (75 μm)	3.0	6.0	7.0	9.0 ^{3/}	7.5	9.5 ^{3/}	4.0	6.0	4.0	6.5	7.0	9.0 ^{3/}
#635 (20 μm)			≤ 3.0		≤ 3.0							
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		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/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above the percentage stated on the table.
 - 5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.
 - 6/ When the mixture is used as a binder, the maximum shall be increased by 0.5 percent passing.”

Revise Article 1030.05(b) of the Standard Specifications to read:

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

Mix Design	Voids in the Mineral Aggregate (VMA), % Minimum for Ndesign				
	30	50	70	80	90
IL-19.0		13.5	13.5		13.5
IL-9.5		15.0	15.0		
IL-9.5FG		15.0	15.0		
IL-4.75 ^{1/}		18.5			
SMA-12.5 ^{1/2/5/}				17.0 ^{3/} /16.0 ^{4/}	
SMA-9.5 ^{1/2/5/}				17.0 ^{3/} /16.0 ^{4/}	
IL-19.0L	13.5				
IL-9.5L	15.0				

- 1/ Maximum draindown shall be 0.3 percent according to Illinois Modified AASHTO T 305.
- 2/ The draindown shall be determined at the JMF asphalt binder content at the mixing temperature plus 30°F.
- 3/ Applies when specific gravity of coarse aggregate is ≥ 2.760 .
- 4/ Applies when specific gravity of coarse aggregate is < 2.760 .
- 5/ 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.”

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 first and second paragraphs of Articles 1030.06(c)(2) of the Standard Specifications to read:

“(2) Personnel. The Contractor shall provide a QC Manager who shall have overall responsibility and authority for quality control. This individual shall maintain active certification as a Hot-Mix Asphalt Level II technician.

In addition to the QC Manager, the Contractor shall provide sufficient personnel to perform the required visual inspections, sampling, testing, and documentation in a timely manner. Mix designs shall be developed by personnel with an active certification as a Hot-Mix Asphalt Level III technician. Technicians performing mix design testing and plant sampling/testing shall maintain active certification as a Hot-Mix Asphalt Level I technician. The Contractor may provide a technician trainee who has successfully completed the Department’s “Hot-Mix Asphalt Trainee Course” to assist in the activities completed by a Hot-Mix Asphalt Level I technician for a period of one year after the course completion date. The Contractor may also provide a Gradation Technician who has successfully completed the Department’s “Gradation Technician Course” to run gradation tests only under the supervision of a Hot-Mix Asphalt Level II Technician. The Contractor shall provide a Hot-Mix Asphalt Density Tester who has successfully completed the Department’s “Nuclear Density Testing” course to run all nuclear density tests on the job site.”

Add Article 1030.06(d)(3) to the Standard Specifications to read:

“(3) The Contractor shall take possession of any Department unused backup or dispute resolution HMA mixture samples or density specimens upon notification by the Engineer. The Contractor shall collect the HMA mixture samples or density specimens from the location designated by the Engineer. The HMA mixture samples or density specimens may be added to RAP stockpiles according to Section 1031.”

Revise the second paragraph of Articles 1030.07(a)(11) and 1030.08(a)(9) of the Standard Specifications to read:

“When establishing the target density, the HMA maximum theoretical specific gravity (Gmm) will be based on the running average of four available Department test results for that project. If less than four Gmm test results are available, an average of all available Department test results for that project will be used. The initial Gmm will be the last available Department test result from a QMP project. If there is no available Department test result from a QMP project, the Department mix design verification test result will be used as the initial Gmm.”

Revise the following table and notes in Article 1030.09 (c) of the Standard Specifications to read:

CONTROL LIMITS						
Parameter	IL-19.0, IL-9.5, IL-9.5FG, IL-19.0L, IL-9.5L		SMA-12.5, SMA-9.5		IL-4.75	
	Individual Test	Moving Avg. of 4	Individual Test	Moving Avg. of 4	Individual Test	Moving Avg. of 4
% Passing: ^{1/}						
1/2 in. (12.5 mm)	± 6 %	± 4 %	± 6 %	± 4 %		
3/8 in. (9.5mm)			± 4 %	± 3 %		
# 4 (4.75 mm)	± 5 %	± 4 %	± 5 %	± 4 %		
# 8 (2.36 mm)	± 5 %	± 3 %	± 4 %	± 2 %		
# 16 (1.18 mm)			± 4 %	± 2 %	± 4 %	± 3 %
# 30 (600 µm)	± 4 %	± 2.5 %	± 4 %	± 2.5 %		
Total Dust Content # 200 (75 µm)	± 1.5 %	± 1.0 %			± 1.5 %	± 1.0 %
Asphalt Binder Content	± 0.3 %	± 0.2 %	± 0.2 %	± 0.1 %	± 0.3 %	± 0.2 %
Air Voids ^{2/}	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %
Field VMA ^{3/}	-0.7 %	-0.5 %	-0.7 %	-0.5 %	-0.7 %	-0.5 %

- 1/ Based on washed ignition oven or solvent extraction gradation.
- 2/ The air voids target shall be a value equal to or between 3.2 % and 4.8 %.
- 3/ Allowable limit below minimum design VMA requirement.”

Revise Article 1030.09(g)(2) of the Standard Specifications to read:

“(2) The Contractor shall complete split verification sample tests listed in the Limits of Precision table in Article 1030.09(h)(1).”

In the Supplemental Specifications, replace the revision for the end of the third paragraph of Article 1030.09(h)(2) with the following:

“When establishing the target density, the HMA maximum theoretical specific gravity (G_{mm}) will be the Department mix design verification test result.”

Add after third sentence of Article 1030.09(b) to read:

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

Revise Table 1 and Note 4/ of Table 1 in Article 406.07(a) of the Standard Specifications to read:

	Breakdown/Intermediate Roller (one of the following)	Final Roller (one or more of the following)	Density Requirement
IL-9.5, IL-9.5FG, IL-19.0 ^{1/}	V _D , P, T _B , 3W, O _T , O _B	V _S , T _B , T _F , O _T	As specified in Section 1030
IL-4.75 and SMA ^{3/} ^{4/}	T _B , 3W, O _T	T _F , 3W	As specified in Section 1030
Mixtures on Bridge Decks ^{2/}	T _B	T _F	As specified in Articles 582.05 and 582.06.

“4/ The Contractor shall provide a minimum of two steel-wheeled tandem rollers (T_B), and/or three-wheel (3W) rollers for breakdown, except one of the (T_B) or (3W) rollers shall be 84 inches (2.14 m) wide and a weight of 315 pound per linear inch (PLI) (5.63 kg/mm) and one of the (T_B) or (3W) rollers can be substituted for an oscillatory roller (O_T). T_F rollers shall be a minimum of 280 lb/in. (50 N/mm). The 3W and T_B rollers shall be operated at a uniform speed not to exceed 3 mph (5 km/h), with the drive roll for T_B rollers nearest the paver and maintain an effective rolling distance of not more than 150 ft (45 m) behind the paver.”

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

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

Revise first paragraph of Article 1030.10 of the Standard Specifications to read:

“A test strip of 300 ton (275 metric tons), except for SMA mixtures it will be 400 ton (363 metric ton), will be required for each mixture on each contract at the beginning of HMA production for

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.”

Revise fourth paragraph of Article 1030.10 of the Standard Specifications to read:

“When a test strip is constructed, the Contractor shall collect and split the mixture according to the document “Hot-Mix Asphalt Test Strip Procedures”. The Engineer, or a representative, shall deliver split sample to the District Laboratory for verification testing. The Contractor shall complete mixture tests stated in Article 1030.09(a). Mixture sampled shall include enough material for the Department to conduct mixture tests detailed in Article 1030.09(a) and in the document “Hot-Mix Asphalt Mixture Design Verification Procedure“ Section 3.3. The mixture test results shall meet the requirements of Articles 1030.05(b) and 1030.05(d), except Hamburg wheel tests will only be conducted on High ESAL mixtures during production

HOT-MIX ASPHALT – MIXTURE DESIGN VERIFICATION AND PRODUCTION (D1)

Effective: January 1, 2019

Revised: December 1, 2021

Add to Article 1030.05 (d)(3) of the Standard Specifications to read:

“ During mixture design, prepared samples shall be submitted to the District laboratory by the Contractor for verification testing. The required testing, and number and size of prepared samples submitted, shall be according to the following tables.

High ESAL – Required Samples for Verification Testing	
Mixture	Hamburg Wheel and I-FIT Testing ^{1/2/}
Binder	total of 3 - 160 mm tall bricks
Surface	total of 4 - 160 mm tall bricks

Low ESAL – Required Samples for Verification Testing	
Mixture	I-FIT Testing ^{1/2/}
Binder	1 - 160 mm tall brick
Surface	2 - 160 mm tall bricks

1/ The compacted gyratory bricks for Hamburg wheel and I-FIT testing shall be 7.5 ± 0.5 percent air voids.

2/ If the Contractor does not possess the equipment to prepare the 160 mm tall brick(s), twice as many 115 mm tall compacted gyratory bricks will be acceptable.

Revise the fourth paragraph of Article 1030.10 of the Standard Specifications to read:

“When a test strip is not required, each HMA mixture shall still be sampled on the first day of production: I-FIT and Hamburg wheel testing for High ESAL; I-FIT testing for Low ESAL. Within two working days after sampling the mixture, the Contractor shall deliver gyratory cylinders to the District laboratory for Department verification testing. The High ESAL mixture test results shall meet the requirements of Articles 1030.05(d)(3) and 1030.05(d)(4). The Low ESAL mixture test results shall meet the requirements of Article 1030.05(d)(4). The required number and size of prepared samples submitted for the Hamburg wheel and I-FIT testing shall be according to the “High ESAL - Required Samples for Verification Testing” table in Article 1030.05(d)(3) above.”

Add the following to the end of Article 1030.10 of the Standard Specifications to read:

“Mixture sampled during first day of production shall include approximately 60 lb (27 kg) of additional material for the Department to conduct Hamburg wheel testing and approximately 80 lb (36 kg) of additional material for the Department to conduct I-FIT testing. Within two working days after sampling, the Contractor shall deliver prepared samples to the District laboratory for verification testing. The required number and size of prepared samples submitted for the Hamburg wheel and I-FIT testing shall be according to the “High ESAL - Required Samples for Verification Testing” table in Article 1030.05(d)(3) above.”

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets

SPECIAL PROVISION
FOR
INSURANCE

Effective: February 1, 2007
Revised: August 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets
SPECIAL PROVISION
FOR
CONSTRUCTION AND MAINTENANCE SIGNS

Effective: January 1, 2004
Revised: June 1, 2007

All references to Sections or Articles in this specification shall be construed to mean a specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

701.14. Signs. Add the following paragraph to Article 701.14:

All warning signs shall have minimum dimensions of 1200 mm x 1200 mm (48" x 48") and have a black legend on a fluorescent orange reflectorized background, meeting, as a minimum, Type AP reflectivity requirements of Table 1091-2 in Article 1091.02.

State of Illinois
DEPARTMENT OF TRANSPORTATION
Bureau of Local Roads & Streets
SPECIAL PROVISION
FOR
LOCAL QUALITY ASSURANCE/ QUALITY MANAGEMENT QC/QA
Effective: January 1, 2022

Replace the first five paragraphs of Article 1030.06 of the Standard Specifications with the following:

“1030.06 Quality Management Program. The Quality Management Program (QMP) will be Quality Control / Quality Assurance (QC/QA) according to the following.”

Delete Article 1030.06(d)(1) of the Standard Specifications.

Revise Article 1030.09(g)(3) of the Standard Specifications to read:

“(3) If core testing is the density verification method, the Contractor shall provide personnel and equipment to collect density verification cores for the Engineer. Core locations will be determined by the Engineer following the document “Hot-Mix Asphalt QC/QA Procedure for Determining Random Density Locations” at density verification intervals defined in Article 1030.09(b). After the Engineer identifies a density verification location and prior to opening to traffic, the Contractor shall cut a 4 in. (100 mm) diameter core. With the approval of the Engineer, the cores may be cut at a later time.”

Revise Article 1030.09(h)(2) of the Standard Specifications to read:

“(2) After final rolling and prior to paving subsequent lifts, the Engineer will identify the random density verification test locations. Cores or nuclear density gauge testing will be used for density verification. The method used for density verification will be as selected below.

Density Verification Method	
<input type="checkbox"/>	Cores
<input checked="" type="checkbox"/>	Nuclear Density Gauge (Correlated when paving \geq 3,000 tons per mixture)

Density verification test locations will be determined according to the document “Hot-Mix Asphalt QC/QA Procedure for Determining Random Density Locations”. The density testing interval for paving wider than or equal to 3 ft (1 m) will be 0.5 miles (800 m) for lift thicknesses of 3 in. (75 mm) or less and 0.2 miles (320 m) for lift thicknesses greater than 3 in. (75 mm). The density testing interval for paving less than 3 ft (1 m) wide will be 1 mile (1,600 m). If a day’s paving will be less than the prescribed density testing interval, the length of the day’s paving will be the interval for that day. The density testing interval for mixtures used for patching will be 50 patches with a minimum of one test per mixture per project.

If core testing is the density verification method, the Engineer will witness the Contractor coring, and secure and take possession of all density samples at the

density verification locations. The Engineer will test the cores collected by the Contractor for density according to Illinois Modified AASHTO T 166 or AASHTO T 275.

If nuclear density gauge testing is the density verification method, the Engineer will conduct nuclear density gauge tests. The Engineer will follow the density testing procedure detailed in the document "Illinois Modified ASTM D 2950, Standard Test Method for Density of Bituminous Concrete In-Place by Nuclear Method".

A density verification test will be the result of a single core or the average of the nuclear density tests at one location. The results of each density test must be within acceptable limits. The Engineer will promptly notify the Contractor of observed deficiencies."

Revise the seventh paragraph and all subsequent paragraphs in Section D. of the document "Hot-Mix Asphalt QC/QA Initial Daily Plant and Random Samples" to read:

"Mixtures shall be sampled from the truck at the plant by the Contractor following the same procedure used to collect QC mixture samples (Section A). This process will be witnessed by the Engineer who will take custody of the verification sample. Each sample bag with a verification mixture sample will be secured by the Engineer using a locking ID tag. Sample boxes containing the verification mixture sample will be sealed/taped by the Engineer using a security ID label."

State of Illinois
DEPARTMENT OF TRANSPORTATION
Bureau of Local Roads & Streets

SPECIAL PROVISION
FOR
EMULSIFIED ASPHALTS

Effective: January 1, 2007
Revised: February 7, 2008

All references to Sections and Articles in this Special Provision shall be construed to mean specific Sections and Articles in the Standard Specifications for Road and Bridge Construction adopted by the Department of Transportation.

Replace the table after Note 2 in Article 403.02 with the following:

Type of Construction	Bituminous Materials Recommended for Weather Conditions Indicated	
	Warm [15 °C to 30 °C]* [(60 °F to 85 °F)]*	Hot [30 °C Plus]* [(85 °F Plus)]*
Prime	MC-30, PEP	MC-30, PEP
Cover Coat and Seal Coat	RS-2, CRS-2, RC-800, RC-3000, MC-800, MC-3000, SC-3000, HFE-90, HFE-150, HFE-300, HFRS-2, PEA**	RS-2, CRS-2, RC-800, RC-3000, MC-800, MC-3000, SC-3000, PG46-28, PG52-28, HFE-90, HFE-150, HFE-300, HFRS-2, PEA**

* Temperature of the air in the shade at the time of application.

** PEA is only allowed on roads with low traffic volumes

Replace the table after Note 2 in Article 406.02 with the following:

Type of Construction	Bituminous Materials Recommended
Prime (tack) on Brick, Concrete, or Bituminous Bases (Note 3)	SS-1, SS-1h, CSS-1, CSS-1h, HFE-90, RC-70
Prime on Aggregate Bases (Note 4)	MC-30, PEP
Mixture for Cracks, Joints, and Flangeways	PG58-22, PG64-22

Note 3. When emulsified asphalts are used, they shall be diluted with an equal volume of potable water. HFE emulsions shall be diluted by the manufacturer. The diluted material shall be thoroughly agitated within 24 hours of application and show no separation of water and emulsion. The diluted material shall not be returned to an approved emulsion storage tank.

Note 4. Preparation of the bituminous PEP shall be as specified in Article 403.05.

Replace the table in Article 1032.04 with the following:

Spraying Application Temperature Ranges		
Type and Grade of Bituminous Material	Temperature Ranges	
	°F min. - max.	°C min. - max.
PEP	60 - 130	15 - 55
PEA	140 - 190	60 - 88
MC-30	85 - 190	30 - 90
MC-70, RC-70, SC-70	120 - 225	50 - 105
MC-250, SC-250	165 - 270	75 - 130
MC-800, SC-800	200 - 305	95 - 150
MC-3000, SC-3000	230 - 345	110 - 175
PG46-28	275 - 385	135 - 195
PG52-28	285 - 395	140 - 200
RS-2, CRS-2	110 - 160	45 - 70
SS-1, SS-1h, CSS-1, CSS-1h	75 - 130	25 - 55
SS-1hP, CSS-1hP	75 - 130	25 - 55
HFE-90, HFE-150, HFE-300	150 - 180	65 - 80
HFP, CRSP, HFRS-2	150 - 180	65 - 80
E-2	85 - 190	30 - 90
E-3	120 - 225	50 - 105
E-4	165 - 270	75 - 130

Add subparagraph (g) to Article 1032.06:

- (g) Penetrating Emulsified Asphalt (PEA). The penetrating emulsified asphalt shall meet the following requirements when tested according to AASHTO T59:

Viscosity, Saybolt Fural @ 25°C (77°F),	sec:	20 - 500
Sieve Test, retained on 850 μm (No. 20) sieve, maximum,	%:	0.10
Storage Stability Test, 1 day, maximum,	%:	1
Float Test @ 60°C (140°F), minimum,	sec:	150
Stone Coating Test, 3 minutes,	:	Stone Coated Thoroughly
Particle Charge	:	Negative
pH, minimum	:	7.3
Distillation Test:		
Distillation to 260°C (500°F) Residue, minimum	%:	65
Oil Distillate by Volume, maximum	%:	3
Test on residue from distillation:		
Penetration @ 25°C (77°F), 100 g, 5 sec, minimum	dmm:	300

Replace the last sentence and table of Article 1032.06 with the following:

The different grades are, in general, used for the following.

Grade	Use
SS-1, SS-1h, CSS-1, CSS-1h, HFE 90, SS-1hP, CSS-1hP	Tack or fog seal
PEP	Bituminous surface treatment prime
RS-2, HFE 90, HFE 150, HFE 300, CRSP, HFP, CRS-2, HFRS-2, PEA	Bituminous surface treatment
CSS-1h Latex Modified	Microsurfacing

BDE SPECIAL PROVISIONS
For the April 25 and June 13, 2025 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 Bureau of Design & Environment (BDE).

File Name	#		Special Provision Title	Effective	Revised	
	80099	1	<input type="checkbox"/>	Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2022
	80274	2	<input type="checkbox"/>	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2022
	80192	3	<input type="checkbox"/>	Automated Flagger Assistance Devices	Jan. 1, 2008	April 1, 2023
	80173	4	<input type="checkbox"/>	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
	80426	5	<input type="checkbox"/>	Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	Jan. 1, 2022
*	80241	6	<input type="checkbox"/>	Bridge Demolition Debris	July 1, 2009	
*	50531	7	<input type="checkbox"/>	Building Removal	Sept. 1, 1990	Aug. 1, 2022
*	50261	8	<input type="checkbox"/>	Building Removal with Asbestos Abatement	Sept. 1, 1990	Aug. 1, 2022
	80460	9	<input checked="" type="checkbox"/>	Cement, Finely Divided Minerals, Admixtures, Concrete, and Mortar	Jan. 1, 2025	
	80384	10	<input checked="" type="checkbox"/>	Compensable Delay Costs	June 2, 2017	April 1, 2019
*	80198	11	<input type="checkbox"/>	Completion Date (via calendar days)	April 1, 2008	
*	80199	12	<input type="checkbox"/>	Completion Date (via calendar days) Plus Working Days	April 1, 2008	
	80461	13	<input type="checkbox"/>	Concrete Barrier	Jan. 1, 2025	
	80453	14	<input type="checkbox"/>	Concrete Sealer	Nov. 1, 2023	
	80261	15	<input checked="" type="checkbox"/>	Construction Air Quality – Diesel Retrofit	June 1, 2010	Jan. 1, 2025
*	80029	16	<input type="checkbox"/>	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 2, 2025
	80229	17	<input type="checkbox"/>	Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
	80452	18	<input type="checkbox"/>	Full Lane Sealant Waterproofing System	Nov. 1, 2023	
	80447	19	<input type="checkbox"/>	Grading and Shaping Ditches	Jan. 1, 2023	
	80433	20	<input type="checkbox"/>	Green Preformed Thermoplastic Pavement Markings	Jan. 1, 2021	Jan. 1, 2022
	80456	21	<input type="checkbox"/>	Hot-Mix Asphalt	Jan. 1, 2024	Jan. 1, 2025
	80446	22	<input checked="" type="checkbox"/>	Hot-Mix Asphalt - Longitudinal Joint Sealant	Nov. 1, 2022	Aug. 1, 2023
	80438	23	<input type="checkbox"/>	Illinois Works Apprenticeship Initiative – State Funded Contracts	June 2, 2021	April 2, 2024
	80450	24	<input type="checkbox"/>	Mechanically Stabilized Earth Retaining Walls	Aug. 1, 2023	
	80464	25	<input type="checkbox"/>	Pavement Marking Inspection	April 1, 2025	
	80441	26	<input checked="" type="checkbox"/>	Performance Graded Asphalt Binder	Jan. 1, 2023	
	80459	27	<input type="checkbox"/>	Preformed Plastic Pavement Marking	June 2, 2024	
*	34261	28	<input type="checkbox"/>	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2022
	80455	29	<input type="checkbox"/>	Removal and Disposal of Regulated Substances	Jan. 1, 2024	April 1, 2024
	80445	30	<input type="checkbox"/>	Seeding	Nov. 1, 2022	
	80457	31	<input type="checkbox"/>	Short Term and Temporary Pavement Markings	April 1, 2024	April 2, 2024
	80462	32	<input type="checkbox"/>	Sign Panels and Appurtenances	Jan. 1, 2025	April 1, 2025
	80448	33	<input type="checkbox"/>	Source of Supply and Quality Requirements	Jan. 2, 2023	
	80340	34	<input type="checkbox"/>	Speed Display Trailer	April 2, 2014	Jan. 1, 2022
	80127	35	<input type="checkbox"/>	Steel Cost Adjustment	April 2, 2004	Jan. 1, 2022
	80397	36	<input type="checkbox"/>	Subcontractor and DBE Payment Reporting	April 2, 2018	
	80391	37	<input type="checkbox"/>	Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
	80463	38	<input type="checkbox"/>	Submission of Bidders List Information	Jan. 2, 2025	
	80437	39	<input checked="" type="checkbox"/>	Submission of Payroll Records	April 1, 2021	Nov. 2, 2023
	80435	40	<input type="checkbox"/>	Surface Testing of Pavements – IRI	Jan. 1, 2021	Jan. 1, 2023
	80465	41	<input type="checkbox"/>	Surveying Services	April 1, 2025	
	80466	42	<input type="checkbox"/>	Temporary Rumble Strips	April 1, 2025	
*	20338	43	<input type="checkbox"/>	Training Special Provisions	Oct. 15, 1975	Sept. 2, 2021
	80429	44	<input type="checkbox"/>	Ultra-Thin Bonded Wearing Course	April 1, 2020	Jan. 1, 2022
	80439	45	<input checked="" type="checkbox"/>	Vehicle and Equipment Warning Lights	Nov. 1, 2021	Nov. 1, 2022
	80458	46	<input type="checkbox"/>	Waterproofing Membrane System	Aug. 1, 2024	
	80302	47	<input checked="" type="checkbox"/>	Weekly DBE Trucking Reports	June 2, 2012	Jan. 2, 2025
	80454	48	<input type="checkbox"/>	Wood Sign Support	Nov. 1, 2023	
	80427	49	<input checked="" type="checkbox"/>	Work Zone Traffic Control Devices	Mar. 2, 2020	Jan. 1, 2025
*	80071	50	<input type="checkbox"/>	Working Days	Jan. 1, 2002	

Highlighted items indicate a new or revised special provision for the letting.

An * indicates the special provision requires additional information from the designer, which needs to be submitted separately. The Project Coordination and Implementation Section will then include the information in the applicable special provision.

The following special provisions are in the 2025 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>
80434	Corrugated Plastic Pipe (Culvert and Storm Sewer)	Articles 542.03, 550.03, 1040.03, 1040.04(b), 1040.04(d) & 1040.08	Jan. 1, 2021	
80443	High Tension Cable Median Barrier Removal	Section 632	April 1, 2022	
80045	Material Transfer Device	Articles 406.03, 406.06(f), 406.13(b), 406.14 & 1102.02	Nov 15, 1999	Jan. 1, 2022
80410	Traffic Spotters	Article 701.13	Jan. 1, 2019	

CEMENT, FINELY DIVIDED MINERALS, ADMIXTURES; CONCRETE, AND MORTAR (BDE)

Effective: January 1, 2025

Revise the first paragraph of Article 285.05 of the Standard Specifications to read:

“285.05 Fabric Formed Concrete Revetment Mat. The grout shall consist of a mixture of cement, fine aggregate, and water so proportioned and mixed as to provide a pumpable slurry. Fly ash or ground granulated blast furnace (GGBF) slag, and concrete admixtures may be used at the option of the Contractor. The grout shall have an air content of not less than 6.0 percent nor more than 9.0 percent of the volume of the grout. The mix shall obtain a compressive strength of 2500 psi (17,000 kPa) at 28 days according to Article 1020.09.”

Revise Article 302.02 of the Standard Specifications to read:

“302.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Hydrated Lime	1012.01
(d) By-Product, Hydrated Lime	1012.02
(e) By-Product, Non-Hydrated Lime	1012.03
(f) Lime Slurry	1012.04
(g) Fly Ash	1010
(h) Soil for Soil Modification (Note 1)	1009.01
(i) Bituminous Materials (Note 2)	1032

Note 1. This soil requirement only applies when modifying with lime (slurry or dry).

Note 2. The bituminous materials used for curing shall be emulsified asphalt RS-2, CRS-2, HFE 90, or HFE 150; rapid curing liquid asphalt RC-70; or medium curing liquid asphalt MC-70 or MC-250.”

Revise Article 312.07(c) of the Standard Specifications to read:

“(c) Cement1001”

Add Article 312.07(i) of the Standard Specifications to read:

“(i) Ground Granulated Blast Furnace (GGBF) Slag1010”

Revise the first paragraph of Article 312.09 of the Standard Specifications to read:

“312.09 Proportioning and Mix Design. At least 60 days prior to start of placing CAM II, the Contractor shall submit samples of materials to be used in the work for proportioning and testing.

The mixture shall contain a minimum of 200 lb (120 kg) of cement per cubic yard (cubic meter). Cement may be replaced with fly ash or ground granulated blast furnace (GGBF) slag according to Article 1020.05(c)(1) or 1020.05(c)(2), respectively, however the minimum cement content in the mixture shall be 170 lbs/cu yd (101 kg/cu m). Blends of coarse and fine aggregates will be permitted, provided the volume of fine aggregate does not exceed the volume of coarse aggregate. The Engineer will determine the proportions of materials for the mixture according to the "Portland Cement Concrete Level III Technician Course" manual. However, the Contractor may substitute their own mix design. Article 1020.05(a) shall apply, and a Level III PCC Technician shall develop the mix design."

Revise Article 352.02 of the Standard Specifications to read:

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

Item	Article/Section
(a) Cement (Note 1)	1001
(b) Soil for Soil-Cement Base Course	1009.03
(c) Water	1002
(d) Bituminous Materials (Note 2)	1032

Note 1. Bulk cement may be used for the traveling mixing plant method if the equipment for handling, weighing, and spreading the cement is approved by the Engineer.

Note 2. The bituminous materials used for curing shall be emulsified asphalt RS-2, CRS-2, HFE 90, or HFE 150; rapid curing liquid asphalt RC-70; or medium curing liquid asphalt MC-70 or MC-250."

Revise Article 404.02 of the Standard Specifications to read:

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

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fine Aggregate	1003.08
(d) Bituminous Material (Tack Coat)	1032.06
(e) Emulsified Asphalts (Note 1) (Note 2)	1032.06
(f) Fiber Modified Joint Sealer	1050.05
(g) Additives (Note 3)	

Note 1. When used for slurry seal, the emulsified asphalt shall be CQS-1h according to Article 1032.06(b).

Note 2. When used for micro-surfacing, the emulsified asphalt shall be CQS-1hP according to Article 1032.06(e).

Note 3. Additives may be added to the emulsion mix or any of the component materials to provide the control of the quick-traffic properties. They shall be included as part of the mix design and be compatible with the other components of the mix.

Revise the last sentence of the fourth paragraph of Article 404.08 of the Standard Specifications to read:

“When approved by the Engineer, the sealant may be dusted with fine sand, cement, or mineral filler to prevent tracking.”

Revise Note 2 of Article 516.02 of the Standard Specifications to read:

“Note 2. The sand-cement grout mix shall be according to Section 1020 and shall be a 1:1 blend of sand and cement comprised of a Type I, IL, or II cement at 185 lb/cu yd (110 kg/cu m). The maximum water cement ratio shall be sufficient to provide a flowable mixture with a typical slump of 10 in. (250 mm).”

Revise Note 2 of Article 543.02 of the Standard Specifications to read:

“Note 2. The grout mixture shall be 6.50 hundredweight/cu yd (385 kg/cu m) of cement plus fine aggregate and water. Fly ash or ground granulated blast furnace (GGBF) slag may replace a maximum of 5.25 hundredweight/cu yd (310 kg/cu m) of the cement. The water/cement ratio, according to Article 1020.06, shall not exceed 0.60. An air-entraining admixture shall be used to produce an air content, according to Article 1020.08, of not less than 6.0 percent nor more than 9.0 percent of the volume of the grout. The Contractor shall have the option to use a water-reducing or high range water-reducing admixture.”

Revise Article 583.01 of the Standard Specifications to read:

“**583.01 Description.** This work shall consist of placing cement mortar along precast, prestressed concrete bridge deck beams as required for fairing out any unevenness between adjacent deck beams prior to placing of waterproofing membrane and surfacing.”

Revise Article 583.02(a) of the Standard Specifications to read:

“(a) Cement1001”

Revise the first paragraph of Article 583.03 of the Standard Specifications to read:

“**583.03 General.** This work shall only be performed when the air temperature is 45 °F (7 °C) and rising. The mixture for cement mortar shall consist of three parts sand to one part cement by volume. The amount of water shall be no more than that necessary to produce a workable, plastic mortar.”

Revise Note 2/ in Article 1003.01(b) of the Standard Specifications to read:

“2/ Applies only to sand. Sand exceeding the colorimetric test standard of 11 (Illinois Modified AASHTO T 21) will be checked for mortar making properties according to Illinois Modified ASTM C 87 and shall develop a compressive strength at the age of 14 days when using Type I, IL, or II cement of not less than 95 percent of the comparable standard.

Revise the second sentence of Article 1003.02(e)(1) of the Standard Specifications to read:

“The test will be performed with Type I, IL, or II portland cement having a total equivalent alkali content ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) of 0.90 percent or greater.”

Revise the first sentence of the second paragraph of Article 1003.02(e)(3) of the Standard Specifications to read:

“The ASTM C 1293 test shall be performed with Type I, IL, or II portland cement having a total equivalent alkali content ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) of 0.80 percent or greater.”

Revise the second sentence of Article 1004.02(g)(1) of the Standard Specifications to read:

“The test will be performed with Type I, IL, or II portland cement having a total equivalent alkali content ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) of 0.90 percent or greater.”

Revise Article 1017.01 of the Standard Specifications to read:

“**1017.01 Requirements.** The mortar shall be high-strength according to ASTM C 387 and shall have a minimum 80.0 percent relative dynamic modulus of elasticity when tested by the Department according to Illinois Modified AASHTO T 161 or AASHTO T 161 when tested by an independent lab. The high-strength mortar shall have a water-soluble chloride ion content of less than 0.40 lb/cu yd (0.24 kg/cu m). The test shall be performed according to ASTM C 1218, and the high-strength mortar shall have an age of 28 to 42 days at the time of test. The ASTM C 1218 test shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department. Mixing of the high-strength mortar shall be according to the manufacturer’s specifications. The Department will maintain a qualified product list.”

Revise the fourth sentence of Article 1018.01 of the Standard Specifications to read:

“The ASTM C 1218 test shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department.”

Revise Article 1019.02 of the Standard Specifications to read:

“**1019.02 Materials.** Materials shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002

- (c) Fine Aggregate for Controlled Low-Strength Material (CLSM) 1003.06
- (d) Fly Ash 1010
- (e) Ground Granulated Blast Furnace (GGBF) Slag 1010
- (f) Admixtures (Note 1)

Note 1. The air-entraining admixture may be in powder or liquid form. Prior to approval, a CLSM air-entraining admixture will be evaluated by the Department. The admixture shall be able to meet the air content requirements of Mix 2. The Department will maintain a qualified product list.”

Revise Article 1019.05 of the Standard Specifications to read:

“**1019.05 Department Mix Design.** The Department mix design shall be Mix 1, 2, or 3 and shall be proportioned to yield approximately one cubic yard (cubic meter).

Mix 1	
Cement	50 lb (30 kg)
Fly Ash – Class C or F, and/or GGBF Slag	125 lb (74 kg)
Fine Aggregate – Saturated Surface Dry	2900 lb (1720 kg)
Water	50-65 gal (248-322 L)
Air Content	No air is entrained

Mix 2	
Cement	125 lb (74 kg)
Fine Aggregate – Saturated Surface Dry	2500 lb (1483 kg)
Water	35-50 gal (173-248 L)
Air Content	15-25 %

Mix 3	
Cement	40 lb (24 kg)
Fly Ash – Class C or F, and/or GGBF Slag	125 lb (74 kg)
Fine Aggregate – Saturated Surface Dry	2500 lb (1483 kg)
Water	35-50 gal (179-248 L)
Air Content	15-25 %”

Revise Article 1020.04, Table 1, Note (8) of the Standard Specifications to read:

“(8) In addition to the Type III portland cement, 100 lb/cu yd of ground granulated blast-furnace slag and 50 lb/cu yd of microsilica (silica fume) shall be used. For an air temperature greater than 85 °F, the Type III portland cement may be replaced with Type I, IL, or II portland cement.”

Revise Article 1020.04, Table 1 (Metric), Note (8) of the Standard Specifications to read:

“(8) In addition to the Type III portland cement, 60 kg/cu m of ground granulated blast-furnace slag and 30 kg/cu m of microsilica (silica fume) shall be used. For an air temperature greater than 30 °C, the Type III portland cement may be replaced with Type I, IL, or II portland cement.”

Revise the second paragraph of Article 1020.05(a) of the Standard Specifications to read:

“For a mix design using a portland-pozzolan cement, portland blast-furnace slag cement, portland-limestone cement, or replacing portland cement with finely divided minerals per Articles 1020.05(c) and 1020.05(d), the Contractor may submit a mix design with a minimum portland cement content less than 400 lbs/cu yd (237 kg/cu m), but not less than 375 lbs/cu yd (222 kg/cu m), if the mix design is shown to have a minimum relative dynamic modulus of elasticity of 80 percent determined according to AASHTO T 161. Testing shall be performed by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete.”

Revise the first sentence of the first paragraph of Article 1020.05(b) of the Standard Specifications to read:

“Corrosion inhibitors and concrete admixtures shall be according to the qualified product lists.”

Delete the fourth and fifth sentences of the second paragraph of Article 1020.05(b) of the Standard Specifications.

Revise the third sentence of the second paragraph of Article 1020.05(b)(5) of the Standard Specifications to read:

“The qualified product lists of concrete admixtures shall not apply.”

Revise second paragraph of Article 1020.05(b)(10) of the Standard Specifications to read:

“When calcium nitrite is used, it shall be added at the rate of 4 gal/cu yd (20 L/cu m) and shall be added to the mix immediately after all compatible admixtures have been introduced to the batch. Other corrosion inhibitors shall be added per the manufacturer’s specifications.”

Delete the third paragraph of Article 1020.05(b)(10) of the Standard Specifications.

Revise Article 1020.15(b)(1)c. of the Standard Specifications to read:

“c. The minimum portland cement content in the mixture shall be 375 lbs/cu yd (222 kg/cu m). When the total of organic processing additions, inorganic processing additions, and limestone addition exceed 5.0 percent in the cement, the minimum portland cement content in the mixture shall be 400 lbs/cu yd (237 kg/cu m). For a drilled shaft, foundation, footing, or substructure, the

minimum portland cement may be reduced to as low as 330 lbs/cu yd (196 kg/cu m) if the concrete has adequate freeze/thaw durability. The Contractor shall provide freeze/thaw test results according to AASHTO T 161, and the relative dynamic modulus of elasticity of the mix design shall be a minimum of 80 percent. Testing shall be performed by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete. Freeze/thaw testing will not be required for concrete that will not be exposed to freezing and thawing conditions as determined by the Engineer.”

Revise Article 1021.01 of the Standard Specifications to read:

“**1021.01 General.** Admixtures shall be furnished in liquid or powder form ready for use. The admixtures shall be delivered in the manufacturer's original containers, bulk tank trucks or such containers or tanks as are acceptable to the Engineer. Delivery shall be accompanied by a ticket which clearly identifies the manufacturer, the date of manufacture, and trade name of the material. Containers shall be readily identifiable as to manufacturer, the date of manufacture, and trade name of the material they contain.

Concrete admixtures shall be on one of the Department's qualified product lists. Unless otherwise noted, admixtures shall have successfully completed and remain current with the AASHTO Product Eval and Audit Concrete Admixture (CADD) testing program. For admixture submittals to the Department; the product brand name, manufacturer name, admixture type or types, an electronic link to the product's technical data sheet, and the NTPEP testing number which contains an electronic link to all test data shall be provided. In addition, a letter shall be submitted certifying that no changes have been made in the formulation of the material since the most current round of tests conducted by AASHTO Product Eval and Audit. After 28 days of testing by AASHTO Product Eval and Audit, air-entraining admixtures may be provisionally approved and used on Departmental projects. For all other admixtures, unless otherwise noted, the time period after which provisionally approved status may be earned is 6 months.

The manufacturer shall include the following in the submittal to the AASHTO Product Eval and Audit CADD testing program: the manufacturing range for specific gravity, the midpoint and manufacturing range for residue by oven drying, and manufacturing range of pH. The submittal shall also include an infrared spectrophotometer trace no more than five years old.

For air-entraining admixtures according to Article 1021.02, the specific gravity allowable manufacturing range established by the manufacturer shall be according to AASHTO M 194. For residue by oven drying and pH, the allowable manufacturing range and test methods shall be according to AASHTO M 194.

For admixtures according to Articles 1021.03, 1021.04, 1021.05, 1021.06, 1021.07, and 1021.08, the pH allowable manufacturing range established by the manufacturer shall be according to ASTM E 70. For specific gravity and residue by oven drying, the allowable manufacturing range and test methods shall be according to AASHTO M 194.

All admixtures, except chloride-based accelerators, shall contain a maximum of 0.3 percent chloride by weight (mass) as determined by an appropriate test method. To verify the test result, the Department will use Illinois Modified AASHTO T 260, Procedure A, Method 1.

Prior to final approval of an admixture, the Engineer reserves the right to request a sample for testing. The test and reference concrete mixtures tested by the Engineer will contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). For freeze-thaw testing, the Department will perform the test according to Illinois Modified AASHTO T 161. The flexural strength test will be performed according to AASHTO T 177. If the Engineer decides to test the admixture, the manufacturer shall submit AASHTO T 197 water content and set time test results on the standard cement used by the Department. The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by AASHTO.

Random field samples may be taken by the Department to verify an admixture meets specification. A split sample will be provided to the manufacturer if requested. Admixtures that do not meet specification requirements or an allowable manufacturing range established by the manufacturer shall be replaced with new material.”

Revise Article 1021.03 of the Standard Specifications to read:

“**1021.03 Retarding and Water-Reducing Admixtures.** The admixture shall be according to the following.

- (a) Retarding admixtures shall be according to AASHTO M 194, Type B (retarding) or Type D (water-reducing and retarding).
- (b) Water-reducing admixtures shall be according to AASHTO M 194, Type A.
- (c) High range water-reducing admixtures shall be according to AASHTO M 194, Type F (high range water-reducing) or Type G (high range water-reducing and retarding).”

Revise Article 1021.05 of the Standard Specifications to read:

“**1021.05 Self-Consolidating Admixtures.** Self-consolidating admixture systems shall consist of either a high range water-reducing admixture only or a high range water-reducing admixture combined with a separate viscosity modifying admixture. The one or two component admixture system shall be capable of producing a concrete that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation.

High range water-reducing admixtures shall be according to AASHTO M 194, Type F.

Viscosity modifying admixtures shall be according to AASHTO M 194, Type S (specific performance).”

Revise Article 1021.06 of the Standard Specifications to read:

“1021.06 Rheology-Controlling Admixture. Rheology-controlling admixtures shall be capable of producing a concrete mixture with a lower yield stress that will consolidate easier for slipform applications used by the Contractor. Rheology-controlling admixtures shall be according to AASHTO M 194, Type S (specific performance).”

Revise Article 1021.07 of the Standard Specifications to read:

“1021.07 Corrosion Inhibitor. The corrosion inhibitor shall be according to one of the following.

- (a) Calcium Nitrite. Corrosion inhibitors shall contain a minimum 30 percent calcium nitrite by weight (mass) of solution and shall comply with either the requirements of AASHTO M 194, Type C (accelerating) or the requirements of ASTM C 1582. The corrosion inhibiting performance requirements of ASTM C 1582 shall not apply.
- (b) Other Materials. The corrosion inhibitor shall be according to ASTM C 1582.

For submittals requiring testing according to ASTM M 194, Type C (accelerating), the admixture shall meet the requirements of the AASHTO Product Eval and Audit CADD testing program according to Article 1021.01.

For submittals requiring testing according to ASTM C 1582, a report prepared by an independent laboratory accredited by AASHTO re:source for portland cement concrete shall be provided. The report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications. However, ASTM G 109 test information specified in ASTM C 1582 is not required to be from an independent accredited lab. All other information in ASTM C 1582 shall be from an independent accredited lab. Test data and other information required to be submitted to AASHTO Product Eval and Audit according to Article 1021.01, shall instead be submitted directly to the Department.”

Add Article 1021.08 of the Standard Specifications as follows:

“1021.08 Other Specific Performance Admixtures. Other specific performance admixtures shall, at a minimum, be according to AASHTO M 194, Type S (specific performance). The Department also reserves the right to require other testing, as determined by the Engineer, to show evidence of specific performance characteristics.

Initial testing according to AASHTO M 194 may be conducted under the AASHTO Product Eval and Audit CADD testing program according to Article 1021.01, or by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete. In either case, test data and other information required to be submitted to AASHTO Product Eval and Audit according to Article 1021.01, shall also be submitted directly to the Department. The independent accredited lab report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications.”

Revise Article 1024.01 of the Standard Specifications to read:

“1024.01 Requirements for Grout. The grout shall be proportioned by dry volume, thoroughly mixed, and shall have a minimum temperature of 50 °F (10 °C). Water shall not exceed the minimum needed for placement and finishing.

Materials for the grout shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fine Aggregate	1003.02
(d) Fly Ash	1010
(e) Ground Granulated Blast Furnace (GGBF) Slag.....	1010
(f) Concrete Admixtures	1021”

Revise Note 1 of Article 1024.02 of the Standard Specifications to read:

“Note 1. Nonshrink grout shall be according to Illinois Modified ASTM C 1107.

The nonshrink grout shall have a water-soluble chloride ion content of less than 0.40 lb/cu yd (0.24 kg/cu m). The test shall be performed according to ASTM C 1218, and the grout shall have an age of 28 to 42 days at the time of test. The ASTM C 1218 test shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department. Mixing of the nonshrink grout shall be according to the manufacturer’s specifications. The Department will maintain a qualified product list.”

Revise Article 1029.02 of the Standard Specifications to read:

“1029.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Cement.....	1001
(b) Fly Ash	1010
(c) Ground Granulated Blast Furnace (GGBF) Slag	1010
(d) Water.....	1002
(e) Fine Aggregate.....	1003
(f) Concrete Admixtures	1021
(g) Foaming Agent (Note 1)	

Note 1. The manufacturer shall submit infrared spectrophotometer trace and test results indicating the foaming agent meets the requirements of ASTM C 869 in order to be on the Department’s qualified product list. Submitted data/results shall not be more than five years old.”

Revise the second paragraph of Article 1103.03(a)(4) the Standard Specifications to read:

“The dispenser system shall provide a visual indication that the liquid admixture is actually entering the batch, such as via a transparent or translucent section of tubing or by independent check with an integrated secondary metering device. If approved by the Engineer, an alternate indicator may be used for admixtures dosed at rates of 25 oz/cwt (1630 mL/100 kg) or greater, such as accelerating admixtures, corrosion inhibitors, and viscosity modifying admixtures.”

Revise the first two sections of Check Sheet #11 of the Supplemental Specifications and Recurring Special Provisions to read:

“Description. This work shall consist of filling voids beneath rigid and composite pavements with cement grout.

Materials. Materials shall be according to the following Articles of Division 1000 - Materials of the Standard Specifications:

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fly Ash	1010
(d) Ground Granulated Blast Furnace (GGBF) Slag.....	1010
(e) Admixtures	1021
(f) Packaged Rapid Hardening Mortar or Concrete	1018”

Revise the third paragraph of Materials Note 2 of Check Sheet #28 of the Supplemental Specifications and Recurring Special Provisions to read:

“The Department will maintain a qualified product list of synthetic fibers, which will include the minimum required dosage rate. For the minimum required fiber dosage rate based on the Illinois Modified ASTM C 1609 test, a report prepared by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete shall be provided. The report shall show results of tests conducted no more than five years prior to the time of submittal.”

COMPENSABLE DELAY COSTS (BDE)

Effective: June 2, 2017

Revised: April 1, 2019

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 according to Article 109.04.

When an extended traffic control 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: January 1, 2025

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 according to the table below.

Horsepower Range	Model Year and Older
50-99	2003
100-299	2002
300-599	2000
600-749	2001
750 and up	2005

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* (<https://www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel>), 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.

HOT-MIX ASPHALT – LONGITUDINAL JOINT SEALANT (BDE)

Effective: November 1, 2022

Revised: August 1, 2023

Add the following after the second sentence in the eighth paragraph of Article 406.06(h)(2) of the Standard Specifications:

“If rain is forecasted and traffic is to be on the LJS or if pickup/tracking of the LJS material is likely, the LJS shall be covered immediately following its application with FA 20 fine aggregate mechanically spread uniformly at a rate of 1.5 ± 0.5 lb/sq yd (0.75 ± 0.25 kg/sq m). Fine aggregate landing outside of the LJS shall be removed prior to application of tack coat.”

Add the following after the first sentence in the ninth paragraph of Article 406.06(h)(2) of the Standard Specifications:

“LJS half-width shall be applied at a width of 9 ± 1 in. (225 ± 25 mm) in the immediate lane to be placed with the outside edge flush with the joint of the next HMA lift. The vertical face of any longitudinal joint remaining in place shall also be coated.”

Add the following after the eleventh paragraph of Article 406.06(h)(2) of the Standard Specifications:

“LJS Half-Width Application Rate, lb/ft (kg/m) ^{1/}			
Lift Thickness, in. (mm)	Coarse Graded Mixture (IL-19.0, IL-19.0L, IL-9.5, IL-9.5L, IL-4.75)	Fine Graded Mixture (IL-9.5FG)	SMA Mixture (SMA-9.5, SMA-12.5)
$\frac{3}{4}$ (19)	0.44 (0.66)		
1 (25)	0.58 (0.86)		
1 $\frac{1}{4}$ (32)	0.66 (0.98)	0.44 (0.66)	
1 $\frac{1}{2}$ (38)	0.74 (1.10)	0.48 (0.71)	0.63 (0.94)
1 $\frac{3}{4}$ (44)	0.82 (1.22)	0.52 (0.77)	0.69 (1.03)
2 (50)	0.90 (1.34)	0.56 (0.83)	0.76 (1.13)
$\geq 2 \frac{1}{4}$ (60)	0.98 (1.46)		

1/ The application rate includes a surface demand for liquid. The thickness of the LJS may taper from the center of the application to a lesser thickness on the edge of the application, provided the correct width and application rate are maintained.”

Revise the second paragraph of Article 406.13(b) of the Standard Specifications to read:

“Aggregate for covering tack, LJS, or FLS will not be measured for payment.”

Add the following to the end of the second paragraph of Article 406.14 of the Standard Specifications:

“Longitudinal joint sealant (LJS) half-width will be paid for at the contract unit price per foot (meter) for LONGITUDINAL JOINT SEALANT, HALF-WIDTH.”

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PERFORMANCE GRADED ASPHALT BINDER (BDE)

Effective: January 1, 2023

Revise Article 1032.05 of the Standard Specifications to read:

“1032.05 Performance Graded Asphalt Binder. These materials will be accepted according to the Bureau of Materials Policy Memorandum, “Performance Graded Asphalt Binder Qualification Procedure.” The Department will maintain a qualified producer list. These materials shall be free from water and shall not foam when heated to any temperature below the actual flash point. Air blown asphalt, recycle engine oil bottoms (ReOB), and polyphosphoric acid (PPA) modification shall not be used.

When requested, producers shall provide the Engineer with viscosity/temperature relationships for the performance graded asphalt binders delivered and incorporated in the work.

- (a) Performance Graded (PG) Asphalt Binder. The asphalt binder shall meet the requirements of AASHTO M 320, Table 1 “Standard Specification for Performance Graded Asphalt Binder” for the grade shown on the plans and the following.

Test	Parameter
Small Strain Parameter (AASHTO PP 113) BBR, ΔT_c , 40 hrs PAV (40 hrs continuous or 2 PAV at 20 hrs)	-5 °C min.

- (b) Modified Performance Graded (PG) Asphalt Binder. The asphalt binder shall meet the requirements of AASHTO M 320, Table 1 “Standard Specification for Performance Graded Asphalt Binder” for the grade shown on the plans.

Asphalt binder modification shall be performed at the source, as defined in the Bureau of Materials Policy Memorandum, “Performance Graded Asphalt Binder Qualification Procedure.”

Modified asphalt binder shall be safe to handle at asphalt binder production and storage temperatures or HMA construction temperatures. Safety Data Sheets (SDS) shall be provided for all asphalt modifiers.

- (1) Polymer Modification (SB/SBS or SBR). Elastomers shall be added to the base asphalt binder to achieve the specified performance grade and shall be either a styrene-butadiene diblock, triblock copolymer without oil extension, or a styrene-butadiene rubber. The polymer modified asphalt binder shall be smooth, homogeneous, and be according to the requirements shown in Table 1 or 2 for the grade shown on the plans.

Table 1 - Requirements for Styrene-Butadiene Copolymer (SB/SBS) Modified Asphalt Binders		
Test	Asphalt Grade SB/SBS PG 64-28 SB/SBS PG 70-22	Asphalt Grade SB/SBS PG 64-34 SB/SBS PG 70-28 SB/SBS PG 76-22 SB/SBS PG 76-28
Separation of Polymer ITP, "Separation of Polymer from Asphalt Binder" Difference in °F (°C) of the softening point between top and bottom portions	4 (2) max.	4 (2) max.
TESTS ON RESIDUE FROM ROLLING THIN FILM OVEN TEST (AASHTO T 240)		
Elastic Recovery ASTM D 6084, Procedure A, 77 °F (25 °C), 100 mm elongation, %	60 min.	70 min.

Table 2 - Requirements for Styrene-Butadiene Rubber (SBR) Modified Asphalt Binders		
Test	Asphalt Grade SBR PG 64-28 SBR PG 70-22	Asphalt Grade SB/SBS PG 64-34 SB/SBS PG 70-28 SBR PG 76-22 SBR PG 76-28
Separation of Polymer ITP, "Separation of Polymer from Asphalt Binder" Difference in °F (°C) of the softening point between top and bottom portions	4 (2) max.	4 (2) max.
Toughness ASTM D 5801, 77 °F (25 °C), 20 in./min. (500 mm/min.), in.-lbs (N-m)	110 (12.5) min.	110 (12.5) min.
Tenacity ASTM D 5801, 77 °F (25 °C), 20 in./min. (500 mm/min.), in.-lbs (N-m)	75 (8.5) min.	75 (8.5) min.
TESTS ON RESIDUE FROM ROLLING THIN FILM OVEN TEST (AASHTO T 240)		
Elastic Recovery ASTM D 6084, Procedure A, 77 °F (25 °C), 100 mm elongation, %	40 min.	50 min.

- (2) Ground Tire Rubber (GTR) Modification. GTR modification is the addition of recycled ground tire rubber to liquid asphalt binder to achieve the specified performance grade. GTR shall be produced from processing automobile and/or truck tires by the ambient

grinding method or micronizing through a cryogenic process. GTR shall not exceed 1/16 in. (2 mm) in any dimension and shall not contain free metal particles, moisture that would cause foaming of the asphalt, or other foreign materials. A mineral powder (such as talc) meeting the requirements of AASHTO M 17 may be added, up to a maximum of four percent by weight of GTR to reduce sticking and caking of the GTR particles. When tested in accordance with Illinois Modified AASHTO T 27 “Standard Method of Test for Sieve Analysis of Fine and Coarse Aggregates” or AASHTO PP 74 “Standard Practice for Determination of Size and Shape of Glass Beads Used in Traffic Markings by Means of Computerized Optical Method”, a 50 g sample of the GTR shall conform to the following gradation requirements.

Sieve Size	Percent Passing
No. 16 (1.18 mm)	100
No. 30 (600 µm)	95 ± 5
No. 50 (300 µm)	> 20

GTR modified asphalt binder shall be tested for rotational viscosity according to AASHTO T 316 using spindle S27. GTR modified asphalt binder shall be tested for original dynamic shear and RTFO dynamic shear according to AASHTO T 315 using a gap of 2 mm.

The GTR modified asphalt binder shall meet the requirements of Table 3.

Table 3 - Requirements for Ground Tire Rubber (GTR) Modified Asphalt Binders		
Test	Asphalt Grade GTR PG 64-28 GTR PG 70-22	Asphalt Grade GTR PG 76-22 GTR PG 76-28 GTR PG 70-28
TESTS ON RESIDUE FROM ROLLING THIN FILM OVEN TEST (AASHTO T 240)		
Elastic Recovery ASTM D 6084, Procedure A, 77 °F (25 °C), 100 mm elongation, %	60 min.	70 min.

- (3) Softener Modification (SM). Softener modification is the addition of organic compounds, such as engineered flux, bio-oil blends, modified vegetable oils, glycol amines, and fatty acid derivatives, to the base asphalt binder to achieve the specified performance grade. Softeners shall be dissolved, dispersed, or reacted in the asphalt binder to enhance its performance and shall remain compatible with the asphalt binder with no separation. Softeners shall not be added to modified PG asphalt binder as defined in Articles 1032.05(b)(1) or 1032.05(b)(2).

An Attenuated Total Reflectance-Fourier Transform Infrared spectrum (ATR-FTIR) shall be collected for both the softening compound as well as the softener modified

asphalt binder at the dose intended for qualification. The ATR-FTIR spectra shall be collected on unaged softener modified binder, 20-hour Pressurized Aging Vessel (PAV) aged softener modified binder, and 40-hour PAV aged softener modified binder. The ATR-FTIR shall be collected in accordance with Illinois Test Procedure 601. The electronic files spectral files (in one of the following extensions or equivalent: *.SPA, *.SPG, *.IRD, *.IFG, *.CSV, *.SP, *.IRS, *.GAML, *.[0-9], *.IGM, *.ABS, *.DRT, *.SBM, *.RAS) shall be submitted to the Central Bureau of Materials.

Softener modified asphalt binders shall meet the requirements in Table 4.

Test	Asphalt Grade	
	SM PG 46-28	SM PG 46-34
	SM PG 52-28	SM PG 52-34
	SM PG 58-22	SM PG 58-28
	SM PG 64-22	
Small Strain Parameter (AASHTO PP 113) BBR, ΔT_c , 40 hrs PAV (40 hrs continuous or 2 PAV at 20 hrs)	-5°C min.	
Large Strain Parameter (Illinois Modified AASHTO T 391) DSR/LAS Fatigue Property, $\Delta G^* _{peak}$, 40 hrs PAV (40 hrs continuous or 2 PAV at 20 hrs)	≥ 54 %	

The following grades may be specified as tack coats.

Asphalt Grade	Use
PG 58-22, PG 58-28, PG 64-22	Tack Coat

Revise Article 1031.06(c)(1) and 1031.06(c)(2) of the Standard Specifications to read:

“(1) RAP/RAS. When RAP is used alone or RAP is used in conjunction with RAS, the percentage of virgin ABR shall not exceed the amounts listed in the following table.

Ndesign	Binder	Surface	Polymer Modified Binder or Surface ^{3/}
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).
 - 3/ The maximum ABR percentages for ground tire rubber (GTR) modified mixes shall be equivalent to the percentages specified for SBS/SBR polymer modified mixes.
- (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 following table.

HMA Mixtures - FRAP/RAS Maximum ABR % ^{1/ 2/}			
Ndesign	Binder	Surface	Polymer Modified Binder or Surface ^{3/}
30	55	45	15
50	45	40	15
70	45	35	15
90	45	35	15
SMA	--	--	25
IL-4.75	--	--	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).
- 3/ The maximum ABR percentages for GTR modified mixes shall be equivalent to the percentages specified for SBS/SBR polymer modified mixes.”

Add the following to the end of Note 2 of Article 1030.03 of the Standard Specifications.

“A dedicated storage tank for the ground tire rubber (GTR) modified asphalt binder shall be provided. This tank shall be capable of providing continuous mechanical mixing throughout and/or recirculation of the asphalt binder to provide a uniform mixture. The tank shall be heated and capable of maintaining the temperature of the asphalt binder at 300 °F to 350 °F (149 °C to 177 °C). The asphalt binder metering systems of dryer drum plants shall be calibrated with the actual GTR modified asphalt binder material with an accuracy of ±0.40 percent.”

SUBMISSION OF PAYROLL RECORDS (BDE)

Effective: April 1, 2021

Revised: November 2, 2023

FEDERAL AID CONTRACTS. Revise the following section of Check Sheet #1 of the Recurring Special Provisions to read:

“STATEMENTS AND PAYROLLS

The payroll records shall include the worker’s name, social security number, last known address, telephone number, email address, classification(s) of work actually performed, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof), daily and weekly number of hours actually worked in total, deductions made, and actual wages paid.

The Contractor and each subcontractor shall submit certified payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers, last known addresses, telephone numbers, and email addresses shall not be included on weekly submittals. Instead, the payrolls need only include an identification number for each employee (e.g., the last four digits of the employee’s social security number). The submittals shall be made using LCPTracker Pro software. The software is web-based and can be accessed at <https://lcptracker.com/>. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option (“No Work”, “Suspended”, or “Complete”) selected.”

STATE CONTRACTS. Revise Item 3 of Section IV of Check Sheet #5 of the Recurring Special Provisions to read:

- “3. Submission of Payroll Records. The Contractor and each subcontractor shall, no later than the 15th day of each calendar month, file a certified payroll for the immediately preceding month to the Illinois Department of Labor (IDOL) through the Illinois Prevailing Wage Portal in compliance with the State Prevailing Wage Act (820 ILCS 130). The portal can be found on the IDOL website at <https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Prevailing-Wage-Portal.aspx>. Payrolls shall be submitted in the format prescribed by the IDOL.

In addition to filing certified payroll(s) with the IDOL, the Contractor and each subcontractor shall certify and submit payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers shall not be included on weekly submittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee’s social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted. The submittals shall be made using LCPTracker Pro software. The software is web-based and can be accessed at <https://lcptracker.com/>.

When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option (“No Work”, “Suspended”, or “Complete”) selected.”

80437

VEHICLE AND EQUIPMENT WARNING LIGHTS (BDE)

Effective: November 1, 2021

Revised: November 1, 2022

Add the following paragraph after the first paragraph of Article 701.08 of the Standard Specifications:

“The Contractor shall equip all vehicles and equipment with high-intensity oscillating, rotating, or flashing, amber or amber-and-white, warning lights which are visible from all directions. In accordance with 625 ILCS 5/12-215, the lights may only be in operation while the vehicle or equipment is engaged in construction operations.”

80439

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012

Revised: January 2, 2025

The following applies to all Disadvantaged Business Enterprise (DBE) trucks on the project, whether they are utilized for DBE goal credit or not.

The Contractor shall notify the Engineer at least three days prior to DBE trucking activity.

The Contractor shall submit a weekly report of DBE trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) to the Engineer on Department form "SBE 723" within ten business days following the reporting period. The reporting period shall be Sunday through Saturday for each week reportable trucking activities occur.

Any costs associated with providing weekly DBE trucking reports 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.

80302

WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: March 2, 2020
Revised: January 1, 2025

Add the following to Article 701.03 of the Standard Specifications:

“(q) Temporary Sign Supports 1106.02”

Revise the third paragraph of Article 701.14 of the Standard Specifications to read:

“For temporary sign supports, the Contractor shall provide a FHWA eligibility letter for each device used on the contract. The letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device. The signs shall be supported within 20 degrees of vertical. Weights used to stabilize signs shall be attached to the sign support per the manufacturer’s specifications.”

Revise the first paragraph of Article 701.15 of the Standard Specifications to read:

“**701.15 Traffic Control Devices.** For devices that must meet crashworthiness standards, the Contractor shall provide a manufacturer’s self-certification or a FHWA eligibility letter for each Category 1 device and a FHWA eligibility letter for each Category 2 and Category 3 device used on the contract. The self-certification or letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device.”

Revise the first six paragraphs of Article 1106.02 of the Standard Specifications to read:

“**1106.02 Devices.** Work zone traffic control devices and combinations of devices shall meet crashworthiness standards for their respective categories. The categories are as follows.

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, plastic drums, and delineators, with no attachments (e.g. lights). Category 1 devices shall be MASH compliant.

Category 2 includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. These include vertical panels with lights, barricades, temporary sign supports, and Category 1 devices with attachments (e.g. drums with lights). Category 2 devices shall be MASH compliant.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions (impact attenuators), truck mounted attenuators, and other devices not meeting the definitions of Category 1 or 2. Category 3 devices manufactured after December 31, 2019 shall be MASH compliant. Category 3 devices manufactured on or before December 31, 2019, and compliant

with NCHRP 350, may be used on contracts let before December 31, 2029. Category 3 devices shall be crash tested for Test Level 3 or the test level specified.

Category 4 includes portable or trailer-mounted devices such as sign supports, speed feedback displays, arrow boards, changeable message signs, temporary traffic signals, and area lighting supports. It is preferable for Category 4 devices manufactured after December 31, 2019 to be MASH-16 compliant; however, there are currently no crash tested devices in this category, so it remains exempt from the NCHRP 350 or MASH compliance requirement.

For each type of device, when no more than one MASH compliant is available, an NCHRP 350 compliant device may be used, even if manufactured after December 31, 2019.”

Revise Articles 1106.02(g), 1106.02(k), and 1106.02(l) to read:

“(g) Truck Mounted/Trailer Mounted Attenuators. The attenuator shall be approved for use at Test Level 3. Test Level 2 may be used for normal posted speeds less than or equal to 45 mph.

(k) Temporary Water Filled Barrier. The water filled barrier shall be a lightweight plastic shell designed to accept water ballast and be on the Department’s qualified product list.

Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings.

(l) Movable Traffic Barrier. The movable traffic barrier shall be on the Department’s qualified product list.

Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings. The barrier shall be capable of being moved on and off the roadway on a daily basis.”

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Trade Title	Rg	Type	C	Base	Foreman	Overtime							H/W	Pension	Vac	Trng	Other Ins	Add OT 1.5x owed	Add OT 2.0x owed
						M-F	Sa	Su	Hol	Sa	Su	Hol							
ASBESTOS ABT-GEN	All	ALL		50.15	51.15	1.5	1.5	2.0	2.0	15.53	19.10	0.00	0.91			0.00	0.00		
ASBESTOS ABT-MEC	All	BLD		41.27	44.57	1.5	1.5	2.0	2.0	15.84	16.02	0.00	0.90			3.11	6.21		
BOILERMAKER	All	BLD		55.76	60.77	2.0	2.0	2.0	2.0	6.97	26.44	0.00	3.34	1.95		0.00	38.26		
BRICK MASON	All	BLD		52.06	57.27	1.5	1.5	2.0	2.0	12.70	24.54	0.00	1.24	0.00		3.99	7.98		
CARPENTER	All	ALL		55.11	57.11	1.5	1.5	2.0	2.0	12.89	26.87	1.55	0.93	0.00		0.00	0.00		
CEMENT MASON	All	ALL		51.00	53.00	2.0	1.5	2.0	2.0	12.19	29.96	0.00	0.80	0.00		0.00	0.00		
CERAMIC TILE FINISHER	All	BLD		47.09	47.09	1.5	1.5	2.0	2.0	13.00	16.82	0.00	1.09	0.00		5.17	10.34		
CERAMIC TILE LAYER	All	BLD		54.84	59.84	1.5	1.5	2.0	2.0	13.00	20.68	0.00	1.17	0.00		7.15	14.30		
COMMUNICATION TECHNICIAN	All	BLD		46.63	49.03	1.5	1.5	2.0	2.0	14.67	19.15	0.00	0.93			10.03	20.08		
ELECTRIC PWR EQMT OP	All	ALL		50.82	69.34	1.5	1.5	2.0	2.0	7.25	14.22	0.00	1.52	1.52		8.63	17.26		
ELECTRIC PWR GRNDMAN	All	ALL		39.04	69.34	1.5	1.5	2.0	2.0	7.25	10.93	0.00	1.17	1.17		6.63	13.27		
ELECTRIC PWR LINEMAN	All	ALL		61.09	69.34	1.5	1.5	2.0	2.0	7.25	17.10	0.00	1.83	1.83		10.38	20.76		
ELECTRIC PWR TRK DRV	All	ALL		40.46	69.34	1.5	1.5	2.0	2.0	7.25	11.33	0.00	1.21	1.21		6.87	13.75		
ELECTRICIAN	All	ALL		55.99	60.39	1.5	1.5	2.0	2.0	16.54	22.78	0.00	1.68			12.23	24.46		
ELEVATOR CONSTRUCTOR	All	BLD		67.84	76.32	2.0	2.0	2.0	2.0	16.18	20.96	5.42	0.75			0.00	0.00		
FENCE ERECTOR	E	ALL		51.00	53.00	1.5	1.5	2.0	2.0	13.74	18.32	0.00	0.75			0.00	0.00		
FENCE ERECTOR	W	ALL		48.53	54.35	1.5	1.5	2.0	2.0	13.21	26.70	0.00	1.80	0.00		0.00	0.00		
GLAZIER	All	BLD		51.55	53.05	1.5	2.0	2.0	2.0	15.64	26.18	0.00	2.27	0.00		0.00	0.00		
HEAT/FROST INSULATOR	All	BLD		55.02	58.32	1.5	1.5	2.0	2.0	15.84	19.01	0.00	0.90			4.60	9.20		
IRON WORKER	E	ALL		59.26	62.76	2.0	2.0	2.0	2.0	18.30	26.31	0.00	0.49	0.00		0.00	0.00		
IRON WORKER	W	ALL		53.40	59.81	2.0	2.0	2.0	2.0	13.21	30.79	0.00	1.80	0.00		0.00	0.00		
LABORER	All	ALL		50.15	50.90	1.5	1.5	2.0	2.0	15.53	19.10	0.00	0.91			0.00	0.00		
LATHER	All	ALL		55.11	57.11	1.5	1.5	2.0	2.0	12.89	26.87	1.55	0.93	0.00		0.00	0.00		
MACHINIST	All	BLD		58.39	62.39	1.5	1.5	2.0	2.0	9.93	8.95	1.85	1.47			0.00	0.00		
MARBLE FINISHER	All	ALL		39.50	53.55	1.5	1.5	2.0	2.0	12.70	22.32	0.00	0.73	0.00		2.88	5.76		
MARBLE SETTER	All	BLD		51.00	56.10	1.5	1.5	2.0	2.0	12.70	24.01	0.00	0.92	0.00		3.73	7.45		

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MATERIAL TESTER I	All	ALL		40.15		1.5	1.5	2.0	2.0	15.53	19.10	0.00	0.91			0.00	0.00
MATERIALS TESTER II	All	ALL		45.15		1.5	1.5	2.0	2.0	15.53	19.10	0.00	0.91			0.00	0.00
MILLWRIGHT	All	ALL		55.11	57.11	1.5	1.5	2.0	2.0	12.89	26.87	1.55	0.93	0.00	0.00	0.00	0.00
OPERATING ENGINEER	All	BLD	1	60.80	64.80	2.0	2.0	2.0	2.0	23.70	20.80	2.00	2.70	0.00	0.00	0.00	0.00
OPERATING ENGINEER	All	BLD	2	59.50	64.80	2.0	2.0	2.0	2.0	23.70	20.80	2.00	2.70	0.00	0.00	0.00	0.00
OPERATING ENGINEER	All	BLD	3	56.95	64.80	2.0	2.0	2.0	2.0	23.70	20.80	2.00	2.70	0.00	0.00	0.00	0.00
OPERATING ENGINEER	All	BLD	4	55.20	64.80	2.0	2.0	2.0	2.0	23.70	20.80	2.00	2.70	0.00	0.00	0.00	0.00
OPERATING ENGINEER	All	BLD	5	64.55	64.80	2.0	2.0	2.0	2.0	23.70	20.80	2.00	2.70	0.00	0.00	0.00	0.00
OPERATING ENGINEER	All	BLD	6	61.80	64.80	2.0	2.0	2.0	2.0	23.70	20.80	2.00	2.70	0.00	0.00	0.00	0.00
OPERATING ENGINEER	All	BLD	7	63.80	64.80	2.0	2.0	2.0	2.0	23.70	20.80	2.00	2.70	0.00	0.00	0.00	0.00
OPERATING ENGINEER	All	FLT		50.50	50.50	1.5	1.5	2.0	2.0	23.95	21.40	2.00	2.85	0.00	0.00	0.00	0.00
OPERATING ENGINEER	All	HWY	1	59.00	63.00	1.5	1.5	2.0	2.0	23.70	20.80	2.00	2.70	0.00	0.00	0.00	0.00
OPERATING ENGINEER	All	HWY	2	58.45	63.00	1.5	1.5	2.0	2.0	23.70	20.80	2.00	2.70	0.00	0.00	0.00	0.00
OPERATING ENGINEER	All	HWY	3	56.40	63.00	1.5	1.5	2.0	2.0	23.70	20.80	2.00	2.70	0.00	0.00	0.00	0.00
OPERATING ENGINEER	All	HWY	4	55.00	63.00	1.5	1.5	2.0	2.0	23.70	20.80	2.00	2.70	0.00	0.00	0.00	0.00
OPERATING ENGINEER	All	HWY	5	53.80	63.00	1.5	1.5	2.0	2.0	23.70	20.80	2.00	2.70	0.00	0.00	0.00	0.00
OPERATING ENGINEER	All	HWY	6	62.00	63.00	1.5	1.5	2.0	2.0	23.70	20.80	2.00	2.70	0.00	0.00	0.00	0.00
OPERATING ENGINEER	All	HWY	7	60.00	63.00	1.5	1.5	2.0	2.0	23.70	20.80	2.00	2.70	0.00	0.00	0.00	0.00
ORNAMENTAL IRON WORKER	E	ALL		57.51	60.51	2.0	2.0	2.0	2.0	14.31	26.50	0.00	2.00	0.00	0.00	0.00	0.00
PAINTER	All	ALL		53.05	55.05	1.5	1.5	1.5	2.0	16.08	9.90	0.00	1.65	0.00	0.00	0.00	0.00
PAINTER - SIGNS	All	BLD		46.76	52.53	1.5	1.5	2.0	2.0	8.20	16.81	0.00	0.00	0.00	0.00	0.00	0.00
PILEDRIIVER	All	ALL		55.11	57.11	1.5	1.5	2.0	2.0	12.89	26.87	1.55	0.93	0.00	0.00	0.00	0.00
PIPEFITTER	All	BLD		57.00	60.00	1.5	1.5	2.0	2.0	13.65	22.85	0.00	3.12	0.00	0.00	0.00	0.00
PLASTERER	All	BLD		50.00	53.00	1.5	1.5	2.0	2.0	17.81	21.22	0.00	1.15			0.00	0.00
PLUMBER	All	BLD		58.55	62.05	1.5	1.5	2.0	2.0	17.75	17.74	0.00	1.83			0.00	0.00
ROOFER	All	BLD		50.25	55.25	1.5	1.5	2.0	2.0	11.98	17.34	0.00	1.11	0.00	0.00	0.00	0.00
SHEETMETAL WORKER	All	BLD		56.35	60.86	1.5	1.5	2.0	2.0	15.41	19.83	0.00	1.79	2.62	2.62	0.00	0.00
SPRINKLER FITTER	All	BLD		60.00	62.75	1.5	1.5	2.0	2.0	14.95	19.40	0.00	1.10	0.00	0.00	0.00	0.00
STEEL ERECTOR	E	ALL		59.26	62.76	2.0	2.0	2.0	2.0	18.30	26.31	0.00	0.49	0.00	0.00	0.00	0.00

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STONE MASON	All	BLD		52.06	57.27	1.5	1.5	2.0	2.0	2.0	12.70	24.54	0.00	1.24	0.00	3.99	7.98
SURVEY WORKER	All	BLD		50.15	50.90	1.5	1.5	2.0	2.0	2.0	15.53	19.10	0.00	0.91		0.00	0.00
SURVEY WORKER	All	HWY		50.15	50.90	1.5	1.5	2.0	2.0	2.0	15.53	19.10	0.00	0.91		0.00	0.00
TERRAZZO FINISHER	All	BLD		48.94	48.94	1.5	1.5	2.0	2.0	2.0	13.00	18.42	0.00	1.11	0.00	4.22	8.44
TERRAZZO MECHANIC	All	BLD		52.85	56.35	1.5	1.5	2.0	2.0	2.0	13.00	19.81	0.00	1.15	0.00	4.47	8.94
TRAFFIC SAFETY WORKER I	All	HWY		42.10	43.70	1.5	1.5	2.0	2.0	2.0	11.11	9.81	0.00	1.05	0.00	0.00	0.00
TRAFFIC SAFETY WORKER II	All	HWY		43.10	44.70	1.5	1.5	2.0	2.0	2.0	11.11	9.81	0.00	1.05	0.00	0.00	0.00
TRUCK DRIVER	All	ALL	1	44.54		1.5	1.5	2.0	2.0	2.0	13.15	13.15	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	ALL	2	44.69		1.5	1.5	2.0	2.0	2.0	13.15	13.15	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	ALL	3	44.89		1.5	1.5	2.0	2.0	2.0	13.15	13.15	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	ALL	4	45.09		1.5	1.5	2.0	2.0	2.0	13.15	13.15	0.00	0.25	0.00	0.00	0.00
TUCK POINTER	All	BLD		51.53	52.53	1.5	1.5	2.0	2.0	2.0	10.05	22.66	0.00	1.15	0.00	0.00	0.00

Legend

Rg Region

Type Trade Type - All,Highway,Building,Floating,Oil & Chip,Rivers

C Class

Base Base Wage Rate

OT M-F Unless otherwise noted, OT pay is required for any hour greater than 8 worked each day, Mon through Fri. The number listed is the multiple of the base wage.

OT Sa Overtime pay required for every hour worked on Saturdays

OT Su Overtime pay required for every hour worked on Sundays

OT Hol Overtime pay required for every hour worked on Holidays

H/W Health/Welfare benefit

Vac Vacation

Trng Training

Other Ins Employer hourly cost for any other type(s) of insurance provided for benefit of worker.

Explanations MCHENRY COUNTY

IRON WORKERS (EAST) - Starting at the Wisconsin Line at Route 47 South to Route 14. Then Route 14 Southeast to Virginia Road. Then Virginia Road Southeast to Route 31, Route 31 South to Kane County Line.

FENCE ERECTOR (EAST) - Same as IRON WORKER ABOVE.

ORNAMENTAL IRON WORKER (EAST) - Same as IRON WORKER ABOVE.

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STEEL ERECTOR (EAST) - Same as IRON WORKER ABOVE.

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day and Veterans Day in some classifications/counties. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration. If in doubt, please check with IDOL.

EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

CERAMIC TILE FINISHER

The grouting, cleaning, and polishing of all classes of tile, whether for interior or exterior purposes, all burned, glazed or unglazed products; all composition materials, granite tiles, warming detectable tiles, cement tiles, epoxy composite materials, pavers, glass, mosaics, fiberglass, and all substitute materials, for tile made in tile-like units; all mixtures in tile like form of cement, metals, and other materials that are for and intended for use as a finished floor surface, stair treads, promenade roofs, walks, walls, ceilings, swimming pools, and all other places where tile is to form a finished interior or exterior. The mixing of all setting mortars including but not limited to thin-set mortars, epoxies, wall mud, and any other sand and cement mixtures or adhesives when used in the preparation, installation, repair, or maintenance of tile and/or similar materials. The handling and unloading of all sand, cement, lime, tile, fixtures, equipment, adhesives, or any other materials to be used in the preparation, installation, repair, or maintenance of tile and/or similar materials. Ceramic Tile Finishers shall fill all joints and voids regardless of method on all tile work, particularly and especially after installation of said tile work. Application of any and all protective coverings to all types of tile installations including, but not be limited to, all soap compounds, paper products, tapes, and all polyethylene coverings, plywood, masonite, cardboard, and any new type of products that may be used to protect tile installations, Blastrac equipment, and all floor scarifying equipment used in preparing floors to receive tile. The clean up and removal of all waste and materials. All demolition of existing tile floors and walls to be re-tiled.

COMMUNICATIONS TECHNICIAN

Construction, installation, maintenance and removal of telecommunication facilities (voice, sound, data and video), telephone, security systems, fire alarm systems that are a component of a multiplex system and share a common cable, and data inside wire, interconnect, terminal equipment, central offices, PABX and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area network), LAN (local area networks), and ISDN (integrated system digital network), pulling of wire in raceways, but not the installation of raceways.

McHenry County Prevailing Wage Rates posted on 3/3/2025

MARBLE FINISHER

Loading and unloading trucks, distribution of all materials (all stone, sand, etc.), stocking of floors with material, performing all rigging for heavy work, the handling of all material that may be needed for the installation of such materials, building of scaffolding, polishing if needed, patching, waxing of material if damaged, pointing up, caulking, grouting and cleaning of marble, holding water on diamond or Carborundum blade or saw for setters cutting, use of tub saw or any other saw needed for preparation of material, drilling of holes for wires that anchor material set by setters, mixing up of molding plaster for installation of material, mixing up thin set for the installation of material, mixing up of sand to cement for the installation of material and such other work as may be required in helping a Marble Setter in the handling of all material in the erection or installation of interior marble, slate, travertine, art marble, serpentine, alberene stone, blue stone, granite and other stones (meaning as to stone any foreign or domestic materials as are specified and used in building interiors and exteriors and customarily known as stone in the trade), carrara, sanionyx, vitrolite and similar opaque glass and the laying of all marble tile, terrazzo tile, slate tile and precast tile, steps, risers treads, base, or any other materials that may be used as substitutes for any of the aforementioned materials and which are used on interior and exterior which are installed in a similar manner.

MATERIAL TESTER I: Hand coring and drilling for testing of materials; field inspection of uncured concrete and asphalt.

MATERIAL TESTER II: Field inspection of welds, structural steel, fireproofing, masonry, soil, facade, reinforcing steel, formwork, cured concrete, and concrete and asphalt batch plants; adjusting proportions of bituminous mixtures.

OPERATING ENGINEER - BUILDING

Class 1. Asphalt Plant; Asphalt Spreader; Autograde; Backhoes with Caisson Attachment; Batch Plant; Benoto (requires Two Engineers); Boiler and Throttle Valve; Caisson Rigs; Central Redi-Mix Plant; Combination Back Hoe Front End-loader Machine; Compressor and Throttle Valve; Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Conveyor (Truck Mounted); Concrete Paver Over 27E cu. ft; Concrete Paver 27E cu. ft. and Under; Concrete Placer; Concrete Placing Boom; Concrete Pump (Truck Mounted); Concrete Tower; Cranes, All; Cranes, Hammerhead; Cranes, (GCI and similar Type); Creter Crane; Spider Crane; Crusher, Stone, etc.; Derricks, All; Derricks, Traveling; Formless Curb and Gutter Machine; Grader, Elevating; Grouting Machines; Heavy Duty Self-Propelled Transporter or Prime Mover; Highlift Shovels or Front Endloader 2-1/4 yd. and over; Hoists, Elevators, outside type rack and pinion and similar machines; Hoists, One, Two and Three Drum; Hoists, Two Tugger One Floor; Hydraulic Backhoes; Hydraulic Boom Trucks; Hydro Vac (and similar equipment); Locomotives, All; Motor Patrol; Lubrication Technician; Manipulators; Pile Drivers and Skid Rig; Post Hole Digger; Pre-Stress Machine; Pump Cretes Dual Ram; Pump Cretes: Squeeze Cretes-Screw Type Pumps; Gypsum Bulker and Pump; Raised and Blind Hole Drill; Roto Mill Grinder; Scoops - Tractor Drawn; Slip-Form Paver; Straddle Buggies; Operation of Tie Back Machine; Tournapull; Tractor with Boom and Side Boom; Trenching Machines.

Class 2. Boilers, Broom, All Power Propelled; Bulldozers; Concrete Mixer (Two Bag and Over); Conveyor, Portable; Forklift Trucks; Highlift Shovels or Front Endloaders under 2-1/4 yd.; Hoists, Automatic; Hoists, Inside Elevators; Hoists, Sewer Dragging Machine; Hoists, Tugger Single Drum; Laser Screed; Rock Drill (Self-Propelled); Rock Drill (Truck Mounted); Rollers, All; Steam Generators; Tractors, All; Tractor Drawn Vibratory Roller; Winch Trucks with "A" Frame.

Class 3. Air Compressor; Combination Small Equipment Operator; Generators; Heaters, Mechanical; Hoists, Inside Elevators

McHenry County Prevailing Wage Rates posted on 3/3/2025

(remodeling or renovation work); Hydraulic Power Units (Pile Driving, Extracting, and Drilling); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Low Boys; Pumps, Well Points; Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 4. Bobcats and/or other Skid Steer Loaders; Oilers; and Brick Forklift.

Class 5. Assistant Craft Foreman.

Class 6. Gradall.

Class 7. Mechanics; Welders.

OPERATING ENGINEERS - HIGHWAY CONSTRUCTION

Class 1. Asphalt Heater and Planer Combination; Asphalt Heater Scarifier; Asphalt Spreader; Autograder/GOMACO or other similar type machines; ABG Paver; Backhoes with Caisson Attachment; Ballast Regulator; Belt Loader; Caisson Rigs; Car Dumper; Central Redi-Mix Plant; Combination Backhoe Front Endloader Machine, (1 cu. yd. Backhoe Bucket or over or with attachments); Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Paver over 27E cu. ft.; Concrete Placer; Concrete Tube Float; Cranes, all attachments; Cranes, Tower Cranes of all types; Creter Crane; Spider Crane; Crusher, Stone, etc.; Derricks, All; Derrick Boats; Derricks, Traveling; Dredges; Elevators; Outside type Rack & Pinion and Similar Machines; Formless Curb and Gutter Machine; Grader, Elevating; Grader, Motor Grader, Motor Patrol, Auto Patrol, Form Grader, Pull Grader, Subgrader; Guard Rail Post Driver Truck Mounted; Hoists, One, Two and Three Drum; Heavy Duty Self-Propelled Transporter or Prime Mover; Hydraulic Backhoes; Backhoes with shear attachments up to 40' of boom reach; Lubrication Technician; Manipulators; Mucking Machine; Pile Drivers and Skid Rig; Pre-Stress Machine; Pump Cretes Dual Ram; Rock Drill - Crawler or Skid Rig; Rock Drill - Truck Mounted; Rock/Track Tamper; Roto Mill Grinder; Slip-Form Paver; Snow Melters; Soil Test Drill Rig (Truck Mounted); Straddle Buggies; Hydraulic Telescoping Form (Tunnel); Operation of Tieback Machine; Tractor Drawn Belt Loader; Tractor Drawn Belt Loader (with attached pusher - two engineers); Tractor with Boom; Tractaire with Attachments; Traffic Barrier Transfer Machine; Trenching; Truck Mounted Concrete Pump with Boom; Raised or Blind Hole Drills (Tunnel Shaft); Underground Boring and/or Mining Machines 5 ft. in diameter and over tunnel, etc; Underground Boring and/or Mining Machines under 5 ft. in diameter; Wheel Excavator; Widener (APSCO).

Class 2. Batch Plant; Bituminous Mixer; Boiler and Throttle Valve; Bulldozers; Car Loader Trailing Conveyors; Combination Backhoe Front Endloader Machine (Less than 1 cu. yd. Backhoe Bucket or over or with attachments); Compressor and Throttle Valve; Compressor, Common Receiver (3); Concrete Breaker or Hydro Hammer; Concrete Grinding Machine; Concrete Mixer or Paver 7S Series to and including 27 cu. ft.; Concrete Spreader; Concrete Curing Machine, Burlap Machine, Belting Machine and Sealing Machine; Concrete Wheel Saw; Conveyor Muck Cars (Haglund or Similar Type); Drills, All; Finishing Machine - Concrete; Highlift Shovels or Front Endloader; Hoist - Sewer Dragging Machine; Hydraulic Boom Trucks (All Attachments); Hydro-Blaster; Hydro Excavating (excluding hose work); Laser Scream; All Locomotives, Dinky; Off-Road Hauling Units (including articulating) Non Self-Loading Ejection Dump; Pump Cretes: Squeeze Cretes - Screw Type Pumps, Gypsum Bulker and Pump; Roller, Asphalt; Rotary Snow Plows; Rototiller, Seaman, etc., self-propelled; Self-Propelled Compactor; Spreader - Chip - Stone, etc.; Scraper - Single/Twin Engine/Push and Pull; Scraper - Prime Mover in Tandem (Regardless of Size); Tractors pulling attachments, Sheeps Foot, Disc, Compactor, etc.; Tug Boats.

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Class 3. Boilers; Brooms; All Power Propelled; Cement Supply Tender; Compressor, Common Receiver (2); Concrete Mixer (Two Bag and Over); Conveyor, Portable; Farm-Type Tractors Used for Mowing, Seeding, etc.; Forklift Trucks; Grouting Machine; Hoists, Automatic; Hoists, All Elevators; Hoists, Tugger Single Drum; Jeep Diggers; Low Boys; Pipe Jacking Machines; Post-Hole Digger; Power Saw, Concrete Power Driven; Pug Mills; Rollers, other than Asphalt; Seed and Straw Blower; Steam Generators; Stump Machine; Winch Trucks with "A" Frame; Work Boats; Tamper-Form-Motor Driven.

Class 4. Air Compressor; Combination - Small Equipment Operator; Directional Boring Machine; Generators; Heaters, Mechanical; Hydraulic Power Unit (Pile Driving, Extracting, or Drilling); Light Plants, All (1 through 5); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Pumps, Well Points; Vacuum Trucks (excluding hose work); Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 5. SkidSteer Loader (all); Brick Forklifts; Oilers.

Class 6. Field Mechanics and Field Welders

Class 7. Dowell Machine with Air Compressor; Gradall and machines of like nature.

OPERATING ENGINEERS - FLOATING

Diver. Diver Wet Tender, Diver Tender, ROV Pilot, ROV Tender

SURVEY WORKER

Operates survey equipment (such as levels, transits, data collectors, GPS and robotic total stations) for the purpose of performing construction layout and/or grade checking.

SURVEY FOREMAN

Operates survey equipment (such as levels, transits, data collectors, GPS and robotic total stations) for the purpose of performing construction layout and/or grade checking; oversees survey crew operations; and/or coordinates work of survey crews.

TRAFFIC SAFETY Worker I

Traffic Safety Worker I - work associated with the delivery, installation, pick-up and servicing of safety devices during periods of roadway construction, including such work as set-up and maintenance of barricades, barrier wall reflectors, drums, cones, delineators, signs, crash attenuators, glare screen and other such items, and the layout and application or removal of conflicting and/or temporary roadway markings utilized to control traffic in construction zones, as well as flagging for these operations.

TRAFFIC SAFETY WORKER II

Work associated with the installation and removal of permanent pavement markings and/or pavement markers including both installations performed by hand and installations performed by truck.

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION

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Class 1. Two or three Axle Trucks. A-frame Truck when used for transportation purposes; Air Compressors and Welding Machines, including those pulled by cars; pick-up trucks and tractors; Ambulances; Batch Gate Lockers; Batch Hopperman; Car and Truck Washers; Carry-alls; Fork Lifts and Hoisters; Helpers; Mechanics Helpers and Greasers; Oil Distributors 2-man operation; Pavement Breakers; Pole Trailer, up to 40 feet; Power Mower Tractors; Self-propelled Chip Spreader; Skipman; Slurry Trucks, 2-man operation; Slurry Truck Conveyor Operation, 2 or 3 man; Teamsters; Unskilled Dumpman; and Truck Drivers hauling warning lights, barricades, and portable toilets on the job site.

Class 2. Four axle trucks; Dump Crets and Adgetors under 7 yards; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnapulls or Turntrailers when pulling other than self-loading equipment or similar equipment under 16 cubic yards; Mixer Trucks under 7 yards; Ready-mix Plant Hopper Operator, and Winch Trucks, 2 Axles.

Class 3. Five axle trucks; Dump Crets and Adgetors 7 yards and over; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turntrailers or turnapulls when pulling other than self-loading equipment or similar equipment over 16 cubic yards; Explosives and/or Fission Material Trucks; Mixer Trucks 7 yards or over; Mobile Cranes while in transit; Oil Distributors, 1-man operation; Pole Trailer, over 40 feet; Pole and Expandable Trailers hauling material over 50 feet long; Slurry trucks, 1-man operation; Winch trucks, 3 axles or more; Mechanic--Truck Welder and Truck Painter.

Class 4. Six axle trucks; Dual-purpose vehicles, such as mounted crane trucks with hoist and accessories; Foreman; Master Mechanic; Self-loading equipment like P.B. and trucks with scoops on the front.

TERRAZZO FINISHER

The handling of sand, cement, marble chips, and all other materials that may be used by the Mosaic Terrazzo Mechanic, and the mixing, grinding, grouting, cleaning and sealing of all Marble, Mosaic, and Terrazzo work, floors, base, stairs, and wainscoting by hand or machine, and in addition, assisting and aiding Marble, Masonic, and Terrazzo Mechanics.

Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 217-782-1710 for wage rates or clarifications.

LANDSCAPING

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.

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MATERIAL TESTER & MATERIAL TESTER/INSPECTOR I AND II

Notwithstanding the difference in the classification title, the classification entitled "Material Tester I" involves the same job duties as the classification entitled "Material Tester/Inspector I". Likewise, the classification entitled "Material Tester II" involves the same job duties as the classification entitled "Material Tester/Inspector II".



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MIDLAND STANDARD ENGINEERING & TESTING, INC.

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(847) 844-1895 f(847) 844-3875

August 26, 2022

Mr. Timothy Hauser
HR Green, Inc.
1391 Corporate Drive, Suite 203
McHenry, Illinois 60050

Re: Subsurface Exploration and Analysis
Venice Avenue/Court Street Reconstruction
McHenry, Illinois
MSET File No. 22515

Dear Mr. Hauser:

We have completed the field exploration work and analysis of the project referenced above. This report was prepared for use in the preparation of the project design plans.

Purpose

The purpose of this exploration was to determine the existing pavement sections of the planned alignments proposed for rehabilitation and to determine the types of soil encountered at the proposed subgrade elevation and the various components of the soil.

Scope

The scope of this exploration and analysis included review of available information from previous work conducted in the area, field and laboratory testing, analysis of the data obtained, formulation of our recommendations and preparation of this report.

The field exploration included making three (3) pavement cores with subgrade probes along the alignment to be rehabilitated, labeled C-1 thru C-3, and one (1) soil boring to a depth of six (6) feet below the ground surface, labeled B-1, for potential storm sewer replacement.

PROJECT LOCATION AND DESCRIPTION

Project Location and Description

The project site is located along Venice Avenue and Court Street within the city of McHenry, Illinois. Plans include implementing a rehabilitation program along the alignments. Additional work includes storm sewer replace/replacement along Venice Avenue at the intersection of Park Street.

FIELD EXPLORATION

General

A field engineer from Midland Standard Engineering & Testing, Inc supervised the pavement cores and soil boring. The specimens obtained were transported to our laboratory for testing and analysis. Our project engineer has directed all phases of this investigation.

Pavement Sampling Procedures

Pavement cores were made with a 4-inch diameter core barrel/electric drill setup to sample all pavement components. Samples of the granular base and underlying subgrade soils were obtained using hand auger equipment.

Subgrade Strength Tests (Pavement Cores)

Strength measurements of the subgrade soils were determined in the field using a dynamic cone penetrometer (DCP) to a depth of 18 inches below the bottom of the existing pavement section. Strength testing in the field was performed in accordance with the Illinois Test Procedure 501 of the IDOT Manual of Test Procedures for Materials.

Drilling Equipment

The soil boring was performed with a truck mounted Geoprobe® 3100GT drill rig equipped with a rotary head. Hollow stem augers were used to advance the borehole.

Soil Drilling and Sampling Procedures

Representative samples of the profile soils were obtained by use of split-spoon sampling methods in accordance with ASTM procedure D 1586.

During the split-spoon sampling procedures, a standard penetration test was performed using an automatic hammer in accordance with current ASTM D 1586 procedures. At sampling intervals, advancement of the boring was stopped and all loose material was removed from the borehole. The sampler was then lowered into the borehole and was seated in undisturbed soil by pushing or tapping, taking suitable precautions that the rods were reasonably tight. The sampling spoon was then advanced by driving with an automatic drop hammer. During the sampling procedure, the standard penetration value (N) of the soil was determined. The standard penetration value (N) is defined as the number of blows of a one hundred forty-pound (140 lb) hammer required to advance the spoon sampler one foot (12") into the soil.

The results of the standard penetration tests indicate the relative density and comparative consistency of the soils and thereby provide a basis for estimating the relative strength and compressibility of the soil profile components. The results of the standard penetration tests can be found on the boring logs in the Appendix of this report.

Strength Tests (Soil Borings)

A calibrated hand penetrometer was used to aid in determining the strength and consistency of cohesive soil samples (Qp) in the field. Split-spoon samples were subjected to unconfined compressive strength testing (Qu) by the RIMAC Method as modified by IDOT. Consideration must be given to the manner in which the values of the unconfined compressive strength were obtained. Split-spoon sampling techniques provide a representative, but somewhat disturbed soil sample.

Water Level Measurements

Water level observations were made during and immediately after the boring operations and are noted on the boring log, presented herewith. In relatively pervious, sandy soils, the water level elevation would be considered reliable. In relatively impervious, clayey soils, the accurate determination of the groundwater elevation may not be possible, even after several days of observation. Seasonal variations, temperature and recent rainfall conditions may influence the levels of the groundwater table, and volumes of water will depend on the permeability of the soils.

LABORATORY TESTING

Scope

A supplemental laboratory-testing program was conducted to ascertain additional pertinent engineering characteristics of the foundation materials necessary in analyzing the behavior of the proposed construction. The soils laboratory work was performed in accordance with applicable ASTM standards. The laboratory-testing program included supplementary visual classification, unconfined compressive strength on cohesive samples and moisture contents on all samples. The results of laboratory testing are reported on the attached Boring Log, DCP Data Sheet and Pavement Core Log.

PAVEMENT REHABILITATION

General

A rehabilitation program of the existing pavement materials is planned along the following alignments within the city limits of McHenry, Illinois:

<u>Alignment</u>	<u>Limits</u>	<u>Length</u>
Venice Avenue	Riverside Drive to Court Street	680 l.f.
Court Street	Venice Avenue to W. Elm Street	365 l.f.

The planned alignments are two lane local roadways primarily consisting of residential traffic. The alignments provide access to municipal parking lots located near the intersection of Venice Avenue and Court Street. Additionally, street parking is provided on Court Street near the intersection of W. Elm Street to support the surrounding businesses.

The condition of the pavement is relatively poor, with thermal and map pattern (alligator) cracking observed across a majority of the alignment. Additionally, potholing has developed across the alignment and has been patched in many areas. The condition of the alignments is likely due to the age of the pavement materials and soft subgrade soils in areas.

The appropriate rehabilitation program for the alignments depend on multiple factors including but not limited to the condition of the existing pavement materials, current and future traffic loading and the pavement design life. Rehabilitation programs including Grind and Overlay, Remove and Replace and Reconstruction were considered.

Existing Pavement Section

The pavement section along the alignments proposed for rehabilitation encountered 2-1/4 to 5 inches Bituminous Concrete over 7-1/2 to 8-1/2 inches Granular Base Course. The bituminous section is comprised of a top wearing surface lift of 1-1/2 inches overlying 3/4 to 3-1/2 inches of bituminous binder. The granular base course materials consist of brown Crushed GRAVEL with Sand.

An existing structural number (SN) was estimated for the pavement materials utilizing coefficients presented in Figure 46-F 'Coefficients of HMA Overlay on Flexible Pavements or Recycled Base' as part of the modified AASHTO Design criteria in the IDOT Bureau of Local Roads Chapter 46 Pavement Rehabilitation Manual. The structural number (SN) for the pavement section was estimated between **1.55** and **2.10**. See Pavement Core Measurement Log for detailed results.

Subgrade Soils

Subgrade soils encountered at the core locations consist of black to grey and brown Clay LOAM, A-6 with an IBV of 3.5 to 13 (Qu=1.1-4.0 tsf) and moisture contents of 14 to 20 percent. See Dynamic Cone Penetration (DCP) data sheets at each core location for results.

Grind and Overlay

Typical pavement rehabilitation includes grinding the existing bituminous pavement to a nominal depth and overlaying it with a new surface course. A grinding depth should be selected that maintains a sufficient section (minimum 3" recommended) of the remaining bituminous pavement to provide a stable base for the overlying pavement. The bituminous section encountered across the planned alignments is relatively thin (2-1/4" to 5") and should not be considered for a grind and overlay treatment.

Remove and Replace

As an alternate to a traditional grind and overlay, the existing bituminous section may be removed to the depth encountered exposing the existing base course materials. The existing base course would then be graded, compacted and inspected by proof rolling. Where required, unstable base areas should be repaired or replaced with new materials. Once the base is approved, a new section of Hot Mix Asphalt (HMA) may be placed.

Reconstruction

If traffic loading required and increased structural number, reconstruction of the alignments would be appropriate. Reconstruction would include removing the existing pavement materials exposing the subgrade soils. The subgrade soils would then be graded, compacted and inspected by proof rolling. Unstable areas should be repaired by removing the unsuitable materials as directed by the Geotechnical Engineer and replaced with an approved Aggregate Subgrade.

IDOT typically estimated undercuts along 20 percent of the alignment to a nominal depth of 12 inches. A similar quantity for geotechnical fabric is also anticipated. If reconstruction is selected, the Geotechnical Engineer should review subgrade conditions with respect to the planned construction and verify subgrade treatment estimates.

Once the subgrade is approved, a new pavement section consisting of a granular base course and Hot Mix Asphalt (HMA) can be placed. The thickness of the pavement material should be determined based on traffic loading and using an estimated Illinois Bearing Ratio (IBR) of 3.0. Additionally, a Subgrade Support Rating (SSR) of 'POOR' is considered appropriate for a mechanistic pavement design.

STORM SEWER RECOMMENDATIONS

General

Storm sewer removal and replacement was identified in the project documents along Venice Avenue at the intersection of Park Street.

Subsurface Conditions

Boring B-1 was performed at the intersection of Venice Avenue and Park Street in the area of the planned storm sewer repair. The soil profile at the boring location encountered surficial pavement materials comprised of 3 inches of Bituminous Concrete overlying 8 inches of Granular Base Course materials. Below the surficial pavement materials, dark brown Clay LOAM, A-6 was noted to a depth of 5 feet below top of existing pavement. The clay profile was firm in consistency with unconfined compressive strengths (Q_p/Q_u) of 0.50 to 0.81 tons per square foot and moisture contents of 10 to 21 percent.

Below the upper clay profile, brown SAND, A-3 for the remainder of the boring depth. The granular layer is slightly dense with standard penetration values (N) of 6 blows per foot and moisture content of 18 percent. Groundwater was noted within the granular layer at a depth of 5.5 feet during drilling. Details of the soil and groundwater conditions encountered at the boring location are presented on the attached Boring Logs.

IEPA LPC-663 Certification

Samples taken in the area of the planned excavation were classified and screened for volatiles with an Ion Science Tiger LT Photo-Ionization Detector (PID). Discrete samples were selected for analytical testing in accordance with the maximum allowable concentrations per 35 Ill. Adm. Code Part 1100, Subpart F. Materials tested meet the maximum allowable concentrations are suitable for disposal as Clean Construction Demolition Debris (CCDD). Reference the attached IEPA LPC-663.

Closure

Thank you for the opportunity to be of service. Please contact us if you have any questions regarding the information contained in this report.

Very truly yours,
MIDLAND STANDARD ENGINEERING & TESTING, INC.



Gregory Ford
Staff Engineer



Michael H. Prigge, P.E.
Project Engineer

Attachments: Boring Location Map
Pavement Core Measurement Log (C-1 through C-3)
Pavement Core Photographs
DCP Data Sheet
Boring Log (B-1)
General Notes
IEPA LPC-663 Certification (attached separately)

Boring Location Map

Venice Avenue Reconstruction
McHenry, Illinois
MSET File No. 22515

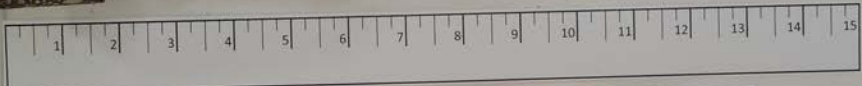
Legend

- ◆ Pavement Core w/ DCP
- ◆ Profile Boring (6')



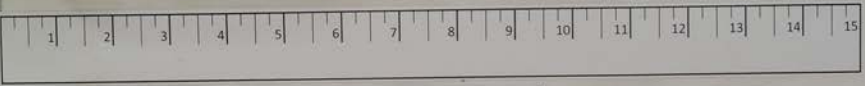
PAVEMENT CORE MEASUREMENT LOG
 VENICE AVENUE AND COURT STREET RECONSTRUCTION
 MCHENRY, ILLINOIS

Core No. C-1							
Location	Court Street, SB ~ 98' S of W. Elm Street						
Material	Depth (in.)		Thickness (in.)	Remarks/Condition		coeff	sn
Bituminous Surface	0	to 1- 1/2	1- 1/2			0.30	0.45
Bituminous Binder	1- 1/2	to 2- 1/4	3/4			0.25	0.19
Granular Base Course	2- 1/4	to 10- 1/2	8- 1/4	Brown Crushed GRAVEL with Sand		0.11	0.91
Subgrade	10- 1/2			Brown Clay LOAM, A-6 IBV = 5.3, Qu = 1.7 tsf, Mc = 16%			1.55
Core No. C-2							
Location	Venice Avenue, WB ~ 25' E of Court Street						
Material	Depth (in.)		Thickness (in.)	Remarks/ Condition		coeff	sn
Bituminous Surface	0	to 1- 1/2	1- 1/2			0.30	0.45
Bituminous Binder	1- 1/2	to 2- 1/2	1			0.25	0.25
Granular Base Course	2- 1/2	to 11	8- 1/2	Brown Crushed GRAVEL with Sand		0.11	0.94
Subgrade	11			Black and Grey Clay LOAM, A-6 IBV = 12.6, Qu = 4.0 tsf, Mc = 14%			1.64
Core No. C-3							
Location	Venice Avenue, EB ~ 105' W of Riverside Drive						
Material	Depth (in.)		Thickness (in.)	Remarks/ Condition		coeff	sn
Bituminous Surface	0	to 1- 1/2	1- 1/2			0.30	0.45
Bituminous Binder	1- 1/2	to 4	2- 1/2			0.25	0.63
Bituminous Binder	4	to 5	1			0.20	0.20
Granular Base Course	5	to 12- 1/2	7- 1/2	Brown Crushed GRAVEL with Sand		0.11	0.83
Subgrade	12- 1/2			Black and Grey Clay LOAM, A-6 IBV = 3.5, Qu = 1.1 tsf, Mc = 20%			2.10



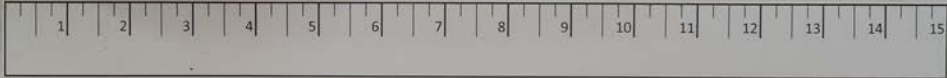
VENICE AVENUE RECONSTRUCTION
MCHENRY, ILLINOIS
MSET File No. 22515 AUGUST 2022

C-1



VENICE AVENUE RECONSTRUCTION
MCHENRY, ILLINOIS
MSET File No. 22515 AUGUST 2022

C-2



VENICE AVENUE RECONSTRUCTION	
MCHENRY, ILLINOIS	
MSET File No. 22515	AUGUST 2022

C-3

MIDLAND STANDARD ENGINEERING & TESTING, INC.
410 NOLEN DRIVE, SOUTH ELGIN, ILLINOIS 60177

DYNAMIC CONE PENETRATION TEST

MSET NO. 22515

DATE TESTED 8/4/22

PROJ. NAME Venice Avenue Reconstruction

WEATHER P. Cloudy

PROJ. LOC McHenry, IL 1 - Double Mass, 2 - Single Mass: 2

CLIENT HR Green, Inc.

INSPECTOR TW

TEST LOCATION AND REMARKS	INITIAL DEPTH	SUBGRADE <input checked="" type="checkbox"/>			FOUNDATION <input type="checkbox"/>		
		DEPTH	BLOWS	RATE	IBV	QU	AVG
C-1: Brown Clay LOAM, A-6 Mc= 16%	10.5"	16.5	22.5	28.5			
		7	9	13			29
		1.7	1.3	0.9			1.2
		3.5	4.8	7.7			5.3
		1.1	1.5	2.4			1.7
C-2: Black and Grey Clay LOAM, A-6, Mc= 14%	11"	17	23	29			AVG
		24	23	11			58
		0.5	0.5	1.1			0.6
		16.6	15.7	6.2			12.6
		5.3	5.0	2.0			4.0
C-3: Black and Grey Clay LOAM, A-6, Mc= 20%	12.5"	18.5	24.5	30.5			AVG
		6	8	7			21
		2.0	1.5	1.7			1.7
		2.9	4.2	3.5			3.5
		0.9	1.3	1.1			1.1
							AVG
							AVG

NOTE: Rate is inches of penetration per blow.

CALCULATIONS

$IBV = 10^{[0.84 - 1.26 \times \text{LOG}(\text{RATE})]}$

$QU(\text{tsf}) = 0.32 \times IBV$

RATE	IBV	QU	RATE	IBV	QU
0.5	17	5.4	1.3	5	1.6
0.6	13	4.2	1.5	4	1.3
0.7	11	3.5	2.0	3	1.0
0.8	9	2.9	2.6	2	0.6
0.9	8	2.6	3.0	1.7	0.5
1.0	7	2.2	3.3	1.5	0.5
1.1	6	1.9	4.6	1	0.3
1.2	5.5	1.8	>4.6	<1	<0.3

PROJECT: **Venice Avenue Reconstruction** | SITE LOCATION: **McHenry, IL**
 BORING LOCATION: **Venice Ave, WB at Park St** | CLIENT: **HR Green, Inc.**

DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE			TESTS		REMARKS
				TYPE/ INTERVAL	NO.	N-VALUE Blows per ft.	Wc%	Dry Unit Weight, pcf	
0		PAVEMENT - Bit. Concrete (3")	0.0						
		GBC - Brown GRAVEL with Sand (8")	-0.3						
		Dark Brown Clay LOAM, A-6, firm	-0.9						
2.5				SS	1	5	10		0.5 (Qp)
				SS	2	4	21	85	0.81
5		Brown SAND (f-c), A-3, moist to wet, slightly dense	-5.0						
				SS	3	6	18		
		End of Boring at 6.5'	-6.5						

WATER LEVEL OBSERVATIONS, ft. DURING DRILLING:  5.5' IMMEDIATELY AFTER DRILLING:  Moist DELAYED READING AFTER 		BORING STARTED: <u>8/12/22</u> BORING COMPLETED: <u>8/12/22</u> LOGGED BY: <u>BB</u> BORING METHOD: <u>HSA</u>
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GENERAL NOTES

PARTICLE SIZE DESCRIPTION & TERMINOLOGY

Coarse Grained or Granular Soils have more than 50% of their dry weight retained on a #200 sieve; they are described as: boulders, cobbles, gravel or sand. Fine Grained soils have less than 50% of their dry weight retained on a #200 sieve; they are described as: clays or clayey silts if they are cohesive and silts if they are non-cohesive. In addition to gradation, granular soils are defined on the basis of their relative in-place density and the fine grained soils on the basis of their strength or consistency and their plasticity.

Major Component of Sample	Size Range	Descriptive Term of Components Also Present in Sample	Approximate Quantity (Percent)
Boulders			
Cobbles	8 inches to 3 inches (200 mm to 75mm)	Trace	1 - 9
Gravel	3 inches to #4 sieve (75mm to 4.75mm)	Little	10 - 19
Sand	#4 to #200 sieve (4.75mm to 0.075mm)	Some	20 - 34
Silt	Passing #200 sieve (0.075mm to 0.002mm)	And	35 - 50
Clay	Smaller than 0.002mm		

RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

GRANULAR SOILS

DENSITY CLASSIFICATION	APPROXIMATE RANGE OF N *
Very Loose	0 - 3
Slightly Dense	4 - 9
Medium Dense	10 - 29
Dense	30 - 49
Very Dense	50 - 80
Extremely Dense	80 +

COHESIVE SOILS

CONSISTENCY	UNCONFINED COMPRESSIVE STRENGTH, Q_u - TSF	APPROXIMATE RANGE OF N *
Very Soft	0.25	0 - 2
Soft	0.25 - 0.49	3 - 4
Firm	0.50 - 0.99	5 - 8
Stiff	1.00 - 1.99	9 - 15
Very Stiff	2.00 - 3.99	16 - 30
Hard	4.00 - 8.00	31 - 50
Very Hard	8.00 +	Over 50

* STANDARD PENETRATION TEST (ASTM D1586) - A 2.0" outside-diameter, split barrel sampler is driven into undisturbed soil by means of a 140 pound weight falling freely through a vertical distance of 30 inches. The sampler is normally driven 3 successive 6 inch increments. The total number of blows required for the final 12 inches of penetration is the Standard Penetration Resistance (N).



www.msetinc.com

MIDLAND STANDARD ENGINEERING & TESTING, INC.

410 Nolen Drive, South Elgin, Illinois 60177
(847) 844-1895 f(847) 844-3875

March 17, 2025

Mr. Jeffrey Strzalka, PE
HR Green, Inc.
1391 Corporate Drive, Suite 203
McHenry, Illinois 60050

Re: Subsurface Exploration and Analysis
Venice Avenue Sanitary Sewer
McHenry, Illinois
MSET File No. 25235

Dear Mr. Strzalka:

Midland Standard Engineering & Testing, Inc. has conducted a subsurface exploration and laboratory analysis for the above referenced project.

INTRODUCTION

Purpose and Scope

The purpose of this exploration and analysis was to determine the various components of the soil, the engineering characteristics of the materials, and to provide soil parameters for the sanitary sewer extension and new lift station.

The scope of this exploration included a geological reconnaissance of the site, a review of available soil information, subsurface exploration, soil testing, and an engineering analysis and evaluation of the materials encountered.

General

The exploration and analysis of the foundation and subsurface conditions reported herein are considered in sufficient detail and scope for analysis. This report has been prepared for the exclusive use and specific application to the proposed project.

The recommendations submitted are based on the available soil information, standard utility construction practices, and available site location information. Any revision in the plans for the proposed structures from those enumerated in this report should be brought to the attention of the Soils Engineer to determine if changes in the recommendations are required. Any deviations from the noted subsurface conditions that are encountered during construction should also be brought to the attention of the Soil Engineer.

The Soils Engineer warrants that the findings, recommendations, specifications, or professional advice contained herein have been promulgated after being prepared in accordance with generally accepted professional engineering practice in the fields of foundation engineering, soil mechanics, and engineering geology. No other warranties are implied or expressed.

PROJECT LOCATION AND DESCRIPTION

Project Location and Description

The project site is located along Venice Avenue, from Green Street to Riverside Drive in McHenry, Illinois. The alignment parallels Boone Creek as it flows to the Foz River from the west. The project consists of 1,120 lineal feet of new 10-inch diameter sanitary sewer with invert depths of 6.5 feet to 9.5 feet.

FIELD EXPLORATION

General

Our exploration program consisted of making three (3) structure borings to a depth of twenty (20) feet below ground surface. An MSET field crew staked the boring locations at the site. Ground surface elevation at the boring locations were determined using a Trimble GNSS Catalyst Receiver.

Drilling Equipment

The soil borings were drilled using a truck mounted Geoprobe® 3100 drill rig equipped with a rotary head. Hollow stem augers were used to advance the boreholes.

Sampling and Standard Penetration Test Procedures

Representative samples were obtained by the use of split-spoon sampling procedures in accordance with ASTM Procedure D1586.

During the split spoon sampling procedures, a standard penetration test was performed in accordance with current ASTM D1586 procedures. At sampling intervals, advancement of the boring was stopped and all loose material removed from the borehole. The sampler was then lowered into the borehole and seated in undisturbed soil by pushing or tapping, taking suitable precautions that the rods were reasonably tight. The sampling spoon was then driven using an automatic drop hammer. During the sampling procedure, the standard penetration value (N) of the soil was determined. The standard penetration value (N) is defined as the number of blows of a one hundred forty-pound (140 lb) hammer required to advance the spoon sampler one foot (12") into the soil.

The results of the standard penetration tests indicate the relative density and comparative consistency of the soils and thereby provide a basis for estimating the relative strength and compressibility of the soil profile components. The results of the standard penetration tests can be found on the attached boring logs.

Strength Tests

During the field boring operations, samples of the predominantly cohesive soil from the split spoon sampling device were tested using a calibrated soil penetrometer to aid in determining the strength of the soil. Consideration must be given to the manner in which the values of the

unconfined compressive strengths were obtained. Split spoon sampling techniques provide a representative, but somewhat disturbed soil sample.

Water Level Measurements

Water level observations were made during and immediately after the boring operations were completed and are noted on the attached boring logs. In relatively pervious (granular) soils, the indicated elevations are considered reliable groundwater levels. In relatively impervious (clay) soils, the accurate determination of the groundwater elevation may not be possible, even after several days of observation. Seasonal variations, temperature and recent rainfall conditions may influence the levels of the groundwater table and volumes of water will depend on the permeability of the soils.

LABORATORY TESTING

Scope

A supplemental testing program was conducted to ascertain additional pertinent engineering characteristics of the subgrade and foundation materials necessary in analyzing the behavior of the proposed construction. The soils laboratory work was performed in accordance with applicable ASTM standards. The laboratory-testing program included visual classification; moisture content determination for each sample obtained, and unconfined compression testing for applicable samples. The results of laboratory testing are reported on the attached boring logs.

SUBSURFACE CONDITIONS

Soil Profile

The shallow depth soil profile encountered at boring locations consists of pavement materials or Topsoil overlying SAND possible FILL. The natural deposits below the possible FILL are mostly loose to medium dense granular deposits at B-1 and B-2 and soft to firm clay at B-3.

- **Existing Pavement** – The pavement encountered at B-1 and B-2 consists of 1.75 (B-2) to 3.75 (B-1) inches of bituminous concrete over 2.75 to 8.5 inches granular base course.
- **Topsoil** -At boring B-3, 18 inches of Dark Brown Topsoil was encountered at the surface.
- **Possible FILL** – At all borings below the pavement and topsoil is very loose to medium dense SAND with Gravel possible FILL, that extends to depths of 3.0 to 6.5 feet. The SAND, Possible FILL has a standard penetration resistance, N Value of 3 to 11 blows per foot.
- **Organic Silt** – At boring B-1 from a depth of 3.0 to 6.0 feet is very loose Organic SILT OL with a moisture content, Mc of 29% and a N Value of 1 bpf.
- **Granular Deposits at B-1 and B-2** – Below 6 feet at B-1 and below 3 feet at B-2 is saturated granular deposits, mostly Silty SAND, SM and SAND with Silt, SP-SM with N Values of 3 to 12 bpf in the planned pipe invert zone, and N Values of 4 to 27 bpf below 12 feet.
- **Lean CLAY at B-3** – Below the possible SAND FILL at B-3 is soft to firm Lean CLAY CL with Mc of 19% to 25% and unconfined compressive strengths, Qu/Qp of 0.25 to 0.75 tons per square foot. The profile stiffens below 19.0 feet with very stiff Lean CLAY CL encountered.

Details of the soil conditions at each boring location are presented on the attached boring logs.

Groundwater Conditions

Groundwater measurements were made during and immediately after the drilling operations were complete. A summary of the groundwater measurements is provided in the table below.

Boring No.	Ground Surface Elevation	GW During Drilling Depth/Elev.	GW at Completion Depth/Elev.
B-1	741.4	8.5'/732.9	3.8'/737.6
B-2	741.9	6.0'/735.9	5.2'/736.7
B-3	741.8	16.0'/725.8	8.5'/733.3

DISCUSSION AND RECOMMENDATIONS

Discussion

The soil conditions present at the boring locations consist of saturated loose granular deposits or soft clay at the pipe invert depth. Pipe and manhole installation should consider a **temporary well point dewatering system** and trench support procedures.

General Open Trench Construction

The planned watermain should be installed and backfilled in accordance with the current Standard Specifications for Water and Sewer Main Construction in Illinois. The pipe should be installed in accordance with the project specifications to provide proper support for the pipe. Bedding stone should be placed under the pipe in accordance with the table below. Cobbles and boulders greater than three (3) inches in diameter should be removed from the pipe subgrade with their holes filled with bedding stone.

Sewer Invert Subgrade Soil Conditions

The soil anticipated to be exposed at pipe subgrade level based on the soil borings is shown in the table below. Pipe support should be developed by providing a minimum of six (6) to eight (8) inches of IDOT CA-05 or CA-07, bedding layer.

Boring Number	Location	Estimated Invert Depth	Soil Description	Subgrade Treatment
B-1	Station 9+40	6.5 +/- feet	Slightly dense Silty Clayey GRAVEL with Sand, Below water table	Notes 1 & 2
B-2	Station 13+30	9 +/- Feet	Slightly dense Sandy Silty CLAY over Loose SAND, Below water table	Notes 1 & 2
B-3	Station 16+95	10.5 +/- Feet	Soft to firm Lean CLAY Below water table	Notes 1 & 2

Note 1 – Lower the ground water level a minimum of two below invert using well points.
 Note 2 - Undercut subgrade, use a minimum of 12 inches of 3-inch crushed stone (IDOT CA-01) with a ground stabilization fabric at the soil to stone interface, bottom of stone layer. Compact stone with backhoe bucket. This stone treatment is in addition to the standard pipe bedding.

Excavation Conditions and Dewatering

Groundwater was measured 3 to 5 feet above the invert level in the granular soil profile. Dewatering of the site will be necessary to control groundwater entering the excavations and maintain the stability of the pipe support soil. Dewatering of the site will require a well point system to lower the groundwater in the excavation. **The well point dewatering system should be designed for heavy ground water flow considering the loose to slightly dense, water bearing granular deposits, and proximity to the nearby creek and Fox River.**

Construction Excavation Bracing

Proper excavation bracing or support is the responsibility of the contractor. Excavations at the site are anticipated to extend through the water bearing granular deposits. OSHA requirements dictate the use of sloping back or shoring and bracing of the excavation during construction. All work should be performed in accordance with OSHA and local requirements.

Soil parameters for the design of temporary sheet pile construction bracing are listed below. The wall design should include ground water pressure and the effects of surcharge loads and live loads, on the ground surface behind the wall. The additional loading of unbalanced ground water levels from construction dewatering should also be addressed.

Soil Description	Elevation	Moist Unit Weight (pcf) ¹	Total Shear Strength		Earth Pressure Coeff.		Interface Friction Angle or Adhesion
			c (psf)	ϕ'	Ka	Kp	
B-1							
SAND SP	741 to 738	125	0	30°	0.33	3.00	17°
Organic SILT OL	738 to 735	38	430	0°	1.00	1.00	400 psf
Silty Clay GRAVEL & Silty SAND, w/Sand	735 to 731	58	0	30°	0.33	3.00	14°
GRAVEL with Sand	731 to 728	68	0	34°	0.28	3.55	17°
SAND with Silt	728 to 724	68	0	32°	0.31	3.25	14°
B-2							
SAND SW-SM & Silty SAND SM	741 to 736	120	0	26°	0.39	2.60	14°
SAND SP-SM	736 to 734	63	0	30°	0.33	3.00	17°
Sandy Silty CLAY CL-ML	734 to 732	58	400	0°	1.00	1.00	400 psf
SAND SW-SM	732 to 727	58	0	26°	0.39	2.60	14°
SAND SW-SM	727 to 722	63	0	30°	0.33	3.00	14°
B-3							
SAND SW	741 to 735	125	0	30°	0.33	3.00	17°
CLAY CL	735 to 725	63	500	0°	1.00	1.00	500 psf
Silty Clayey SAND, SC-SM	725 to 723	68	0	30°	0.33	3.00	14°
CLAY CL	723 to 721	68	3450	0°	1.00	1.00	1100 psf

Notes

1. The ground water level was measured in the borings at approximate elevation 734 to 736. Submerged unit weight used below this elevation.

Utility Trench Backfill

The trenches for all sewer pipes should be backfilled in accordance with Article 550.07, Method 1 of IDOT Standard Specification for Road and Bridge Construction.

Closure

This report is based on the information available at this time. If you have any questions regarding this report, please feel free to call.

Sincerely,
MIDLAND STANDARD ENGINEERING & TESTING, INC.

William Wyzgala

William J. Wyzgala, P.E.
Principal Engineer

Attachments: Boring Location Map
Boring Log (B-1 through B-3)
General Soil Profile
General Notes

Boring Location Map

Venice Avenue Sanitary Sewer
McHenry, IL MSET Project #25235

Legend
◆ Soil Boring



Google Earth

Image © 2025 Airbus

300 ft

PROJECT: Venice Ave Sanitary Sewer SITE LOCATION: McHenry, IL
 BORING LOCATION: 1002404.913E, 2068117.052N CLIENT: HR Green

DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE			TESTS			REMARKS
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc %	Dry Unit Weight, pcf	Unconfined Compressive Strength, tsf	
0		3.75" Asphalt	741.4							
		2.75" Base	741.1							
		Possible FILL - Brown (f-c) SAND with Gravel, SW, medium dense	740.8	SS	1	11	5			
3		Grey and Dark Grey Organic SILT with Sand, little roots, OL, very loose	738.4	SS	2	1	29	84	0.43	
6		Grey Silty Clayey GRAVEL with Sand, GC-GM, slightly dense	735.4	SS	3	7	24			
9		Grey Silty SAND with Gravel, wet, SM, very loose	733.4	SS	4	3	16			
12		Brown GRAVEL with Sand, GP, medium dense	730.9	SS	5	17	9			
15		Brown (f-c) SAND with Silt and Gravel, SW-SM, medium dense	727.9	SS	6	14	11			
		End of Boring at 17.5' Refusal Blowing Sand	723.9	SS	7	27	9			

WATER LEVEL OBSERVATIONS, ft. DURING DRILLING: 8.5' IMMEDIATELY AFTER DRILLING: 3.8' DELAYED READING AFTER		BORING STARTED: <u>3/11/25</u> BORING COMPLETED: <u>3/11/25</u> LOGGED BY: <u>EW</u> BORING METHOD: <u>HSA</u>
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PROJECT: Venice Ave Sanitary Sewer SITE LOCATION: McHenry, IL
 BORING LOCATION: 1002779.828E, 2067999.884N CLIENT: HR Green

DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE			TESTS		REMARKS
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc %	Dry Unit Weight, pcf	
0		1.75" Asphalt	741.9						
		8.5" Dark Brown SAND	741.8						
		Possible FILL - Dark Brown (f-c) SAND with Silt and Gravel, SW-SM, very loose	741.1	SS	1	3	13		
3		Brown and Grey Silty SAND, SM, very loose	738.9	SS	2	2	27		
6		Brown (f-m) SAND with Silt, SP-SM, medium dense	735.9	SS	3	12	17		
9		Grey Sandy Silty CLAY, CL-ML, slightly dense	733.9	SS	4	4	20	0.4 Qp	
12		Grey (f-c) SAND with Silt, SW-SM, very loose	731.9	SS	5	3	16		
15		Brown (f-c) SAND with Silt, SW-SM, slightly dense to medium dense	728.9	SS	6	4	26		
18				SS	7	10	25		
				SS	8	9	18		
		End of Boring at 20.0'	721.9						

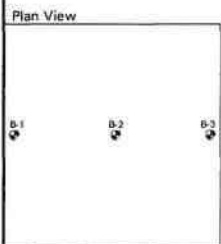
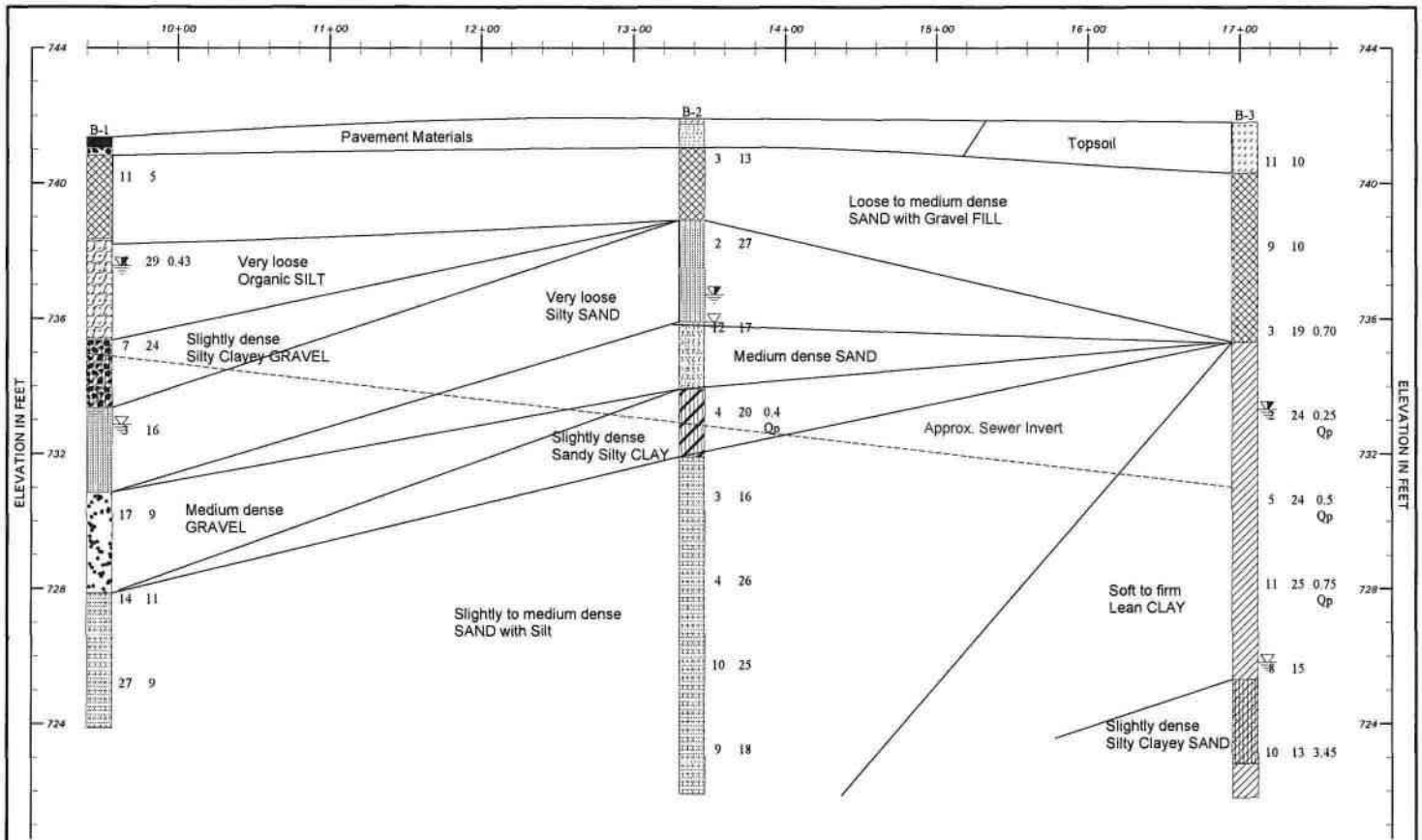
WATER LEVEL OBSERVATIONS, ft. DURING DRILLING: 6.0' IMMEDIATELY AFTER DRILLING: 5.2' DELAYED READING AFTER		BORING STARTED: <u>3/11/25</u> BORING COMPLETED: <u>3/11/25</u> LOGGED BY: <u>EW</u> BORING METHOD: <u>HSA</u>
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PROJECT: Venice Ave Sanitary Sewer SITE LOCATION: McHenry, IL
 BORING LOCATION: 1003103.995E, 2067862.577N CLIENT: HR Green

DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE			TESTS		REMARKS
				TYPE/ INTERVAL	NO.	N-VALUE Blows per ft.	Wc %	Dry Unit Weight, pcf	
0		18" Dark Brown TOPSOIL	741.8						
3		Possible FILL - Dark Brown (f-c) SAND with Gravel, SW, medium dense to slightly dense	740.3	SS	1	11	10		
				SS	2	9	10		
6		Blueish Grey Lean CLAY with Sand, CL, firm	735.3	SS	3	3	19	97	0.70
9		Grey Lean CLAY with Sand, CL, soft	733.3	SS	4	2	24		0.25 Qp
12		Grey Lean CLAY with Sand, trace roots, CL, soft	731.3	SS	5	5	24		0.5 Qp
15				SS	6	11	25		0.75 Qp
18		Grey Silty Clayey SAND with Gravel, SC-SM, slightly dense	725.3	SS	7	8	15		
		Grey Lean CLAY, CL, very stiff	722.8	SS	8	10	13	124	3.45
		End of Boring at 20.0'	721.8						

very poor recovery
Cave in at 15.5'

WATER LEVEL OBSERVATIONS, ft. DURING DRILLING: 16.0" IMMEDIATELY AFTER DRILLING: 8.5" DELAYED READING AFTER	BORING STARTED: <u>3/6/25</u> BORING COMPLETED: <u>3/6/25</u> LOGGED BY: <u>CS</u> BORING METHOD: <u>HSA</u>
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Midland Standard Engineering & Testing		
GENERALIZED SOIL PROFILE		
HORIZONTAL SCALE: 1"=100' (approximate)	DRAWN BY/APPROVED BY	DATE DRAWN
VERTICAL SCALE: 1"=1'		3/18/2025
Venice Ave Sanitary Sewer		
PROJECT NO. 25235		FIGURE NUMBER

GENERAL NOTES

PARTICLE SIZE DESCRIPTION & TERMINOLOGY

Coarse Grained or Granular Soils have more than 50% of their dry weight retained on a #200 sieve; they are described as: boulders, cobbles, gravel or sand. Fine Grained soils have less than 50% of their dry weight retained on a #200 sieve; they are described as: clays or clayey silts if they are cohesive and silts if they are non-cohesive. In addition to gradation, granular soils are defined on the basis of their relative in-place density and the fine grained soils on the basis of their strength or consistency and their plasticity.

Major Component of Sample	Size Range	Descriptive Term of Components Also Present in Sample	Approximate Quantity (Percent)
Boulders	Over 8 in. (200 mm)		
Cobbles	8 inches to 3 inches (200 mm to 75mm)	Trace	1 - 9
Gravel	3 inches to #4 sieve (75mm to 4.75mm)	Little	10 - 19
Sand	#4 to #200 sieve (4.75mm to 75mm)	Some	20 - 34
Silt	Passing #200 sieve (75mm to 2mm)	And	35 - 50
Clay	Smaller than 2mm		

RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

GRANULAR SOILS

DENSITY CLASSIFICATION	APPROXIMATE RANGE OF N *
Very Loose	0 - 3
Slightly Dense	4 - 9
Medium Dense	10 - 29
Dense	30 - 49
Very Dense	50 - 80
Extremely Dense	80 +

COHESIVE SOILS

CONSISTENCY	UNCONFINED COMPRESSIVE STRENGTH, Q_u - TSF	APPROXIMATE RANGE OF N *
Very Soft	0.25	0 - 2
Soft	0.25 - 0.49	3 - 4
Firm	0.50 - 0.99	5 - 8
Stiff	1.00 - 1.99	9 - 15
Very Stiff	2.00 - 3.99	16 - 30
Hard	4.00 - 8.00	31 - 50
Very Hard	8.00 +	Over 50

*STANDARD PENETRATION TEST (ASTM D1586) - A 2.0" outside-diameter, split barrel sampler is driven into undisturbed soil by means of a 140 pound weight falling freely through a vertical distance of 30 inches. The sampler is normally driven 3 successive 6 inch increments. The total number of blows required for the final 12 inches of penetration is the Standard Penetration Resistance (N).



Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as
amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: Venice Avenue Sanitary Sewer Office Phone Number, if available: N/A

Physical Site Location (address, including number and street):

Venice Avenue, from Green Street to Riverside Drive

City: McHenry State: IL Zip Code: 60050

County: McHenry Township: McHenry

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.34417 Longitude: - 88.26478

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

IEPA Site Number(s), if assigned: BOL: _____ BOW: _____ BOA: _____

Approximate Start Date (mm/dd/yyyy): _____ Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): _____

II. Owner/Operator Information for Source Site

Site Owner

Name: City of McHenry, Public Works

Street Address: 1415 Industrial Drive

PO Box: _____

City: McHenry State: IL

Zip Code: 60050 Phone: (815) 3633-2186

Contact: _____

Email, if available: _____

Site Operator

Name: _____

Street Address: _____

PO Box: _____

City: _____ State: IL

Zip Code: _____ Phone: _____

Contact: _____

Email, if available: _____

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a):

Samples were obtained from soil borings located in the area of planned construction. A discrete sample was obtained, screened, and tested for environmental contaminants.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201 (g), 1100.205(a), 1100.610]:

See First Environmental Laboratories, Inc. reports dated March 19, 2025.

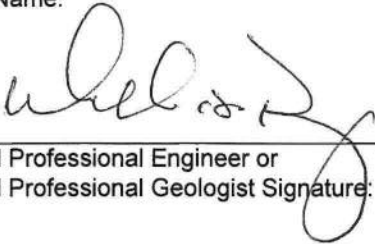
IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, William D. Prigge, PE (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name: Midland Standard Engineering & Testing, Inc.
Street Address: 410 Nolen Drive
City: South Elgin State: IL Zip Code: 60177
Phone: 847-844-1895

William D. Prigge
Printed Name:



Licensed Professional Engineer or
Licensed Professional Geologist Signature:

Mar 20, 2025
Date:

