Illinois Department of Transportation

Local Public Agency
Formal Contract Proposal

COVER SHEET

Proposal Submitted By:

Contractor's Name

Contractor's Address | City | State | Zip Code

STATE OF ILLINOIS

Local Public Agency	County	Section Number
City of Evanston	Cook	22-00294-00-PK

Route(s) (Street/Road Name)	Type of Funds
Poplar Avenue	Rebuild IL

☐ Proposal Only ☐ Proposal and Plans ☐ Proposal only, plans are separate

Submitted/Approved
For Local Public Agency:

For a County and Road District Project

Submitted/Approved

Highway Commissioner Signature | Date

Submitted/Approved

County Engineer/Superintendent of Highways | Date

For a Municipal Project

Submitted/Approved/Passed

Signature | Date

Official Title

Department of Transportation

Released for bid based on limited review

Regional Engineer Signature | Date

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

Local Public Agency	County	Section Number	Route(s) (Street/Road Name)
City of Evanston	Cook	22-00294-00-PK	Poplar Avenue

NOTICE TO BIDDERS

Sealed proposals for the project described below will be received at the office of E-bidding through DemandStar (Name of Office)

(Address) until 2:00 PM (Time) on 07/05/22 (Date).

Sealed proposals will be opened and read publicly at the office of Virtually via GoogleMeet (Name of Office)

(Address) at 2:15 PM (Time) on 07/05/22 (Date).

DESCRIPTION OF WORK

Location	Project Length
Poplar Avenue from Livingston Street to Colfax Street	2,650

Proposed Improvement

The resurfacing of Poplar Avenue from Livingston Street to Colfax Street as well as the reconstruction of the adjacent City of Evanston Parking Lot (#54). Rebuild Illinois funds will be used for street resurfacing, base patching, and curb replacement on Poplar Avenue.

1. Plans and proposal forms will be available in the office of

Electronically via DemandStar and the City of Evanston Website

2. ☒ Prequalification

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

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

4. The following BLR Forms shall be returned by the bidder to the Awarding Authority:
   a. Local Public Agency Formal Contract Proposal (BLR 12200)
   b. Schedule of Prices (BLR 12201)
   c. Proposal Bid Bond (BLR 12230) (if applicable)
   d. Apprenticeship or Training Program Certification (BLR 12325) (do not use for project with Federal funds.)
   e. Affidavit of Illinois Business Office (BLR 12326) (do not use for project with Federal funds)

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

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

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

8. If a special envelope is supplied by the Awarding Authority, each proposal should be submitted in that envelope furnished by the Awarding Agency and the blank spaces on the envelope shall be filled in correctly to clearly indicate its contents. When an envelope other than the special one furnished by the Awarding Authority is used, it shall be marked to clearly indicate its contents. When sent by mail, the sealed proposal shall be addressed to the Awarding Authority at the address and in care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the Notice to Bidders. Proposals received after the time specified will be returned to the bidder unopened.

9. Permission will be given to a bidder to withdraw a proposal if the bidder makes the request in writing or in person before the time for opening proposals.

Local Public Agency	County	Section Number	Route(s) (Street/Road Name)
City of Evanston	Cook	22-00294-00-PK	Poplar Avenue

PROPOSAL

1. Proposal of _____
Contractor's Name

_____.
Contractor's Address

2. The plans for the proposed work are those prepared by Engineering Division, City of Evanston and approved by the Department of Transportation on _____.

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

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

5. The undersigned agrees to complete the work within _____ working days or by 11/11/22 unless additional time is granted in accordance with the specifications.

6. The successful bidder at the time of execution of the contract _____ 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 of check shall be forfeited to the Awarding Authority.

7. 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 products 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. A bid may be declared unacceptable if neither a unit price nor a total price is shown.

8. The undersigned submits herewith the schedule of prices on BLR 12201 covering the work to be performed under this contract.

9. The undersigned further agrees that if awarded the contract for the sections contained in the combinations on BLR 12201, 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.

10. 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 Collector, City of Evanston Treasurer of _____.
The amount of the check is _____ (_____).

Attach Cashier's Check or Certified Check Here

In the event that one proposal guaranty check is intended to cover two or more bid proposals, the amount must be equal to the sum of the proposal guaranties which would be required for each individual bid proposal. If the proposal guaranty check is placed in another bid proposal, state below where it may be found.

The proposal guaranty check will be found in the bid proposal for: Section Number _____.

Local Public Agency	County	Section Number	Route(s) (Street/Road Name)
City of Evanston	Cook	22-00294-00-PK	Poplar Avenue

CONTRACTOR CERTIFICATIONS

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 procedure established by the appropriate Revenue Act, its liability for the tax or the amount of the 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: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract 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 on 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 of 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 on 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 or 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 canceled.

Local Public Agency	County	Section Number	Route(s) (Street/Road Name)
City of Evanston	Cook	22-00294-00-PK	Poplar Avenue

SIGNATURES

(If an individual)

Signature of Bidder | Date

Business Address

City | State | Zip Code

(If a partnership)

Firm Name

Signature | Date

Title

Business Address

City | State | Zip Code

Insert the Names and Addresses of all Partners

(If a corporation)

Corporate Name

Signature | Date

Title

Business Address

City | State | Zip Code

Insert Names of Officers

President

Attest:

Secretary

Secretary

Treasurer

Illinois Department of Transportation

Schedule of Prices

Contractor's Name

Contractor's Address | City | State | Zip Code

Local Public Agency: City of Evanston | County: Cook | Section Number: 22-00294-00-PK

Route(s) (Street/Road Name)

Schedule for Multiple Bids

Combination Letter	Section 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	500		
2	TREE TRUNK PROTECTION	EACH	8		
3	TREE ROOT PRUNING	FOOT	250		
4	TREE PRUNING	EACH	50		
5	REM & DISP UNS MATL	CU YD	20		
6	TRENCH BACKFILL	CU YD	308		
7	POROUS GRAN BACKFILL	TON	82		
8	TOPSOIL F & P, SPECIAL	CU YD	179		
9	EXPLORE TRENCH SP	EACH	2		
10	SEEDING	SQ YD	1401		
11	EROSION CONTROL BLANKT	SQ YD	1401		
12	SODDING, SALT TOLERANT	SQ YD	147		
13	INLET FILTERS	EACH	33		
14	SUBBASE GRAN MATL, TY B	TON	205		
15	AGG BASE CSE B 4	SQ YD	610		
16	HES PCC BSE CSE 7	SQ YD	821		
17	AGGREGATE-TEMP ACCESS	TON	2		
18	TEMP HOT-MIX ASPHALT	TON	10		
19	BIT MATLS TACK CT	POUND	6213		
20	MIX CR JTS FLANGEWYS	TON	5		

Local Public Agency	County	Section Number	Route(s) (Street/Road Name)
City of Evanston	Cook	22-00294-00-PK	

Item Number	Items	Unit	Quantity	Unit Price	Total
21	AGGREGATE (PRIME COAT)	TON	37		
22	LEV BIND MM N50	TON	506		
23	HMA SURF REM BUTT JT	SQ YD	338		
24	TEMPORARY RAMP	SQ YD	338		
25	HMA SC "D" N50	TON	1031		
26	PCC DRIVEWAY PAVT 8	SQ YD	27		
27	PC CONC SIDEWALK 5	SQ FT	8411		
28	DETECTABLE WARNINGS	SQ FT	100		
29	PAVEMENT REMOVAL	SQ YD	1813		
30	HMA SURF REM VAR DP	SQ YD	7898		
31	DRIVE PAVEMENT REM	SQ YD	20		
32	CONC CURB REMOVAL	FOOT	3053		
33	COMB CURB GUTTER REM	FOOT	2666		
34	SIDEWALK REM	SQ FT	7548		
35	CL D PATCH, SPECIAL 9	SQ YD	672		
36	STORM SEW 10"SP DIP CL 50	FOOT	14		
37	WM 6" DI CL 52, PJ, EZC	FOOT	400		
38	WATER VALVES 6"	EACH	2		
39	W SERV 4 DIA, LONG PART	EACH	1		
40	W SERV 2 DIA, SHORT PART	EACH	2		
41	W SERV 2 DIA , SHORT FULL	EACH	1		
42	ADJ SAN SERV, 8" OR LESS	EACH	3		
43	FIRE HYD W/A V VB & T	EACH	1		
44	DI WATER MAIN FITTING	POUND	100		
45	VV, TY A, 5' DIA, TY 1 FR, CL	EACH	2		
46	FILLING VALVE BOXES	EACH	2		
47	INLET, TY A, 36, TY1 F OL	EACH	2		
48	CB RECONST	EACH	13		
49	FR & LIDS ADJUST SPECIAL	EACH	20		
50	FRAMES AND LIDS	EACH	33		
51	CONC CURB TB	FOOT	2993		
52	COMB CC&G TB6.12	FOOT	2663		
53	NON-SPECIAL WASTE DISP	CU YD	460		
54	SP WASTE PLANS AND REP	LSUM	1		
55	SOIL DISPOSAL ANALYSIS	EACH	2		
56	MOBILIZATION	LSUM	1		
57	TRAFFIC CONTROL AND PRO	LSUM	1		

Local Public Agency	County	Section Number	Route(s) (Street/Road Name)
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58	CONSTRUCTION LAYOUT	LSUM	1		
59	STREET SWEEPING	EACH	10		
60	SIGN PANEL T1	SQ FT	15		
61	METAL POST TY A	FOOT	120		
62	THPL PVT MK LTR & SYM	SQ FT	22		
63	THPL PVT MK LINE 4	FOOT	3365		
64	THPL PVT MK LINE 6	FOOT	305		
65	THPL PVT MK LINE 24	FOOT	68		
66	BICYCLE RACKS	EACH	30		
67	CONCRETE WHEEL STOPS	EACH	8		
68	PRE & POST CON SUB VIDEO	FOOT	500		
				Bidder's Total Proposal	

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.A bid may be declared unacceptable if neither a unit price or total price is shown.

Illinois Department of Transportation

Local Public Agency
Proposal Bid Bond

Local Public Agency	County	Section Number
City of Evanston	Cook	22-00294-00-PK

WE, _____ as PRINCIPAL, and

_____ as SURETY, are held jointly, severally and firmly bound unto the above Local Public Agency (hereafter referred to as "LPA") 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 LPA 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 LPA 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 LPA 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 LPA determines the PRINCIPAL has failed to enter into a formal contract in compliance with any requirements set forth in the preceding paragraph, then the LPA 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 _____ (Month and Year)

Principal

Company Name		Company Name	
Signature	Date	Signature	Date
By:		By:	
Title		Title	

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

Surety

Name of Surety	Signature of Attorney-in-Fact	Date
	By:	

STATE OF IL

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) day of _____ (Month and Year) .

Notary Public Signature

(SEAL)

Date commission expires _____

Local Public Agency	County	Section Number
City of Evanston	Cook	22-00294-00-PK

ELECTRONIC BID BOND

☐ **Electronic bid bond is allowed (box must be checked by LPA 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 LPA 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

Company/Bidder Name

Signature

Date

Title

Illinois Department of Transportation

Apprenticeship and Training Program Certification

Local Public Agency	County	Street Name/Road Name	Section Number
City of Evanston	Cook	Poplar Avenue	23-00294-00-PK

All contractors are required to complete the following certification

☐ For this contract proposal or for all bidding groups in this deliver and install proposal.

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

Illinois Department of Transportation policy, adopted in accordance with the provisions of the Illinois Highway Code, requires this contract to be awarded to the lowest responsive and responsible bidder. The award decision is subject to approval by the Department. In addition to all other responsibility factors, this contract or deliver and install proposal requires all bidders and all bidder's 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:

1. Except as provided in paragraph 4 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.

2. The undersigned bidder further certifies, for work to be performed by subcontract, that each of its subcontractors 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.

3. 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.

4. Except for any work identified above, if any bidder or subcontractor 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 workforces 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 afterward 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

Signature

Date

Title

Address

City

State

Zip Code

Illinois Department of Transportation

Affidavit of Illinois Business Office

Local Public Agency	County	Street Name/Road Name	Section Number
City of Evanston	Cook	Poplar Avenue	22-00294-00-PK

I, _____ of _____ , _____ ,
Name of Affiant | City of Affiant | State of Affiant

being first duly sworn upon oath, state as follows:

1. That I am the _____ of _____ .
Officer or Position | Bidder

2. That I have personal knowledge of the facts herein stated.

3. That, if selected under the proposal described above, _____ , will maintain a business office in the
Bidder

State of Illinois, which will be located in _____ County, Illinois.
County

4. That this business office will serve as the primary place of employment for any persons employed in the construction contemplated by this proposal.

5. That this Affidavit is given as a requirement of state law as provided in Section 30-22(8) of the Illinois Procurement Code.

Signature | Date

Print Name of Affiant

Notary Public

State of IL

County _____

Signed (or subscribed or attested) before me on _____ by
(date)

_____ , authorized agent(s) of
(name/s of person/s)

_____ .
Bidder

Signature of Notary Public

(SEAL)

My commission expires _____

Illinois Department of Transportation

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

CITY OF EVANSTON

SPECIFICATIONS AND BID DOCUMENTS
Construction Bid with Sub-contractors

BID NUMBER: 22-43

For

Poplar Avenue Street and Parking Lot Improvements
June 2, 2022

BID DUE DATE:	**2:00 P.M., Tuesday, July 5, 2022**
VIRTUAL BID OPENING:	**2:15 P.M., Tuesday, July 5, 2022** **Google Meet ID:** meet.google.com/erk-vjyw-pza **Phone Numbers:** (US)+1 617-675-4444 PIN: 491 020 418 0044#
BID BOND:	**5% of Contract Amount**
PERFORMANCE/MATERIAL & LABOR PAYMENT BOND:	**100% of Contract Amount**
CONTRACT PERIOD:	**Contract award through: November 11, 2022**

ELECTRONIC BID SUBMITTAL:
Bid responses will only be accepted electronically
via E-bidding through DemandStar (WWW.DEMANDSTAR.COM)
It is highly recommended that new DemandStar users complete the account setup process prior to project due date/time.

CITY OF EVANSTON
NOTICE TO BIDDERS

Bids will be received by the City's Purchasing Office until 2:00 P.M. local time Tuesday, July 5, 2022 and will be publically read virtually via Google Meets at 2:15 P.M. Interested parties can use the following link: meet.google.com/erk-vjyw-pza or join by phone 617-675-4444 PIN: 491 020 418 0044# to access the virtual bid opening. Effective immediately, the City of Evanston will no longer accept hard copy paper submittals for any solicitation. Responses will only be accepted electronically via E-bidding through DemandStar (www.demandstar.com). Although registration is required, vendors can download solicitations and upload responses for free. Bids shall cover the following:

Poplar Avenue Street and Parking Lot Improvements
Bid Number: 22-43

Work on this project includes the resurfacing of Poplar Avenue and the reconstruction of the adjacent parking lot (City of Evanston Lot #54). Bidders must be prequalified by the Illinois Department of Transportation (IDOT) and present an IDOT issued "Certificate of Eligibility" with the bid proposal.

The above item shall conform to the Invitation for Bids on file in the Purchasing Office. Parties interested in submitting a bid should contact the Purchasing Office to receive a copy of the bid or see the City's website at: www.cityofevanston.org/business/bids-proposals/ or DemandStar at: www.demandstar.com.

The City of Evanston (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 State of Illinois requires under Public Works contracts that the general prevailing rate of wages in this locality be paid for each craft or type of worker hereunder. This requirement is in accordance with The Prevailing Wage Act (820 ILCS 130) as amended. The City of Evanston reserves the right to reject any or all submittals or to accept the submittal(s) deemed most advantageous to the City.

The Evanston City Council also reserves the right to award the contract to an Evanston firm if that firm's bid is within 5% of the low bid.

Each Bidder shall be required to submit with their bid a disclosure of ownership interest statement form in accordance with the provisions of City Code Section 1-18-1 *et seq*. Failure to submit such information will result in the disqualification of such bid.

Linda Thomas
Purchasing Specialist

INSURANCE REQUIREMENTS

TYPE OF INSURANCE	MINIMUM INSURANCE COVERAGE	
	Consequent Death	Bodily Injury and Property Damage
	Each Occurrence	Aggregate
Commercial General Liability including:	$3,000,000	$3,000,000
1. Comprehensive form		
2. Premises - Operations		
3. Explosion & Collapse Hazard		
4. Underground Hazard		
5. Products/Completed Operations Hazard		
6. Contractual Insurance – With an endorsement on the face of the certificate that it includes the "Indemnity" paragraph of the specifications.	**Insurance Certificate Must State: The City Of Evanston is Named as Additional Insured**	
7. Broad Form Property Damage - construction projects only		
8. Independent contractors		
9. Personal Injury		
Automobile Liability Owned, Non-owned or Rented	$ 1,000,000	$1,000,000
Workmen's Compensation and Occupational Diseases As required by applicable laws.		
Employer's Liability		$ 500,000

Thirty day notice of cancellation required on all certificates.

EXHIBIT B

City of Evanston M/W/EBE Policy

A City of Evanston goal is to provide contracting and sub-contracting opportunities to Minority Business Enterprises, Women Business Enterprises, and Evanston Business Enterprises. The goal of the Minority, Women and Evanston Business Enterprise Program (M/W/EBE) is to assist such businesses with opportunities to grow. To assist such growth, the City's goal is to have general contractors utilize M/W/EBEs to perform no less than 25% of the awarded contract.

Firms bidding on projects with the City must work to meet the 25% goal or request a waiver from participation. It is advised that bidders place advertisements requesting sub-contractors and that they email or contact individual firms that would be appropriate to partner in response to the project. For samples of possible advertisements, see the City of Evanston's Business Diversity Section http://www.cityofevanston.org/business/business-diversity/ (Sample Advertisement). If you request a paper copy of the additional documents, it will be available free of charge from the Purchasing Office, 2100 Ridge Road Suite 4200, Evanston, IL 60201.

If a bidder is unable to meet the required M/W/EBE goal, the Bidder must seek a waiver or modification of the goal on the attached forms. Bidder must include:

1. A narrative describing the Bidder's efforts to secure M/W/EBE participation prior to the bid opening.
2. Documentation of each of the assist agencies that were contacted, the date and individual who was contacted, and the result of the conversation (see form)
3. A letter attesting to instances where the bidder has not received inquiries/proposals from qualified M/W/EBEs
4. Names of owners, addresses, telephone numbers, date and time and method of contact of qualified M/W/EBE who submitted a proposal but was not found acceptable.
5. Names of owners, addresses, telephone numbers, date and time of contact of at least 15 qualified M/W/EBEs the bidder solicited for proposals for work directly related to the Bid prior to the bid opening (copies must be attached).

If a bidder is selected with a Sub-contractor listed to meet the M/W/EBE goal, a "monthly utilization report" will be due to the City prior to each payment being issued to the Contractor. This report will include documentation of the name of the firm hired, the type of work that firm performed, etc. Should the M/W/EBE not be paid according to the schedule proposed in this document, the City reserves the right to cancel the contract. Examples of this monthly form can be found on the City's website: http://www.cityofevanston.org/business/business-diversity/ (MWEBE Monthly Utilization Report).

EXHIBIT C

M/W/EBE PARTICIPATION COMPLIANCE FORM

I do hereby certify that

_____ (Name of firm) intends to participate as a Sub-contractor or General Contractor on the project referenced above.

This firm is a (check only one):

_____ Minority Business Enterprise (MBE), a firm that is at least 51% managed and controlled by a minority, certified by a certifying agency within Illinois.

_____ Women's Business Enterprise (WBE), a firm that is at least 51% managed and controlled by a woman, certified by a certifying agency within Illinois.

_____ Evanston Based Enterprise (EBE), a firm located in Evanston for a minimum of one year and which performs a "commercially useful function".

Total proposed price of response $_____

Amount to be performed by a M/W/EBE $_____

Percentage of work to be performed by a M/W/EBE _____%

Information on the M/W/EBE Utilized:

Name _____

Address _____

Phone Number _____

Signature of firm attesting to participation _____

Title and Date _____

Please attach

1. Proper certification documentation if applying as an M/WBE and check the appropriate box below. This M/WBE will be applying with documentation from:

   ❒ Cook County ❒ State Certification
   ❒ Federal Certification ❒ Women's Business Enterprise National Council
   ❒ City of Chicago ❒ Chicago Minority Supplier Development Council

2. Attach business license if applying as an EBE

EXHIBIT C

M/W/EBE UTILIZATION SUMMARY REPORT

The following Schedule accurately reflects the value of each MBE/WBE/EBE sub-agreement, the amounts of money paid to each to date, and this Pay Request. The total proposed price of response submitted is _____.

MBE/WBE/EBE FIRM NAME	FIRM TYPE (MBE/WBE/ EBE)	SERVICES PERFORMED	AMOUNT OF SUB-CONTRACT	PERCENT OF TOTAL CONTRACT AMOUNT
			$	
			$	
			$	
			$	
			$	
			$	
			$	
			$	
			$	
			$	
			$	
			$	
			$	
			$	
			$	
TOTAL			$	

EXHIBIT D

M/W/EBE PARTICIPATION WAIVER REQUEST

I am _____ of _____, and I have authority to
(Title) (Name of Firm)

execute this certification on behalf of the firm. I _____ do
(Name)

hereby certify that this firm seeks to waive all or part of this M/W/EBE partcipation goal

for the following reason(s):

(CHECK ALL THAT APPLY. SPECIFIC SUPPORTING DOCUMENTATION MUST BE ATTACHED.)

_____ 1. No M/W/EBEs responded to our invitation to bid.

_____ 2. An insufficient number of firms responded to our invitation to bid.

For #1 & 2, please provide a narrative describing the outreach efforts from your firm and proof of contacting at least 15 qualified M/W/EBEs prior to the bid opening. Also, please attach the accompanying form with notes regarding contacting the Assist Agencies.

_____ 3. No sub-contracting opportunities exist.

Please provide a written explanation of why sub-contracting is not feasible.

_____ 4. M/W/EBE participation is impracticable.

Please provide a written explanation of why M/W/EBE participation is impracticable.

Therefore, we request to waive _____of the 25% utilization goal for a revised goal of _____%.

Signature:_____ Date: _____
(Signature)

EXHIBIT E

Construction Contractors' Assistance Organizations ("Assist Agencies") Form

AGENCY	DATE CONTACTED	CONTACT PERSON	RESULT OF CONVERSATION
Association of Asian Construction Enterprises (AACE) 5500 Touhy Ave., Unit K Skokie, IL. 60077 Phone: 847-5259693 Perry Nakachii, President			
Black Contractors United (BCU) 400 W. 76th Street Chicago, IL 60620 Phone: 773-483-4000; Fax: 773-483-4150 Email: bcunewera@ameritech.net			
Chicago Minority Business Development Council 105 West Adams Street Chicago, Illinois 60603 Phone: 312-755-8880; Fax: 312-755-8890 Email: info@chicagomsdc.org Shelia Hill, President			
Evanston Minority Business Consortium, Inc. P.O. Box 5683 Evanston, Illinois 60204 Phone: 847-492-0177 Email: embcinc@aol.com			
Federation of Women Contractors 5650 S. Archer Avenue Chicago, Illinois 60638 Phone: 312-360-1122; Fax: 312-360-0239 Email: FWCChicago@aol.com Contact Person: Beth Doria Maureen Jung, President			
Hispanic American Construction Industry (HACIA) 901 W. Jackson, Suite 205 Chicago, IL 60607 Phone: 312-666-5910; Fax: 312-666-5692 Email: info@haciaworks.org			
Women's Business Development Ctr. 8 S. Michigan Ave, Suite 400 Chicago, Illinois 60603 Phone: 312-853-3477 X220; Fax: 312-853-0145 Email: wbdc@wbdc.org Carol Dougal, Director			

PLEASE NOTE: Use of Construction Contractor's Assistance Organization (Assist Agencies") Form and agencies are for use as a resource only. The agencies and or vendors listed are not referrals or recommendations by the City of Evanston.

EXHIBIT G

CERTIFICATION OF BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY (Only if Contract Exceeds $10,000)

This certification is required pursuant to Executive Order 11246 (30 F.R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed sub-contractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or sub-contract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven calendar days after bid opening. No contract shall be awarded unless such report is submitted.

CERTIFICATION OF BIDDER

Name and Address of Bidder (Include ZIP Code)

IRS EMPLOYER I.D. NUMBER 36-_____

1. Bidder has participated in a previous contract or sub-contract subject to the Equal Opportunity Clause. ____Yes ___No

2. Bidder has filed all compliance reports due under applicable instructions. ___Yes ___No

3. Have you ever been or are you being considered for sanction due to violation of Executive Order 11246, as amended? ___Yes ___No

Name:_____

Title: _____

Signature: _____

Date: _____

EXHIBIT H

DISCLOSURE OF OWNERSHIP INTERESTS

City of Evanston Ordinance 15-0-78 requires all persons (APPLICANT) seeking to do business with the City to provide the following information with their bid. Every question must be answered. If the question is not applicable, answer with "NA".

APPLICANT NAME: _____

APPLICANT ADDRESS: _____

TELEPHONE NUMBER: _____

FAX NUMBER: _____

APPLICANT is (**Check One**)

1. Corporation ( ) 2. Partnership ( ) 3. Sole Owner ( ) 4. Association ( )

5. Other ( ) _____

Please answer the following questions on a separate attached sheet if necessary.

SECTION I - CORPORATION

1a. Names and addresses of all Officers and Directors of Corporation.

_____

_____

_____

1b. (Answer only if corporation has 33 or more shareholders.) Names and addresses of all those shareholders owning shares equal to or in excess of 3% of the proportionate ownership interest and the percentage of shareholder interest. (Note: Corporations which submit S.E.C. form 10K may substitute that statement for the material required herein.)

_____

_____

_____

1c. (Answer only if corporation has fewer than 33 shareholders.) Names and addresses of all shareholders and percentage of interest of each herein. (Note: Corporations which submit S.E.C. form 10K may substitute that statement for the material requested herein.)

_____

_____

_____

SECTION 2 - PARTNERSHIP/ASSOCIATION/JOINT VENTURE

2a. The name, address, and percentage of interest of each partner whose interests therein, whether limited or general is equal to or in excess of 3%.

_____

_____

_____

2b. Associations: The name and address of all officers, directors, and other members with 3% or greater interest.

_____

_____

_____

SECTION 3 - TRUSTS

3a. Trust number and institution.

_____

3b. Name and address of trustee or estate administrator.

_____

_____

_____

3c. Trust or estate beneficiaries: Name, address, and percentage of interest in total entity.

_____

_____

_____

SECTION 4 - ALL APPLICANTS - ADDITIONAL DISCLOSURE

4a. Specify which, if any, interests disclosed in Section 1, 2, or 3 are being held by an agent or nominee, and give the name and address of principal.

_____

_____

_____

4b. If any interest named in Section 1, 2, or 3 is being held by a "holding" corporation or other "holding" entity not an individual, state the names and addresses of all parties holding more than a 3% interest in that "holding" corporation or entity as required in 1(a), 1(b), 1(c), 2(a), and 2(b).

_____

_____

_____

4c. If "constructive control" of any interest named in Sections 1, 2, 3, or 4 is held by another party, give name and address of party with constructive control. ("Constructive control" refers to control established through voting trusts, proxies, or special terms of venture of partnership agreements.)

_____

_____

_____

I have not withheld disclosure of any interest known to me. Information provided is accurate and current.

_____ _____

Date Signature of Person Preparing Statement

_____

Title

ATTEST: _____ (Notary Seal)

Notary Public

Commission Expires: _____

EXHIBIT I

ADDITIONAL INFORMATION SHEET

Bid/Proposal Name: _____

Bid/Proposal Number #: _____

Company Name: _____

Contact Name: _____

Address: _____

City,State, Zip: _____

Telephone/FAX: #_____

E-mail: _____

Comments: _____

_____

_____

_____

_____

_____

_____

EXHIBIT J

CERTIFICATE OF COMPLIANCE
WITH PREVAILING WAGE RATE ACT

The undersigned, upon being first duly sworn, hereby certifies to the City of Evanston, Cook, County, Illinois, that all work under this contract shall comply with the Prevailing Wage Rate Act of the State of Illinois, 820 ILCS 130 *et seq*, and as amended by Public Acts 86-799 and 86-693 and current City of Evanston Resolution, with rates to be paid in effect at time work is performed. Contractors shall submit monthly certified payroll records to the city.

Name of Contractor: _____

By: _____

By: State of _____, County of _____

Subscribed and sworn to before me this _____ day

of_____, _____.

Notary Public

EXHIBIT K

MAJOR SUB-CONTRACTORS LISTING

The following Tabulation of Major Sub-contractors shall be attached and made a condition of the Bid. The Bidder expressly understands and agrees to the following provisions:

A. If awarded a Contract as a result of this Bid, the major sub-contractors used in the prosecution of the work will be those listed below.

B. The following list includes all sub-contractors who will perform work representing 5% (five percent) or more of the total Base Bid.

C. The sub-contractors listed below are financially responsible and are qualified to perform the work required.

D. The sub-contractors listed below comply with the requirements of the Contract Documents.

E. Any substitutions in the sub-contractors listed below shall be requested in writing by the Contractor and must be approved in writing by the Owner. All pertinent financial, performance, insurance and other applicable information shall be submitted with the request for substitutions(s). Owner shall respond to such requests within 14 calendar days following the submission of all necessary information to the full satisfaction of the Owner.

Category Number	**Name of Sub-contractor**	**Address and Telephone**

(Attach additional sheets as required)

END OF SECTION

EXHIBIT L

CONFLICT OF INTEREST

_____, hereby certifies that it has conducted an investigation into whether an actual or potential conflict of interest exists between the Bidder, its owners and employees and any official or employee of the City of Evanston.

Bidder further certifies that it has disclosed any such actual or potential conflict of interest and acknowledges if Bidder/proposer has not disclosed any actual or potential conflict of interest, the City of Evanston may disqualify the bid/proposal.

_____

(Name of Bidder/proposer if the Bidder/proposer is an Individual)
(Name of Partner if the Bidder/proposer is a Partnership)
(Name of Officer if the Bidder/proposer is a Corporation)

The above statements must be subscribed and sworn to before a notary public.
Subscribed and Sworn to this _____ day of _____, 20

_____ (Notary Seal)
Notary Public

Commission Expires: _____

EXHIBIT M

SIGNATURE FORM
THE SECTION BELOW MUST BE COMPLETED IN FULL AND SIGNED

The undersigned hereby certifies that they have read and understand the contents of this solicitation and attached service agreements, and agree to furnish at the prices shown any or all of the items above, subject to all instructions, conditions, specifications and attachments hereto. Failure to have read all the provisions of this solicitation shall not be cause to alter any resulting contract or to accept any request for additional compensation. By signing this document, the proposer hereby certifies that they are not barred from bidding on this contract as a result bid rigging or bid rotating or any similar offense (720 ILCS 5/33 E-3, E-4).

Authorized Signature: _____

Company Name: _____

Typed/Printed Name: _____

Date: _____

Title: _____

Telephone Number: _____

E-mail _____

Fax Number: _____

Exhibit N

Contractor Services Agreement Acknowledgement Page

The City has attached its standard contractor services agreement as an exhibit to this bid document. Identify all exceptions to the agreement that would prevent your firm from executing it**. The City shall not consider or negotiate regarding exceptions submitted at any time after the submission of the Bidder's response.** *Please check one of the following statements:*

____I have read the contractor services agreement and plan on executing the agreement without any exceptions.

_____My firm cannot execute the City's standard contractor service agreement unless the exceptions noted below or in the attached sample contractor services agreement are made.

*****Please be aware that submitting exceptions to the contract may impact the likelihood of your firm being selected to perform this work.**

List exceptions in the area below:

_____

_____

_____

_____

_____

_____

_____

_____

_____

Authorized Signature: _____ **Company Name:** _____

Typed/Printed Name and Title: _____ **Date:** _____

Exhibit N

CONTRACTOR SERVICES AGREEMENT

The parties referenced herein desire to enter into an agreement for professional services for

Poplar Avenue Street and Parking Lot Improvements

(BID #22-43)

THIS AGREEMENT (hereinafter referred to as the "Agreement") is entered into between the City of Evanston, an Illinois municipal corporation with offices located at 2100 Ridge Avenue, Evanston Illinois 60201 (hereinafter referred to as the "City"), and *[Insert Contractor name here]*, with offices located at *[Insert Contractor address here]*, (hereinafter referred to as the "Contractor"). Compensation (the "Compensation") for all basic services provided by the Contractor pursuant to the terms of this Agreement shall not exceed $*[Insert fee here]*.

Revision March 2020

TABLE OF CONTENTS

RECITALS

WHEREAS, the City intends to retain the services of a qualified and experienced contractor for the following:

Poplar Avenue Street and Parking Lot Improvements

WHEREAS, this Agreement shall include the following documents which are attached hereto:

a) City of Evanston Bid 22-43, attached as Exhibit A.

b) Contractor's response to Bid 22-43, attached as Exhibit B.

c) Any sub-contractor sub-contracts related to this Agreement, attached as Exhibit C.

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth, the parties agree as follows:

1 Services and Duties of the Contractor

1.1 The Contractor shall perform professional services and provide equipment (the "Work") in accordance with Exhibits A, B, and C. The Contractor retains the right to control the manner of performance of the services provided for in this Agreement and is an independent contractor and not agent or an employee of the City. All employees and sub-contractors of the Contractor shall likewise not be considered to be employees of the City. Contractor is solely responsible for the means and methods of all work performed under the terms of this Agreement for this Project ("the Project"). Contractor is an independent Contractor and is solely responsible for all taxes, withholdings, and other statutory or contractual obligations of any sort, including but not limited to, Worker's Compensation Insurance. Nothing in this Agreement accords any third-party beneficiary rights whatsoever to any non-party to this Agreement that any non-party may seek to enforce. Contractor acknowledges and agrees that should Contractor or its sub-contractors provide false information, or fail to be or remain in compliance with this Agreement; the City may void this Agreement.

1.2 The Contractor warrants and states that it has read the Contract Documents, and agrees to be bound thereby, including all performance guarantees as respects Contractor's work and all indemnity and insurance requirements. Contractor further affirms that it has visited the Project site and has become familiar with all special conditions, if any, at the Project site. Contractor shall perform the Work and its obligations under this Agreement in accordance with and subject to the Contract Documents to the full extent that each such provision is applicable to the Work. Contractor shall take necessary precautions to properly protect the Work of others, if any, from damage caused by operations under this Agreement. In addition, Contractor shall protect the work during normal and adverse weather conditions until the Project is complete and accepted by the City, or until the Contractor has fully completed its work under this Agreement. Contractor's obligations include, but are not limited to, placing and adequately maintaining at or about all locations of Project work, sufficient guards, barricades, lights, and enclosures to protect the Work.

1.3 The Contractor shall not have any public or private interest and shall not acquire directly or indirectly any such interest which conflicts in any manner with the performance of its services under this Agreement.

1.4 The Contractor shall designate, in writing, a person to act as its Project Manager for the work to be performed under this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret and define the Contractor's policies and decisions with respect to the work covered by this Agreement.

1.5 The Contractor shall employ only persons duly licensed by the State of Illinois to perform the professional services required under this Agreement for which applicable Illinois law requires a license, subject to prior approval of the City. The Contractor shall employ only well qualified persons to perform any of the remaining services required under this Agreement, also subject to prior approval of the City. The City reserves the right to require replacement of Contractor, sub-contractor, or supplier personnel for any reason. Contractor will replace the unacceptable personnel at no charge to the City. For all solicitations or advertisements placed by or on behalf of Contractor for employees for this Project it will state that the Contractor is an Equal Opportunity Employer.

1.6 Pursuant to the Illinois Freedom of Information Act, 5 ILCS 140/7(2), records in the possession of others whom the City has contracted with to perform a governmental function are covered by the Act and subject to disclosure within limited statutory timeframes (five (5) working days with a possible five (5) working day extension). Upon notification from the City that it has received a Freedom of Information Act request that calls for records within the Contractor's control, the Contractor shall promptly provide all requested records to the City so that the City may comply with the request within the required timeframe. The City and the Contractor shall cooperate to determine what records are subject to such a request and whether or not any exemption to the disclosure of such records, or part thereof, is applicable. Contractor shall indemnify and defend the City from and against all claims arising from the City's exceptions to disclosing certain records which Contractor may designate as proprietary or confidential. Compliance by the City with an opinion or a directive from the Illinois Public Access Counselor or the Attorney General under FOIA, or with a decision or order of Court with jurisdiction over the City, shall not be a violation of this Section.

1.7 The Contractor shall obtain prior approval from the City prior to sub-contracting with any entity or person to perform any of the work required under this Agreement. The Contractor may, upon request of the City, submit to the City a draft sub-contractor agreement for City review and approval prior to the execution of such an agreement. Any previously entered into sub-contractor agreement(s) are attached as Exhibit C. If the Contractor sub-contracts any of the services to be performed under this Agreement, the sub-contractor agreement shall provide that the services to be performed under any such agreement shall not be sublet, sold, transferred, assigned or otherwise disposed of to another entity or person without the City's prior written consent. The Contractor shall be responsible for the accuracy and quality of any sub-contractor's work.

1.8 The Contractor shall cooperate fully with the City, other City contractors, other municipalities and local government officials, public utility companies, and others, as may be directed by the City. This shall include attendance at meetings, discussions and hearings as requested by the City. This cooperation shall extend to any investigation, hearings or meetings convened or instituted by OSHA relative to this Project, as necessary. Contractor shall cooperate with the City in scheduling and performing its Work to avoid conflict, delay in or interference with the work of others, if any, at the Project.

1.9 The Contractor acknowledges that it shall enforce and comply with all applicable Occupational Safety and Health Administration standards (OSHA) for this Project in effect as of the date of the execution of this Agreement, or as otherwise promulgated by OSHA in the future taking effect during the pendency of this Project. Contractor shall enforce all such standards and ensure compliance thereto as to its own agents and employees, and as to the agents and employees of any sub-contractor throughout the course of this Project. Contractor is solely responsible for enforcing and complying with all applicable safety standards and requirements on this Project, and is solely responsible for correcting any practices or procedures which do not comply with the applicable safety standards and requirements for this Project. Any Project specific safety requirements applicable to this Project must be followed by Contractor and any sub-contractor(s) on the Project. Additionally, all such safety requirements shall be made a part of any sub-contractor agreement.

1.10 The Contractor shall submit to the City a progress report each month this Agreement is in effect. The report shall include the following items:

a) A summary of the Contractor's project activities, and any sub-contractor project activities that have taken place during the invoice period;
b) A summary of the Contractor's project activities and any sub-contractor project activities, that shall take place during the next invoice period;
c) A list of outstanding items due to or from the City; and
d) A status of the Project schedule.

1.11 The Contractor shall perform the work required under this Agreement pursuant to high quality industry standards expected by the City. The Contractor shall apply for and receive all appropriate permits before performing any work in the City. The Contractor shall also provide the appropriate permit drawings for Building Permits to be issued for the Project, if said permits are obligated by the Project. The City will assist the Contractor with obtaining the appropriate building and right-of-way permits.

1.12 The Contractor shall provide drawings of record, in the following 3 electronic formats for all locations where equipment has been installed and/or work has been performed. The electronic formats required by this Section 1.12 are Auto Cad Version 2007, ArcView and PDF.

1.13 Contractor recognizes that proper cleanup and removal of construction debris is an important safety consideration. The Contractor shall be solely responsible for daily construction site/area cleanup and removal of all construction debris in accordance with City-approved disposal

practices. Contractor shall be solely responsible for identifying and removing at its expense all hazardous material and waste which it uses and generates.

1.14 To the extent that there is any conflict between a provision specified in this Agreement, with a provision specified in any of the other Contract Documents, as defined in Section 1.15, this Agreement shall control. The City and the Contractor may amend this Section 1.14 as provided by Section 15 herein.

The Contractor acknowledges and agrees that the City has no retained control over any of the Work done pursuant to this Agreement, and that the City is expressly exempt from the retained control exception as defined in the Restatement of Torts, Second, Section 414. This provision shall survive completion, expiration, or termination of this Agreement.

1.15 The Contract Documents for this Project consist of:

a) This Agreement;
b) The City's Bid, and the plans, specifications, general conditions, drawings addenda, and modifications thereto;
c) The Contractor's response to the Bid;
d) Other exhibits and schedules, if any, listed in this Agreement;
e) Amendments or Other Contract Documents, if any; and
f) Amendments/Modifications to this Agreement issued after execution thereof.

1.16 As a condition of receiving payment, Contractor must (i) be in compliance with the Agreement, (ii) pay its employees prevailing wages when required by law (Examples of prevailing wage categories include public works, printing, janitorial, window washing, building and grounds services, site technician services, natural resource services, security guard and food services). Contractor is responsible for contacting the Illinois Dept. of Labor 217-782-6206; http://www.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx to ensure compliance with prevailing wage requirements), (iii) pay its suppliers and sub-contractors according to the terms of their respective contracts, and (iv) provide lien waivers to the City upon request.

2 Standard Certifications

Contractor acknowledges and agrees that compliance with this section and each subsection for the term of the Agreement is a material requirement and condition of this Agreement. By executing this Agreement, Contractor certifies compliance with this section and each subsection and is under a continuing obligation to remain in compliance and report any non-compliance.

This section, and each subsection, applies to sub-contractors used on this Agreement. Contractor shall include these Standard Certifications in any sub-contract used in the performance of the Agreement.

If this Agreement extends over multiple fiscal years, Contractor and its sub-contractors shall confirm compliance with this section in the manner and format determined by the City by the date

specified by the City and in no event later than January 1 of each year that this Agreement remains in effect.

If the City determines that any certification in this section is not applicable to this Agreement, it may be stricken, subject to sole approval by the City, without affecting the remaining subsections.

2.1 As part of each certification, Contractor acknowledges and agrees that should Contractor or its sub-contractors provide false information, or fail to be or remain in compliance with the Standard Certification requirements, one or more of the following sanctions will apply:

- the Agreement may be void by operation of law,
- the City may void the Agreement, and
- Contractor and its sub-contractors may be subject to one or more of the following: suspension, debarment, denial of payment, civil fine, or criminal penalty.

2.2 By signing this Agreement, the Contractor certifies that it has not been barred from being awarded a contract with a unit of State or local Government as a result of bid rigging or bid rotating or similar offense, nor has it made any admission of guilt of such conduct that is a matter of public record. (720 ILCS 5/33 E-3, E-4).

2.3 In the event of the Contractor's noncompliance with any provision of Section 1-12-5 of the Evanston City Code, the Illinois Human Rights Act or any other applicable law, the Consultant may be declared non-responsible and therefore ineligible for future contracts or sub-contracts with the City, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation.

2.4 During the term of this Agreement, the Contractor agrees as follows:

a) That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, national origin or ancestry, or age or physical or mental disabilities that do not impair ability to work, and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization. Consultant shall comply with all requirements of City of Evanston Code Section 1-12-5.

b) That, in all solicitations or advertisements for employees placed by it on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, national origin, ancestry, or disability.

2.5 The Contractor certifies pursuant to the Illinois Human Rights Act (775 ILCS 5/2*105 et. seq.)*, that it has a written sexual harassment policy that includes, at a minimum, the following information:

a) The illegality of sexual harassment;
b) The definition of sexual harassment under State law;
c) A description of sexual harassment utilizing examples;
d) The Contractor's internal complaint process including penalties;
e) Legal recourse, investigation and complaint process available through the Illinois Department of Human Rights and the Human Rights Commission, and directions on how to contact both; and
f) Protection against retaliation as provided to the Department of Human Rights.

2.6 In accordance with the Steel Products Procurement Act (30 ILCS 565), Contractor certifies steel products used or supplied in the performance of a contract for public works shall be manufactured or produced in the U.S. unless the City grants an exemption.

2.7 Contractor certifies that it is properly formed and existing legal entity and as applicable has obtained an assumed name certificate from the appropriate authority, or has registered to conduct business in Illinois and is in good standing with the Illinois Secretary of State.

2.8 If Contractor, or any officer, director, partner, or other managerial agent of Contractor, has been convicted of a felony under the Sarbanes-Oxley Act of 2002, or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953, Contractor certifies at least five years have passed since the date of the conviction.

2.9 Contractor certifies that if more favorable terms are granted by Contractor to any similar governmental entity in any state in a contemporaneous agreement let under the same or similar financial terms and circumstances for comparable supplies or services, the more favorable terms will be applicable under this Agreement.

2.10 Contractor certifies that it is not delinquent in the payment of any fees, fines, damages, or debts to the City of Evanston.

2.11 The Contractor certifies that all Design Professionals performing the Work under this Agreement will ensure that the Project shall be designed in conformance with the Americans with Disabilities Act of 1990, 42 U.S.C. Section 12101, *et seq.*, and all regulations promulgated thereunder. Design Professional means any individual, sole proprietorship, firm, partnership, joint venture, corporation, professional corporation, or other entity that offers services under the Illinois Architecture Practice Act of 1989 (225 ILCS 305/), the Professional Engineering Practice Act of 1989 (225 ILCS 325/), the Structural Engineering Licensing Act of 1989 (225 ILCS 340/), or the Illinois Professional Land Surveyor Act of 1989 (225 ILCS 330/).

2.12 The Contractor shall comply with all federal, state and local laws, statutes, ordinances, rules, regulations, orders or other legal requirements now in force or which may be in force during the term of this Agreement. The Contractor shall comply with the Illinois Human Rights Act, 775 ILCS 5/1-101 *et. seq*, Title VII of the Civil Rights Act of 1964, and the Illinois Prevailing Wage Act, 820 ILCS 130/0.01 *et. seq.*

3 Additional Services/Change Orders

3.1 If the representative of the City responsible for the Project verbally requests the Contractor to perform additional services, the Contractor shall confirm in writing that the services have been requested and that such services are additional services. Failure of the City to respond to the Contractor's confirmation of said services within thirty (30) calendar days of receipt of the notice shall be deemed a rejection of, and refusal to pay for the additional services. Contractor shall not perform any additional services until City has confirmed approval of said additional services in writing. If authorized in writing by the City, the Contractor shall furnish, or obtain from others, additional services of the following types, which shall be paid for by the City as set forth in Section 9 of this Agreement:

a) Additional Services due to significant changes in scope of the Project or its design, including, but not limited to, changes in size, complexity or character of construction, or time delays for completion of work when such delays are beyond the control of the Contractor;
b) Revisions of previously approved studies, reports, design documents, drawings or specifications;
c) Preparation of detailed renderings, exhibits or scale models for the Project;
d) Investigations involving detailed consideration of operations, maintenance and overhead expenses for the preparation of rate schedules, earnings and expense statements, feasibility studies, appraisals and valuations, detailed quantity surveys of material and labor, and material audits or inventories required for certification of force account construction performed by the City;
e) Services not otherwise provided for in this Agreement.

3.2 The City may, upon written notice, and without invalidating this Agreement, require changes resulting in the revision or abandonment of work already performed by the Contractor, or require other elements of the work not originally contemplated and for which full compensation is not provided in any portion of this Agreement. Any additional services, abandonment of services which were authorized by the City, or changes in services directed by the City which result in the revision of the scope of services provided for in Exhibits A, B, C, and D that cause the total Compensation due Contractor under this Agreement to exceed $25,000 or more, or increase or decrease the contract duration by more than 30 days are subject to approval by the Evanston City Council. These actions must be addressed either in a written Change Order or in a written amendment to this Agreement approved by both parties.

3.3 Contractor acknowledges and agrees that the Public Works Construction Change Order Act, 50 ILCS 525/1 et seq. shall apply to all Change Orders for the Project. It is expressly understood and agreed to by Contractor that it shall not be entitled to any damages or Compensation from the City on account of delay or suspension of all or any part of the Work. Contractor acknowledges that delays are inherent in construction projects and Contractor assessed that risk and fully included that risk assessment within its contract sum specified in its Response to the City Bid for this Project. The City shall not compensate Contractor for work that is more difficult than the

contract sum specified in its Response would reflect. Delays to minor portions of the Work will not be eligible for extensions of time.

Delays to the Project caused by labor disputes or strikes involving trades not directly related to the Project, or involving trades not affecting the Project as a whole will not be eligible for an extension of time.

The City will not grant an extension of time for a delay by the Contractor's inability to obtain materials unless the Contractor first furnishes to the City documentary proof. The proof must be provided in a timely manner in accordance with the sequence of the Contractor's operations and accepted construction schedule.

In addition to any other changes requested by City (as described in Sections 3.1 and 3.2), the Company shall be entitled to request (and the City may grant) Change Orders with respect to:

(a) The City-caused delays;
(b) Change in Law;
(c) Force Majeure Events.

The foregoing events shall entitle the Contractor to a change in the Compensation for this Project, if the Contractor demonstrates that it will unavoidably incur reasonable costs as a result thereof and the Contractor provides reasonable and detailed documentary support with respect to any such price impact.

The parties agree to reasonably confer regarding any such disputes with respect to the issuance of a Change Order.

Any payment for compensable delay will only be based upon actual costs excluding, without limitation, what damages, if any, the Contractor may have reasonably avoided. The Contractor understands that this is the sole basis for recovering delay damages and explicitly waives any right to calculate daily damages for office overhead, profit, or other purported loss.

All Contractor Change Orders authorized under this Section 3 shall be made in writing. In remitting a Change Order, the Contractor must first show in writing that:

(a) The work was outside the scope of this Agreement,
(b) The extra work was not made necessary due to any fault of Contractor;
(c) The circumstances said to necessitate the change in performance were not reasonably foreseeable at the time the Agreement was signed;
(d) The change is germane to the original Agreement; and
(e) The Change Order is in the best interest of the City and authorized by law.

Any person who fails to first obtain the City's written authorization for a Change Order commits a Class 4 felony. The written determination and the written Change Order resulting from

that determination shall be preserved in the contract's file which shall be open to the public for inspection.

The City reserves all rights and causes of action, at law or equity, to seek redress against entities or persons who violate the requirements of this Section 3. By initialing below, Contractor hereby acknowledges that it is bound by this Section 3.

Contractor's Initials: _____

3.4 The Contractor is required to include the City of Evanston as a reference whenever and wherever the Contractor provides references for similar projects for a period of one (1) year from the date of Final Acceptance by the City of the Work for this Project.

4 Bonds

4.1 Before the Scheduled Construction Commencement Date, the Contractor is required to furnish unconditional performance and payment bonds in the amount of 100% of the Compensation as security for the faithful performance and completion of all the Contractor's obligations under the Contract Documents and covering the payment of all materials used in the performance of this Agreement and for all labor and services performed under this Agreement. All Bonds shall be issued on a form acceptable to the City. The bonds must be for the entire term of the Agreement. Failure to provide these bonds shall constitute a breach of Contractor's obligations under this Agreement. Each surety providing the Bonds must have a Best's rating not less than A/X and be licensed in Illinois and shall be named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 as published in the Federal Register and available on the website of the U.S. Department of the Treasury, Financial Management Service, at www.fms.treas.gov/c570/c570.html. All Bonds signed by an agent must be accompanied by a certified copy of his or her authority to act. It shall be the duty of the Contractor to advise the surety or sureties of any Change Orders that result in an increase to the Compensation and to ensure that the amounts of the Bonds are updated to reflect and cover any such increases throughout the course of the Project. The cost of such Bonds shall be included within the Compensation.

4.2 If the surety behind any Bond furnished by the Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in the State or it ceases to meet any of the requirements of this Contract, the Contractor shall, within [5] five days thereafter, substitute another Bond of equivalent value and surety, both of which must be acceptable to the City. In addition, no further progress payments under the Agreement will be made by the City until the Contractor complies with the provisions of this Agreement. The Contractor shall furnish to the City proof of any required bonds and proof of required insurance as one of the conditions precedent to payment under the Agreement. Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment or performance of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or authorize a copy to be furnished. All surety Bonds provided for in this Section shall incorporate by reference this Agreement, and any language that may be in any such surety Bond which conflicts with the provisions of this Agreement that define the

scope of the surety(‘s) duty(ies) shall be of no force and effect.

5 Liquidated Damages in the Event Contractor Fails to Complete the Work

5.1 The parties agree that failure of Contractor to timely complete the Work required by this Agreement constitutes a default. The parties agree that this default will result in damage and injury to City. The parties further agree, however, that actual damages incurred by City as result of such default is difficult if not impossible to ascertain with any degree of certainty or accuracy. Accordingly, the parties have negotiated and have agreed that for each calendar day after written notice is delivered to Contractor and Contractor fails to cure such default, that Contractor will pay City, as and for liquidated damages, and not as a penalty, the sum of **Seven Hundred and Fifty Dollars per day**. Contractor shall reimburse the City for all costs, expenses and fees (including, without limitation, attorneys’ fees), if any, paid by the City in connection with such written demand by City. Contractor stipulates and agrees that the sums payable by Contractor under this Section are reasonable under the circumstances existing as of the execution of this Agreement. This Section 5.1 is not intended to limit any direct damages that may be recoverable by City related to the Contractor's failure to complete the Work in accordance with this Agreement. There shall be no early completion bonus if the Work is completed before the substantial completion date. The City, at its option, may withhold liquidated damages from progress payments payable to Contractor before the substantial completion date.

6 The City’s Responsibilities

6.1 The City may evaluate the Contractor’s and any sub-contractor’s performance (interim and final). Timeliness in meeting the Project schedule and the overall relationship with the Contractor are factors that will be considered in the Contractor’s performance rating. An unfavorable performance rating may be a factor when future assignments are being considered.

6.2 The City makes no representation or warranty of any nature whatsoever as to the accuracy of information or documentation provided by the City to the Contractor which were generated or provided by third parties.

7 Period of Service

7.1 The Contractor shall commence work on the Project after supplying the City with the Contractor’s performance and payment bonds and all required insurance documents before starting its Work on this Project. The City shall determine when the Contractor has completed the Work required pursuant to this Agreement, and shall determine the date of Final Acceptance. Contractor recognizes time is of the essence regarding its performance on this Project. Contractor shall continue to perform its obligations while any dispute concerning the Agreement is being resolved, unless otherwise directed by the City.

7.2 Each phase of the project shall be completed in accordance with the activities outlined in the City's Bid 22-43, Exhibit A.

8 Payment for Services and Reimbursements

8.1 Within the first five (5) business days of each month, the Contractor shall invoice the City for Work completed during the previous month. The Contractor shall provide a detailed invoice that relates invoiced items to the Contractor's response to Bid 22-43 in both quantity and unit cost. Any discrepancies in the monthly invoice shall be promptly brought to the attention of the Contractor by the City Project Manager and efforts shall be made to promptly resolve said discrepancies between the City and Contractor. In the event the City and Contractor cannot resolve invoice discrepancies, items in dispute will be removed from the invoice and the City shall approve the remainder of the invoice. Payment will be made as soon as possible following the City Council meeting in which the item appeared on the bills list, and in accordance with all applicable laws and rules of the City of Evanston and the State of Illinois.

8.2 In the event of termination by the City of this Agreement pursuant to paragraph 9.1 after completion of any phase of the basic services, fees due the Contractor for services rendered through such phase shall constitute final payment for such services, and no further fees shall be due to the Contractor. In the event of such termination by the City during any phase of the basic services, the Contractor shall be paid for services rendered on the basis of the proportion of work completed on the phase to date of termination.

8.3 The City shall have the right to withhold payment to the Contractor due to the quality of a portion or all of the work performed hereunder which is not in accordance with the requirements of this Agreement, or which is unsatisfactory, or is due to the Contractor's failure or refusal to perform any of its obligations hereunder. Compensation in excess of the total contract amount specified in this Agreement will not be allowed unless justified in the City's sole judgment and authorized in advance as provided for in Section 3 of this Agreement. Compensation for improper performance by the Contractor is disallowed.

8.4 Upon completion of the Work performed by the Contractor, prior to the submission of a request for final payment, the City and Contractor shall perform a final acceptance test and review of the Work performed and/or equipment installed pursuant to the Agreement. A punch list of items outstanding will be jointly developed by the City and Contractor. In addition, the Contractor shall submit drawings of record for the Project for the City to approve. The Contractor shall promptly resolve all punch list items to the satisfaction of the City, and shall transmit to the City in writing confirmation that all punch list items have been resolved. The City will review, and the Contractor shall modify, as necessary, any drawings of record to the satisfaction of the City. Punch list items and drawings of record must be approved by the City prior to the Contractor submitting its final invoice for payment.

8.5 The Contractor shall submit an Affidavit and a final waiver of its lien, and all final waivers of liens of any sub-contractors, suppliers, and sub-sub-contractors, if applicable, with its final invoice, stating that all obligations incurred in performance of the professional services have been paid in full. The Affidavit will also include a statement stating that the professional services

were performed in compliance with the terms of the Agreement. The Affidavit and all final lien waivers shall be on a form acceptable to the City.

8.6 All Project invoices shall be sent to:

Chris Venatta
City of Evanston
2100 Ridge Avenue
Evanston, Illinois 60201

9 Notice and Cure/Termination

9.1 In furtherance of Contractor's Work on this Project, the City and the Contractor agree that the following Notice and Cure provision in this Section 9.1 shall apply during the duration of Contractor's work on this Project, in addition to the reserved rights of the City enumerated in this Agreement as follows:

5.1 Liquidated Damages;
8.3 City's right to withhold payment;
16.2 Contractor's duty to revise and correct errors; and
16.3 Contractor's duty to respond to City's notice of errors and omissions.

The City may notify Contractor of its intent to terminate this Agreement within (7) seven calendar days of issuance by the City of written notice to Contractor's Project Manager regarding defects in the Project or in Contractor's Work. The City shall specify any such nonconforming Work or defects in the Project in its notice to Contractor under this Section 9.1. Contractor will have the opportunity to cure the non-conforming Work within (7) seven calendar days after receipt of the written notice issued by the City. All such curative work done shall be performed and completed to the City's satisfaction. Nothing in this Section 9.1 shall otherwise affect the City's right to exercise its rights in Section 9.2.

9.2 The City shall have the right to terminate this Agreement upon fifteen (15) days written notice for any reason. Mailing of such notice shall be equivalent to personal notice and shall be deemed to have been given at the time of receipt.

Payments made by the City pursuant to this Agreement are subject to sufficient appropriations made by the City of Evanston City Council. In the event of termination resulting from non-appropriation or insufficient appropriation by the City Council, the City's obligations hereunder shall cease and there shall be no penalty or further payment required.

9.3 Within thirty (30) days of termination of this Agreement, the Contractor shall turn over to the City any documents, drafts, and materials, including but not limited to, outstanding work product, data, studies, test results, source documents, AutoCAD Version 2007, ArcView, PDF, Word, Excel spreadsheets, technical specifications and calculations, and any other such items specifically identified by the City related to the Work herein. Upon receipt of said items, the

Contractor shall be paid for labor and expenses incurred to the date of termination as provided in Section 8.2. This Agreement is subject to termination by either party if either party is restrained by a state or federal court of competent jurisdiction from performing the provisions of this Agreement. Upon such termination, the liabilities of the parties to this Agreement shall cease, but they shall not be relieved of the duty to perform their obligations through the date of termination. No lien shall be filed by the Contractor in the event of a termination of this Agreement by the City.

9.4 If, because of death or any other occurrence, including, but not limited to, Contractor becoming insolvent, it becomes impossible for any principal or principals of the Contractor to render the services set forth in this Agreement, neither the Contractor, nor its surviving principals shall be relieved of their obligations to complete the professional services. However, in the event of such an occurrence, the City at its own option may terminate this Agreement if it is not furnished evidence that competent professional services can still be furnished as scheduled.

9.5 In the event of an emergency or threat to the life, safety or welfare of the citizens of the City, the City shall have the right to terminate this Agreement without prior written notice.

10 Insurance

10.1 The Contractor shall, at its own expense, secure and maintain in effect throughout the duration of this contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by the Contractor, its agents, representatives, employees or sub-contractors. Contractor acknowledges and agrees that if it fails to comply with all requirements of this Section 10, the City may void the Agreement.

The Contractor must give to the City Certificates of Insurance identifying the City to be an Additional Insured for all Work done pursuant to this Agreement before City staff recommends award of the contract to City Council. Any limitations or modifications on the Certificate(s) of Insurance issued to the City in compliance with this Section that conflict with the provisions of this Section 10 shall have no force and effect.

After award of the Contract to Contractor (contracts over $500,000 in value or if the project is deemed high risk) the Contractor **shall** give the City a certified copy (ies) of the insurance policy (ies) evidencing the amounts set forth in Section 10.2, and copies of the Additional Insured endorsement to such policy (ies) which name the City as an Additional Insured for all Work done pursuant to this Agreement before Contractor does any Work pursuant to this Agreement. Contractor's certificate of insurance shall contain a provision that the coverage afforded under the policy(s) will not be canceled or reduced without thirty (30) days prior written notice (hand delivered or registered mail) to the City. Contractor shall promptly forward new certificate(s) of insurance evidencing the coverage(s) required herein upon annual renewal of the subject policies.

The policies and the Additional Insured endorsement must be delivered to the City within two (2) weeks of the request. All insurance policies shall be written with insurance companies licensed or authorized to do business in the State of Illinois and having a rating of not less than A-VII

according to the A.M. Best Company. Should any of the insurance policies be canceled before the expiration date, the issuing company will mail thirty (30) days written notice to the City. The Contractor shall require and verify that all sub-contractors maintain insurance meeting all of the requirements stated herein.

Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officers, officials, employees and volunteers; or the Contractor shall provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration and defense expenses.

10.2 Contractor shall carry and maintain at its own cost with such companies as are reasonably acceptable to City all necessary liability insurance (which shall include as a minimum the requirements set forth below) during the term of this Agreement, for damages caused or contributed to by Contractor, and insuring Contractor against claims which may arise out of or result from Contractor's performance or failure to perform the Services hereunder:

a) Worker's compensation in statutory limits and employer's liability insurance in the amount of at least five hundred thousand dollars ($500,000);
b) Comprehensive general liability coverage which designates the City as an additional insured for not less than three million dollars ($3,000,000) combined single limit for bodily injury, death and property damage, per occurrence;
c) Comprehensive automobile liability insurance covering owned, non-owned, and leased vehicles for not less than one million dollars ($1,000,000) combined single limit for bodily injury, death, or property damage, per occurrence; and

Contractor understands that the acceptance of Certificates of Insurance, policies, and any other documents by the City in no way releases the Contractor and its sub-contractors from the requirements set forth herein.

Contractor expressly agrees to waive its rights, benefits and entitlements under the "Other Insurance" clause of its commercial general liability insurance policy as respects the City. Contractor expressly agrees that its insurance coverage is required to be primary by this Agreement, that its insurance coverage shall be on a primary and non-contributory basis, and that it and its insurance carrier are estopped from denying such coverage is primary. In the event Contractor fails to purchase or procure insurance as required above, the parties expressly agree that Contractor shall be in default under this Agreement, and that the City may recover all losses, attorney's fees and costs expended in pursuing a remedy, or reimbursement, at law or in equity, against Contractor.

11 Indemnification

11.1 The Contractor shall defend, indemnify and hold harmless the City and its officers, elected and appointed officials, agents, and employees from any and all liability, losses, or damages as a result of claims, demands, suits, actions, or proceedings of any kind or nature, including but not limited to costs, and fees, including attorney's fees, judgments or settlements, resulting from or

arising out of any negligent or willful act or omission on the part of the Contractor or Contractor's sub-contractors, employees, agents or sub-contractors during the performance of this Agreement. Such indemnification shall not be limited by reason of the enumeration of any insurance coverage herein provided. This provision shall survive completion, expiration, or termination of this Agreement.

11.2 Nothing contained herein shall be construed as prohibiting the City, or its officers, agents, or employees, from defending through the selection and use of their own agents, attorneys, and experts, any claims, actions or suits brought against them. The Contractor shall be liable for the costs, fees, and expenses incurred in the defense of any such claims, actions, or suits. Nothing herein shall be construed as a limitation or waiver of defenses available to the City and employees and agents, including but not limited to the Illinois Local Governmental and Governmental Employees Tort Immunity Act, 745 ILCS 10/1-101 *et seq.*

At the City Corporation Counsel's option, Contractor must defend all suits brought upon all such Losses and must pay all costs and expenses incidental to them, but the City has the right, at its option, to participate, at its own cost, in the defense of any suit, without relieving Contractor of any of its obligations under this Agreement. Any settlement of any claim or suit related to this Project by Contractor must be made only with the prior written consent of the City Corporation Counsel, if the settlement requires any action on the part of the City.

To the extent permissible by law, Contractor waives any limits to the amount of its obligations to indemnify, defend, or contribute to any sums due under any Losses, including any claim by any employee of Contractor that may be subject to the Illinois Workers Compensation Act, 820 ILCS 305/1 *et seq.* or any other related law or judicial decision, including but not limited to, *Kotecki v. Cyclops Welding Corporation,* 146 Ill. 2d 155 (1991). The City, however, does not waive any limitations it may have on its liability under the Illinois Workers Compensation Act, the Illinois Pension Code or any other statute.

11.3 The Contractor shall be responsible for any losses and costs to repair or remedy work performed under this Agreement resulting from or arising out of any act or omission, neglect, or misconduct in the performance of its Work or its sub-contractors' work. Acceptance of the work by the City will not relieve the Contractor of the responsibility for subsequent correction of any such error, omissions and/or negligent acts or of its liability for loss or damage resulting therefrom.

11.4 All provisions of this Section 11 shall survive completion, expiration, or termination of this Agreement.

12 Drawings and Documents

12.1 Any drawings, survey data, reports, studies, specifications, estimates, maps, plans, computations, and other documents required to be prepared by the Contractor for the Project shall be considered Works for Hire and the sole property of the City.

12.2 The Contractor and its sub-contractor shall maintain for a minimum of three (3) years

after the completion of this Agreement, or for three (3) years after the termination of this Agreement, whichever comes later, adequate books, records and supporting documents to verify the amounts, recipients and uses of all disbursements of funds passing in conjunction with the Agreement. The Agreement and all books, records and supporting documents related to the Agreement shall be available for review and audit by the City and the federal funding entity, if applicable, and the Contractor agrees to cooperate fully with any audit conducted by the City and to provide full access to all materials. Failure to maintain the books, records and supporting documents required by this Subsection shall establish a presumption in favor of the City for recovery of any funds paid by the City under the Agreement for which adequate books, records, and supporting documentation are not available to support their purported disbursement.

13 Successors and Assigns

13.1 The City and the Contractor each bind themselves and their partners, successors, executors, administrators, and assigns to the other party of the Agreement and to the partners, successors, executors, administrators, and assigns of such other party in respect to all covenants of this Agreement. Neither the City nor the Contractor shall assign, sublet, or transfer its interest in this Agreement without the written consent of the other. Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of any public body, which may be a party hereto, nor shall it be construed as giving any right or benefits hereunder to anyone other than the City and the Contractor.

14 Force Majeure

14.1 Whenever a period of time is provided for in this Agreement for the Contractor or the City to do or perform any act or obligation, neither party shall be liable for any delays or inability to perform if such delay is due to a cause beyond its control and without its fault or negligence including, without limitation:

a) Acts of nature;
b) Acts or failure to act on the part of any governmental authority other than the City or Contractor, including, but not limited to, enactment of laws, rules, regulations, codes or ordinances subsequent to the date of this Agreement;
c) Acts or war;
d) Acts of civil or military authority;
e) Embargoes;
f) Work stoppages, strikes, lockouts, or labor disputes;
g) Public disorders, civil violence, or disobedience;
h) Riots, blockades, sabotage, insurrection, or rebellion;
i) Epidemics or pandemics;
j) Terrorist acts;
k) Fires or explosions;
l) Nuclear accidents;
m) Earthquakes, floods, hurricanes, tornadoes, or other similar calamities;
n) Major environmental disturbances; or
o) Vandalism.

If a delay is caused by any of the *force majeure* circumstances set forth above, the time period shall be extended for only the actual amount of time said party is so delayed. Further, either party claiming a delay due to an event of *force majeure* shall give the other party written notice of such event within three (3) business days of its occurrence or it shall be deemed to be waived.

15 Amendments and Modifications

15.1 Except as otherwise provided herein, the nature and scope of Work specified in this Agreement may only be modified by a written Change Order, or a written amendment to this Agreement, approved by both parties. This Agreement may be modified or amended from time to time provided, however, that no such amendment or modifications shall be effective unless reduced to writing and duly authorized and signed by the authorized representatives of the parties.

16 Standard of Care & Warranty

16.1 The Contractor shall perform all of the provisions of this Agreement to the satisfaction of the City. The City shall base its determination of the Contractor's fulfillment of the scope of the work in accordance with generally accepted professional standards applicable to the Work for this Project. The Contractor shall perform all of the provisions of this Agreement with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar conditions.

16.2 The Contractor shall be responsible for the accuracy of its professional services under this Agreement and shall promptly make revisions or corrections resulting from its errors, omissions, or negligent acts without additional compensation. The City's acceptance of any of the Contractor's professional services shall not relieve the Contractor of its responsibility to subsequently correct any such errors or omissions. If a Contractor has provided the City with specifications for this Project which are determined to be incorrect or which require revision during the solicitation process (including but not limited to Requests for Proposals, Requests for Qualifications, or bids), the Contractor shall make such corrections or revisions to the specifications at no cost to the City. Further, upon receipt of an invoice from the City, the Contractor shall promptly reimburse the City for the reasonable costs associated with the preparation and dissemination of said corrections or revisions to appropriate parties, including but not limited to preparation of the corrected or revised documents, and printing and distribution costs.

16.3 During the pendency of its Work on this Project, the Contractor shall respond to the City's notice of any errors or omissions within twenty-four (24) hours. The Contractor shall be required to promptly visit the Project site(s) if directed to by the City.

16.4 The Contractor shall comply with all federal, state, and local statutes, regulations, rules, ordinances, judicial decisions, and administrative rulings applicable to its performance under this Agreement.

16.5 Contractor guarantees and warrants to the City that:

a) All materials and equipment furnished under this Agreement shall be of good quality and new, unless otherwise required or permitted by the Contract Documents;
b) The Work of this Agreement shall be free from defects which are not inherent in the quality required; and
c) The Work shall comply with the requirements set forth in the Contract Documents.

This warranty and guarantee shall be for a period of one (1) year from the date of completion and Final Acceptance of the Work by the City, or as otherwise provided in the Contract Documents.

If, within the one year warranty period, after the Contractor has received a final payment under this Agreement, any of the Work is found to be not be in accordance with the requirements of this Agreement, or where defects in materials or workmanship may appear, or be in need of repair, the Contractor shall correct non-conforming and/or defective work or materials promptly after receipt of written notice from the City. Contractor shall immediately at its own expense repair, replace, restore, or rebuild any such Work. This remedy is in addition to any other legal or equitable remedies the City may have under this Agreement or the law.

This guarantee and warranty shall not relieve Contractor of liability for latent defects, and shall be in addition to the City's rights under the law or other guarantees or warranties, express or implied.

16.6 The provisions of this Section 16 shall survive the completion, expiration or termination of this Agreement.

17 Savings Clause

17.1 If any provision of this Agreement, or the application of such provision, shall be rendered or declared invalid by a court of competent jurisdiction, or by reason of its requiring any steps, actions, or results, the remaining parts or portions of this Agreement shall remain in full force and effect.

18 Non-Waiver of Rights

18.1 No failure or delay by the City to exercise any power given to it hereunder or to insist upon strict compliance by Contractor with its obligations hereunder, nor any payment made by the City under this Agreement, shall constitute a waiver of the City's right to demand strict compliance with the terms hereof, unless such waiver is in writing and signed by the City.

19 Entire Agreement

19.1 This Agreement sets forth all the covenants, conditions and promises between the parties with regard to the subject matter set forth herein. There are no covenants, promises, agreements, conditions or understandings between the parties, either oral or written, other than those

contained in this Agreement. This Agreement has been negotiated and entered into by each party with the opportunity to consult with its counsel regarding the terms therein. No portion of the Agreement shall be construed against a party due to the fact that one party drafted that particular portion as the rule of *contra proferentem* shall not apply.

20 Governing Law

20.1 This Agreement shall be construed in accordance with and subject to the laws and rules of the City of Evanston and the State of Illinois both as to interpretation and performance. Venue for any action arising out of or due to this Agreement shall be in Cook County, Illinois. The City shall not enter into binding arbitration to resolve any dispute related to this Agreement. The City does not waive tort immunity by entering into this Agreement.

21 Ownership of Contract Documents

21.1 Contractor is specifically prohibited from using in any form or medium, the name or logo of the City for public advertisement, unless expressly granted written permission by the City. Submission or distribution of documents to meet official regulatory requirements or for similar purposes in connection with this Project is not to be construed as publication in derogation of the City's reserved rights.

22 Notice

22.1 Any notice required to be given by this Agreement shall be deemed sufficient if made in writing and sent by certified mail, return receipt requested, or by personal service, to the persons and addresses indicated below or to such other addresses as either party hereto shall notify the other party of in writing pursuant to the provisions of this Subsection:

City of Evanston Project Manager, Bid 22-43
2100 Ridge Avenue
Evanston, Illinois 60201

if to the Contractor:

_____
_____
_____

22.2 Mailing of such notice as and when provided above shall be equivalent to personal notice and shall be deemed to have been given at the time of mailing.

23 Severability

23.1 Except as otherwise provided herein, the invalidity or unenforceability of any particular provision, or part thereof, of this Agreement shall not affect the other provisions, and this Agreement shall continue in all respects as if such invalid or unenforceable provision had not been

contained herein.

24 Execution of Agreement

24.1 This Agreement shall be signed last by the City Manager.

25 Counterparts

25.1 For convenience, this Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original.

26 Authorizations

26.1 The Contractor's authorized representatives who have executed this Agreement warrant that they have been lawfully authorized by the Contractor's board of directors or its bylaws to execute this Agreement on its behalf. The City Manager affirms that he/she has been lawfully authorized to execute this Agreement. The Contractor and the City shall deliver upon request to each other copies of all articles of incorporation, bylaws, resolutions, ordinances, or other documents which evidence their legal authority to execute this Agreement on behalf of their respective parties.

27 Time of Essence

27.1 Time is of the essence with respect to each provision hereof in which time is a factor.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed by their duly authorized representatives. The effective date of this Agreement will be the date this Agreement is signed by the City Manager.

CONTRACTOR

By: _____

Name: _____

Its: _____

Date: _____

CITY OF EVANSTON

By: _____
Kelley Gandurski
Its: Interim City Manager Date: _____

Approved as to form:

By: _____
Nicholas Cummings
Its: Corporation Counsel

Revision: March 2020

EXHIBIT N

BDE SPECIAL PROVISIONS
For the April 29, 2022 and June 17, 2022 Lettings

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

File Name	#		Special Provision Title	Effective	Revised
80099	1	☐	Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2022
* 80274	2	☐	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2022
80192	3	☐	Automated Flagger Assistance Device	Jan. 1, 2008	
80173	4	☐	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
80426	5	☐	Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	Jan. 1, 2022
80436	6	☐	Blended Finely Divided Minerals	April 1, 2021	
80241	7	☐	Bridge Demolition Debris	July 1, 2009	
5026I	8	☐	Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
5048I	9	☐	Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
5049I	10	☐	Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
5053I	11	☐	Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
80384	12	☐	Compensable Delay Costs	June 2, 2017	April 1, 2019
80198	13	☐	Completion Date (via calendar days)	April 1, 2008	
80199	14	☐	Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80293	15	☐	Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	July 1, 2016
80311	16	☐	Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
80261	17	☑	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80434	18	☐	Corrugated Plastic Pipe (Culvert and Storm Sewer)	Jan. 1, 2021	
80029	19	☐	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	March 2, 2019
80229	20	☐	Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
80433	21	☐	Green Preformed Thermoplastic Pavement Markings	Jan. 1, 2021	Jan. 1, 2022
80422	22	☐	High Tension Cable Median Barrier	Jan. 1, 2020	Jan. 1, 2022
* 80443	23	☐	High Tension Cable Median Barrier Removal	April 1, 2022	
* 80444	24	☑	Hot-Mix Asphalt – Patching	April 1, 2022	
80442	25	☐	Hot-Mix Asphalt – Start of Production	Jan. 1, 2022	
80438	26	☐	Illinois Works Apprenticeship Initiative – State Funded Contracts	June 2, 2021	Sept. 2, 2021
80411	27	☐	Luminaires, LED	April 1, 2019	Jan. 1, 2022
80045	28	☐	Material Transfer Device	June 15, 1999	Jan. 1, 2022
80418	29	☐	Mechanically Stabilized Earth Retaining Walls	Nov. 1, 2019	Nov. 1, 2020
80430	30	☑	Portland Cement Concrete – Haul Time	July 1, 2020	
3426I	31	☐	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2022
80395	32	☐	Sloped Metal End Section for Pipe Culverts	Jan. 1, 2018	
80340	33	☐	Speed Display Trailer	April 2, 2014	Jan. 1, 2022
80127	34	☐	Steel Cost Adjustment	April 2, 2004	Jan. 1, 2022
80397	35	☐	Subcontractor and DBE Payment Reporting	April 2, 2018	
80391	36	☐	Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
80437	37	☐	Submission of Payroll Records	April 1, 2021	
80435	38	☐	Surface Testing of Pavements – IRI	Jan. 1, 2021	Jan. 1, 2022
80410	39	☐	Traffic Spotters	Jan. 1, 2019	
20338	40	☐	Training Special Provisions	Oct. 15, 1975	Sept. 2, 2021
80318	41	☐	Traversable Pipe Grate for Concrete End Sections	Jan. 1, 2013	Jan. 1, 2018
80429	42	☐	Ultra-Thin Bonded Wearing Course	April 1, 2020	Jan. 1, 2022
80439	43	☐	Vehicle and Equipment Warning Lights	Nov. 1, 2021	
80440	44	☐	Waterproofing Membrane System	Nov. 1, 2021	
80302	45	☐	Weekly DBE Trucking Reports	June 2, 2012	Nov. 1, 2021
80427	46	☑	Work Zone Traffic Control Devices	Mar. 2, 2020	
80071	47	☐	Working Days	Jan. 1, 2002	

The following special provisions are in the 2022 Standard Specifications and Recurring Special Provisions.

File Name	Special Provision Title	New Location(s)	Effective	Revised
80425	Cape Seal	Sections 405, 1003	Jan. 1, 2020	Jan. 1, 2021
80387	Contrast Preformed Plastic Pavement Marking	Articles 780.08, 1095.03	Nov. 1, 2017	
80402	Disposal Fees	Article 109.04(b)	Nov. 1, 2018	
80378	Dowel Bar Inserter	Articles 420.03, 420.05, 1103.20	Jan. 1, 2017	Jan. 1, 2018
80421	Electric Service Installation	Articles 804.04, 804.05	Jan. 1, 2020	
80415	Emulsified Asphalts	Article 1032.06	Aug. 1, 2019	
80423	Engineer's Field Office and Laboratory	Section 670	Jan. 1, 2020	
80417	Geotechnical Fabric for Pipe Underdrains and French Drains	Articles 1080.01(a), 1080.05	Nov. 1, 2019	
80420	Geotextile Retaining Walls	Article 1080.06(d)	Nov. 1, 2019	
80304	Grooving for Recessed Pavement Markings	Articles 780.05, 780.14, 780.15	Nov. 1, 2012	Nov. 1, 2020
80416	Hot-Mix Asphalt – Binder and Surface Course	Sections 406, 1003, 1004, 1030, 1101	July 2, 2019	Nov. 1, 2019
80398	Hot-Mix Asphalt – Longitudinal Joint Sealant	Sections 406, 1032	Aug. 1, 2018	Nov. 1, 2019
80406	Hot-Mix Asphalt – Mixture Design Verification and Production (Modified for I-FIT)	Sections 406, 1030	Jan. 1, 2019	Jan. 2, 2021
80347	Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Sections 406, 1030	Nov. 1, 2014	July 2, 2019
80383	Hot-Mix Asphalt – Quality Control for Performance	Sections 406, 1030	April 1, 2017	July 2, 2019
80393	Manholes, Valve Vaults, and Flat Slab Tops	Articles 602.02, 1042.10	Jan. 1, 2018	Mar. 1, 2019
80424	Micro-Surfacing and Slurry Sealing	Sections 404, 1003	Jan. 1, 2020	Jan. 1, 2021
80428	Mobilization	Article 671.02	April 1, 2020	
80412	Obstruction Warning Luminaires, LED	Sections 801, 822, 1067	Aug. 1, 2019	
80359	Portland Cement Concrete Bridge Deck Curing	Articles 1020.13, 1022.03	April 1, 2015	Nov. 1, 2019
80431	Portland Cement Concrete Pavement Patching	Articles 701.17(e)(3)b, 1001.01(d), 1020.05(b)(5)	July 1, 2020	
80432	Portland Cement Concrete Pavement Placement	Article 420.07	July 1, 2020	
80300	Preformed Plastic Pavement Marking Type D - Inlaid	Articles 780.08, 1095.03	April 1, 2012	April 1, 2016
80157	Railroad Protective Liability Insurance (5 and 10)	Article 107.11	Jan. 1, 2006	
80306	Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Section 1031	Nov. 1, 2012	Jan. 2, 2021
80407	Removal and Disposal of Regulated Substances	Section 669	Jan. 1 2019	Jan. 1, 2020
80419	Silt Fence, Inlet Filters, Ground Stabilization and Riprap Filter Fabric	Articles 280.02, 280.04, 1080.02, 1080.03, 1081.15	Nov. 1, 2019	July 1, 2021
80408	Steel Plate Beam Guardrail Manufacturing	Article 1006.25	Jan. 1, 2019	
80413	Structural Timber	Article 1007.03	Aug. 1, 2019	
80298	Temporary Pavement Marking	Section 703, Article 1095.06	April 1, 2012	April 1, 2017
80409	Traffic Control Devices – Cones	Article 701.15(a), 1106.02(b)	Jan. 1, 2019	
80288	Warm Mix Asphalt	Sections 406, 1030, 1102	Jan. 1, 2012	April 1, 2016
80414	Wood Fence Sight Screen	Article 641.02	Aug. 1, 2019	April 1, 2020

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

- Bridge Demolition Debris
- Building Removal - Case I
- Building Removal – Case II
- Building Removal - Case III
- Building Removal-Case IV
- Completion Date
- Completion Date Plus Working Days
- DBE Participation
- Railroad Protective Liability Insurance
- Training Special Provisions
- Working Days

Illinois Department of Transportation

Check Sheet for Recurring Special Provisions

Local Public Agency	County	Section Number
City of Evanston	Cook	22-00294-00-PK

☐ **Check this box for lettings prior to 01/01/2022.**

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

Recurring Special Provisions

Check Sheet #		Reference Page No.
1	☐ Additional State Requirements for Federal-Aid Construction Contracts	1
2	☐ Subletting of Contracts (Federal-Aid Contracts)	4
3	☐ EEO	5
4	☐ Specific EEO Responsibilities Non Federal-Aid Contracts	15
5	☐ Required Provisions - State Contracts	20
6	☐ Asbestos Bearing Pad Removal	26
7	☐ Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal	27
8	☐ Temporary Stream Crossings and In-Stream Work Pads	28
9	☒ Construction Layout Stakes	29
10	☐ Use of Geotextile Fabric for Railroad Crossing	32
11	☐ Subsealing of Concrete Pavements	34
12	☐ Hot-Mix Asphalt Surface Correction	38
13	☒ Pavement and Shoulder Resurfacing	40
14	☐ Patching with Hot-Mix Asphalt Overlay Removal	41
15	☐ Polymer Concrete	43
16	☐ PVC Pipeliner	45
17	☐ Bicycle Racks	46
18	☐ Temporary Portable Bridge Traffic Signals	48
19	☐ Nighttime Inspection of Roadway Lighting	50
20	☐ English Substitution of Metric Bolts	51
21	☐ Calcium Chloride Accelerator for Portland Cement Concrete	52
22	☒ Quality Control of Concrete Mixtures at the Plant	53
23	☒ Quality Control/Quality Assurance of Concrete Mixtures	61
24	☐ Digital Terrain Modeling for Earthwork Calculations	77
25	☐ Preventive Maintenance - Bituminous Surface Treatment (A-1)	79
26	☐ Temporary Raised Pavement Markers	85
27	☐ Restoring Bridge Approach Pavements Using High-Density Foam	86
28	☐ Portland Cement Concrete Inlay or Overlay	89
29	☐ Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	93
30	☐ Longitudinal Joint and Crack Patching	96
31	☐ Concrete Mix Design - Department Provided	98
32	☐ Station Numbers in Pavements or Overlays	99

Local Public Agency	County	Section Number
City of Evanston	Cook	22-00294-00-PK

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

Check Sheet #			Page No.
LRS 1		**Reserved**	101
LRS 2	☐	Furnished Excavation	102
LRS 3	☒	Work Zone Traffic Control Surveillance	103
LRS 4	☒	Flaggers in Work Zones	104
LRS 5	☒	Contract Claims	105
LRS 6	☒	Bidding Requirements and Conditions for Contract Proposals	106
LRS 7	☐	Bidding Requirements and Conditions for Material Proposals	112
LRS 8		**Reserved**	118
LRS 9	☒	Bituminous Surface Treatments	119
LRS 10		**Reserved**	123
LRS 11	☒	Employment Practices	124
LRS 12	☒	Wages of Employees on Public Works	126
LRS 13	☒	Selection of Labor	128
LRS 14	☐	Paving Brick and Concrete Paver Pavements and Sidewalks	129
LRS 15	☒	Partial Payments	132
LRS 16	☐	Protests on Local Lettings	133
LRS 17	☐	Substance Abuse Prevention Program	134
LRS 18	☐	Multigrade Cold Mix Asphalt	135
LRS 19	☐	Reflective Crack Control Treatment	136

EXHIBIT O

BID BOND SUBMITTAL LABEL

CUT AND ATTACH LABEL ON OUTSIDE OF SEALED BID BOND SUBMITTAL

✂----------

BID SUBMITTAL NUMBER: _____

BID SUBMITTAL NAME: _____

_____

BID SUBMITTAL DUE DATE/TIME: _____

COMPANY NAME: _____

COMPANY ADDRESS: _____

COMPANY TELEPHONE #: _____

✂----------

If required by the bid documents, a scanned copy of the bid bond must be included with the bid electronic submission. The City is currently not able to accept a certified check, bank cashier's check or electronic bid bond at this time.

The original bid bond (in the amount of 5% of the original bid amount) must be mailed within ten (10) days after the bid due date, to the City of Evanston Purchasing Department, 2100 Ridge Avenue - Room 4200 Evanston, Illinois 60201 Attention Purchasing Manager using the USPS (certified or priority), UPS or FedEx mail options in order to have a tracking number; which sum shall be forfeited in case the successful bidder fails to enter into a binding contract and provide a properly executed contract and surety bond within 15 days after the date the contract is awarded by the City.

Illinois Department of Transportation

Special Provisions

Local Public Agency	County	Section Number
City of Evanston	Cook	22-00294-00-PK

The following Special Provision supplement the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2022, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures of Materials" in effect on the date of invitation of bids, and the Supplemental Specification and Recurring Special Provisions indicated on the Check Sheet included here in which apply to and govern the construction of the above named section, and in case of conflict with any parts, or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

Instructions for BLR 11310

This form shall be used as the starting paragraph for the special provision packet included in Federal Aid, Township Bridge (TBP) and Motor Fuel Tax (MFT) roadway improvement and maintenance projects. For more information see Chapter 11 of the Bureau of Local Roads and Street Manual (BLRS Manual).

STATE OF ILLINOIS

City of Evanston

CONTRACT SPECIFICATIONS

For

Poplar Avenue Street and Parking Lot Improvements

Bid Number: 22-43

CITY OF EVANSTON

SPECIAL PROVISIONS

Poplar Avenue Street and Parking Lot Improvments
Bid Number: 22-43

TABLE OF CONTENTS

CITY OF EVANSTON

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", Adopted January 1, 2022, (herein after called "the Standard Specifications"), the latest edition of the "Watershed Management Ordinance" of the Metropolitan Water Reclamation District of Greater Chicago, the latest edition of the Standard Specifications for Water and Sewer Construction in Illinois, the latest edition of the "Manual of Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures of Materials" in effect on the date of invitation of bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to the govern the construction of,

Poplar Avenue Street and Parking Lot Improvements
Bid Number: 22-43

and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

PROJECT DESCRIPTION
Work on this project includes the resurfacing of Poplar Avenue, the reconstruction of the adjacent parking lot (City of Evanston Lot #54), and water main improvements.

COMPLETION DATES
A contract is anticipated to be awarded by the City of Evanston on July 25, 2022. This contract has a substantial completion of **October 28, 2022** and a final completion date on **November 11, 2022.**

MATERIAL TESTING/INSPECTION
Add the following paragraphs to Article 106.01:
All materials incorporated in this Contract are to be inspected according to IDOT's QC/QA programs per the Project Procedures Guidelines (PPG). The latest version is available on the IDOT website at: http://www.idot.illinois.gov/Assets/uploads/files/Doing-Business/Manuals-Guides-&-Handbooks/Highways/Materials/PPG.pdf. All material incorporated into the work shall originate from IDOT approved sources (as required by PPG) and/or be accompanied by sufficient IDOT approved evidence of material inspection. All mix designs for PCC and HMA shall be submitted to the Engineer with QC Plans for review and approval.

The contractor will provide the QC for all work and the City will perform QA according to PPG guidelines.

DEFINITION OF TERMS
Add the following sentences to Article 101.16:
"The Engineer will have the rights and authority assigned in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents."

Add the following sentence to Article 101.28:

“The terms ‘Plans’ and ‘Drawings’ have like meaning and are used interchangeably in the Contract Documents.”

Add the following sentence to Article 101.29:
“The terms ‘Proposal’ and ‘Bid’ have like meaning and are used interchangeably in the Contract Documents.”

Add the following sentence to Article 101.30:
“The terms ‘Proposal Guaranty’ and ‘Bid Bond’ have like meaning and are used interchangeably in the Contract Documents.”

Add Article 101.56, which shall read as follows:
“**101.56 Addenda.** Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the Contract Documents, Drawings, and Specifications, by additions, deletions, clarifications or corrections.”

Add Article 101.57, which shall read as follows:
“**101.57 Award Authority.** The terms 'State, Department, Council, City, Village, Owner, Municipality' or other words used to describe the Awarding Authority in these documents and the Specifications shall be interpreted to mean the City of Evanston.”
Add Article 101.58, which shall read as follows:
“**101.58 Bonds.** Bid, Performance, and Payment Bonds and other instruments of security, furnished by the Contractor and his surety in accordance with the Contract Documents.”

Add Article 101.59, which shall read as follows:
“**101.59 Change Order.** A written order to the CONTRACTOR authorizing an addition, deletion or revision in the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the CONTRACT PRICE OR CONTRACT TIME.”

Add Article 101.60, which shall read as follows:
“**101.60 Contract Price.** The total monies payable to the CONTRACTOR under the terms and conditions of the CONTRACT DOCUMENTS.”

Add Article 101.61, which shall read as follows:
“**101.61 Drawings.** The part of the CONTRACT DOCUMENTS which show the characteristics and scope of the WORK to be performed and which have been prepared by or approved by the ENGINEER.”

Add Article 101.63, which shall read as follows:
“**101.63 Purchase Order.** Written communication issued by the OWNER to the CONTRACTOR authorizing him to proceed with the WORK and establishing the date of commencement of the WORK.”

Add Article 101.64, which shall read as follows:
“**101.64 Project.** The undertaking to be performed as provided in the CONTRACT DOCUMENTS.”

Add Article 101.65, which shall read as follows:
“**101.65 Shop Drawings.** All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, manufacturer, SUPPLIER or distributor, which illustrate how specific portions of the WORK shall be fabricated or installed.”

Add Article 101.66, which shall read as follows:
"**101.66 Substantial Completion.** That date as certified by the Engineer when the construction of the Project is sufficiently completed, in accordance with the Contract Documents, so that the Project can be utilized for the purposes for which it is intended. For this project, substantial completion shall be accomplished when all work is completed except placement of sod, landscaping items, and punch list items.

Add Article 101.67, which shall read as follows:
"**101.67 Supplemental Standard Specifications.** Modifications to the Standard Specifications."

Add Article 101.68, which shall read as follows:
"**101.68 Supplier.** Any person or organization who supplies materials or equipment for the Work, including that fabricated to a special design, but who does not perform labor at the site."

Add Article 101.69, which shall read as follows:
"**101.69 Written Notice.** Any notice to any party of the Agreement relative to any part of the Agreement in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at his last given address, or delivered in person to said party or his authorized representative on the Work."

ADVERTISEMENT, BIDDING, AWARD AND CONTRACT EXECUTION
Delete Article 102.01 and replace it with the following:
"**102.01 Procedures to be in Accordance with Rules.** The procedures for the advertisement, bidding, award and contract execution shall be in accordance with these Specifications."

Add Article 102.02, which shall read as follows:
"**102.02 Examination of Site.** There is no warranty or guaranty, either expressed or implied, that the provided subsurface information will disclose the actual conditions which will be encountered during the progress of the Work. Bidders shall examine the site, interpret or disregard subsurface information as they see fit, and arrive at their own conclusions regarding the nature, character, quality, and quantity of subsurface conditions likely to be encountered. By submitting their Bids, Bidders attest that they have fully complied with these requirements and made their own conclusions regarding subsurface conditions, which are reflected in their Bids. Bidders further attest that, should they be awarded construction Contract(s) for the Project, they shall neither have nor assert against the Owner or Engineer any claims for damages, for extra work, or for relief from any obligation of this Contract based upon deficiencies in the subsurface information provided or failure by the Owner to furnish other subsurface information or knowledge in Owner's or Engineer's possession, if any.

Bidders will be permitted to make test borings, test pits, soundings, or other investigations on the site of the Work which they so desire subject to approval by the Owner. Bidders wishing to make such investigations shall coordinate the intended site investigations with Mr. Chris Venatta, Senior Project Manager, Capital Planning and Engineering Bureau, Public Works Agency, City of Evanston; forty-eight (48) hours' notice prior to the intended investigation will be required. Bidders shall be responsible for coordination with JULIE and other utility companies, and shall be required to have an insurance coverage as indicated in the specifications with the Owner and Engineer as additional insured on a non-contributory basis. It shall be understood that the party or parties receiving such approval shall assume all risks and liability contingent thereto, and shall be responsible for restoring the site to its original condition before the investigation, including site clean-up."

SCOPE OF WORK

Delete Article 104.04 and replace it with the following:

"**104.04 Maintenance of Detours.** Maintenance of Detours that may be required in the Work shall be performed by the Contractor. Work shall be performed in accordance with Section 107 of the Standard Specifications and as modified by the Special Provisions. The Owner must approve all detours and road closures. Such approval will not be unreasonably withheld, but all requests must be submitted with supporting data such as the projected duration of the closure and detour routes. The Owner may require the use of signage with specific street names identifying the detour route."

Delete Article 104.05 in its entirety.

Add Article 104.08, which shall read as follows:

"**104.08 Intent of Plans and Specifications.** Any minor work not specifically mentioned in the Specifications or not shown on the Plans, but necessary for the proper completion of the Work shall be considered as being a part of and included in the Contract and shall be executed in the proper manner, and the Contractor shall not be entitled to extra or additional compensation for the same. The Work quantities listed on the Bid Schedule, Drawings, Attachment A Schedule and elsewhere in the Contract Documents are approximate and are intended for comparison of Bids only and do not constitute a "guaranty" of the amount of Work to be performed. Actual Work quantities may vary significantly. Payment shall be made only for the amount of each Payment Item quantity actually installed. Measurement and payment for Work shall be in accordance with the Standard Specifications as modified herein by Special Provision. The price Bid for each Payment Item shall include all work required to complete the Item including a proportionate allocation of Contractor overhead and profit, and shall not include costs more properly allocated to other Payment Items."

Add Article 104.09, which shall read as follows:

"**104.09 Record Plans (Record Drawings).** The Contractor shall keep a complete up-to-date record of the actual construction of the Work in accordance with the special provision for Submittals."

CONTROL OF WORK

Add the following paragraph to Article 105.01

"The Engineer shall have no authority to suspend the Work, wholly or in part, for any reason. All rights conferred onto the Engineer for suspending the Work by Standard Specification Articles 105.01 and 108.07 shall be the sole right of the Owner."

Delete Article 105.05 and replace with the following:

"The documents forming the Contract Documents, as listed in the Agreement, are complementary, and the work called for by one is as binding upon the parties as if it was called for by all. In the event of conflict between the Contract Documents, the interpretation of the Engineer shall govern. Generally, the Engineer will resolve conflicts in a manner which will yield the greater quality in the Work. In the interpretation of any conflict between the Contract Documents, the following order of precedence shall govern:

- Evanston General Conditions
- Bid Form
- Addenda
- Instruction to Bidders

- Special Provisions
- Drawings/Plans
- Standard Specifications – Illinois Department of Transportation
- Other Referenced Specifications
- Other documents included in the Contract Documents by specific reference in the Agreement."

Delete the first paragraph of Article 105.06 and replace it with the following:
"The Contractor will be furnished, free of charge, 2 full-size sets of Drawings, and 2 sets of the Contract Documents. Any additional full size sets or random sheets will be furnished at a cost of $3.00 per drawing sheet and $0.50 per Contract Document sheet. The IDOT Standard Specifications will not be furnished and the Contractor shall obtain those specifications on his own directly from IDOT."

Add the following paragraphs to Article 105.06:
"On or within fifteen (15) calendar days from the date on the Purchase Order, the Contractor shall identify the person who will act as Project Superintendent in writing to the OWNER. The Project Superintendent is required to attend monthly meetings to discuss the Project status."

Add the following sentences to the first paragraph of Article 105.07:
"The Drawings depict the locations of various existing underground utilities, including gas mains, electric duct lines, telephone lines, cable TV lines, sewers, and water mains. The information shown on the Drawings has been determined from the best available information, including field surveys and/or the records of the parent utility companies. Such information may or may not be accurate. Other underground utilities may also be present. As such, the Owner and Engineer assume no responsibility in the event that, during construction, utilities other than those shown are encountered or that actual locations of those utilities shown are different from the locations designated on the Drawings.

Delete Article 105.09 of the Standard Specifications and replace it with the following:
"**105.09 Survey Control Points.** The primary vertical and horizontal control points for the Work are shown on the Drawings. Using this reference control, the Contractor shall take the necessary topography, locate all earthwork and structures, and establish all grades necessary for the accomplishment of the Work. The Contractor shall carefully preserve all marks, reference points and stakes established, and, in the case of their destruction, such points, marks or stakes shall be replaced by the Contractor at his expense. The Contractor shall also be responsible for any mistakes caused by their loss or disturbance.

Any monuments that are disturbed by construction operations shall be reset by the Contractor in accordance with generally accepted engineering and surveying practice. Property corners, fences, or any other indications of property lines shall be referenced by the Contractor prior to construction and reset by the Contractor after completion of construction in accordance with generally accepted engineering and surveying practice.

Prior to establishing the working control, the Contractor shall provide, at the Engineer's request, sufficient copies of an illustration of the working control relative to pertinent construction. The Engineer will check all forms prior to placing concrete. All checking by the Engineer will be independent. The sole intent of the Engineer's checking of working controls, forms and other

references shall be to provide greater assurance to the Owner that the Work, when completed, will be in General conformance with the Contract Documents. The Contractor shall be solely responsible for the correctness and adequacy of Work controls."

Delete Article 105.10 and replace it with the following:
"**105.10 Authority of Engineer.** The Engineer, as the Owner's representative, will administer the Contract and observe, survey, monitor, and judge the performance of the Contractor. The Engineer will perform technical inspections of work performed by the Contractor and shall have authority to reject, in writing, all work and materials which do not comply with the Contract Documents.

The Engineer, as the Owner's representative, will interpret the Contract Documents. The Engineer will decide questions which arise in the execution of the Work or in the interpretation of the Contract Documents. The Engineer's decision or interpretations shall be final, unless the Contractor appeals to the Owner in writing within fifteen (15) calendar days after the decision or interpretation.

Neither the Engineer's authority to act under this Section, or elsewhere in the Contract Documents, nor any decision made by the Engineer in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of the Engineer to the Contractor; any Subcontractor; any supplier, manufacturer, fabricator, distributor, vendor, or any other person or organization performing any of the Work, or to any surety for any of them.
The use of terms, such as, but not limited to: "approval", "judgment", "requirement", or "direction" shall not be effective to assign to the Engineer any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions herein; shall not be construed in any manner to relieve the Contractor of any of its responsibilities under the Contract Documents; nor, shall be construed to create duties on the part of the Engineer or the Owner toward the Contractor.

The Engineer will not be responsible for the Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, and the Engineer will not be responsible for the Contractor's failure to perform or furnish the Work in accordance with the Contract Documents.

The Engineer will not be responsible for the acts or omissions of the Contractor or of any Subcontractor; any supplier, manufacturer, fabricator, distributor, vendor, or of any other person or organization performing or furnishing any of the Work. It is agreed and understood that the Contractor is solely responsible for supervising the Work and for safety at the site of the Work as provided for in Article 105.14."

Delete Article 105.11 in its entirety.

Add the following paragraph to Article 105.12:
"The Contractor agrees that representatives of the Owner, Engineer, Illinois Environmental Protection Agency, and the Metropolitan Water Reclamation District of Greater Chicago shall have access to the Work whenever it is in preparation or progress and that the Contractor shall provide facilities for access and inspection."

Add Article 105.14, which shall read as follows:
"**105.14 Job-Site Safety.** The Contractor is solely responsible at all times for safety at the job site. The Contractor shall implement whatever protection measures are necessary to fully protect his

work forces, the work forces of his suppliers and subcontractors, and the general public from construction activities. Any and all safety regulations and other provisions of applicable Federal, State and local laws and building and construction codes shall be observed.

The Drawings do not include standards or guidelines for construction safety. The Contractor shall be responsible for the adequacy and safety of all construction methods and the safe prosecution of the Work, including, but not limited to: forms, falsework, scaffolding, trench protection, protective barricades, protective rails, and warning lights. It is expressly stipulated that any examination and/or approval by the Engineer of the Contractor's plans for such items as well as for any other items needed for the prosecution of the Work will cover only general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Such examination and/or approval by the Engineer shall not relieve the Contractor from full and complete responsibility for safe prosecution of the Work at all times and for obtaining satisfactory results. Requirements for safety-related work tasks presented in Project Drawings and Specifications, such as traffic control, represent the minimum level of protection which must be implemented. Depending on the Contractor's means and methods, these protection measures may or may not be fully adequate to protect Project work forces or the general public. As such, the Contractor is solely responsible for and is required to implement whatever additional protection measures may be necessary to fully protect the Project work force and the general public.

Nothing in the foregoing paragraphs shall be construed as relieving the Contractor from full responsibility for safe prosecution of the Work at all times. In the event the Owner, Engineer or their representatives are held by a court or administrative body to be liable for personal injuries or damages to property arising from deficiencies in job-site safety, the Contractor shall promptly indemnify and hold them harmless there from.

The Contractor shall follow the latest Center for Disease Control and Prevention guidelines when entering the home of residents."

Add the following Article 105.15, which shall read as follows:
"**105.15 Official Contact.** All official notices required to be delivered to the City of Evanston under the terms of this Contract shall be sent to the following representative of the City:

Mr. Chris Venatta, Senior Project Manager
Capital Planning & Engineering Bureau, Public Works Agency
City of Evanston
2100 Ridge Avenue,
Evanston, IL 60201
(847) 866-2967

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC
Delete the first paragraph of Article 107.04 and replace it with the following:
"Owner will obtain approvals of the construction plans from the Metropolitan Water Reclamation District of Greater Chicago (MWRD or MWRDGC) and the Illinois Environmental Protection Agency (IEPA). The Contractor shall at his own expense obtain all required construction permits, licenses, insurance, and other appurtenant approvals or permissions for the execution of this Work; give all necessary notices; pay all fees required; fulfill all permit requirements, including construction standards, bond requirements, and insurance requirements; and, comply with all rules, regulations, ordinances, and laws relating to the Work and to the preservation of public health and safety."

Add the following sentences to Article 107.08:
"Suitable toilet facilities shall be provided at the job site. The facilities and the location of same shall be approved by the Owner and shall be kept in a clean and sanitary condition. Sanitary sewer manholes or construction trenches may not be used for toilet facilities."

Delete the first sentence of Article 107.09 and replace it with the following:
"The Contractor shall notify the Engineer at least thirty (30) days in advance of the starting of any construction work which might in any way inconvenience or endanger traffic, so arrangements can be made, if necessary, for closing the road and providing suitable detours."

Add the following paragraphs to Article 107.09:
"The Contractor shall identify and obtain, at their own expense, other sites for storage of materials and equipment. Sites shall be approved by the Owner and shall conform to City zoning and land use regulations.

Contractors shall confine all work activities to the public right-of-ways, except areas designated as tree protection zones and in areas required to be accessed for the purpose of lead water service line replacements to a point located within a home. If, for their convenience, Contractors wish to conduct work activities outside public right-of-ways, including storage of equipment and materials, Contractors shall obtain written permission from affected property owners prior to proceeding with these work activities. Costs of obtaining permission, permits, easements, site preparation, site maintenance, site restoration, and all other expenses associated with work outside right-of-ways, easements, and properties fully executing Property Owner Agreement Forms for full lead water service replacement, shall be borne by the Contractors at no additional expense to the Owner.

Construction materials may not be placed or stored along City streets and other public areas more than five (5) calendar days prior to their planned incorporation into the Project. Excess materials to be incorporated into the Project, including pipe, backfill materials, and other construction materials, not incorporated into the Project shall be removed from the construction site by the end of each day and shall be disposed of in accordance with these Specifications. Temporary storage of materials shall not interfere with curb line storm drainage. Reclaimed construction materials shall be moved to the Contractor's storage areas. Excess spoils shall be removed at the end of each day.

Excess construction equipment not actively engaged in daily work operations shall be stored only in the Contractor's storage areas and not along City streets. Tracked construction equipment shall be moved from place to place in the City only on rubber-tired trailers. "Walking" of tracked equipment between construction areas is expressly prohibited. Refueling trucks shall not be parked on City streets and shall be returned to the Contractor's storage area when not in use. The Contractor shall provide off-street parking for personal vehicles belonging to his employees, supplier's employees, and subcontractor's employees. These vehicles may not be parked along City streets or in Work areas. No trailers and/or connex containers will be allowed to be stored on/in the City of Evanston R.O.W.

Electrical power for construction operations outside normal project hours shall be obtained through temporary power drops from Commonwealth Edison facilities. The Contractor shall not use engine-driven generators for power at work sites or use other engine-driven equipment outside normal project work hours, including, but not limited to: pumps and compressors, except in emergency situations.

The Contractor shall provide receptacles as necessary at construction areas for depositing waste paper and garbage; and, shall empty these receptacles regularly. The Contractor shall keep the construction site and his storage sites neat and shall promptly clean up any debris that accumulates. All waste materials shall be hauled to a legal waste disposal site of the Contractor's choice.

The Contractor shall conduct his operations so that access to homes and other buildings is maintained at all times when Contractor is not working at that specific location. The Contractor shall cooperate in efforts to notify home and other building owners as to when direct vehicular access to their property will be curtailed and the approximate length of time of such curtailment. Written and/or vocal notification shall be given to affected residents or tenants of the properties not less than 24 hours prior to access curtailment. The Contractor shall maintain access for emergency vehicles to all parts of the construction area at all times.

Where water service connections are made, the Contractor shall not place spoil on the parkway.

The Contractor shall provide for and maintain the flow in all sewers, drains, building or inlet connections and all water-courses which may be met with during the progress of the Work. He shall not allow the contents of any sewer, drain, or inlet connection to flow into trenches, sewers, or other structures to be constructed under the Contract and shall immediately remove and cart away from the vicinity of the Work all offensive matter. The Contractor shall not disrupt the function of individual sanitary services for more than four continuous hours. If construction operations are anticipated to disrupt individual services for more than four hours, the Contractor shall provide for temporary sanitary service for the duration of the disruption.

The Contractor shall provide for and maintain the flow in all water mains or services which may be met with during the progress of the Work. When water mains or services are to be disturbed to the extent that the water will be shut-off, the City of Evanston Utilities Department and all parties being served by the lines involved shall be notified in accordance with Article 561.03, giving them the time and duration of the shut-off period. In cases involving disruption of fire hydrants, the City of Evanston Fire Department shall also be notified in accordance with Article 561.03. The Contractor shall not disrupt the function of individual water services for more than four continuous hours. If construction operations are anticipated to disrupt individual services for more than four hours, the Contractor shall provide for temporary water service for the duration of the disruption.

The Contractor shall promptly notify the proper utility company and all other effected parties of any damage to water, gas, electric, telephone, sewer, and other utility lines and connections caused by the Contractor’s operations. The damage shall be immediately repaired at the Contractor's expense. In the case of an accidental breaking of a water main or service line, the repairs of such a break shall have priority over all other operations. The parties whose services are affected by the break shall be notified at once and all assistance given to supply emergency water where necessary by temporary lines, tank truck, or other means. The Contractor shall maintain an appropriate inventory of the materials for emergency repairs. In the case of an accidental breakage of a street light cable, the Contractor shall submit for approval a licensed electrical contractor to repair any and all damage to the existing street light cables.

The Contractor shall not allow travel upon any street, park, roadway, or alley to be hindered or inconvenienced needlessly, nor shall the same be wholly obstructed without the written permission of the Owner thereof. No construction vehicles shall be driven through or shall be parked in alleys unless so approved by the Engineer. Construction traffic shall be routed on major City through-streets. Construction traffic on minor streets shall be limited as much as is practical. All street

closures must be approved by Engineer.

When traffic must be obstructed, the Contractor shall provide proper traffic control as accepted by the Engineer and Owner by placing clearly worded signs announcing such fact with proper barricades, at the nearest cross-streets on each side of such obstructed portion, where travel can pass around the obstruction in the shortest and easiest way. "No parking" signs must be approved by the Engineer and must be POSTED AND DATED at least 48 hours before the intended date of use. "No Parking" signs are to be purchased from the Owner. If vehicles are still parked in "No Parking" areas identified by the Contractor, the Contractor shall notify the Engineer who will contact the Evanston Police to have the vehicles towed away. No towing of vehicles shall be done by the Contractor.

Driveways to fire department buildings, driveways to medical buildings, and driveways to businesses required for continuance of their commerce shall be kept open and maintained in passable conditions at all times unless modified by agreement between the Contractor and the property owner. All agreements between the Contractor and private property owners must be in writing to be considered binding. The Contractor shall give reasonable notice to the owners of all private driveways before interfering with them. Daily construction operations shall be terminated at such locations that the operations of driveways are not obstructed. Driveways shall be passable between the hours of 6:00 p.m. and 9:00 am.

Delete Article 107.17 and replace it with the following:
"**107.17 Use of Explosives**

(a) General

Blasting and other uses of explosives will not be permitted under this Contract."

Delete Article 107.18 and replace it with the following:
"**107.18 Use of Fire Hydrants.** If the Contractor desires to use water from hydrants, he shall fill out an application to the City of Evanston Utilities Department and shall conform to the municipal ordinances, rules, or regulations concerning their use. The Contractor shall obtain a use permit for each hydrant, and shall operate the hydrant properly. The Contractor is required to use an RPZ or appropriate back flow prevention device subject to approval of the City. There is a $300 deposit on the fire hydrant and all borrowed equipment. Water shall be furnished from hydrants at no cost to the Contractor. However, the Contractor shall restore any damage to the hydrant caused by his use, including settlement.

Fire hydrants shall be accessible at all times to the Fire Department. No material or other obstructions shall be placed closer to a fire hydrant than permitted by municipal ordinances, rules or regulations, or within five (5) feet of a fire hydrant, in the absence of such ordinances, rules or regulations."

Add the following paragraphs to Article 107.20:
"All existing roadway ditches or swales disturbed during construction operations shall be restored to their original cross-section and longitudinal grade, as approved by the Engineer. Any settlement caused by sewer or water main trenches shall be refilled and the original grades maintained by the Contractor for a period of one year from the date of final completion of the Project. Any property damage caused by trench excavation or augering operations, including settlement, shall be restored at Contractor's expense."

Existing roadways, driveways, sidewalks, curbs, utilities, structures, landscaping, site objects, and other site improvements not indicated to be removed and/or replaced as part of the Project which are damaged by Contractor's operations shall be repaired to a condition equal or better than that prior to the start of construction; or, if deemed un-repairable by the Owner, removed and replaced by the Contractor at no cost to the Owner in accordance with the terms of the Project specifications, Drawings, applicable codes, ordinances, and technical standards.

The correction of defects in the Work performed by the Contractor shall be done at no additional cost to the Owner and in accordance with the terms of the Project specifications, Drawings, applicable codes, ordinances, and technical standards.

Add the following paragraph to Article 107.25:
"Prior to commencement of construction operations, the Contractor shall prepare a written inventory of existing traffic control and other signage along the routes of construction. This inventory shall list the location, wording, and general condition of signage. This inventory shall be submitted to the Engineer upon completion and before any signage is removed for construction activities. The Contractor shall remove all existing traffic control signs, store these signs in a manner, which prevents damage, and reinstall them as soon as possible following installation of new sewers as coordinated by the Engineer."

Delete Article 107.27 and replace it with the following:
Extension of Indemnification to Third Parties. In the event that some of the Work is to be completed on property that is not owned by the Owner, the Contractor shall provide the indemnification and save harmless protection to the owner of such property. The Contractor shall also provide the indemnification and save harmless protection to owners of adjacent properties that may be affected by his operations.

Claims and disputes by third parties arising from work on this Contract, including augering and directional drilling or excavation work shall be resolved in accordance with the procedures hereinafter specified. This provision does not change, modify or alter the Contractor's responsibility to follow the insurance requirements of the Contract. Neither does this provision change, modify or alter the Contractor's responsibility to defend, indemnify and hold harmless the Owner and the Engineer from all types of claims that may arise out of or in consequence of the performance of this work by the Contractor or which may result in any way there from as that duty is stated in Section 107. Furthermore, this provision does not change, modify or alter the Contractor's responsibility to follow the provisions requiring a Contractor's Performance Bond.

The Contractor agrees to follow the procedure described following in resolving all property damage disputes that arise during the performance of the Work under the Contract. The Contractor agrees that the following procedure is the way the Contractor will hold the City of Evanston, MWRD and Engineer harmless for property damage claims:

i. Procedure for Resolving Property Damage Disputes

If the Contractor receives a claim for property damage allegedly caused by his performance of the Work under this Contract, the Contractor shall, within five (5) calendar days of receipt of such claims:

Acknowledge the claim to the property owner.

Send a copy of the said claim and acknowledgment to Engineer.

If the claim is not settled (or the Contractor does not agree to settle the claim) within five (5) calendar days, the Contractor shall:

Forward the claim to the Contractor's insurance carrier.

Require his insurance company to forward to Engineer an acknowledgment of receipt of the claim.

The Contractor and insurance carrier shall either settle or deny claims within sixty (60) calendar days of initial receipt of the claims. The insurance carrier and Contractor shall notify the Engineer of claims settled and denied, including the terms of the settlement or reasons for denial. The Contractor shall advise property owners of the decision to deny their claims and shall include in the Notice of Denial the name and address of the person authorized to accept service of process on behalf of the Contractor.

When a claim is allowed in any amount, Contractor shall, within thirty (30) calendar days of the award, pay to the property owner the amount of the award. If the Contractor does not make these payments to the property owner within the thirty (30) calendar day period, the Owner shall be authorized to make these payments for the Contractor and then deduct the amounts paid from the next payment due the Contractor under this Contract."

Add the following paragraphs to Article 107.30:
"The Contractor assumes full responsibility for the safekeeping of all materials and equipment and for all unfinished work until final acceptance by the Owner, and if any of it is damaged or destroyed from any cause, the Contractor shall replace it at his own expense.

The Contractor shall indemnify and save harmless the Owner against any liens filed for nonpayment of his bills in connection with the Contract work. The Contractor shall furnish the Owner satisfactory evidence that all persons who have done work or furnished materials, equipment or service of any type under this Contract have been fully paid prior to the acceptance of the Work by the Owner.

The Contractor shall erect and maintain such barriers and lights and/or watchmen as will protect and warn pedestrians and vehicles, and prevent access of unauthorized persons to the site so as to prevent accidents as a consequence of his work.

The Contractor shall indemnify and hold harmless the Owner, the Owner's employees, the Engineer, and the Engineer's employees from any and all liability, loss, cost, damages and claims, and expense (including reasonable attorney's fees and court costs) resulting from, arising out of, or incurred by reason of any claims, actions, or suits based upon or alleging bodily injury, including death, or property damage arising out of, or resulting from the Contractor's operations under this Contract, whether such operations be by himself or by any subcontractor or by anyone directly or indirectly employed by either of them. The Contractor shall obtain insurance for this purpose, which shall insure the interests of the Owner and Engineer as the same may appear, and shall file with the Owner and Engineer certificates of such insurance.

The Contractor shall protect the Owner's property and adjacent property from injury or loss resulting from his operations. Objects sustaining such damage shall be replaced to the satisfaction of the Owner and Engineer; the cost of such repairs shall be borne by the Contractor.

The Contractor shall be completely responsible for protecting his work from vandalism. Any

vandalized concrete shall be repaired and/or replaced as directed by the Engineer and at the Contractor's expense."

Delete the second and fourth paragraphs of Article 107.35.

Delete Article 107.40 in its entirety and replace with the following:
Unknown Utilities. The requirements stated in Article 107.37 for known utilities shall apply to unknown utilities. No additional compensation will be allowed for any delays, inconveniences, or damages sustained by the Contractor due to the presence of any claimed interference from unknown utility facilities or any adjustment of them, except as specifically provided in the contract.

Definition. An unknown utility is defined as an active or inactive underground transmission facility (excluding service connections) which is either:
(1) Located underground and (a) not shown in any way in any location on the plans; (b) not identified in writing by the City to the Contractor prior to the letting; or (c) not located relative to the location shown in the contract within the tolerances provided in 220 ILCS 50/2.8 or Administrative Code Title 92 Part 530.40(c).
(2) Located above ground or underground and not relocated as provided in the contract

Add Article 107.42, which shall read as follows:
"**107.42 Traffic Control and Protection.** Special attention is called to the following Highway Standard Details and Section 701 relating to Traffic control:

STANDARDS
701301, 701501, 701602, 701606, 701611, 701701, 701801, 701901, 780001

If requested by Contractor, one-block-long road closures will be allowed by the Owner in areas deemed necessary by the Engineer. No more than one lane of other streets may be closed at any time. Traffic control shall be in accordance with the applicable sections of the Standard Specifications, the applicable guidelines contained in the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, any Special Provisions, any Supplemental Standard Specifications and any special details and Highway Standards contained herein.

At the Pre-Construction Meeting, the Contractor shall furnish the name, and a 24-hour telephone number of the individual in his direct employ, who is responsible for the installation and maintenance of the traffic control for the Project. In accordance with Article 108.01, if a subcontractor is to provide this aspect of the work, consent of the Engineer is required. This shall not relieve the Contractor of the foregoing requirement for an individual in his direct employ to superintend the implementation and maintenance of the traffic control.

The Contractor shall furnish, install, maintain, relocate, and remove all traffic cones, signs, barricades, warning lights and other devices which are to be used for the purpose of controlling pedestrian and vehicular traffic. The traffic control requirements presented in the Contract documents represent the minimum level of control which shall be provided. The Contractor is solely responsible for implementing all other traffic control measures required to fully protect pedestrians, vehicles, and his work forces.

The Contractor is responsible to ensure that all barricades, warning signs, lights and other devices installed for traffic control are in place and operational twenty-four hours each calendar day this Contract is in effect. In particular, the Contractor shall make sure that warning lights are functioning

during night-time hours. Warning lights shall be checked each calendar day to verify functioning, replace batteries/bulbs, and/or replace light assemblies as necessary.

All areas of work shall be protected each night by Type II drum-type or sawhorse-type barricades at not greater than fifty (50) foot centers.

Drum-type and sawhorse barricades shall be equipped with working flashing lights and highly visible reflectors, reflective tape or reflective paint. At least six reflectors shall be visible from any viewing angle. Tape or paint shall cover at least 30 percent of the barricade from any viewing angle and shall conform to Section 700 of the Standard Specifications. Arrow boards shall be silent type powered by electricity or battery packs. No engine/generator-powered arrow boards are permitted.

The Contractor shall place "No Parking" signs a minimum of two (2) calendar days prior to curb replacement, patching or resurfacing operations. All "No Parking" signs must have the approval of, affixed, and displayed to the satisfaction of the Engineer. Posting of signs on trees shall be done in such a manner to facilitate removal; stapling or nailing of signs to trees is prohibited. Contractor shall keep a log of all posted "No Parking" signs and shall submit the log to the Engineer promptly upon request.

School busses and emergency vehicles shall have access to all premises at all times."

Add Article 107.43, which shall read as follows:
"**107.43 Maintenance of Roads.** Contractor shall maintain roads for all weather conditions and at all times in compliance with state and local regulations. Upon completion of construction, Contractor shall return all roads to their original condition as described in Section 442. With the Owner's approval, roadways and drives may be closed temporarily in the immediate area of the work. However, roadways and driveways shall be reopened as soon as is practical following the completion of installation and/or restoration. All roadways shall be maintained open to local traffic between the hours of 6:00 p.m. and 9:00 am or at other times when Contractor is not actively engaged in sewer and/or water main installation. Roadways shall be open to through traffic whenever practical. Roadways shall be open to emergency vehicles at all times. Temporary pavements specified by Engineer or Owner shall be placed on the same day as sewer and/or water main installation and shall be maintained as necessary until final roadway restoration. Contractor shall promptly remove all loose material spilled on roadways during the execution of the Work.
Temporary pavements shall consist of aggregate, cold mix, hot mix, or steel plates as specified or as directed by the Engineer. Hot mix shall be used for all IDOT and arterial streets and all intersections, and shall be compacted to the satisfaction of the Engineer by a steel drum roller. Aggregate surface course shall be used for other streets, alleys and driveways, unless otherwise directed by the Engineer. Steel plates shall be used to close construction work shafts and shall be set with their surfaces flush with existing roadways.

Temporary pavements for trenches crossing roadways and sewer and/or water main structures in through traffic lanes shall be hot mix when specified or as directed by Engineer. Temporary pavements around structures not located in through traffic lanes shall be aggregate surface course as specified or as directed by the Engineer."

Add Article 107.44, which shall read as follows:
"**107.44 Water Control.** The Contractor shall perform grading and other operations to maintain site drainage. Surface water shall not be allowed to accumulate in excavations. The Contractor

shall dispose of surface and subsurface water in a legal manner. He shall not allow mud, silt, or debris to flow into any surface water area or body other than in compliance with the State Water Quality Standards. Where the Contractor's operations disturb existing combined sewers, the Contractor shall provide temporary bulkheads and pumping facilities as necessary to maintain the combined sewers, connected building services and storm water inlet leads in full operation, including transport of the maximum dry-weather and wet-weather flow of which the existing sewer is capable. Combined wastewater shall not be permitted to flow along streets, public right-of-ways, private property, trench areas or inactive relief sewers. All earthworks, moving of equipment, water control of excavations, and other operations likely to create silting, shall be conducted so as to minimize pollution to watercourses or water storage areas. Under no circumstances shall the Contractor discharge pollutants into any watercourse or water storage area."

Add Article 107.45, which shall read as follows:
"**107.45 Overnight Protection of Work.** The Contractor shall adequately backfill, cover with appropriate plates, or suitably fence and barricade all open excavations at the completion of each day's work. Open-cut excavations shall be reduced to a maximum length of thirty feet overnight. Excavations shall not block roadways or driveways. Open ends of sewers being installed shall be bulk-headed overnight with watertight plugs to prevent entrance of soils, entrance of groundwater, and/or entrance by the public. The Contractor shall protect all excavations from public access. All shafts for open-cut work shall be fully covered during non-working hours and during working hours when not being actively used for that day's construction."

Add Article 107.46, which shall read as follows:
"**107.46 Guarantees and Warranties.** All guarantees and warranties required shall be furnished by the Contractor and shall be delivered to the Owner before the final voucher on the Contract is issued."

PROSECUTION AND PROGRESS
Add the following to Article 108.01:
"The Owner may approve the use of second tier subcontractors on a case by case basis after the Prime Contractor initiates a request for approval of same. The Prime Contractor is responsible for compliance with all the provision of the contract and is also responsible for providing that all of the pertinent provisions and requirements of the prime contract are incorporated into the second tier subcontracts. The Prime Contractor shall provide a copy of the second tier subcontract, second tier subcontractor insurance certificates, and shall provide waivers from the second tier subcontractors as required for the processing of pay estimates. The second tier subcontractor shall not commence work until approval is granted by the Owner"

Add the following to Article 108.02:
"Prior to commencing construction operations, the Project Superintendent shall meet with the Owner and Engineer and submit his Progress Schedule.

The construction schedule shall reflect that no work will be performed on Saturdays, Sundays, Holidays, and the days listed below as modified in Art. 108.03 Section 108. Calendar day is defined as: "Any calendar day between April 1 and November 30 inclusive, except Saturdays, Sundays or legal holidays. If the City approves work on Saturday, the Contractor will not be charged a calendar day for work done on that Saturday."

The Contractor shall submit to the Engineer monthly updates of the schedules required per these specifications. Schedule updates shall reflect the progress to date by providing actual start dates for activities started, actual finish dates for completed activities, and identifying out of sequence

work, schedule logic changes, and any circumstances or events impacting the current schedule. The updates shall also contain the Contractor's best estimate of the remaining duration for activities not complete as of the date of the update. All graphic presentations and reports shall be submitted with the monthly partial payment requests.

The Contractor shall prepare and submit daily reports containing, among other items, the following information:

1. A description of work activities performed.
2. A description of obstructions encountered.
3. Temperature and weather conditions.

The reports shall be submitted on a daily basis, by the end of the next business day.

Information provided on the daily report shall not constitute notice of delay or any other notice required by the Contract Documents.

Failure to provide the updated schedule every month may be cause to withhold any partial payment due to the Contractor during the course of the Contract until the deficiency has been remedied."

Delete the second paragraph of Article 108.03 and replace it with the following:
"The Contractor shall notify the Owner and Engineer at least 72 hours before beginning work. The Contractor shall give a minimum of 24 hour notice, not including Saturdays, Sundays or legal holidays, prior to suspension of construction activities for any non-weather related reason. Suspension of work for non-weather related reasons must be pre-approved by the Engineer. The Contractor must be in advance of the Controlling Item as indicated by his submitted Construction Schedule as a condition of the Engineer's granting of authorization to suspend work. In addition, the suspension shall not affect the completion date of the Project. The Contractor shall notify the Engineer at least 24 hours, not including Saturdays, Sundays or legal holidays, prior to the resumption of work. The site must be left in a clean and neat manner, acceptable to the Engineer, prior to the authorization of the suspension.

The Contractor shall perform the Work in accordance with the following scheduling requirements:

a. The Contractor will be required to discuss their operations and get verbal and / or written permission at least twenty-four (24) hours in advance in order to work on the following dates:

Friday, April 15, 2022	Good Friday
Saturday, April 23, 2022	Last Day of Passover
Monday, July 4, 2022	Independence Day
Monday, September 26, 2022	Rosh Hashanah
Wednesday, October 5, 2022	Yom Kippur

Delete Article 108.04 and replace it with the following:
"**108.04 Normal Work Hours.** Normal work hours shall be Monday through Friday (excluding legal holidays) between 7:00 am and 5:00 p.m. local time during the calendar dates specified in Article 108.03. Except for work required to maintain warning lights, barricades and other safety/health-related systems no work shall be performed on Saturdays, Sundays, legal holidays, or between 5:00 pm and 7:00 am on other days without specific permission of the Owner. This requirement

excludes private water service work which may take place outside of normal work hours including Saturdays in accordance with the Evanston City Code. Only work between the parkway and private residence may take place outside of normal working hours and at no time will work within the roadway be permitted outside of normal working hours or work on Sunday without written approval from the Engineer.

No work, except maintenance of warning lights, barricades and other safety/health-related systems, may be performed unless the Engineer is available to observe/inspect construction activities. Owner will provide the services of the Engineer as needed for construction observation/inspection between the hours of 7:00 am and 5:00 p.m., Monday through Friday, except legal holidays, in accordance with the calendar dates specified in Article 108.03. Prohibited work activities outside of normal work hours include but are not limited to the warming up of any piece of equipment or turning on engines. Any violation for working hours will incur a $500.00 fine for each occurrence.

If at any time during the project the Contractor elects to work on a Saturday, they must obtain written permission from the Capital Planning and Engineering Bureau, Senior Project Manager and/or City Engineer/Bureau Chief, Public Works Agency. Contractor shall request this at least twenty-four hours in advance of Saturday work. The contractor is required to estimate any Saturday work and include that in the bid amount.

If at any time during the project the Contractor elects to work past the normal working hours, the Engineer shall invoice the Contractor for Engineering Services at a rate of $75.00 per hour for Engineering Services provided beyond the normal working hours at the conclusion of each month. Engineering Services will be paid for at the contract unit price of $75.00 per hour. Administrative accounts payable, overhead, and profits costs shall be included in the various contract items and no additional compensation will be allowed.

Delete Article 108.05 and replace it with the following:
"**108.05 Project Completion Times:**
The Project Completion Time and Substantial Completion Times shall be as specified in the Contract Documents. Liquidated damages, as indicated in Article 108.09 shall apply for failure to achieve any of the listed Partial Completion Dates, Substantial Completion Dates, Project Completion Dates, and other specific Work task completion requirements. Calendar day is defined as: "Any calendar day between April 1 and November 30 inclusive, except Saturdays, Sundays or legal holidays. If the City approves work on Saturday, the Contractor will not be charged a calendar day for work done on that Saturday." Claims for extension or shortening of the Substantial Completion Times and Project Completion Time shall be based on written notice delivered by the party making the claim to the other party and to the Engineer promptly, but, in no event, later than thirty (30) calendar days after the occurrence of the event giving rise to the claim and stating the nature of the claim."

Add the following paragraph to Article 108.07
"The Engineer shall have no authority to suspend the Work, wholly or in part, for any reason. All rights conferred onto the Engineer for suspending the Work by Standard Specification Articles 105.01 and 108.07 shall be the sole right of the Owner."

MEASUREMENT AND PAYMENT
Add the following paragraphs to Article 109.02:
"All the requirements of the Supplemental Standard Specifications pertaining to Sections 100 to

109 of the Standard Specifications are considered incidental to the Work, and no separate or additional payment will be made, except as otherwise indicated, for complying with said requirements. The Owner has the authority to withhold any payment if satisfactory progress is not made by Contractor to complete any work on the Contract.

The cost of removal of any temporary surfaces, trench backfill or other temporary materials above the subgrade level in areas where final surface restoration is to be performed shall be incidental to the Contract and no additional separate payment will be made except as indicated on the Plans.

Existing facilities or property damaged by construction activities, including settlement, whether through result of Contractor's negligence or as a normal result of the means and methods employed by the Contractor, shall be restored to original condition. Restoration of damaged areas will be considered incidental to the Work and the cost shall be included as part of the unit or lump sum price item to which the restoration pertains.

Payment for each item will be made at the unit or lump sum price bid for that item. The cost of all other related or incidental work required by the plans and specifications shall not be measured or paid for as a separate item, but shall be included as part of the unit or lump sum price item to which the work pertains. Failure to list all such related or incidental work for the bid items shall not invalidate this stipulation."

Delete Article 109.07 and replace it with the following:
"**109.07 Partial Payments and Retainage.** The Owner will pay the Contractor monthly for Work completed in accordance with the Contract Documents. Applications for Payment from the Contractor (and subcontractors) shall be prepared and submitted by the Contractor with all supporting documents to the Engineer. Supporting documents to be submitted with Applications for Payment shall include, but are not limited to:

Documents to be Submitted With
Applications for Partial Payment

(a) MBE/WBE/EBE Monthly Utilization Report

(b) All delivery tickets for concrete and asphalt.

(c) Lien Waivers

(d) Construction Schedule Update

(e) Certified payrolls for general contractor and sub-contractors

Failure to submit any of the above documents may cause the payment application to be rejected.

Lien waivers shall accompany each Application for Payment and shall reflect the amount paid to each subcontractor, and supplier, and their respective supporting lien waivers. Contractor's lien waivers submitted with interim Applications for Payment shall reflect all costs up to the date of the Application. Lien waivers from subcontractors, suppliers and others accompanying interim Applications for Payment may be submitted one month in arrears. Lien waivers submitted with the final Application for Payment shall reflect the full values of Contractor's efforts; and, all subcontracts, materials purchases, and other Project costs.

Applications for Payment shall be reviewed by the Engineer within ten (10) calendar days of the submittal and returned to the Contractor for correction or forwarded to the Owner for approval, as appropriate. Engineer and Contractor must agree to quantities forwarded to the Owner. Any disputed quantities not included in the Application for Payment must be resolved within thirty (30) calendar days with any adjustments from disputed quantities to be included on the following Application for Payment. Applications for Payment certified by the Engineer must be in the City offices by the close of business on the last working day of each month. The Owner will pay the Contractor within thirty (30) calendar days of receipt of Applications for Payment certified by the Engineer.

Retainage shall be withheld as follows:

'There shall be deducted from the amount so determined for the first 50 percent of the completed work a sum of ten percent to be retained until after the completion of the entire work to the satisfaction of the Engineer. After 50 percent or more of the work is completed, the City may, at its discretion, certify the remaining partial payments without any further retention, provided that satisfactory progress is being made, and provided that the amount retained is not less than five percent of the total adjusted contract price."

Delete the first, third, and fourth paragraphs of Article 109.08 and add the following:
"Final payment will be made within sixty (60) calendar days after the Work is fully completed and accepted by the Owner and the Contract fully performed. Request for final payment shall be prepared by the Contractor and accompanied by the documentation hereinafter listed. Quantities for this Contract shall be subject to the contract unit price applied to final measured quantities.

Neither the final payment nor any part of the retained percentage shall become due until the Contractor delivers to the Owner a complete release of all liens arising out of this Contract, or receipts in full in lieu thereof, and in either case, an affidavit that so far as he has the knowledge or information, the releases and receipts include all the labor and material for which a lien could be filed, but the Contractor may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the Owner, to indemnify the Owner against any lien. If any liens remain unsatisfied after all payments are made, the Contractor shall refund to the Owner all moneys that the Owner may be compelled to pay in discharging such liens, including all costs and Attorney's fees.

With his final payment request, the Contractor shall submit the following data:

Documents to be Submitted With
Application for Final Payment

(a) MBE/WBE/EBE
Utilization Final Report

(b) Contractor prepared Record - Drawings

Add the following as the first two paragraphs of Article 109.09:
"The Contractor shall notify the Engineer immediately when the Contractor becomes aware of any circumstances which the Contractor believes may lead to a claim for extra cost. Where possible, the Contractor shall delay proceeding with work which may result in the claim for extra cost until the Engineer has had a reasonable opportunity to review the situation, unless such delay will materially

disrupt the prosecution of the Work or unless immediate Contractor action is required to resolve an emergency which endangers life or property. The purposes of the Engineer's review are: to verify that a claim for extra cost may be warranted, to make modifications to the Work to avoid or minimize the extra cost, and/or to monitor the Contractor's performance of the work generating the extra cost. For those situations where the Engineer is not notified prior to the Contractor performing work which causes the claim, the amount of extra cost to which the Contractor is entitled shall not include costs which, in the Engineer's sole opinion, could reasonably have been avoided if the Contractor had notified the Engineer prior to proceeding with the Work.

The Contractor shall submit, in writing, claims for extra cost to the Engineer as soon as possible after the occurrence of the event(s) giving rise to the claim, but not more than thirty (30) calendar days thereafter. Claims shall include appropriate supporting documentation as specified in following paragraphs to justify the extra cost claimed. This documentation shall include, as a minimum: a description of the circumstances which generated the claim, prior notifications provided to the Engineer, and a detailed breakdown of costs incurred by the Contractor. In the event that this documentation cannot be assembled within thirty (30) calendar days or if the extra cost is ongoing, the Contractor shall submit, in writing, whatever partial information is available to keep the Engineer informed of the Contractor's progress. Extra costs incurred by the Contractor solely because of the particular means and methods which the Contractor chooses to perform the Work will not be considered. Claims submitted more than thirty (30) calendar days after the occurrence of the event(s) giving rise to the claim will not be considered."

Delete the first, second and third paragraphs of Article 109.09 sub-paragraph (e) and replace them with the following:
"(e) Procedure. All claims and supporting documentation shall be submitted to the Engineer. The Engineer shall review each claim and advise the Owner of the Engineer's opinion of the relative merit of each claim and the dollar and/or time adjustment which the Engineer believes is warranted, if any. The Owner shall make a determination of the merit of each claim and the dollar and/or time adjustment, if any, which is appropriate for resolution of the claim. If Contractor is dissatisfied with the Owner's decision regarding merit, dollar adjustment, and/or time adjustment associated with a claim, the Contractor may request arbitration in accordance with the following:

- All claims, counter-claims, disputes and other matters in question between the Owner and the Contractor arising out of, or relating to this Agreement or the breach of it, will be decided by arbitration if the parties mutually agree, or in a court of competent jurisdiction within the State.

- Notice of the demand for arbitration shall be filed in writing with the other party to the Contract Documents and with the American Arbitration Association, and a copy shall be filed with the Engineer. Demand for arbitration shall in no event be made on any claim, dispute or other matter in question which would be barred by the applicable statute of limitations.

- The Contractor will carry on the Work and maintain the progress schedule during any arbitration proceedings, unless otherwise mutually agreed in writing."

SUBMITTALS
This section includes general requirements and procedures related to the Contractor's responsibilities for preparing and transmitting submittals to the Engineer to demonstrate that the performance of the Work will be in accordance with the Contract requirements. Submittals include schedules, Contractor's Drawings, calculations, samples, manuals, methods of

construction, and record drawings. Other requirements for submittals are specified under applicable sections of the Standard Specifications.

SUBMITTAL REQUIREMENTS

Not later than three days after the pre-construction conference, submit in writing a list of submittals and a list of materials and equipment that will be purchased giving name, address and telephone number of supplier, manufacturer or processor. No material shall be incorporated into the Work until approval of the source has been given by Engineer. Delivery of materials to the Contract site prior to approval is made at the Contractor's risk and subject to immediate removal at no cost to the Owner, when it is determined that the source is not acceptable.

CONTRACTOR'S DRAWINGS AND OTHER SUBMITTALS

Contractor's drawings shall be neat in appearance, legible and explicit to enable proper review relative to Contract compliance. They shall be complete and detailed to show fabrication, assembly and installation details, catalog data, pamphlets, descriptive literature, and performance and test data. They shall be accompanied by calculations or other sufficient information to provide a comprehensive description of the structure, machine or system provided and its intended manner of use.

Contractor's Responsibility

Each Contractor's drawing submitted by the Contractor shall have affixed to it the following Certification Statement, signed by the Contractor:

"**Certification Statement:** By this submittal, I hereby represent that I have determined and verified all field measurements, field construction criteria, materials, dimensions, catalog numbers and similar data and I have checked and coordinated each item with other applicable approved drawings and all Contract requirements."

The review and approval of Contractor's drawings by the Engineer shall not relieve the Contractor from his responsibility with regard to the fulfillment of the terms of the Contract. All risks of error and omission are assumed by the Contractor, and the Engineer will have no responsibility therefore.

No portion of the Work requiring a Contractor's drawing shall be started nor shall any materials be fabricated, delivered to the site, or installed prior to the approval or qualified approval of such item. Fabrication performed, materials purchased or on-site construction accomplished which does not conform to approved Contractor's drawings and data shall be at the Contractor's risk. The Owner will not be liable for any expense or delay due to corrections or remedies required to accomplish conformity.

Contract Work, materials, fabrication, and installation shall conform with approved Contractor's drawings.

Identification

Data - All submittals for approval shall have the following identification data, as applicable, contained thereon or permanently adhered thereto.

1. Owner Contract Number.

2. Project name and location.
3. Submittal Numbers. Re-submittals shall bear original submittal number and be lettered.
4. Product identification.
5. Drawing title, drawing number, revision number, and date of drawing and revision.
6. Applicable Contract drawing numbers and specification section and paragraph numbers.
7. Subcontractor's, vendor's, and/or manufacturer's name, address and phone number.
8. Contractor's certification statement.

Catalog Data - Each submittal of catalog data shall have the identification required as hereinbefore stated.

1. Catalogs or brochures submitted in packages of multiple items for approval need the identification only on the exterior. In such instances the identification shall include page and catalog item numbers for items submitted for approval. If one or more of the items in such a submittal are not approved, re-submittal of only the unapproved items is required.

2. Catalog cuts containing various products, sizes and materials shall be highlighted to show particular items being submitted.

Space - Vacant space of approximately 3-1/2-inches high by 4-inches wide shall be provided adjacent to the identification data to receive the Engineer's status stamp.

Shop Drawings

Shop drawings shall show types, sizes, accessories, weights, layouts including plans, elevations and sectional views, component, assembly and installation details, and all other information required to illustrate how applicable portions of the Contract requirements will be fabricated and/or installed. Include manufacturer's certified performance curves, catalog cuts, pamphlets and descriptive literature, as required.

Working Drawings

Submit working drawings as required for changes, substitutions, contractor design items, and designed methods of construction. Requirements for working drawings will be listed in appropriate Specification Sections and/or in Special Provisions. Drawings shall be accompanied by calculations or other information to completely explain the structure, and describe its intended use. Working drawings and calculations as submitted shall be sealed, dated and signed by a Professional Engineer, and/or Structural Engineer as appropriate, registered in the State of Illinois.

Review and approval of such drawings by the Engineer shall not relieve the Contractor from his responsibility with regard to the fulfillment of the terms of the Contract. All risks of error are assumed by the Contractor and the Engineer shall have no responsibility therefore.

Catalog Data

Submittals - 6 copies of catalog data are required for the original submittal and each subsequent re-submittal that may become necessary.

Manufacturer's equipment data shall be certified and shall include materials type, performance characteristics, voltage, phase, capacity, and similar data. Provide wiring diagrams when applicable. Indicate catalog, model and serial numbers representing specified equipment. Provide complete component information to verify all specified required items.

Data Identification - Each submittal shall have all pertinent data contained therein that are applicable to the item submitted for approval, adequately and prominently designated.

Approval Process

Original Submittal - Copies of catalog data specified in Item F and one reproducible sepia and six legible prints of all shop and working drawings shall be submitted to the Engineer for approval in accordance with the Contractor's drawings submission schedule, with all fabrication and installation requirements, allowing at least 30 calendar days for checking and appropriate action by the Engineer. Three copies of all Contractor's drawings will be returned.

Contractor's drawings will be returned, stamped with one of the following classifications:

APPROVED

No corrections, no marks.

APPROVED AS CORRECTED

Minor corrections are required as noted on the submittal. All items may be fabricated as marked without further resubmission. Resubmit corrected copy to the Engineer.

REVISE AND RESUBMIT

Make the necessary corrections and resubmit drawings as per original submission. Thirty (30) calendar days will be allowed for checking and appropriate action by the Engineer. Only one stamped drawing will be returned.

NOT APPROVED

Requires corrections or is otherwise not in accordance with the Contract Documents. Correct and resubmit drawings as per original submission. Thirty (30) calendar days will be allowed for checking and appropriate action by the Engineer. Only one stamped drawing will be returned. Incomplete submittals or submittals not in conformance with this Specification will not be reviewed, but will be returned to the Contractor as "not approved".

INFORMATION ONLY

Items not reviewed or items for which submittals are not required.

Review and approval of Contractor's drawings by the Engineer shall not relieve the Contractor in any way from his responsibility with regard to the fulfillment of the terms of the Contract. All risks of error are assumed by the Contractor and the Engineer shall have no responsibility

therefore.

Excessive Reviews of Contractor Drawings and Other Submittals

The Owner's cost for Engineer's effort to review Contractor drawings or other submittals which have been returned two or more times stamped "REVISE AND RESUBMIT" or "NOT APPROVED" shall be borne by the Contractor at a rate of $120.00 per labor hour for services provided in 2010. Upon completion of each subsequent review, the Engineer will provide the Contractor a summary total of hours expended in performing the review. Moneys due the Owner for Engineer's cost for third and additional reviews of Contractor drawings and other submittals will be deducted from the next regular payment due the Contractor. The cost for these services shall be deducted from the “Amount Earned to Date” from the next regular payment due the Contractor.

RECORD DRAWINGS

The Contractor shall keep one record copy of all Contract Documents, reference documents, and all submittals at the site in good order and annotated to show all revisions made during the construction process. Such annotations shall be kept updated on a single set of Contract Drawings and will be inspected monthly. Failure to maintain current record drawings will be cause to delay progress payments. Record drawings shall be available to the Engineer at all times during the life of the Contract.

All drawings and Contractor's submittals shall be made a part of the record drawings and shall include the following:

Contract Drawings - Contractor shall annotate or redraft, as required, to show all revisions, substitutions, variations, omissions and discrepancies made or discovered during construction concerning location and depth of utilities, piping, duct banks, conduits, manholes, pumps, valves, vaults and other equipment. Revisions shall be made and shown on all drawing views with actual dimensions established to permanent points.

Contractor's Drawings - Same as above. Include, for example, piping layouts; and duct layouts. Sections and details shall be added as required, for clarity. Prior to preliminary inspection, furnish a reproducible of the record drawings. At the completion of the Contract and before final payment is made, furnish the Engineer one set of reproducible of the finally approved record drawings reflecting all revisions herein described.

The Contractor shall keep a complete to-date record of the actual construction of all work called for under the Plans and Specifications of this contract and as ordered by the Engineer.

Upon completion of this contract, the Contractor shall furnish to the Engineer record contract plan drawings where changes from the original plans have occurred.

The Engineer will make available to the Contractor one set of full size prints of the original contract drawings on which the Contractor shall make the necessary changes to indicate the major changes. The changes shall be made with opaque Higgins carmine red ink, or approved equal, using standard drafting procedures.

Record drawings on Mylar will be prepared by the Engineer based on the changes indicated by the Contractor. All record drawings on Mylar for this contract shall be signed by the Contractor certifying to its major corrections.

PAYMENT
No separate payment will be made for the work in this section; all the costs of such work shall be considered incidental to the items of work to which they pertain.

SAW CUTS
The Contractor shall full-depth saw cut for the removal of existing curb, sidewalk, all structure work, and for all pavement patches. The concrete saw shall be equipped with a diamond blade of sufficient size to saw pavements full-depth and be capable of accurately maintaining cutting depth. All saw cuts shall be parallel or perpendicular to the curb & gutter, edge of sidewalk, or the edge of pavement, with straight, clean, edges, to the satisfaction of the ENGINEER. This item shall be included with curb & gutter, sidewalk, structure work, and pavement removal. The slurry resulting from the saw cutting work shall be immediately washed away using water to prevent tracking by vehicles or pedestrians to the satisfaction of the ENGINEER.

When removing pavement, curb and gutter, shoulder, and/or any other structures, the use of any type of concrete breakers which might damage the underground public or private utilities or property will not be permitted. Pavement openings must be initiated with hydraulic impact/air hammers and the use of excavator buckets to strike and break pavement is strictly prohibited and will result in an immediate deficiency deduction.

Saw cuts for all work will not be measured for payment and shall be considered as included in the related contract pay item. No separate payment will be made for saw cuts.

If additional surface is damaged or removed due to negligence on the part of the Contractor, the additional work will not be measured for payment but shall be done at the Contractor's expense. It is Contractor's responsibility to determine the thickness of the existing pavement and whether or not it contains reinforcement.

CLEARING, TREE REMOVAL AND PROTECTION, CARE AND REPAIR OF EXISTING PLANT MATERIALS
Add the following paragraphs to Article 201.01:
"Trees and shrubs which may be removed for performance of the Work are so designated on the Drawings, or agreed to with the Property Owner only for those locations requiring full replacement of their lead water service. It is not anticipated that any other trees or shrubs will need to be removed for performance of the Work. Should the Contractor desire to remove trees or shrubs, the Contractor shall notify the Owner for approval prior to removing any trees or shrubs. Owner will not grant permission for removal of trees or shrubs, unless the Contractor can demonstrate that there is no other practicable way to complete the Work, including augering or hand-excavation.

Owner recognizes that some tree branches will need to be pruned to provide clearance for construction equipment. However, the Contractor shall secure the express permission of the Engineer to trim specific overhanging branches of trees. The maximum permitted height of trimming shall be 14 feet. All tree trimming, pruning, and repair of wound surfaces shall be performed by a licensed arborist approved by the Owner. The Owner will provide appropriate staff to observe tree trimming operations. The Contractor shall provide at least 72-hour notice to the Owner of trimming operations. No trimming shall be done unless Owner's staff is available to observe trimming. Trimming shall be performed to the satisfaction of Owner's staff. The Contractor shall provide proper tree guards to protect trees from damage due to construction equipment and operations.

Trees and shrubs damaged due to construction operations or removed without approval shall be

replaced, at Contractor's expense, with trees or shrubs of like species and size, to a maximum trunk size of 6-inches diameter as directed by the Owner. If trees larger than 6-inches diameter are irreparably damaged or destroyed, the Contractor shall replace these trees with trees of like species 6-inches in diameter. Tree trimming, pruning, repair of wound surfaces, removal of trees and shrubs requested by Contractor, and replacement of trees and shrubs irreparably damaged shall be incidental to the items of work to which they pertain."

Parkway Tree Protection

Prospective contractors are advised that it is the express intent of the City of Evanston to minimize trimming of trees in the work corridors and to vigorously protect the quality of the urban forest. The equipment and methods used to perform any and all portions of the work must be the size and nature that results in the least disruption to the existing environment. The City of Evanston reserves the right to limit the size of the equipment used on the project.

The Contractor shall at all times demonstrate to the satisfaction of the City of Evanston that suitable precautions and due diligence are being observed to protect the natural and improved features of the area. Special and continuing attention will be paid to the maintenance of tree protection fencing and the appropriate observance of tree protection areas as delineated by the fencing.

To insure compliance with the City of Evanston's intent to minimize area disturbances, the following procedures and actions will be followed: When the Engineer determines that a deficiency exists, the Contractor shall be notified. If the contractor fails to rectify the deficiency immediately, the Engineer will impose a daily monetary deduction for each 24-hour period (or portion thereof) the deficiency exists. This time period will begin with the time of notification to the Contractor and end with the Engineer's acceptance of the corrections. The cost of the daily deduction will be $250 per occurrence per calendar day. In addition, the Contractor will be liable and responsible for any and all corrective and remedial actions required to restore the area or item to comparable pre-project conditions as well as any additional fines and fees as stated in the tree protection requirements in these specifications.

Care of Existing Plant Material. If construction is to occur within the root zone of existing plant material, root pruning and special plant care will be required, as hereinafter specified. All pruning shall be performed by a professional arborist (someone whose principal occupation is the care and maintenance of trees).

The Contractor shall be responsible for taking measures to minimize damage to tree limbs, tree trunks, and tree roots at each work site. All such measures shall be included in the contract price for other works except that payment will be made for Temporary Fence and Earth Saw Cut of Tree Roots as separate pay items.

A. Earth Saw Cut of Tree Roots (Tree Root Pruning):

1. Whenever the proposed excavation falls within the drip-line of a tree, the contractor shall:
    a. Root prune 6-inches behind and parallel to the proposed edge of trench a neat, clean vertical cut to a minimum depth directed by the City Arborist through all the affected tree roots.

    b. Root prune to a maximum width of 4 inches using a "Vermeer" wheel matching the following criteria. The root pruner wheel shall be 60" diameter (188" circumference) carrying 28 pair (56 total) stump cutter teeth with tooth spacing at 6.7" on center.

The cutting depth shall be 24” and shall utilize a 65hp tractor. Trenching machines will not be permitted.

c. Exercise care not to cut any existing utilities.

d. If during construction it becomes evident that additional tree roots will require root pruning, the City Arborist and the Contractor shall have the root pruning sub-contractor return to the site to properly root prune the tree at the location directed by the City Arborist. The contractor will be paid for the additional root pruning as described below; however, no additional compensation will be made for remobilization to the construction site.

e. For locations where root pruning is performed for the purpose of curb and gutter removal and replacement, the contractor shall root prune 6-inches behind the curbing so as to neatly cut the tree roots.

f. Depth of cut shall be 12 inches for curb removal and replacement and 24 inches for structural work. Any roots encountered at a greater depth shall be neatly saw-cut at no additional cost.

g. The Engineer or City Arborist will mark locations where earth saw cutting of tree roots is required in the field.

2. All root pruning cuts shall be immediately backfilled with material side cast from the earth-sawing procedure, so that the ground surface is even and no tripping potential exists.

3. All root pruning work is to be performed through the services of a certified arborist to be approved by the City Arborist.

TREE ROOT PRUNING shall be used to protect all trees within the public right-of-way of the project limits or as directed by the Engineer. This work will be paid for at the Contract unit price per FOOT for TREE ROOT PRUNING measured in place.

The Contract unit price per FOOT for TREE ROOT PRUNING shall be payment in full for all materials, labor and equipment required for: tree root pruning as shown on plan details; and all related work which is not included under other Payment Items.

B. Temporary Fence:

1. The Contractor shall erect a temporary fence around all trees within the construction area to establish a “tree protection zone”, as established by City Arborist, before any work begins or any material is delivered to the jobsite. No work is to be performed (other than root pruning), materials stored, or vehicles driven or parked within the “tree protection zone” at any time during the course of construction.

2. The exact location and establishment of the “tree protection zone” fence shall be approved by the City Arborist prior to setting the fence. The fence shall be 48 inches high, plastic poly-type or any other type of highly visible barrier in an open-weave type pattern with large openings. The type, color and pattern of the fence shall be approved by the Engineer prior to erection. This fence shall be properly maintained in an upright manner and shall remain up until final restoration, unless the Engineer directs removal otherwise. Tree fence shall be supported using T-Post style fence

posts with a maximum of 8' spacing. T-posts must be at least six feet in length, two feet of which must be set in the ground. The fence shall be attached to posts and secured with a minimum of three nylon locking ties per post. Utilizing re-bar as a fence post will not be permitted.

3. The fence shall be installed 18" behind and parallel to the curb and between the curb and sidewalk. Fence shall be erected on a minimum of three sides with the fourth sidewalk side being optional. Fence shall be installed at the drip-line of the tree or as listed in the following guidelines:

a. Establish the diameter of the tree at a point four and a half feet above the ground, (referred to as diameter breast height or DBH)

i. Trees with diameters 10 inches and under require root zone protection a minimum of five feet from the center of the tree.

ii. Trees 10 to 19 inches in diameter shall have a minimum root zone protection of 10 feet from the center of the tree.

iii. Trees greater than 19 inches in diameter shall have a minimum root zone protection of 15 feet from the center of the tree.

4. Parking or maneuvering of machinery, stockpiling of materials or any other use will not be allowed upon unpaved areas within 10 feet of the root protection zone of trees or plants designated to be protected.

5. Construction area is defined as all areas within 10 feet each side of roadway improvement location.

6. All work within the "tree protection zone" shall have the Engineer's prior approval. All slopes and other areas not re-graded should be avoided so that unnecessary damage is not done to the existing turf, tree root system or ground cover.

7. The grade within the "tree protection zone" shall not be changed unless approved by the Engineer prior to making said changes or performing the work.

TEMPORARY FENCE shall be used to protect all trees within the public right-of-way of the project limits or as directed by the Engineer. This work will be paid for at the Contract unit price per FOOT for TEMPORARY FENCE measured in place.

The Contract unit price per FOOT for TEMPORARY FENCE shall be payment in full for all materials, labor and equipment required for: providing snow fence as shown on plan details; and all related work which is not included under other Payment Items.

When improvements are required within the "tree protection zone", tree trunk protection will be required.

C. Tree Trunk Protection:

The Contractor shall provide 2 in. by 8 in. by 8 ft. boards banded continuously around each trunk to prevent scarring of trees shown on the plans or designated by the Engineer. For multi-stem trees, saplings, and shrubs to be protected within the area of construction, temporary fencing may be used for trunk protection

TREE PROTECTION shall be used to protect all trees within the public right-of-way of the project limits or as directed by the Engineer. This work will be paid for at the Contract unit price per EACH for TREE PROTECTION measured in place.

The Contract unit price per EACH for TREE PROTECTION shall be payment in full for all materials, labor and equipment required for: installation of trunk boards in accordance with Supplemental Standard Specifications; and all related work which is not included under other Payment Items.

D. Tree Pruning:

Tree pruning shall consist of pruning branches for aesthetic and structural enhancement or as directed by the Engineer. All pruning shall be done according to the current ANSI A300 (part 1) pruning standard. Trees selected for pruning will be cleaned of dead, diseased, or broken branches, thinned appropriately to reduce density of branches, raised to provide vertical clearance for pedestrian and vehicular traffic, and if warranted by species tolerance and specimen needs limbs will be reduced to promote a central leader and good structure. Pruning to provide clearance over the street will be allowed up to 14 feet above the pavement. If additional clearance is needed a request in writing shall be submitted to the City Arborist. All branch pruning to American Elms and Oak trees shall be done between October 15 and April 15, when the trees are dormant.

Under pruning to provide clearance over the street will be allowed up to 14 feet above the pavement. If additional clearance is needed a request in writing shall be submitted to the City Arborist.

TREE PRUNING will be paid for at the contract unit price per EACH for TREE PRUNING, which price shall include under pruning branches to provide clearance over the street, for aesthetic and structural enhancement, of existing trees.

DISPOSAL OF EXCAVATED MATERIAL
This work shall consist of meeting IEPA requirements for the disposal of excavated material including, but not limited to, clean construction or demolition debris (CCDD), uncontaminated soil, and/or contaminated soil. Excavated materials must be removed from the site by the end of each day.

The Contractor will be responsible to provide CCDD and soil fill site operators with all testing information and fees as required by the IEPA and fill site operators.

The City will provide IEPA LPC documentation prior to the start of construction.

TRENCH BACKFILL
Add the following paragraphs to Article 208.02:

Water Main
Bedding (4" below bottom of pipe to spring line) – Coarse Aggregate
Trench backfill (spring line to bottom of pavement) – Fine Aggregate

Rigid Sewer
Bedding (4" below bottom of pipe to spring line) - Coarse Aggregate
Trench Backfill (spring line to bottom of pavement) – Fine Aggregate

Flexible Sewer
Bedding (4" below bottom of pipe to 12" above top of pipe) - Coarse Aggregate
Trench Backfill (spring line to bottom of pavement) – Fine Aggregate

Fine aggregate shall consist of sand (natural) gradation FA 6. Stone sand, chats, wet bottom boiler slag, slag sand, granulated slag sand, or crushed concrete sand will NOT be allowed.

Coarse aggregate shall be crushed gravel or crushed stone gradation CA-7, CA-11 or CA-13. Gravel, crushed concrete, crushed slag, chats, crushed sandstone, or wet bottom boiler slag will NOT be allowed.

Case I - Trench Backfill in Paved Areas. Case I applies to excavation in any area which has or which is proposed to have a permanent type street, sidewalk, curb and gutter, bituminous paved parking lot, or is within 2 feet of a paved surface. Trench backfilling shall be performed in accordance with Article 550.07 modified herein. Where backfilling a trench containing a single longitudinal pipe, the Contractor shall use fine aggregate gradation FA-6 sand (natural). Where backfilling a trench containing multiple longitudinal pipes (common trench), the Contractor shall use coarse aggregate gradation CA-7, CA-11, or CA-13 crushed gravel or crushed stone from 4-inches below the bottom of the lowest pipe to 12-inches above the crown of the highest pipe and fine aggregate gradation FA-6 sand (natural) from 12-inches above the crown of the highest pipe to the pavement sub-grade. Granular trench backfill shall be compacted to a minimum of 95% Standard Proctor Density as per ASTM-D698. Where native subsoils excavated from trenches meet the gradation, quality, and other requirements of Article 1003.04, this material shall be used to backfill trenches in lieu of new FA-6 material.

Use of native soil for backfill shall be incidental to the cost of the sewer or water main installation and no separate payment shall be made. Use of native soils for backfill that has been transported between different locations on this project shall be incidental to the cost of the sewer or water main installation unless otherwise approved in advance by the Engineer.

Trenches shall be backfilled with FA-6 sand (natural) granular material or native subsoils meeting FA-6/quality requirements up to the proposed bottom of the pavement structure within the standard trench width. The remainder of the trench shall be backfilled as soon as possible with full-depth temporary aggregate. The temporary aggregate shall be coarse aggregate and shall consist of gravel, crushed gravel, crushed stone, or crushed concrete. Crushed slag and grindings from PCC or HMA surface removal operations will NOT be allowed.

When specified by the Engineer, the top of the trench shall also receive temporary asphalt surfacing consisting of 3-inches of compacted hot-mix asphalt with a steel drum roller over the temporary aggregate. The temporary aggregate shall be re-graded and compacted as necessary to permit the surface of the temporary asphalt to be flush with existing hard-surface pavements. Temporary asphalt shall be placed and compacted with a steel drum roller as soon as practical after backfilling the trench and placing the aggregate surface course.

The Contractor shall maintain temporary aggregate and temporary asphalt surfaces free from, ruts, potholes or other displacements and provide means for dust control until such time as the permanent pavement is placed. Should settlement occur, the Contractor shall furnish and install additional temporary paving material to maintain the surface at street grade. Maintenance of temporary paving shall be incidental to the initial paving operation and no separate payment shall be made.

Delete Article 208.04 and replace it with the following:
Trench backfill fine aggregate material will be paid for at the contract unit price per CUBIC YARD for TRENCH BACKFILL furnished and placed between the top of bedding (at spring line) and the bottom of the pavement structure within the standard trench widths as shown on the plans. The contract unit price for TRENCH BACKFILL shall be payment in full for all materials, labor, equipment, transportation and related work required to furnish Case I FA-6 sand (natural). No payment will be made for the hauling, compaction, placement, and testing of accepted native soils used as trench backfill.

TRENCH BACKFILL required for filling outside the standard trench widths shown on the plans shall be incidental to storm sewer, water main, relief sewer or combined sewer construction contract items and no separate payment shall be made.

Trench backfill coarse aggregate material will be paid for at the contract unit price per TON for POROUS GRANULAR BACKFILL furnished and placed between the trench subgrade and the pipe spring line for rigid pipe and to 12" above the top of pipe for flexible pipe.

Temporary aggregate will be paid for at the contract unit price per TON for AGGREGATE FOR TEMPORARY ACCESS installed as specified in Section 402, as modified herein, and as directed by and to the satisfaction of the Engineer. Removal and disposal of temporary aggregate will not be paid for separately but shall be considered as included in the contract.

Temporary HMA surface will be paid for at the contract unit price per TON for TEMPORARY HOT-MIX ASPHALT. Removal and disposal of temporary asphalt will not be paid for separately but shall be considered as included in the contract. With approval from the Engineer, there may be times when temporary cold mix asphalt will be allowed which will be paid for at the contract unit price per TON for TEMPORARY COLD-MIX ASPHALT.

TOPSOIL FURNISH AND PLACE
Add the following paragraph to Article 211.04:
Topsoil shall be pulverized.

Revise Article 211.07 of the Standard Specifications to read:
Topsoil furnish and place shall be that material obtained from outside the right-of-way or private property of those locations impacted by the Contract Documents and will be measured for payment by truck load material delivery ticket displaying volume in cubic yards.

Revise Article 211.08 of the Standard Specifications to read:
This work will be paid for at the contract unit price per cubic yard for TOPSOIL FURNISH AND PLACE.

EXPLORATION TRENCHES
Delete Section 213 in its entirety and replace it with the following:

SECTION 213. EXPLORATION TRENCH

213.01 Description. The Contractor shall excavate exploration trenches as directed and approved by the Engineer to confirm the locations and/or sizes of existing water and sewer utilities. Exploration trenches shall be excavated using methods minimizing possible damage to the utilities. Following completion, trenches shall be backfilled in accordance with Section 208 and temporary

paving provided as necessary to the satisfaction of the Engineer. Exploration trenches dug by the Contractor for his own purposes shall be incidental to construction and no separate payment shall be made.

213.02 Utilities Encountered. If, during the exploratory excavation process, utilities are uncovered which cause interference with the Work, the Contractor shall stop all affected work and immediately notify the Engineer.

213.03 Trenches Requested by Engineer. The Engineer may also request that the Contractor excavate exploration trenches in the Project area."

Exploration trenches ordered by the Engineer will be measured for payment per EACH for actual trenches excavated and backfilled to the depth specified. This work will be paid for at the Contract unit price per EACH for EXPLORATION TRENCH (UP TO 8 FEET DEEP).

Each unit of exploration trenches shall be up to 5 feet in length. These Contract unit prices shall be payment in full for all labor, materials, and equipment required for: pavement saw-cutting, removal, and disposal; trench excavation and disposal; protection of existing utilities and repair of damage to existing utilities.

Temporary pavement, permanent pavement patching, and any other necessary restoration will be paid for separately.

SODDING

Add the following paragraph to Article 252.01:
"All grassed areas disturbed by Contractor's operations shall be restored by sodding. To be acceptable, the sod shall be in a live, healthy condition and be knitted to the soil. Sod shall be growing in place for forty-five (45) calendar days prior to measurement. Only living sod that is acceptable will be measured for payment."

Add the following paragraph to Article 252.02:
"On major roadways (arterial streets, main streets, State and County routes, etc.) sod for public parkway areas and other areas within 25 feet of public roadways shall be salt-tolerant. The sod for most residential streets does not have to be salt-tolerant, at the Engineer's discretion. Sod for other areas shall be native sod matching the species, color, and texture of adjoining grass areas as approved by the Engineer."

Add the following to Article 252.03:
"Sod bed preparation shall include the placement of top soil, including excavating and grading the areas to be sodded to a depth of at least 3-inches below a line connecting the top of the curb and the top of the sidewalk, disposing of the material removed and placing pulverized topsoil on the space so prepared, raked and ready for sodding. The topsoil shall be free from quack grass and weeds and shall be approved by the Engineer before placing. One rolling of the entire surface of the soil shall be made. Existing sidewalks, curbs and trees, and the like, which are not to be removed, shall be protected from damage during the placement of topsoil."

Add the following paragraph to Article 252.04:
"The Contractor is encouraged to refrain from placing sod during the months of July and August, when possible within the required construction schedule. No sod may be placed between November 1 and March 1 unless approved by the Engineer. Regardless of the time of placement and subsequent climatic conditions, the Contractor shall water sod sufficiently to maintain it in a

healthy condition until accepted by the Owner. Sod shall be in a moist condition at the time of cutting and shall be kept in a moist condition until it is placed. Sod cut less than 24 hours before placement is preferred. Sod cut more than 48 hours before placement shall not be used."

Add the following to Article 252.06:
"The placement of sodding shall consist of preparing the ground surface and furnishing, transporting, and placing sod and fertilizer required in the sodding operations. Fertilizer having an analysis of 10-6-4 or having a different analysis but still meeting the 5-3-2 ratio requirements, shall be applied at such a rate that each acre to be sodded shall receive a total of 160 pounds of the three nutrients specified in Article 1081.08. The fertilizer nutrient will not be paid separately but shall be incidental to the cost of sod placement."

Delete the first paragraph of Article 252.08 and replace it with the following paragraphs:
"Within eight hours after sod has been placed five gallons of water per square yard shall be applied and the entire surface of sod rolled. Thereafter, on days designated by the Engineer, additional water shall be applied to sodded areas at the rate of three gallons per square yard. The number of additional applications shall not exceed ten and these applications will be required within a forty-five (45) calendar day growing period after the sod has been placed. The cost of this watering program shall be incidental to the cost of sodding.

The Contractor shall perform additional watering to maintain sod in a healthy condition. The cost of additional watering shall be incidental to the cost of sodding. Any sodding that does not survive will be replaced by the Contractor at his own expense."

Delete Article 252.13 and replace it with the following paragraphs:
This work will be paid for at the Contract unit price per SQUARE YARD for SODDING, measured in place for the quantity actually installed within the pay limits shown on the plans, as hereinafter specified, or as directed by Engineer.

Grassed areas to be restored by SODDING include parkways and all other turf areas which have been disturbed by construction activities.

The Pay limits for grassed areas to be restored by SODDING shall be up to 3-foot of parkway adjacent to curbs, driveways, sidewalks and alley approaches installed as part of this Project; up to 10-feet (to a maximum of 5-feet each side of utility centerline, as required) of parkway disturbed for crossing utility construction; and, up to 16 feet (to a maximum of 8-feet each side of utility centerline, as required) of the parkway for longitudinal utility construction. The Contract unit price for SODDING shall be payment in full for all materials, labor and equipment required for: site preparation; disposal of surplus materials; fertilizers; furnishing, transporting and placing sod; stakes; all watering; mowing; replacement of sod which fails to survive through the establishment period; and all related work required to complete the installation which is not included under other Payment Items.

Sodding outside the limits shown on the plan or specified due to damage caused by Contractor's operations or for Contractor's purposes shall be considered incidental to the contract and no separate payment shall be made.

Preparation of areas to be sodded, rotor tilling and removal/disposal of existing grass, dirt, and debris, will not be measured or paid for separately but shall be considered as included in this pay item.

SUBBASE GRANULAR MATERIAL, TYPE B

Add the following paragraphs to Article 311.02:

"The Contractor shall furnish and place 4 inches or greater coarse aggregate conforming to Article 1004.04 and Article 311.05 (Type B) with a gradation number of CA-6 for use as the base course for all driveways, curb and gutter, as shown on the plans and as directed by the Engineer (aggregate base course for pavement patching is incidental to the patching pay item).

The coarse aggregate shall be gravel, crushed gravel, crushed stone, or crushed concrete. Crushed slag and grindings from PCC or HMA surface removal operations will NOT be allowed.

For existing driveways the existing base materials may be suitable for reuse as determined by the Engineer. Base course shall be placed on the prepared sub-grade. Temporary aggregate suitable for reuse as granular subbase will not be paid for separately as Subbase Granular Material, Type B."

Delete Article 311.09 and replace it with the following paragraphs:

"This work will be paid for at the Contract unit price per TON for SUBBASE GRANULAR MATERIAL, TYPE B, or at the Contract unit price per SQ YD for of the thickness specified for BASE COURSE, CA-6.

The Contract unit price for SUBBASE GRANULAR MATERIAL, TYPE B, and BASE COURSE, CA-6 shall be payment in full for all materials, labor and equipment required for: site preparation, including final grading of trench backfill material; supply, initial placement, compaction and compaction testing of the aggregate base course; and, all related work to complete the installation which is not included under other Payment Items.

The payment shall be limited to the actual amount of SUBBASE GRANULAR MATERIAL, TYPE B, installed within the horizontal and vertical payment limits shown on the plans or specified for curb/gutter, driveways, and at other locations as directed by Engineer (aggregate base course is incidental to all patching and sidewalk pay items unless otherwise noted on the plans)."

INCIDENTAL HOT-MIX ASPHALT SURFACING

This work shall consist of the preparation of the base, the application of bituminous priming material and the construction of the Hot-Mix Asphalt surface for driveway pavements and speed humps.

The Hot-Mix Asphalt for the Incidental Hot-Mix Asphalt surface shall meet the requirements of Section 406 of the Standard Specifications for Road and Bridge Construction. Areas where the Incidental Hot-Mix Asphalt surfacing will be placed shall have the base primed. The rate of application of prime will be as specified in Article 406.05.

The Hot-Mix Asphalt mixture may be spread and finished by approved hand methods or a finishing machine approved by the Engineer.

The Hot-Mix Asphalt mixture shall be rolled and compacted to the satisfaction of the Engineer with tandem roller meeting the requirements of Article 1101.01 of the Standard Specifications for Road and Bridge Construction.

This work will be paid for at the contract unit price per ton for "INCIDENTAL HOT-MIX ASPHALT SURFACING", which price shall include all labor, materials and equipment necessary to complete the work. Saw cutting, HMA surface removal, and preparation or the surface for

speed hump will not be paid for separately but shall be considered as included in the contract unit price for incidental HMA surfacing.

The cost of Bituminous Materials (Tack Coat) will not be paid for separately but shall be incidental to the unit price per ton for INCIDENTAL HOT-MIX ASPHALT SURFACING.

PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT
Add the following paragraphs to Article 423.02:
"Materials: - Materials for concrete shall be in accordance with Section 420 as applicable. Class SI concrete shall be used. Forms shall be a minimum of 2" x 8" lumber or its approved equal, held in place by stakes or braces with the top edges true to line and grade. The aggregate base course shall be four (4") inches thick of crushed limestone gradation CA-6 constructed in accordance with Section 351 of the Standard Specifications. The driveway pavement shall be six (6") inches or eight (8") inches thick. Three-quarter (3/4") inch thick expansion joint material shall be placed between the curb and the full width of the proposed driveway. Contraction joints shall be provided.

Curing and Protection: Curing shall be in accordance with Article 1022.01. Curing compound shall be Type III. Protect all surfaces from sun. During hot weather, keep temperature of concrete below 90 degrees Fahrenheit. During cold weather, keep temperature of concrete between 50 degrees F and 70 degrees F for 3 to 5 days. Protect from frost and rapid drying for 6 days. The Contractor shall be solely responsible for protecting his work from vandalism. All vandalized concrete work shall be removed and replaced at the Contractor's expense."

Delete Article 423.11 and replace it with the following paragraphs:
This work will be paid for at the Contract unit price per SQUARE YARD for PORTLAND CEMENT CONCRETE (PCC) DRIVEWAY PAVEMENT, of the thickness specified, measured in place. Payment shall be made for the quantity of pavement actually installed within the pay limits shown on the Drawings or as directed by Engineer.

The Contract unit price for PCC DRIVEWAY PAVEMENT shall be payment in full for all materials, labor, and equipment required for: final grading of aggregate base course; reinforcement, if required; pavement placement, curing, and protective coating; and all related work required to complete the installation which is not included under other Payment Items.

PCC DRIVEWAY PAVEMENT installation outside the limits shown on the Drawings due to damage caused by Contractor's operations or for Contractor's purposes shall be considered incidental to this work and no separate payment shall be made.

PORTLAND CEMENT CONCRETE SIDEWALK
Add the following sentences to Article 424.01:
"The Work shall also include adjustments to surface elements such as buffalo boxes, valve covers, manhole covers, vault covers, etc. to final grades."

Add the following sentences to Article 424.02:
"Curing shall be in accordance with Article 1022.01. Curing compound shall be Type III. Protect all surfaces from sun. During hot weather, keep temperature of concrete below 90 degrees Fahrenheit. During cold weather, keep temperature of concrete between 50 degrees F and 70 degrees F for 3 to 5 days. Protect from frost and rapid drying for 6 days."

Add the following sentences to Article 424.04:
"The Aggregate Base Course required for necessary grading will not be paid for separately and

constructed in accordance with section 351 of the Standard Specifications."

Add the following paragraphs to Article 424.06:
"Concrete placement will be permitted if air temperature is 40 degrees Fahrenheit or higher. Concrete pours shall be ended at expansion or control joints. Partial slabs shall not be allowed. The surface shall be divided by control joints extending to the depth of the slab. Control joints shall be tooled first, saw-cut to proper depth and shall be spaced at 5-foot or other uniform intervals as directed by the Engineer. All edges and intermediate joints of sidewalks shall be shaped with an edging tool having a ½ inch radius. Surfaces of sidewalks shall have a light broom finish, except handicapped ramps at intersections, which shall be finished as shown on the Drawings.

All sidewalk removed shall be formed within 3 working days of removal. New sidewalk shall be poured within 1 working day of being formed. The forms shall be removed within 1 working day after the concrete pour and the restoration adjacent to new sidewalk shall be done with 24 hours after removal of the forms. All low areas shall be filled in to match the surrounding grades within 72 hours of the sidewalk being poured.

The Contractor shall be solely responsible for protecting his work from vandalism. All vandalized concrete work shall be removed and replaced at the Contractor's expense"

Add the following paragraphs to Article 424.09:
"The product used for detectable warnings shall be Prefabricated Detectable Warning Panels (Red Brick) manufactured by one of the following:
> Access Products, Inc. (888-679-4022)/ Supplier (630-689-7574)
> Armorcast Products Company (818-982-3600)
> Detectable Warning Systems, Inc. (866-999-7452)
> www.TUFTILE.com (888-960-8897)."

HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH
Add the following sentence to Article 440.01:
"Cold milling will not be allowed prior to the completion of the installation of relief sewers, combined sewers, storm sewers, or water mains."

Revise the first sentence of Article 440.04 of the Standard Specifications to read:
The existing HMA surface and underlying HMA base, PCC base, brick base, or aggregate base shall be removed to varying depths (nominal depth of 3") as specified on the plans and/or as directed by the Engineer with a self-propelled milling machine.

Add the following to Article 440.04:
"HMA Surface Removal, Variable Depth shall include any additional passes of the milling machine required to remove an existing quarter crown and establish the proposed pavement cross slope as shown on the plans. These operations shall be considered incidental to the work, and no separate payment shall be made."

Delete Article 440.08 and replace it with the following paragraphs:
"This work will be paid for at the Contract unit price per SQUARE YARD for HOT MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH outside of the standard trench width, but within the payment limits for full-width street resurfacing shown on the plans and/or as directed by the Engineer.

The Contract unit price for HOT MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH shall be payment in full for all materials, labor, and equipment required for: planning of pavement; loading and disposal of milled pavement and aggregate cuttings; sweeping of the planed surface of fines and dust; and related work required. Measurement for cold milling shall be based on actual pavement area milled, but shall not include the trench portion if the pipe trench is located in the milling area.

Cold milling outside the pay limits specified to repair damage caused by Contractors operations or which have been removed/replaced for Contractor's purposes shall be considered incidental to the work and no separate payment shall be made."

PAVEMENT PATCHING

Add the following paragraph to Article 442.01:
"Class B patches shall conform to Section 353-Portland Cement Concrete Base Course and Class D patches shall conform to Section 355 – Hot-Mix Asphalt (HMA) Base Course. Existing pavement is to be removed and replaced in accordance with the Drawings. The quantification sub-types: I, II, III, and IV, shall not apply."

Add the following paragraph to Article 442.04:
"Roadway restoration activities, except installation of final HMA surface course, shall be carried out such that no more than 1,000 lineal feet of permanent roadway is removed at any one time for each open-cut pipe installation operation; no more than 1,000 feet of permanent roadway is removed per active mainline sewer or water main installation crew; and, such that the period that the permanent roadway removed at any location does not exceed thirty (30) calendar days, without the approval of the Engineer. In no case, however, shall the total length of permanent roadway removed exceed 2,500 lineal feet regardless of the number of open-cut sewer or water main construction operations (active mainline crews) underway.

Installation of final HMA surface shall be completed not later than thirty (30) calendar days after patch/base course installation. All streets, roads, alleys, and drives disturbed in any construction year shall be fully resurfaced and restored, including surface course, by December 1 of that construction year in accordance with Article 108.02 of the Standard Specifications."

Add the following sentences to the first paragraph of Article 442.05:
"The Contractor shall saw-cut existing pavements to full depth, along the line of the maximum allowable trench width as showing on the Drawings. All excavated material including paving bricks shall be properly disposed of off-site. No drop hammer and/or guillotine-type concrete breakers/cutters shall be utilized for pavement removal. No earth saw shall be utilized to saw-cut pavement."

Add the following sub-paragraph to Article 442.06 Paragraph (a) Subparagraph (2):
"On streets having a concrete base and HMA overlay, PCC concrete base patches will be 2 inches below existing pavement surface."

Add the following to Article 442.08 - Class D Patching:
"(e) Hot-Mix Asphalt Mixture for Patching Potholes (Temporary Hot Mix and Cold Mix). This work shall consist of the removal of loose and broken pavement and the construction of a temporary HMA concrete patch on the existing roadway to be used to maintain traffic during construction as specified at locations designated by the Engineer. Between April 15 and December 1, Hot Mix shall be applied and the MHA mixture shall conform to Section 406. Between December 16 and April 14, Cold Mix may be used."

Delete Article 442.11 and replace it with the following paragraphs:
"This work will be paid for at the Contract unit price per SQUARE YARD for CLASS B PATCHES, SPECIAL; CLASS D PATCHES, SPECIAL; CLASS D PATCHES, SPECIAL – WIDENING; FULL DEPTH PATCHES, SPECIAL; and FULL DEPTH PATCHES, SPECIAL - WIDENING of the thickness shown on the Drawings, measured in place. Payment shall be made for the quantity of patch actually installed within the pay limits shown on the Drawings or as directed by Engineer.

These Contract unit prices shall be payment in full for all materials, labor and equipment required for: saw-cutting (full depth), removal, and disposal of existing pavement and sub-base to proposed subgrade; furnishing, placement and final grading of aggregate base course, new paving materials and installation; furnishing and installing contraction joints, dowel bars, and expansion joints as required; finishing and additional reinforcement where required for concrete pavement; and related work required to complete the installation which is not included in other Payment Items.

For Class B and Full Depth Patches, the quantities for payment purposes shall be based on the maximum allowable width of the trench at the top of the subgrade. This payment width shall not exceed a maximum dimension as indicated by the details shown on the Drawings. The length of removal and replacement shall be measured along the centerline of the pipe over which removal and replacement is made. Length of removal and replacement for all patching shall include distances through manholes and other structures.

For Full Depth Patches, the payment thickness shall be: 9" PCC and 2" HMA thickness to existing pavement surface elevation as shown on the plans.

Additional pavement removal and replacement beyond the maximum pay widths shown on the Drawings required to complete the Work or for Contractor's purposes shall be considered incidental to combined sewer, relief sewer, storm sewer, sanitary sewer, and water main construction and no separate payment shall be made.

Additional aggregate base course outside the pay limits shown on the Drawings required to complete the Work or for Contractor's purposes shall be considered incidental to the work and no separate payment shall be made."

STORM (COMBINED) SEWERS
Delete Article 550.01 and replace it with the following:
"**550.01 Description**. This work shall consist of constructing combined, relief, and storm sewers of the required inside diameter with necessary fittings and appurtenances."

Delete Article 550.03 and replace it with the following:
"**550.03 Pipe Material Requirements**. Pipes used in sewer construction shall be as follows and as indicated on the drawings. Pipes shall be of uniform material and structural class between structures:

(a) Combined sewers 4 to 15 inches in diameter and more than 5 feet deep; relief sewers 4 to 15 inches in diameter and more than 5 feet deep; and sanitary service connection piping other than specified in Paragraph d following - Poly-vinyl chloride (PVC) pipe conforming to ASTM D-3034 having joints conforming to ASTM D-3212. Pipe shall be a solid wall product not thinner than SDR 26 with minimum stiffness of

115 psi. Where minimum separation requirements between sewer pipe and water main are not met, the use of Poly-vinyl chloride (PVC) pipe conforming to AWWA C-900 and rated for 150 psi (DR18) having joints conforming to ASTM-3139 and ASTM F-477 is required.

(b) Combined sewers 16 to 24 inches in diameter and more than 5 feet deep; and, relief sewers 16 to 24 inches in diameter and more than 5 feet deep (alternate bid item**)** - Poly-vinyl chloride (PVC) pipe conforming to ASTM F-679 having joints conforming to ASTM D-3212 and a solid wall not thinner than SDR26 with minimum stiffness of 115 psi may be used in lieu of DR25 pipe at Contractor's option. Where minimum separation requirements between sewer pipe and water main are not met, the use of Poly-vinyl chloride (PVC) pipe conforming to AWWA C-905 and rated for 165 psi (DR25) having joints conforming to ASTM-3139 and ASTM F-477 is required.

(c) Catch basin and inlet leads; relief sewers 4 to 24 inches in diameter and 5 feet or less in depth or where indicated on drawings; sanitary sewer service connection piping crossing under other utilities; and, combined sewers 4 to 24 inches in diameter where indicated on drawings - Ductile iron pipe conforming to ANSI 21.51 (AWWA - C151); of a minimum thickness Class 50 as designed per ANSI A21.50 (AWWA - C150) except as designated on the Contract Drawings; tar (seal) coated per ANSI A21.4(AWWA - C104); and, with push-on joints per ANSI A21.11(AWWA - C111)."

Add the following paragraphs to Article 550.04:
"The width and depth of trench excavation for all pipes shall be as shown on the Drawings. Along the proposed pipe alignments indicated on the Drawings, Contractor shall remove the surface materials only to such widths as will permit a trench to be excavated, which will afford sufficient room for efficient and proper construction. Where sidewalks, driveways, pavements, and curb/gutter are encountered, care shall be taken to protect such against fracture or disturbance beyond these working limits.

Prior to the placement of all pipes, bedding shall be placed on the trench bottom, compacted and shaped to receive the pipe. Bedding shall consist of crushed gravel or crushed limestone conforming to CA-7, CA-11, or CA-13 of Section 1004 for RCP and DIP sewers, and ASTM D2321 Class IB for PVC Sewers. Geotextile filter fabric, Trevira 1114 or equal, shall be provided to encase the pipe bedding and initial pipe cover in trenches through wet, soft, and/or granular native soils and elsewhere as directed by Engineer. The geotextile fabric shall be placed as shown on the Drawings.

The trench shall be excavated to the alignment and depth required and may be advanced up to 50 feet ahead of the pipe laying operation during working periods and up to 20 feet ahead of pipe laying operations during non-work periods. Trenching operations shall be terminated at the end of each day's work in locations which do not obstruct roadways, alleys or driveways. In general, the length of open trench shall not exceed 70 feet from the forward cut to the completely backfilled trench nor shall more than one street crossing be obstructed by the same trench at any one time. Open cut excavations shall be reduced to a maximum length of 30 feet for overnight protection.

Roadway restoration activities, except installation of final HMA surface course, shall be carried out such that no more than 1,000 lineal feet of permanent roadway is removed at any one time for

each open-cut pipe installation operation; no more than 1,000 feet of permanent roadway is removed per active mainline sewer or water main installation crew; and, such that the period that the permanent roadway removed at any location does not exceed thirty (30) calendar days, without the approval of the Engineer. In no case, however, shall the total length of permanent roadway removed exceed 2,500 lineal feet regardless of the number of open-cut sewer or water main construction operations (active mainline crews) underway. Roadways shall be reinstated as soon as possible after sewer and water main installation.

Contractor shall conduct dewatering as necessary to maintain the water table level below the trench bottom prior to and during pipe laying, jointing and backfilling. The dewatering operation, however accomplished, shall be carried out so that it does not destroy or weaken the strength of the soil under or alongside the trench.

Contractor shall divert all sanitary flow around the construction area by means of flumes or temporary by-pass pumping systems. Pumping shall be sufficient such that no backing up of sanitary flow will occur. Contractor shall be responsible for all damage resulting from negligence in creating restrictions to flow within the sewer system. Contractor shall not interrupt the flow from individual sanitary services for more than four hours. Sanitary flows shall not be diverted into catch basins or relief sewers.

Open-cut trenches shall be supported as required to fully protect life, existing utilities, adjacent structures, pavements, and the Work. Trench support is an integral part of the Contractor's means and methods. The Contractor shall employ the services of a registered (Illinois) Structural Engineer, registered (Illinois) Professional Engineer, Geotechnical Engineer, and other professionals as necessary to prepare designs of support systems. The support systems shall conform to Federal laws, State laws and municipal ordinances. The minimum protection shall conform to the recommendations in O.S.H.A. Safety and Health Standards for Construction. A sand box or trench shield may be used as permitted by O.S.H.A.

For sewers located in unpaved areas, augering construction shall be made where the sewer passes within a distance of tree diameter times 8 or 8 feet, whichever is greater, from trees. For sewers located in paved areas, augering construction shall be made where the sewer passes within a distance of tree diameter times 5 or 8 feet, whichever is greater, from trees. The auger shall be approximately 6 inches larger than the outside diameter of the pipe bell and extend not less than 10 feet or as shown on drawings, whichever is greater, from the base of the tree in both directions. The annular space between pipe and auger wall shall be filled with granular material. Augering work shall be considered incidental to the construction of sewers and no separate payment shall be made."

Delete the first paragraph of Article 550.05 and replace it with the following:
"Sewers designated on the Drawings to be abandoned shall be filled with Controlled Low-Strength Material (CLSM), unless otherwise specified by the Engineer. CLSM shall meet the following requirements:

(a) Materials. CLSM shall consist of a mixture of Portland cement, fly ash, fine aggregate, and water proportioned to provide a backfill material that is self-compacting and capable of being excavated with hand tools if necessary at a later date. All materials shall meet the following requirements:

Portland Cement, Type I	Section 1001
Water	Section 1002

Fine Aggregate (Natural Sand)	Section 1003.02
Fly Ash	Section 1010.02

(b) Proportioning. Materials for CLSM shall be proportioned as follows:

Portland Cement	50 lbs.
Fly Ash	300 lbs. (if Type F) or 200 lbs. (if Type C)
Fine Aggregate (Saturated Surface Dry)	2900 lbs.
Water	45-65 gallons

These quantities will yield approximately one cubic yard of CLSM of the proper consistency. The flowability shall be observed by the Engineer and the water content adjusted within the specified limits to produce desired results. The CLSM shall be ready-mixed as specified in Section 1020.11 of the Standard Specifications. Sufficient mixing capacity shall be provided to permit the CLSM to be placed without interruption. The mixer drum shall be completely emptied prior to the initial batch of CLSM to ensure that no additional cement fines are incorporated into the mix.

(c) Placement. The CLSM shall be discharged directly from the truck into the space to be filled, or by other methods approved by the Engineer."

Add the following paragraphs to Article 550.06:
"Laying of sewer pipe shall be accomplished to line and grade in the trench only after it has been dewatered and the foundation and/or bedding have been prepared. Mud, silt, gravel, and other foreign material shall be kept out of the pipe and off joint surfaces. All pipe laid shall be retained in position so as to maintain alignment and joint closure until sufficient backfill has been completed to adequately hold the pipe in place.

Pipe alignment shall not deviate by more than 0.5 inch or 0.25 inch per foot of diameter, whichever is greater, from true vertical alignment; or 2.0 inches or 0.5 inch per foot of diameter, whichever is greater, from true horizontal alignment, prior to and following placement and compaction of backfill. Sewers found to vary from these alignment criteria shall be excavated and relayed or otherwise corrected as approved by the Engineer.

Contractor shall check line and grade of each pipe section installed with laser beam; and, in the event they do not meet specified limits described hereinafter, the work shall be immediately stopped, the Engineer notified, and the cause remedied before proceeding with the Work.

Installation of PVC sewers shall conform to ASTM D2321. After installing any sewer on the bedding and the joint made, backfilling to one foot above the crown of the pipe shall be placed to form a granular encasement. The pipe shall be laid so that it will be uniformly supported for the entire length of its pipe barrel fully bearing on the aggregate cradle. No blocking of any kind will be permitted to adjust the pipe to grade.

All branch sewer connections shall meet the structural, jointing, and water-tightness requirements for the mainline pipe to which they are made. Break-in-connections will not be allowed. Connections of pipe 18-inches in diameter or smaller to RCP may be made using cast-in or cored-in flexible couplings meeting ASTM C-923, or precast wye or tee fittings as approved by Engineer. Connections of pipe larger than 18-inch diameter to RCP shall be with pre-cast wye or tee fittings as approved by Engineer. Connections to PVC or DIP shall be made using factory-made wye or tee fittings. Tapping saddles may NOT be used for connections to PVC pipe. Connections may be tees or wyes at Contractor's option, unless shown otherwise on the Drawings.

Plugs for pipe branches, stubs, or other open ends, which are not to be immediately connected, shall be made of an approved material and shall be secured in place with a joint comparable to the main line joint. Stoppers may be of an integrally cast breakout design.

Shear resistant couplings as manufactured by Fernco Inc. or approved equal shall be used for connections of new pipe to existing pipe, and where dissimilar pipe and joint materials are encountered. Connections may not be made with only stainless steel shear rings. An associated bushing is required at all connections."

Add the following paragraphs to Article 550.07:
"Covering of the pipe to a depth of one-foot over the top of the pipe shall be performed by a method which assures that materials fill and support the haunch areas of the pipe, encasing the pipe to the limits as indicated. The aggregate shall be placed in layers not exceeding six inches (6") in thickness and carried up at the same levels on both sides of the pipe. Each layer shall be thoroughly compacted and tamped under and around the pipe.

Cover and backfill shall be compacted in accordance with Method 1 or Method 3, and shall achieve a Standard Proctor Density of not less than 95 percent as tested in accordance with Section 106. To facilitate compaction by Method 3, the Contractor shall provide a well point/pump system, sump pits and pumps, or other proactive procedures approved by the Engineer for extracting the water used for backfill compaction from the pipe bedding material. The spacing between extraction points shall be sufficient to assure adequate water velocities for the jetting process and to assure that the backfill and/or bedding will not become over-saturated such that compaction is lost. In any case, jetting water extraction points shall be located not more than 400 feet apart.

Following completion of the backfilling process, the final layer of backfill shall also be inundated with water in accordance with Method 2. The Contractor shall repair any subsidence which occurs prior to paving by adding additional backfill material and compacting in accordance with Method 1.

Contractor shall repair any subsidence greater than 1½ inches which occurs following paving by removing paving, installing additional backfill, compacting in accordance with Method 1, and re-installing paving. Contractor shall repair any subsidence 3-inches or less which occurs following base course paving by installing additional leveling binder immediately prior to installation of the bituminous surface course. Contractor shall repair any subsidence, which occurs following installation of bituminous surface course by installation of additional surface course. The unsettled pavement surrounding the subsidence area shall be milled to a depth of 1½ inches for at least the full lane width each way of the subsidence transverse to the direction of traffic and 20-feet each way of the subsidence longitudinal to the direction of traffic.

Concrete pavement displaced more than ½ inch by subsidence shall be removed and replaced to the nearest contraction joints, expansion joints, curbs, or transitions to other pavement types, as applicable. The cost of correcting subsidence, including additional paving, shall be borne by the Contractor at no additional cost to the Owner, whether that subsidence is caused by the Contractor's failure to adequately compact backfill or otherwise perform the Work, or is inherent in the construction methods utilized, including tunneling."

Add Article 550.11 which shall read as follows:
"Contractor shall be responsible for all on-site and off-site testing for the Work performed under this Section. Contractor shall retain the services of an independent certified testing laboratory to perform all testing. All testing shall be in accordance with Section 106 of this Specification and the

Standard Specifications. Copies of all on-site and off-site test reports shall be submitted to the Engineer. Certified test reports will be acceptable for material proposed to be incorporated into the Work; however, final acceptance will be based on the material as it is actually incorporated into the Work. Testing shall including the following:

Pre-construction and Post-construction Sub-surface Videotaping. Prior to commencing construction and following completion of construction, Contractor shall conduct a closed-circuit internal television inspection of existing mainline combined, storm and sanitary sewers along the routes of the proposed relief sewer, combined sewer, and water mains. The purpose of the televising is to document the condition of the existing sewers prior to the start of the construction and any change in condition, which occurs as a result of construction. Following completion of sewer and water main installation, infiltration/exfiltration testing, backfill compaction testing, and deflection testing, but before final restoration and placing sewers in service, the Contractor shall conduct an internal television inspection of all new mainline sewers 48 inch in diameter or smaller. Inspection of new mainline sewers shall be performed in the presence of the Engineer.

The closed circuit camera and other televising equipment used shall be specifically designed for sewer line inspection. The camera shall be cable drawn. The camera shall be high-resolution color and shall be equipped with a lighted, pivoting head to view branch connections. For sewers 24-inches and larger, the camera shall be mounted on an appropriately sized skid so that the camera is centered in the sewer. Camera pull speed through the mainline pipe shall not exceed 30 feet per minute, the camera should be paused at every connection, and the camera panned to view the full interior of the connection. Crawler-type cameras shall not be used unless the sewer cannot be televised using cable drawn equipment, such as dead-end sewers or sewers so obstructed that pulling cables cannot be installed. If, during the internal inspection, the camera cannot pass through the entire sewer from a single set-up, the sewer internal inspection shall be completed using a reverse set-up from an adjacent manhole. If the sewer cannot be inspected over the remainder of its full length using the reverse set-up, Contractor shall notify the Engineer immediately while the camera remains in the sewer.

Contractor shall record the internal inspection on DVD format. Each DVD made shall be labeled "City of Evanston, 2022 Water Main Improvements and Street Resurfacing Project, PW-WMRS-2201" and shall be consecutively numbered. An index of each videotape shall be provided which includes tape number, street/alley location (including names of end-blocks), beginning manhole number, ending manhole number, length of sewer, diameter of sewer, beginning and ending tape counter numbers. Contractor shall utilize the Owner's manhole numbering system (available through Engineer) to identify the existing sewer sections televised. For post-construction inspection of new sewers, the manhole numbering system shown on the Drawings, prefaced by "City of Evanston, 2022 Water Main Improvements and Street Resurfacing Project, PW-WMRS-2201" or other project designation, shall be utilized. The upstream manhole number, downstream manhole number and footage from beginning manhole shall be superimposed on the video image.

Contractor shall also prepare a written report for each section of sewer televised. Each report shall be labeled "City of Evanston, 2022 Water Main Improvements and Street Resurfacing Project, PW-WMRS-2201" and shall be coordinated with the DVD. For each sewer section televised, the report shall include: date of inspection, videotape reference number including counter readings, street location (including names of end-blocks), beginning manhole number, ending manhole number, length of sewer, diameter of sewer, and pipe material. The report shall note the locations (as a distance from the beginning manhole) the locations, orientations (o'clock position) and appropriate size parameters of: service and other connections; pipe defects, such as cracks, offsets, sags, deformations and break-in connections; water infiltration; mineral, grit, and grease build-ups; root

intrusions; and, other irregularities.

Backfill Compaction. During the installation of Case I backfill material, the Contractor shall conduct density testing specified in Article 550.07 in accordance with Section 106. The cost of testing shall be incidental to storm sewer, water main, relief sewer and combined sewer installation and no separate payment shall be made.

Infiltration/Exfiltration Testing. Contractor shall conduct infiltration testing of each manhole-to-manhole section of relief sewer after the pipe is installed and backfilled, but before street paving operations commence. If Contractor elects to compact backfill by jetting (Article 550.07 - Method 3), then the infiltration test shall be performed during the jetting operation. Where the depth of the ground water is less than 24 inches over the crown of the pipe at the upstream section to be tested, an exfiltration test shall be used in place of an infiltration test.

Infiltration tests shall be made by measuring the flow of infiltrating water over a calibrated weir set up in the invert of the sewer. Personnel for reading flow measuring devices will be furnished by the Engineer, but all other labor, equipment, material and water, including gauges and meters, will be furnished by the Contractor.

Exfiltration tests shall be made by bulk-heading the section to be tested and completely filling the subject sewer. The bulkheads shall be watertight and shall be adequately braced to withstand the head of water pressure that will be applied in the testing process. As such, the Contractor shall employ the services of a Registered (Illinois) Structural Engineer for bulkhead and bulkhead bracing design. The exfiltration test shall be conducted by filling the sewer to a level four feet above the crown of the sewer in the manhole at the upper end of the section being tested. The rate of flow required to keep this required level will be the exfiltration. Tests shall be conducted for at least two hours.

No additional pipe shall be laid until the infiltration/exfiltration test on each manhole-to-manhole section of pipe meets specified limits following:

Exfiltration: 100 gallons per day per inch of pipe diameter per mile of sewer.
Infiltration: 100 gallons per day per inch of pipe diameter per mile of sewer.
No visible leaks which endanger the pipe or surrounding bedding/ backfill.

If the specified infiltration/exfiltration limits are exceeded, the Contractor shall televise or internally inspect the sewer in the presence of the Engineer to identify the source(s) of the leakage. Contractor shall immediately make all repairs and/or replacements necessary to achieve the specified infiltration/exfiltration limits. After all repairs are made, the Contractor shall again make an infiltration or exfiltration test. All costs of internal inspection to locate leakage sources, other testing and pipe correction shall be borne by the Contractor at no additional cost to the Owner.

Deflection Testing. For PVC pipes, a deflection test shall also be performed as described in the Standard Specifications for Water and Sewer Construction in Illinois. The maximum permitted deflection shall be 5 percent. Those pipe sections failing deflection testing shall be corrected by re-excavating the pipe, allowing the pipe to return to its circular cross-section (or replacing the pipe if necessary), and replacing the pipe cover and backfill. Devices that generate internal pressures or vibrations shall not be used to correct pipes failing the deflection test. The cost for defection testing and pipe correction shall be incidental to the prices bid for Sewer Items. No additional payment will be made for deflection testing or correction of defects located."

Internal Television Inspection: Following completion of open-cut sewer installation, infiltration/exfiltration testing, backfill compaction testing, and deflection testing, but before final surface is installed, the Contractor shall conduct an internal television inspection of all mainline sewers installed. The television camera used shall be high resolution color, shall be equipped with a revolving head capable of viewing up service connections, and shall be equipped with a footage counter which records on the videotape. For televising pipes 54-inches and smaller, the camera shall be stopped at each lateral connection and the camera head rotated to give a full view of the interior of the lateral. DVD format shall be made of the internal inspections and given to the Owner. The cost of televising the Relief Sewer, Combined Sewer, Storm Sewer, Sanitary Sewer, shall be considered incidental. No additional payments will be made for this work.

Delete Article 550.09 and replace it with the following paragraphs:
"Measurement of sewers shall include all straight sections of pipe and all bends and other fittings, including wyes, tees, reducers and rubber check valves actually installed. The measurement for relief and combined sewers of the materials and sizes specified shall not include the distance through base tee manholes, other manholes, and drop structures. In the case of cast-in-place structures, the distance not included in relief and combined sewer measurement shall be the length from outside of the structure wall on the upstream side of the structure to the outside of the structure wall on the downstream side of the structure as shown on the Drawings. In the case of precast structures, the distance not included in relief and combined sewer measurement shall be the distance between the first joints in standard pipe sections upstream and/or downstream of the structure. Measurement and payment for manholes, base tee sections and other structures shall be made under the appropriate Payment Items for these structures."

Delete Article 550.10 and replace it with the following paragraphs:
"Installation of storm sewers, relief sewers, and combined sewers shall be paid on a Contract unit price basis per LINEAR FOOT for sewer of the diameter, material, and strength class specified. Payment items are defined below for the various sizes, classes, and materials used, including RCP (reinforced concrete pipe), DIP (ductile iron pipe), and PVC (poly-vinyl chloride) pipe.

The Contract unit prices for RCP, DIP, and PVC sewers shall be payment in full for all materials, labor, and equipment required for: site preparation, including removal, replacement and/or repair of fences and other site objects; trench excavation, including removal and disposal of existing sewer pipes, structures, and excess excavated materials; protection, support and repair of damage to existing utilities; support of trench walls, including shoring and bracing; dewatering of trenches; temporary pumping of flows in existing and new sewers; sewer pipe, including fittings, fittings as necessary to reconnect catch basin outlet leads, risers, adapters, couplings, collars and other components; connection of existing sewers to the proposed sewer; abandonment of existing sewers where called out on the Drawings, including filling and placement of required plugs; bedding placement and compaction to one foot above the top of the pipe; backfill placement, compaction and compaction testing; infiltration/exfiltration testing of sewers; internal television inspection of all pipes; deflection testing of sewers; correction of defects; and, other related work required to complete the installation which is not included under other Payment Items.

The Contract unit price for RCP, DIP, and PVC sewers shall include: combined sewer repairs where shown on the Drawings.

These items shall not include the costs of installations and adjustments of sanitary and water services, which shall be paid for in accordance with the appropriate Payment Items. Adjustment of other existing house service utilities, including gas, electric, cable TV and telephone services, shall be considered incidental to the work and no separate payment shall be made.

Roadway, sidewalk, driveway, and curb/gutter removal/replacement outside the pay limits shown on the Drawings required for completion of the work or for Contractor's purposes shall be incidental to combined sewer, relief sewer, storm sewer, and sanitary sewer construction and no separate payment shall be made.

Pre and Post Construction Sub-Surface Videotaping shall be paid for at the Contract unit price per FOOT of sewer for PRE AND POST CONSTRUCTION SUB-SURFACE VIDEOTAPING of existing combined and storm sewers on streets in which tunnels, relief sewers, and water mains are proposed, at locations as specified, where not covered by other payment items, and at other locations as directed by Engineer. The Contract unit price shall be payment in full for all materials, labor, and equipment required for: traffic control; cleaning of existing sewers (jetting); internal videotaping existing mainline combined sewers and storm sewers, including reverse set-ups, retrieving stuck televising equipment or repairing of sewers damaged by the televising effort; providing one copy of the videotapes (DVD format) and reports to the Owner and other related work required. This item will be measured for payment separately for pre-construction and for post-construction footage.

Sub-surface videotaping will be required before the start of construction and will also be required following completion of the construction (but prior to installation of the bituminous surface course).

The quantity shall not include pre-construction or post-construction videotaping for: sewer liner installation, new relief sewer installation, new storm sewer installation, and new combined sewer installation, all of which shall be considered incidental to the Contract."

WATER MAIN

Add the following to Article 561.01:

"Where shown on the Drawings, Line Stopping shall be performed. This work shall involve the placement of a self-contained hydraulic unit within an operating water main for the purpose of installation of a valve and/or other connection with the existing system without interruption of service."

Add the following to Article 561.02:

(a) All materials shall be Made in America

(b) Line Stops. The line-stop unit shall be a self-contained hydraulic (hand pump operated) ram. The line-stopping device shall be of such a design that, when hydraulic pressure is applied, the bladder will expand and conform to the I.D. of the pipe and tuberculation inside the main (if any) will be moved outside of the sealing area.

The line-stop shall be of the 'Short Stop' variety, which will require removing only the top of the pipe during the operation. All fittings shall employ an I.D. thread, screw-type engagement together with O-Ring seal for bubble-tight completion. After insertion of plug, a screw-on cap will be used and bolted down. The system shall be capable of containing a water pressure of 150 psi. The line-stopping system shall be Hydro-Stop or approved equal. Line-stop sleeves shall be Style "Evanston Sleeve Total Seal" Extra Heavy Duty as manufactured by Hydro Stop or equal.

(c) Fasteners. Stainless steel bolts will be used on all fittings or mechanical joints.

(d) Fittings. All fittings furnished shall be ductile iron conforming to AWWA Standard for Ductile Iron Compact Fittings C153, 350 psi rating. Fittings shall be mechanical joint and shall be equipped with Mega-Lug or equal joint restraining glands. Restraining glands which rely on the bearing of screw-points on the water main wall shall not be utilized. All fittings shall be cement-mortar lined inside and bituminous-coated outside, in accordance with Sec. 51-8 - ANSI A21.51 (AWWA C104 and C151).

(e) Valves. Gate valves and tapping valves with sleeve and cut in-valves 24-inches and smaller in size shall be resilient wedge mechanical joint type, manufactured to meet or exceed the requirements of AWWA C515, latest revision. Gate valves larger than 24-inches in size shall be of double disc type to meet AWWA C500 requirements and shall be in accordance with the following specifications:

i. Valves shall be Waterous Series 2500 or approved equal and shall have the manufacturer and year cast on the body with raised letters.

ii. Valves shall have an unobstructed waterway equal to or greater than the full nominal diameter of the valve. The sealing mechanism shall consist of a cast iron gate having a vulcanized synthetic rubber coating. The resilient sealing mechanism shall provide zero leakage at the design water pressure of 150 psi when installed with the line flow in either direction. All valves are to be tested in strict accordance with AWWA C515 or AWWA C500.

iii. Valves shall have non-rising stems made of cast, forged, or rolled bronze shown in AWWA C515. Two stem seals shall be provided and shall be of the O-ring type.

iv. Valves shall be equipped with cast iron operating nuts and shall be secured to the stem with stainless steel bolts. Valves shall turn counterclockwise, or left (looking downward at the operating nut) to open.

v. The valve body, bonnet and cover shall be cast iron ASTM A126, Class B. All internal and external surfaces shall be coated with epoxy to a minimum thickness of 4 mils. Bonnet bolts shall be stainless steel.

(f) Fire hydrant with auxiliary valve and valve box. Hydrants shall conform in all respects to the American Water Works Association Standard C502 latest revision and shall meet the following specifications:

i. Hydrants shall be Waterous Pacer. The hydrant shall have a breakaway flange at the ground line and shall be for five and one-half (5-½) or six (6) feet of cover as appropriate. Hydrant size shall be 5-¼ inch valve opening with a 6-inch mechanical joint inlet connection. Stem seals shall be "O-Ring" type. Hydrants shall be equipped with drain outlets. Finish color above the ground line shall be red. Note red color shall extend at least 6-inches below the intended ground line. Hydrant shall be installed such that the breakaway flange is installed within two (2) inches of the finished grade. The breakaway flange must not be buried. All buried bolts shall be stainless steel. Hydrant extension is allowed to adjust to minimum grade requirements.

ii. Hydrants furnished shall be for buried installation with two 2 ½ inch hose connections and one 4-inch pumper nozzle, National Standard Threads. Operating and outlet nozzle cap nuts shall

be of pentagon shape in conformance with Section 3.2.9.8 of AWWA Standard. Suitable nozzle caps, gaskets, and chains shall be provided.

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iii. All auxiliary valves used for hydrant installation shall be in conformance with the specifications of AWWA C515. Valve boxes used for auxiliary hydrant valves shall be 5-¼-inch shaft diameter with cover marked "WATER". All boxes shall be F-2450 as manufactured by CLOW CORP, Tyler 6850-664S or approved equal. The auxiliary valve shall be installed 2 feet from the fire hydrant or as specified by the Engineer.

iv. Where existing fire hydrants are being replaced, the replacement shall include removal of all existing hydrant components, including: the existing connection to the water main, the water main to the hydrant, hydrant valve, valve box and hydrant. Care shall be exercised in the removal of the existing hydrant and valve such that they are not damaged. The existing valve and hydrant shall be stored by the Contractor to the end of the Project or other time during the Project designated by the Owner, at which time it shall be delivered to the Owner.

Installation of New or Replacement Fire Hydrant shall include all new components, including: tee fitting equipped with Mega-Lug or equal joint restraining glands at the water main, extensions or reduction in height, 6-inch DIP hydrant water supply main from the tee, auxiliary hydrant valve, valve box and hydrant. Replacement components shall conform to all applicable specifications presented in Section 561. In order to achieve the required hydrant height from the ground surface shown on the drawings for replacement hydrants, a Gradelok, or equal, adjustable pipe offset shall be used, if necessary.

v. All new fire hydrants installed mid-block shall be installed on the property line between two adjacent properties. New fire hydrants shall be covered with a burlap bag until they are placed in service. Existing fire hydrants which are taken out of service with the existing water main shall be covered with a burlap bag until they are removed."

vi. Use of same class pipe material with main line is required on each proposed hydrant location. (If water main line is class 52, use class 52 for hydrant run).

(a) Ductile Iron Pipe Water Main. All ductile iron pipe shall be thickness class 52 in accordance with AWWA Standard Specifications for Ductile Iron Pipe, External Zinc-Based Coated, centrifugally cast in Metal Molds for water or other Liquids - AWWA -C151 latest revision. Coating: The exterior of ductile iron pipe shall be coated with a layer of arc-sprayed zinc per ISO 8179. The mass of the zinc applied shall be 200 g/m2 of pipe surface area. A finishing layer topcoat shall be applied to the zinc. The mean dry film thickness of the finishing layer shall not be less than 3 mils with a local minimum not less than 2 mils. The coating system shall conform in every respect to ISO 8179-1 "Ductile iron pipes - External zinc-based coating - Part 1: Metallic zinc with finishing layer. Second edition 2004-06-01." The whole of the above Specifications shall apply. The pipe shall be furnished with push-on joints. All pipe shall be cement-mortar lined inside and bituminous-coated outside, in accordance with Sec. 51-8 - ANSI A21.51 (AWWA C104 and C151). All ductile iron pipe must be clearly marked by the manufacturer to indicate pipe classification or pipe thickness. Unmarked pipe will not be accepted.

Viton gaskets will be required at the Dewey Avenue project location as determined by additional environmental testing conducted by the contractor prior to the start of construction as approved by the Engineer.

(b) Tapping Sleeves and Valves. For water main extensions and water services greater than 2-inch, tapping sleeves are required which shall be CST-EX "Total Seal" Extra Heavy Duty all stainless steel tapping sleeve with drop-in stainless steel bolts and nuts as manufactured by Cascade Waterworks Manufacturing or equal. Tapping valves shall be as specified under Article 561.02 Subparagraph (c.) and shall be secured using stainless steel T-bolts and nuts. Tapping sleeves shall be located a minimum of two feet clear distance from any existing joint or fitting.

(c) Foster Adaptor. The device shall be Infact Corporation FOSTER ADAPTOR or equal, incidental to various pay items. Mechanical joint (MJ) valves and fittings shall be connected using a bolt-through positive restraint mechanism manufactured of U. S. A. ductile iron conforming to ASTM A536, 65-45-12. The positive restraint device shall connect the valves and/or fittings at a linear distance not to exceed three (3) inches and without attachment to pipe. The device shall come complete with all accessories, including standard styrene butadiene rubber (SBR) MJ gaskets conforming to the latest revision of AWWA C111/ASTM F-477 and weathering steel (Corten) bolts conforming to AWWA C111/A21.11 and ASTM A242. Nuts for 3 through 12-inch sizes shall be SAE Grade 5 steel with black oxide coating. Nuts for 14-inch and larger adaptors shall be heavy hex Corten steel conforming to ASTM A242. Sizes 3-12-inch of the bolt-through MJ positive restraining device shall be supplied with an NSF 61 asphaltic seal coating in accordance with ANSI/AWWA C104/A21.4. Sizes 14-36-inch shall be supplied with NSF 61, 7-mil. fusion bonded epoxy conforming to AWWA C116/ A21.16-09 as well as the coating, surface preparation and application requirements of ANSI/AWWA C550. For sewer installations, the device shall be supplied with 40-mil Protecto 401 epoxy. [Epoxy coating, blue Teflon® coated, and stainless steel hardware are available for all sizes.] The device shall be used with standard mechanical joint fittings (AWWA C110 or C153) and valves.

Shop drawings for water system components shall be submitted for approval as soon as possible, but not less than thirty (30) calendar days prior to the time when the components are intended to be installed."

Add the following additional sentences to Subparagraph (a) of Article 561.03:
"The trench shall have a flat bottom conforming to the grade to which the pipe is to be laid, and provided with a minimum of 5-feet, 6-inches of cover. Provide pipe insulation if cover is less than 5-feet (Incidental to various pay Items). Along the proposed pipe alignments indicated on the plans, the Contractor shall remove the surface materials only to such widths as will permit a trench to be excavated, which will afford sufficient room for efficient and proper construction. Where sidewalks, driveways, pavements, and curb/gutter are encountered, care shall be taken to protect such against fracture or disturbance beyond these working limits.

Prior to the placement of all pipes, bedding shall be placed on the trench bottom, compacted and shaped to receive the pipe. The pipe shall be placed as shown in the plans. Any part of the trench excavated below the grade shall be corrected with approved material, firmly compacted. Where the Contractor must excavate below the plan grade indicated because of unforeseen conditions, all additional excavation and backfilling will be considered incidental to the Contract. In some instances, trees, shrubs, utilities, sidewalks and other obstructions may be encountered, the proximity of which may be a hindrance to open-cut excavation for installation of water mains and appurtenances. In such cases, the Contractor shall excavate by means of auger in order to protect such obstructions against damage. Augering work shall be performed in accordance with the clearances and procedures specified in Article 550.04."

The trench shall be excavated to the alignment and depth required and may be advanced up to 50 feet ahead of the pipe laying operation during working periods and up to 10 feet ahead of pipe laying operations during non-work periods. Trenching operations shall be terminated at the end of each day's work in locations that do not obstruct roadways, alleys or driveways. In general, the length of open trench shall not exceed 70 feet from the forward cut to the completely backfilled trench nor shall more than one street crossing be obstructed by the same trench at any one time. Open cut excavations shall be reduced to a maximum length of 30 feet for overnight protection.

Open-cut trenches shall be supported as required to fully protect life, existing utilities, adjacent structures, pavements, and the Work. Trench support is an integral part of the Contractor's means and methods. The Contractor shall employ the services of a registered (Illinois) Structural Engineer, registered (Illinois) Professional Engineer, Geotechnical Engineer, and other professionals as necessary to prepare designs of support systems. The support systems shall conform to Federal laws, State laws and municipal ordinances. The minimum protection shall conform to the recommendations in O.S.H.A. Safety and Health Standards for Construction. A sand box or trench shield may be used as permitted by O.S.H.A.

Add the following subparagraphs to Article 561.03:
(c) Notification. Wherever construction activities will disrupt water mains and/or individual water services, the Contractor shall develop a work plan for limiting the extent and duration of the disruption. This work plan shall be submitted to the City of Evanston Utilities Department for review and approval not less than two weeks before the planned disruption. No disruption will be permitted until said work plan has been reviewed and approved.

In addition, it is the responsibility of the Contractor to directly notify the City of Evanston Utilities Department, affected customers, and, if fire hydrants are affected, the City of Evanston Fire Department not less than 48-hours in advance of the start of the disruption, advising them of the planned time and duration of the disruption. Each disruption to the mainline system; an individual service; or, group of services, when they are being transferred to a new water main in a single, staged construction operation, shall be considered a separate occurrence, for which notification shall be provided. The Contractor shall also directly notify the City of Evanston Utilities Division not less than 48-hours in advance of mainline pressure-testing and disinfection operations. In cases where construction activities will require operation of water main valves, the City of Evanston Utilities Department will be responsible for the operation of the valves.

(d) Installation. All pipe laying and the making of all joints shall be done strictly in accordance with manufacturer's directions and in accordance with AWWA C600 "Installation of Ductile Iron Water Mains and Their Appurtenances". Mechanical joint fittings shall be spaced a minimum of 2 feet apart. The Contractor shall be responsible for achieving the water-tightness specified. The method of handling and of placing pipe in the trench shall not damage the pipe. Pipe interiors shall

be kept clean and the exposed ends of the pipe in the trench shall be closed by suitable watertight bulkheads at all times when pipe-laying is not actually in progress. Abrupt changes in pipe alignment shall be accomplished by use of appropriate fittings as shown on the Drawings. Wherever long horizontal or vertical curves are shown on the drawings, the pipe may be laid to such curves by uniformly deflecting the pipe joints along the arc of the curve to form a smooth radius. Pipe deflection shall not exceed one-half the maximum allowable joint deflection recommended by the pipe manufacturer. A temporary plug/cap or watertight protection is required for the end of pipe at the end of any working days and is considered incidental.

All required valve box extensions shall be made so that the top section is a minimum 2 feet in length. Blocking at bends, tees, caps, hydrants and valves shall be of poured Class SI concrete, a minimum of 12" thick, placed between solid ground and the fitting, and shall be anchored in such a manner that pipe and fitting joints will be accessible for repairs.

New and relocated fire hydrants shall be placed a minimum of three feet from the back of the curb unless otherwise directed by the Engineer. All fire hydrants on new mains shall be covered with burlap bags until such time that the Owner notifies the Contractor that the burlap bags shall be removed."

Add Article 561.06, which shall read as follows:
Hydrostatic Tests. Hydrostatic tests will be performed according to Section 13 of the American Water Works Association Specifications, Designation: AWWA C600. The water main will be subjected to the hydrostatic pressure and leakage tests specified in the Special Provisions. Water for making the hydrostatic and leakage tests shall be furnished by the Contractor at his/her own expense and shall be of satisfactory bacteriological quality for drinking purposes.

"Only one connection of the new pipeline, as approved by the Owner, shall be made to the present system prior to pressure-testing the new pipeline. Contractor shall provide all temporary bulkheads/plugs required for testing. Contractor shall test the pipeline in sections as approved by Engineer. The test shall be made by closing valves and filling the lines slowly with water. Care shall be used to see that all air is released during the filling of the pipeline. After the line or section thereof, has been completely filled, it shall be allowed to stand under a slight pressure for sufficient time to allow the escape of air from any air pockets. During this period the hydrants, valves, and other connections shall be examined for leaks. If any are found, they shall be stopped prior to the pressure test.

PRESSURE / LEAK TEST
Only one connection to the new water main, as approved by the Engineer and the City of Evanston Water and Sewer Division, shall be made to the present system prior to pressure testing the new water main. The Contractor shall provide all temporary bulkheads / plugs required for testing.

The Contractor shall test the water main in sections as approved by the Engineer and the City of Evanston Water and Sewer Division. The test shall be made by closing valves and filling the lines slowly with water, care shall be used to see that all air is released during the filling of the water main. After the line or section has been completely filled, it shall be allowed to stand under slight pressure for sufficient time to allow the escape of air from any air pockets. During this period, the hydrants, valves and other connections shall be examined for leaks. If any are found, they shall be repaired prior to the start of the pressure / leak test.

The test shall consist of holding a pressure on the water main of 150 pounds per square inch (psi) for a period of at least two (2) hours. The pressure during the two hour test cannot vary by more

than 5 psi for the duration of the test.

Leakage shall be defined as the quantity of water that must be supplied into the newly laid pipe or any valve section thereof to maintain pressure within 5 psi of the specified test pressure after the water main has been filled with water and the air has been expelled. This leakage will be calculated after the 2-hour test has been completed. The water necessary to bring the pressure up to 150 psi from a measured container shall be the amount of leakage. Leakage will equal the amount of water used from the container.

No pipe installation will be accepted if the leakage is greater than that determined by the following formula:

L = (S x D x SQRT P)/133,200 in inch-pound units:

Where:

L = allowable leakage, in gallons per hour
S = length of pipe tested, in feet
D = nominal diameter of the pipe, in inches
P = average test pressure during the leakage test, in psi (gauge)

Where it is not practical to pressure test the final connections to an existing water main, a visual inspection shall be carried out under normal working pressure before backfilling the trench. Any noticeable leakage shall be stopped and any defective pipe shall be replaced with new sections.

Add Article 561.07, which shall read as follows:
Disinfection of Water Main. Upon completion of the newly laid water main, the water main shall be disinfected according to the American Water Works Association, Procedure Designation: AWWA C651, except as modified herein. Bacteriological Tests shall follow AWWA C651 Option A, modified for sampling at 24 hour intervals as noted below.

Disinfection of Water Main
The basic disinfection procedure consists of:

1) Preventing contaminated materials from entering the water main during storage, construction or repair.

2) Removing, by flushing **at a velocity of 3.0 ft. /sec** those materials that may have entered the water main.

3) Chlorinating any residual contamination that may remain, and flushing the chlorinated water from the main.

4) Protecting the existing distribution system from backflow due to hydrostatic pressure test and disinfection procedures.

5) Determining the bacteriological quality by laboratory test after disinfection.

6) Final connection of the approved new water main to the active distribution system.

The Contractor shall provide all corporation cocks necessary for disinfection of the new water main.

These corporation cocks shall be placed as necessary to facilitate testing and disinfection of the new water main, including chlorine application points and sample collecting points. These corporation cocks shall be located in valve vaults only, unless otherwise approved by the Engineer.

The new pipe shall be thoroughly flushed clean, at a velocity of 3.0 ft. /sec and pressure tested before disinfection is attempted. All disinfecting work shall be done by the Contractor with the approval of the Engineer. Heavy particulates generally contain bacteria and prevent even very high chlorine concentrations from contacting and killing such organisms. It is therefore essential that the water main be thoroughly flushed before the final disinfection by chlorination is performed.

The method to be used for disinfecting the water main is referred to as the **Continuous-Feed Method using Chlorine Gas**. At a point not more than 10 feet downstream from the beginning of the new water main, water entering the new main shall receive a dose of chlorine fed at a constant rate such that the water will have not less than 50 milligrams per liter (mg/l) free chlorine at the discharge end. The chlorine solution must be distributed uniformly throughout the length of the water main being disinfected.

After the contact period of not less than 24 hours, the water main shall be flushed until chlorine concentration of the water leaving the new water main is no higher than that generally prevailing in the distribution system (under one milligram per liter (mg/l).

If there is any possibility that the chlorinated water will cause damage to the environment, then a neutralizing chemical shall be applied to the water to be wasted to neutralize thoroughly the chlorine residual remaining in the water. This neutralizing chemical must be approved for that purpose.

After final flushing and before the new water main is connected to the City's water distribution system, two consecutive sets of acceptable samples (no bacteria growth), taken at least 24 hours apart, shall be collected from the new water main. The second days' sample will be collected using only the water main pressure, no water main valves will be open for this sample and no flushing will be permitted. At least one set of samples shall be collected from every 1,200 feet of the new water main, plus one set from the end of the line, and at least one set from each branch or as required by the Owner.

Sampling for bacteriological analysis shall be collected in sterile bottles treated with sodium thiosulfate as required by Standard Methods for the Examination of Water and Wastewater. No hose or fire hydrant shall be used to collect samples. Corporation cocks may be installed in the water main with a copper tube gooseneck assembly to obtain samples. After samples have been collected, the gooseneck assemblies must be removed.

The City of Evanston will take the samples and perform the lab testing. For acceptance, two consecutive sets of samples, taken at 24 hour intervals, shall indicate bacteriologically satisfactory water.

If the initial disinfection fails to produce satisfactory bacteriological results, the new water main may be reflushed and shall be resampled. For each time the City must resample, the Contractor shall be assessed fees to cover City costs as outlined below. If these samples also fail to produce acceptable results, the water main shall be rechlorinated by the continuous feed method until satisfactory results are obtained.

Failure to follow this procedure during pressure and chlorination testing may result in unacceptable

results and may require the Contractor to incur additional costs in re-testing and cause project completion delays.

The interior of all mainline pipe, service pipe, fittings, valves, corporation stops, curb stops, and other water main or water service components which are likely to come in contact with potable water immediately after their installation or before chlorine-gas disinfection can be accomplished, shall be swabbed, soaked, or sprayed with a 2 percent hypochlorite solution before they are installed.

The Contractor shall provide all corporation cocks necessary for disinfecting the new pipeline. These corporation cocks shall be placed as necessary to facilitate testing and disinfection of the new water main, including chlorine application points and sample collecting points. These corporation cocks shall be located in valve vaults. The new pipeline shall be flushed clean before disinfection is attempted. All disinfecting work shall be done by the Contractor under the direction and with the cooperation of the Owner."

Contractors will be charged for each of the following additional tests when necessary because of Contractor's failure to pass the initial test:

Each Additional Pressure Test	**$167.00**
Each Additional Chlorination	**$167.00**
Each Additional Flushing and Sample Collection	**$167.00**
Each Additional Sample Analysis (laboratory fee)	**$25.00**

Add Article 561.08, which shall read as follows:
"**561.08 Sequence of Work.** Contractor shall submit a work plan indicating the sequence of water main installation not less than ten (10) calendar days prior to the planned start of work. This work plan shall include information as to where and how the flushing, pressure testing, and disinfection of the new pipeline will be carried out in such manner that will cause the least amount of water service interruption to the water customers. The work plan must be approved by the Owner prior to installation of any water mains and shall conform to the following general sequences of installation listed.

Items of Work shall be completed in the following sequence unless otherwise approved in writing by the Engineer:

1) Placement of Temporary Traffic Control and Protection
2) Posting of No Parking Sign
3) Tree Protection Measures (Tree Canopy Pruning, Tree Root Pruning, Temporary Fencing)
4) Exploration Trenches as needed
5) Water Main Installation and Patching of Trench with temporary Hot-Mix Asphalt (To be completed as the end of each day)
6) Water Main Testing
7) Water Service Installation and Transfers, Final Interconnection, and Sewer Work
8) Permanent Trench Pavement Patching and Concrete Curb and Sidewalk Repairs
9) Initial Parkway Restoration (Final Grading of Topsoil) – Partial Completion Met
10) Paving Operations (Utility Frames Removals as directed by Engineer, HMA Surface Removal, Additional Pavement Patching as directed by Engineer, Binder Paving, Utility Frame Adjustments, HMA Surface Paving)
11) Pavement Marking - **Substantial Completion Met**

12) Final Parkway Restoration (Installation of Sodding)
13) Punch List Work

DEMPSTER STREET FROM ACCESS DRIVEWAY TO DODGE AVENUE:

The proposed 10" water main (DIP, Class 52, External Zinc Based Coated, Restrained Joint) shall be installed on Dempster Street from to Dodge Avenue. This water main segment of the project will commence from Dodge Avenue to Access Driveway.

Exploratory trench should be performed on the existing 12" water main along Dodge Avenue by Dempster Street intersection prior to the start of construction. As indicated on the plans the initial work should be within 4-hour shut-down. All non-pressure connections to existing water mains will not be paid for separately but considered incidental to other water main work items.

The Contractor shall start by cutting in on the existing 12" water main along Dodge Avenue as indicated on the plans and using a duo sleeve to connect for the proposed 12" water main then install a 12" in-line valve in valve vault. Provide a 1" corporation stop with 1" copper pipe extension adjacent to the 12" valve for testing. The 12" water main will continue to the west side of Dodge Avenue only. ***All materials necessary to perform this task should be on the field at least 1 day prior to work on this task. Provide temporary asphalt at the work area and traffic protection for this assembly. Contractor shall save the existing curb.***

As shown on the plans using 2 - 45º bends to continue west.

At Sta. 6+12, install a 12" x 8" tee and install the 8" in-line valve in valve box for interconnections to existing 8" water main along Dodge Avenue (South). Also, provide temporary asphalt and traffic protection for this assembly. Use foster adaptors for the 8" valve connections, incidental.

At Sta. 6+10.50, install a 12" to 10" reducer. As shown on the plans to continue west, the Contractor may prepare the 8' x 20' drilling/receiving pit at Sta. 5+60. The Contractor will directionally drill the new 10" water main to or from the 8' x 20' drilling/receiving pit at Sta. 1+90.

At Sta. 3+93.30, install a 10" x 8" tee and install the 8" in-line valve in valve box for interconnections to existing 8" water main for the Commercial Complex (South). Also, provide temporary asphalt and traffic protection for this assembly. Use foster adaptors for the 8" valve connections, incidental.

At Sta. 3+75, install a 10" x 6" tee for proposed fire hydrant on the south side of Dempster Street, west of Dodge Avenue.

The proposed 10" water main will continue west to Access Driveway.

At Sta. 1+70, install a 10" x 10" tee, also 10" to 12" increaser (PE-PE) and install the 12" in-line valve in valve box for interconnections to existing 12" water main for the Commercial Complex (North). Also, provide temporary asphalt and traffic protection for this assembly.

At Sta. 1+47.50, install a 10" x 8" tee and install the 8" in-line valve in valve box for interconnections to existing 8" water main along the access driveway for the Commercial Complex (South). Also, provide temporary asphalt and traffic protection for this assembly. Use foster adaptors for the 8" valve connections, incidental. ***(AS SHOWN IN THE PLANS,***

INSTALL THE REQUIRED 8" LINE STOP PRIOR TO FINAL CONNECTIONS)

At Sta. 1+20, the Contractor will install a 10" in-line valve in valve vault. Provide a 1" corporation stop with 1" copper pipe extension adjacent to the 10" valve for testing. Also, for testing (incidental), the Contractor will install a temporary flushing fire hydrant just after the 10" valve or a temporary frame and grate to cover the same size diameter 45º bends and pipes for flushing. Provide temporary asphalt and traffic protection for this assembly.

At this time, the new water mains may be flushed, pressure tested and chlorinated. After the acceptance of the disinfection testing. The final connections to the existing water main as indicated on the plans may then be made within 4-hour shut-down. All non-pressure connections to existing water mains will not be paid for separately but considered incidental to other water main work items.

ISABELLA STREET FROM BRYANT AVENUE EXTENSION TO NORTH SHORE CHANNEL:

The proposed 8" water main (DIP, Class 52, External Zinc Based Coated, Restrained Joint) shall be installed on Isabella Street from Bryant Avenue Extension to North Shore Channel. This water main segment of the project will commence from Bryant Avenue Extension to North Shore Channel.

Exploratory trench should be performed on the existing 8" water main on Isabella Street prior to the start of construction. As indicated on the plans the initial work should be within 4-hour shut-down. All non-pressure connections to existing water mains will not be paid for separately but considered incidental to other water main work items.

The Contractor shall start by cutting in on the existing 8" water main along Isabella Street and using a duo sleeve to connect for the proposed 8" water main then install a 8" in-line valve in valve vault. Provide a 1" corporation stop with 1" copper pipe extension adjacent to the 8" valve for testing. The 8" water main will continue east to North Shore Channel. ***All materials necessary to perform this task should be on the field at least 1 day prior to work on this task. Provide temporary asphalt at the work area and traffic protection for this assembly. Contractor shall save the existing curb.***

At Sta. 1+90, install a 8" x 6" cross as shown in the plans, install the 6" in-line valve in valve box for interconnections to existing 6" water main along Isabella Street (West) and install the 6" in-line valve in valve box for interconnections to existing 6" water main along Bryant Street Extension (South). Also, provide temporary asphalt and traffic protection for this assembly. Use foster adaptors for the 6" valve connections, incidental.

As shown on the plans using 2 - 45º bends to continue east, the Contractor may prepare the 8' x 20' drilling/receiving pit at Sta. 2+10. The Contractor will directionally drill the new 8" water main with the required 12" DIWM casing under the existing CTA Railroad tracks to or from the 8' x 20' drilling/receiving pit at Sta. 2+90. Also, install the 8" in-line valves at Sta. 2+15 and Sta. 3+00.

The proposed 8” water main will continue east to North Shore Channel.

The Contractor may prepare the 8’ x 20’ drilling/receiving pit at Sta. 5+85. The Contractor will directionally drill the new 8” water main to or from the 8’ x 20’ drilling/receiving pit at Sta. 3+10.

At Sta. 6+00, install a 8” x 6” tee for proposed fire hydrant on the south side of Isabella Street, just west of the North Shore Channel.

At Sta. 6+05, the Contractor will install a 8” in-line valve in valve vault. Provide a 1” corporation stop with 1” copper pipe extension adjacent to the 8” valve for testing. Also, provide temporary asphalt and traffic protection for this assembly.

At this time, the new water mains may be flushed, pressure tested and chlorinated. After the acceptance of the disinfection testing. The final connections to the existing water main as indicated on the plans may then be made within 4-hour shut-down. All non-pressure connections to existing water mains will not be paid for separately but considered incidental to other water main work items.

EASTWOOD AVENUE FROM LIVINGSTON STREET TO ISABELLA STREET:

The proposed 6” water main (DIP, Class 52, External Zinc Based Coated, Push-On Joint) shall be installed on Eastwood Avenue from Livingston Street to Isabella Street. This water main segment of the project will commence from Isabella Street to Livingston Street.
Exploratory trench should be performed on the existing 8” water main on Isabella Street and the existing 6” water main on Eastwood Avenue prior to the start of construction. As indicated on the plans the initial work should be within 4-hour shut-down. All non-pressure connections to existing water mains will not be paid for separately but considered incidental to other water main work items.

The Contractor shall start by removing the existing 8” x 6” tee on the existing 8” water main, using a duo sleeve connect the proposed 8” water main then install the proposed 8” x 6” tee. To continue south, at Sta. 10+03, install a 6” in-line valve in valve box. Provide a 1” corporation stop with 1” copper pipe extension adjacent to the 6” valve for testing. The 6” water main will continue South to Jenks Street. ***All materials necessary to perform this task should be on the field at least 1 day prior to work on this task. Provide temporary asphalt at the crossings and traffic protection for this assembly. Contractor shall save the existing curb.***

The proposed 6” water main will continue South to Jenks Street.

At Sta. 5+97, install a 6” x 6” tee as shown in the plans, install the 6” in-line valve in valve vault for interconnections to existing 6” water main along Jenks Street (West), just east of this 6” valve, install a 6”x6” tee for proposed fire hydrant on the northwest corner of Eastwood Avenue and Jenks Street. Provide a 1” corporation stop with 1” copper pipe extension adjacent to the 6” valve for testing. Also, provide temporary asphalt and traffic protection for this assembly.

The proposed 6” water main will continue South to Livingston Street.

At Sta. 5+70, install a 6” in-line valve in valve box.

At Sta. 3+37, install a 6” x 6” tee for proposed fire hydrant on the northeast side of Eastwood Avenue and Alley.

At Sta. 1+57, install a 8” x 6” cross as shown in the plans, install the 8” in-line valve in valve vault for interconnections to existing 8” water main along Livingston Street (West). Provide a 1” corporation stop with 1” copper pipe extension adjacent to the 6” valve for testing. Also, for testing (incidental), the Contractor will install a temporary flushing fire hydrant just after the 8” valve or a temporary frame and grate to cover the same size diameter 45º bends and pipes for flushing. Install the 6” in-line valve in valve box for interconnections to existing 8” water main along Livingston Street (East). Use foster adaptor for the east 8” valve connection, incidental. Provide temporary asphalt and traffic protection for this assembly.

At Sta. 1+28, the Contractor will install a 6” in-line valve in valve vault. Provide a 1” corporation stop with 1” copper pipe extension adjacent to the 6” valve for testing. Also, for testing (incidental), the Contractor will install a temporary flushing fire hydrant just after the 6” valve or a temporary frame and grate to cover the same size diameter 45º bends and pipes for flushing Provide temporary asphalt and traffic protection for this assembly.

At this time, the new water mains may be flushed, pressure tested and chlorinated. After the acceptance of the disinfection testing, the water services may be tapped. The final connections to the existing water main as indicated on the plans may then be made within 4-hour shut-down after all the water services were transferred to the new water main. All non-pressure connections to existing water mains will not be paid for separately but considered incidental to other water main work items.

LINCOLN STREET FROM GREEN BAY ROAD TO ASHLAND AVENUE:

The proposed 16” water main (DIP, Class 52, External Zinc Based Coated, Push-On Joint) shall be installed on Lincoln Street from Green Bay Road to Poplar Avenue and the proposed 10” water main (DIP, Class 52, External Zinc Based Coated, Push-On Joint) shall be installed on Lincoln Street from Poplar Avenue to Ashland Avenue.
Exploratory trench should be performed on the existing 18” water main on Green Bay Road and Lincoln Street prior to the start of construction. As indicated on the plans the initial work should be within 4-hour shut-down. All non-pressure connections to existing water mains will not be paid for separately but considered incidental to other water main work items.

The Contractor shall start by cutting in on the existing 18” water main along Lincoln Street and using a duo sleeve to connect for the proposed 18” water main, install a 18” to 16” reducer. As shown on the plans using 2 - 45º bends to continue east and then at Sta. 2+15, install a 16” in-line valve in valve vault. Provide a 1” corporation stop with 1” copper pipe extension adjacent to the 16” valve for testing. The 16” water main will continue east to Poplar Avenue. ***All materials necessary to perform this task should be on the field at least 1 day prior to work on this task. Provide temporary asphalt at the work area and traffic protection for this assembly. Contractor shall save the existing curb.***

At Sta. 3+35, install a 16” in-line valve in valve vault.

At Sta. 3+40, install a 16” x 16” tee. As shown in the plans;

1) For the 16" water main, connect a 45º bend (PE-MJ) at the tee and continue to the south side of Lincoln Street and install another 45º bend on the proposed 16" water main, for interconnections with the existing 16" water main. Also, provide temporary asphalt and traffic protection for this assembly

At Sta. 4+17 @ 14' RT, install a 16" x 8" tee as shown in the plans, install the 8" in-line valve in valve box for interconnections to existing 8" water main along Poplar Avenue (South).

At Sta. 4+35, install a 16" x 6" tee for proposed fire hydrant on the Southeast side of Lincoln Street and Poplar Avenue.

At Sta. 4+40, as shown in the plans, install the 16" in-line valve in valve vault for interconnections to existing 16" water main along Lincoln Street (East). Provide a 1" corporation stop with 1" copper pipe extension adjacent to the 16" valve for testing. Provide temporary asphalt and traffic protection for this assembly.

2) For the 10" water main, install 16" to 10" reducer, then on Sta. 3+46, install a 10" in-line valve in valve box. Also, provide temporary asphalt and traffic protection for this assembly.

The proposed 10" water main will continue East to Ashland Avenue.

At Sta. 5+45, install a 10" x 6" tee as shown in the plans, install the 6" in-line valve in valve vault for interconnections to existing 6" water main along Eastwood Avenue (North). Provide a 1" corporation stop with 1" copper pipe extension adjacent to the 6" valve for testing. Also, for testing (incidental), the Contractor will install a temporary flushing fire hydrant on the east side of Eastwood Avenue after the 6" valve or a temporary frame and grate to cover the same size diameter 45º bends and pipes for flushing. Provide temporary asphalt and traffic protection for this assembly.

At Sta. 5+86, install a 10" x 6" tee for proposed fire hydrant on the Northeast corner of Lincoln Street and Eastwood Avenue.

At Sta. 10+00, install the 10" in-line valve in valve vault, for interconnections to existing 10" water main along Lincoln Street (East). Provide a 1" corporation stop with 1" copper pipe extension adjacent to the 10" valve for testing. Also, for testing (incidental), the Contractor will install a temporary flushing fire hydrant on the just after the 10" valve or a temporary frame and grate to cover the same size diameter 45º bends and pipes for flushing. Provide temporary asphalt and traffic protection for this assembly.

At this time, the new water mains may be flushed, pressure tested and chlorinated. After the acceptance of the disinfection testing, the water services may be tapped. The final connections to the existing water main as indicated on the plans may then be made within 4-hour shut-down after all the water services were transferred to the new water main. All non-pressure connections to existing water mains will not be paid for separately but considered incidental to other water main work items.

EMERSON STREET FROM HARTREY AVENUE TO LELAND AVENUE:

The proposed 8" water main (DIP, Class 52, External Zinc Based Coated, Push-On Joint) shall be installed on Emerson Street from Leland Avenue to Hartrey Avenue. This water main

segment of the project will commence from Hartrey Avenue to Leland Avenue.
Exploratory trench should be performed on the existing 10” water main on Hartrey Avenue and Emerson Street prior to the start of construction. As indicated on the plans the initial work should be within 4-hour shut-down. All non-pressure connections to existing water mains will not be paid for separately but considered incidental to other water main work items.

As shown on the plans, the Contractor will remove the existing 10” x 6” cross and replace it with 10” x 6” tee and install a 6” in-line valve in valve box for interconnecting with the existing 6” water main along Emerson Street (East). Use foster adaptor for the 6” valve connection, incidental. Then to continue west, the Contractor may cut in the existing 10” water main and install the proposed 10” x 8” tee, using a duo sleeves, at Sta. 10+82, install a 8” in-line valve in valve vault. Provide a 1” corporation stop with 1” copper pipe extension adjacent to the 8” valve for testing. The 8” water main will continue West to Laurel Avenue. ***All materials necessary to perform this task should be on the field at least 1 day prior to work on this task. Provide temporary asphalt at the crossings and provide traffic protection for this assembly. Contractor shall save the existing curb.***

At Sta. 7+33, install a 8” x 8” tee as shown in the plans, install the 8” in-line valve in valve box for interconnections to existing 8” water main along Laurel Avenue (South), Use foster adaptor for the 8” valve connection, incidental. Also, provide temporary asphalt and traffic protection for this assembly.

The proposed 8” water main will continue West to Lemar Avenue. At Sta. 7+17, install a 8” x 6” tee for proposed fire hydrant on the Southwest side of Emerson Street and Laurel Avenue.

At Sta. 4+28, install a 8” x 6” tee as shown in the plans, install the 6” in-line valve in valve vault for interconnections to existing 6” water main along Foster Street (North). Provide a 1” corporation stop with 1” copper pipe extension adjacent to the 6” valve for testing. Also, for testing (incidental), the Contractor will install a temporary flushing fire hydrant just after the 6” valve or a temporary frame and grate to cover the same size diameter 45º bends and pipes for flushing. Provide temporary asphalt and traffic protection for this assembly.

At Sta. 4+02, install a 8” x 8” tee as shown in the plans, install the 8” in-line valve in valve box for interconnections to existing 8” water main along Lemar Avenue (South), Use foster adaptor for the 8” valve connection, incidental. Also, provide temporary asphalt and traffic protection for this assembly.

The proposed 8” water main will continue West to Leland Avenue. At Sta. 3+75, install a 8” x 6” tee for proposed fire hydrant on the Southwest side of Emerson Street and Lemar Avenue.

At Sta. 1+53 and Sta. 1+43, install a 2 - 45º bend to Leland Avenue (South).

At Sta. 1+44 , install a 8” x 6” tee for proposed fire hydrant on the Southeast side of Emerson Street and Leland Avenue.

At Sta. 1+45, install the 8” in-line valve in valve vault, reduced to match the existing 6” water main prior to interconnections along Leland Avenue. Provide a 1” corporation stop with 1” copper pipe extension adjacent to the 8” valve for testing. Also, provide temporary asphalt and provide traffic protection for this assembly.

At this time, the new water mains may be flushed, pressure tested and chlorinated. After the

acceptance of the disinfection testing, the water services may be tapped. The final connections to the existing water main as indicated on the plans may then be made within 4-hour shut-down after all the water services were transferred to the new water main. All non-pressure connections to existing water mains will not be paid for separately but considered incidental to other water main work items.

DEWEY AVENUE FROM KIRK STREET TO OAKTON STREET:

The proposed 6" water main (DIP, Class 52, External Zinc Based Coated, Push-On Joint) shall be installed on Dewey Avenue from Kirk Street to Oakton Street. This water main segment of the project will commence from Oakton Street to Kirk Street.

Exploratory trench should be performed on the existing 10" water main on Oakton Street and the existing 6" water main on Dewey Avenue prior to the start of construction. As indicated on the plans the initial work should be within 4-hour shut-down. All non-pressure connections to existing water mains will not be paid for separately but considered incidental to other water main work items.

The Contractor shall start by removing the existing 10" x 6" tee on the existing 10" water main, using a duo sleeve connect the proposed 10" water main then install the proposed 10" x 6" tee. To continue south, at Sta. 8+13, install a 6" in-line valve in valve vault. Provide a 1" corporation stop with 1" copper pipe extension adjacent to the 6" valve for testing. The 6" water main will continue South to Kirk Street. ***All materials necessary to perform this task should be on the field at least 1 day prior to work on this task. Provide temporary asphalt at the crossings and traffic protection for this assembly. Contractor shall save the existing curb.***

The proposed 6" water main will continue South to Kirk Street. ***Contractor shall save the existing curb***

At Sta. 4+55, install a 6" x 6" tee for proposed fire hydrant on the east side of Dewey Avenue (mid-block).

Contractor shall save the existing curb

At Sta. 1+70, install a 6" x 6" cross as shown in the plans, install the 6" in-line valve in valve box for interconnections to existing 6" water main along Kirk Street (West) and install the 6" in-line valve in valve box for interconnections to existing 6" water main along Kirk Street (East). Also, provide temporary asphalt and traffic protection for this assembly. Use foster adaptors for the 6" valve connections, incidental.

At Sta. 1+20, install a 6" x 6" tee for proposed fire hydrant on the southeast side of Dewey Avenue and Kirk Street.

At Sta. 1+15, the Contractor will install a 8" in-line valve in valve vault. Provide a 1" corporation stop with 1" copper pipe extension adjacent to the 8" valve for testing. Also, provide temporary asphalt and traffic protection for this assembly.

At this time, the new water mains may be flushed, pressure tested and chlorinated. After the acceptance of the disinfection testing, the water services may be tapped. The final connections to the existing water main as indicated on the plans may then be made within 4-hour shut-down after all the water services were transferred to the new water main. All non-pressure connections to existing water mains will not be paid for separately but considered incidental to other water main work items.

FORESTVIEW ROAD FROM PAYNE STREET TO COLFAX STREET:

The proposed 6" water main (DIP, Class 52, External Zinc Based Coated, Push-On Joint) shall be installed on Forestview Road from Payne Street to Colfax Street. This water main segment of the project will commence from Grant Street and broken down to two sections; from Grant Street to Colfax Street and from Grant Street to Payne Street.

Exploratory trench should be performed on the existing 8" water main on Grant Street and on the existing 6" water main on Forestview Road prior to the start of construction. As indicated on the plans the initial work should be within 4-hour shut-down. All non-pressure connections to existing water mains will not be paid for separately but considered incidental to other water main work items.

The Contractor shall start by removing the existing 8" x 6" cross on the existing 8" water main, using a duo sleeve connect the proposed 8" water main then install the proposed 8" x 6"cross. To continue north, at Sta. 9+82, install a 6" in-line valve in valve vault, provide a 1" corporation stop with 1" copper pipe extension adjacent to the 6" valve for testing. To continue south, at Sta. 9+74, install a 6" in-line valve in valve vault , provide a 1" corporation stop with 1" copper pipe extension adjacent to the 6" valve for testing. ***All materials necessary to perform this task should be on the field at least 1 day prior to work on this task. Provide temporary asphalt at the crossings and traffic protection for this assembly.***

For North Section; Forestview Road from Grant Street to Colfax Street

The proposed 6" water main will continue north to Colfax Street. At Sta. 12+42, install a 6" x 6" tee for proposed fire hydrant on the east side of Forestview Road (mid-block).

At Sta. 15+54, install a 6" x 6" tee for proposed fire hydrant on the southeast corner of Forestview Road and Colfax Street.

At Sta. 15+59, install the 6" in-line valve in valve vault. Provide a 1" corporation stop with 1" copper pipe extension adjacent to the 6" valve for testing. Also, provide temporary asphalt and traffic protection for this assembly.

At this time, the new water mains may be flushed, pressure tested and chlorinated. After the acceptance of the disinfection testing, the water services may be tapped. The final connections to the existing water main as indicated on the plans may then be made within 4-hour shut-down after all the water services were transferred to the new water

main. All non-pressure connections to existing water mains will not be paid for separately but considered incidental to other water main work items.

For South Section; Forestview Road from Grant Street to Payne Street

The proposed 6" water main will continue south to Payne Street. At Sta. 9+37, install a 6" x 6" tee for proposed fire hydrant on the Southeast corner of Forestview Road and Grant Street.

At Sta. 5+34, install a 6" x 6" tee for proposed fire hydrant on the east side of Forestview Road (Mid-block).

At Sta. 1+25, install a 6" x 6" tee and install the 6" in-line valve in valve box for interconnections to existing 6" water main along Payne Street (West Leg). Also, provide temporary asphalt and traffic protection for this assembly. Use foster adaptor for the 6" valve connection, incidental.

At Sta. 1+22 @ 11' RT and Sta. 1+00 @ 35' RT, install a 2 - 45º bend to Payne Street (East).

At Sta. 1+00 @ 43' RT, install a 6" x 6" tee and install the 6" in-line valve in valve box for interconnections to existing 6" water main along Forestview Road (South Leg). Also, provide temporary asphalt and traffic protection for this assembly. Use foster adaptor for the 6" valve connection, incidental.

At Sta. 1+00 @ 59' RT, install a 6" x 6" tee for proposed fire hydrant on the Southeast corner of Forestview Road and Payne Street.

At Sta. 1+00 @ 64' RT, install the 6" in-line valve in valve vault for interconnections to existing 6" water main along Payne Street (East Leg). Provide a 1" corporation stop with 1" copper pipe extension adjacent to the 6" valve for testing. Provide temporary asphalt and traffic protection for this assembly.

At this time, the new water mains may be flushed, pressure tested and chlorinated. After the acceptance of the disinfection testing, the water services may be tapped. The final connections to the existing water main as indicated on the plans may then be made within 4-hour shut-down after all the water services were transferred to the new water main. All non-pressure connections to existing water mains will not be paid for separately but considered incidental to other water main work items.

EWING AVENUE FROM GRANT STREET TO PAYNE STREET:

The proposed 6" water main (DIP, Class 52, External Zinc Based Coated, Restrained Joint) shall be installed on Ewing Avenue from Grant Street to Payne Street. This water main segment of the project will commence from Grant Street to Payne Street.

Exploratory trench should be performed on the existing 8” water main on Grant Street and on the existing 6” water main on Ewing Avenue prior to the start of construction. As indicated on the plans the initial work should be within 4-hour shut-down. All non-pressure connections to existing water mains will not be paid for separately but considered incidental to other water main work items.

The Contractor shall start by removing the existing 8” x 6” cross on the existing 8” water main, using a duo sleeve to connect the proposed 8” water main then install the proposed 8” x 6”cross. Using a foster adaptor, incidental, install a 6” in-line valve in valve box, to interconnect with the existing 6” water main on Ewing Avenue (north) as shown in the plans. To continue south, at Sta. 9+28.50, install a 6” in-line valve in valve vault. Provide a 1” corporation stop with 1” copper pipe extension adjacent to the 6” valve for testing. The 6” water main will continue south to Payne Street. ***All materials necessary to perform this task should be on the field at least 1 day prior to work on this task. Provide temporary asphalt at the crossings and traffic protection for this assembly. Contractor shall save the existing curb.***

To continue south, the Contractor may prepare the 8’ x 20’ drilling/receiving pit at Sta. 8+86. The Contractor will directionally drill the new 6” water main to or from the 8’ x 20’ drilling/receiving pit at Sta. 5+67.

The proposed 10” water main will continue south to Payne Street.

At Sta. 5+44, install a 6” x 6” tee and continue south as shown in the plans. To continue east, install another 6”x6” tee for the proposed fire hydrant on the northeast corner of Ewing Avenue and Noyes Street and a 6” in-line valve in valve vault for interconnections to existing 6” water main along Noyes Street. Provide a 1” corporation stop with 1” copper pipe extension adjacent to the 6” valve for testing. Also, provide temporary asphalt and traffic protection for this assembly. ***Contractor shall save the existing curb.***

The Contractor may prepare the 8’ x 20’ drilling/receiving pit at Sta. 4+92. The Contractor will directionally drill the new 6” water main to or from the 8’ x 20’ drilling/receiving pit at Sta. 0+96.

At Sta. 0+94, install a 6” x 6” tee for proposed fire hydrant on the northeast side of Ewing Avenue and Payne Street.

At Sta. 0+89, the Contractor will install a 6” in-line valve in valve vault. Provide a 1” corporation stop with 1” copper pipe extension adjacent to the 6” valve for testing. Also, provide temporary asphalt and traffic protection for this assembly.

At this time, the new water mains may be flushed, pressure tested and chlorinated. After the acceptance of the disinfection testing, the water services may be tapped. The final connections to the existing water main as indicated on the plans may then be made within 4-hour shut-down after all the water services were transferred to the new water

main. All non-pressure connections to existing water mains will not be paid for separately but considered incidental to other water main work items.

GENERAL REQUIREMENTS

All water main construction for all streets and sections shall conform to the following two general requirements (as well as the detailed sequencing for each street).

Water Services

Residents affected by the installation of new water services must be notified **24 hours in advance and 15 minutes prior to the shutoff**.

Any impacted water service lines for properties having signed (executed) a right-of-entry (ROE) that has been provided to the Owner or the Engineer are identified as full lead service line replacements to the extents shown on the Drawings. All properties that do not have a signed ROE that are impacted by the Work are identified as Partial Replacements. Existing services that are partial replacements may be constructed of lead, copper or other material.

For those properties with a signed ROE, the Contractor shall schedule Preliminary Investigation appointments with the property owner to obtain a signed Property Owner Agreement form, and for the Contractor to develop a Preconstruction survey showing the proposed location of the new water service. Scheduling of the Preliminary Investigation is at the convenience of the Property Owner and shall include the Property Owner, Engineer, and Contractor. Once the Property Owner Agreement form and Pre-Construction Layout drawing are submitted and approved by the Engineer, the Contractor can schedule the water service replacement work with the Property Owner.

Full Replacement of lead water service replacement work will include replacement of the existing lead water service with 1.5” copper pipe from the water main to the meter in the home, and connection to the interior plumbing. For homes with identified lead services lines which the Engineer has not received a fully executed right-of-entry form, the service line shall be replaced with 1.5” copper pipe with a reducer to connect to the remaining privately-owned portion of the service line (Partial Replacement as shown in the Drawings). Any outdoor space impacted by this work will be restored in-kind, as agreed upon between the Contractor and the property owner on the Property Owner Agreement form prior to the initiation of the work. Relocation of items within the home to accommodate the work will be agreed upon between the property owner and the Contractor prior to signing the Property Owner Agreement form. Any restoration within the home outside of patching of the concrete structure (as shown on the Drawings) such as re-tiling, installing drywall, or other finishes will be performed by Others.

Executed ROE’s received at the time of bidding are summarized in the Appendix.

Prior to backfill of the new water service the Contractor shall take Global Positioning System (GPS) coordinates at the point of connection to the new water main, new curb box, and the location the water service enters the home. The coordinates shall be submitted to the Engineer for each property.

The Contractor must flush the new water service and make every effort to assure debris does not enter the existing portion of the water service as the new installation takes place. All water services shall be perpendicular to the new water main to the new round way and B Box. Provide

pipe insulation if cover is less than 5-feet (Incidental to various pay Items).

Following completion of the water service replacement, the Contractor shall submit a Post-Construction Layout Drawing making any adjustments to the Pre-Construction Layout Drawing as necessary to identify the installed location of the water service and to show full or partial replacements.

Final Interconnections

After all of the water services have been installed and are in service the Contractor will make the connection(s) to the existing water main(s) as indicated in the plans.

The Contractor shall notify the Utilities Department 48 hours in advance of initiating these connections to allow the Utilities Department sufficient time to notify residents of the water service interruption and schedule the necessary valve closures. Only Utilities Department personnel may operate existing valves in the distribution system.

The Contractor must be prepared to make these connections in a timely fashion. A maximum of four (4) hours will be allowed per shutdown to complete the connections to existing water mains. Because these connections cannot be pressure tested or chlorinated, the Contractor must swab all pipe and fittings with a 2% hypochlorite solution using a new, clean long-string mop and the new section of main must be pressurized prior to backfilling. The Contractor shall also swab and chlorinate water main sections as outlined above that branch off the “main line” water main that may be difficult to properly flush.

Prior to back filling the Contractor must install the appropriate sized MJ end cap on the open end of all of the abandoned water main. Concrete blocks shall be installed beneath all of the connection points between the old and new water mains.

THE CONTRACTOR SHALL SUBMIT, FOR REVIEW BY THE CITY, A DETAILED CONSTRUCTION SCHEDULE AT THE PRE-CONSTRUCTION MEETING IN ACCORDANCE WITH THE FOLLOWING GUIDELINES.

“NO PARKING” SIGNS REQUIRED BY THE CITY INDICATE CONSTRUCTION ZONE NO PARKING MONDAY THROUGH FRIDAY BETWEEN THE HOURS OF 7:00AM TO 5:00PM.

Payment shall be made at the Contract unit price per LINEAR FOOT for each of the various sizes of DUCTILE IRON WATERMAIN, actually installed as specified, measured in place. These Contract unit prices shall be payment in full for all materials, labor, and equipment required for: site preparation, including removal, replacement and/or repair of fences and other site objects; trench excavation, including removal and disposal of existing pipes, structures, and excess excavated materials; protection, support and repair of damage to existing utilities; support of trench walls; shoring and bracing; dewatering of trenches; pipe; bends; fittings; restraining glands; installation and removal of temporary fire hydrants, which will be provided by the City; thrust blocks; plugging existing water mains; support of pipe at water main connections; joint materials; hydrostatic testing; disinfection; corporation stops used for disinfection; bedding; backfill placement, compaction and compaction testing; testing; correction of defects; and, other work required to complete the installation which is not included under other Payment Items.

Payment shall also be made at the Contract unit price per EACH for WATER VALVES, of the size specified; for PIPES, EXTENSION, FIRE HYDRANT WITH AUXILLARY VALVE AND VALVE BOX AND FH PIPE RUN AND EXTENSIONS OR REDUCTION OF HEIGHT, of the

size specified; for VALVE BOXES, of the size specified; for PRESSURE CONNECTION; for TAPPING SLEEVE, of the size specified; and for WATER MAIN LINE STOP, of the size specified.

The City will furnish temporary fire hydrants which are to be installed by the Contractor at the locations designated on the plans for the purpose of flushing the newly installed water main clean at a velocity of 3.0 ft. /sec. Prior to the final water main interconnections, the Contractor shall remove the temporary fire hydrant, store it in a safe location, and contact the City for pick up. This work shall be incidental to the water main construction, and no separate payment shall be made.

These items shall not include the cost of pavement, sidewalk, driveway, and curb/gutter removal and disposal within the pay limits show on the Drawings. Roadway, sidewalk, driveway, and curb/gutter removal/ replacement within pay limits or as directed by the Engineer shall be paid for in accordance with the appropriate Payment Items.

Roadway, sidewalk, driveway, and curb/gutter removal/replacement outside the pay limits shown on the Drawings required for completion of the Work or for Contractor's purposes shall be incidental to combined sewer, relief sewer, storm sewer, sanitary sewer, and water main construction and no separate payment shall be made.

Additional water service submittals include the following:

PROPERTY OWNER AGREEMENT FORM: Agreement form fully executed by the Contractor, Property Owner, and the Engineer for each property authorized to perform Full Lead Service Line Replacement at least 5 days prior to performing the Work.

PRE-CONSTRUCTION LAYOUT DRAWING: Layout drawing showing the planned alignment of the new water service signed by the Contractor and the Owner's designated plumbing inspector at least 5 days in advance to performing the Work showing the planned location of the new water service for each home authorized to perform Full Lead Service Line Replacements.

POST-CONSTRUCTION LAYOUT DRAWING: Layout drawing showing the final alignment of the new water service signed by the Contractor within 5 days of performing a Full Lead Service Line Replacement. The drawing shall show the final location and alignment of the new water service for each home.

WATER SERVICE LINE

Delete Article 562.01 and replace it with the following:

"**562.01 Description**

(a) Water service 2" diameter and less.

Existing services less than 1.5" diameter will be increased to 1.5" diameter. Existing services that are 2" diameter shall be replaced with a 2" diameter services. Existing services between 1.5" and 2" diameter shall be replaced with the same size as the existing service.

Work shall consist of the disconnection of the existing water service, removal of existing curb box to depth shown on plans or directed by engineer, tapping the new

water main, and extending new copper services perpendicularly from the new water main either to the new service box to be installed in the parkway, as close to the old service box as possible (Partial Replacement), and up to the meter in the home (Full Replacement), as shown on the Drawings and/or as directed by the Engineer. Contractors may only cut lead services using a tube cutter. Saws will not be allowed to cut lead services.

Full replacements of existing lead water service lines will only occur at the properties where a fully executed right-of-entry (ROE), Property Owner Agreement Form, and Pre-Construction Layout drawing have been submitted and approved by the Engineer. Partial replacement of lead water service lines will occur only at those properties that do not have an executed ROE and Property Owner Agreement Form.

Full replacement of existing lead water service lines will extend from the new water main into the home. For full replacements, the Contractor shall contact each Property Owner to schedule and review the water service installation work (including water service line route, location of access pits, installation method, extent of demolition, and extent of restoration) in order to confirm water service line entrance type and location of all underground utilities (including sprinkler lines, underground electric, natural gas lines, and other utilities that may be present), and document the existing conditions of the property on a Property Owner Agreement Form. The Contractor shall obtain a signed Property Owner Agreement Form and submit it to the Engineer at least seven days in advance of the commencement of the work on the property. The Contractor shall notify each Property Owner at least 72 hours in advance of the commencement of the work on their property, providing each Property Owner with the date and start time of both external and internal work on their property. The Contractor shall provide a telephone number where Property Owners can call to be updated on the status of the work on their property and general project information. The Contractor shall minimize the time period for each water service installation to minimize the disruption to the Property Owner. The Contractor must coordinate and schedule the work with the Property Owner so that the water service to the home will be interrupted for less than four (4) hours. The Contractor will not be reimbursed for any downtime associated with the water service line installation work and shall provide temporary water using materials approved by the National Science Foundation (NSF) and Engineer, or bottled water in any instance where the water is shut-off for more than four (4) hours for the duration of the delay until the service line has been completed. For all work and specification requirements, Galvanized services will be treated as lead services.

For existing lead water service connections that require a Partial Replacement; The City of Evanston requires the use of minimum 2.0 feet (5.0 feet max.) straight pipe of high-density polyethylene (HDPE) water service tubing (CTS) be installed prior to connecting to existing lead water service on the private side. HDPE conforming to the minimum requirements of cell classification 445574E as defined and described in ASTM D3350 with a resin designation code of PE4710 by the Plastic Pipe Institute will be used.

For Existing Lead Water Service Partial Replacement Connections; (Installation of Min. 2’ (5’ max) HDPE pipe)

1) End of tubing or pipe must be round, free of burrs and clean for both existing lead and new HDPE pipes by using pipe cutter only.
2) For HDPE plastic tubing or pipe, push the appropriate size of liner in until the flare on the liner rests solidly against the end of the tubing or pipe.
3) Insert tubing into the body of fitting until it contacts the stop inside the fitting.
4) Tighten the compression nut until it makes contact with the machined shoulder of the fitting.

(b) For existing lead service lines, all lead service lines shall be fully removed if fully exposed. Where the water service is installed in a new alignment to meet current Plumbing Code or avoid certain site features, if the existing water service is not exposed, it may be disconnected from the house and the water main and left in place with the permission of the Engineer.

(c) Any lead or galvanized iron/steel service piping removed shall be handled and disposed of in accordance with all local, state and federal laws and regulations.

(d) Replacement work within private property shall be coordinated with the Engineer and Property Owner prior to starting any work.

(e) All plumbing demolition and installation work shall be performed by an Illinois Licensed Plumber.

(f) For service line replacements into a house, the Contractor may either expand the existing pipe penetration into the house or create a new penetration (through the floor or wall as appropriate) for the new water service line, as approved by the Engineer. The new water service line shall extend into the building to the meter, and then the Contractor shall connect into the existing interior plumbing. Contractor shall provide fittings to connect new water service to new meter. The Contractor shall repair and provide a watertight seal of the pipe penetration through the building in accordance with this Section, the Drawings, and as approved by the Engineer.

(g) The installation of the new water service line for each property has not been individually detailed. The water service line connection details were developed to generally illustrate to the Contractor the plumbing elements. The piping and equipment shown on the water service line connection details are not to scale and do not show every offset or fitting, nor every hanger or support, or structural difficulty that may be encountered. To carry out the intent and purpose of the water service line connection, Contractor shall field verify all piping and plumbing systems to ensure all necessary plumbing parts are installed to provide a complete and safe transfer of the domestic water service without extra charge to the Owner or Property Owner. The Contractor shall be responsible to coordinate the system installation and routing with the work of all trades.

(h) The Contractor shall maintain an on-site supply of anticipated specialty fittings, including but not limited to corporation stops, curb stops, curb boxes, reducing

fittings, etc., such that the work proceeds without impacting the execution of the work and causing a delay in connecting the service.

(i) All existing water services which are 3-inch in diameter will be changed to 4-inch services and reduced to 3-inch at the point of connection to the existing service.

(j) Water service 4" or greater in diameter

Work shall consist of installing appropriately sized tee fittings with an attached valve(s), and extending the new ductile iron service from the new water main to the new service box to be installed in the parkway as shown on the drawings and/or as directed by the Engineer.

Ductile Iron Pipe Water Service. All ductile iron pipe shall be thickness class 52 in accordance with AWWA Standard Specifications for Ductile Iron Pipe, External Zinc-Based Coated, centrifugally cast in Metal Molds for water or other Liquids AWWA -C151 latest revision. Coating: The exterior of ductile iron pipe shall be coated with a layer of arc-sprayed zinc per ISO 8179. The mass of the zinc applied shall be 200 g/m2 of pipe surface area. A finishing layer topcoat shall be applied to the zinc. The mean dry film thickness of the finishing layer shall not be less than 3 mils with a local minimum not less than 2 mils. The coating system shall conform in every respect to ISO 8179-1 "Ductile iron pipes - External zinc-based coating - Part 1: Metallic zinc with finishing layer. Second edition 2004-06-01." The whole of the above Specifications shall apply. The pipe shall be furnished with push on joints. All pipe shall be cement mortar lined inside and bituminous coated outside, in accordance with Sec. 51 8 ANSI A21.51 (AWWA C104 and C151). All ductile iron pipes must be clearly marked by the manufacturer to indicate pipe classification or pipe thickness. Unmarked pipe will not be accepted.

Add the following Subparagraphs to Article 562.02:
"(a.) **Copper Pipe.** Copper pipe shall be copper water tube, a minimum of 1.5" diameter, Type K, soft temper, conforming to ASTM-B88 and ASTM-B251 of the inside diameter indicated on the Drawings. Flare type fitting for underground pipe. Solder or flared style fittings for above grade (inside the home) pipe. The pipe shall be marked with the manufacturer's name or trademark and a mark indicative of the type of pipe. The outside diameter of the pipe and minimum weight per foot of the pipe shall not be less than that listed in ASTM B251, Table 11.

(b) **Stops and Fittings.** All corporation stops, curb stops, and connection couplings shall be fabricated of bronze alloy and shall be provided with outlets suitable for connections. All connections shall be made with flare-type couplings. Stops and fittings shall be as manufactured by Ford Co. or approved equal and shall be in accordance with AWWA Specifications. The curb stops shall be Minneapolis pattern (City of Evanston Standard). Corporation stops and curb stops shall be the non-restricting ball valve type.

(c.) **Curb Boxes.** The curb boxes shall be cast iron Minneapolis pattern base, for rigid assembly, extension-type adjustable to 6-foot bury or as required to make flush with the existing ground elevation. The boxes shall be complete with a lid marked 'WATER' and pentagon brass plug. Curb boxes shall be as manufactured by Mueller Co. or equal.

(d.) **Tapping Saddles.** All Tapping saddles shall be Smith-Blair 317, Ford FC 202 or

approved equivalent, and shall conform to the following specifications: Tapping saddles shall have an epoxy-coated ductile iron body with stainless steel straps. The threads shall be C.C. The saddles shall fit an oversized cast iron pipe in the sizes listed.

(d.) **Pipe Hangers, Supports and Restraints.** All supports shall be designed to adequately secure the pipe against excessive dislocation due to internal flow forces, thermal expansion/contraction, and all probable external forces such as personal contact or equipment. Supports for copper pipe shall be copper plated or shall have a minimum 1/16-inch plastic coating. Support spacing for copper piping and tubing 2-inches in diameter and smaller shall not exceed 5-feet, and greater than 2-inches in diameter shall not exceed 8-feet. Where pipe supports come in contact with copper piping, provide protection from galvanic corrosion by wrapping pipe with 1/16-inch thick neoprene sheet material and galvanized protection shield. Anchoring devices shall be selected by the Contractor depending on the size, spacing, and other necessary parameters. Anchoring devices shall withstand shear and pullout loads imposed by loading and spacing on a particular support. Expansion anchors shall be equal to Kwik Bolt as manufactured by Hilti USA, Tulsa, Oklahoma; or Wej-it by Wej-it Expansion Products, Inc., Broomfield,, CO. The length of the expansion bolts shall be sufficient to place the wedge portion of the bolt a minimum of 1-inch behind the steel reinforcement.

(d.) **Electrical Grounding.** Wire shall be 6 AWG copper wire or conducting metal braid shall be woven from 240 strands of 30 AWG tinned copper wires and be capable of carrying fault current comparable to that of 6 AWG copper wire, 3M Corp., Scotchbrand 25, or equal.

Water pipe ground clamps shall be cast bronze saddle type, and of the correct size for the pipe, as manufactured by Thomas & Betts Co. Cat. No. 2, similar by Burndy; O.Z. Gedney Co., or equal and the correct size for the pipe.

(e.) **Property Owner Agreement Form.** All property owner agreement forms shall be completed and executed between the Contractor and the Property Owner and provided to the City Engineer seven days in advance of work on the specified private property.

(f.) **Preconstruction and Post Construction Layout Drawings.** For full lead water service line replacement pre and post construction layout drawings shall be prepared by the Contractor and submitted to the Engineer for approval. Pre-construction layout drawings showing the proposed location of the new water service line, size and location of all pits and excavations required to complete the work, fence removal, bushes, trees, landscaping and other items that require demolition shall be approved by the Engineer prior to proceeding with the work. Post-construction layout drawings shall be completed showing any changes to the pre-construction layout drawing following completion of the work and shall include the new water tap location, curb box location, and location where new water service enters the home.

Shop Drawings for water system components shall be submitted for approval as soon as possible, but not less than thirty (30) calendar days prior to the time when the components are intended to be installed. Post construction drawings shall be submitted prior to payment for a full water service replacement."

Add the following paragraphs to Article 562.03:
"Care should be taken in installing new water services so as to have the least interruption of service to the water customer. This work will require disruptions of water service. The Contractor shall notify the Property Owner not less than 48-hours in advance of planned disruptions. The water main will not be turned off for the installation of water services. The City of Evanston Utilities

Division personnel are the only persons authorized to turn on and off water main valves.

The Contractor shall perform a limited hazardous materials survey (consisting of inspection and/or testing) for lead-based paint and asbestos containing materials as part of the contract unit price of Full Replacements. Owner reserves the right to request testing for lead-based paint or asbestos containing materials. Remediation of lead-based paint of asbestos-containing materials shall be paid for separately

For Full Lead Service Line Replacement, Contractor shall neatly and in clean concise lines remove all obstacles agreed upon with the property owner in the Property Owner Agreement form prior to proceeding with the Work. This work shall also include either concrete coring or saw cutting concrete with clean perpendicular cuts to allow for water service to enter into the home. Contractor shall not perform any work outside of the work area agreed upon with the Property Owner. Within the home, the Contractor shall use plastic sheeting and other methods to minimize dust and disturbance. All concrete material and other demolition debris removed from the home to accommodate the work shall be replaced by the Contractor.

All underground water service lines shall be installed using trenchless methods, shall be augered in place, and shall be a minimum of five (5) feet in depth unless otherwise approved by the Engineer. Water services may be installed in open cut trench when various trenchless excavation methods are not feasible for use due to field conditions and when approved by the Engineer. The City will pay the pavement removal and replacement using separate unit price items when open cut is approved. Open cut installation, when approved by the Engineer will be paid for in accordance with the unit price items in this section, and will include all the necessary work associated with trenching such as labor, materials, equipment and all other associated items. The Contractor will patch any concrete as needed to restore the work area. Any additional finishing restoration required inside of the home, following a service line replacement, will be performed by others. Provide pipe insulation if cover is less than 5-feet (Incidental to various pay Items) when approved by the Engineer. The Contractor may select a boring tool, mechanical drill or jack, at his option, to form the passage through the soil for insertion of water services under existing pavements. The size of the passage shall be just large enough to accommodate the service, but not so large to cause post-construction subsidence of the pavement. The service line shall be capped or plugged during the insertion process to prevent the entrance of soil. The insertion and receiving pits shall be backfilled in accordance with Section 208.

The replacement service line shall be one continuous length (no couplings in the new copper tubing will be allowed) and be of sufficient length to allow for some movement for trench settling after placement of the backfill material. For Full Lead Service Line Replacements, a new 1.5” copper service is to extend to the new water meter located inside the home. For Full Replacements, should an existing water meter be located outside the home, the Contractor shall discuss a location to install a new meter inside the home prior to the property owner signing the Property Owner Agreement Form. Owner shall supply Contractor with new meter under this contract.

After laying the new full copper service, a new curb stop and curb box will be installed. The old curb stop shall be closed and disconnected from the new service line. In the case of service lines for which the property owner has not granted right-of-entry permission or signed the Property Owner Agreement form, the service line cannot be replaced in its entirety, and a Partial Lead Service Line Replacement will be performed. Partial Lead Service Line Replacements will be from the water main to the existing curb stop with new 1.5” copper line and a reducer and Potable Water Service Tubing used to connect to the existing water service line.

All above ground (interior) water service piping shall be installed with associated piping, valves, hangers, supports, restraints, valves, meter and fittings to connect to the new water service meter. Reductions in size to connect to the existing water service shall be performed using reducing fittings. After installation and connection to the interior plumbing system, and verification of valve and meter operation, Contractor shall remove all debris and excess material from the work area inside the home. If miscellaneous items had been relocated to obtain access to the meter, those items shall be placed back to their original location prior to construction.

Contractor shall keep the existing and new water service line clean during installation. Following installation, the service pipe shall be flushed clean prior to disconnecting the existing service. After each service is reconnected, the Contractor shall verify that the water service is supplying adequate water. The Contractor will be charged for any labor and materials used by the City Utilities Division to correct any problems that arise due to Contractor's efforts.

All valves shall be installed at locations to allow for easy operation through access panels, doors, or adjacent to equipment and other features. Valves shall be installed in a horizontal upright position, and not a downward facing position from a horizontal plane.

Pipe penetrations shall be performed by the Contractor at the home for full replacements. Contractor shall furnish all labor, materials, equipment and incidentals required and install pipe penetration assemblies at all floor and wall penetrations. Generally, penetration details are called out and referenced on the Drawings. Where penetrations are required the most conservative penetration detail shown on the detail sheets shall be utilized as appropriate for the piping type, the wall or floor construction and the rating of the wall or floor penetrated. Where existing tile, brick, wood or other floor or wall material must be cut through, existing materials should be preserved as much as possible and set aside for the Property Owner to re-install. In preparation of surfaces for penetrations, the Contractor shall prepare those surfaces that will be in contact with the final seal. The surfaces shall be free of dirt, loose rust, oil, wax, grease, curing compounds, laitance, loose concrete or other deleterious and all other preparations in accordance with manufacturer's recommendations. The sealing produce shall be placed in such a manner, for the consistency necessary for each application, to assure that the space to be sealed is completely filled. For installation of a sleeve, install sleeve for piping passing through wall penetrations. Select the sleeve of the size large enough for the water service pipe in accordance with the manufacturer’s written instructions. Sleeves shall be cut to length for mounting flush with all interior/exterior surfaces. Use grout or silicone sealant to seal the space outside of the sleeve. All seals shall be cured in accordance with the manufacturer’s written instructions.

Cutting, coring, and patching will be made to existing construction. Coring shall be used where wall sleeves are to be installed. All cutting and rough patching shall be performed by the Contractor will all interior dust being controlled to minimize dust within the home. Finish patching shall be the responsibility of the Contractor. Contractor shall coordinate and perform all cutting, fitting and patching including attendant excavation and backfill to make sure several parts fit together properly. Provide penetration of structural surfaces and materials for installation of piping. Execute excavating and backfilling by methods which will prevent settlement or damage to other work. When excavating in close proximity to piping or other items subject to damage, use hand excavation. Refine entire surfaces as necessary to provide an even finish to match adjacent surfaces. Contractor shall remove all debris resulting from cutting, coring, and patching to the satisfaction of the Engineer.

Cutting shall be performed in a manner so as to limit the extent of patching and performed with

a concrete saw and diamond saw blades of the proper size. Cutting shall not be performed in locations where wall sleeves will be installed unless approved by the Engineer. Contractor to provide for control of the slurry generated by sawing operations on both sides of the wall and from below when cutting a floor. When cutting reinforced concrete wall or floor, the cutting shall be done so as not to damage the bond between the concrete and reinforcing steel left in structure. Cut shall be made so that steel neither protrudes nor is recessed from face of the cut. Contractor shall saw cut concrete and masonry prior to breaking out intended sections.

All existing water services abandoned in place shall have all existing corporation and curb stop valves closed prior to abandonment. Cut ends shall be fully crimped. Water service pipe entering the home shall be removed prior to concrete patching.

Install any electrical grounding across meter at the completion of the work.

Water Service work to replace the Public Side of the water service will be paid for at the Contract unit price per EACH service connection for SHORT WATER SERVICE – PARTIAL REPLACEMENT up to 2 inches in diameter, less than 30 LF in length (from water main to curb box), counted in place.

Water Service work to replace the entire water service line including both the Public and Private Side will be paid for at the Contract unit price per EACH service connection for SHORT WATER SERVICE – FULL REPLACEMENT up to 2 inches in diameter, from water main to meter, counted in place.

Water Service work to replace the Public Side of the water service will be paid for at the Contract unit price per EACH service connection for LONG WATER SERVICE- PARTIAL REPLACEMENT up to 2 inches in diameter, 30 LF to 70 lf in length (from water main to curb box), counted in place.

Water Service work to replace the entire water service line including both the Public and Private Side will be paid for at the Contract unit price per EACH service connection for LONG WATER SERVICE- FULL REPLACEMENT up to 2 inches in diameter, from water main to meter, counted in place.

Water Service work will be paid for at the Contract unit price per EACH service connection for WATER SERVICE 4 inches or greater diameter, less than 50 LF in length, counted in place.

Water Service work to install interior copper pipe more than 2-feet from the interior of the house foundation shall be paid for at the Contract unit price per LINEAR FOOT for INTERIOR COPPER PIPE, up to 2 inches in diameter.

Short services are defined as locations where the water main is 30 feet or less from the curb box. Long services are defined as locations where the water main is more than 30 feet and less than 70 feet from the curb box.

The Contract unit price WATER SERVICE shall be payment in full for all materials, labor, and equipment required for: site preparation, including removal, replacement and/or repair of fences and other site objects; excavation, including removal and disposal of existing pipes, structures, and excess excavated materials; protection, support and repair of damage to existing utilities; support of installation pit walls; shoring and bracing; dewatering of installation pits; trenchless installation (augering/boring/jacking, or other trenchless methods) of new service line,

disconnection of existing water services and extending new services from the new water main to the new service box to be installed in the parkway and to the meter as necessary; new curb boxes, couplings, fittings, joint materials, corporation stops, tapping saddles, curb stops, service piping, and buffalo boxes; machine tapping of holes into new water main; supply backfill material, backfill placement, compaction and compaction testing; disinfection; testing; correction of defects; concrete coring and patching of home; demolition within the work area; access pits; abandonment of the existing water service; homeowner coordination; and other related work required to complete the installation which is not included under other Payment Items. Additionally, for WATER SERVICE 4 inches or greater, the price shall also include all water service pipes, tees (no tapping saddles allowed) and two (2) 4-inch or greater resilient wedge type valves and valve boxes per each long service, and one (1) 4-inch or greater resilient wedge type valve and valve box per each service to match the diameter of the new service. Services less than or equal to 1.5 inches shall be replaced with a 1.5 inch diameter minimum service. Services between 1.5 inches to 2 inches shall be replaced with the same diameter as the existing service. Existing services greater than 2 inches and less than 4 inches shall be replaced with 4 inch services. Services over 4 inches shall be replaced with the same diameter as the existing service. The Contractor is advised that specific liquidated damages apply to disruptions of individual water services as indicated in Bid Form of Contract Documents.

ADJUSTING SANITARY SEWERS AND WATER SERVICE LINES

Add the following subparagraphs to Article 563.01.

"(a) Adjusting and Reconnecting Sanitary Sewer Services. Work under the Payment Item "ADJUSTING SANITARY SEWER SERVICE" shall consist of installation of a new tee or wye fitting at the proposed or existing mainline combined sewer, if necessary, and installation of new sanitary sewer service pipe from the combined sewer to the existing sanitary sewer service line 2 feet beyond the outer face of curb, as shown on the Drawings and/or as directed by the Engineer. Work under the Payment Item "ADJUSTING SANITARY SEWER SERVICES" shall consist of adjusting and reconnecting sanitary sewer services where required by the replacement of the existing combined sewer and/or installation of a new relief sewers, using new service pipe, fittings, and couplings as necessary.

(b) Water Service Line Disconnection and Replacement. Work under the Payment Item "ADJUSTING WATER SERVICES" shall consist of rerouting the existing water service lines because of new sewer installation using new service pipe, fittings, and couplings as necessary. The Contractor shall make every reasonable effort to protect existing services. In some locations, however, it may be necessary to reroute services. Where approved by the Engineer, the Contractor may remove and reroute water services within trench lines to provide adequate clearance from new facilities. The existing water services shall be cut at both sides of the trench for the proposed sewer pipe, and replaced by new copper service lines which shall be connected to the existing water lines adjacent to or above the proposed sewer pipe or as directed by the Engineer. No reconnection joints shall be located directly above or below the proposed sewer. The City system contains a range of service sizes and materials. The Contractor shall maintain a suitable inventory of proper service piping and fittings so as to minimize the time required for making re-connections.

Add the following subparagraphs to Article 563.02 - Materials.

"(a) Sewer Services. Any existing system components, including fittings, which are damaged by the Contractor due to his negligence, shall be replaced by him at his own expense. Material used for replacement shall be equal to that used for reconnection of existing sanitary building services in conformance with this Specification.

(i.) Eight-inch diameter or smaller individual building services. Service pipe material shall be PVC or ductile iron pipe as specified in Section 550. Where service pipes run beneath other major utilities which are likely to place a structural load on the service pipe, such as beneath new relief sewers, ductile iron service pipe shall be used. At other locations, PVC service pipe shall be used.

(ii.) Services shall be connected to PVC or VCP mainline sewers by means of factory-made wye fittings of strengths equal to or greater than the mainline sewer. Tapping saddles may NOT be used for connection of services to PVC or VCP mainline sewers.

(iii.) Connectors for reconnection of service pipes to RCP mainline sewers 24-inch and larger shall be KOR-N-TEE or equal meeting ASTM C-923, sized to match the diameter and material of service.

(b) Water Service Line Reconnection

(i.) Service pipe and system components. Material shall be as specified in Section 562

(ii.) Water Service Line Sleeve. Sleeves for water service lines shall be Schedule 40 PVC pipe conforming to ASTM D-1785.

Shop drawings for system components shall be submitted for approval as soon as possible, but not less than thirty (30) calendar days prior to the time when the components are intended to be installed."

Add the following paragraph to Article 563.03:
"If the Contractor damages any sanitary service line not requiring adjustment, or any other underground structure or utility, he shall replace or repair it as required by the Engineer and no additional compensation will be allowed. When a sanitary sewer is to be adjusted, the Contractor shall remove it carefully to prevent damage to the existing pipe which will remain."

Add the following paragraph to Article 563.04:
"All openings into RCP sewer main shall be clean, machine-cored openings which will not damage the structural integrity of the pipe. Break-in connections are prohibited. Service connections shall be at least two 2 feet apart. All reconnection of new service pipes to existing service pipes shall be by means of an approved flexible coupling."

Add the following paragraphs to Article 563.05:
"The Contractor shall take all precautions to keep the existing and new water service line clean from all debris and shall flush the new copper service line prior to reconnecting to the existing service. After each service is connected, the Contractor shall verify that the water service is supplying adequate water. The Contractor will be charged for any labor and materials used by the Water Department to correct any problems that arise due to Contractor's efforts.

All water services, which pass below or within 18 inches above combined, storm, sanitary, and relief sewers and services, shall be sleeved using a PVC casing pipe. The water service sleeve shall be of adequate diameter to accommodate the copper water service line and shall extend a minimum of 10 feet either side of the sewer. The ends of the PVC casing pipe shall be sealed with class SI concrete or as approved by Engineer."

Sanitary services shall be paid for at the Contract unit price per EACH service connection for SANITARY SEWER SERVICE to 2 feet beyond the outer face of curb, up to 8 inches in diameter, counted in place.

The Contract unit price for SANITARY SEWER SERVICE shall be payment in full for all materials, labor and equipment required for: site preparation; including removal, replacement and/or repair of fences and other site objects; excavation, removal and disposal of existing pipes, structures, and excess excavated materials; protection, support and repair of damage to existing utilities; support of trench walls; shoring and bracing; dewatering of trenches; pipe joint materials and fittings, including wyes/tees, couplings, and bends; connections to existing piping; pipe bedding and cover; backfill placement, compaction and compaction testing; correction of defects; and related work required to complete the installation which is not included under other Payment Items. The Contractor is advised that specific liquidated damages apply to disruptions of individual sanitary services as indicated in Bid Form of Contract Documents.

Adjustments shall be paid for at the Contract unit price per LINEAR FOOT for ADJUSTING WATER SERVICES up to 2 inches in diameter; SLEEVES FOR ADJUSTING WATER SERVICES, and ADJUSTING SANITARY SEWER SERVICE up to 8 inches in diameter; measured in the field. These Contract unit prices shall be payment in full for all materials, labor and equipment required for: site preparation; the cost of all joint materials; all connections; excavation; disposal of excess excavated materials; bedding; installation, including connections to existing systems; backfill placement, compaction and compaction testing; machine tapping of holes into pipe; system components, including wyes, tees, adapters, couplings, bends, concrete encasement, service line sleeves, pipes and tubing; testing; correction of defects; and other related work required to complete the installation which is not included under other Payment Items. The Contractor is advised that specific liquidated damages apply to disruptions of individual water and sanitary services as indicated in Bid Form of Contract Documents.

These items shall not include the cost of pavement, sidewalk, driveway, and curb/gutter removal and disposal within the pay limits shown on the Drawings. Roadway, sidewalk, driveway, and curb/gutter removal/ replacement within pay limits or as directed by the Engineer shall be paid for in accordance with the appropriate Pay Items.

Roadway, sidewalk, driveway, and curb/gutter removal/replacement outside the pay limits shown on the Drawings required for completion of the Work or for Contractor's purposes shall be incidental to combined sewer, relief sewer, storm sewer, and sanitary sewer construction and no separate payment shall be made.

CATCH BASIN, MANHOLE, INLET, DRAINAGE STRUCTURE AND VALVE VAULT CONSTRUCTION, ADJUSTMENT AND RECONSTRUCTION

Delete Article 602.01 and replace it with the following:

"**602.01 Description.** This work, as shown on the Drawings, shall consist of:

(a) Removing and disposing of existing manholes, inlets and catch basins designated to be abandoned.

(b) Replacing existing manholes, catch basins, inlets, and valve vaults.

(c) Adjusting or partially reconstructing existing manholes, catch basins, inlets, or valve

vault structures in order to rehabilitate the utility structure and/or establish the utility structures at final finished grades.

(d) Constructing new valve vaults, including bases, barrel sections, transition cone sections or flat slab tops (if required), and required frames and lids.

(e) Constructing new combined sewer and relief sewer manholes, catch basins and inlets, including placing precast reinforced concrete sections together with flat slab tops (if required), transition sections, precast monolithic bases, frames and lids.

(f) Installing new frames/lids on existing utility structures to meet grades shown on the Drawings, to match existing grades, or as directed by Engineer."

Add the following paragraph and subparagraphs to Article 602.02:
"In addition to the requirements of the Standard Specifications previously cited, manhole catch basin, inlet and valve vaults materials shall conform to the following additional requirements, which, in case of conflict, shall take presence over the Standard Specifications:

(a) **Materials for Reconstructing Existing Structures.** Concrete brick or precast reinforced concrete sections.

(b) **Materials for Constructing New Structures.** Precast reinforced concrete sections only.

(c) **Final Grade Adjustments for Structures.** Tapered precast reinforced concrete adjustment rings shall be used for final grade adjustment of existing and new structures. Adjustment rings shall be laid on a full bed of mortar. A minimum of one and a maximum of two rings shall be used for final grade adjustment at each structure. The total height of final adjustment shall not exceed 11-inches for any structure. The use of brick for final structure adjustment is not permitted.

(d) Frames, covers and grates shall conform to Section 604.

(e) **Inlets.** Inlets shall be precast reinforced concrete conforming to INLET, TYPE A – IDOT STANDARD 602301 with the following exceptions: 1) Instead of a 16" depth, the depth shall be 34" unless otherwise specified on the drawings. 2) Instead of the 3" Sand Cushion, a minimum 6" deep granular material (CA-11) base will be required.

(f) **Catch Basins.** Type A catch basins shall be precast reinforced concrete conforming to CATCH BASIN TYPE A – IDOT STANDARD 602001 with the following exceptions: 1) Instead of a 34" sump, a 48" sump will be required. 2) Instead of the 3" sand cushion, a minimum 6" deep granular material (CA-11) base will be required.

(g) **Valve Vaults.** Valve vault sections shall be precast reinforced concrete conforming to ASTM C-478. All top sections for precast reinforced concrete valve vaults shall be precast reinforced concrete concentric cones or slab tops of the same quality as the barrel of the vault. Valve vaults shall be supplied with factory-formed openings to accommodate the various size water mains such that a minimum 12 inches of clearance between the top of the vault base and bottom of the main can be provided. Bases for replacement vaults on existing water mains shall be separate,

one-piece precast units having a minimum thickness of 6 inche**s.** No slab or split bottom shall be used. Valve vaults for new valves shall be 4-foot, 5-foot, or 6-foot diameter.

(h) **Manholes.** Storm, sanitary, combined, and relief sewer manhole barrel sections shall be precast reinforced concrete conforming to the requirements of ASTM C-478. Pipe connections shall conform to ASTM C-923. No steps shall be installed in manholes. All top sections for precast reinforced concrete manholes shall be precast reinforced concrete eccentric cones or slab tops of the same quality as the manhole barrel. Except where otherwise indicated on the drawings, manholes shall have a precast monolithic base with a factory-installed bench and otherwise be in conformance with Illinois Department of Transportation Highway Standards MANHOLE TYPE A – IDOT STANDARD 602401. Where indicated on the drawings, manholes supplied for 48" and larger pipes shall be of a "T"-pipe base-style fabrication. The pipeline portion of the base "T" section shall conform to ASTM C-76 and be of the same pipe class as connected sewer pipe. The riser section shall conform to ASTM C-478.

(i) **Gasket Materials for Joints Between Precast Concrete Sections.** 100 percent butyl rubber rope-type gasket having a square cross-section of 1-inch nominal size conforming to the physical properties of Federal Specifications SS-S00210 as sold under the trade name E-Z Stik or equal.

Shop drawings for system components shall be submitted for approval as soon as possible, but not less than thirty (30) calendar days prior to the time when the components are intended to be installed."

Delete Article 602.03 in its entirety.

Delete Article 602.07 and replace it with the following:
"**602.07 Precast Reinforced Concrete Sections.** Base, barrel, cone and top sections shall be set as shown on the Drawings. The joints between precast concrete base sections, barrel sections, cone sections, and top slab sections in manholes, vaults, catch basins and inlets shall be sealed with two rings of 100 percent butyl gasket in rope form having a square cross-section of 1-inch nominal size. Adjusting rings and frames shall be set in full-width beds of cement mortar.

For valve vault reconstruction, the precast bottom slab should be placed directly on level, undisturbed earth. Sand may be used for final leveling off the bottom of the excavation, but thickness shall be kept to a practical minimum. In no case, shall the thickness of sand used for leveling exceed 1-inch. The purpose of requiring the base slab to be set on undisturbed earth and limiting the use of sand for leveling is to minimize post-construction settlement of the replacement valve vault and resulting damage to the existing water main. The Contractor shall bear the cost of repairing existing water mains damaged by vault settlement.

All lift holes on precast elements for manholes, vaults, catch basins, and inlets shall be completely filled with mortar and sealed with a bitumastic material."

Add the following to Article 602.11:
"(d) All existing frames, lids, grates and inlets reclaimed during construction are the property of the City of Evanston. These frames lids and grates shall be moved to a suitable place on the job for storage and made available for removal by the Owner.

(e) All manhole frame castings placed shall be set in full mortar beds composed of one part masonry cement to two parts sand by volume, based on dry materials, with no admixtures. Castings must be set accurately to the finished elevation so that no subsequent adjustment will be required. All frames will be adjusted to final grade by means of concrete adjusting rings. No brickwork to produce an adjustment ring will be accepted or permitted to adjust any structure to grade. Where manholes are located in roadways, paved alleys or paved driveways, casings shall be set to match the longitudinal slope and cross-slope of the pavement.

(f) Existing frames and lids must not be used as temporary covers during construction."

Delete the second paragraph of Article 602.13 and replace it with the following:
"The space between the sides of the excavation and the outer surfaces of the structures shall be filled with CA-11 material as shown on the Drawings."

Delete Article 602.16 and replace it with the following:
"This work will be paid for at the Contract unit price per EACH for CATCH BASINS, MANHOLES, INLETS, and VALVE VAULTS, of the types and sizes specified, measured in place. These Contract unit prices shall be payment in full for all materials, labor, and equipment required for: site preparation, including removal, replacement and/or repair of fences and other site objects; trench excavation, including removal and disposal of existing sewer pipes, structures, and excess excavated materials; protection, support and repair of damage to existing utilities; support of trench walls; shoring and bracing; dewatering of trenches; temporary pumping of combined sewer flows; new structures; bedding; sewer connection; frames, lids and other castings; flexible check valves; abandonment of existing sewers where called out on the Drawings, including filling and placement of required plugs; supply, placement, compaction, and compaction testing of material, infiltration/exfiltration and other testing/inspection; correction of defects; and, other related work required to complete the installation which is not included under other Payment Items.

Roadway, sidewalk, driveway, and curb/gutter removal/replacement outside the pay limits shown on the Drawings required for completion of the work or for Contractor's purposes shall be incidental to combined sewer, relief sewer, storm sewer, and sanitary sewer construction and no separate payment shall be made."

FRAMES AND LIDS TO BE ADJUSTED, SPECIAL
Add the following to Article 603.03 of the Standard Specifications:
"The contractor shall adjust the structures to the finished pavement elevation no more than 5 calendar days prior to placement of the final lift of surface unless approved by the Engineer."

Add the following to Article 603.09 of the Standard Specifications:
"Removing frames and lids on drainage and utility structures in the pavement prior to milling, and adjusting to final grade prior to placing the surface course, will be paid for at the contract unit price each for FRAMES AND LIDS TO BE ADJUSTED, SPECIAL.

This work will not be paid for separately when drainage and utility structures are specified for payment as reconstructions or new manholes but shall be considered as included in the unit price bid for structure reconstructions or manholes."

ADJUSTING FRAMES AND GRATES OF DRAINAGE AND UTILITY STRUCTURES
Delete Article 603.08 and replace it with the following:

"**603.08 Adjusting Rings**. Drainage and utility structure frames shall be adjusted to grade by removal of the frame and adjustment from the structure, preparing the top of the structure to receive the new adjustment, installing the proper height precast concrete adjusting rings and reinstalling the frame, all in accordance with applicable provisions of Section 602. The use of cast iron adjusting rings is prohibited."

FRAMES AND GRATES

Add the following to Article 604.02:

"(f) Frames and grates furnished under this Contract shall be Gray Iron Castings conforming to the Specifications for Gray Iron Castings, ASTM A-48, Class 35. Circular lids for manholes and vaults shall have large (2.5 inch nominal) pick holes. Circular lids for closing catch basins shall have large (2.5 inch nominal) pick holes:

(g) Frames and grates on structures shall be as follows (or approved equal):

Existing inlets and catch basins; new catch basins and inlets on Combined Sewer system:

- Neenah Type R-1712 (390 lbs.) Frame, Open Lid Grate (116 lbs.) with large (2.5 inch nominal) pick holes or equal.

New catch basins and type A inlets for Storm/Relief Sewer work:

- Neenah Type R-3031-B Frame, Sinusoidal Grate,
- Neenah Type R-3036-B Frame, Sinusoidal Grate (for Depressed Curb)

Manholes and vaults:

- Neenah Type R-1712 (390 lbs.) Frame and Extra Heavy Duty Cover (150 lbs.) with large (2.5 inch nominal) pick holes or equal. Valve Vault covers shall be lettered "WATER".

High Capacity Inlet, Type A

- Neenah Type R-3067-L Frame, Vane Grate

New frames and grates may be requested by the Engineer during adjustment of existing structures."

Delete Article 604.05 and replace it with the following:

New frames and grates and/or closed lids placed on adjusted and/or rebuilt existing structures will be paid for at the Contract unit price per EACH for FRAME AND GRATES, FRAME AND LIDS, and FRAMES AND LIDS(or GRATES) TO BE ADJUSTED. This work shall be paid for at the Contract unit price per EACH set of frame and lid or grate actually installed. These Contract unit prices shall be payment in full for all materials, labor, and equipment required for: site preparation; excavation; disposal of excess excavated materials including existing structures; frames and grates/lids; adjusting rings, tapered adjusting rings where necessary and concrete setting materials; installation; backfill placement, compaction and compaction testing; testing/inspection; correction of defects; stockpiling reclaimed castings; and all related work required to complete the installation which is not included in other Payment Items.

Frames and grates or closed lids placed on new structures will be considered incidental to the cost of the new structures and will be paid for under the appropriate Pay Items for new structures.

Removed frames and grates shall remain the property of the city and shall be stored in a secured area for pickup by the city.

REMOVING OR FILLING (ABANDONING) EXISTING MANHOLES, CATCH BASINS AND INLETS

Add the following sentences to Article 605.01:
"This work shall also consist of all work necessary to remove or fill existing valve vaults so designated on the Drawings. The terms "fill", "remove", and "abandon" shall be interchangeable and shall consist of removing the upper portion of an existing structure, filling unused pipes, sealing pipe connections, and filling the remainder of the structure with Trench Backfill sand (FA-6), compacted to the satisfaction of the Engineer."

Articles 605.03 and 605.04 shall apply with the following modifications:
"The Contractor shall make his own investigation to determine the existence, nature and location of all sewers and appurtenances thereto within the limits of the improvement. The Contractor shall be held responsible for any damage to existing sewers. All pavements will be sawed to a full depth prior to any casting replacement/adjustment, structure removal, or filling operation. Connecting pipes shall be cut one joint from the existing structure to be removed/filled. Structures in private paved areas, parkways and other grassed areas shall be removed a minimum of 2-feet below final grade and structures in public streets shall be removed a minimum of 6-feet below final grade. Pipes connected to these structures shown to be abandoned and shall be filled with CLSM materials in accordance with Article 550.05. Remaining portions of existing structures may be filled with Case I trench backfill material in accordance with Section 208 or may be filled with CLSM material in accordance with Article 550.05, at Contractor's option. Structures shall be pumped out and cleaned of all mud and debris before the fill material is placed. The remainder of the excavation shall be backfilled in accordance with Section 208."

Delete Article 605.06 and replace it with the following:
"This work will be paid for at the Contract unit price per EACH for catch basins, inlets, valve vaults, valve boxes, and manholes that are to be abandoned, filled, or removed, as counted in the field. These Contract unit prices shall be payment in full for all materials, labor, and equipment required for: site preparation, including removal, replacement and/or repair of fences and other site objects; excavation, including removal and disposal of existing sewer pipes, structures, and excess excavated materials; protection, support and repair of damage to existing utilities; saw-cutting, removal and disposal of existing pavement; excavation, removal and disposal of removal wastes; supply, placement, compaction, and compaction testing of backfill, stockpiling reclaimed castings; and all related work required. For items abandoned, the price shall include the cost of removal of frames/covers, adjusting collars and structure down to 24-inches below existing grassed surface or 72-inches below existing pavement as applicable, disposal of wastes, concrete bulkheads, and filling of remaining structure as specified."

CONCRETE GUTTER, CURB, MEDIAN, AND PAVED DITCH

Delete Article 606.01 and replace it with the following:
"**606.01 Description.** This work shall consist of concrete curb type B, combination concrete curb and gutter type B-6.12 and B-6.12 modified, and removal/replacement of existing medians."

All curb and gutter removed shall be formed within 2 working days of removal. New curb and gutter shall be poured within 1 working day of being formed. The forms shall be removed within 1 working day after the concrete pour and the restoration behind the new curb shall be done with 24 hours after removal of the forms. All low areas shall be filled in to match the surrounding grades within 72 hours of the curb being poured.

Add the following Subparagraphs to Article 606.02:
"(g) **Base.** A minimum of four (4") inches compacted thickness of aggregate base course shall be placed on the subgrade prior to construction of the proposed concrete curb and gutter.
(h) **Forms.** The use of a slip-form or curb machine is allowed, but the Contractor is advised that variable face height curb is required in many parts of the Project to match existing curbs, roadways and parkway grading. Additional pavement patching, restoration or excavation beyond the requirements of this proposal, as required for or resulting from the use of such a machine, will not be considered for additional payment and should be considered incidental to its use. Excavation to accommodate the installation of concrete forms or use of slip-form shall be limited to 12 inches from back of proposed curb. Hand forming shall be required in the vicinity of specific trees where the root zones are near and/or have overgrown the existing curb line. These locations will be determined by the City Arborist.

(i) **Curing.** Curing shall be in accordance with Article 1022.01. Curing compound shall be Type III. Protect all surfaces from sun. During hot weather, keep temperature of concrete below 90 degrees Fahrenheit. During cold weather, keep temperature of concrete between 50 degrees F and 70 degrees F for 3 to 5 days. Protect from frost and rapid drying for 6 days. The Contractor shall be solely responsible for protecting his work from vandalism. All vandalized concrete work shall be removed and replaced at the Contractor's expense."

Add the following sentence to Article 606.06 - Placing Concrete.
"The transition from full height curb to depressed curb shall be made at a maximum rate of three (3) inches per foot of length."

Delete the last sentence of the first paragraph of Article 606.07.

Add the following paragraphs to Article 606.07:
"Expansion joints consisting of pre-molded bituminous expansion joint filler, one-half inch in thickness and two greased 1-inch diameter dowel bars with expansion caps shall be placed at 50-foot intervals. When curb and gutter is constructed adjacent to flexible pavement, a 1-inch thick preformed expansion joint, conforming to the cross-section of the curb and gutter, shall be installed at points of curvature for short-radius curves and at construction joints.

Contraction joints shall be placed between expansion joints at distances not to exceed twenty-five (25) feet. Contraction joints shall be formed using steel templates one-eighth inch in thickness, equal to the width of the gutter or curb, and penetrating at least two (2) inches below the surface of the curb and gutter; using three-quarter ($^3/_4$) inch thick preformed expansion joint filler placed fully across the curb or gutter; or by sawing to a depth of at least two (2) inches after the concrete is four-hours, but not more than twenty-four hours old. If steel templates are used, they shall be left in place until the concrete has set sufficiently to hold its shape but shall be removed while the forms are still in place. Template-formed or sawed joints shall be sealed in accordance with Article 420.12.

All longitudinal joints, except adjacent to flexible pavement, shall be provided with No. 6 epoxy coated steel tie bars thirty (30) inches long at 36" on center conforming to Article 1006.10 and installation in accordance with IDOT Standard 606001. This work is incidental to the curb pay item.

Hand removal and hand forming of the curb and gutter shall be required in the vicinity of specific trees and their root zones. These individual locations shall be determined, in the field, by the City Arborist. These operations shall be considered incidental to the work, and no separate

payment shall be made. Excavation to accommodate the installation of concrete forms or use of slip-form shall be limited to 12 inches from back of proposed curb.

The proposed curb and/or curb & gutter flag thickness shall meet the bottom of the existing pavement and extend to the top of the proposed edge of pavement as shown on the plans. No separate payment shall be made for additional concrete used."

Delete Article 606.15 and replace it with the following:
"This work will be paid for at the Contract unit price per LINEAR FOOT for CONCRETE CURB TYPE B, COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.12, and COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.12 MODIFIED. Curb and gutter will be measured in place for the quantity actually removed and replaced within the pay limits shown on the Drawings or as directed by Engineer.

These Contract unit prices shall be payment in full for all materials, labor and equipment required for: site preparation, including removal, replacement and/or repair of fences and other site objects; saw-cutting, removal and disposal of existing curbs/gutters and other structures; excavation, including removal and disposal of excess excavated materials; final grading of aggregate base course, backfill; furnishing and installing all joints as required, including epoxy coated tie bars; curing; protection; and all related work required to complete the installation which is not included in other Payment Items. Modified (depressed) curbs shall be paid for at the same Contract unit price as standard type B, B6.12.

Removal/replacement of curb/gutter will be paid for where placed within the standard trench width of new sewers, manholes, catch basins, and inlets, where shown on the Drawings outside the standard trench width or where directed by Engineer.

Removal/replacement of curb/gutter outside the pay limits specified which have been damaged by Contractors operations or which have been removed/replaced for Contractor's purposes shall be considered incidental to the work and no separate payment shall be made."

TRAFFIC CONTROL AND PROTECTION
Delete Article 701.20 and replace it with the following:
This work will be paid for at the Contract LUMP SUM price for TRAFFIC CONTROL AND PROTECTION. This lump sum price shall be payment in full for all materials, labor and equipment required for: handling, furnishing, transporting, installing, maintaining, relocating and removing all traffic control devices and signage required for to fully protect construction operations and the general public; including implementing any detour plans shown on the Drawings. This lump sum price shall also include all materials, labor and equipment required for: furnishing, installing, relocating and removing steel plates and other temporary bridging over trenches, auger pits, receiving pits and other areas disturbed by construction activities. The salvage value of the materials removed shall be reflected in the price bid for this Item. Progress payments for traffic control will be made in direct proportion to the value of work completed. Contractor shall also refer to the IDOT Standards included herein for additional traffic control measures. The Contractor is advised that specific liquidated damages apply for failure to maintain traffic control devices.

TRAFFIC CONTROL AND PROTECTION shall be paid monthly in an amount equal to the lump sum price bid multiplied by the overall percentage completion of other Contract Payment Items.

CONSTRUCTION LAYOUT

This work shall consist of surveying local control points to establish horizontal and vertical control required for construction of the water main improvements and related contract items of work. These stakes or markings must be maintained throughout construction. The survey foreman will be responsible for the review of stakes and marking with the Engineer prior to the final placement of any materials.

This work will be measured and paid for at the contract unit price LUMP SUM as CONSTRUCTION LAYOUT, which price includes all labor, material and equipment necessary to survey control points, lines, establish stakes and marking, and the review of all such stakes and markings with the Engineer.

The limits of concrete construction contract items will be provided by the Engineer.

STREET SWEEPING

Add the following paragraphs to Article 107.15:

"The Contractor shall utilize a mechanical street sweeper to clean streets affected by the Contractor's operations, including haul routes, at least twice per week and additionally as directed by the Engineer. Liquated Damages shall be assessed as outlined in the Bid Form if the Contractor fails to utilize a mechanical street sweeper to the satisfaction of the Engineer. The street-sweeper shall be a full-sized, municipal-type sweeper having dust collection and street washing capabilities. If, in the opinion of the Engineer, dust becomes a problem despite the normal cleanup measures of street sweeping, the Contractor shall wash down the pavement, spread calcium chloride as a palliative, or re-sweep streets as necessary, all at no additional cost to the Owner. The Contractor shall keep sufficient quantities of calcium chloride on site, for use as directed by the Engineer for dust control. The contractor shall provide cleanings twice per week and additionally as directed by the Engineer.

This work will be paid for at the Contract unit price per EACH for STREET SWEEPING, which price shall be payment in full for labor, equipment and materials required to complete the work.

ENVIRONMENTAL CONTROL

The Contractor shall be responsible for furnishing all necessary items for fulfilling the Work described herein for environmental protection including prevention and control of erosion and sedimentation that results directly or indirectly from the Project.

PREVENTION OF WATER POLLUTION

The Contractor shall take all such precautions in the conduct of his operations as may be necessary to avoid contaminating the water in adjacent watercourses or water storage areas including wells whether natural or man-made.

All earthwork, moving of equipment, water control of excavations, and other operations likely to create silting, shall be conducted so as to minimize pollution of watercourses or water storage areas.

Water used during the Contract Work, which has become contaminated with oil, bitumens, harmful or objectionable chemicals, sewage or other pollutants, shall be disposed of so as to avoid affecting all nearby waters and lands. Under no circumstances shall the Contractor discharge pollutants into any watercourse or water storage area. Do not allow water used in aggregate processing, concrete curing, foundation and concrete lift cleanup or any other waste to directly enter a stream untreated. When water from adjacent natural sources is used in the Contract Work, intake methods shall be such as to avoid contaminating the source of supply or

becoming a source of erosion or sedimentation.

NOISE AND AIR POLLUTION CONTROL
Conduct operations so as not to violate any applicable ordinances, regulations, rules and laws in effect in the area at the date of bid opening pertaining to noise and air pollution and to conform to all provisions in effect at the date of bid opening as set forth in the Rules and Regulations Governing the Control of Air Pollution and noise pollution in the State of Illinois.

PLANT PEST CONTROL
All soil moving or handling equipment that has operated in or will operate in regulated areas shall be subject to plant quarantine regulations. In general, these regulations require the thorough cleaning of soil from equipment before such equipment is moved from regulated areas to uninfected areas. Complete information may be obtained from the regional office of the Plant Pest Control Division of the United States Department of Agriculture.

PRESERVATION OF NATURAL RESOURCES
All construction operations, contract work, clean up and the condition of the adjacent terrain upon completion of the Work shall fully comply with all applicable regulations and laws concerning the preservation of natural resources.

DUST CONTROL
Throughout the entire construction period, maintain dust control by use of water sprinklers or chemical dust control binder as may be approved by the Engineer.

WORK INSIDE THE HOME AND ON PRIVATE PROPERTY
The Contractor shall take all precautions to minimize disturbance within private property for Full Lead Service Line Replacements. The Contractor shall agree on the proposed means and methods for minimizing disturbances on Private Property with the Engineer and the Property Owner prior to the Property Owner signing the Property Owner Agreement Form. At a minimum such protections may include maintaining dust due to cutting concrete; installing plastic sheeting to isolate work areas; plastic wrapping shoes prior to entry; protecting existing appliances; minimize removal of drywall, tile, and other interior materials; temporarily removing and replacing exterior plants (when possible); not disturbing vegetation outside of the agreed upon immediate work zone, and other precautions necessary to limit interior disturbances to the Property Owner.

PAYMENT
No separate payment will be made for the work in this Section; all the costs of such work shall be considered incidental to the items of work to which they pertain.

BICYCLE RACKS
DESCRIPTION. This work shall consist of furnishing and installing bicycle racks.

GENERAL. Bicycle Racks will be placed at the locations indicated in the plans. The locations will be field marked and verified for approval by the Engineer. The anchor bolts must be drilled and grouted into the concrete pads or sidewalks only after the Bicycle Rack locations have been finalized.

SUBMITTALS. Contractor shall submit technical data for each manufactured product, including certification that each product complies with specified requirements. Contractor shall also submit

shop drawings showing complete information for fabrication, including anchoring detail.

MATERIALS. Bicycle Racks shall be 'U' Shaped Single Bike Rack Units meeting the following requirements:

a. Steel pipe – 2" x 2" x 3/16" square tube flat top type. Pipe shall not be welded in sections. If applicable, only the base plate shall be welded.
b. Steel coating shall be a successive combination of sandblasting, iron phosphate pretreatment, electro statically applied epoxy primer, and final thick black TGIC Polyester powder coat.
c. Bike rack shall be 36 inches in height by 30 inches wide.
d. Base plates shall be 3/8 inch thick steel according to ASTM A 36M. Base plates shall be galvanized according to ASTM A 153.
e. Concrete Anchor Unit should consist of Lag Screw 3/8" X 3", Cut Washer 3/8", and Lag Shield 1/2" X 2". All parts are to be zinc plated or alloy zinc.

The steel pipe and base plate shall be coated as specified below. Color of the coating shall be black. The coating shall be applied only after the steel pipe and base plate have been fabricated. The final product shall not contain cracks in the coating, ripples in the curved areas, nor any damage due to fabrication and/or shipping.

a. Steel shall be shot blast to near white steel and then an iron phosphate pretreatment shall be applied.
b. Primer shall be a thermosetting epoxy powder coating electrostatically applied and cured six minutes at 250 degrees F.
c. The primer thickness shall be 1.8-10 mils. Topcoat shall be triglycidly isocyanurate (TGIC) polyester powder coating, electrostatically applied and cured in an oven for 20 minutes at 250 degree F. The total coating shall be 8-10 mils.

METHOD OF MEASUREMENT. Bicycle Racks shall be counted as EACH upon successful completion of installation.

BASIS OF PAYMENT. This item will be paid for at the contract unit price EACH for each BICYCLE RACK, which shall include furnishing and installing new racks with mounting hardware.

RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (BDE)

Effective: November 1, 2012
Revised: January 2, 2020

Revise Section 1031 of the Standard Specifications to read:

"**SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES**

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

(a) Reclaimed Asphalt Pavement (RAP). RAP is the material produced by cold milling or crushing an existing hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.

(b) Reclaimed Asphalt Shingles (RAS). Reclaimed asphalt shingles (RAS). RAS is from the processing and grinding of preconsumer or post-consumer shingles. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable material, as defined in Central Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources", by weight of RAS. All RAS used shall come from a Central Bureau of Materials approved processing facility where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 93 percent passing the #4 (4.75 mm) sieve based on a dry shake gradation. RAS shall be uniform in gradation and asphalt binder content and shall meet the testing requirements specified herein. In addition, RAS shall meet the following Type 1 or Type 2 requirements.

(1) Type 1. Type 1 RAS shall be processed, preconsumer asphalt shingles salvaged from the manufacture of residential asphalt roofing shingles.

(2) Type 2. Type 2 RAS shall be processed post-consumer shingles only, salvaged from residential, or four unit or less dwellings not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP).

1031.02 Stockpiles. RAP and RAS stockpiles shall be according to the following.

(a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. "Homogeneous Surface").

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

(1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. All FRAP shall be fractionated prior to testing by screening into a minimum of two size fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP shall pass the sieve size specified below for the mix into which the FRAP will be incorporated.

Mixture FRAP will be used in:	Sieve Size that 100 % of FRAP Shall Pass
IL-19.0	1 1/2 in. (37.5 mm)
SMA 12.5	1 in. (25.0 mm)
IL-9.5, IL-9.5FG, SMA 9.5	3/4 in. (19.0 mm)
IL-4.75	1/2 in. (12.5 mm)

(2) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogeneous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.

(3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag.

(4) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

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

(b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall not be intermingled. Each stockpile shall be signed indicating what type of RAS is present.

Unless otherwise specified by the Engineer, mechanically blending manufactured sand (FM 20 or FM 22) up to an equal weight of RAS with the processed RAS will be permitted

to improve workability. The sand shall be “B Quality” or better from an approved Aggregate Gradation Control System source. The sand shall be accounted for in the mix design and during HMA production.

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

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

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

(1) During Stockpiling. For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).

(2) After Stockpiling. For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

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

(b) RAS Testing. RAS or RAS blended with manufactured sand shall be sampled and tested during stockpiling according to Central Bureau of Materials Policy Memorandum, “Reclaimed Asphalt Shingle (RAS) Source”.

Samples shall be collected during stockpiling at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 250 tons (225 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a ≤ 1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS or RAS blended with manufactured sand shall be stockpiled in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.

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

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

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

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

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

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

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

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the ITP, “Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)”.

(b) Evaluation of RAS and RAS Blended with Manufactured Sand Test Results. All of the test results, with the exception of percent unacceptable materials, shall be compiled and averaged for asphalt binder content and gradation. Individual test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	RAS
No. 8 (2.36 mm)	± 5 %
No. 16 (1.18 mm)	± 5 %
No. 30 (600 µm)	± 4 %
No. 200 (75 µm)	± 2.0 %
Asphalt Binder Content	± 1.5 %

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

1031.05 Quality Designation of Aggregate in RAP/FRAP.

(a) RAP. The aggregate quality of the RAP for homogeneous and conglomerate stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.

(1) RAP from Class I, Superpave/HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.

(2) RAP from Class I binder, Superpave/HMA (High ESAL) binder, or (Low ESAL) IL-19.0L binder mixtures are designated as containing Class C quality coarse aggregate.

(b) FRAP. If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer.

If the quality is not known, the quality shall be determined as follows. Coarse and fine FRAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5000 tons (4500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant laboratory prequalified by the Department for the specified testing. The consultant laboratory shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the Central Bureau of Materials Aggregate Lab for MicroDeval Testing, according to ITP 327. A maximum loss of 15.0 percent will be applied for all HMA applications.

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

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

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

(2) Steel Slag Stockpiles. Homogeneous RAP stockpiles containing steel slag will be approved for use in all HMA (High ESAL and Low ESAL) Surface and Binder Mixture applications.

(3) Use in HMA Surface Mixtures (High and Low ESAL). RAP/FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be FRAP or homogeneous in which the coarse aggregate is Class B quality or better. FRAP from Conglomerate stockpiles shall be considered equivalent to limestone for frictional considerations. Known frictional contributions from plus #4 (4.75 mm) homogeneous FRAP stockpiles will be accounted for in meeting frictional requirements in the specified mixture.

(4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP/FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP, homogeneous, or conglomerate, in which the coarse aggregate is Class C quality or better.

(5) Use in Shoulders and Subbase. RAP/FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, homogeneous, or conglomerate.

(6) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in Article 1031.06(c)(1) below for a given Ndesign.

(b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.

(c) RAP/FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with RAP or FRAP in HMA mixtures up to a maximum of 5.0 percent by weight of the total mix.

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

RAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

HMA Mixtures [1/ 2/]	RAP/RAS Maximum ABR %		
Ndesign	Binder	Surface	Polymer Modified Binder or Surface
30	30	30	10

50	25	15	10
70	15	10	10
90	10	10	10

1/ For Low ESAL HMA shoulder and stabilized subbase, the RAP/RAS ABR shall not exceed 50 percent of the mixture.

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

(2) FRAP/RAS. When FRAP is used alone or FRAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the following table.

FRAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

HMA Mixtures 1/ 2/	FRAP/RAS Maximum ABR %		
Ndesign	Binder	Surface	Polymer Modified Binder or Surface
30	50	40	10
50	40	35	10
70	40	30	10
90	40	30	10
SMA	- -	- -	20
IL-4.75	- -	- -	30

1/ For Low ESAL HMA shoulder and stabilized subbase, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.

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

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

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

(b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design.

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

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

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

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

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

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

(c) RAP/FRAP and/or RAS. HMA plants utilizing RAP/FRAP and/or RAS shall be capable of automatically recording and printing the following information.

(1) Dryer Drum Plants.

a. Date, month, year, and time to the nearest minute for each print.

b. HMA mix number assigned by the Department.

c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).

d. Accumulated dry weight of RAP/FRAP/RAS in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).

e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.

f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.

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

h. Aggregate and RAP/FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP/FRAP are printed in wet condition.)

(2) Batch Plants.

a. Date, month, year, and time to the nearest minute for each print.

b. HMA mix number assigned by the Department.

c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).

d. Mineral filler weight to the nearest pound (kilogram).

e. RAP/FRAP/RAS weight to the nearest pound (kilogram).

f. Virgin asphalt binder weight to the nearest pound (kilogram).

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

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

1031.09 RAP in Aggregate Surface Course and Aggregate Wedge Shoulders, Type B. The use of RAP in aggregate surface course (temporary access entrances only) and aggregate wedge shoulders, Type B shall be as follows.

(a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except “Non-Quality” and “FRAP”. The testing requirements of Article 1031.03 shall not apply. RAP used shall be according to the current Central Bureau of Materials Policy Memorandum, “Reclaimed Asphalt Pavement (RAP) for Aggregate Applications”.

(b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted.”

80306

HOT-MIX ASPHALT – BINDER AND SURFACE COURSE (BDE)

Effective: July 2, 2019
Revised: November 1, 2019

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

Materials. Add the following after the second paragraph of Article 1003.03(c):

"For mixture IL-9.5FG, at least 67 percent of the required fine aggregate fraction shall consist of either stone sand, slag sand, steel slag sand, or combinations thereof meeting FA 20 gradation."

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	CA 11 1/
	SMA 12.5 2/	CA 13, CA 14, or CA 16
	SMA 9.5 2/	CA 13 or CA 16 3/
	IL-9.5	CA 16
	IL-9.5FG	CA 16
HMA Low ESAL	IL-19.0L	CA 11 1/
	IL-9.5L	CA 16

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

2/ The coarse aggregates used shall be capable of being combined with stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation and mineral filler to meet the approved mix design and the mix requirements noted herein.

3/ The specified coarse aggregate gradations may be blended."

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

"High ESAL	Binder Courses	IL-19.0, IL-9.5, IL-9.5FG, IL-4.75, SMA 12.5, SMA 9.5

	Surface Courses	IL-9.5, IL-9.5FG, SMA 12.5, SMA 9.5”

Mixture Design. Revise the table in Article 1030.04(a)(1) and add SMA 9.5 and IL-9.5FG mixture compositions as follows:

“HIGH ESAL, MIXTURE COMPOSITION (% PASSING) [1/]						
Sieve Size	SMA 12.5 [5/]		SMA 9.5 [5/]		IL-9.5FG	
	min.	max.	min.	max.	min.	max.
1 in. (25 mm)						
3/4 in. (19 mm)		100		100		
1/2 in. (12.5 mm)	90	99	95	100		100
3/8 in. (9.5 mm)	50	85	70	95	90	100
#4 4.75 mm)	20	40	30	50	60	75
#8 (2.36 mm)	16	24 [4/]	20	30	45	60
#16 (1.18 mm)				21	25	40
#30 (600 μm)				18	15	30
#50 (300 μm)				15	8	15
#100 (150 μm)					6	10
#200 (75 μm)	8.0	11.0 [3/]	8.0	11.0 [3/]	4.0	6.5
#635 (20 μm)		≤ 3.0		≤ 3.0		
Ratio of Dust/Asphalt Binder						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 24 percent.

5/ When the bulk specific gravity (Gsb) of the component aggregates vary by more than 0.2, the blend gradations shall be based on volumetric percentage."

Revise the table in Article 1030.04(b)(1) to read:

<table>
<tr><td colspan="5">"VOLUMETRIC REQUIREMENTS, High ESAL</td></tr>
<tr><td rowspan="2">Ndesign</td><td colspan="3">Voids in the Mineral Aggregate (VMA), % minimum</td><td rowspan="2">Voids Filled with Asphalt Binder (VFA),%</td></tr>
<tr><td>IL-19.0</td><td>IL-9.5
IL-9.5FG</td><td>IL-4.75 1/</td></tr>
<tr><td>50</td><td rowspan="3">13.5</td><td rowspan="3">15.0</td><td>18.5</td><td>65 - 78 2/</td></tr>
<tr><td>70</td><td rowspan="2"></td><td rowspan="2">65 – 75 3/</td></tr>
<tr><td>90</td></tr>
</table>

1/ Maximum draindown for IL-4.75 shall be 0.3 percent.

2/ VFA for IL-4.75 shall be 76-83 percent.

3/ VFA for IL-9.5FG shall be 65-78 percent."

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

<table>
<tr><td colspan="5">"VOLUMETRIC REQUIREMENTS, SMA 12.5 1/ and SMA 9.5 1/</td></tr>
<tr><td>ESALs (million)</td><td>Ndesign</td><td>Design Air Voids Target, %</td><td>Voids in the Mineral Aggregate (VMA), % min.</td><td>Voids Filled with Asphalt (VFA), %</td></tr>
<tr><td>≤ 10</td><td>50</td><td>4.0</td><td>16.0</td><td>75 – 80</td></tr>
<tr><td>> 10</td><td>80</td><td>4.0</td><td>17.0</td><td>75 – 80</td></tr>
</table>

1/ Maximum draindown shall be 0.3 percent."

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

"If the Contractor and Engineer agree the nuclear density test method is not appropriate for the mixture, cores shall be taken at random locations determined according to the

QC/QA document "Determination of Random Density Test Site Locations". Core densities shall be determined using the Illinois Modified AASHTO T 166 or T 275 procedure."

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

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

a. Confined Edge. Each confined edge density shall be represented by a one-minute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.

b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced 10 ft (3 m) apart longitudinally along the unconfined pavement edge and centered at the random density test location.

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

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

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

1/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge.

2/ 92.0 % when placed as first lift on an unimproved subgrade."

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

"(h) Oscillatory Roller. The oscillatory roller shall be self-propelled and provide a smooth operation when starting, stopping, or reversing directions. The oscillatory roller shall be able to operate in a mode that will provide tangential impact force with or without vertical impact force by using at least one drum. The oscillatory roller shall be equipped with water tanks and sprinkling devices, or other approved methods, which shall be used to wet the drums to prevent material pickup. The drum(s) amplitude and frequency of the tangential and vertical impact force shall be approximately the same in each direction and meet the following requirements:

(1) The minimum diameter of the drum(s) shall be 42 in. (1070 mm);

(2) The minimum length of the drum(s) shall be 57 in. (1480 mm);

(3) The minimum unit static force on the drum(s) shall be 125 lb/in. (22 N/m); and

(4) The minimum force on the oscillatory drum shall be 18,000 lb (80 kN)."

CONSTRUCTION REQUIREMENTS

Add the following to Article 406.03 of the Standard Specifications:

"(j) Oscillatory Roller .....1101.01"

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

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

Revise Article 406.05(c) to read.

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

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

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

Revise Article 406.06(d) to read:

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

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

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

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

"TABLE 1 - MINIMUM ROLLER REQUIREMENTS FOR HMA				
	Breakdown Roller (one of the following)	Intermediate Roller	Final Roller (one or more of the following)	Density Requirement
Binder and Surface [1/]	V_D, P [3/], T_B, 3W, O_T, O_B	P [3/], O_T, O_B	V_S, T_B, T_F, O_T	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).
IL-4.75 and SMA [4/ 5/]	T_B, 3W, O_T	- -	T_F, 3W, O_T	
Bridge Decks [2/]	T_B	- -	T_F	As specified in Articles 582.05 and 582.06.

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

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

"O_T - Oscillatory roller, tangential impact mode. Maximum speed is 3.0 mph (4.8 km/h) or 264 ft/min (80 m/min).

O_B - Oscillatory roller, tangential and vertical impact mode, operated at a speed to produce not less than 10 vertical impacts/ft (30 impacts/m)."

Basis of Payment. Replace the second through the fifth paragraphs of Article 406.14 with the following:

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

80416

CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010
Revised: November 1, 2014

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

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

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

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

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

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

a) Included on the U.S. Environmental Protection Agency (USEPA) *Verified Retrofit Technology List* (http://www.epa.gov/cleandiesel/verification/verif-list.htm), or verified by the California Air Resources Board (CARB) (http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm); or

b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

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

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

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

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

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

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

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

Diesel Retrofit Deficiency Deduction

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

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

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

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

80261

DISPOSAL FEES (BDE)

Effective: November 1, 2018

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

"(5) Disposal Fees. When the extra work performed includes paying for disposal fees at a clean construction and demolition debris facility, an uncontaminated soil fill operation or a landfill, the Contractor shall receive, as administrative costs, an amount equal to five percent of the first $10,000 and one percent of any amount over $10,000 of the total approved costs of such fees.

(6) Miscellaneous. No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.

(7) Statements. No payment will be made for work performed on a force account basis until the Contractor has furnished the Engineer with itemized statements of the cost of such force account work. Statements shall be accompanied and supported by invoices for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices, the Contractor shall furnish an affidavit certifying that such materials were taken from his/her stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

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

a. Name, classification, date, daily hours, total hours, rate, and extension for each laborer and foreman. Payrolls shall be submitted to substantiate actual wages paid if so requested by the Engineer.

b. Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.

c. Quantities of materials, prices and extensions.

d. Transportation of materials.

e. Cost of property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, and social security tax.

(8) Work Performed by an Approved Subcontractor. When extra work is performed by an approved subcontractor, the Contractor shall receive, as administrative costs, an amount equal to five percent of the total approved costs of such work with the minimum payment being $100.

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

80402

EMULSIFIED ASPHALTS (BDE)

Effective: August 1, 2019

Revise Article 1032.06 of the Standard Specifications to read:

"1032.06 Emulsified Asphalts. Emulsified asphalts will be accepted according to the current Bureau of Materials Policy Memorandum, "Emulsified Asphalt Acceptance Procedure". These materials shall be homogeneous and shall show no separation of asphalt after thorough mixing, within 30 days after delivery, provided separation has not been caused by freezing. They shall coat the aggregate being used in the work to the satisfaction of the Engineer and shall be according to the following requirements.

(a) Anionic Emulsified Asphalt. Anionic emulsified asphalts RS-1, RS-2, HFRS-2, SS-1h, and SS-1 shall be according to AASHTO M 140, except as follows.

(1) The cement mixing test will be waived when the emulsion is being used as a tack coat.

(2) The Solubility in Trichloroethylene test according to AASHTO T 44 may be run in lieu of Ash Content and shall meet a minimum of 97.5 percent.

(b) Cationic Emulsified Asphalt. Cationic emulsified asphalts CRS-1, CRS-2, CSS-1h, and CSS-1 shall be according to AASHTO M 208, except as follows.

(1) The cement mixing test will be waived when the emulsion is being used as a tack coat.

(2) The Solubility in Trichloroethylene test according to AASHTO T 44 may be run in lieu of Ash Content and shall meet a minimum of 97.5 percent.

(c) High Float Emulsion. High float emulsions HFE-90, HFE-150, and HFE-300 are medium setting and shall be according to the following table.

Test	HFE-90	HFE-150	HFE-300
Viscosity, Saybolt Furol, at 122 °F (50 °C), (AASHTO T 59), SFS [1/]	50 min.	50 min.	50 min.
Sieve Test, No. 20 (850 µm), retained on sieve, (AASHTO T 59), %	0.10 max.	0.10 max.	0.10 max.
Storage Stability Test, 1 day, (AASHTO T 59), %	1 max.	1 max.	1 max.
Coating Test (All Grades), (AASHTO T 59), 3 minutes	stone coated thoroughly		
Distillation Test, (AASHTO T 59): Residue from distillation test to 500 °F (260 °C), % Oil distillate by volume, %	65 min. 7 max.	65 min. 7 max.	65 min. 7 max.

Characteristics of residue from distillation test to 500 °F (260 °C): Penetration at 77 °F (25 °C), (AASHTO T 49), 100 g, 5 sec, dmm	90-150	150-300	300 min.
Float Test at 140 °F (60 °C), (AASHTO T 50), sec.	1200 min.	1200 min.	1200 min.

1/ The emulsion shall be pumpable.

(d) Penetrating Emulsified Prime. Penetrating Emulsified Prime (PEP) shall be according to AASHTO T 59, except as follows.

Test	Result
Viscosity, Saybolt Furol, at 77 °F (25 °C), SFS	75 max.
Sieve test, retained on No. 20 (850 µm) sieve, %	0.10 max.
Distillation to 500 °F (260 °C) residue, %	38 min.
Oil distillate by volume, %	4 max.

The PEP shall be tested according to the current Bureau of Materials Illinois Laboratory Test Procedure (ILTP), "Sand Penetration Test of Penetrating Emulsified Prime (PEP)". The time of penetration shall be equal to or less than that of MC-30. The depth of penetration shall be equal to or greater than that of MC-30.

(e) Delete this subparagraph.

(f) Polymer Modified Emulsified Asphalt. Polymer modified emulsified asphalts, e.g. SS-1hP, CSS-1hP, CRS-2P (formerly CRSP), CQS-1hP (formerly CSS-1h Latex Modified) and HFRS-2P (formerly HFP) shall be according to AASHTO M 316, except as follows.

(1) The cement mixing test will be waived when the polymer modified emulsion is being used as a tack coat.

(2) CQS-1hP (formerly CSS-1h Latex Modified) emulsion for micro-surfacing treatments shall use latex as the modifier.

(3) Upon examination of the storage stability test cylinder after standing undisturbed for 24 hours, the surface shall show minimal to no white, milky colored substance and shall be a homogenous brown color throughout.

(4) The distillation for all polymer modified emulsions shall be performed according to AASHTO T 59, except the temperature shall be 374 ± 9 °F (190 ± 5 °C) to be held for a period of 15 minutes and measured using an ASTM 16F (16C) thermometer.

(5) The specified temperature for the Elastic Recovery test for all polymer modified emulsions shall be 50.0 ± 1.0 °F (10.0 ± 0.5 °C).

(6) The Solubility in Trichloroethylene test according to AASHTO T 44 may be run in lieu of Ash Content and shall meet a minimum of 97.5 percent.

(g) Non-Tracking Emulsified Asphalt. Non-tracking emulsified asphalt NTEA (formerly SS-1vh) shall be according to the following.

Test	Requirement
Saybolt Viscosity at 77 °F (25 °C), (AASHTO T 59), SFS	20-100
Storage Stability Test, 24 hr, (AASHTO T 59), %	1 max.
Residue by Distillation, 500 ± 10 °F (260 ± 5 °C), or Residue by Evaporation, 325 ± 5 °F (163 ± 3 °C), (AASHTO T 59), %	50 min.
Sieve Test, No. 20 (850 µm), (AASHTO T 59), %	0.3 max.
Tests on Residue from Evaporation	
Penetration at 77 °F (25 °C), 100 g, 5 sec, (AASHTO T 49), dmm	40 max.
Softening Point, (AASHTO T 53), °F (°C)	135 (57) min.
Ash Content, (AASHTO T 111), % 1/	1 max.

1/ The Solubility in Trichloroethylene test according to AASHTO T 44 may be run in lieu of Ash Content and shall meet a minimum of 97.5 percent

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

Grade	Use
SS-1, SS-1h, RS-1, RS-2, CSS-1, CRS-1, CRS-2, CSS-1h, HFE-90, SS-1hP, CSS-1hP, NTEA (formerly SS-1vh)	Tack Coat
PEP	Prime Coat
RS-2, HFE-90, HFE-150, HFE-300, CRS-2P (formerly CRSP), HFRS-2P (formerly HFP), CRS-2, HFRS-2	Bituminous Surface Treatment
CQS-1hP (formerly CSS-1h Latex Modified)	Micro-Surfacing Slurry Sealing Cape Seal"

PORTLAND CEMENT CONCRETE – HAUL TIME (BDE)

Effective: July 1, 2020

Revise Article 1020.11(a)(7) of the Standard Specifications to read:

"(7) Haul Time. Haul time shall begin when the delivery ticket is stamped. The delivery ticket shall be stamped no later than five minutes after the addition of the mixing water to the cement, or after the addition of the cement to the aggregate when the combined aggregates contain free moisture in excess of two percent by weight (mass). If more than one batch is required for charging a truck using a stationary mixer, the time of haul shall start with mixing of the first batch. Haul time shall end when the truck is emptied for incorporation of the concrete into the work. The maximum haul time shall be as follows.

Concrete Temperature at Point of Discharge, °F (°C)	Maximum Haul Time 1/ (minutes)	
	Truck Mixer or Truck Agitator	Nonagitator Truck
50 - 64 (10 - 17.5)	90	45
> 64 (> 17.5) - without retarder	60	30
> 64 (> 17.5) - with retarder	90	45

1/ To encourage start-up testing for mix adjustments at the plant, the first two trucks will be allowed an additional 15 minutes haul time whenever such testing is performed.

For a mixture which is not mixed on the jobsite, a delivery ticket shall be required for each load. The following information shall be recorded on each delivery ticket: (1) ticket number; (2) name of producer and plant location; (3) contract number; (4) name of Contractor; (5) stamped date and time batched; (6) truck number; (7) quantity batched; (8) amount of admixture(s) in the batch; (9) amount of water in the batch; and (10) Department mix design number.

For concrete mixed in jobsite stationary mixers, the above delivery ticket may be waived, but a method of verifying the haul time shall be established to the satisfaction of the Engineer."

80430

TRAFFIC CONTROL DEVICES - CONES (BDE)

Effective: January 1, 2019

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

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

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

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

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

80409

WARM MIX ASPHALT (BDE)

Effective: January 1, 2012
Revised: April 1, 2016

Description. This work shall consist of designing, producing and constructing Warm Mix Asphalt (WMA) in lieu of Hot Mix Asphalt (HMA) at the Contractor's option. Work shall be according to Sections 406, 407, 408, 1030, and 1102 of the Standard Specifications, except as modified herein. In addition, any references to HMA in the Standard Specifications, or the special provisions shall be construed to include WMA.

WMA is an asphalt mixture which can be produced at temperatures lower than allowed for HMA utilizing approved WMA technologies. WMA technologies are defined as the use of additives or processes which allow a reduction in the temperatures at which HMA mixes are produced and placed. WMA is produced by the use of additives, a water foaming process, or combination of both. Additives include minerals, chemicals or organics incorporated into the asphalt binder stream in a dedicated delivery system. The process of foaming injects water into the asphalt binder stream, just prior to incorporation of the asphalt binder with the aggregate.

Approved WMA technologies may also be used in HMA provided all the requirements specified herein, with the exception of temperature, are met. However, asphalt mixtures produced at temperatures in excess of 275 °F (135 °C) will not be considered WMA when determining the grade reduction of the virgin asphalt binder grade.

Equipment.

Revise the first paragraph of Article 1102.01 of the Standard Specifications to read:

"**1102.01 Hot-Mix Asphalt Plant.** The hot-mix asphalt (HMA) plant shall be the batch-type, continuous-type, or dryer drum plant. The plants shall be evaluated for prequalification rating and approval to produce HMA according to the current Bureau of Materials and Physical Research Policy Memorandum, "Approval of Hot-Mix Asphalt Plants and Equipment". Once approved, the Contractor shall notify the Bureau of Materials and Physical Research to obtain approval of all plant modifications. The plants shall not be used to produce mixtures concurrently for more than one project or for private work unless permission is granted in writing by the Engineer. The plant units shall be so designed, coordinated and operated that they will function properly and produce HMA having uniform temperatures and compositions within the tolerances specified. The plant units shall meet the following requirements."

Add the following to Article 1102.01(a) of the Standard Specifications.

"(11) Equipment for Warm Mix Technologies.

a. Foaming. Metering equipment for foamed asphalt shall have an accuracy of ± 2 percent of the actual water metered. The foaming control system shall be electronically interfaced with the asphalt binder meter.

b. Additives. Additives shall be introduced into the plant according to the supplier's recommendations and shall be approved by the Engineer. The system for introducing the WMA additive shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes."

Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

"(e) Warm Mix Technologies.

(1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.

(2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification."

Construction Requirements.

Revise the second paragraph of Article 406.06(b)(1) of the Standard Specifications to read:

"The HMA shall be delivered at a temperature of 250 to 350 °F (120 to 175 °C). WMA shall be delivered at a minimum temperature of 215 °F (102 °C)."

Basis of Payment.

This work will be paid at the contract unit price bid for the HMA pay items involved. Anti-strip will not be paid for separately, but shall be considered as included in the cost of the work.

80288

MAINTENANCE OF ROADWAYS (D1)

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.

GROUND TIRE RUBBER (GTR) MODIFIED ASPHALT BINDER (D1)
Effective: June 26, 2006
Revised: December 1, 2021

Add the following to the end of article 1032.05 of the Standard Specifications:

"(c) Ground Tire Rubber (GTR) Modified Asphalt Binder. A quantity of 10.0 to 14.0 percent GTR (Note 1) shall be blended by dry unit weight with a PG 64-28 to make a GTR 70-28 or a PG 58-28 to make a GTR 64-28. The base PG 64-28 and PG 58-28 asphalt binders shall meet the requirements of Article 1032.05(a). Compatible polymers may be added during production. The GTR modified asphalt binder shall meet the requirements of the following table.

Test	Asphalt Grade GTR 70-28	Asphalt Grade GTR 64-28
Flash Point (C.O.C.), AASHTO T 48, °F (°C), min.	450 (232)	450 (232)
Rotational Viscosity, AASHTO T 316 @ 275 °F (135 °C), Poises, Pa·s, max.	30 (3)	30 (3)
Softening Point, AASHTO T 53, °F (°C), min.	135 (57)	130 (54)
Elastic Recovery, ASTM D 6084, Procedure A (sieve waived) @ 77 °F, (25 °C), aged, ss, 100 mm elongation, 5 cm/min., cut immediately, %, min.	65	65

Note 1. GTR shall be produced from processing automobile and/or light truck tires by the ambient grinding method. GTR shall not exceed 1/16 in. (2 mm) in any dimension and shall contain no free metal particles or other 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, *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

Add the following to the end of Note 1. 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 must be capable of providing continuous mechanical mixing throughout by continuous agitation and 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."

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.”

FRICTION 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	Allowed Alone or in Combination [5/]: Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete
HMA Low ESAL	Stabilized Subbase or Shoulders	Allowed Alone or in Combination [5/]: Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag[1/] Crushed Concrete
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L SMA Binder	Allowed Alone or in Combination [5/ 6/]: Crushed Gravel Carbonate Crushed Stone[2/] Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete[3/]

<table>
<tr><th>Use</th><th>Mixture</th><th>Aggregates Allowed</th></tr>
<tr><td>HMA
High ESAL
Low ESAL</td><td>C Surface and Binder
IL-9.5
IL-9.5FG
or IL-9.5L</td><td><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/]</td></tr>
<tr><td rowspan="5">HMA
High ESAL</td><td rowspan="5">D Surface and Binder
IL-9.5
or IL-9.5FG</td><td><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/]</td></tr>
<tr><td><u>Other Combinations Allowed:</u>

Up to... | With...</td></tr>
<tr><td>25% Limestone | Dolomite</td></tr>
<tr><td>50% Limestone | Any Mixture D aggregate other than Dolomite</td></tr>
<tr><td>75% Limestone | Crushed Slag (ACBF) or Crushed Sandstone</td></tr>
<tr><td rowspan="2">HMA
High ESAL</td><td rowspan="2">E Surface
IL-9.5

SMA
Ndesign 80
Surface</td><td><u>Allowed Alone or in Combination</u> [5/ 6/]:

Crushed Gravel
Crystalline Crushed Stone
Crushed Sandstone
Crushed Slag (ACBF)
Crushed Steel Slag

No Limestone.</td></tr>
<tr><td><u>Other Combinations Allowed:</u>

Up to... | With...</td></tr>
</table>

<table>
<tr><td>Use</td><td>Mixture</td><td colspan="2">Aggregates Allowed</td></tr>
<tr><td rowspan="3"></td><td rowspan="3"></td><td>50% Dolomite[2/]</td><td>Any Mixture E aggregate</td></tr>
<tr><td>75% Dolomite[2/]</td><td>Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone</td></tr>
<tr><td>75% Crushed Gravel[2/]</td><td>Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag</td></tr>
<tr><td rowspan="4">HMA
High ESAL</td><td rowspan="4">F Surface
IL-9.5

SMA
Ndesign 80
Surface</td><td colspan="2"><u>Allowed Alone or in Combination</u> [5/ 6/]:

Crystalline Crushed Stone
Crushed Sandstone
Crushed Slag (ACBF)
Crushed Steel Slag
No Limestone.</td></tr>
<tr><td colspan="2"><u>Other Combinations Allowed</u>:</td></tr>
<tr><td>Up to...</td><td>With...</td></tr>
<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>
</table>

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."

DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING, & PATCHING OPERATIONS)
Effective: January 1, 1985
Revised: January 5, 2016
886.02TS

The following Traffic Signal Special Provisions and the "District 1 Standard Traffic Signal Design Details" supplement the requirements of the State of Illinois "Standard Specifications for Road and Bridge Construction" Sections 810, 886, 1079 and 1088.

The intent of this Special Provision is to prescribe the materials and construction methods commonly used to replace traffic signal detector loops and replace magnetic signal detectors with detector loops during roadway resurfacing, grinding and patching operations. Loop detector replacement will not require the transfer of traffic signal maintenance from the District Electrical Maintenance Contractor to this contract's electrical contractor. Replacement of magnetic detector will require wiring revisions inside the control cabinet and therefore the transfer of maintenance will be required. All material furnished shall be new. The locations and the details of all installations shall be as indicated on the Plans or as directed by the Engineer.

The work to be provided under this contract consists of furnishing and installing all traffic signal work as specified on the Plans and as specified herein in a manner acceptable and approved by the Engineer.

Notification of Intent to Work.
Contracts such as pavement grinding or patching which result in the destruction of traffic signal detection require a notification of intent to work and an inspection. A minimum of seven (7) working days prior to the detection removal, the Contractor shall notify the:

- Traffic Signal Maintenance and Operations Engineer at (847)705-4424
- IDOT Electrical Maintenance Contractor at (773) 287-7600

at which time arrangements will be made to adjust the traffic controller timing to compensate for the absence of detection.

Failure to provide proper notification may require the District's Electrical Maintenance Contractor to be called to investigate complaints of inadequate traffic signal timing. All costs associated with these expenses will be paid for by the Contractor at no additional expense to the Department according to Section 109 of the "Standard Specifications."

Acceptance of Material.
The Contractor shall provide:

1. All material approval requests shall be submitted a minimum of seven (7) days prior to the delivery of equipment to the job site, or within 30 consecutive calendar days after the contract is awarded, or within 15 consecutive calendar days after the preconstruction meeting, whichever is first.
2. Four (4) copies of a letter listing the vendor's name and model numbers of the proposed equipment shall be supplied. The letter will be reviewed by the Traffic Design Engineer to determine whether the equipment to be used is approved. The

letters will be stamped as approved or not approved accordingly and returned to the Contractor.

3. One (1) copy of material catalog cuts.
4. The contract number, permit number or intersection location must be on each sheet of the letter and material catalog cuts as required in items 2 and 3.

Inspection of Construction.

When the road is open to traffic, except as otherwise provided in Section 801 and 850 of the Standard Specifications, the Contractor must request a turn-on and inspection of the completed detector loop installation at each separate location. This request must be made to the Traffic Signal Maintenance and Operations Engineer at (847)705-4424 a minimum of seven (7) working days prior to the time of the requested inspection.

Acceptance of the traffic signal equipment by the Department shall be based upon inspection results at the traffic signal "turn on." If approved, traffic signal acceptance shall be verbal at the "turn on" inspection followed by written correspondence from the Engineer. If this work is not completed in time, the Department reserves the right to have the work completed by others at the Contractor's expense.

All cost of work and materials required to comply with the above requirements shall be included in the pay item bid price, under which the subject materials and signal equipment are paid, and no additional compensation will be allowed. Materials and signal equipment not complying with the above requirements will be subject to removal and disposal at the Contractor's expense.

Restoration of Work Area.

Restoration of the traffic signal work area due to the detector loop installation and/or replacement shall be included in the cost of this item. All roadway surfaces such as shoulders, medians, sidewalks, pavement shall be replaced as shown in the plans or in kind. All damage to mowed lawns shall be replaced with an approved sod, and all damage to unmowed fields shall be seeded.

Removal, Disposal and Salvage of Existing Traffic Signal Equipment.

The removal, disposal, and salvage of existing traffic signal equipment shall be included in the cost of this item. All material and equipment removed shall become the property of the Contractor and disposed of by the Contractor outside the State's right-of-way. No additional compensation shall be provided to the Contractor for removal, disposal or salvage expense for the work in this contract.

DETECTOR LOOP REPLACEMENT.

This work shall consist of replacing existing detector loops which are destroyed during grinding, resurfacing, or patching operations.

If damage to the detector loop is unavoidable, replacement of the existing detection system will be necessary. This work shall be completed by an approved Electrical Contractor as directed by the Engineer.

Replacement of the loops shall be accomplished in the following manner: The Engineer shall mark the location of the replacement loops. The Traffic Signal Maintenance and Operations Engineer shall be called to approve loop locations prior to the cutting of the pavement. The

Contractor may reuse the existing coilable non-metallic conduit (CNC) located between the existing handhole and the pavement if it hasn't been damaged. CNC meeting the requirements of NEC Article 353 shall be used for detector loop raceways to the handholes. All burrs shall be removed from the edges of the existing conduit which could cause damage to the new detector loop during installation. If the existing conduit is damaged beyond repair, if it cannot be located, or if additional conduits are required for each proposed loop; the Contractor shall be required to drill through the existing pavement into the appropriate handhole, and install 1" (25 mm) CNC. This work and the required materials shall not be paid for separately but shall be included in the pay item Detector Loop Replacement. Once suitable CNC raceways is established, the loop may be cut, installed, sealed and spliced to the twisted-shielded lead-in cable in the handhole.
All loops installed in new asphalt pavement shall be installed in the binder course and not in the surface course. The edge of pavement or the curb shall be cut with a 1/4" (6.3 mm) deep x 4" (100 mm) saw-cut to mark location of each loop lead-in.

A minimum of seven (7) working days prior to the Contractor cutting loops, the Contractor shall have the proposed loop locations marked and contact the Traffic Signal Maintenance and Operations Engineer (847)705-4424 to inspect and approve the layout.

Loop detectors shall be installed according to the requirements of the "District 1 Standard Traffic Signal Design Details." Saw-cuts from the loop to the edge of pavement shall be made perpendicular to the edge of pavement when possible in order to minimize the length of the saw-cut unless directed otherwise by the Engineer or as shown on the plan.

The detector loop cable insulation shall be labeled with the cable specifications.

Each loop detector lead-in wire shall be labeled in the handhole using a water proof tag, from an approved vendor, secured to each wire with nylon ties. The lead-in wire, including all necessary connections for proper operation, from the edge of pavement to the handhole, shall be included in the detector loop pay item.

Loop sealant shall be a two-component thixotropic chemically cured polyurethane. The sealant shall be installed 1/8" (3 mm) below the pavement surface. If installed above the surface the excess shall be removed immediately.

Round loop(s) 6 ft (1.8 m) diameter may be substituted for 6 ft (1.8 m) by 6 ft (1.8 m) square loop(s) and shall be paid for as 24 feet (7.2 m) of detector loop.

Resistance to ground shall be a minimum of 100 mega-ohms under any conditions of weather or moisture. Inductance shall be more than 50 and less than 700 microhenries. Quality readings shall be more than 5.

Heat shrink splices shall be used according to the "District 1 Standard Traffic Signal Design Details."

Detector loop replacement shall be measured along the sawed slot in the pavement containing the loop cable up to the edge of pavement, rather than the actual length of the wire in the slot. Drilling handholes, sawing the pavement, furnishing and installing CNC to the appropriate

handhole, cable splicing to provide a fully operable detector loop, testing and all trench and backfill shall be included in this item.

Basis of Payment.
Detector Loop Replacement shall be paid for at the contract unit price per foot (meter) of DETECTOR LOOP REPLACEMENT.

MAGNETIC DETECTOR REMOVAL AND DETECTOR LOOP INSTALLATION.
This work shall consist of the removal of existing magnetic detectors, magnetic detector lead-in cable and magnetic detection amplifiers and related control equipment wiring, installation of detector lead-in cable, detector loops, detector amplifiers and related equipment wiring. The detector loop, cable, and amplifier shall be installed according to the applicable portions of the "Standard Specifications" and the applicable portions of the Special Provision for "Detector Loop Replacement." All drilling of handholes, furnishing and installing CNC, cable splicing, trench and backfill, removal of equipment, and removing cable from conduit shall be included in this item.

Basis of Payment.
Magnetic Detector Removal and Detector Loop Installation shall be paid for at the contract unit price per foot (meter) for DETECTOR LOOP, TYPE I, per each for INDUCTIVE LOOP DETECTOR, and foot (meter) for ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR.

DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (~~BDE~~D1)

Effective: April 1, 2011
Revised: April 2, 2011

Add the following to Article 603.02 of the Standard Specifications:

"(i) Temporary Hot-Mix Asphalt (HMA) Ramp (Note 1) 1030
(j) Temporary Rubber Ramps (Note 2)

Note 1. The HMA shall have maximum aggregate size of 3/8 in. (95 mm).

Note 2. The rubber material shall be according to the following.

Property	Test Method	Requirement
Durometer Hardness, Shore A	ASTM D 2240	75 ±15
Tensile Strength, psi (kPa)	ASTM D 412	300 (2000) min
Elongation, percent	ASTM D 412	90 min
Specific Gravity	ASTM D 792	1.0 - 1.3
Brittleness, °F (°C)	ASTM D 746	-40 (-40)"

Revise Article 603.07 of the Standard Specifications 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. ~~After the casting has been adjusted and Class SI concrete has been placed, the work shall be protected by a barricade and two lights for at least 72 hours.~~

When castings are under traffic before the final surfacing operation has been started, properly sized temporary ramps shall be placed around the drainage and/or utility castings according to the following methods.

(a) Temporary Asphalt Ramps. Temporary hot-mix asphalt ramps shall be placed around the casting, flush with its surface and decreasing to a featheredge in a distance of 2 ft (600 mm) around the entire surface of the casting.

(b) Temporary Rubber Ramps. Temporary rubber ramps shall only be used on roadways with permanent posted speeds of 40 mph or less and when the height of the casting to be protected meets the proper sizing requirements for the rubber ramps as shown below.

Dimension	Requirement
Inside Opening	Outside dimensions of casting + 1 in. (25 mm)
Thickness at inside edge	Height of casting ± 1/4 in. (6 mm)
Thickness at outside edge	1/4 in. (6 mm) max.
Width, measured from inside opening to outside edge	8 1/2 in. (215 mm) min

Placement shall be according to the manufacturer's specifications.

Temporary ramps for castings shall remain in place until surfacing operations are undertaken within the immediate area of the structure. Prior to placing the surface course, the temporary ramp shall be removed. Excess material shall be disposed of according to Article 202.03."

ADJUSTMENTS AND RECONSTRUCTIONS (D1)
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."

HOT-MIX ASPHALT BINDER AND SURFACE COURSE (D1)

Effective: November 1, 2019
Revised: December 1, 2021

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 Supplemental 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 I 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.

	Voids in the Mineral Aggregate (VMA), % Minimum for Ndesign				
Mix Design	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 steal slag sand, shall have minimum surge bin storage plus haul time of 1.5 hours."

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 third 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."

PUBLIC CONVENIENCE AND SAFETY (D1)
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."

STATUS OF UTILITIES (D1)
Effective: June 1, 2016
Revised: January 1, 2020

Utility companies and/or municipal owners located within the construction limits of this project have provided the following information regarding their facilities and the proposed improvements. The tables below contain a description of specific conflicts to be resolved and/or facilities which will require some action on the part of the Department's contractor to proceed with work. Each table entry includes an identification of the action necessary and, if applicable, the estimated duration required for the resolution.

UTILITIES TO BE ADJUSTED

Conflicts noted below have been identified by following the suggested staging plan included in the contract. The company has been notified of all conflicts and will be required to obtain the necessary permits to complete their work; in some instances, resolution will be a function of the construction staging. The responsible agency must relocate, or complete new installations as noted below; this work has been deemed necessary to be complete for the Department's contractor to then work in the stage under which the item has been listed.

Pre-Stage

STAGE / LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME

Stage 1

STAGE / LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME

Stage 2

STAGE / LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME

No conflicts to be resolved *(or if there are conflicts they are to be listed as noted above)*

Pre-Stage: _____ Days Total Installation
Stage 1: _____ Days Total Installation
Stage 2: _____ Days Total Installation

The following contact information is what was used during the preparation of the plans as provided by the Agency/Company responsible for resolution of the conflict.

Agency/Company Responsible to Resolve Conflict	Name of contact	Phone	E-mail address

UTILITIES TO BE WATCHED AND PROTECTED

The areas of concern noted below have been identified by following the suggested staging plan included for the contract. The information provided is not a comprehensive list of all remaining utilities, but those which during coordination were identified as ones which might require the Department's contractor to take into consideration when making the determination of the means and methods that would be required to construct the proposed improvement. In some instances, the contractor will be responsible to notify the owner in advance of the work to take place so necessary staffing on the owner's part can be secured.

Pre-Stage

STAGE / LOCATION	TYPE	DESCRIPTION	OWNER

Stage 1

STAGE / LOCATION	TYPE	DESCRIPTION	OWNER

Stage 2

STAGE / LOCATION	TYPE	DESCRIPTION	OWNER

No facilities requiring extra consideration *(or listed as noted above)*

The following contact information is what was used during the preparation of the plans as provided by the owner of the facility.

Agency/Company Responsible to Resolve Conflict	Name of contact	Phone	E-mail address

The above represents the best information available to the Department and is included for the convenience of the bidder. The days required for conflict resolution should be considered in the bid as this information has also been factored into the timeline identified for the project when setting the completion date. The applicable portions of the Standard Specifications for Road and Bridge Construction shall apply.

Estimated duration of time provided above for the first conflicts identified will begin on the date of the executed contract regardless of the status of the utility relocations. The responsible agencies will be working toward resolving subsequent conflicts in conjunction with contractor activities in the number of days noted.

The estimated relocation duration must be part of the progress schedule submitted by the contractor. A utility kickoff meeting will be scheduled between the Department, the Department's contractor and the utility companies when necessary. The Department's contractor is responsible for contacting J.U.L.I.E. prior to all excavation work.

ABV	ABOVE
A/C	ACCESS CONTROL
AC	ACRE
ADJ	ADJUST
AS	AERIAL SURVEYS
AGG	AGGREGATE
AH	AHEAD
APT	APARTMENT
ASPH	ASPHALT
AUX	AUXILIARY
AGS	AUXILIARY GAS VALVE (SERVICE)
AVE	AVENUE
AX	AXIS OF ROTATION
Bk	BACK
B-B	BACK TO BACK
BKPL	BACKPLATE
B	BARN
BARR	BARRICADE
BL	BASELINE
BGN	BEGIN
BM	BENCHMARK
BIND	BINDER
BIT	BITUMINOUS
BTM	BOTTOM
BLVD	BOULEVARD
BRK	BRICK
BBOX	BUFFALO BOX
BLDG	BUILDING
CATV	CABLE
CIP	CAST IRON PIPE
CB	CATCH BASIN
C-C	CENTER TO CENTER
CL	CENTERLINE OR CLEARANCE
CL-E	CENTERLINE TO EDGE
CL-F	CENTERLINE TO FACE
CTS	CENTERS
CERT	CERTIFIED
CHSLD	CHISELED
CS	CITY STREET
CP	CLAY PIPE
CLSD	CLOSED
CLID	CLOSED LID
CT	COAT OR COURT
COMB	COMBINATION
C	COMMERCIAL BUILDING
CE	COMMERCIAL ENTRANCE
CONC	CONCRETE
CONST	CONSTRUCT
CONTD	CONTINUED
CONT	CONTINUOUS
COR	CORNER
CORR	CORRUGATED
CMP	CORRUGATED METAL PIPE
CNTY	COUNTY
CH	COUNTY HIGHWAY
CSE	COURSE
XSECT	CROSS SECTION
m^3	CUBIC METER
mm^3	CUBIC MILLIMETER
CU YD	CUBIC YARD
CULV	CULVERT
C&G	CURB & GUTTER
D	DEGREE OF CURVE
DC	DEPRESSED CURVE
DET	DETECTOR
DIA	DIAMETER
DIST	DISTRICT
DOM	DOMESTIC
DBL	DOUBLE
DSEL	DOWNSTREAM ELEVATION
DSFL	DOWNSTREAM FLOWLINE
DR	DRAINAGE OR DRIVE
DI	DRAINAGE INLET OR DROP INLET
DRV	DRIVEWAY
DCT	DUCT
EA	EACH
EB	EASTBOUND
EOP	EDGE OF PAVEMENT
E-CL	EDGE TO CENTERLINE
E-E	EDGE TO EDGE
ELEC	ELECRICAL
EL	ELEVATION
ENTR	ENTRANCE
EXC	EXCAVATION
EX	EXISTING
EXPWAY	EXPRESSWAY
E	EXTERNAL DISTANCE OF HORIZONTAL CURVE
E	OFFSET DISTANCE TO VERTICAL CURVE
F-F	FACE TO FACE
FA	FEDERAL AID
FAI	FEDERAL AID INTERSTATE
FAP	FEDERAL AID PRIMARY
FAS	FEDERAL AID SECONDARY
FAUS	FEDERAL AID URBAN SECONDARY
FP	FENCE POST
OPT	FIBER OPTIC
FE	FIELD ENTRANCE
FH	FIRE HYDRANT
FL	FLOW LINE
FB	FOOT BRIDGE
FDN	FOUNDATION
FR	FRAME
F&G	FRAME & GRATE
FRWAY	FREEWAY
GAL	GALLON
GALV	GALVANIZED
G	GARAGE
GM	GAS METER
GV	GAS VALVE
GIS	GEOGRAPHICAL INFORMATION SYSTEM
GRAN	GRANULAR
GR	GRATE
GRVL	GRAVEL
GND	GROUND
GUT	GUTTER
GP	GUY POLE
GW	GUY WIRE
HH	HANDHOLE
HATCH	HATCHING
HD	HEAD
HDW	HEADWALL
HDUTY	HEAVY DUTY
ha	HECTARE
HMA	HOT MIX ASPHALT
HWY	HIGHWAY
HORIZ	HORIZONTAL
HSE	HOUSE
IL	ILLINOIS
IMP	IMPROVEMENT
IN DIA	INCH DIAMETER
INL	INLET
INST	INSTALLATION
IDS	INTERSECTION DESIGN STUDY
INV	INVERT
IP	IRON PIPE
IR	IRON ROD
JT	JOINT
kg	KILOGRAM
km	KILOMETER
LS	LANDSCAPING
LN	LANE
LT	LEFT
LIDAR	LIGHT DETECTION AND RANGING
LP	LIGHT POLE
LGT	LIGHTING
LF	LINEAL FEET OR LINEAR FEET
L	LITER OR CURVE LENGTH
LC	LONG CHORD
LNG	LONGITUDINAL
L SUM	LUMP SUM
MACH	MACHINE
MB	MAIL BOX
MH	MANHOLE
MATL	MATERIAL
MED	MEDIAN
m	METER
METH	METHOD
M	MID-ORDINATE
mm	MILLIMETER
mm DIA	MILLIMETER DIAMETER
MIX	MIXTURE
MBH	MOBILE HOME
MOD	MODIFIED
MFT	MOTOR FUEL TAX
N & BC	NAIL & BOTTLE CAP
N & C	NAIL & CAP
N & W	NAIL & WASHER
NC	NORMAL CROWN
NB	NORTHBOUND
NE	NORTHEAST
NW	NORTHWEST
OFS	OFFSET
O&C	OIL AND CHIP
OLID	OPEN LID
PAT	PATTERN
PVD	PAVED
PVMT	PAVEMENT
PM	PAVEMENT MARKING
PED	PEDESTAL
PNT	POINT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION OF HORIZONTAL CURVE
PRC	POINT OF REVERSE CURVE
PT	POINT OF TANGENCY
POT	POINT ON TANGENT
POLYETH	POLYETHYLENE
PCC	PORTLAND CEMENT CONCRETE
PP	POWER POLE OR PRINCIPAL POINT
PRM	PRIME
PE	PRIVATE ENTRANCE
PROF	PROFILE
PGL	PROFILE GRADELINE
PROJ	PROJECT
P.C.	PROPERTY CORNER
PL	PROPERTY LINE
PR	PROPOSED
R	RADIUS or RESIDENTUAL
RR	RAILROAD
RRS	RAILROAD SPIKE
RPS	REFERENCE POINT STAKE
REF	REFLECTIVE
RCCP	REINFORCED CONCRETE CULVERT PIPE
REINF	REINFORCEMENT
REM	REMOVAL
RC	REMOVE CROWN
REP	REPLACEMENT
REST	RESTAURANT
RESURF	RESURFACING
RET	RETAINING
RT	RIGHT
ROW	RIGHT-OF-WAY
RD	ROAD
RDWY	ROADWAY
RTE	ROUTE
SAN	SANITARY
SANS	SANITARY SEWER
SEC	SECTION
SEED	SEEDING
SHAP	SHAPING
S	SHED
SH	SHEET
SHLD	SHOULDER
SW	SIDEWALK OR SOUTHWEST
SIG	SIGNAL
SOD	SODDING
SM	SOLID MEDIAN
SB	SOUTHBOUND
SE	SOUTHEAST
SPL	SPECIAL
SD	SPECIAL DITCH
SQ FT	SQUARE FEET
m^2	SQUARE METER
mm^2	SQUARE MILLIMETER
SQ YD	SQUARE YARD
STB	STABILIZED
STD	STANDARD
SBI	STATE BOND ISSUE
SR	STATE ROUTE
STA	STATION
SPBGR	STEEL PLATE BEAM GUARDRAIL
SS	STORM SEWER
STY	STORY
ST	STREET
STR	STRUCTURE
e	SUPERELEVATION RATE
S.E. RUN.	SUPERELEVATION RUNOFF LENGTH
SURF	SURFACE
SMK	SURVEY MARKER
T	TANGENT DISTANCE
T.R	TANGENT RUNOUT DISTANCE
TEL	TELEPHONE
TB	TELEPHONE BOX
TP	TELEPHONE POLE
TEMP	TEMPORARY
TBM	TEMPORARY BENCH MARK
TD	TILE DRAIN
TBE	TO BE EXTENDED
TBR	TO BE REMOVED
TBS	TO BE SAVED
TWP	TOWNSHIP
TR	TOWNSHIP ROAD
TS	TRAFFIC SIGNAL
TSCB	TRAFFIC SIGNAL CONTROL BOX
TSC	TRAFFIC SYSTEMS CENTER
TRVS	TRANSVERSE
TRVL	TRAVEL
TRN	TURN
TY	TYPE
T-A	TYPE A
TYP	TYPICAL
UNDGND	UNDERGROUND
USGS	U.S. GEOLOGICAL SURVEY
USEL	UPSTREAM ELEVATION
USFL	UPSTREAM FLOWLINE
UTIL	UTILITY
VBOX	VALVE BOX
VV	VALVE VAULT
VLT	VAULT
VEH	VEHICLE
VP	VENT PIPE
VERT	VERTICAL
VC	VERTICAL CURVE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
WM	WATER METER
WV	WATER VALVE
WMAIN	WATER MAIN
WB	WESTBOUND
WILDFL	WILDFLOWERS
W	WITH
WO	WITHOUT

Illinois Department of Transportation

PASSED January 1, 2021
ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 2021
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-21

DATE	REVISIONS
1-1-21	Updated fonts, abbreviations
	and symbols.
1-1-19	Added new symbols.

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

STANDARD 000001-08

ADJUSTMENT ITEMS

	EX	PR
Structure To Be Adjusted		ADJ
Structure To Be Cleaned		C
Main Structure To Be Filled		FM
Structure To Be Filled		F
Structure To Be Filled Special		FSP
Structure To Be Removed		R
Structure To Be Reconstructed		REC
Structure To Be Reconstructed Special		RSP
Frame and Grate To Be Adjusted		A
Frame and Lid To Be Adjusted		A
Domestic Service Box To Be Adjusted		A
Valve Vault To Be Adjusted		A
Special Adjustment		SP
Item To Be Abandoned		AB
Item To Be Moved		M
Item To Be Relocated		REL
Pavement Removal and Replacement		

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ALIGNMENT ITEMS

	EX	PR
Baseline		
Centerline		
Centerline Break Circle		
Baseline Symbol		
Centerline Symbol		
PI Indicator		
Point Indicator		
Horizontal Curve Data (Half Size)	EX. CURVE P.I. STA= Δ= D= R= T= L= E= c= T.R.= S.E. RUN= P.C. STA= P.T. STA=	CURVE P.I. STA= Δ= D= R= T= L= E= c= T.R.= S.E. RUN= P.C. STA= P.T. STA=

BOUNDARIES ITEMS

	EX	PR
Dashed Property Line		
Solid Property/Lot Line		
Section/Grant Line		
Quarter Section Line		
Quarter/Quarter Section Line		
County/Township Line		
State Line		
Chiseled Square Found		
Iron Pipe Found		
Iron Pipe Set		
Survey Marker		
Property Line Symbol		
Same Ownership Symbol (Half Size)		
Northwest Quarter Corner (Half Size)		
Section Corner (Half Size)		
Southeast Quarter Corner (Half Size)		

DRAINAGE ITEMS

	EX	PR
Channel or Stream Line		
Culvert Line		
Grading & Shaping Ditches		
Drainage Boundary Line		
Paved Ditch		
Aggregate Ditch		
Pipe Underdrain		
Storm Sewer		
Flowline		
Ditch Check		
Headwall		
Inlet		
Manhole		
Summit		
Roadway Ditch Flow		
Swale		
Catch Basin		
Culvert End Section		
Water Surface Indicator		
Riprap		

HYDRAULICS ITEMS

	EX	PR
Overflow		
Sheet Flow		
Hydrant Outlet		

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

STANDARD 000001-08

EROSION & SEDIMENT CONTROL ITEMS

	EX	PR
Clearing & Grading Limits		
Dike		
Erosion Control Fence		
Perimeter Erosion Barrier		
Temporary Fence		
Ditch Check Temporary		
Ditch Check Permanent		
Inlet & Pipe Protection		
Sediment Basin		
Erosion Control Blanket		
Fabric Formed Concrete Revetment Mat		
Turf Reinforcement Mat		
Mulch Temporary		
Mulch Method 1		
Mulch Method 2 Stabilized		
Mulch Method 3 Hydraulic		

CONTOUR ITEMS

	EX	PR
Approx. Index Line		
Approx. Intermediate Line		
Index Contour		
Intermediate Contour		

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ISSUED 1-1-21

NON-HIGHWAY IMPROVEMENT ITEMS

	EX	PR
Noise Attn./Levee		
Field Line	E	
Fence		
Base of Levee		
Mailbox		
Multiple Mailboxes		
Pay Telephone		
Advertising Sign		
ITS Camera		
Wind Turbine		
Cellular Tower		

'Intelligent Transportation Systems

LANDSCAPING ITEMS

	EX	PR
Contour Mounding Line		
Fence		
Fence Post		
Shrubs		
Mowline		
Perennial Plants		
Seeding Class 2		
Seeding Class 2A		
Seeding Class 4		
Seeding Class 4 & 5 Combined		

EXISTING LANDSCAPING ITEMS (contd.)

	EX	PR
Seeding Class 5		
Seeding Class 7		
Seedlings Type 1		
Seedlings Type 2		
Sodding		
Mowstake w/Sign		
Tree Trunk Protection		
Evergreen Tree	E	
Shade Tree	E	+

LIGHTING

	EX	PR
Duct		
Conduit		
Electrical Aerial Cable	A	A
Electrical Buried Cable	L	L
Controller		
Underpass Luminaire		
Power Pole		

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

STANDARD 000001-08

LIGHTING (contd.)

	EX	PR
Pull Point		
Handhole		
Heavy Duty Handhole		
Junction Box		
Light Unit Comb		
Electrical Ground		
Traffic Flow Arrow		
High Mast Pole (Half Size)		
Light Unit-1		

PAVEMENT (MISC.)

	EX	PR
Keyed Long. Joint		
Keyed Long. Joint w/Tie Bars		
Sawed Long. Joint w/Tie Bars		
Bituminous Shoulder		
Bituminous Taper		
Stabilized Driveway		
Widening		

PAVEMENT MARKINGS

	EX	PR
Handicap Symbol		
RR Crossing		
Raised Marker Amber 1 Way		
Raised Marker Amber 2 Way		
Raised Marker Crystal 1 Way		
Two Way Turn Left		
Shoulder Diag. Pattern		
Skip-Dash White		
Skip-Dash Yellow		
Stop Line		
Solid Line		
Double Centerline		
Dotted Lines		

Illinois Department of Transportation

PASSED January 1 2023
ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1 2023
ENGINEER OF DESIGN AND ENVIRONMENT

STANDARD 000001-08

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

(Sheet 4 of 9)

STANDARD 000001-08

PAVEMENT MARKINGS (contd.)

	EX	PR
CL 2Ln 2Way RRPM 12.2 m (40') o.c.		
CL 2Ln 2Way RRPM 80' (24.4 m) o.c.		
CL Multilane Div. RRPM 40' (12.2 m) o.c.		
CL Multilane Div. RRPM 80' (24.4 m) o.c.		
CL Multilane Div. Dbl. RRPM 80' (24.4 m) o.c.		
CL Multilane Undiv.		
Two Way Turn Left Line		
Urban Combination Left		
Urban Combination Right		
Urban Left Turn Arrow		
Urban Right Turn Arrow		
Urban Left Turn Only		
Urban Right Turn Only		
Urban Thru Only		
Urban LT & RT Turn Arrow		
Urban Thru Arrow		

RAILROAD ITEMS

	EX	PR
Abandoned Railroad		
Railroad		
Railroad Point		
Control Box		
Crossing Gate		
Flashing Signal		
Railroad Cant. Mast Arm		
Crossbuck		

REMOVAL ITEMS

	EX	PR
Removal Tic		
Bituminous Removal		
Hatch Pattern		
Tree Removal Single		

RIGHT OF WAY ITEMS

	EX	PR
Future ROW Corner Monument		
ROW Marker		
ROW Line		
Easement		
Temporary Easement		

Illinois Department of Transportation

PASSED January 1, 2021
ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 2021
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-21

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

STANDARD 000001-08

PAVEMENT MARKINGS (contd.)

EX PR

Urban U-Turn

Urban Combined U-Turn

Rural Combination Left

Rural Combination Right

Rural Left Turn Arrow

Rural Right Turn Arrow

Rural Left Turn Only

Rural Right Turn Only

Rural Thru Only

Rural Thru Arrow

Rural Lt & Rt Turn Arrow

Bike Lane Symbol

Bike Lane Text

Bike Path Shared

Bike Shared Roadway

Lane Drop Symbol

Wrong Way Arrow

ONLY ONLY ONLY

BIKE LANE

Illinois Department of Transportation

PASSED January 1, 2021
ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 2021
ENGINEER OF BUREAU OF TRAFFIC

ISSUED 1-1-97

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

(Sheet 6 of 9)

STANDARD 000001-08

RIGHT OF WAY ITEMS (contd.)

	EX	PR
Access Control Line	—	—AC—
Access Control Line & ROW	— AC —	—AC—
Access Control Line & ROW with Fence	— AC —	—AC—
Excess ROW Line		—XS—

ROADWAY PLAN ITEMS

	EX	PR
Cable Barrier		
Concrete Barrier		
Edge of Pavement		
Bit Shoulders, Medians and C&G Line		
Aggregate Shoulder		
Sidewalks, Driveways		
Guardrail		
Guardrail Post		
Traffic Sign		
Corrugated Median		
Impact Attenuator		
North Arrow with District Office (Half Size)	N	
Match line		STA. 45+00
Slope Limit Line		
Typical Cross-Section Line		

Illinois Department of Transportation

PASSED January 1, 2021
ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 2021
ENGINEER OF LOCAL ROAD ENVIRONMENT

ISSUED 1-1-21

ROADWAY PROFILES

	EX	PR
P.I. Indicator		
Point Indicator		
Earthworks Balance Point		
Begin Point		
Vert. Curve Data	VPI = ELEV= L = E =	VPI = ELEV= L = E =
Ditch Profile Left Side		
Ditch Profile Right Side		
Roadway Profile Line		
Storm Sewer Profile Left Side		
Storm Sewer Profile Right Side		

SIGNING ITEMS

	EX	PR
Cone, Drum or Barricade		
Barricade Type II		
Barricade Type III		
Barricade With Edge Line		
Flashing Light Sign		
Panels I		
Panels II		
Direction of Traffic		
Sign Flag (Half Size)		

SIGNING ITEMS (contd.)

	EX	PR
Reverse Left W1-4L (Half Size)		
Reverse Right W1-4R (Half Size)		
Two Way Traffic Sign W6-3 (Half Size)		
Detour Ahead W20-2(O) (Half Size)		
Left Lane Closed Ahead W20-5L(O) (Half Size)		
Right Lane Closed Ahead W20-5R(O) (Half Size)		
Road Closed Ahead W20-3(O) (Half Size)		
Road Construction Ahead W20-1 (O) (Half Size)		
Single Lane Ahead (Half Size)		
Transition Left W4-2L (Half Size)		
Transition Right W4-2R (Half Size)		

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

(Sheet 7 of 9)

STANDARD 000001-08

SIGNING ITEMS (contd.)

	EX	PR
One Way Arrow Lrg. W1-6-(O) (Half Size)		
Two Way Arrow Large W1-7-(O) (Half Size)		
Detour M4-10L-(O) (Half Size)		
Detour M4-10R-(O) (Half Size)		
One Way Left R6-1L (Half Size)		
One Way Right R6-1R (Half Size)		
Left Turn Lane R3-100L (Half Size)		
Keep Left R4-7AL (Half Size)		
Keep Left R4-7BL (Half Size)		
Keep Right R4-7AR (Half Size)		
Keep Right R4-7BR (Half Size)		
Stop Here On Red R10-6-AL (Half Size)		
Stop Here On Red R10-6-AR (Half Size)		
No Left Turn R3-2 (Half Size)		
No Right Turn R3-1 (Half Size)		
Road Closed R11-2 (Half Size)		
Road Closed Thru Traffic R11-2 (Half Size)		

Illinois Department of Transportation

PASSED January 1 2021
ENGINEER OF POLICY AND PROCEDURES

APPROVED January 7 2021
ENGINEER OF BUREAU OF DESIGN AND ENVIRONMENT

ISSUED 21-11

STRUCTURES ITEMS

	EX	PR
Box Culvert Barrel		
Box Culvert Headwall		
Bridge Pier		
Bridge		
Retaining Wall		
Temporary Sheet Piling		

TRAFFIC SHEET ITEMS

	EX	PR
Cable Number		
Left Turn Green	-G	-G
Left Turn Yellow	-Y	-Y
Signal Backplate		
Signal Section 8" (200 mm)		
Signal Section 12" (300 mm)		
Walk/Don't Walk Letters	DW W	DW W
Walk/Don't Walk Symbols		

TRAFFIC SIGNAL ITEMS

	EX	PR
Galv. Steel Conduit		
Underground Cable		
Detector Loop Line		
Detector Loop Large		
Detector Loop Small		
Detector Loop Quadrapole		

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

(Sheet 8 of 9)

STANDARD 000001-08

TRAFFIC SIGNAL ITEMS (contd.)

	EX	PR
Detector Raceway		
Aluminum Mast Arm		
Steel Mast Arm		
Veh. Detector Magnetic		
Conduit Splice		
Controller		
Gullbox Junction		
Wood Pole		
Temp. Signal Head		
Handhole		
Double Handhole		
Heavy Duty Handhole		
Junction Box		
Ped. Pushbutton Detector		
Ped. Signal Head		
Power Pole Service		
Priority Veh. Detector		
Signal Head		
Signal Head w/Backplate		
Signal Post		
Closed Circuit TV		
Video Detector System		

Illinois Department of Transportation

PASSED January 1 2021
ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1 2021
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-21

UNDERGROUND UTILITY ITEMS

	EX	PR	ABANDONED
Cable TV			
Electric Cable			
Fiber Optic			
Gas Pipe			
Oil Pipe			
Sanitary Sewer			
Telephone Cable			
Water Pipe			

UTILITIES ITEMS

	EX	PR
Controller		
Double Handhole		
Fire Hydrant		
Guy/Wire or Deadman Anchor		
Handhole		
Heavy Duty Handhole		
Junction Box		
Light Pole		
Manhole		
Monitoring Well (Gasoline)		
Pipeline Warning Sign		
Power Pole		
Power Pole with Light		
Sanitary Sewer Cleanout		
Splice Box Above Ground		
Telephone Splice Box Above Ground		
Telephone Pole		

UTILITY ITEMS (contd.)

	EX	PR
Traffic Signal		
Traffic Signal Control Box		
Water Meter		
Water Meter Valve Box		
Profile Line		
Aerial Power Line		

VEGETATION ITEMS

	EX	PR
Deciduous Tree		
Bush or Shrub		
Evergreen Tree		
Stump		
Orchard/Nursery Line		
Vegetation Line		
Woods & Bush Line		

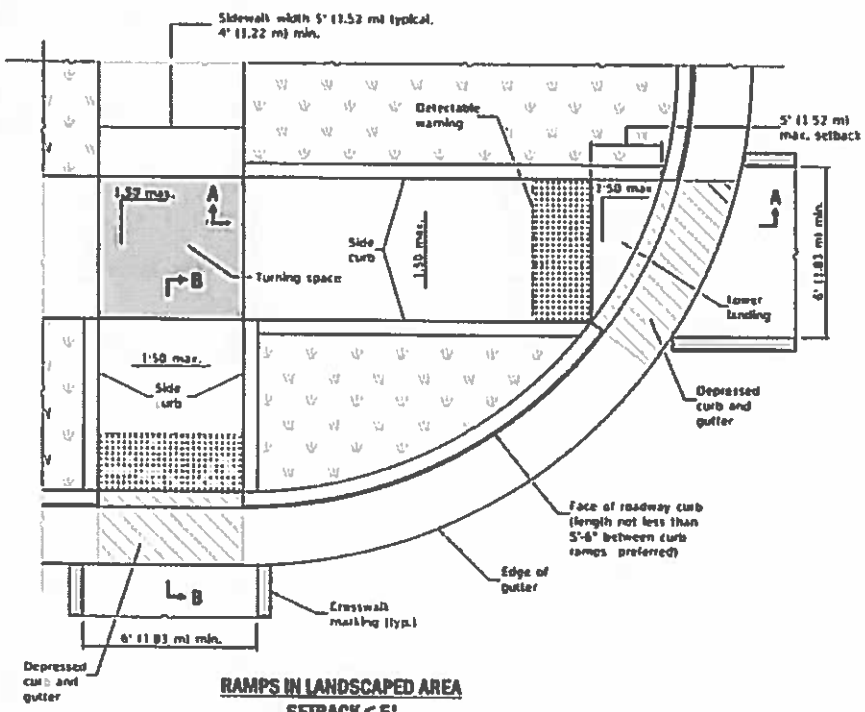
WATER FEATURE ITEMS

	EX	PR
Stream or Drainage Ditch		
Waters Edge		
Water Surface Indicator		
Water Point		
Disappearing Ditch		
Marsh		
Marsh/Swamp Boundary		

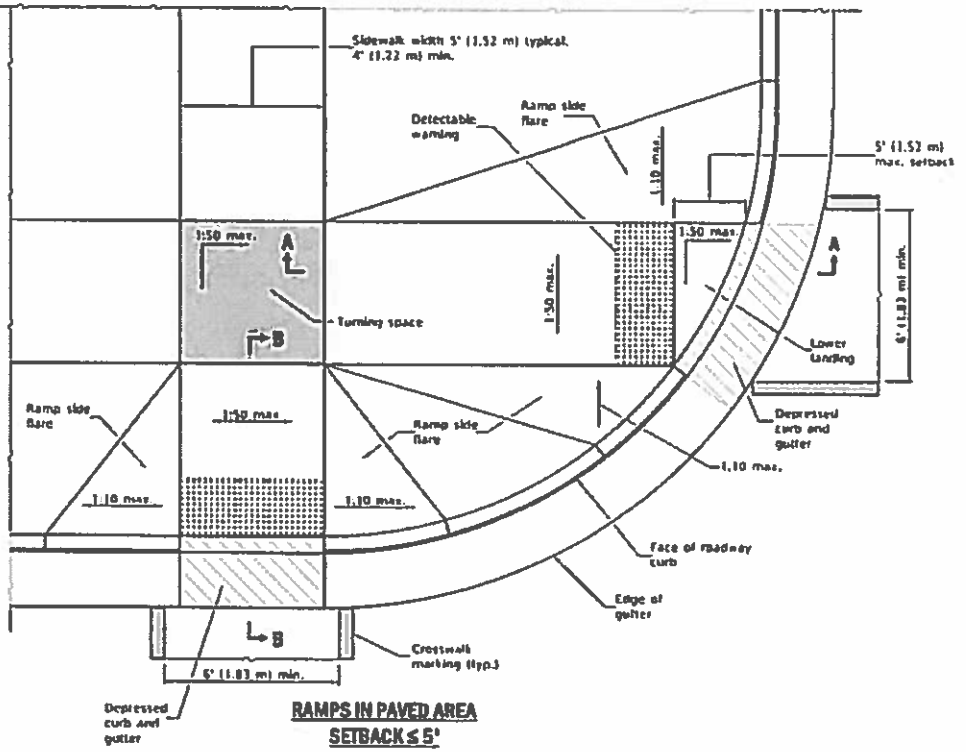
STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

(Sheet 9 of 9)

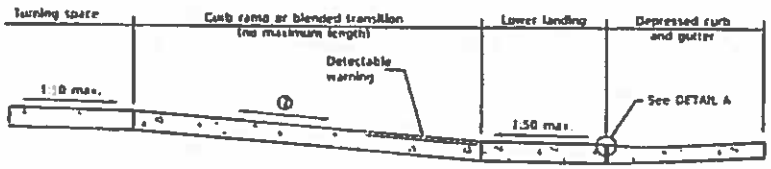
STANDARD 000001-08



RAMPS IN LANDSCAPED AREA
SETBACK ≤ 5'

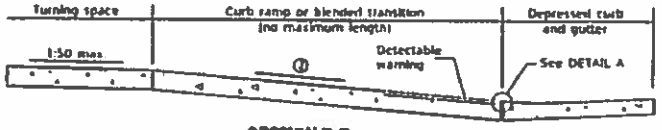


RAMPS IN PAVED AREA
SETBACK ≤ 5'



SECTION A-A

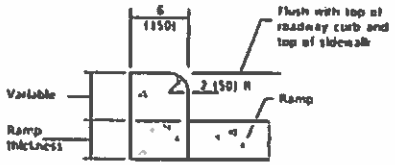
② The running slope of a curb ramp shall be 1:20 min. and 1:12 max. The running slope of a blended transition shall be 1:20 max.



SECTION B-B

② The running slope of a curb ramp shall be 1:20 min. and 1:12 max. The running slope of a blended transition shall be 1:20 max.

DETAIL A



SIDE CURB DETAIL

Illinois Department of Transportation

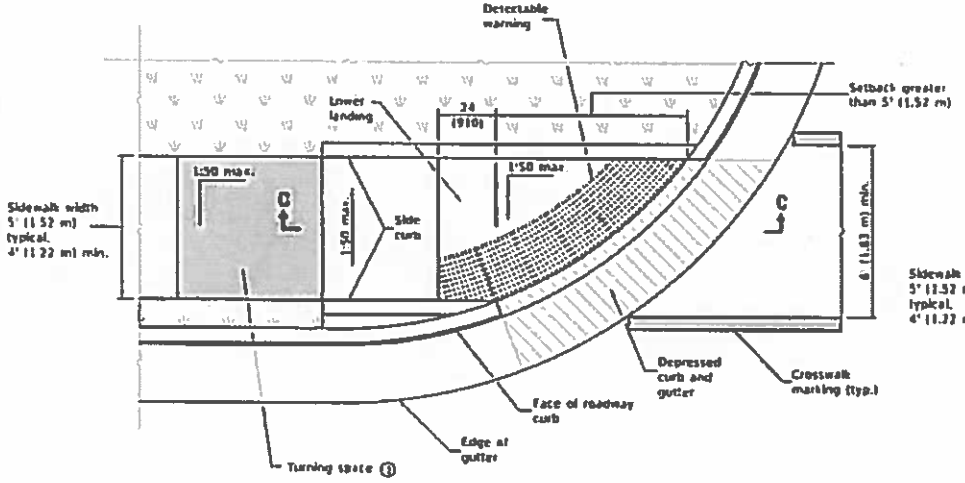
See Sheet 2 for GENERAL NOTES.

DATE	REVISIONS
1-1-19	Removed "15-foot rule", added
	"Blended transitions" and placement
	tolerances for detectable warnings.
1-1-18	Omitted diagonal slope at
	turning spaces and lower
	landings.

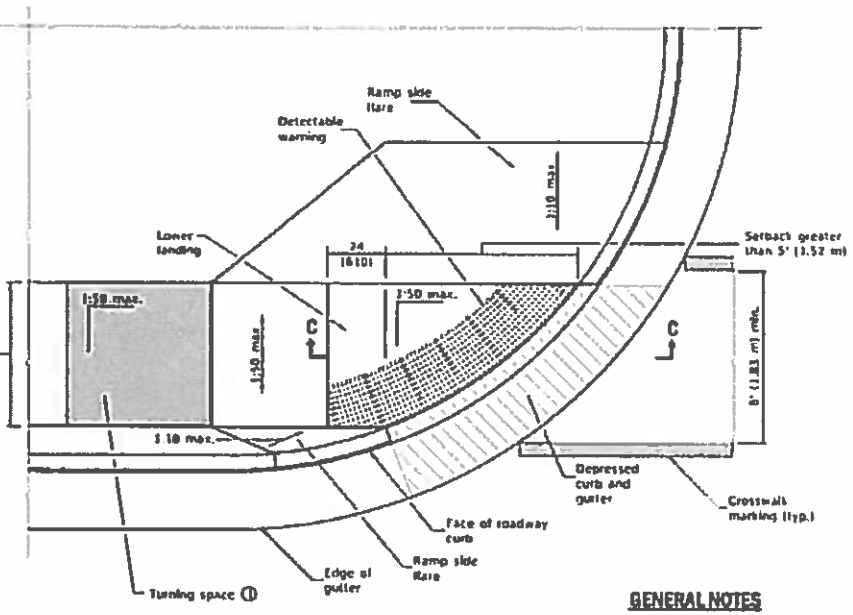
PERPENDICULAR CURB RAMPS FOR SIDEWALKS

(Sheet 1 of 2)

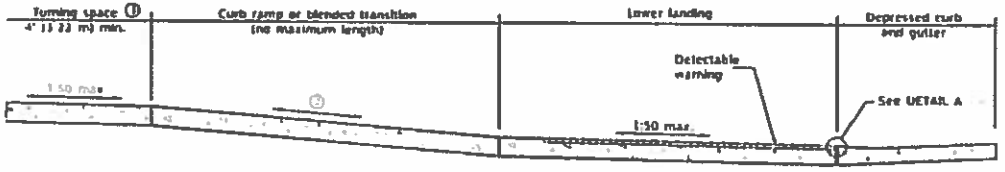
STANDARD 424001-11



RAMP IN LANDSCAPED AREA
SETBACK > 5'



RAMP IN PAVED AREA
SETBACK > 5'



SECTION C-C

① This turning space not required for blended transitions.

② The running slope of a curb ramp shall be 1:20 min. and 1:12 max. The running slope of a blended transition shall be 1:20 max.

GENERAL NOTES

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

Where the turning space is constrained on a side opposite a ramp, the minimum length of the turning space in the direction of the ramp-run shall be 5' (1.52 m).

Where 1:50 maximum slope is shown, 1:64 is preferred.

Detectable warnings are shown in their ideal locations but the following placement tolerances are allowed.

Side Border - Detectable warnings should extend the full width of the walking surface (excluding flared sides) but a border along each side up to 2 in (50 mm) in width is allowed.

Curb Set-Back - Detectable warnings located at the back of curb should closely align with the curb but a gap up to 6 in. (150 mm) behind the curb is allowed.

See Standard 606001 for details of depressed curb adjacent to curb ramps.

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

Illinois Department of Transportation

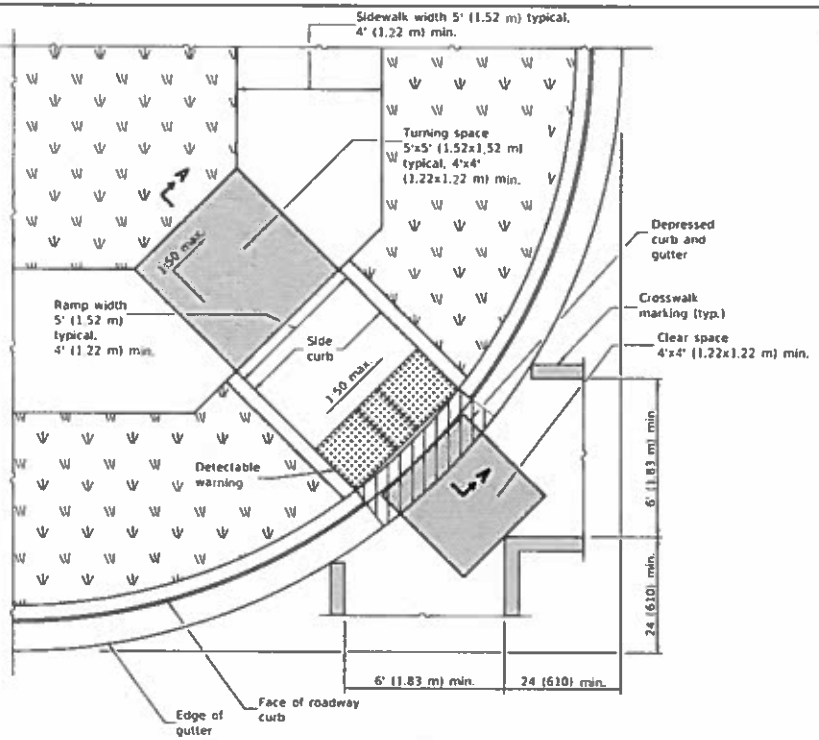
PASSED _____, 20__
ENGINEER OF POLICY AND PROCEDURES

APPROVED _____, 20__
BUREAU CHIEF, HIGHWAY STANDARDS

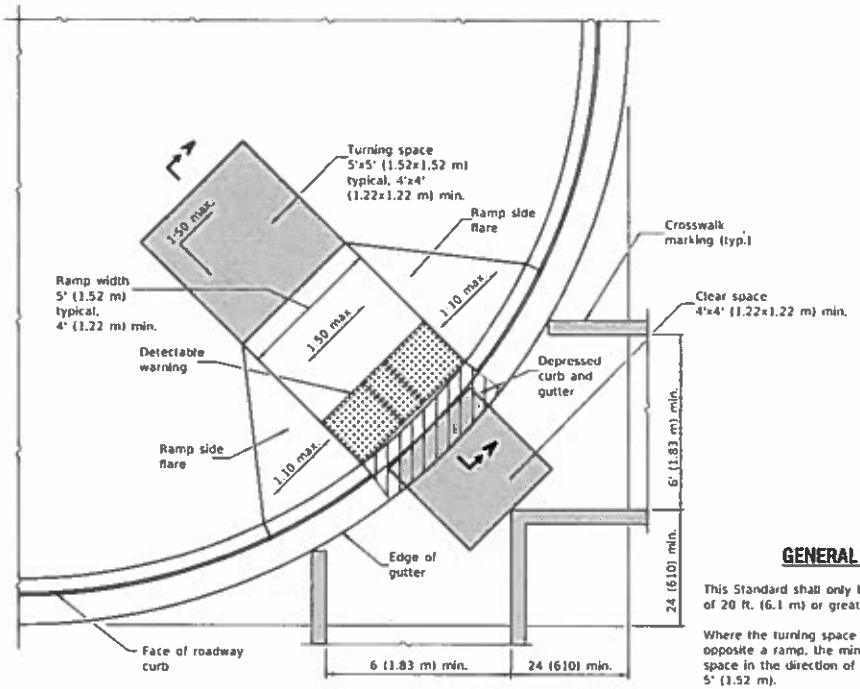
PERPENDICULAR CURB RAMPS FOR SIDEWALKS

(Sheet 2 of 2)

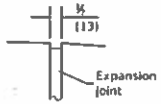
STANDARD 424001-11



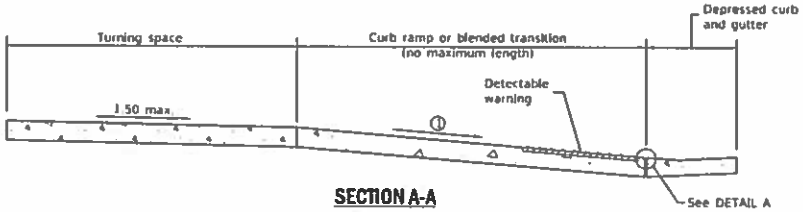
RAMP IN LANDSCAPED AREA



RAMP IN PAVED AREA

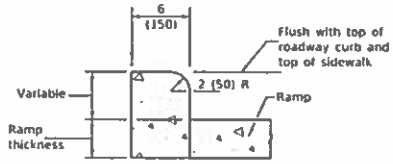


DETAIL A



SECTION A-A

① The running slope of a curb ramp shall be 1:20 min. and 1:12 max. The running slope of a blended transition shall be 1:20 max.



SIDE CURB DETAIL

GENERAL NOTES

This Standard shall only be used for curb radii of 20 ft. (6.1 m) or greater.

Where the turning space is constrained on a side opposite a ramp, the minimum length of the turning space in the direction of the ramp-run shall be 5' (1.52 m).

Where 1:50 maximum slope is shown, 1:64 is preferred.

Detectable warnings are shown in their ideal locations but the following placement tolerances are allowed.

Side Border - Detectable warnings should extend the full width of the walking surface (excluding flared sides) but a border along each side up to 2 in. (50 mm) in width is allowed.

Curb Set-Back - Detectable warnings located at the back of curb should closely align with the curb but a gap up to 6 in. (150 mm) behind the curb is allowed.

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

See Standard 606001 for details of depressed curb adjacent to curb ramp.

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

Illinois Department of Transportation

PASSED January 1, 2021
ENGINEER OF POLICY AND PROCEDURES

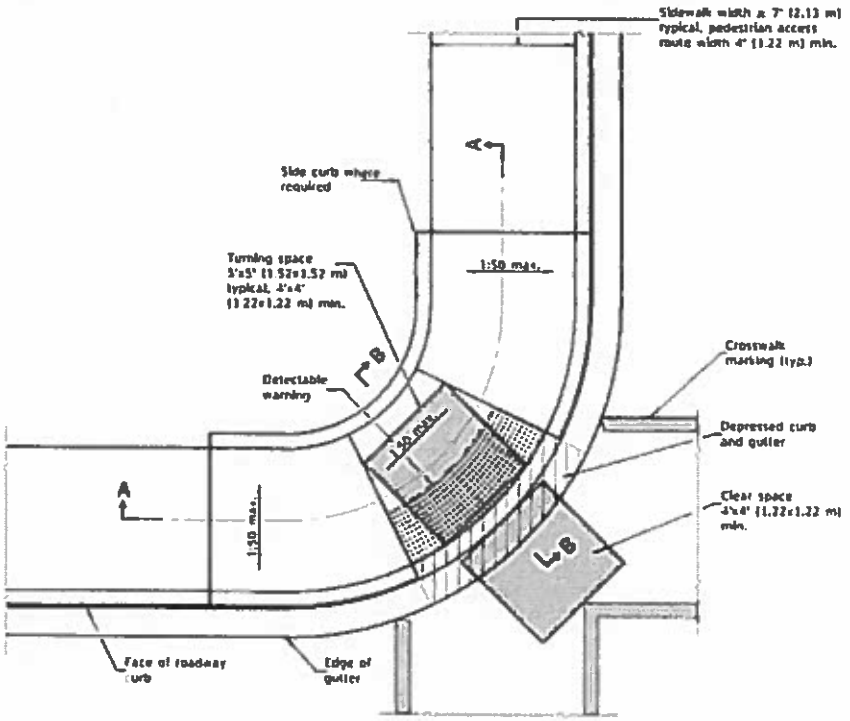
APPROVED January 1, 2021
ENGINEER OF DESIGN AND ENVIRONMENT

BDE 1-1-21

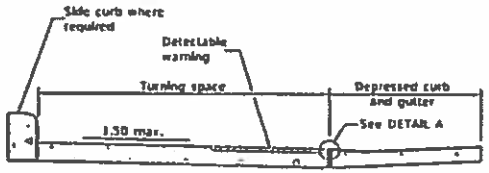
DATE	REVISIONS
1-1-21	Clarified minimum crosswalk width and locations.
1-1-19	Removed "15-foot rule", added "blended transitions" and placement tolerances for detectable warnings.

DIAGONAL CURB RAMPS FOR SIDEWALKS

STANDARD 424006-05

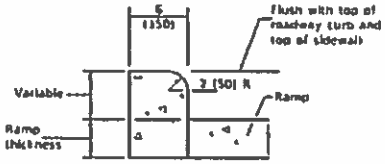


CORNER PARALLEL CURB RAMP



SECTION B-B

DETAIL A



SIDE CURB DETAIL

GENERAL NOTES

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

Where the turning space is constrained on a side opposite a ramp, the minimum length of the turning space in the direction of the ramp-run shall be 5' (1.52 m).

Where 1:50 maximum slope is shown, 1:64 is preferred.

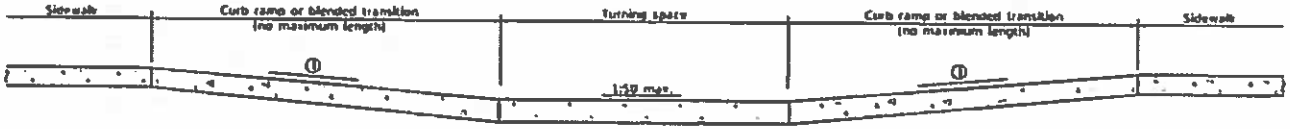
Detectable warnings are shown in their ideal locations but the following placement tolerances are allowed.

Side Border - Detectable warnings should extend the full width of the walking surface (excluding flared sides) but a border along each side up to 2 in. (50 mm) in width is allowed.

Curb Set-Back - Detectable warnings located at the back of curb should closely align with the curb but a gap up to 6 in. (150 mm) behind the curb is allowed.

See Standard 606001 for details of depressed curb adjacent to curb ramp.

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



SECTION A-A

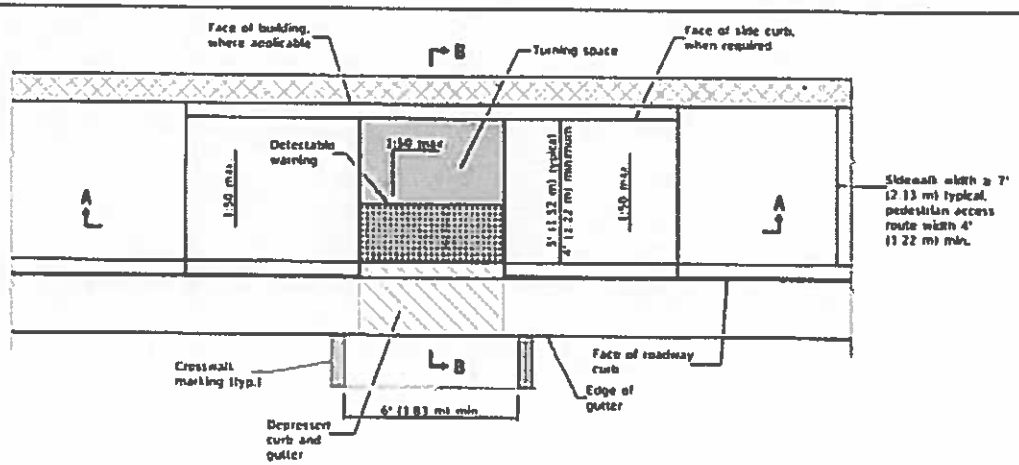
① The running slope of a curb ramp shall be 1:20 min. and 1:12 max. The running slope of a blended transition shall be 1:20 max.

Illinois Department of Transportation

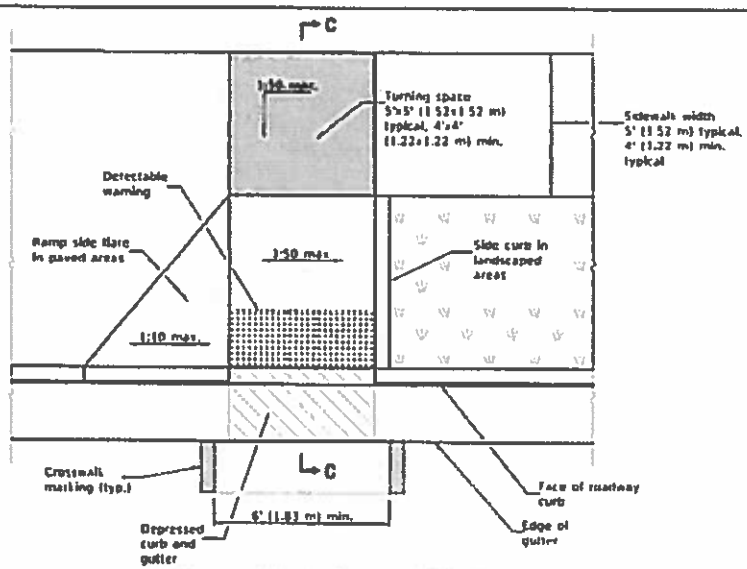
DATE	REVISIONS
1-1-19	Removed upper landing, added blended transition and detectable warning tolerances.
1-1-17	Revised sidewalk width to include 24 (610) buffer behind curb.

CORNER PARALLEL CURB RAMPS FOR SIDEWALKS

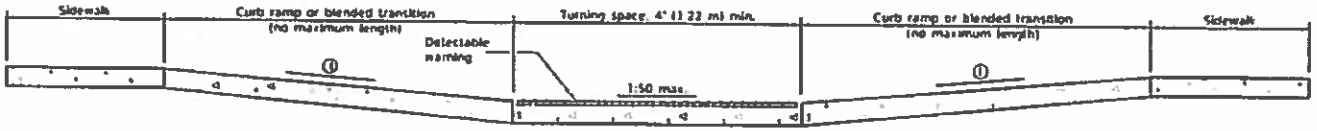
STANDARD 424011-04



PARALLEL MID-BLOCK CURB RAMP

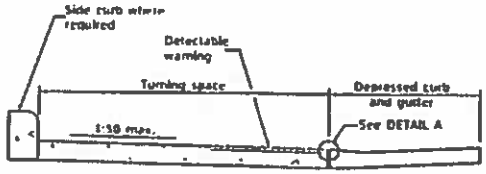


PERPENDICULAR MID-BLOCK CURB RAMP

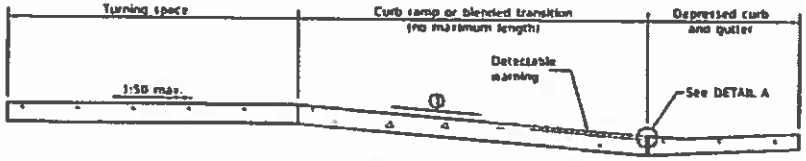


SECTION A-A

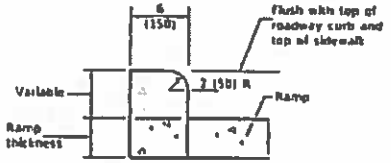
① The running slope of a curb ramp shall be 1:20 min. and 1:12 max. The running slope of a blended transition shall be 1:20 max.



SECTION B-B



SECTION C-C



SIDE CURB DETAIL

DETAIL A

GENERAL NOTES

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

Where the turning space is constrained on a side opposite a ramp, the minimum length of the turning space in the direction of the ramp-run shall be 5' (1.52 m).

Where 1:50 maximum slope is shown, 1:64 is preferred.

Detectable warnings are shown in their ideal locations but the following placement tolerances are allowed.

Side Border - Detectable warnings should extend the full width of the walking surface (excluding flared sides) but a border along each side up to 2 in. (50 mm) in. width is allowed.

Curb Set-Back - Detectable warnings located at the back of curb should closely align with the curb but a gap up to 6 in. (150 mm) behind the curb is allowed.

See Standard 606001 for details of depressed curbs adjacent to curb ramps.

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

Illinois Department of Transportation

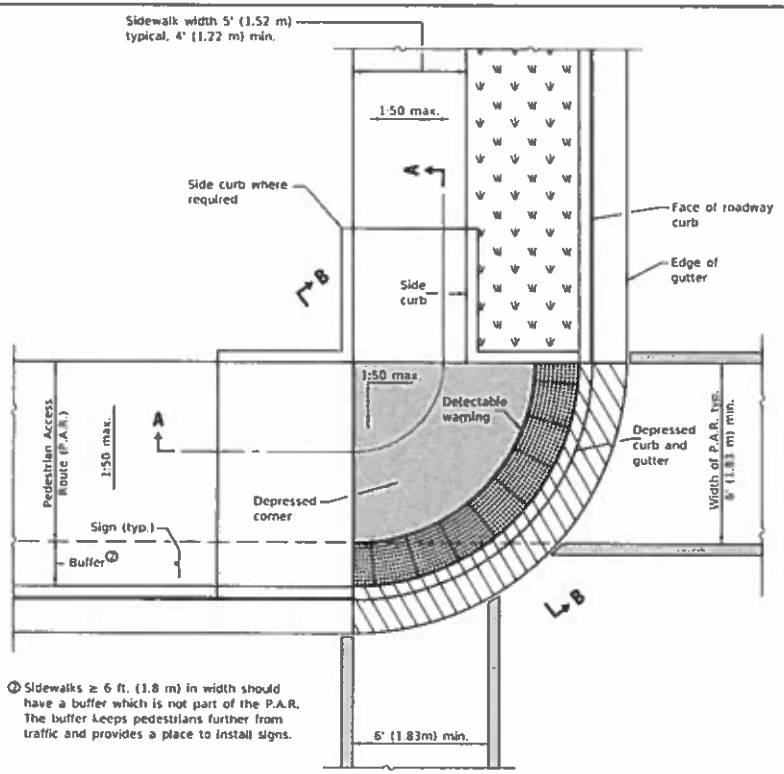
PASSED _____, 2019
BUREAU OF POLICY AND PROCEDURES

APPROVED _____, 2019
BUREAU OF BRIDGES AND STRUCTURES

DATE	REVISIONS
1-1-19	Removed upper landing, added
	blended transitions and detectable
	warning tolerances.
1-1-18	Omitted diagonal slope at
	turning spaces and upper
	landings.

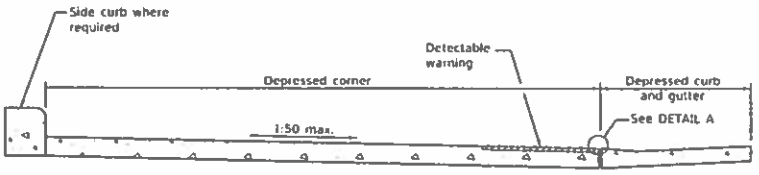
MID-BLOCK CURB RAMPS FOR SIDEWALKS

STANDARD 424016-05

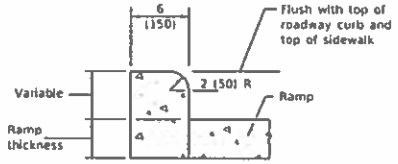


② Sidewalks ≥ 6 ft. (1.8 m) in width should have a buffer which is not part of the P.A.R. The buffer keeps pedestrians further from traffic and provides a place to install signs.

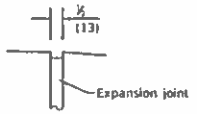
DEPRESSED CORNER



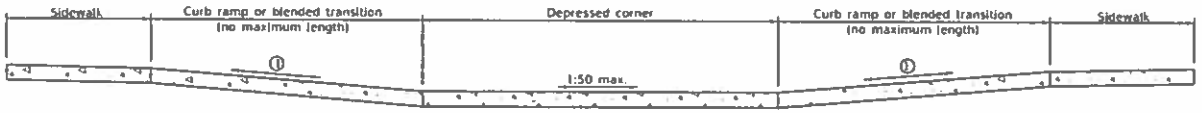
SECTION B-B



SIDE CURB DETAIL



DETAIL A



SECTION A-A

① The running slope of a curb ramp shall be 1:20 min. and 1:12 max. The running slope of a blended transition shall be 1:20 max.

GENERAL NOTES

This standard shall only be used for curb radii of 6 ft. (1.83 m) or greater.

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

Where 1:50 maximum slope is shown, 1:64 is preferred.

Detectable warnings are shown in their ideal tolerances but the following placement tolerances are allowed.

Side Border - Detectable warnings should extend the full width of the walking surface (excluding flared sides) but a border along each side up to 2 in. (50 mm) in. width is allowed.

Curb Set-Back - Detectable warnings located at the back of curb should closely align with the curb but a gap up to 6 in. (150 mm) behind the curb is allowed.

See Standard 606001 for details of depressed curb adjacent to curb ramp.

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

Illinois Department of Transportation

PASSED January 1 2021
ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1 2021
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-21

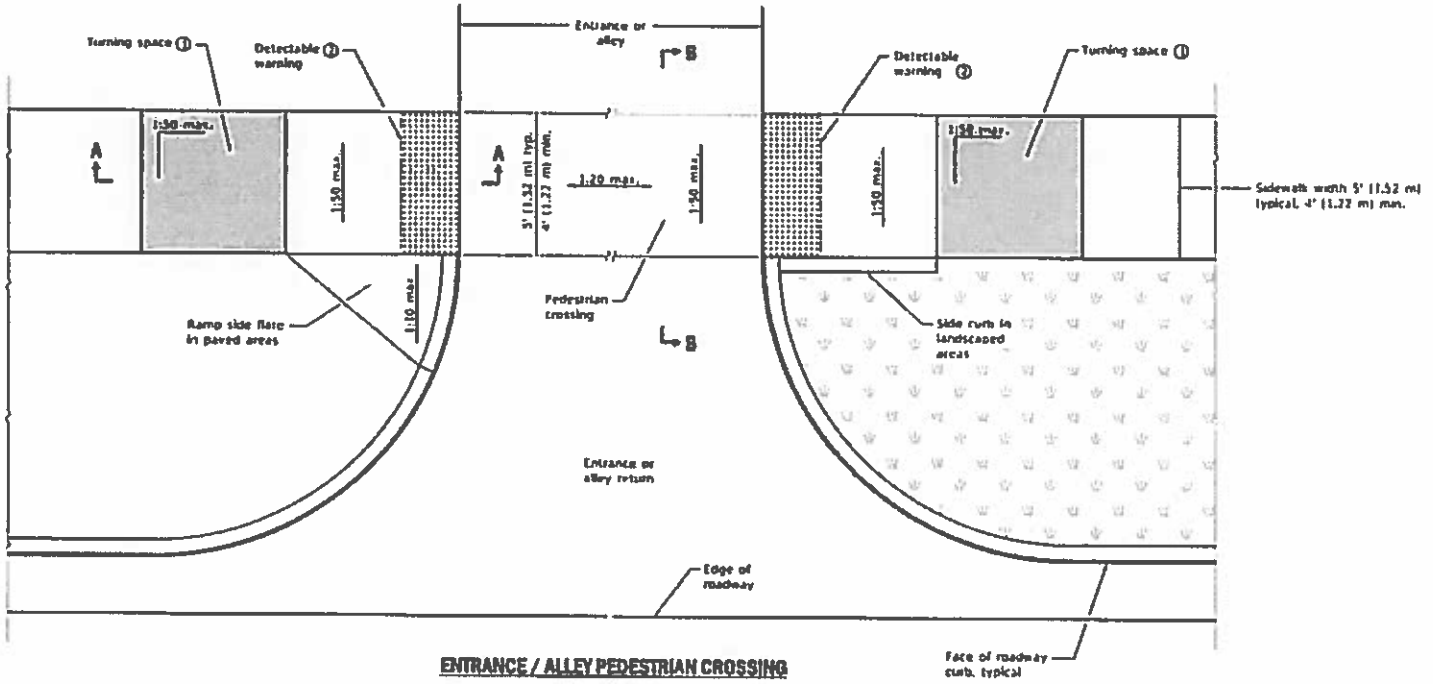
DATE	REVISIONS
1-1-21	Added crosswalk striping and a "buffer" for wide sidewalks.
1-1-19	Removed upper landings, added blended transition and detectable warning tolerances.

DEPRESSED CORNER FOR SIDEWALKS

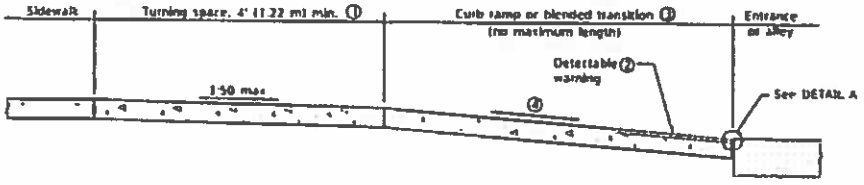
STANDARD 424021-06

② Detectable warning shall only be installed at entrances/alleys with permanent traffic control devices (i.e. stop signs, signals).

① Where possible, maintain the grade of the sidewalk across the entrance/alley to avoid the need for ramps and turning spaces.



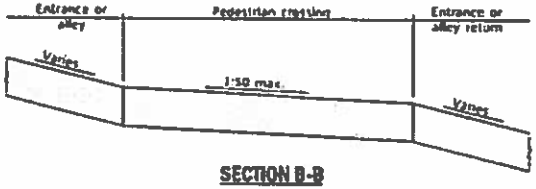
ENTRANCE / ALLEY PEDESTRIAN CROSSING



SECTION A-A

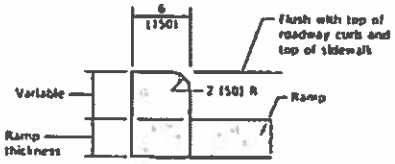
① Turning space not required for blended transitions.

② The running slope of a curb ramp shall be 1:20 min and 1:12 max. The running slope of a blended transition shall be 1:20 max.



SECTION B-B

DETAIL A



SIDE CURB DETAIL

GENERAL NOTES

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

Where 1:50 maximum slope is shown, 1:64 is preferred.

Detectable warnings are shown in their ideal locations but the following placement tolerances are allowed.

Side Border - Detectable warnings should extend the full width of the walking surface (excluding flared sides) but a border along each side up to 2 in. (50 mm) in width is allowed.

Curb Set-Back - Detectable warnings located at the back of curb should closely align with the curb but a gap up to 6 in. (150 mm) behind the curb is allowed.

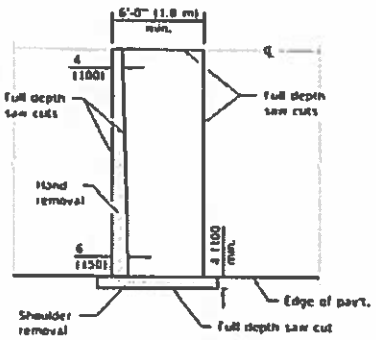
All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

DATE	REVISIONS
1-1-19	Added blended transitions and
	placement tolerances for
	detectable warnings.
1 1 18	Omitted diagonal slope at
	upper landings.

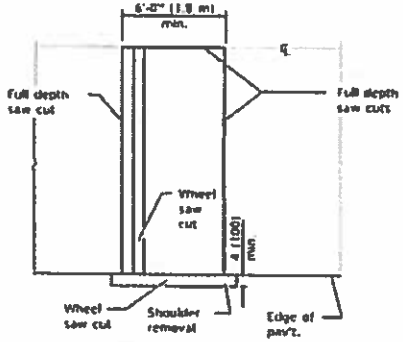
ENTRANCE / ALLEY PEDESTRIAN CROSSINGS

STANDARD 424026-03



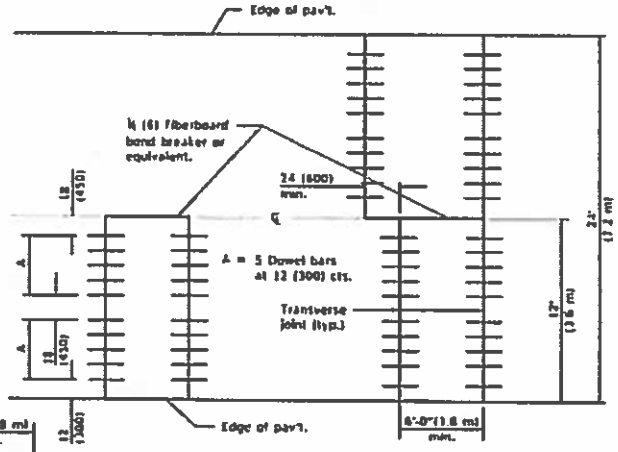
PAVEMENT SAWING DETAIL

(HMA SHOULDER)

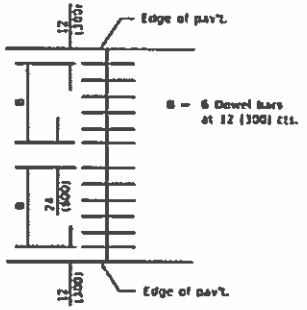


ALTERNATE SAWING DETAIL

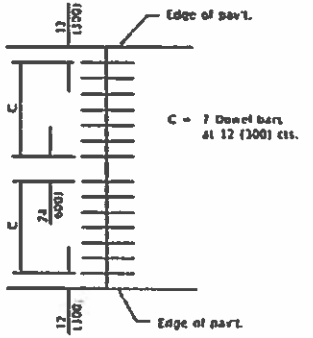
(HMA SHOULDER)



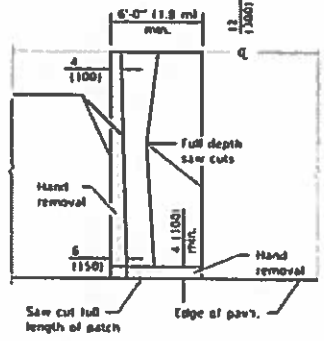
12' (3.6 m) WIDE LANES



14' (4.2 m) WIDE RAMP

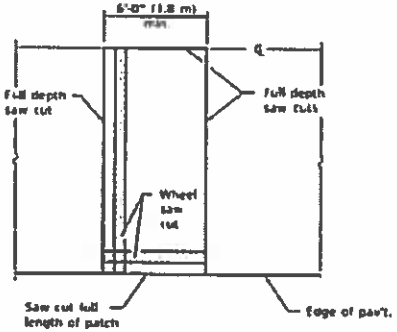


16' (4.8 m) WIDE RAMP



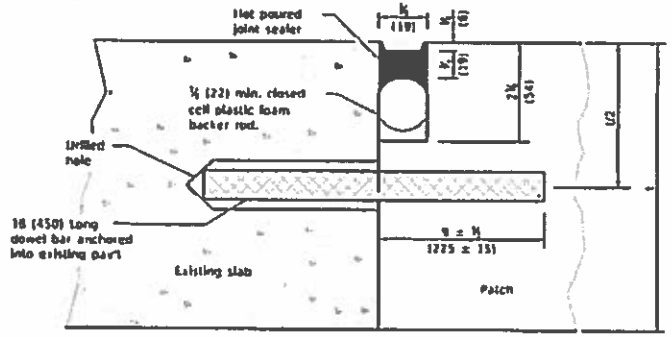
PAVEMENT SAWING DETAIL

(PCC SHOULDER)

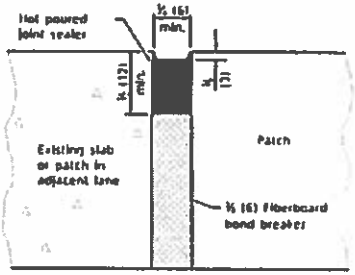


ALTERNATE SAWING DETAIL

(PCC SHOULDER)



TRANSVERSE JOINT



CENTERLINE JOINT

DOWEL BAR TABLE		
PAVEMENT THICKNESS	DOWEL BAR DIAMETER	HOLE DIAMETER
10 (250) or greater	1¼ (38)	1⅝ (43)
8 (200) thru 9.99 (249)	1¼ (32)	1⅝ (35)
Less than 8 (200)	1 (25)	1⅛ (29)

GENERAL NOTES

The transverse joints for Class B patches shall align with joints or cracks in the adjacent lane whenever possible.

See Standard 420701 for details of welded wire reinforcement.

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

Illinois Department of Transportation

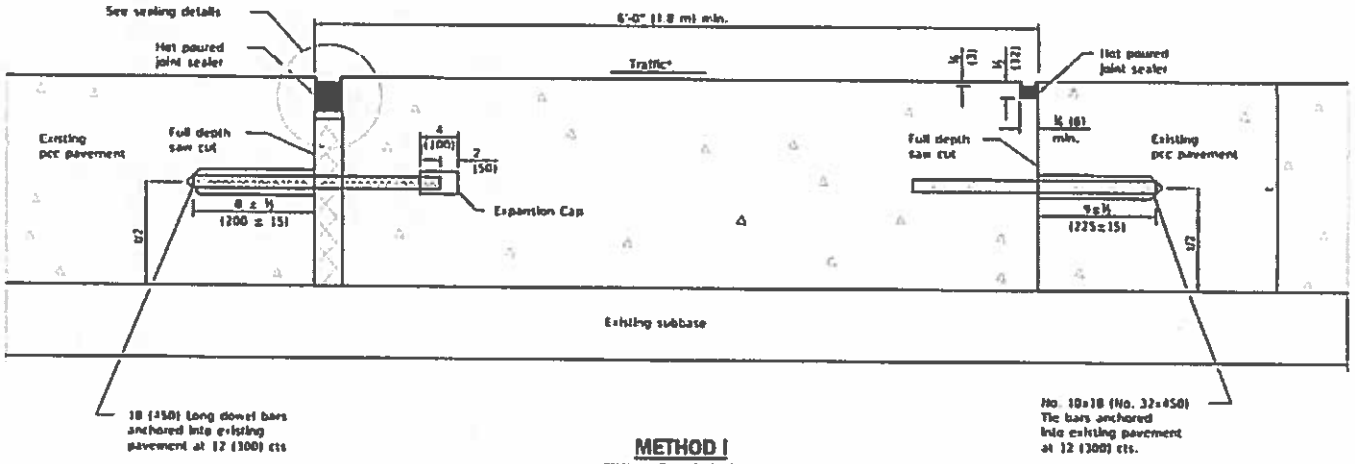
DATE	REVISIONS
1-1-19	Revised reference to Standard 420701 in General Notes.
1-1-18	Revised DOWEL BAR TABLE.

CLASS B PATCHES

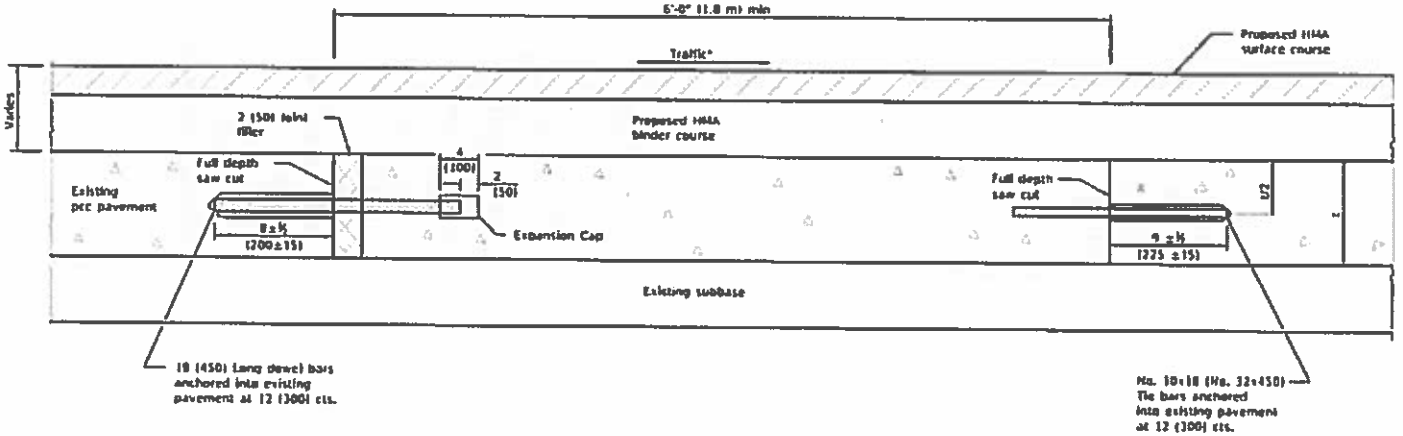
(Sheet 1 of 2)

STANDARD 442101-09

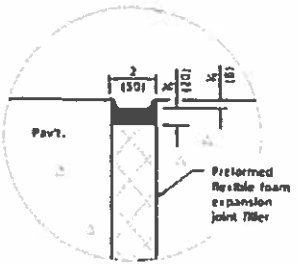
TRANSVERSE EXPANSION JOINTS



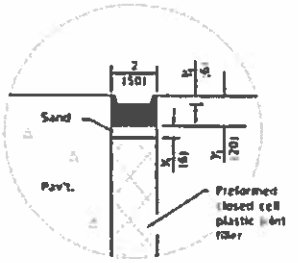
METHOD I
(Without Resurfacing)



METHOD II
(With Resurfacing)



SEALING DETAIL



SEALING DETAIL

NOTE

- When re-establishing a transverse expansion joint on a two-lane, two-way road, reverse the orientation of the dowel bars with respect to traffic for one of the patches such that the joint will be continuous across both lanes.

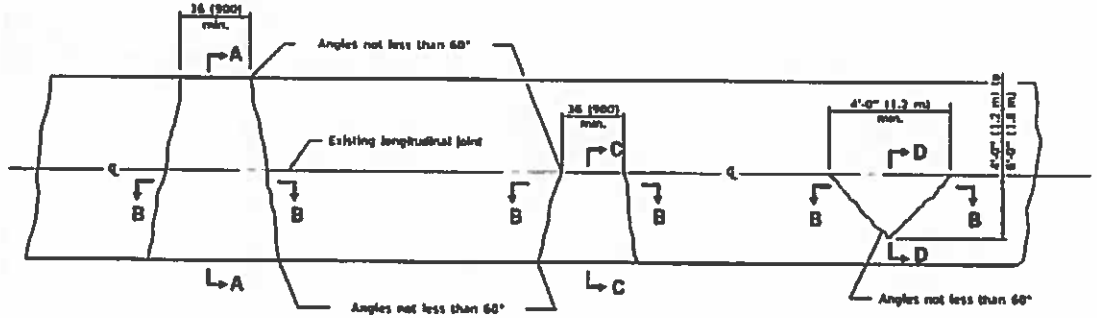
Illinois Department of Transportation

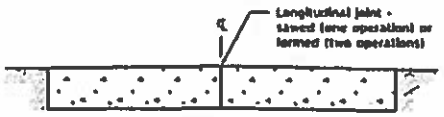
CLASS B PATCHES

(Sheet 2 of 21)

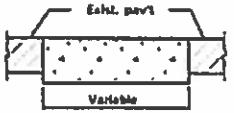
STANDARD 442101-09

CLASS C

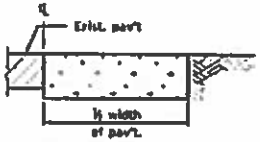




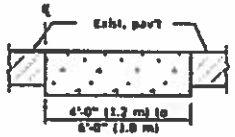
SECTION A-A



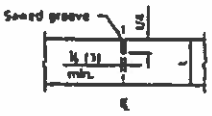
SECTION B-B



SECTION C-C



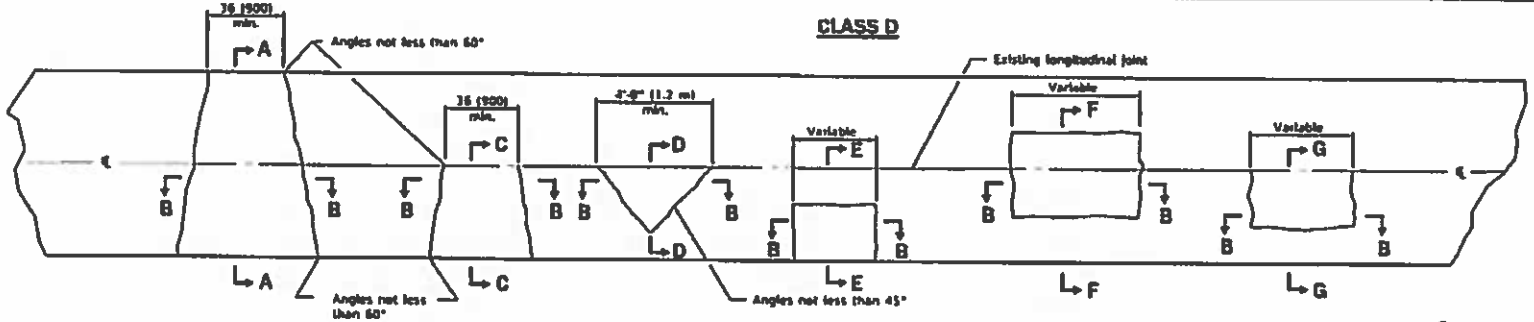
SECTION D-D

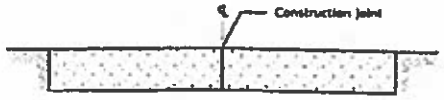


DETAIL OF SAWED CONTRACTION JOINT

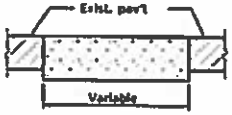
Note:
Longitudinal joints shall be as detailed on Standard 420001, except tie bars are not required for patches 20'-0" (6.0 m) or less in length.

CLASS D

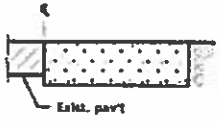




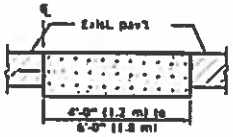
SECTION A-A
(Built in two operations)



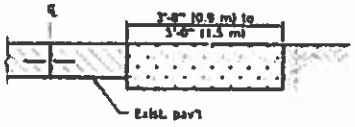
SECTION B-B



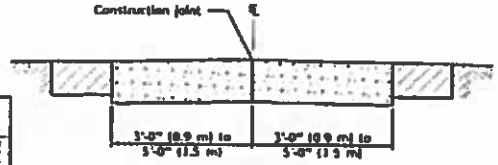
SECTION C-C



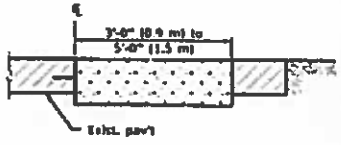
SECTION D-D



SECTION E-E



SECTION F-F
(Built in two operations)



SECTION G-G

GENERAL NOTES

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

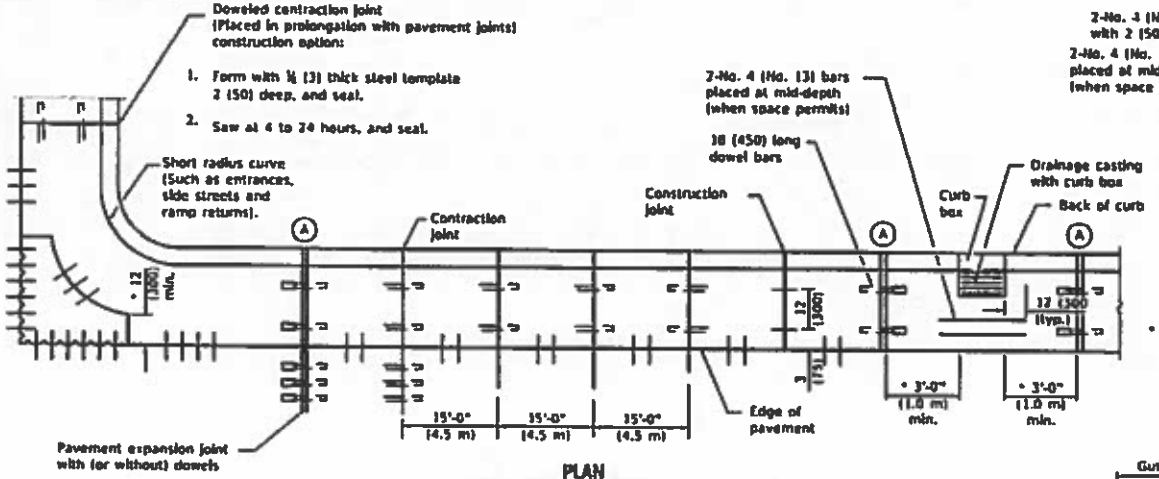
All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

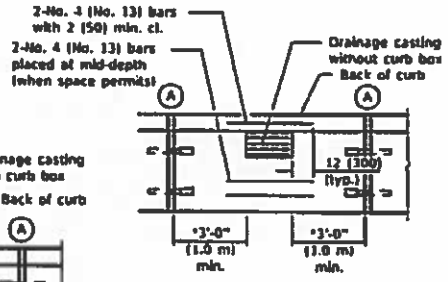
DATE	REVISIONS
1-1-08	Switched units to English (metric).
1-1-07	Revised Note for Class C patches.

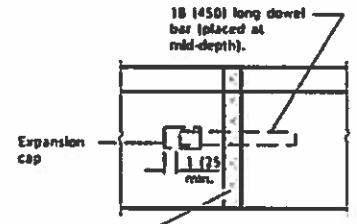
CLASS C and D PATCHES

STANDARD 442201-03

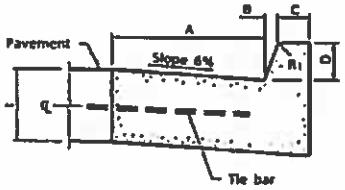


PLAN
ADJACENT TO PCC PAVEMENT OR PCC BASE COURSE

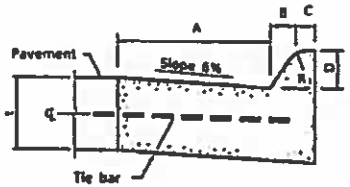




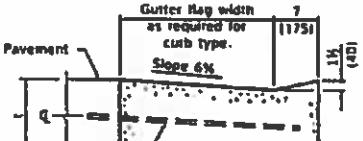
DETAIL (A)
EXPANSION JOINT



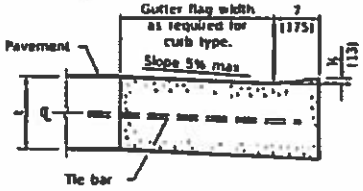
BARRIER CURB



MOUNTABLE CURB



DEPRESSED CURB (TYPICAL)



DEPRESSED CURB ADJACENT TO CURB RAMP ACCESSIBLE TO THE DISABLED

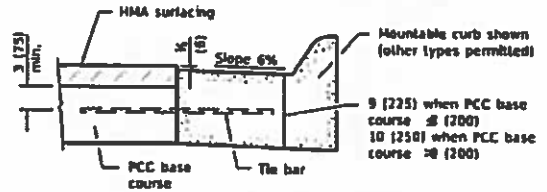
TABLE OF DIMENSIONS
BARRIER CURB

TYPE	A	B	C	D	R_1
B-6.06 * (B-15.15)	6 (150)	1 (25)	6 (150)	6 (150)	1 (25)
B-6.12 (B-15.30)	12 (300)	1 (25)	6 (150)	6 (150)	1 (25)
B-6.18 (B-15.45)	18 (450)	1 (25)	6 (150)	6 (150)	1 (25)
B-6.24 (B-15.600)	24 (600)	1 (25)	6 (150)	6 (150)	1 (25)
B-9.12 (B-22.30)	12 (300)	2 (50)	5 (125)	9 (225)	1 (25)
B-9.18 (B-22.45)	18 (450)	2 (50)	5 (125)	9 (225)	1 (25)
B-9.24 (B-22.600)	24 (600)	2 (50)	5 (125)	9 (225)	1 (25)

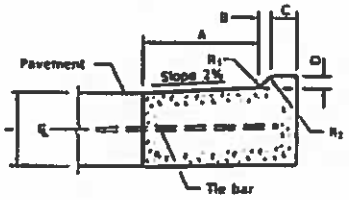
* For corner islands only.

TABLE OF DIMENSIONS
MOUNTABLE CURB

TYPE	A	B	C	D	R_1	R_2
M-2.06 (M-5.15)	6 (150)	2 (50)	4 (100)	2 (50)	1 (25)	2 (50)
M-2.12 (M-5.30)	12 (300)	2 (50)	4 (100)	2 (50)	3 (75)	2 (50)
M-4.06 (M-10.15)	6 (150)	4 (100)	3 (75)	4 (100)	3 (75)	NA
M-4.12 (M-10.30)	12 (300)	4 (100)	3 (75)	4 (100)	3 (75)	NA
M-4.18 (M-10.45)	18 (450)	4 (100)	3 (75)	4 (100)	3 (75)	NA
M-4.24 (M-10.600)	24 (600)	4 (100)	3 (75)	4 (100)	3 (75)	NA
M-6.06 (M-15.15)	6 (150)	6 (150)	2 (50)	6 (150)	2 (50)	NA
M-6.12 (M-15.30)	12 (300)	6 (150)	2 (50)	6 (150)	2 (50)	NA
M-6.18 (M-15.45)	18 (450)	6 (150)	2 (50)	6 (150)	2 (50)	NA
M-6.24 (M-15.600)	24 (600)	6 (150)	2 (50)	6 (150)	2 (50)	NA



ADJACENT TO PCC BASE COURSE WITH HMA SURFACING



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

GENERAL NOTES

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

t = Thickness of pavement.

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

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

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

See Standard 606301 for details of corner islands.

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

Illinois Department of Transportation

APPROVED January 1, 2018
ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 2018
ACTING SECRETARY OF THE DEPARTMENT

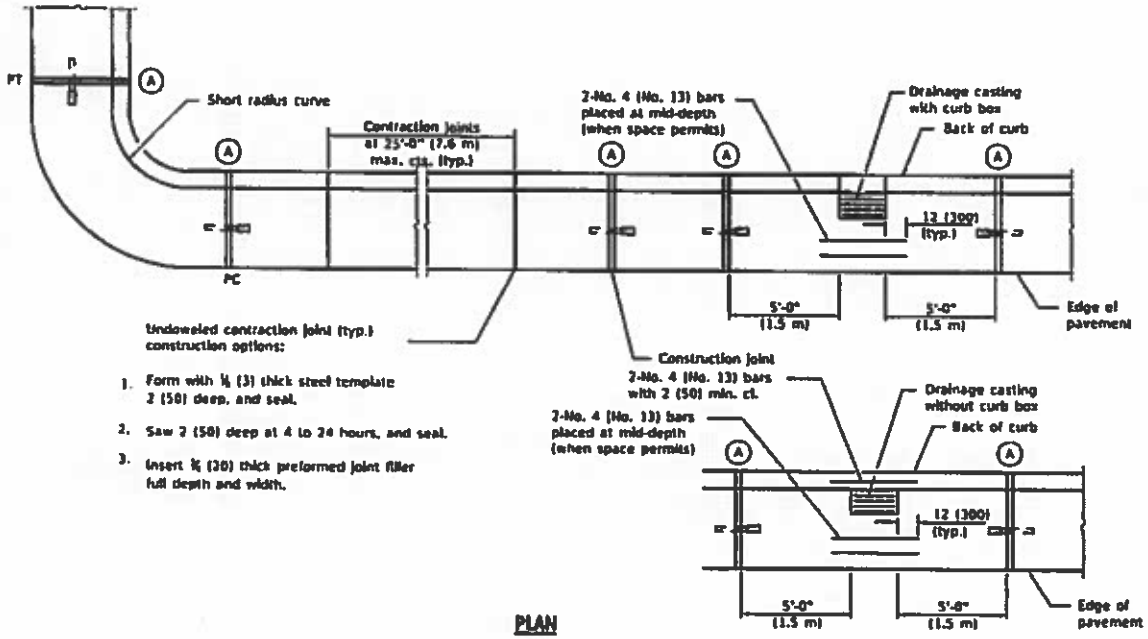
EFFECTIVE JAN 1, 2018

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

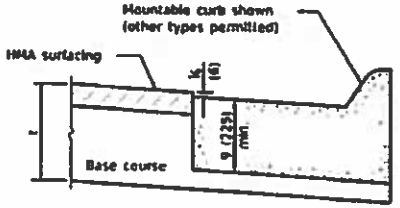
CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER

(Sheet 1 of 2)

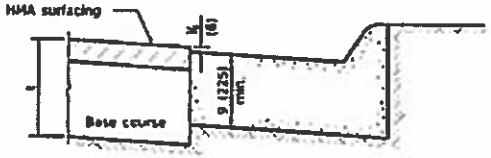
STANDARD 606001-07



PLAN

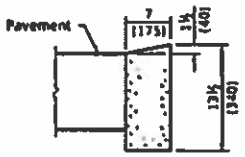


ON DISTURBED SUBGRADE

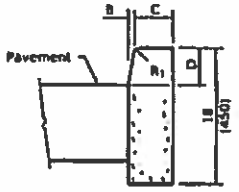


ON UNDISTURBED SUBGRADE

ADJACENT TO FLEXIBLE PAVEMENT

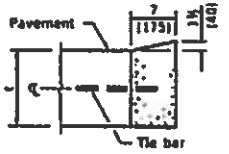


DEPRESSED CURB

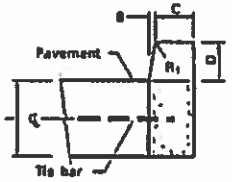


BARRIER CURB

ADJACENT TO FLEXIBLE PAVEMENT



DEPRESSED CURB



BARRIER CURB

ADJACENT TO PCC PAVEMENT OR PCC BASE COURSE

CONCRETE CURB TYPE B

Illinois Department of Transportation

APPROVED January 1, 2019
BUREAU OF POLICY AND PROCEDURES

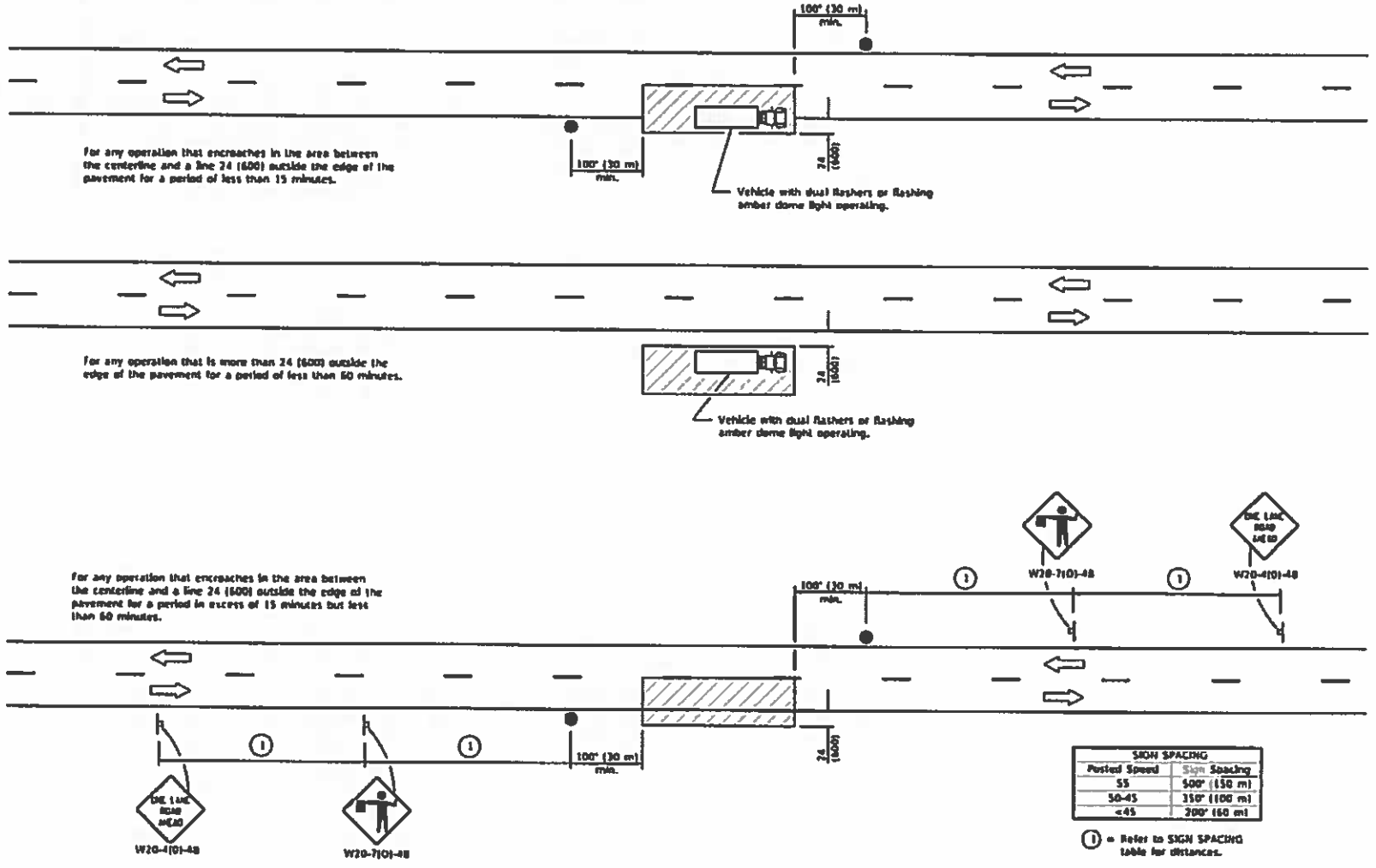
APPROVED January 1, 2018
BUREAU OF BRIDGES AND STRUCTURES

RELEASED 1-1-19

CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER

(Sheet 2 of 2)

STANDARD 606001-07



TYPICAL APPLICATIONS

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

SYMBOLS

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

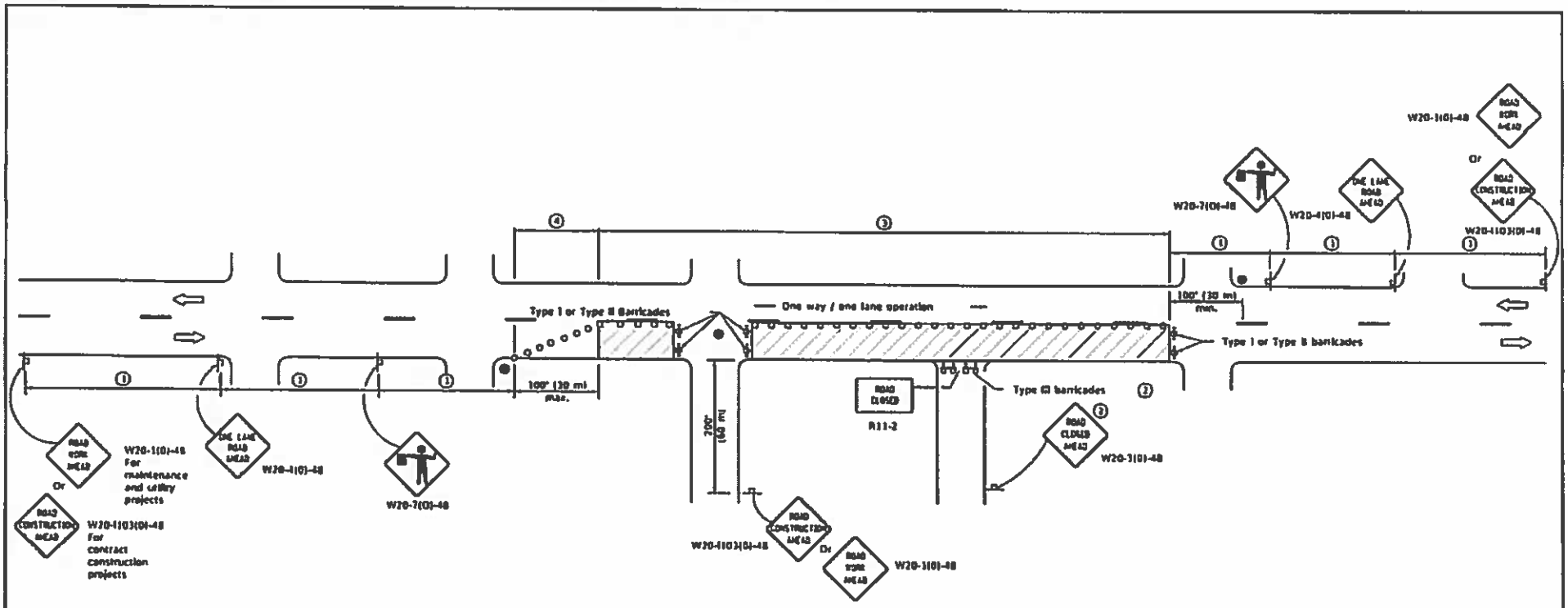
All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

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

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

STANDARD 701301-04



SIGN SPACING	
Posted Speed	Sign Spacing
55	500' (150 m)
50-45	350' (100 m)
<45	200' (60 m)

SYMBOLS

- Work area
- Cone, drum or barricade (not required for moving operations)
- Sign on portable or permanent support
- Flagger with traffic control sign
- Barricade or drum with flashing light
- Type III barricade with flashing lights

1. Refer to SIGN SPACING TABLE for distances.
2. For approved sideroad closures.
3. Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.
4. Cones, drums or barricades at 20' (6 m) centers.

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of one traffic lane in an urban area.

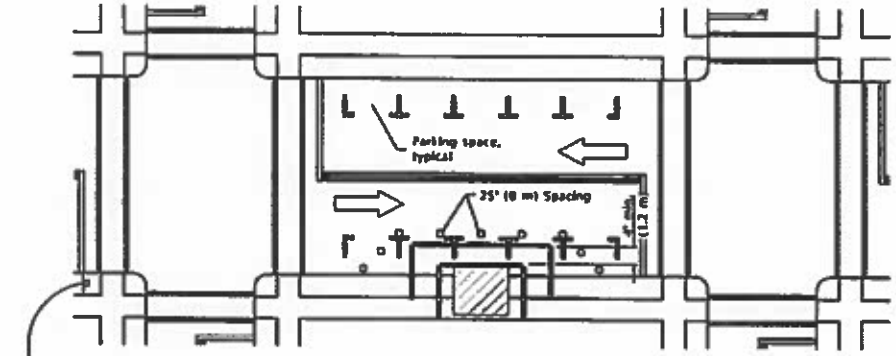
All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

DATE	REVISIONS
1-1-22	Revised flagger sign.
1-1-09	Switched units to
	English (metric).
	Corrected sign No.'s.

URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED

STANDARD 701501-06



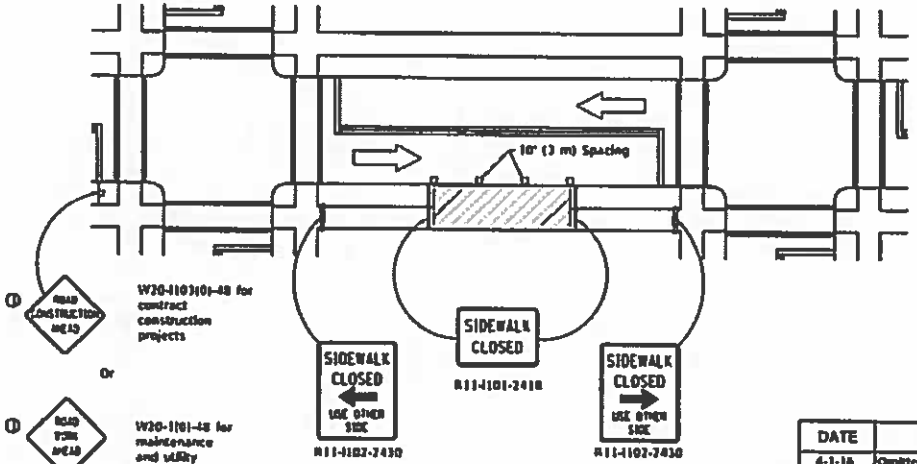
① Omit whenever duplicated by road work traffic control.

① W20-1103(01-48 for contract construction projects

Or

① W20-1101-48 for maintenance and utility projects

SIDEWALK DIVERSION



① W20-1103(01-48 for contract construction projects

Or

① W20-1101-48 for maintenance and utility projects

SIDEWALK CLOSURE

SYMBOLS

- Work area
- Sign on portable or permanent support
- Barricade or drum
- Cone, drum or barricade
- Type III barricade
- Detectable pedestrian channelizing barricade

GENERAL NOTES

This Standard is used where, at any time, pedestrian traffic must be rerouted due to work being performed.

This Standard must be used in conjunction with other Traffic Control & Protection Standards when roadway traffic is affected.

Temporary facilities shall be detectable and accessible.

The temporary pedestrian facilities shall be provided on the same side of the closed facilities whenever possible.

The SIDEWALK CLOSED / USE OTHER SIDE sign shall be placed at the nearest crosswalk or intersection in each end of the closure. Where the closure occurs at a corner, the signs shall be erected on the corners across the street from the closure. The SIDEWALK CLOSED signs shall be used at the ends of the actual closures.

Type III barricades and R11-2-4830 signs shall be positioned as shown in "ROAD CLOSED TO ALL TRAFFIC" detail on Standard 701901.

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

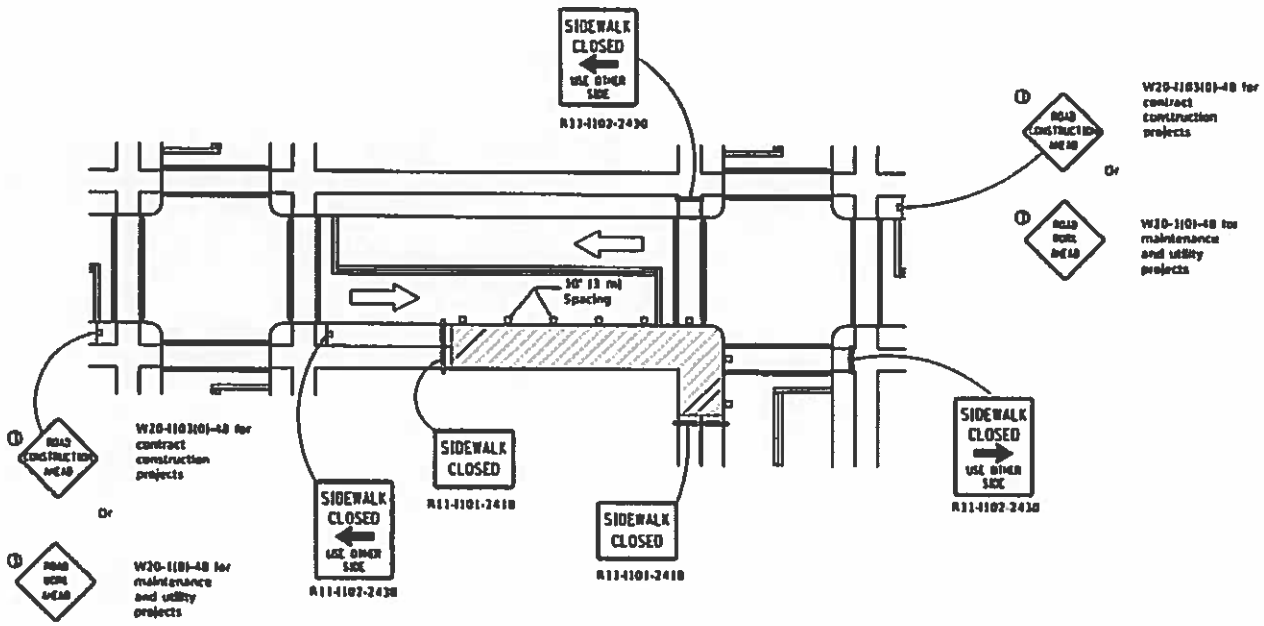
Illinois Department of Transportation

DATE	REVISIONS
4-1-16	Omitted orange safety fence
	from standard as this is
	covered in the std. spec.
1-1-12	Added SIDEWALK DIVERSION.
	Modified appearance of
	plan views. Renamed Std.

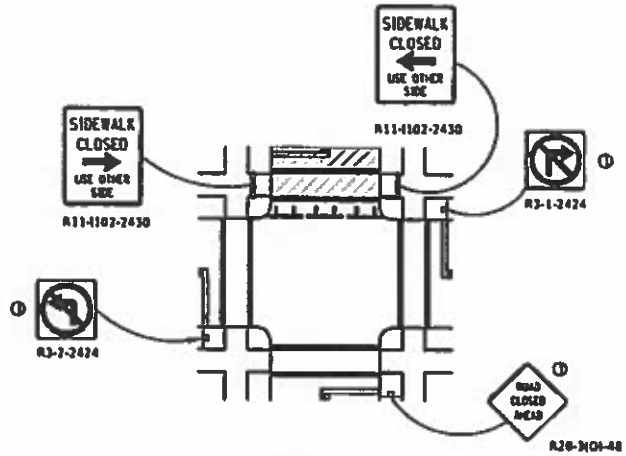
SIDEWALK, CORNER OR CROSSWALK CLOSURE

(Sheet 1 of 2)

STANDARD 701801-06



CORNER CLOSURE



CROSSWALK CLOSURE

Illinois Department of Transportation

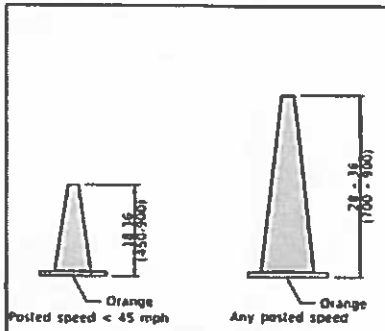
APPROVED	April 1	2015
ENGINEER OF POLICY AND PROCEDURES		
APPROVED	April 1	2015
Council of Bureau Chairmen		

ISSUED 1-1-07

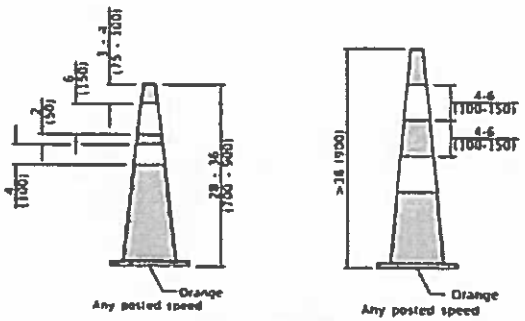
SIDEWALK, CORNER OR CROSSWALK CLOSURE

(Sheet 2 of 2)

STANDARD 701801-06

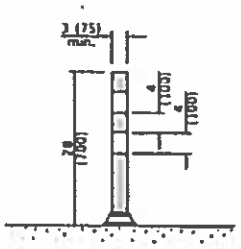


DAYTIME USE

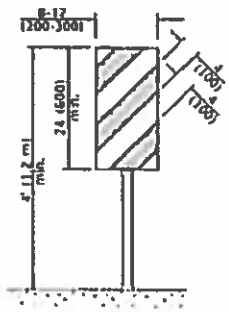


DAY OR NIGHTIME USE

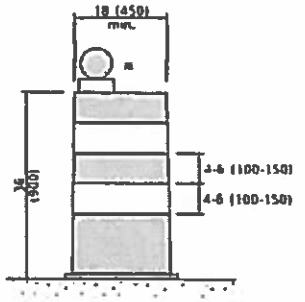
CONES



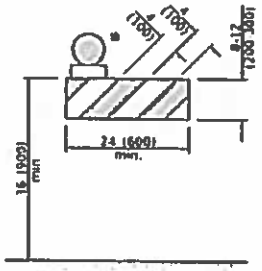
TUBULAR MARKER



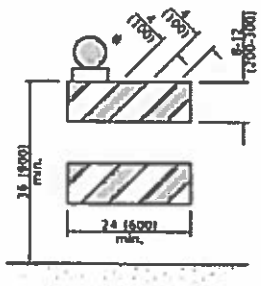
VERTICAL PANEL
POST MOUNTED



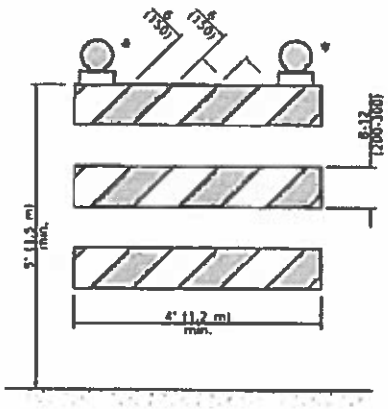
DRUM



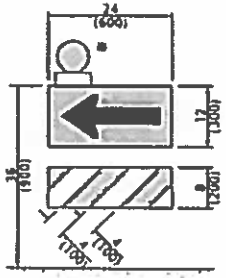
TYPE I BARRICADE



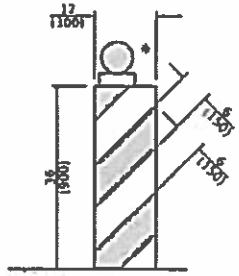
TYPE II BARRICADE



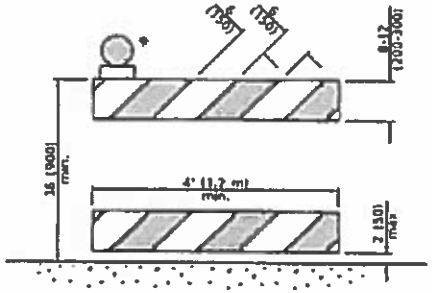
TYPE III BARRICADE



DIRECTION INDICATOR BARRICADE



VERTICAL BARRICADE



DETECTABLE PEDESTRIAN CHANNELIZING BARRICADE

* Warning lights (if required)

GENERAL NOTES

All heights shown shall be measured above the pavement surface.

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

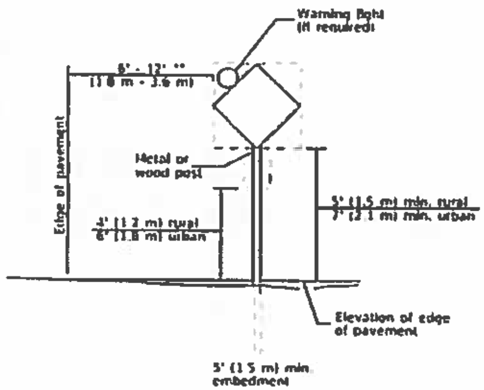
Illinois Department of Transportation

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

TRAFFIC CONTROL DEVICES

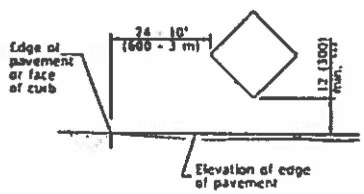
(Sheet 1 of 3)

STANDARD 701901-08



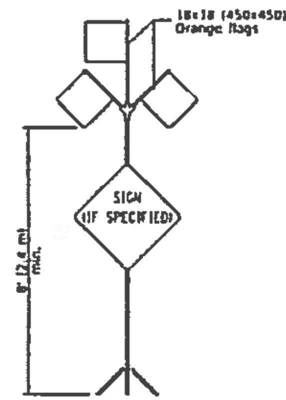
POST MOUNTED SIGNS

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

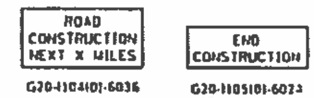


SIGNS ON TEMPORARY SUPPORTS

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



HIGH LEVEL WARNING DEVICE



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

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

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

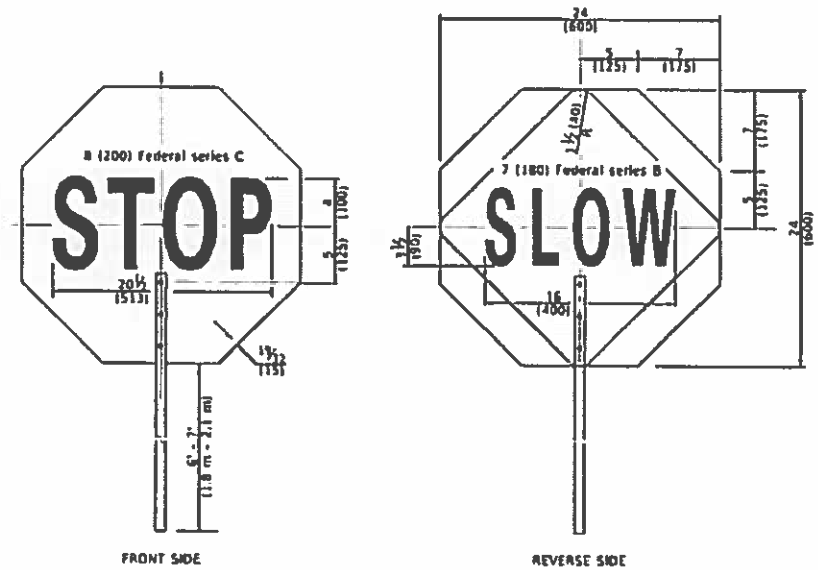
Dual sign displays shall be utilized on multi-lane highways.

WORK LIMIT SIGNING

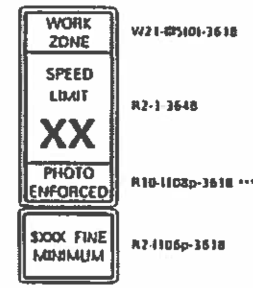
W12-I103-4848

WIDTH RESTRICTION SIGN

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



FLAGGER TRAFFIC CONTROL SIGN



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

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

HIGHWAY CONSTRUCTION SPEED ZONE SIGNS

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

Illinois Department of Transportation

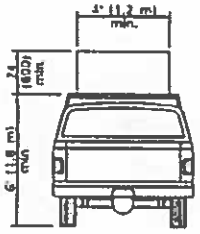
APPROVED ... 2011

APPROVED ... 2011

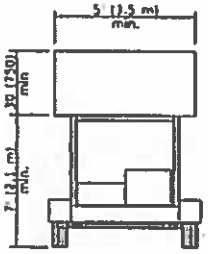
TRAFFIC CONTROL DEVICES

(Sheet 2 of 3)

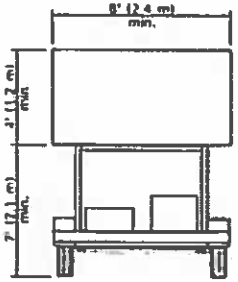
STANDARD 701901-08



TYPE A
ROOF
MOUNTED

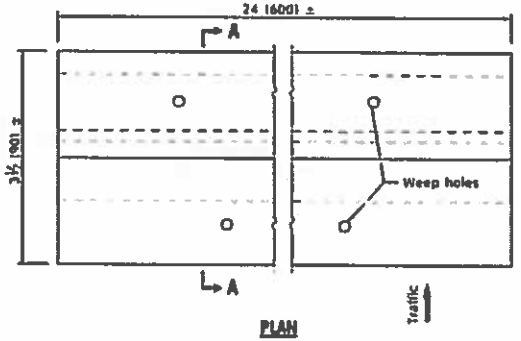


TYPE B
ROOF OR TRAILER
MOUNTED

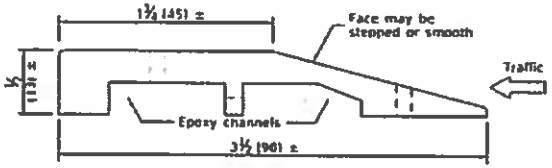


TYPE C
TRAILER
MOUNTED

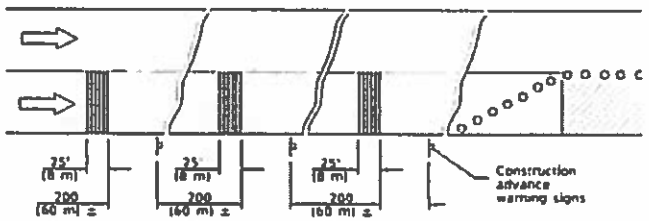
ARROW BOARDS

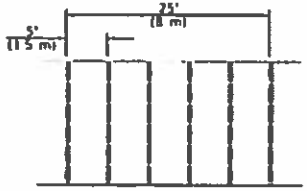


PLAN



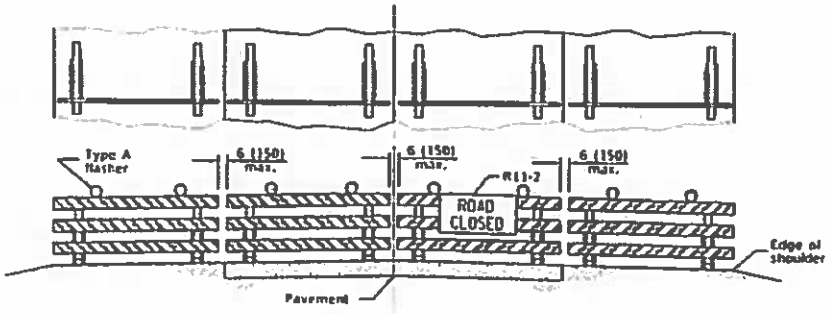
SECTION A-A





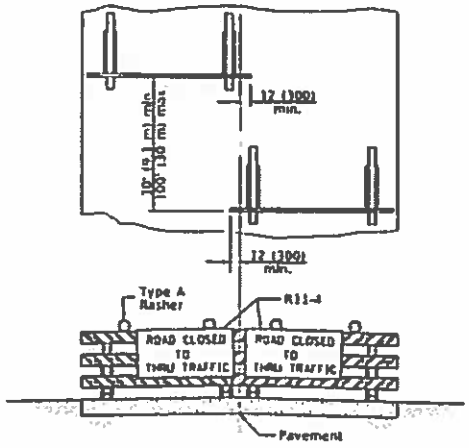
TYPICAL INSTALLATION

TEMPORARY RUMBLE STRIPS



ROAD CLOSED TO ALL TRAFFIC

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



ROAD CLOSED TO THRU TRAFFIC

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

Illinois Department of Transportation

APPROVED _____ 2019

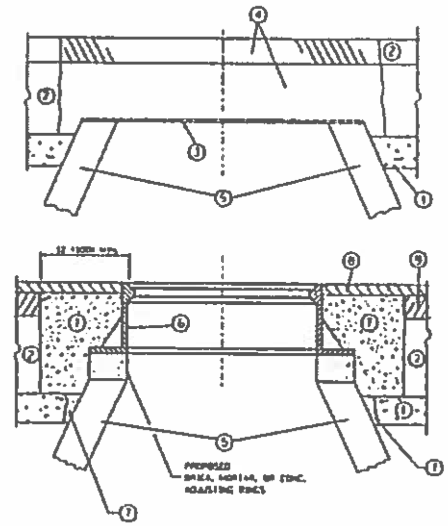
APPROVED _____ 2019

TYPICAL APPLICATIONS OF
TYPE III BARRICADES CLOSING A ROAD

TRAFFIC CONTROL DEVICES

(Sheet 3 of 3)

STANDARD 701901-08



CONSTRUCTION PROCEDURES

STAGE 1 BEFORE PAVEMENT MILLING

a) REMOVE A MINIMUM OF 12 INCH OF THE PAVEMENT FROM AROUND THE STRUCTURE.
b) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
c) COVER THE STRUCTURE OPENING WITH A 36 INCH DIAMETER METAL PLATE.
d) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1½ INCH THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 AFTER PAVEMENT MILLING

a) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
b) INSTALL THE FRAME AND LID. ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
c) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 351, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

LEGEND

1. SUB BASE GRANULAR MATERIAL
2. EXISTING PAVEMENT
3. 36 INCH DIAMETER METAL PLATE
4. PROPOSED CRUSHED STONE AND HMA SURFACE MIX
5. EXISTING STRUCTURE
6. FRAME AND LID (SEE NOTES)
7. CLASS PP-1* CONCRETE
8. PROPOSED HMA SURFACE COURSE
9. PROPOSED HMA BINDER COURSE

NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 602.16 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)".

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

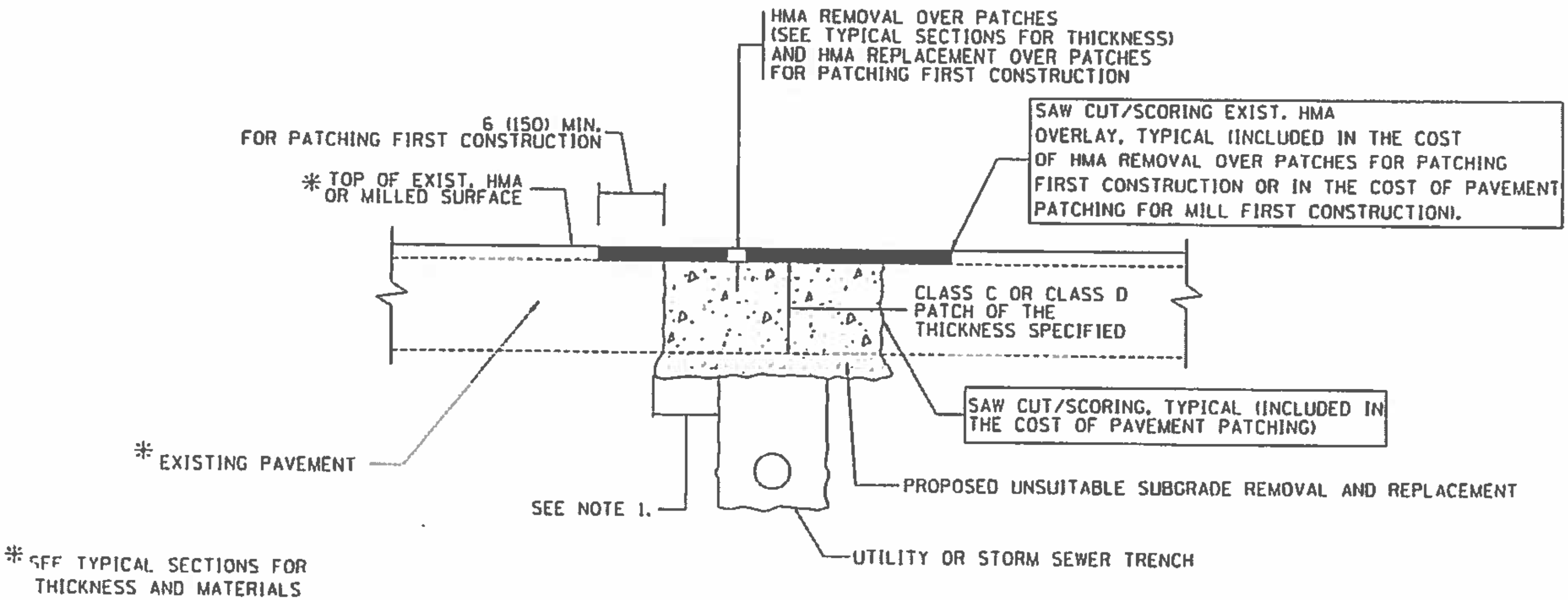
FILE NAME =	USER NAME =	DESIGNED -	REVISED -
	PLOT SCALE =	DRAWN -	REVISED -
	PLOT DATE =	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR
FRAMES AND LIDS ADJUSTMENT WITH MILLING

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CONTRACT NO.		



NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

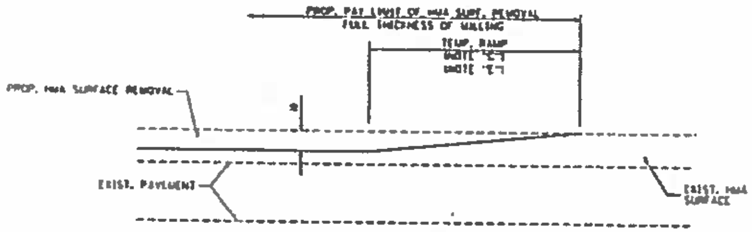
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4½ INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

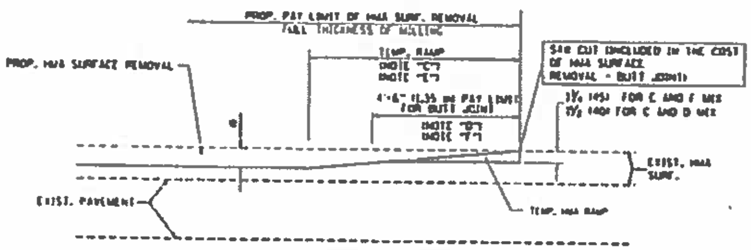
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT



MILLED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

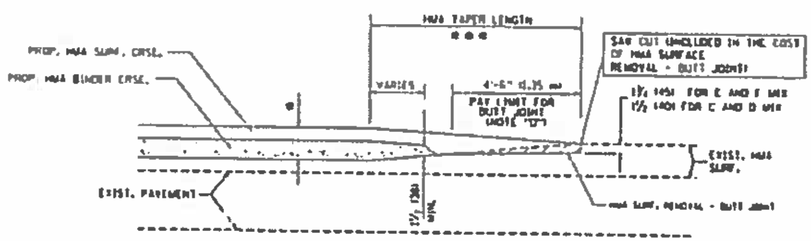
OPTION 1



HMA CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

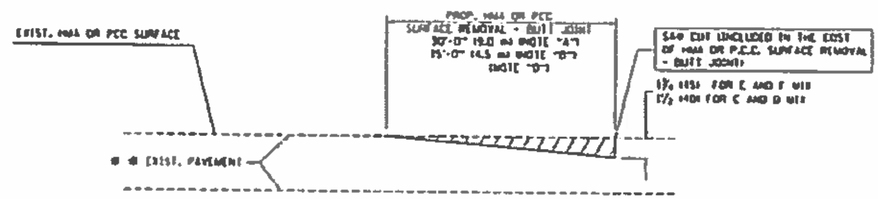
OPTION 2

TYPICAL TEMPORARY RAMP

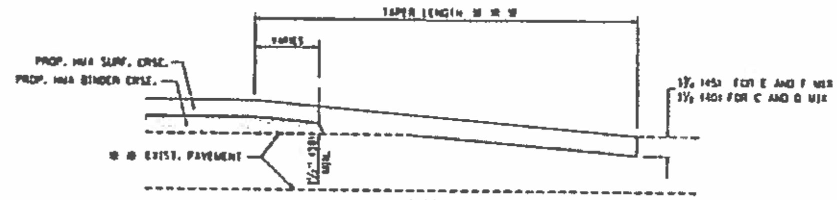


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

✱ ✱ PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.

D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.

E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.

F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT

G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

✱ SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

✱✱✱ 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

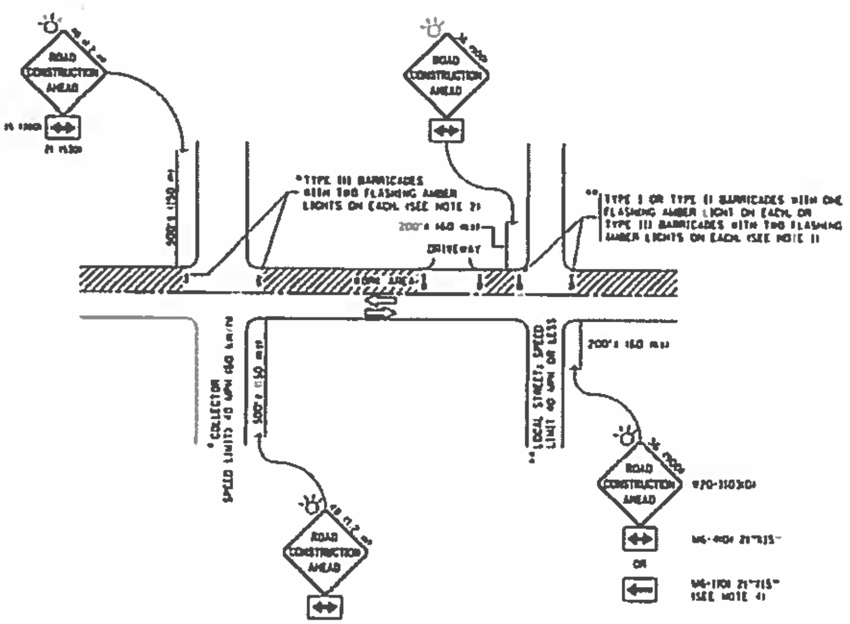
BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

DESIGNED -	REVISED -	STATE OF ILLINOIS	BUTT JOINT AND
DRAWN -	REVISED -	DEPARTMENT OF TRANSPORTATION	HMA TAPER DETAILS
CHECKED -	REVISED -		SCALE: NONE
DATE -	REVISED -		SHEET NO. 1 OF 1 SHEETS

F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | CONTRACT NO.



NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (W6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW W6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (W6-1 OR W6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

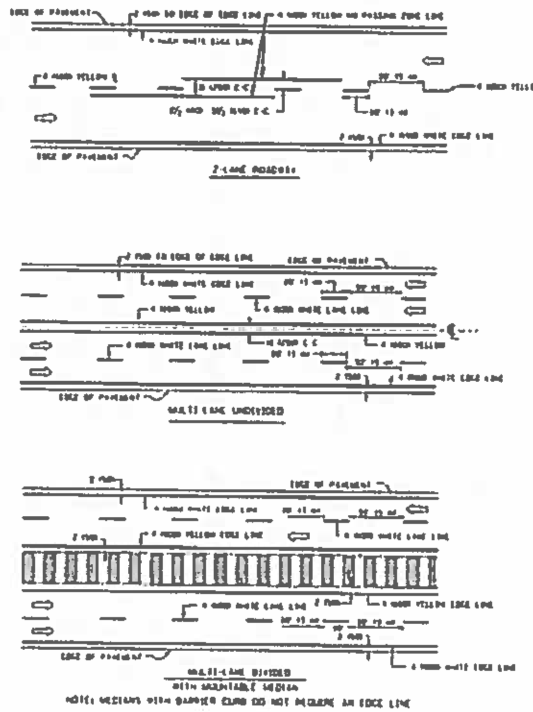
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

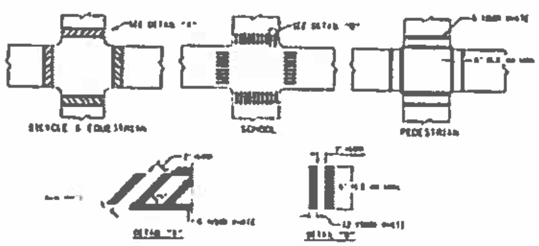
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. TO STA.

SECTION | COUNTY | TOTAL SHEETS | SHEET NO.

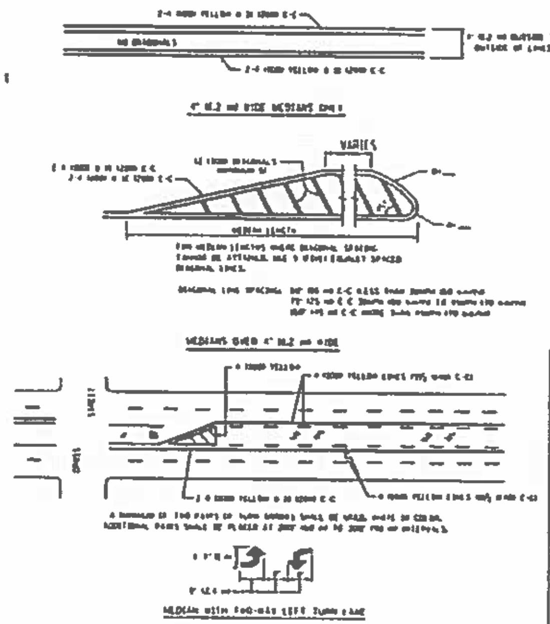
CONTRACT NO.



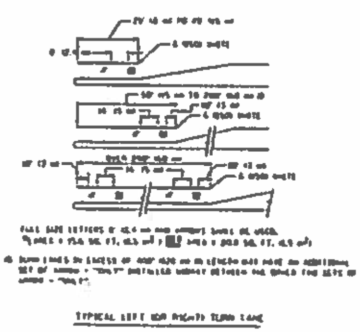
TYPICAL LANE AND EDGE LINE MARKING



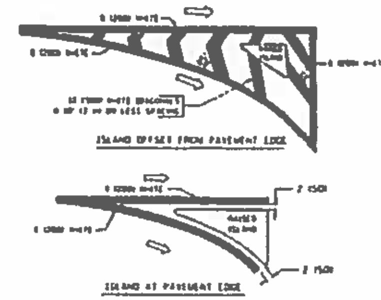
TYPICAL CROSSWALK MARKING



TYPICAL PAINTED MEDIAN MARKING



TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

DESIGNED	DRAWN	CHECKED	DATE	REVISED	SECTION	COUNTY	CONTRACT NO.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

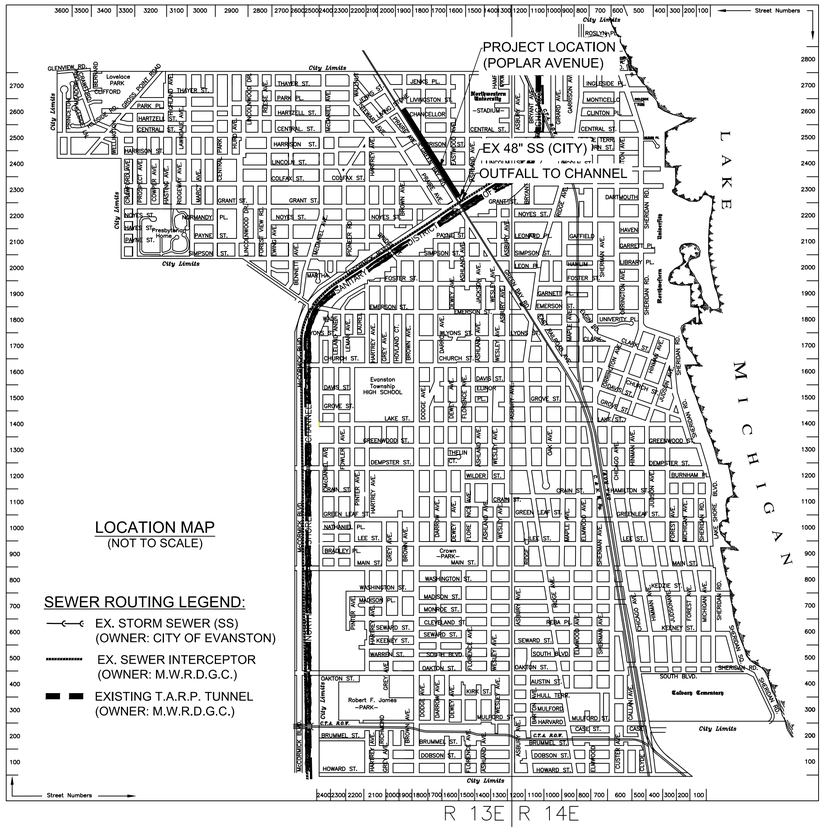
POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
CITY OF EVANSTON
BID #22-43
SECTION #22-00294-00-PK

INDEX OF SHEETS

PROJECT MANAGER

CHRISTOPHER VENATTA, PE
SENIOR PROJECT MANAGER
PUBLIC WORKS AGENCY
BUREAU OF CAPITAL PLANNING AND ENGINEERING

2100 RIDGE AVENUE
EVANSTON, ILLINOIS
(847) 448-8129
CVENATTA@CITYOFEVANSTON.ORG



LOCATION MAP
(NOT TO SCALE)

SEWER ROUTING LEGEND:

- EX. STORM SEWER (SS) (OWNER: CITY OF EVANSTON)
- EX. SEWER INTERCEPTOR (OWNER: M.W.R.D.G.C.)
- EXISTING T.A.R.P. TUNNEL (OWNER: M.W.R.D.G.C.)

HIGHWAY AND TRAFFIC STANDARDS

424001-11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424006-05	DIAGONAL CURB RAMPS FOR SIDEWALKS
424011-04	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424021-06	DEPRESSED CORNER FOR SIDEWALKS
424026-03	ENTRANCE / ALLEY PEDESTRIAN CROSSINGS
442201-03	CLASS C AND D PATCHES
602301-04	INLET - TYPE A
606001-08	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701501-06	URBAN LANE CLOSURE, 2L, 2W UNDIVIDED
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
780001-05	TYPICAL PAVEMENT MARKINGS

NOTICE

1. THE EXACT LOCATION OF ALL UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION ACTIVITIES. FOR UTILITY LOCATION CALL J.U.L.I.E. AT 1-800-892-0123.
2. NO WORK TO BE DONE WITHIN THE PAVED STREET AREA FOR FIVE YEARS BY ANY UTILITY.

NOTE

THE PROPOSED PROJECT WILL NOT ALTER OR HAVE IMPACT ON THE FLOOD PROTECTION AREAS AND THE PROPOSED DRAINAGE CONDITION OF THE PROJECT SITES.

SIGNED BY: CHRISTOPHER VENATTA, PE
SENIOR PROJECT MANAGER

X:\Public Works\Engineering\Engineers\FY 2022 PROJECTS\Parking Lot Improvements\CAD\Sheet Files\1.COVER.dwg

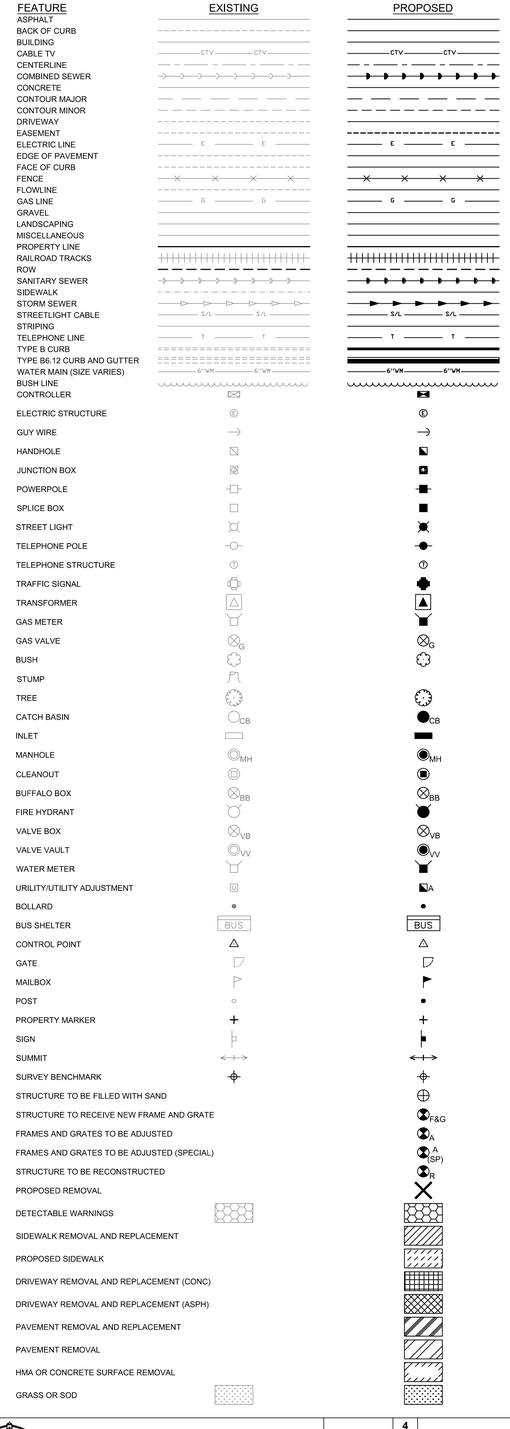
CITY OF EVANSTON
PUBLIC WORKS AGENCY
BUREAU OF CAPITAL PLANNING AND ENGINEERING

DATE	NO.	REVISION
	4	
	3	
	2	
	1	

POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
TITLE SHEET

SCALE	
HORIZONTAL	N/A
VERTICAL	N/A
BID NUMBER: 22-43	
ISSUED FOR: CONSTRUCTION	
DATE: 05/13/2022	
DESIGNED BY:	BN
DRAWN BY:	BN
CHECKED BY:	CV
SHEET	1 OF 18

STANDARD SYMBOLS



GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE PERFORMED ACCORDING TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION, THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" LATEST EDITION, THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" LATEST EDITION, THE DETAILS IN THESE PLANS, THE CONTRACT DOCUMENTS, ALL APPLICABLE REQUIREMENTS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION, THE IEPA AND ORDINANCES OF AUTHORITIES HAVING JURISDICTION AND ALL ADDENDA THERETO.

2. ALL FULL DEPTH SAW-CUTTING OF EXISTING PAVEMENT, CURB, SIDEWALKS AND SURFACES WHEN REQUIRED FOR REMOVAL OR CONSTRUCTION OR AS DIRECTED BY THE ENGINEER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS PAY ITEMS.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING UTILITIES SO THAT THE UTILITIES AND THEIR APPURTENANCES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY, PRIOR TO THE START OF CONSTRUCTION. ALL EXISTING UTILITIES SHALL BE PROTECTED, SUPPORTED AND MAINTAINED IN SERVICE AND RESTORED TO THE CONDITION IN WHICH THEY WERE FOUND, OR BETTER, AT NO EXTRA COST TO THE CONTRACT.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE.

5. ALL ROAD SIGNS, STREET SIGNS, TRAFFIC SIGNS, AND PARKING LOT SIGNS WHICH NEED TO BE RELOCATED OR MOVED DUE TO CONSTRUCTION SHALL BE TAKEN DOWN AND STORED BY THE CONTRACTOR AT HIS OWN EXPENSE, EXCEPT THOSE WHICH THE ENGINEER DEEMS NECESSARY FOR PROPER TRAFFIC CONTROL. AFTER COMPLETION OF THE WORK, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE ENGINEER, RESET ALL SAID SIGNS AT THE LOCATION DESIGNATED BY THE ENGINEER.

6. WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THE LOOSE MATERIAL WILL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE CONTRACT. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF.

7. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE PRIOR TO ORDERING MATERIALS. IN ADDITION, THE CONTRACTOR MUST VERIFY THE LINE AND GRADES. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSION OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS/HER OWN RISK AND EXPENSE AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR ANY COSTS INCURRED.

8. ALL PAVEMENT DIMENSIONS ARE SHOWN TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

9. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE THE MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

10. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 72 HOURS PRIOR TO BEGINNING WORK.

11. IF DURING CONSTRUCTION THE CONTRACTOR ENCOUNTERS OR OTHERWISE BECOMES AWARE OF ANY SEWERS OR UNDERDRAINS OTHER THAN THOSE SHOWN ON THE PLANS, HE/SHE SHALL INFORM THE ENGINEER, WHO SHALL DIRECT THE WORK NECESSARY TO MAINTAIN OR REPLACE THE FACILITIES IN SERVICE AND TO PROTECT THEM FROM DAMAGE DURING CONSTRUCTION IF MAINTAINED. EXISTING FACILITIES TO BE MAINTAINED THAT ARE DAMAGED BECAUSE OF NON-COMPLIANCE WITH THIS PROVISION SHALL BE REPLACED AT THE CONTRACTOR'S OWN EXPENSE.

12. THE CONTRACTOR SHALL PROVIDE TEMPORARY TOILET FACILITIES AND HAND SANITIZING STATIONS FOR THE USE OF ALL THE CONTRACTORS PERSONNEL EMPLOYED ON THE WORK SITE. THE FACILITIES SHALL BE MAINTAINED IN PROPER SANITARY CONDITION THROUGHOUT THE PROJECT. THE LOCATION OF THE TEMPORARY FACILITIES SHALL BE APPROVED BY THE ENGINEER.

13. THE CONTRACTOR MUST OBTAIN A FIRE HYDRANT PERMIT IN ORDER TO USE THE CITY WATER. FOR MORE INFORMATION, CONTACT THE WATER DEPARTMENT AT (847) 475-6880 OR (847) 448-4311.

14. IF ANY SOFT OF YIELDING MATERIALS ARE DETECTED AFTER EXCAVATION TO THE PROPOSED SUBGRADE, THE CONTRACTOR WILL, AT THE DIRECTION OF THE ENGINEER, REMOVE THE MATERIAL AND REPLACE IT WITH AGGREGATE BASE COURSE, TYPE B. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR "EARTH EXCAVATION" AND PER SQUARE YARD FOR "AGGREGATE BASE COURSE, TYPE B".

15. CONSTRUCTION ACTIVITIES MAY OCCUR BETWEEN 7:00AM AND 5:00PM MONDAY THROUGH FRIDAY AND 8:00AM TO 4:00PM ON SATURDAYS (AS APPROVED BY THE ENGINEER). CONSTRUCTION ACTIVITIES ON SUNDAY ARE PROHIBITED. NO WORK WILL BE PERFORMED ON STATE OF ILLINOIS OBSERVED HOLIDAYS. CONSTRUCTION ACTIVITIES ARE IDENTIFIED AS THE OPERATION OF ANY EQUIPMENT, INCLUDING BUT NOT LIMITED TO THE WARMING UP OF ANY PIECE OF EQUIPMENT OR TURNING ON ENGINES. CONSTRUCTION ACTIVITIES SHALL NOT BEGIN BEFORE 7:00AM. ANY VIOLATION FOR WORKING HOURS CONTRACTOR WILL BE FINED $500.00 FOR OCCURRENCE.

16. THE STORAGE OF EQUIPMENT AND/OR MATERIALS WITHIN THE PARKWAYS SHALL REQUIRE PRIOR APPROVAL OF THE ENGINEER.

PROJECT SPECIFIC NOTES

1. THE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS THAT INCLUDE; CRITICAL SPOT GRADES SUCH AS OVERFLOW ELEVATIONS, SPOT ELEVATIONS ALONG THE DESIGNATED ADA ROUTE, SUFFICIENT INFORMATION SUCH THAT THE ENGINEER MAY VERIFY DETENTION VOLUMES, RIM AND INVERT ELEVATIONS OF ALL SEWERS, RIM AND TOP OF PIPE ELEVATIONS OF ALL WATER MAIN, LOCATIONS OF ALL INSTALLED UNDERGROUND UTILITIES, LOCATIONS OF ALL BURIED BENDS AND FITTINGS AND ALL FIELD CHANGES FROM THE APPROVED DRAWINGS.

2. ALL CONSTRUCTION WILL BE INSPECTED BY THE OWNER'S REPRESENTATIVE. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF EVANSTON AS WELL AS THE STANDARD SPECIFICATIONS.

3. ALL PUBLIC WATER MAINS, STORM SEWERS AND SANITARY SEWER MAINS MUST BE ACCEPTED BY THE CITY OF EVANSTON.

4. ALL ELEVATIONS ARE ON CITY OF EVANSTON VERTICAL DATUM. COE DATUM + 578.98 = NAVD88 DATUM.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL TRAFFIC CONTROL TO ADEQUATELY INFORM AND PROTECT THE PUBLIC OF ALL CONSTRUCTION OPERATIONS.

6. PRIOR TO PLACEMENT OF PAVEMENT/STONE, THE SUBGRADE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER. PROOF-ROLLING SHALL BE DONE USING A THREE AXLE DUMP TRUCK TOGETHER WITH LOAD WEIGHING AT LEAST TWENTY-FIVE (25) TONS. THE LOAD SHALL BE UNIFORMLY PLACED IN THE DUMP BODY. ALL DEFICIENCIES SHALL BE REPAIRED AND RE-PROOF-ROLLED UNTIL FOUND ACCEPTABLE TO THE ENGINEER.

7. ALL STONE USED ON THE PROJECT SHALL BE CRUSHED UNLESS SPECIFICALLY NOTED OTHERWISE.

8. ALL CONNECTIONS TO EXISTING COMBINED SEWER OR SANITARY SEWER MANHOLES SHALL BE INSTALLED WITH A NEOPRENE BOOT SECURED WITH DOUBLE STAINLESS STEEL STRAPS MEETING THE REQUIREMENTS OF ASTM C-923.

9. ALL CONCRETE SHALL HAVE AN IDOT TYPE 3 MEMBRANE CURING COMPOUND APPLIED TO THE SURFACE WITHIN 1 HOUR OF FINAL STRIKING AT THE MANUFACTURER RECOMMENDED APPLICATION RATE.

10. ALL DOWEL BARS AND TIE BARS SHALL BE EPOXY COATED UNLESS NOTED OTHERWISE.

11. ALL PAVEMENT SUBGRADE SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY. ALL SUBGRADE IN LAWN AREAS SHALL BE COMPACTED TO 90% MODIFIED PROCTOR DENSITY.

12. SPREAD SCREENED TOPSOIL ON ALL DISTURBED AREAS AND PROPOSED GREEN AREAS. TOPSOIL SHALL COMPLY WITH REQUIREMENTS OF ARTICLE 1081.05.

13. AT LEAST 50 PERCENT OF ALL PARKING SPACES ON POPLAR AVENUE SHALL REMAIN AVAILABLE FOR USE THROUGHOUT THE DURATION OF THE PROJECT.

14. ACCESS TO THE METRA STATION SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.

SUMMARY OF QUANTITIES
POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS

Item No.	Item	Unit	Quantity
1	TEMPORARY FENCE	FOOT	500
2	TREE TRUNK PROTECTION	EACH	8
3	TREE ROOT PRUNING	FOOT	250
4	TREE PRUNING	EACH	50
5	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	20
6	TRENCH BACKFILL	CU YD	308
7	POROUS GRANULAR BACKFILL	TON	82
8	TOPSOIL FURNISH AND PLACE, SPECIAL	CU YD	179
9	EXPLORATION TRENCH, SPECIAL (UP TO 8 FEET DEEP)	EACH	2
10	SEEDING	SQ YD	1,401
11	EROSION CONTROL BLANKET	SQ YD	1,401
12	SODDING, SALT TOLERANT	SQ YD	147
13	INLET FILTERS	EACH	33
14	SUBBASE GRANULAR MATERIAL, TYPE B	TON	205
15	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	610
16	HIGH EARLY-STRENGTH PCC BASE COURSE WIDENING, 7"	SQ YD	821
17	AGGREGATE FOR TEMPORARY ACCESS	TON	2
18	TEMPORARY HOT-MIX ASPHALT	TON	10
19	BITUMINOUS MATERIALS (TACK COAT)	POUND	6,213
20	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	5
21	AGGREGATE (PRIME COAT)	TON	37
22	LEVELING BINDER (MACHINE METHOD), N50	TON	506
23	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	338
24	TEMPORARY RAMP	SQ YD	338
25	HOT-MIX ASPHALT SURFACE COURSE, MIX 'D', N50	TON	1,031
26	PCC DRIVEWAY PAVEMENT, 8 INCH	SQ YD	27
27	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	8,411
28	DETECABLE WARNINGS	SQ FT	100
29	PAVEMENT REMOVAL	SQ YD	1,813
30	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	7,898
31	DRIVEWAY PAVEMENT REMOVAL	SQ YD	20
32	CURB REMOVAL	FOOT	3,053
33	COMBINATION CURB AND GUTTER REMOVAL	FOOT	2,666
34	SIDEWALK REMOVAL	SQ FT	7,548
35	CLASS D PATCHES, SPECIAL, 9 INCH	SQ YD	672
36	STORM SEWERS 10", SPECIAL (DIP CL50)	FOOT	14
37	WATER MAIN 6" (DIP CL 52), PUSH JOINT, EXTERNAL ZINC-BASED COATED	FOOT	400
38	WATER VALVES, 6", COMPLETE	EACH	2
39	WATER SERVICE LINE, 4" DIA OR GREATER, LONG, COMPLETE - PARTIAL REPLACEMENT	EACH	1
40	WATER SERVICE LINE, 2" DIA OR LESS, SHORT - PARTIAL REPLACEMENT	EACH	2
41	WATER SERVICE LINE, 2" DIA OR LESS, SHORT - FULL REPLACEMENT	EACH	1
42	ADJUSTING SANITARY SERVICES, 8-INCH DIA OR LESS	EACH	3
43	FIRE HYDRANT WITH AUXILIARY VALVE, 6" DIWM PIPE, VALVE BOX AND TEE, COMPLETE	EACH	1
44	DUCTILE IRON WATER MAIN FITTINGS (ALLOWANCE)	POUND	100
45	VALVE VAULTS, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2
46	FILLING VALVE BOXES	EACH	2
47	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	2
48	CATCH BASINS TO BE RECONSTRUCTED	EACH	13
49	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	20
50	FRAMES AND LIDS	EACH	33
51	CONCRETE CURB, TYPE B	FOOT	2,993
52	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	2,663
53	NON-SPECIAL WASTE DISPOSAL	CU YD	460
54	SPECIAL WASTE PLANS AND REPORTS	LSUM	1
55	SOIL DISPOSAL ANALYSIS	EACH	2
56	MOBILIZATION	LSUM	1
57	TRAFFIC CONTROL AND PROTECTION	LSUM	1
58	CONSTRUCTION LAYOUT	LSUM	1
59	STREET SWEEPING	EACH	10
60	SIGN PANEL - TYPE 1	SQ FT	15
61	METAL POST - TYPE A	FOOT	120
62	THERMOPLASTIC PAVEMENT MARKING - LETTER AND SYMBOLS	SQ FT	22
63	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3,365
64	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	305
65	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	68
66	BICYCLE RACKS	EACH	30
67	CONCRETE WHEEL STOPS	EACH	8
68	PRE AND POST CONSTRUCTION SUB-SURFACE VIDEOTAPING	FOOT	500

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS @Ndes
PAVEMENT RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE MIX "D", N50 (IL 9.5 mm)	3.5%@50 Gyr
LEVELING BINDER (MACHINE METHOD) N50 (IL9.5mm)	4%@50 Gyr
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	4%@50 Gyr
PATCHES	
CLASS D PATCHES(HMA BINDER IL 19mm)	4%@50 Gyr
DRIVEWAYS / SPEED HUMPS	
HOT-MIX ASPHALT SURFACE COURSE MIX "D", N50 (IL 9.5 mm)	4%@50 Gyr

*THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS./SQ. YD./IN.
*THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

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CITY OF EVANSTON
PUBLIC WORKS AGENCY
BUREAU OF CAPITAL PLANNING AND ENGINEERING

DATE	NO.	REVISION
	4	
	3	
	2	
	1	

POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
GENERAL NOTES AND SUMMARY OF QUANTITIES

SCALE	
HORIZONTAL	N/A
VERTICAL	N/A
BID NUMBER: 22-43	
ISSUED FOR: CONSTRUCTION	
DATE: 05/13/2022	
DESIGNED BY: BN	
DRAWN BY: BN	
CHECKED BY: CV	
SHEET	2 OF 18

A. REFERENCED SPECIFICATIONS

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:
   * STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
   * STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION;
   * CITY OF EVANSTON MUNICIPAL CODE;
   * THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL;
   * IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

B. NOTIFICATIONS

1. THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055).

2. THE CITY OF EVANSTON ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.

3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

C. GENERAL NOTES

1. ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). CONVERSION FACTOR IS 578.98=0 FT. CITY OF EVANSTON DATUM, 579.70=0.00; CCD=579.88.

2. MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.

3. THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.

4. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.

5. THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.

6. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

7. MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.

8. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.

9. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.

10. RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.

D. SANITARY SEWER

1. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.

2. A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.

3. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY OR MWRD.

4. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).

5. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.

6. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.

7. ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
VITRIFIED CLAY PIPE	ASTM C-700	ASTM C-425
REINFORCED CONCRETE SEWER PIPE	ASTM C-76	ASTM C-443
CAST IRON SOIL PIPE	ASTM A-74	ASTM C-564
DUCTILE IRON PIPE	ANSI A21.51	ANSI A21.11
POLYVINYL CHLORIDE (PVC) PIPE		
6-INCH TO 15-INCH DIAMETER SDR 26	ASTM D-3034	ASTM D-3212
18-INCH TO 27-INCH DIAMETER F/DY=46	ASTM F-679	ASTM D-3212
HIGH DENSITY POLYETHYLENE (HDPE)	ASTM D-3350 ASTM D-3035	ASTM D-3261,F-2620 (HEAT FUSION)
WATER MAIN QUALITY PVC		ASTM D-3212,F-477 (GASKETED)
4-INCH TO 36-INCH	ASTM D-2241	
4-INCH TO 12-INCH	AWWA C900	ASTM D-3139
14-INCH TO 48-INCH	AWWA C905	ASTM D-3139 ASTM D-3139

THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE.

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
POLYPROPYLENE (PP) PIPE		
12-INCH TO 24-INCH DOUBLE WALL	ASTM F-2736	D-3212, F-477
30-INCH TO 60-INCH TRIPLE WALL	ASTM F-2764	D3212, F-477

8. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE ¼ " TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO ¼ THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.

9. NON-SHEAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS.

10. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICKHOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID.

11. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:
    a) A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SHEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUBWYE SADDLE OR HUB-TEE SADDLE.
    b) REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION.
    c) WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.

12. WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.

13. ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.

14. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE.

15. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRECAST "RUBBER BOOTS" THAT CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRECAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS.

16. ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG.

17. EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES ASSOCIATED WITH VOLUME CONTROL FACILITIES, DRAIN TILES/FIELD TILES/UNDERDRAINS/PERFORATED PIPES ARE NOT ALLOWED TO BE CONNECTED TO OR TRIBUTARY TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS IN COMBINED SEWER AREAS. CONSTRUCTION OF NEW FACILITIES OF THIS TYPE IS PROHIBITED; AND ALL EXISTING DRAIN TILES AND PERFORATED PIPES ENCOUNTERED WITHIN THE PROJECT AREA SHALL BE PLUGGED OR REMOVED, AND SHALL NOT BE CONNECTED TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS.

18. A BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

E. EROSION AND SEDIMENT CONTROL

1. THE CONTRACTOR SHALL INSTALL THE EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.

2. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE.

3. ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.

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

5. INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:
    a) UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE.
    b) ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.

6. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE CO-PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.

7. A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.

8. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE.

9. MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION TO CONCRETE WASHOUT FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONSTRUCTION ACTIVITIES.

10. TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN. VOLUME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.

12. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.

13. ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT).

14. VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.

15. SOIL STOCKPILES SHALL, AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS.

16. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL BLANKET.

17. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.

18. THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COMBINED SEWER AREA FOR GREEN INFRASTRUCTURE PRACTICES.

19. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.

20. THE CONTRCTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMAINS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATERS SHALL NOT BE DISCHARGE TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.

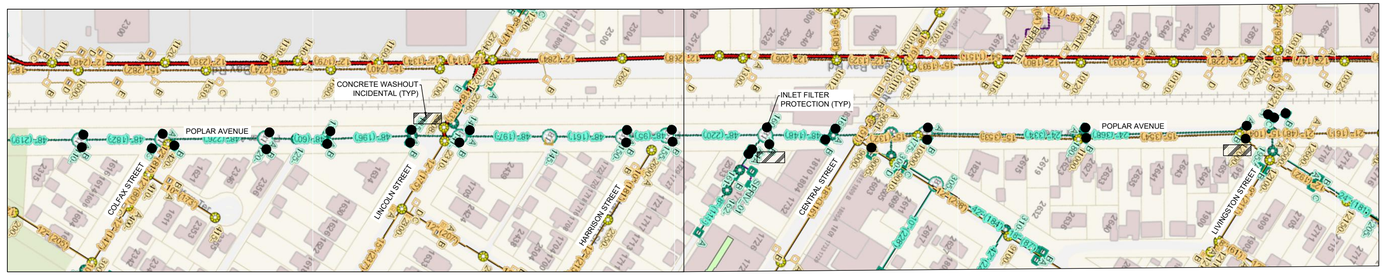
21. ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.

22. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIODS OF CONSTRUCTION SHUTDOWN UNTIL PERMANENT STABILIZATION IS ACHIEVED.

23. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.

24. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, SITE INSPECTOR, OR MWRD.

POPLAR AVENUE FROM COLFAX STREET TO LIVINGSTON STREET
EROSION AND SEDIMENT CONTROL PLAN



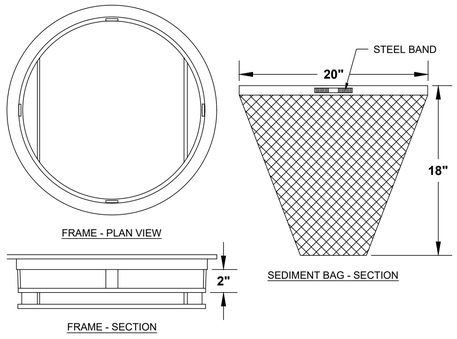
NOTES:

1. CONSTRUCTION PROGRAM SCHEDULE

   PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL MEET WITH THE RESIDENT ENGINEER TO DISCUSS THE PROJECT CONSTRUCTION ACTIVITIES, EROSION AND SEDIMENT CONTROL PRACTICES, AND SITE RESTORATION MEASURES. SITE CLEARING AND EXCAVATION SHALL NOT PROCEED UNTIL THE CONTRACTOR PREPARES AND SUBMITS A CONSTRUCTION PROGRAM SCHEDULE FOR ALL EROSION AND SEDIMENT CONTROL PRACTICES, CONSTRUCTION ACTIVITIES, AND SITE RESTORATION MEASURES.

2. BEST MANAGEMENT PRACTICES

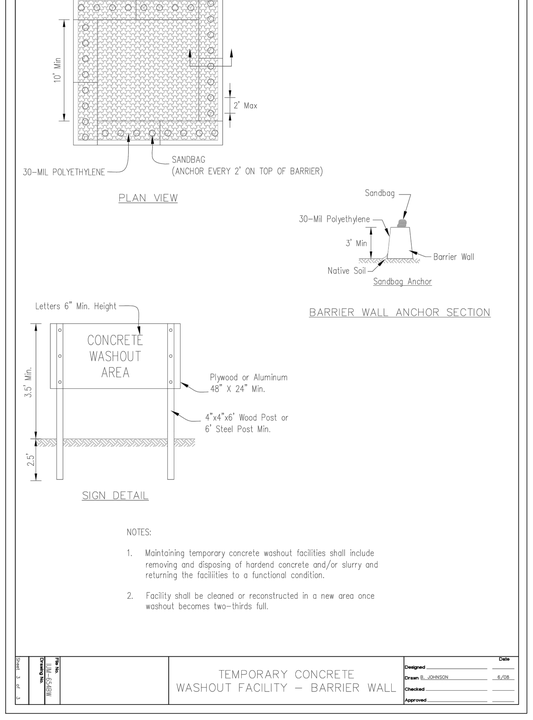
- THE EXISTING DRAINAGE STRUCTURES, AS INDICATED ON THE PLANS, SHALL BE PROVIDED WITH INLET FILTER CONTROL DEVICES. THESE DEVICES SHALL BE MAINTAINED IN PLACE DURING THE ENTIRE CONSTRUCTION PERIOD.
- THE STORM SEWER SHALL BE INSTALLED AS SOON AS EARTHWORK OPERATIONS PERMIT. THE AREAS AROUND INLET STRUCTURES SHALL BE TEMPORARILY GRADED TO GROUND LEVEL 12 INCHES BELOW THE STRUCTURE RIM TO INHIBIT DRAINAGE INTO THE STRUCTURE AND CREATE TEMPORARY SEDIMENT TRAPS. INSTALL FILTER FABRIC UNDER THE INLET CASTING GRATES IMMEDIATELY UPON INSTALLATION OF THE STRUCTURES.
- ALL SEDIMENT FILTERS AND EROSION PROTECTION FEATURES SHALL BE INSPECTED AND MAINTAINED AT LEAST ONCE A WEEK, WITHIN 24 HOURS OF THE END OF A 0.50 INCH RAINFALL EVENT, AND PERIODICALLY AS OTHERWISE NECESSARY TO ALLOW THEM TO OPERATE EFFECTIVELY.
- EXCAVATED SOIL STOCKPILE LOCATIONS SHALL BE LIMITED TO WITHIN THE CONSTRUCTION SITE.
- CONSTRUCTION VEHICLE ACCESS SHALL BE LIMITED TO DEFINED CONNECTIONS TO/FROM THE ADJACENT STREETS.
- SOIL, MUD, OR DEBRIS DEPOSITS TRACKED OR WASHED ON THE ADJACENT STREETS SHALL BE REMOVED DAILY.
- WATER PUMPED OR OTHERWISE DISCHARGED FROM THE WORK SITE DURING DEWATERING OPERATIONS SHALL BE FILTERED TO MINIMIZE THE OFF-SITE DISCHARGE OF SUSPENDED SOLIDS.
- IT IS INTENDED THAT ALL PERMANENT GRASS AREAS BE ESTABLISHED WITH TURF GRASS SOD WITHIN SEVEN DAYS AFTER COMPLETION OF TOPSOIL PLACEMENT OPERATIONS.
- WASHOUT WATER FROM THE CONCRETE TRUCKS IS NOT ALLOWED TO BE DISCHARGED DIRECTLY INTO THE COMBINED SEWER SYSTEM WITHOUT PRETREATMENT. IF A CONCRETE WASHOUT PAD OR DUMPSTER IS NOT MAINTAINED ON SITE, THE CONCRETE TRUCKS SHALL BE REQUIRED TO RETURN TO THE CONCRETE SUPPLIES PLANT FOR WASHOUT CLEANING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATER MAINS, AS WELL AS THEIR SERVICES AND APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG, OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATER SHALL NOT BE DISCHARGED TO WATERWAYS, FLOOD PROTECTION AREAS, OR THE COMBINED SEWER SYSTEM.



NOTES:

1. FRAME: TOP FLANGE FABRICATED FROM 1¼" X 1¼" X 1/8" ANGLE. BASE RIM FABRICATED FROM 1½" X 1/2" X 1/8" CHANNEL. HANDLES AND SUSPENSION BRACKETS FABRICATED FROM 1½" X 1/4" FLAT STOCK. ALL STEEL CONFORMING TO ASTM-A36.
2. SEDIMENT BAG: BAG FABRICATED FROM 4 OZ./ SQ.YD. NON-WOVEN POLYPROPYLENE GEOTEXTILE REINFORCED WITH POLYESTER MESH. BAG SECURED TO BASE RIM WITH A STAINLESS STEEL STRAP AND LOCK.
3. FILTER FOR OTHER SHAPED GRATES SHALL BE APPROVED IN ADVANCE OF PLACEMENT BY RESIDENT ENGINEER.

INLET FILTER PROTECTION
(TO BE INSTALLED ON ALL DRAINAGE STRUCTURES WITHIN WORKZONE)



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CITY OF EVANSTON PUBLIC WORKS AGENCY BUREAU OF CAPITAL PLANNING AND ENGINEERING	DATE	NO.	REVISION
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POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
EROSION AND SEDIMENT CONTROL PLAN

SCALE	
HORIZONTAL	N/A
VERTICAL	N/A

BID NUMBER: 22-43

ISSUED FOR:

DATE: 05/13/2022

DESIGNED BY: BN
DRAWN BY: BN
CHECKED BY: CV

SHEET
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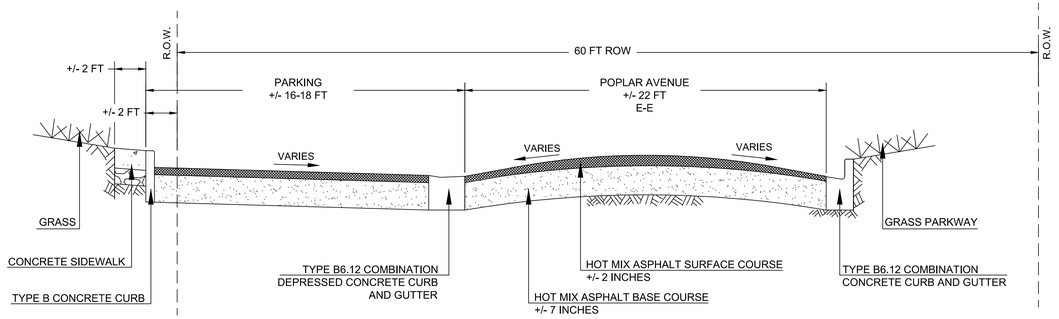
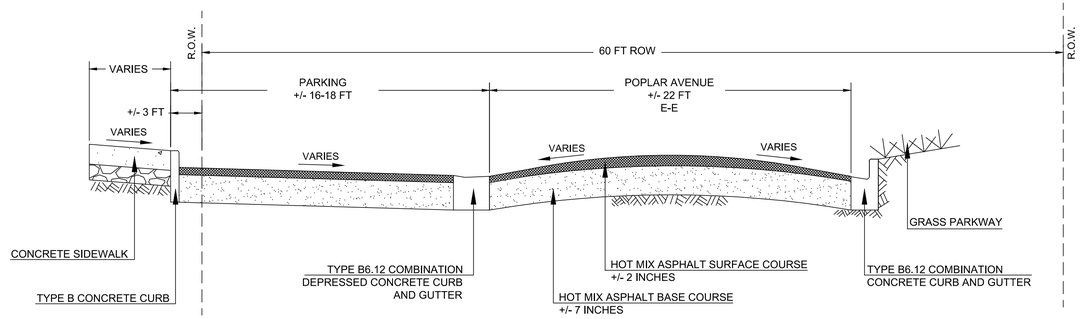
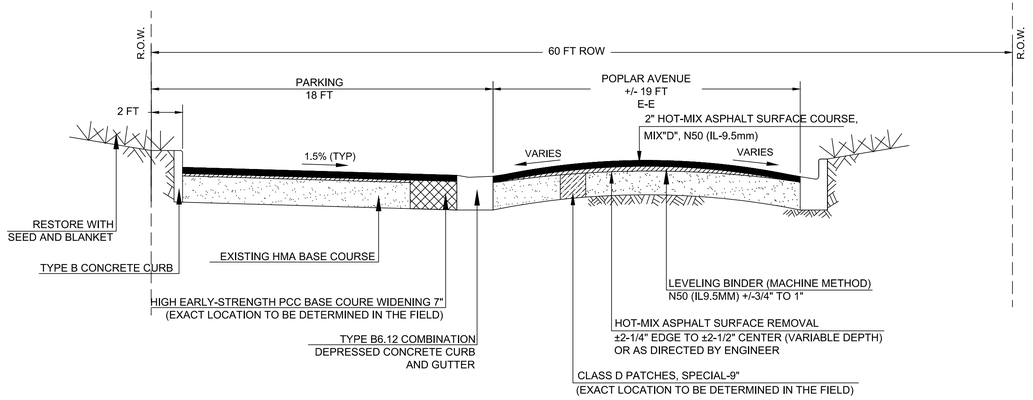


EXISTING
TYPICAL CROSS-SECTION
STA. 10+00 TO 21+00 AND STA. 28+00 TO 37+00
(NOT TO SCALE)

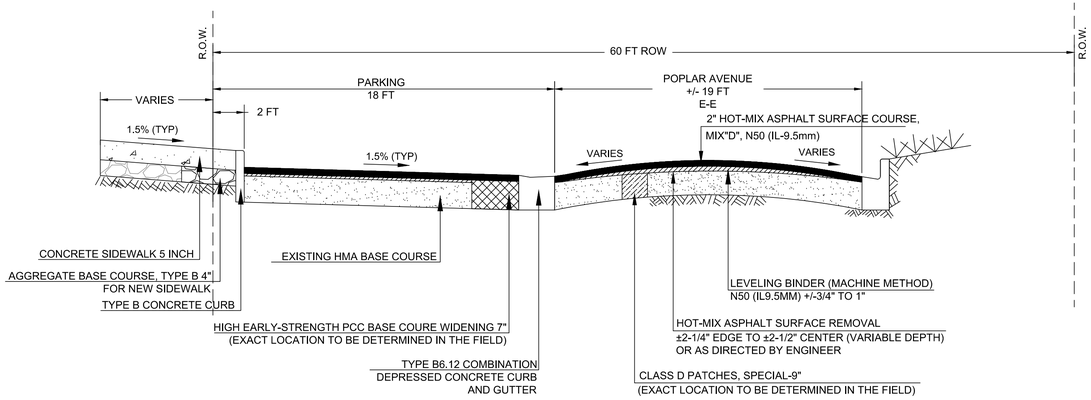


EXISTING
TYPICAL CROSS-SECTION
STA. 21+00 AND STA. 28+00
(NOT TO SCALE)



PROPOSED
TYPICAL CROSS-SECTION
STA. 10+00 TO 21+00 AND STA. 28+00 TO 37+00
(NOT TO SCALE)

NOTE:
1) PROPOSED PARKING LOT DIMENSIONS SHALL BE TAKEN FROM EXISTING ROW LINE. CONTRACTOR TO ESTABLISH ROW PRIOR TO CONSTRUCTION.
2) ENSURE POSITIVE DRAINAGE FROM LIMITS OF DISTURBED AREA TO CURB AND GUTTER.



PROPOSED
TYPICAL CROSS-SECTION
STA. 21+00 AND STA. 28+00
(NOT TO SCALE)

NOTE:
1) PROPOSED PARKING LOT DIMENSIONS SHALL BE TAKEN FROM EXISTING ROW LINE. CONTRACTOR TO ESTABLISH ROW PRIOR TO CONSTRUCTION.
2) ENSURE POSITIVE DRAINAGE FROM LIMITS OF DISTURBED AREA TO CURB AND GUTTER.

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PUBLIC WORKS AGENCY
BUREAU OF CAPITAL PLANNING AND ENGINEERING

DATE	NO.	REVISION
	4	
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POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
TYPICAL SECTIONS

SCALE	
HORIZONTAL	N/A
VERTICAL	N/A

BID NUMBER: 22-43

ISSUED FOR:

DATE: 05/13/2022

DESIGNED BY: BN
DRAWN BY: BN
CHECKED BY: CV

SHEET
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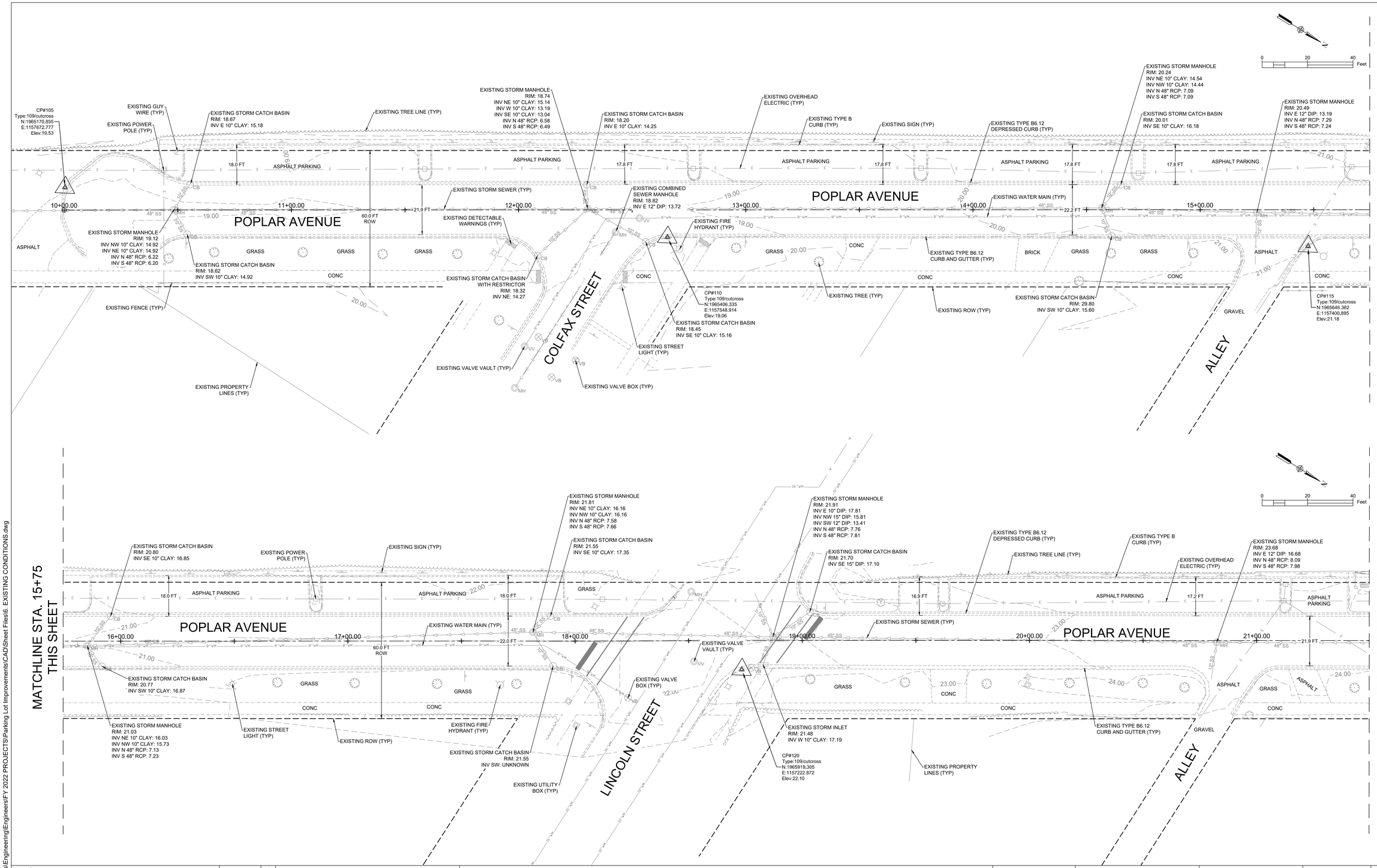

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CITY OF EVANSTON
PUBLIC WORKS AGENCY
BUREAU OF CAPITAL PLANNING AND ENGINEERING

DATE	NO.	REVISION
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POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
EXISTING CONDITIONS

SCALE	
HORIZONTAL	1" = 20'
VERTICAL	N/A

BID NUMBER: 22-43

ISSUED FOR: CONSTRUCTION
DATE: 05/13/2022

DESIGNED BY: BN
DRAWN BY: BN
CHECKED BY: CV

SHEET
6 OF 18

MATCHLINE STA. 21+50
SEE SHEET 6

MATCHLINE STA. 27+00
THIS SHEET

POPLAR AVENUE

HARRISON STREET

ALLEY

EXISTING STORM MANHOLE
RIM: 23.39
INV NE 10" DIP: 18.34
INV NW 10" CLAY: 18.25
INV N 48" RCP: 8.51
INV S 48" RCP: 8.29

EXISTING TYPE B
CURB (TYP)

EXISTING SIGN (TYP)

EXISTING WALL (TYP)

EXISTING STORM CATCH BASIN
RIM: 22.85
INV E 10" DIP: 19.20
INV SE 10" CLAY: 18.65

EXISTING STORM MANHOLE
RIM: 23.92
INV W 6" CLAY: 18.42
INV NW 10" CLAY: 18.42
INV N 48" RCP: 8.67
INV S 48" RCP: 8.67

EXISTING STORM CATCH BASIN
RIM: 23.73
PIPES NOT VISIBLE

EXISTING POWER
POLE (TYP)

EXISTING OVERHEAD
ELECTRIC (TYP)

EXISTING TYPE B6.12
DEPRESSED CURB (TYP)

EXISTING CLEANOUT

EXISTING STORM MANHOLE
RIM: 25.75
INV NW 3" CMP: 20.61
INV S 6" CLAY: 20.45
INV NW 4" DIP: 20.43
INV E 12" CLAY: 20.39
INV W 12" RCP: 20.31

EXISTING STORM CATCH BASIN
RIM: 24.85
INV E 10" CLAY: 19.43

EXISTING TYPE B6.12
CURB AND GUTTER (TYP)

EXISTING STREET
LIGHT (TYP)

EXISTING COMBINED
SEWER MANHOLE
RIM: 24.02
INV SW 8" DIP: 18.72
INV E 12" DIP: 18.22

EXISTING STORM SEWER (TYP)

EXISTING WATER MAIN (TYP)

EXISTING STORM INLET
RIM: 22.88
INV W 10" DIP: 19.60

EXISTING ROW (TYP)

EXISTING STORM INLET
RIM: 23.52
INV W 10" DIP: 19.97

EXISTING TREE
LINE (TYP)

EXISTING FENCE (TYP)

EXISTING FIRE
HYDRANT (TYP)

CP#125
Type:109/cutcross
N:1966312.413
E:1156973.801
Elev:24.39

EXISTING STORM CATCH BASIN
RIM: 25.33
INV NE 8" DIP: 22.46
INV E 10" RCP: 20.75
INV NW 10" PVC: 20.68

EXISTING STORM INLET
RIM: 25.14
INV E 8" DIP: 23.08

CP#130
Type:109/cutcross
N:1966494.645
E:1156857.454
Elev:25.42

EXISTING STORM INLET
RIM: 24.76
INV W 10" DIP: 20.91

EXISTING STORM MANHOLE
RIM: 25.18
INV SW 12" CLAY: 19.62
INV E 10" CLAY: 18.93
INV W 10" CLAY: 18.91
INV N 48" RCP: 9.18
INV S 48" RCP: 9.02

EXISTING TREE (TYP)

EXISTING STORM INLET
RIM: 24.60
INV NW 10" DIP: 20.80

0 20 40 Feet

MATCHLINE STA. 27+00
THIS SHEET

MATCHLINE STA. 33+00
SHEET 8

CENTRAL STREET

BROADWAY AVENUE

POPLAR AVENUE

EXISTING STORM CATCH BASIN
RIM: 23.93
IN SE 10" DIP: 20.43
INV E 10" DIP: 19.68

EXISTING CURB STOPS

EXISTING STORM MANHOLE
RIM: 24.27
INV N 48" RCP: 10.90
INV E 48" RCP: 10.15
INV S 48" RCP: 10.10

EXISTING STORM MANHOLE
RIM: 14.16
INV NE 10" DIP: 19.73
INV NW 10" CLAY: 18.04
INV N 24" CLAY: 14.24
INV S 24" CLAY: 14.20

EXISTING STORM CATCH BASIN
RIM: 24.07
INV SE 10" CLAY: 19.08

EXISTING SIGN (TYP)

EXISTING OVERHEAD
ELECTRIC (TYP)

EXISTING POWER
POLE (TYP)

EXISTING TREE LINE (TYP)

EXISTING TYPE B6.12
DEPRESSED CURB (TYP)

EXISTING TYPE B
CURB (TYP)

EXISTING STORM CATCH BASIN
RIM: 25.04
INV SE 10" DIP: 21.60

EXISTING STORM MANHOLE
RIM: 25.48
INV NE 10" DIP: 20.98
INV NW 10" DIP: 20.92
INV N 24" CLAY: 14.88
INV S 24" CLAY: 14.64

EXISTING COMBINED SEWER (TYP)

EXISTING STORM SEWER (TYP)

EXISTING STREET
LIGHT (TYP)

EXISTING WATER MAIN (TYP)

EXISTING TYPE B6.12
CURB AND GUTTER (TYP)

EXISTING FIRE
HYDRANT (TYP)

EXISTING UTILITY
BOX (TYP)

EXISTING STORM INLET
RIM: 23.78
INV SW 10" DIP: 20.43

EXISTING COMBINED SEWER MANHOLE
RIM: 24.15
INV S 15" CLAY: 18.02
INV N 15" CLAY: 17.75
INV SE 18" CLAY: 16.77

CP#135
Type:109/cutcross
N:1966715.231
E:1156716.439
Elev:25.40

EXISTING DETECTABLE
WARNINGS (TYP)

EXISTING ROW (TYP)

EXISTING TREE (TYP)

CP#140
Type:109/cutcross
N:1967028.255
E:1156517.362
Elev:26.10

EXISTING STORM MANHOLE
RIM: 25.42
INV SE 8" PVC: 22.40
INV SE 4" PVC: 19.41
INV N 15" CLAY: 18.66
INV S 15" CLAY: 18.61

EXISTING STORM CATCH BASIN
RIM: 25.22
UNABLE TO OPEN

EXISTING PROPERTY
LINES (TYP)

0 20 40 Feet

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CITY OF EVANSTON
PUBLIC WORKS AGENCY
BUREAU OF CAPITAL PLANNING AND ENGINEERING

DATE	NO.	REVISION
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POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
EXISTING CONDITIONS

SCALE	
HORIZONTAL	1" = 20'
VERTICAL	N/A

BID NUMBER: 22-43

ISSUED FOR: CONSTRUCTION

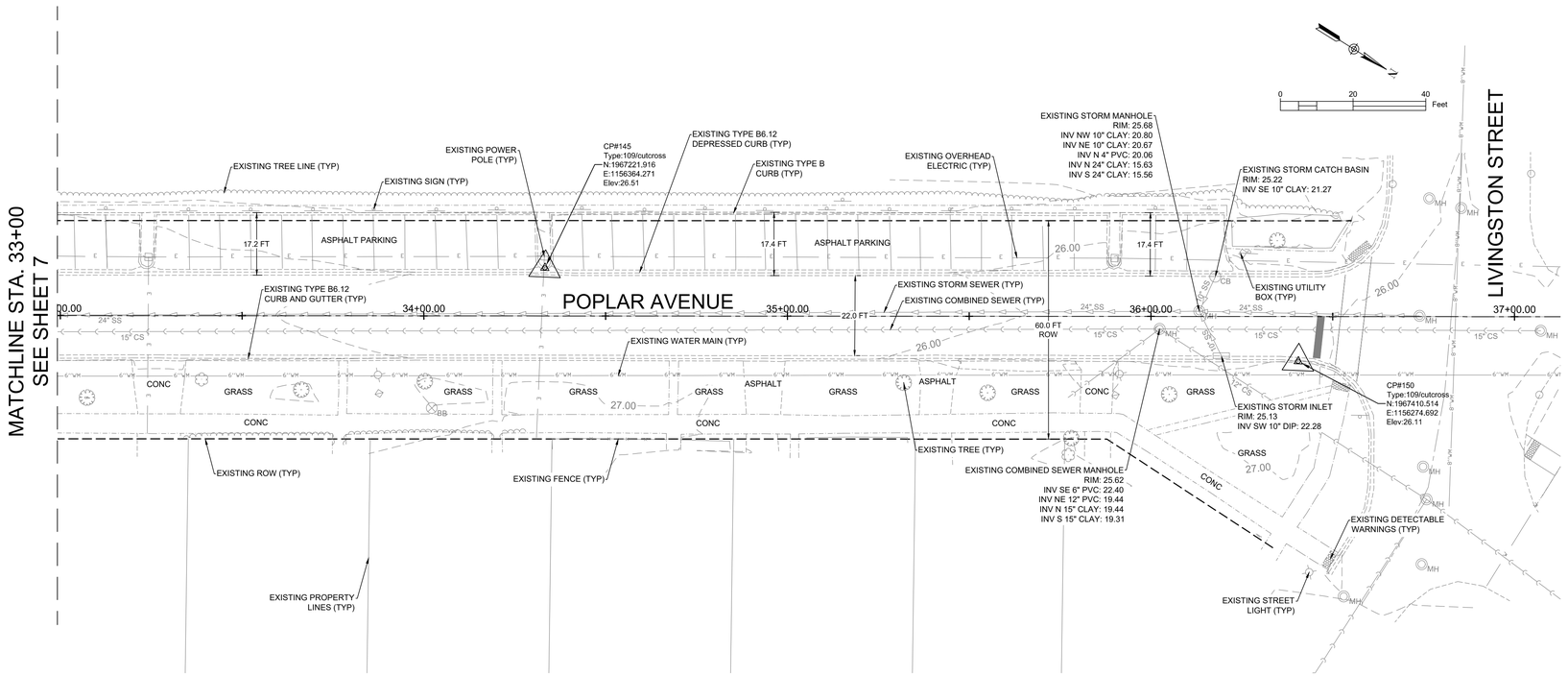
DATE: 05/13/2022

DESIGNED BY: BN

DRAWN BY: BN

CHECKED BY: CV

SHEET
7 OF 18



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CITY OF EVANSTON
PUBLIC WORKS AGENCY
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POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
EXISTING CONDITIONS

SCALE	
HORIZONTAL	1" = 20'
VERTICAL	N/A

BID NUMBER: 22-43

ISSUED FOR: CONSTRUCTION

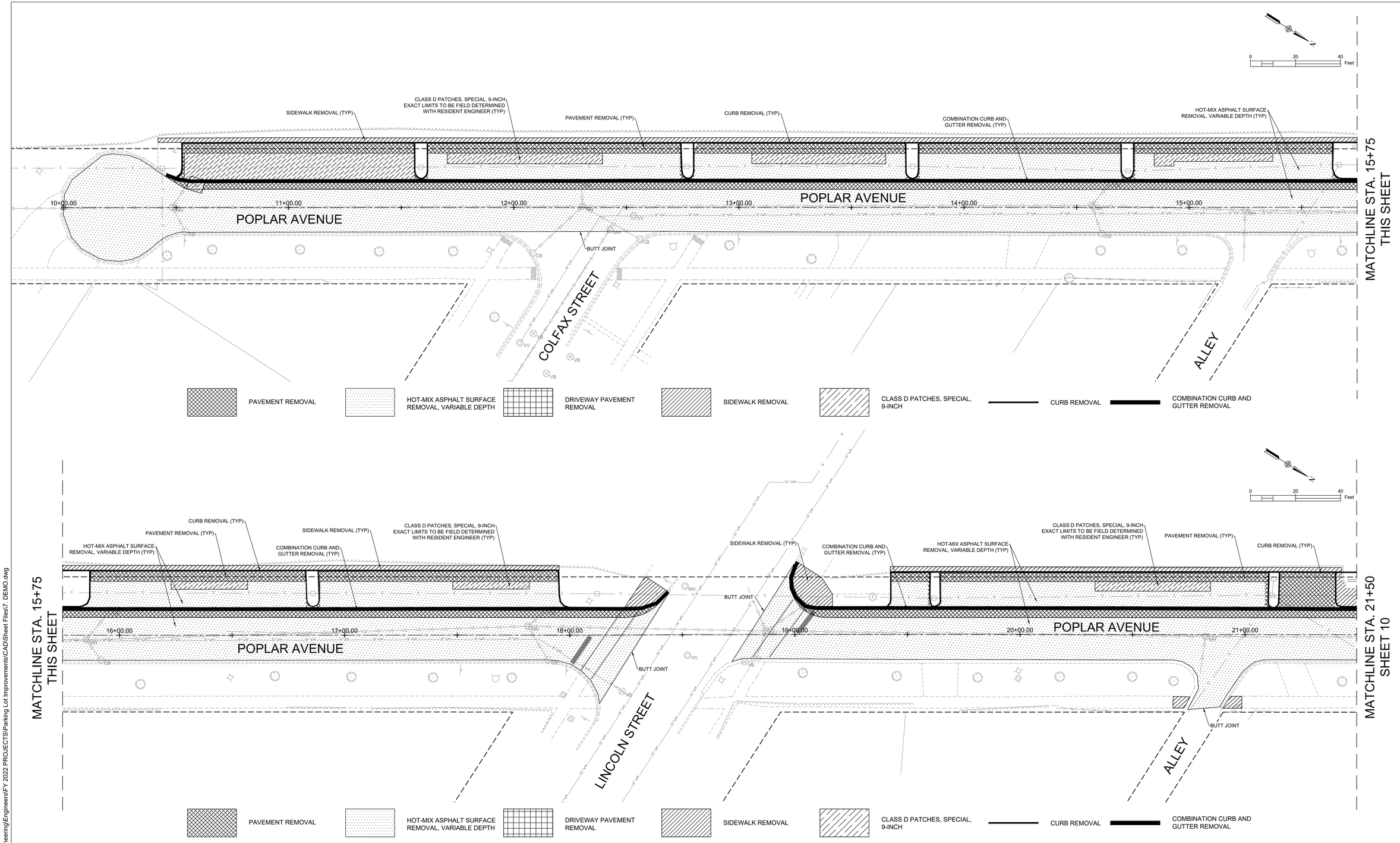
DATE: 05/13/2022

DESIGNED BY: BN

DRAWN BY: BN

CHECKED BY: CV

SHEET
8 OF 18



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CITY OF EVANSTON
PUBLIC WORKS AGENCY
BUREAU OF CAPITAL PLANNING AND ENGINEERING

DATE	NO.	REVISION
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POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
DEMOLITION PLAN

SCALE	
HORIZONTAL	1" = 20'
VERTICAL	N/A

BID NUMBER: 22-43

ISSUED FOR: CONSTRUCTION
DATE: 05/13/2022

DESIGNED BY: BN
DRAWN BY: BN
CHECKED BY: CV

SHEET
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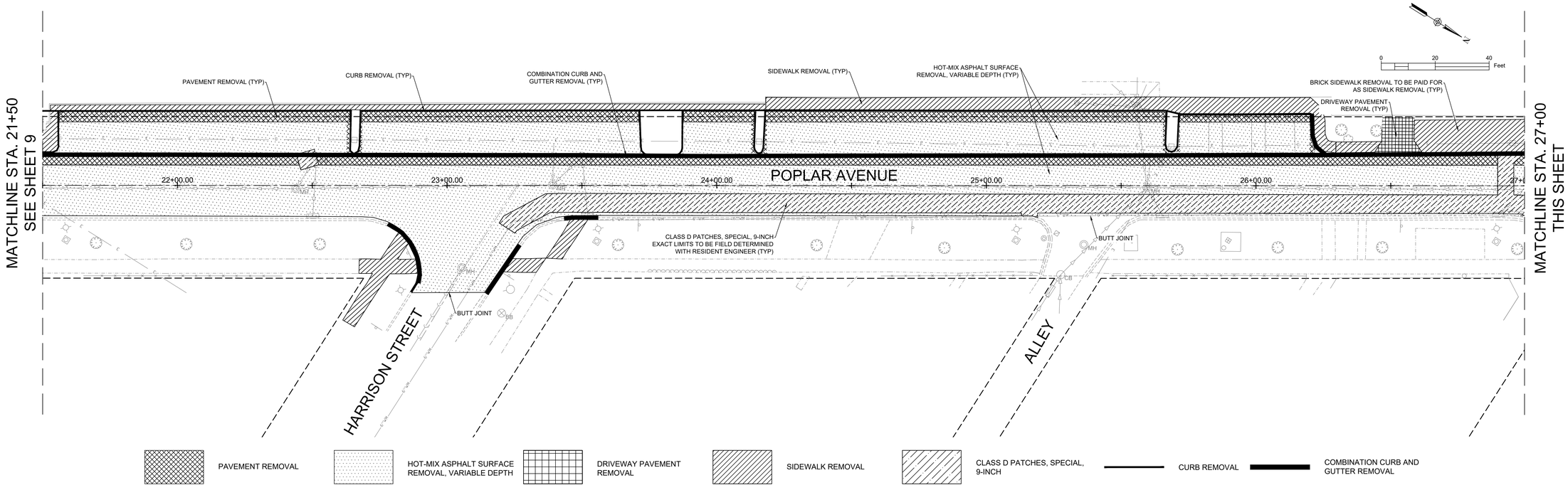

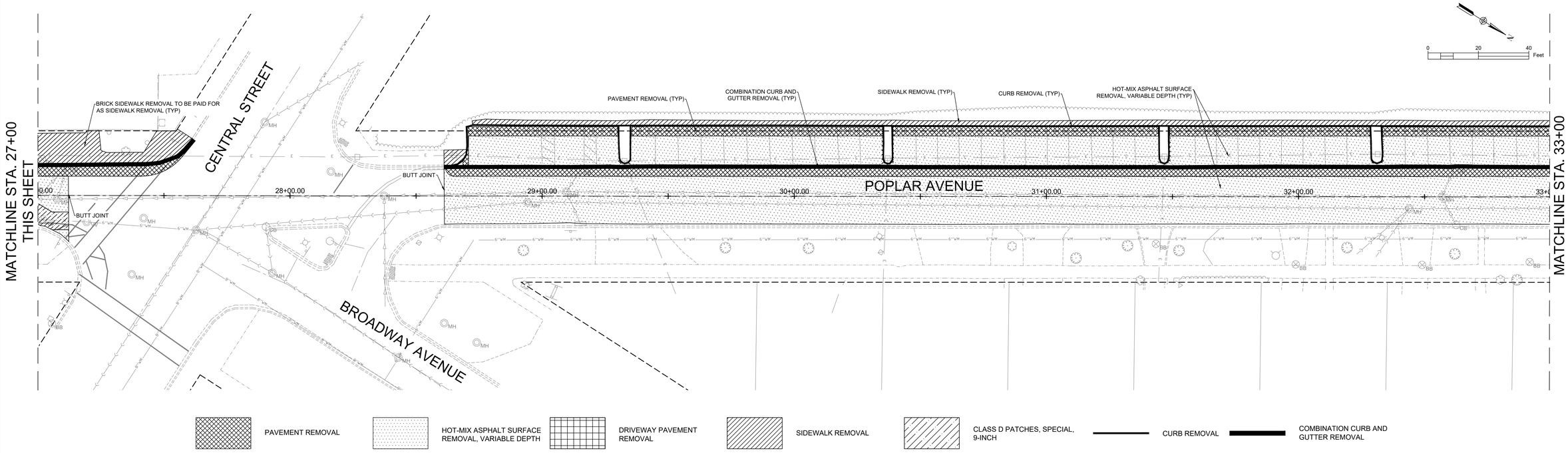

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CITY OF EVANSTON
PUBLIC WORKS AGENCY
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DATE	NO.	REVISION
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POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
DEMOLITION PLAN

SCALE	
HORIZONTAL	1" = 20'
VERTICAL	N/A

BID NUMBER: 22-43

ISSUED FOR: CONSTRUCTION
DATE: 05/13/2022

DESIGNED BY: BN
DRAWN BY: BN
CHECKED BY: CV

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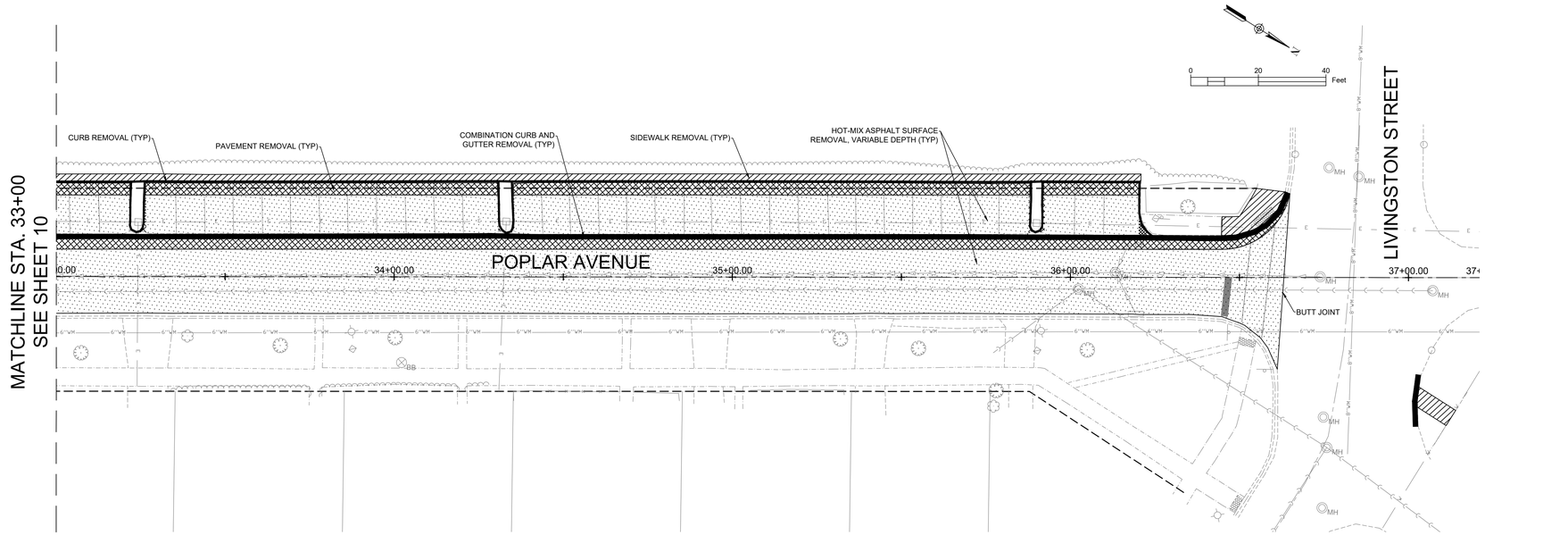

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CITY OF EVANSTON
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DATE	NO.	REVISION
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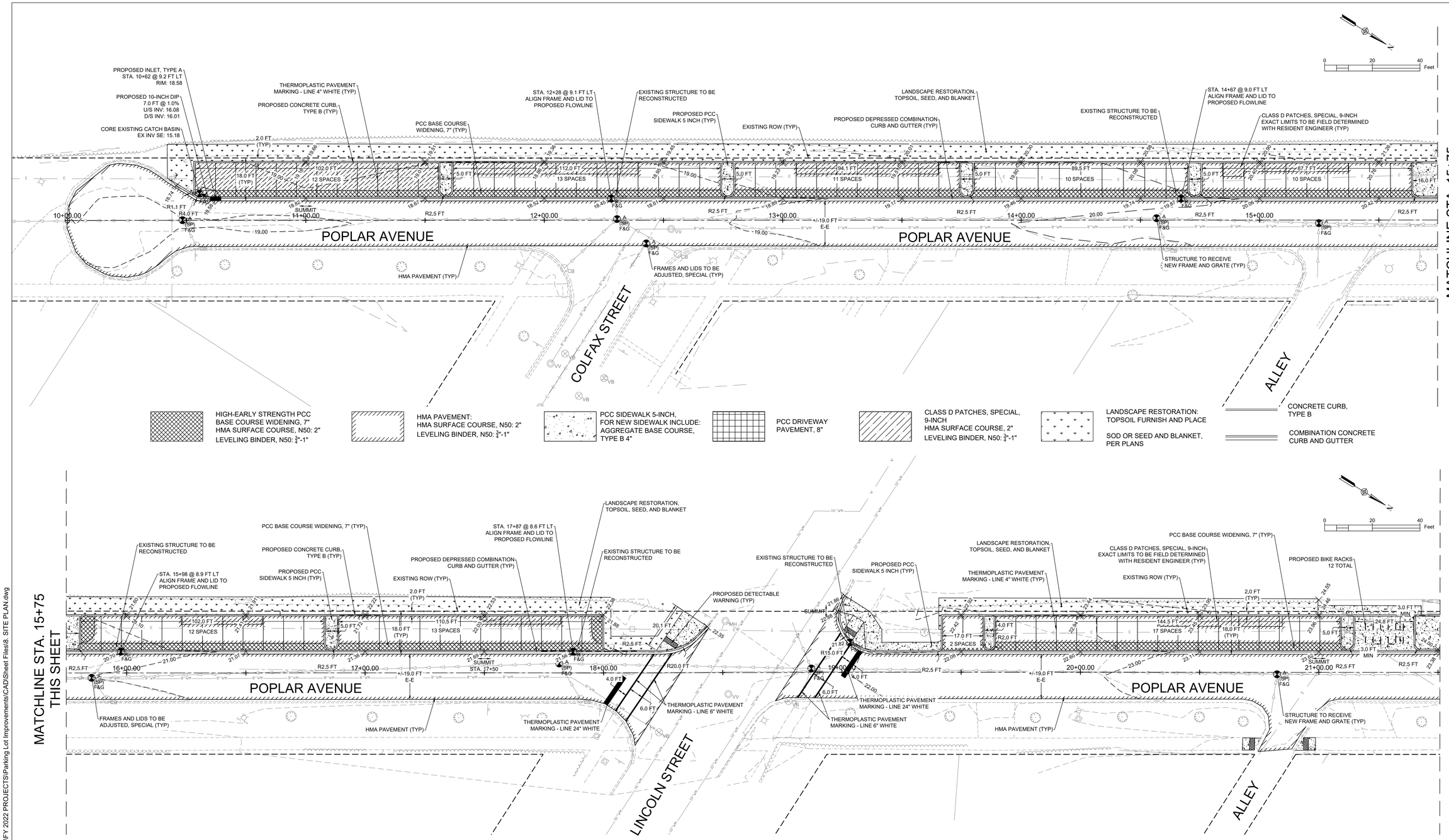
POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
DEMOLITION PLAN

SCALE	
HORIZONTAL	1" = 20'
VERTICAL	N/A
BID NUMBER: 22-43	
ISSUED FOR: CONSTRUCTION	
DATE:	05/13/2022
DESIGNED BY:	BN
DRAWN BY:	BN
CHECKED BY:	CV
SHEET	11 OF 18



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CITY OF EVANSTON
PUBLIC WORKS AGENCY
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DATE	NO.	REVISION
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POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
SITE PLAN

SCALE	
HORIZONTAL	1" = 20'
VERTICAL	N/A

BID NUMBER: 22-43

ISSUED FOR: CONSTRUCTION
DATE: 05/13/2022

DESIGNED BY: BN
DRAWN BY: BN
CHECKED BY: CV

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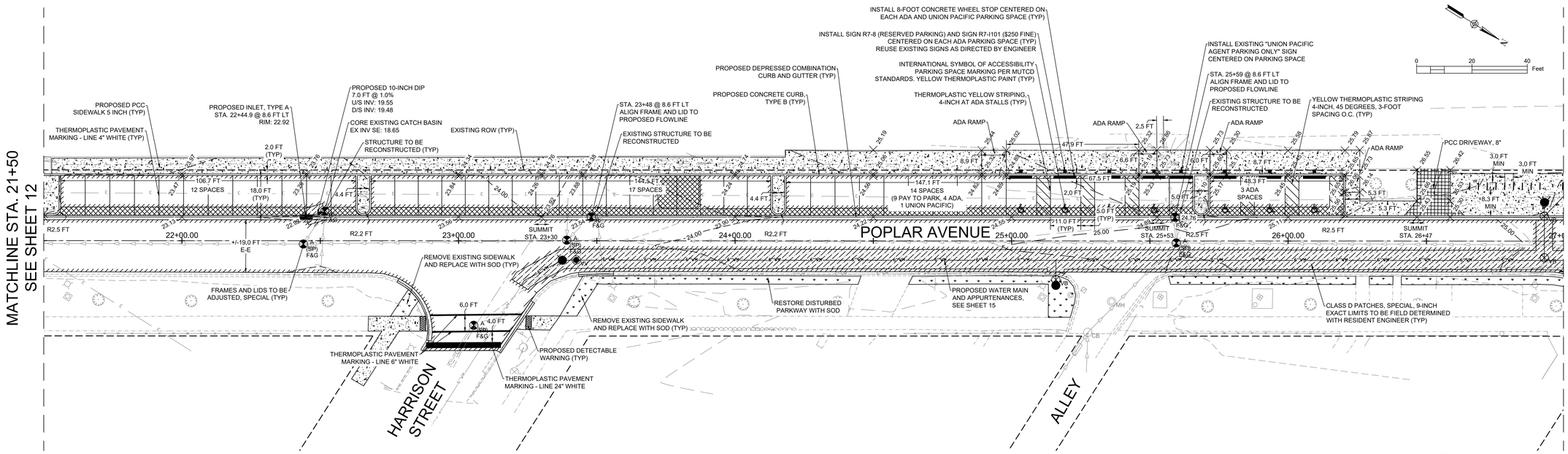
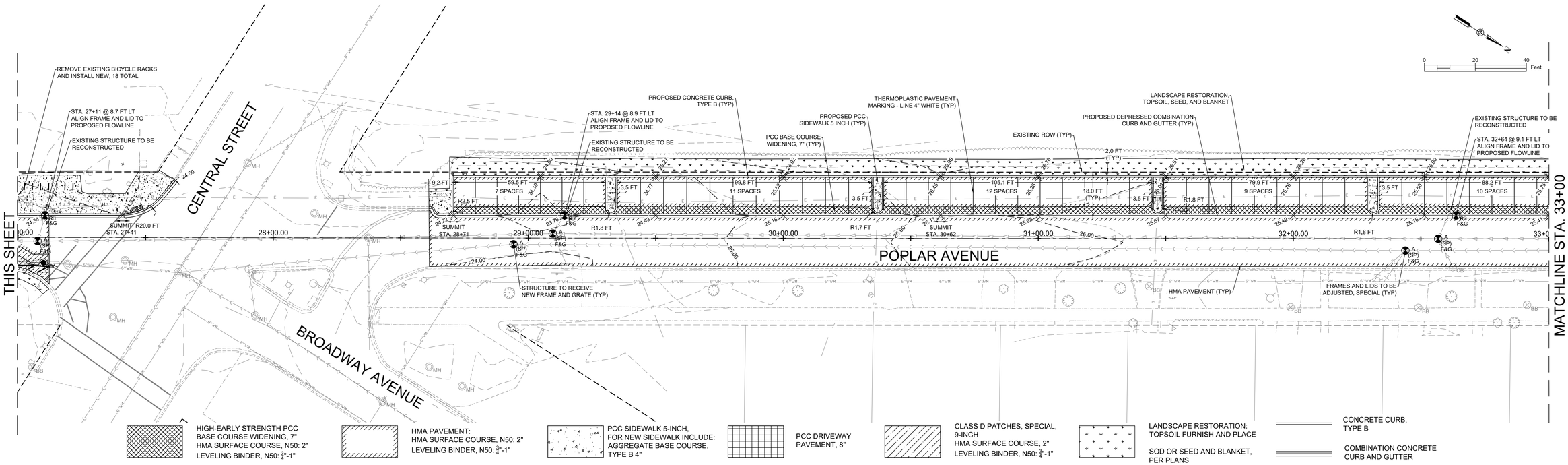
12 OF 18





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CITY OF EVANSTON
PUBLIC WORKS AGENCY
BUREAU OF CAPITAL PLANNING AND ENGINEERING

DATE	NO.	REVISION
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POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
SITE PLAN

SCALE	
HORIZONTAL	1" = 20'
VERTICAL	N/A

BID NUMBER: 22-43

ISSUED FOR: CONSTRUCTION
DATE: 05/13/2022

DESIGNED BY: BN
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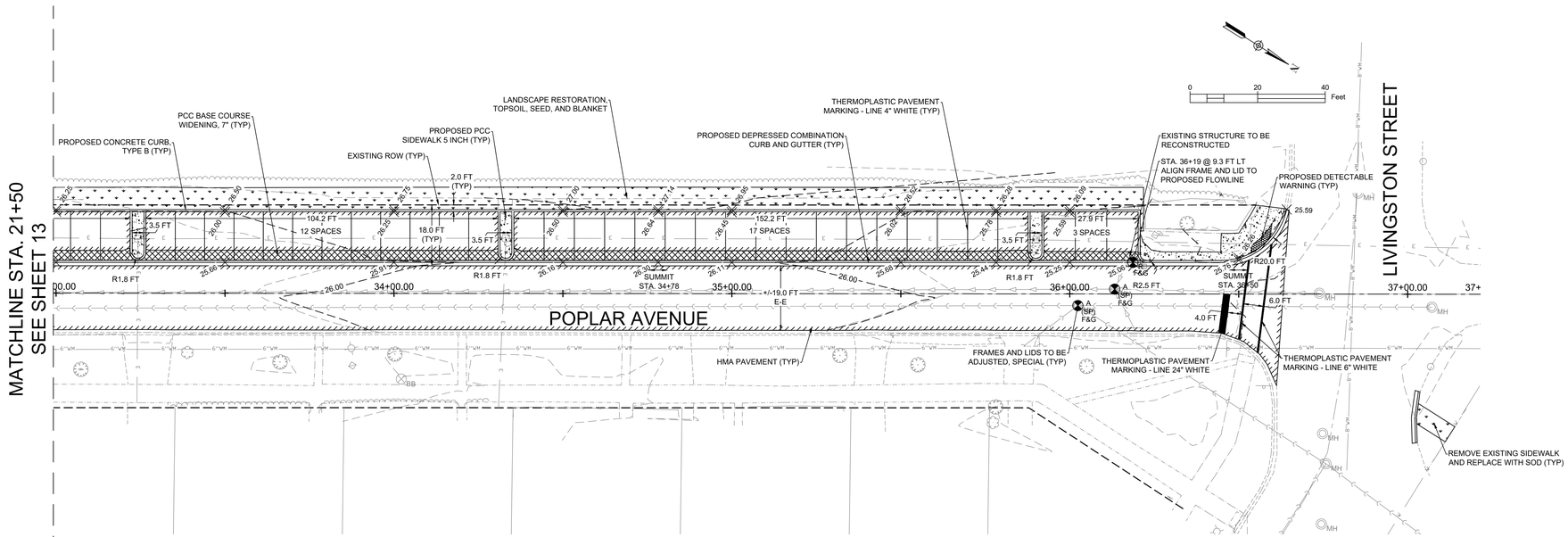
SHEET
13 OF 18



NOTES:

1. PARKING LOT DIMENSIONS SHALL BE TAKEN FROM THE EXISTING ROW LINE. CONTRACTOR TO ESTABLISH ROW LINE PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TO ALL PROPOSED INLETS. AREAS OF SURFACE PONDING SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
3. CROSS SLOPE ON ALL PROPOSED SIDEWALK SHALL BE 1.5%, UNLESS OTHERWISE NOTED. CROSS SLOPE SHALL NOT EXCEED 2.0% AND LONGITUDINAL SLOPE SHALL NOT EXCEED 5.0%.
4. SLOPE AT ALL ADA STALLS SHALL NOT EXCEED 1.5% IN ANY DIRECTION.
5. ACCESS TO THE METRA STATION SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION.
6. THE MINIMUM WIDTH OF EACH PARKING STALL IS 8.5 FEET.
7. EXISTING CATCH BASINS CALLED FOR RECONSTRUCTION SHALL RECEIVE NEW CONE SECTION WITH OPENING INSTALLED AT PROPOSED FLOWLINE OF DEPRESSED CURB.
8. INSTALL STORM SEWER AS SHOWN. ALL STORM SEWER CONNECTIONS SHALL BE WATER TIGHT IN CONFORMANCE WITH ASTM C-923. ALL CONNECTIONS TO EXISTING STRUCTURES SHALL BE MACHINE CORED HOLES.

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CITY OF EVANSTON
PUBLIC WORKS AGENCY
BUREAU OF CAPITAL PLANNING AND ENGINEERING

DATE	NO.	REVISION
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POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
SITE PLAN

SCALE
HORIZONTAL 1" = 20'
VERTICAL N/A

BID NUMBER: 22-43

ISSUED FOR: CONSTRUCTION
DATE: 05/13/2022

DESIGNED BY: BN
DRAWN BY: BN
CHECKED BY: CV

SHEET
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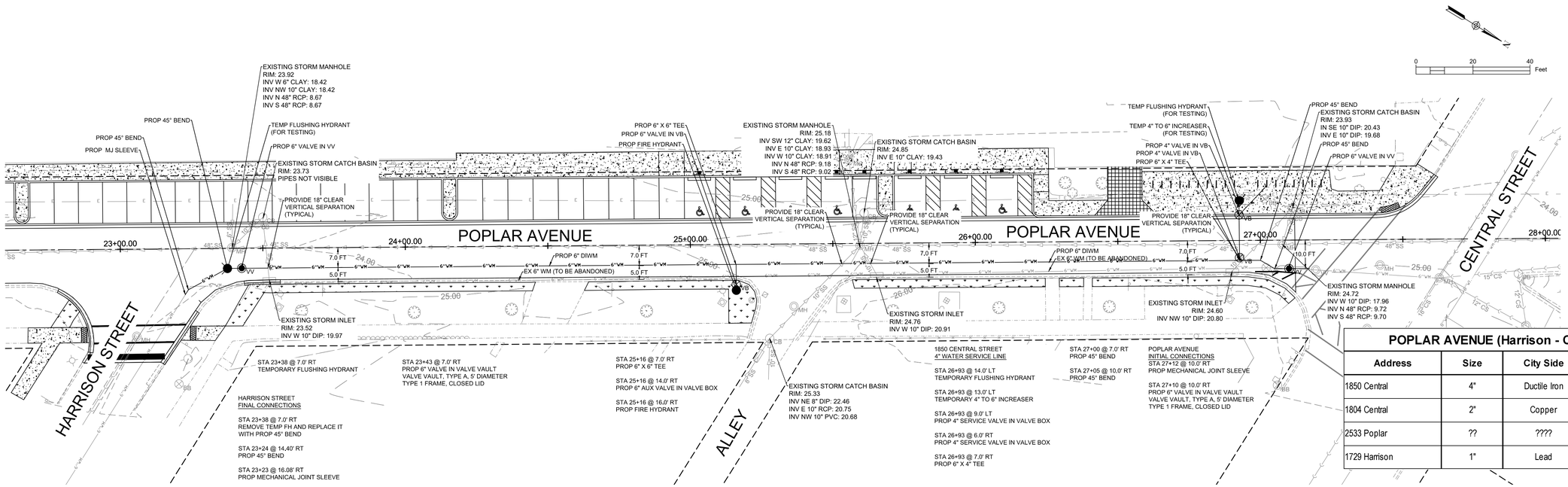
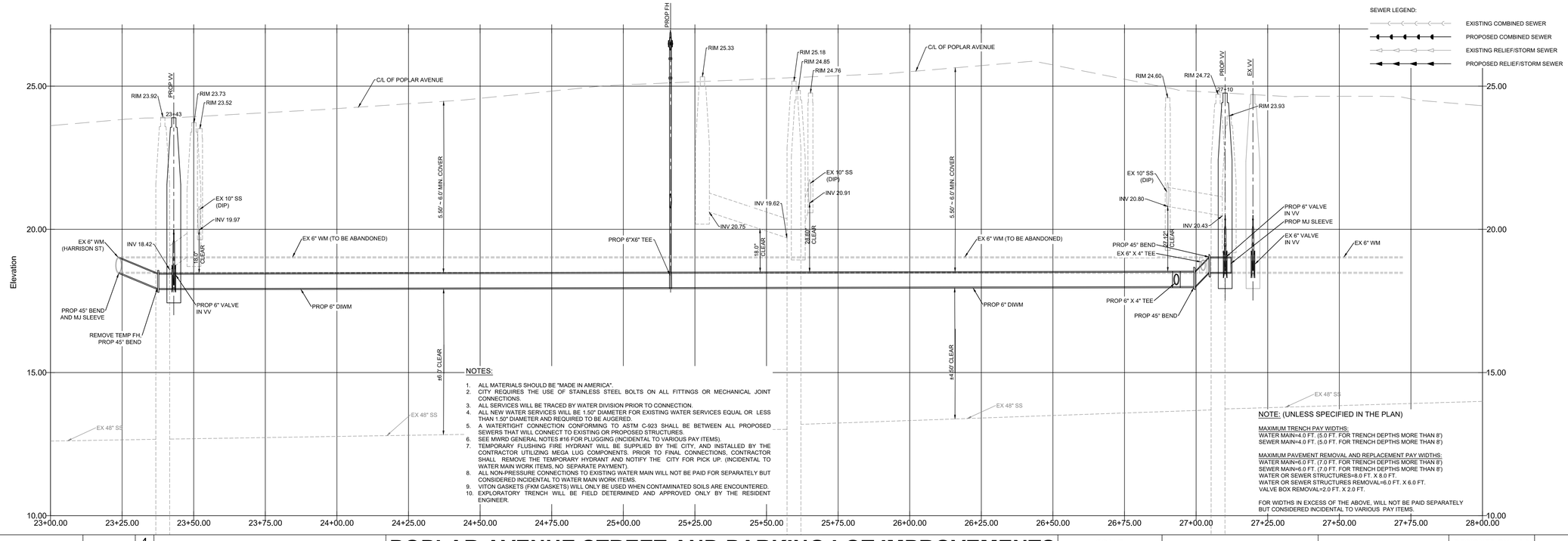


POPLAR AVENUE (Harrison - Central)			
Address	**Size**	**City Side**	**Private Side**
1850 Central	4"	Ductile Iron	Ductile Iron
1804 Central	2"	Copper	Copper
2533 Poplar	??	????	????
1729 Harrison	1"	Lead	Lead



NOTES:

1. ALL MATERIALS SHOULD BE "MADE IN AMERICA".
2. CITY REQUIRES THE USE OF STAINLESS STEEL BOLTS ON ALL FITTINGS OR MECHANICAL JOINT CONNECTIONS.
3. ALL SERVICES WILL BE TRACED BY WATER DIVISION PRIOR TO CONNECTION.
4. ALL NEW WATER SERVICES WILL BE 1.50" DIAMETER FOR EXISTING WATER SERVICES EQUAL OR LESS THAN 1.50" DIAMETER AND REQUIRED TO BE AUGERED.
5. A WATERTIGHT CONNECTION CONFORMING TO ASTM C-923 SHALL BE BETWEEN ALL PROPOSED SEWERS THAT WILL CONNECT TO EXISTING OR PROPOSED STRUCTURES.
6. SEE MWRD GENERAL NOTES #16 FOR PLUGGING (INCIDENTAL TO VARIOUS PAY ITEMS).
7. TEMPORARY FLUSHING FIRE HYDRANT WILL BE SUPPLIED BY THE CITY, AND INSTALLED BY THE CONTRACTOR UTILIZING MEGA LUG COMPONENTS. PRIOR TO FINAL CONNECTIONS, CONTRACTOR SHALL REMOVE THE TEMPORARY HYDRANT AND NOTIFY THE CITY FOR PICK UP. (INCIDENTAL TO WATER MAIN WORK ITEMS, NO SEPARATE PAYMENT).
8. ALL NON-PRESSURE CONNECTIONS TO EXISTING WATER MAIN WILL NOT BE PAID FOR SEPARATELY BUT CONSIDERED INCIDENTAL TO WATER MAIN WORK ITEMS.
9. VITON GASKETS (FKM GASKETS) WILL ONLY BE USED WHEN CONTAMINATED SOILS ARE ENCOUNTERED.
10. EXPLORATORY TRENCH WILL BE FIELD DETERMINED AND APPROVED ONLY BY THE RESIDENT ENGINEER.

NOTE: (UNLESS SPECIFIED IN THE PLAN)

MAXIMUM TRENCH PAY WIDTHS:
WATER MAIN=4.0 FT. (5.0 FT. FOR TRENCH DEPTHS MORE THAN 8')
SEWER MAIN=4.0 FT. (5.0 FT. FOR TRENCH DEPTHS MORE THAN 8')

MAXIMUM PAVEMENT REMOVAL AND REPLACEMENT PAY WIDTHS:
WATER MAIN=6.0 FT. (7.0 FT. FOR TRENCH DEPTHS MORE THAN 8')
SEWER MAIN=6.0 FT. (7.0 FT. FOR TRENCH DEPTHS MORE THAN 8')
WATER OR SEWER STRUCTURES=8.0 FT. X 8.0 FT.
WATER OR SEWER STRUCTURES REMOVAL=6.0 FT. X 6.0 FT.
VALVE BOX REMOVAL=2.0 FT. X 2.0 FT.

FOR WIDTHS IN EXCESS OF THE ABOVE, WILL NOT BE PAID SEPARATELY BUT CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

X:\Public Works\Engineering\Engineers\FY 2022 PROJECTS\Parking Lot Improvements\CAD\Sheet Files\9. WATER MAIN.dwg

CITY OF EVANSTON
PUBLIC WORKS AGENCY
BUREAU OF CAPITAL PLANNING AND ENGINEERING

DATE	NO.	REVISION
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	1	

POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
WATER MAIN

SCALE	
HORIZONTAL	1" = 20'
VERTICAL	1" = 2'

BID NUMBER: 22-43

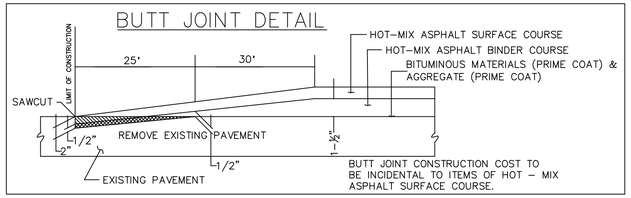
ISSUED FOR: CONSTRUCTION

DATE: 05/13/2022

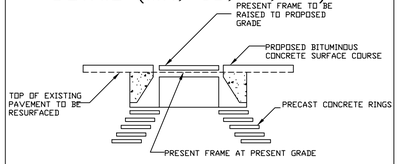
DESIGNED BY: AA
DRAWN BY: AA, BN
CHECKED BY: CV

SHEET
15 OF 18

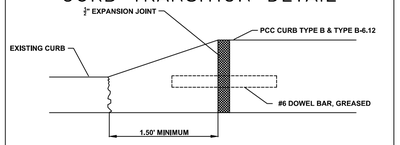
BUTT JOINT DETAIL



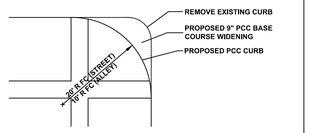
FRAME AND GRATE ADJUSTMENT DETAIL (MH, CB, IN, VV)



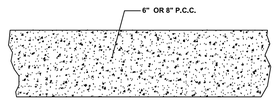
SECTION FOR CURB TRANSITION DETAIL



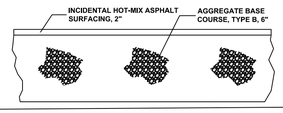
PLAN FOR INCREASING CURB RADIUS DETAIL



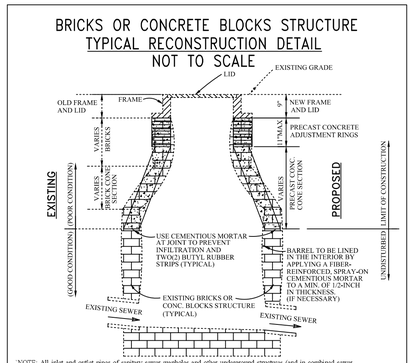
SECTION CONCRETE DRIVEWAY PAVEMENT DETAIL



SECTION HOT-MIX ASPHALT DRIVEWAY PAVEMENT DETAIL



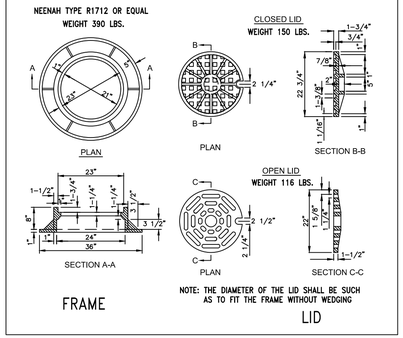
BRICKS OR CONCRETE BLOCKS STRUCTURE TYPICAL RECONSTRUCTION DETAIL NOT TO SCALE



NOTE: All inlet and outlet pipes of sanitary sewer manholes and other underground structures (and in combined sewer areas, also all combined/ storm sewer manholes, catch basins, inlets, and underground detention storage structures) shall be joined with watertight flexible rubber connections, conforming to A.S.T.M. C-443 and C-923 with stainless steel band.

02-05-09 AA

TYPE 1 FRAME AND LID DETAIL



NOTE: THE DIAMETER OF THE LID SHALL BE SUCH AS TO FIT THE FRAME WITHOUT WEDGING

PIPE MATERIAL SPECIFICATION

WHERE POLYVINYL CHLORIDE PIPE (P.V.C.) IS CALLED FOR ON THE CONTRACT PLANS, IT SHALL BE SDR 26 IN CONFORMANCE WITH:

6" TO 15" PIPE ASTM D-3034

18" OR LARGER PIPE ASTM F-679

WHERE DUCTILE IRON PIPE (D.I.P.) IS CALLED FOR ON THE CONTRACT PLANS, IT SHALL BE:

FOR SEWER : CLASS 50 IN CONFORMANCE WITH:

ANSI A-21.51 PIPE

ANSI A-21.11 JOINT

FOR WATER: CLASS 52 IN CONFORMANCE WITH:

Mechanical Joints; AWWA C-153

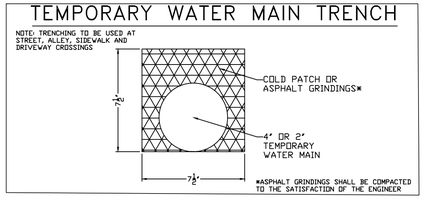
Push-On Joints; AWWA C-153

WHERE EXTRA STRENGTH CLAY PIPE (E.S.V.C.P.) IS CALLED FOR ON THE CONTRACT PLANS, IT SHALL BE IN CONFORMANCE WITH:

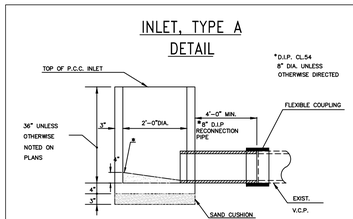
ASTM C-700 PIPE

ASTM C-425 JOINT

TEMPORARY WATER MAIN TRENCH



INLET, TYPE A DETAIL

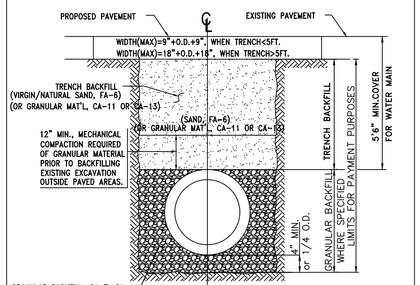


* PREFORMED TAPPERED BOTTOM SHALL BE FURNISHED AT ALL END OF RUN INLETS

SPECIFICATION REFERENCE: SECTION 602

NOTE: All inlet and outlet pipes of sanitary sewer manholes and other underground structures (and in combined sewer areas, also all combined/ storm sewer manholes, catch basins, inlets, and underground detention storage structures) shall be joined with watertight flexible rubber connections, conforming to A.S.T.M. C-443 and C-923 with stainless steel band.

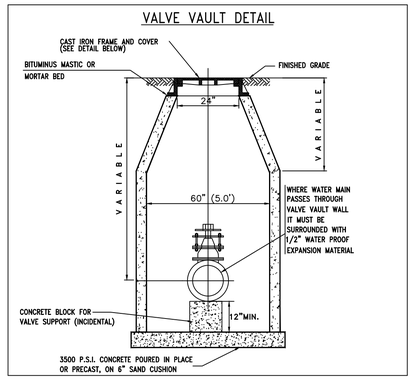
TRENCH BACKFILL & GRANULAR BACKFILL MATERIALS DETAIL



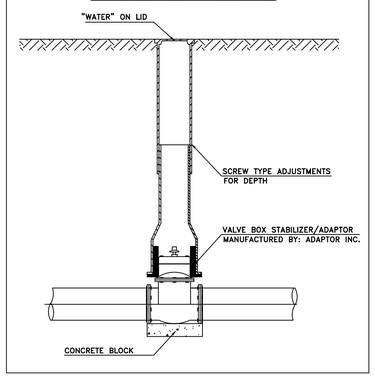
BEDDING PAYMENT SCHEDULE

PIPE SIZE (INCH I. D.)	UNIT RATE PER LIN. FT. (TONS)
6	0.17
8	0.19
10	0.22
12	0.25
15	0.33
18	0.41
21	0.48
24	0.57
27	0.64
30	0.74
36	0.94
42	1.15
48	1.38
54	1.71
60	1.90

VALVE VAULT DETAIL

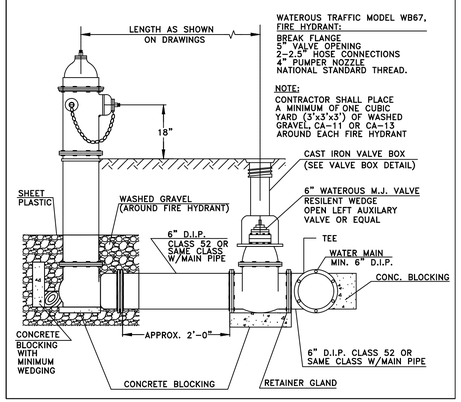


VALVE BOX DETAIL



FIRE HYDRANT DETAIL

(EVANSTON WATER DEPARTMENT STANDARDS)



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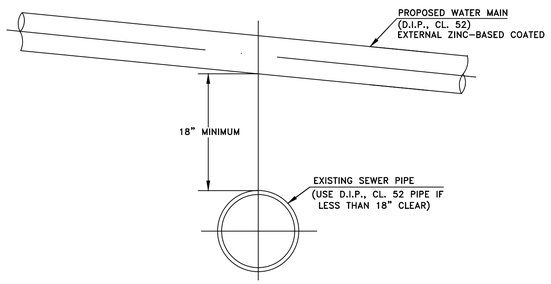
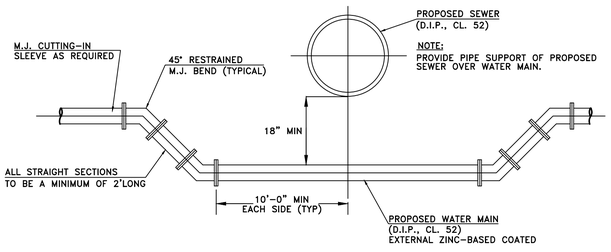
CITY OF EVANSTON PUBLIC WORKS AGENCY BUREAU OF CAPITAL PLANNING AND ENGINEERING		4	
		3	
		2	
		1	
	DATE	NO.	REVISION

POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
DETAILS

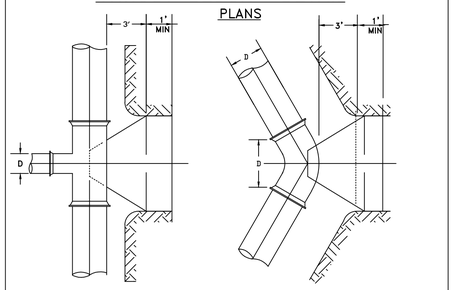
SCALE		BID NUMBER: 22-43	ISSUED FOR: CONSTRUCTION	DESIGNED BY: BN	SHEET
HORIZONTAL	N/A		DATE: 05/13/2022	DRAWN BY: BN	16 OF 18
VERTICAL	N/A			CHECKED BY: CV	

WATER MAIN ADJUSTMENT DETAIL





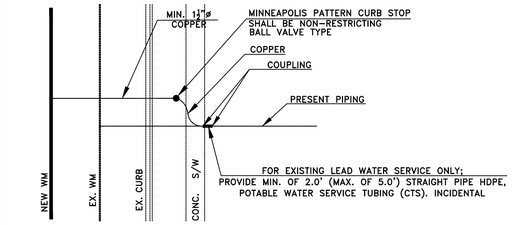
THRUST BLOCK DETAIL



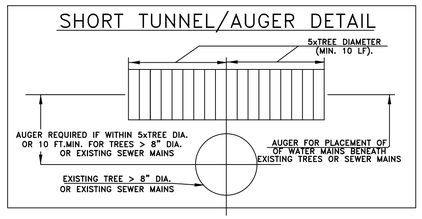
TEE & PLUGS BENDS

PIPE SIZE / TYPE OF FITTING "D"	6"		8"		10"		12"	
	L	H	L	H	L	H	L	
TEE & PLUG	2'-0"	1'-6"	2'-0"	2'-0"	3'-0"	2'-0"	4'-6"	2'-0"
90°BEND	2'-0"	2'-0"	3'-0"	2'-0"	4'-6"	2'-0"	6'-0"	2'-0"
45°BEND	2'-0"	1'-0"	2'-0"	1'-6"	3'-0"	1'-6"	3'-6"	2'-0"
22-1/2° BEND	1'-0"	1'-0"	2'-0"	1'-6"	2'-0"	1'-6"	3'-0"	1'-6"
11-1/4° BEND	1'-0"	1'-0"	1'-0"	1'-6"	1'-0"	1'-0"	1'-6"	1'-0"

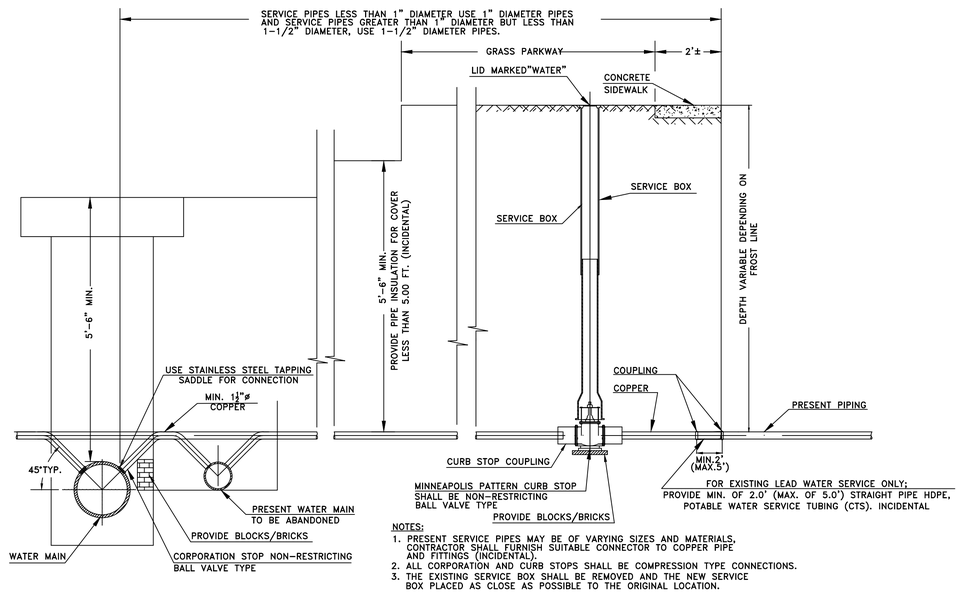
WATER SERVICE CONNECTION PLAN DETAIL



SHORT TUNNEL/AUGER DETAIL



WATER SERVICE CONNECTION DETAIL



NOTES:
1. PRESENT SERVICE PIPES MAY BE OF VARYING SIZES AND MATERIALS. CONTRACTOR SHALL FURNISH SUITABLE CONNECTOR TO COPPER PIPE AND FITTINGS (INCIDENTAL).
2. ALL CORPORATION AND CURB STOPS SHALL BE COMPRESSION TYPE CONNECTIONS.
3. THE EXISTING SERVICE BOX SHALL BE REMOVED AND THE NEW SERVICE BOX PLACED AS CLOSE AS POSSIBLE TO THE ORIGINAL LOCATION.

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CITY OF EVANSTON
PUBLIC WORKS AGENCY
BUREAU OF CAPITAL PLANNING AND ENGINEERING

DATE	NO.	REVISION
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	2	
	1	

POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
DETAILS

SCALE	
HORIZONTAL	N/A
VERTICAL	N/A

BID NUMBER: 22-43

ISSUED FOR: CONSTRUCTION
DATE: 05/13/2022

DESIGNED BY: BN
DRAWN BY: BN
CHECKED BY: CV

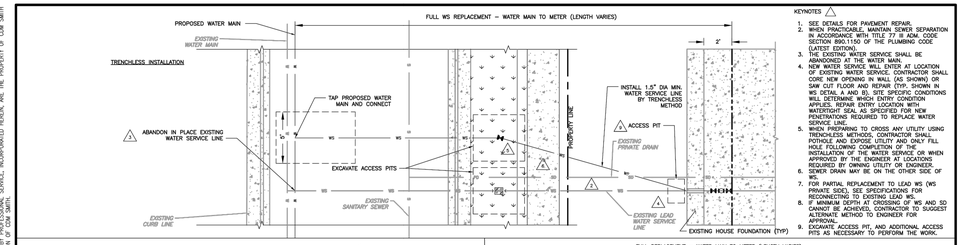
SHEET
17 OF 18

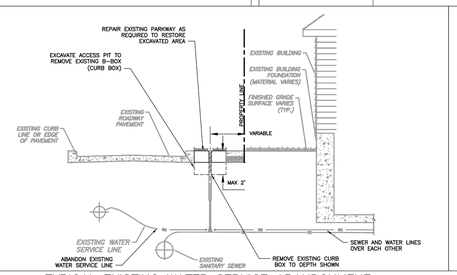
GENERAL WATER SERVICE REPLACEMENT NOTES:

1. CONTRACTOR SHALL COORDINATE ALL SERVICE LINE REPLACEMENT ACTIVITIES WITH THE ENGINEER AND PROPERTY OWNER PRIOR TO COMMENCING SERVICE LINE REPLACEMENT WORK. CONTRACTOR MAY ONLY WORK ON PRIVATE PROPERTY WHERE A SIGNED RIGHT OF ENTRY IS ON FILE FROM THE PROPERTY OWNER. CONTRACTOR MUST OBTAIN EXECUTED PROPERTY OWNER AGREEMENT FORM FOR PERMISSION TO WORK ON PRIVATE PROPERTY BEFORE COMMENCING ANY CONSTRUCTION WORK.
2. THE DETAILS PRESENTED HEREIN REPRESENT TYPICAL CONDITIONS AND WATER SERVICE CONNECTION REPLACEMENT. EACH LOCATION WILL VARY.
3. CONTRACTOR SHALL RESTORE ALL SURFACE FEATURES AND LANDSCAPING EQUAL TO OR BETTER THAN EXISTING CONDITIONS FOLLOWING COMPLETION OF THE WORK.
4. EXISTING WATER SERVICE (WS) AND SEWER DRAIN (SD) MAY BE LOCATED IN CLOSE PROXIMITY AND/OR THE SAME TRENCH. CONTRACTOR SHALL MEET THE REQUIREMENTS OF THE STATE OF ILLINOIS PLUMBING CODE WHEN REPLACING WATER SERVICE CONSIDERING THE LOCATION OF THE EXISTING SEWER SERVICE. CONTRACTOR DOES NOT NEED TO CONSIDER SERVICES ON THE OPPOSITE SIDE OF THE STREET.
5. THE LOCATION OF WATER SERVICE ALIGNMENT SHALL BE DETERMINED BY THE CONTRACTOR'S LICENSED PLUMBER. ALL WORK ON THE WATER SERVICE SHALL BE PERFORMED BY THE CONTRACTOR'S LICENSED PLUMBER.
6. WHEN PERFORMING WORK INSIDE A RESIDENCE, CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO MINIMIZE DEBRIS IN THE IMMEDIATE WORK AREA AS AGREED TO WITH THE PROPERTY OWNER.
7. IN THE EVENT CONTRACTOR IS REQUIRED TO DISTURB EXISTING CONCRETE, CONTRACTOR SHALL TAKE PRECAUTIONS NECESSARY TO CONTROL AND MINIMIZE CONCRETE DUST.
8. WHEN THE CONTRACTOR DETERMINES THAT TRENCHLESS INSTALLATION IS NOT FEASIBLE, CONTRACTOR SHALL SEEK ENGINEER APPROVAL FOR OPEN CUT INSTALLATION, OR A COMBINATION OF OPEN CUT AND TRENCHLESS METHODS.
9. CONTRACTOR SHALL NOT INSTALL ANY INTERMEDIATE FITTINGS OR COUPLINGS OTHER THAN THOSE SHOWN IN THE CONTRACT DOCUMENTS UNLESS APPROVED BY ENGINEER.
10. CONTRACTOR SHALL REPAIR THE CONCRETE FLOOR OR WALL, BUT WILL NOT RESTORE FINISHED SURFACES SUCH AS DRYWALL, RE-TILE, OR PERFORM OTHER FINAL FINISHED RESTORATION. SHOULD TOILETS, HOT WATER TANKS, OR OTHER INTERIOR UTILITY FEATURES BE REMOVED TO PERFORM THE WORK, CONTRACTOR SHALL REINSTALL THOSE ITEMS FOLLOWING COMPLETION OF THE WORK.
11. CONTRACTOR SHALL CHECK ALL FIXTURES FOR WATER PRESSURE AND TEMPERATURE BEFORE AND AFTER WATER SERVICE WORK TO ENSURE FUNCTIONALITY IS RESTORED TO PRECONSTRUCTION CONDITIONS. THIS WORK WILL NOT BE PAID FOR SEPARATELY.

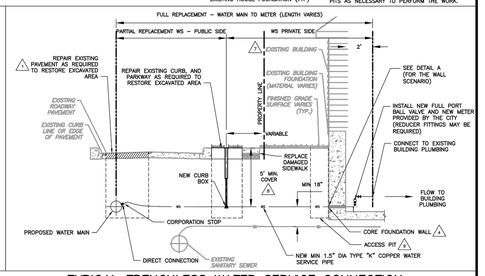
GENERAL WATER SERVICE REPLACEMENT NOTES
Lead Service Line Replacement Program

WS-0





TYPICAL EXISTING WATER SERVICE ABANDONMENT

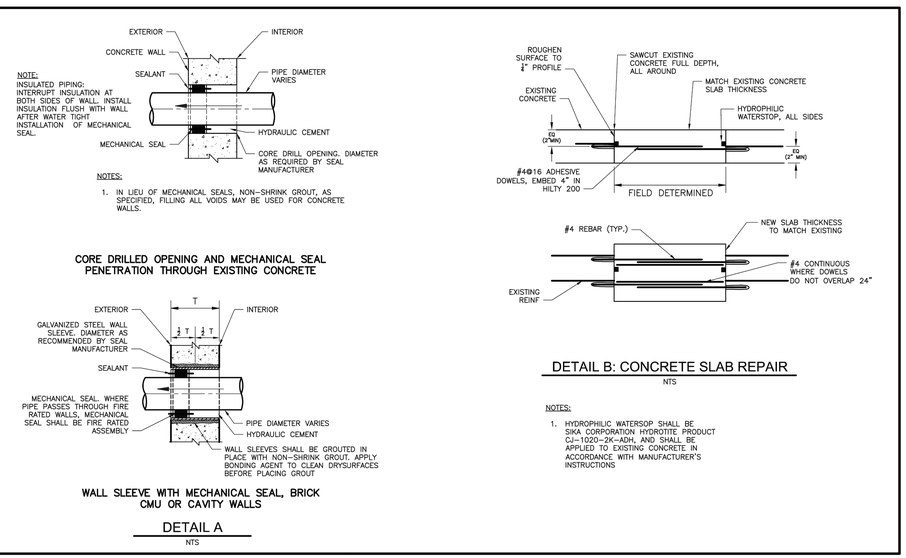


TYPICAL TRENCHLESS WATER SERVICE CONNECTION

SCHEMATIC PLAN AND SECTION
NTS

STANDARD DETAIL
Lead Service Line Replacement Program with Water / Sewer Separation Provided by Relocating Water Service 10-ft From All Sewer Drains, When Practicable
Service Line Replacement: Trenchless WS Replacement

WS-1



WS-2

LEAD SERVICE LINE REPLACEMENT PROGRAM
WS DETAILS

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CITY OF EVANSTON
PUBLIC WORKS AGENCY
BUREAU OF CAPITAL PLANNING AND ENGINEERING

DATE	NO.	REVISION
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	2	
	1	

POPLAR AVENUE STREET AND PARKING LOT IMPROVEMENTS
DETAILS

SCALE	
HORIZONTAL	N/A
VERTICAL	N/A

BID NUMBER: 22-43

ISSUED FOR: CONSTRUCTION
DATE: 05/13/2022

DESIGNED BY: BN
DRAWN BY: BN
CHECKED BY: CV

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Registering for DemandStar

DEMANDSTAR
Building Communities.

We are pleased to announce our membership in the DemandStar network. DemandStar is an online marketplace that connects our suppliers directly to the bids, quotes and RFPs that matter to them.

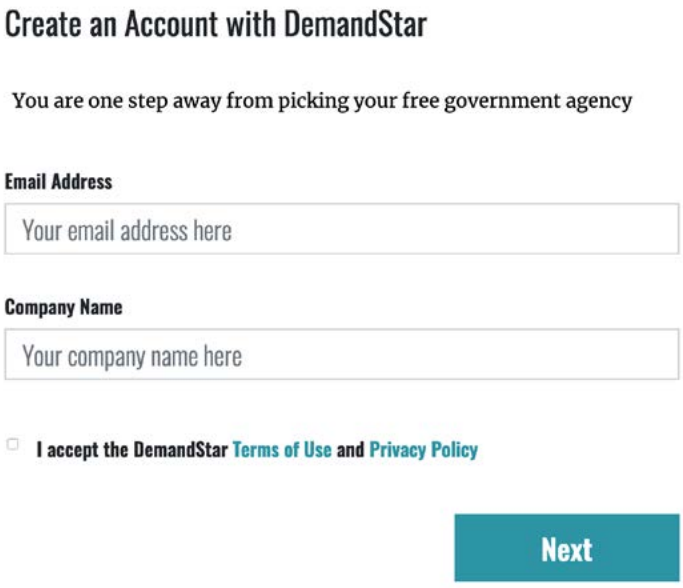
DemandStar is open and accessible to all businesses and provides instant access to our solicitations. By registering for your complimentary DemandStar account, you will receive:

- **Instant** access to bids, quotes and RFPs
- **Automatic** notifications, right to you inbox, of bids that match the commodity codes you select
- The ability to **quickly view** the contractual terms and scope of work
- All the **forms and documents** you need in one place
- Access to **more government bids** in neighboring cities, counties and states

It's EASY! Get started with these 3 easy steps!

1 REGISTER

Go to:
https://www.demandstar.com/registration



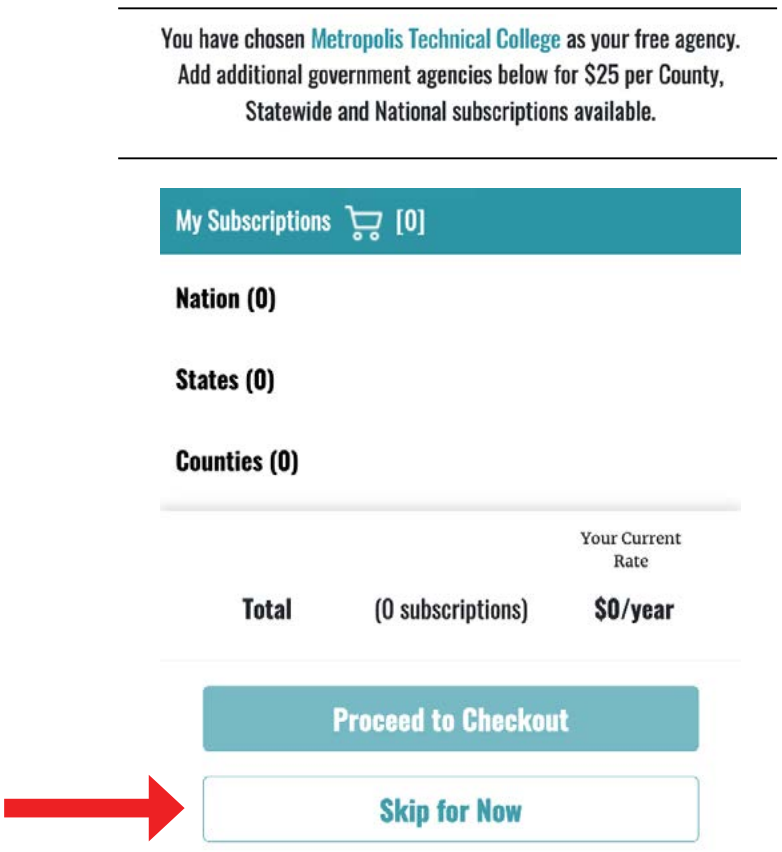
206.940.0305

2 CHOOSE YOUR FREE AGENCY

Type in the name of the government agency you'd like to add, for example "City of Metropolis" in the Search Box

3 CHECK OUT

Check out with your **FREE AGENCY** Registration by clicking "Skip for now" on the page where it gives you options to add additional counties and States



SIGN UP

Visit www.demandstar.com

206.940.0305

DEMANDSTAR

Building Communities.

(E-bidding) Electronic Bidding Instructions

Introduction

To submit a bid electronically (e-bidding) on DemandStar

- The project **MUST** be setup for e-bidding by the government agency advertising the opportunity

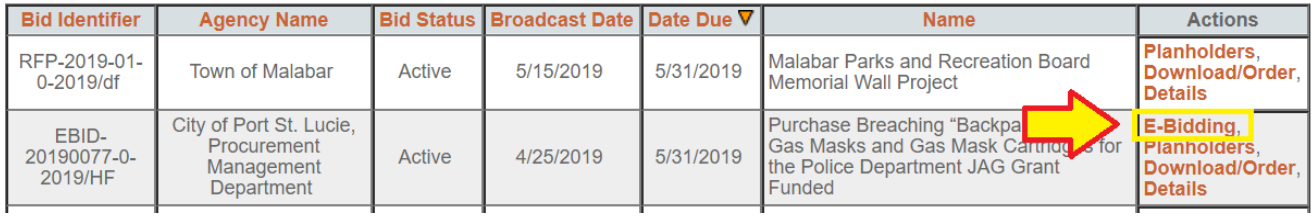
Bid Identifier	Agency Name	Bid Status	Broadcast Date	Date Due	Name	Actions
RFP-2019-01-0-2019/df	Town of Malabar	Active	5/15/2019	5/31/2019	Malabar Parks and Recreation Board Memorial Wall Project	Planholders, Download/Order, Details
EBID-20190077-0-2019/HF	City of Port St. Lucie, Procurement Management Department	Active	4/25/2019	5/31/2019	Purchase Breaching "Backpa... Gas Masks and Gas Mask Cartridg...s for the Police Department JAG Grant Funded	E-Bidding, Planholders, Download/Order, Details

How to check if it is an e-bidding opportunity

- Not all opportunities posted on DemandStar by government are available for e-bidding
- Those that are available for you to electronically bid will list "e-bidding" as an available "ACTION" when you look at the project details

In order to do e-bidding

1. Click on “E-bidding” in the actions column

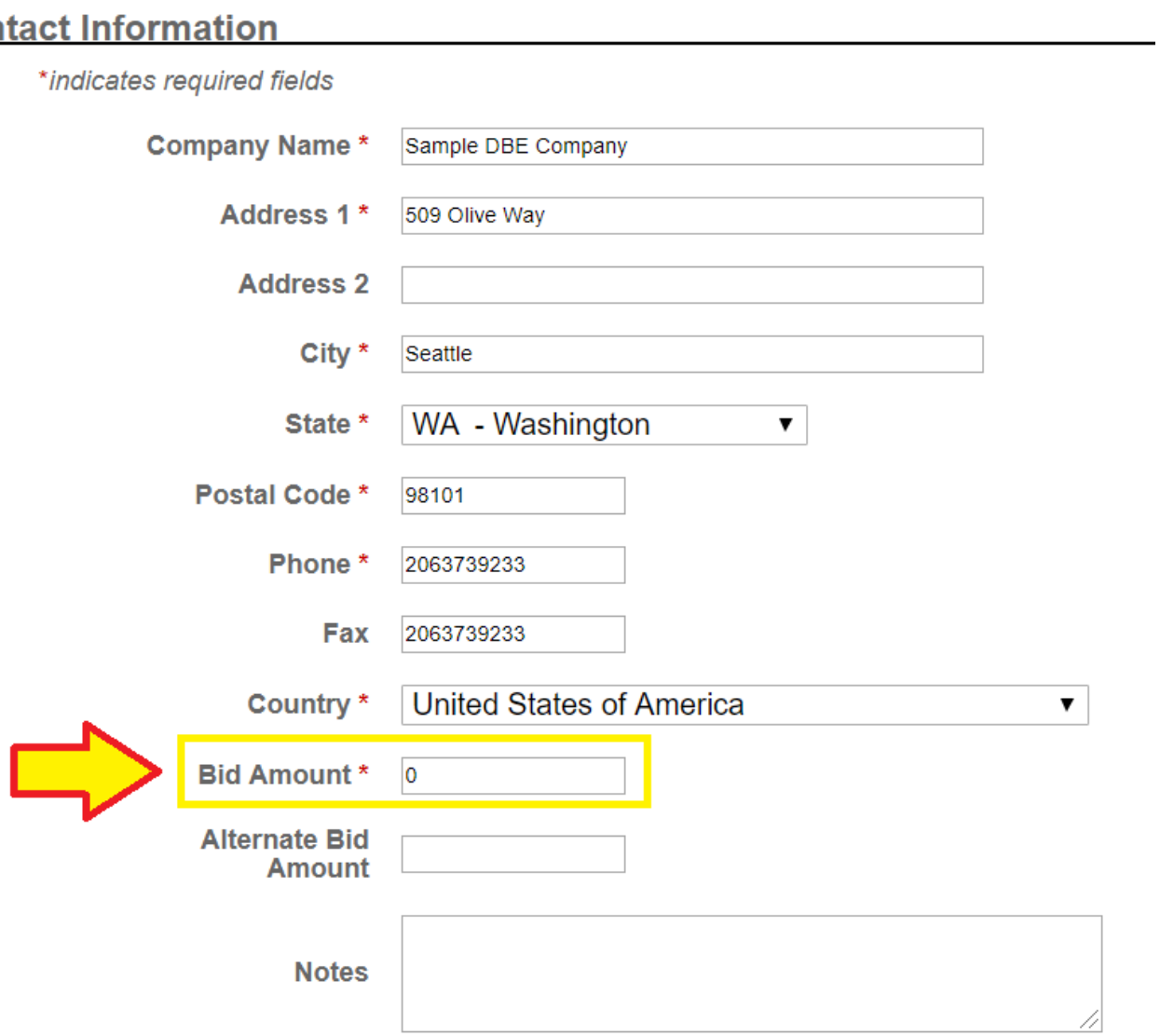


Bid Identifier	Agency Name	Bid Status	Broadcast Date	Date Due	Name	Actions
RFP-2019-01-0-2019/df	Town of Malabar	Active	5/15/2019	5/31/2019	Malabar Parks and Recreation Board Memorial Wall Project	Planholders, Download/Order, Details
EBID-20190077-0-2019/HF	City of Port St. Lucie, Procurement Management Department	Active	4/25/2019	5/31/2019	Purchase Breaching “Backpa Gas Masks and Gas Mask Cartridges for the Police Department JAG Grant Funded	E-Bidding, Planholders, Download/Order, Details

In order to do e-bidding

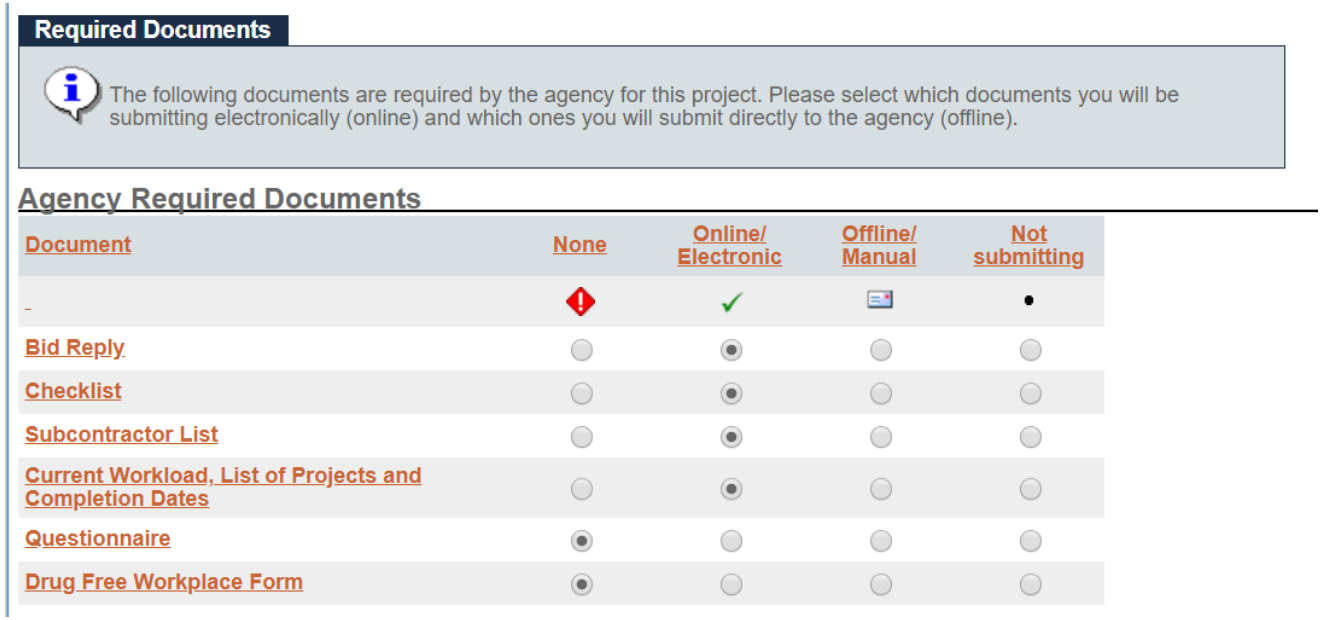
2. Enter you contact information and enter in all required fields

Note: You **MUST** put a number of the “BID AMOUNT” box. However, that number can be 0 so as to allow for a more detailed descriptions of your bid through your uploaded documents.



In order to do e-bidding

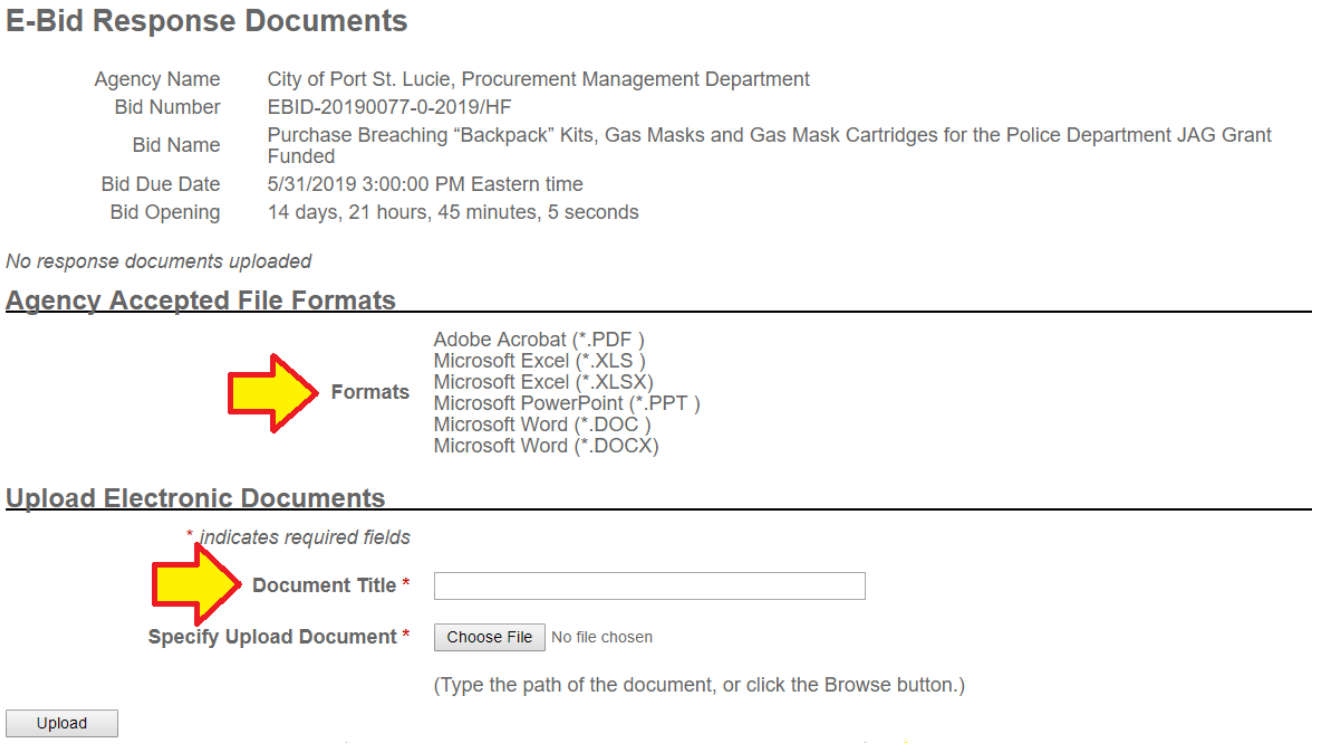
- In the agency required documents section – check the documents you intend on uploading and fulfilling. By checking these boxes this is **ONLY** an acknowledgement of how you will fulfill the requirement. You still have to upload the documents.



In order to do e-bidding

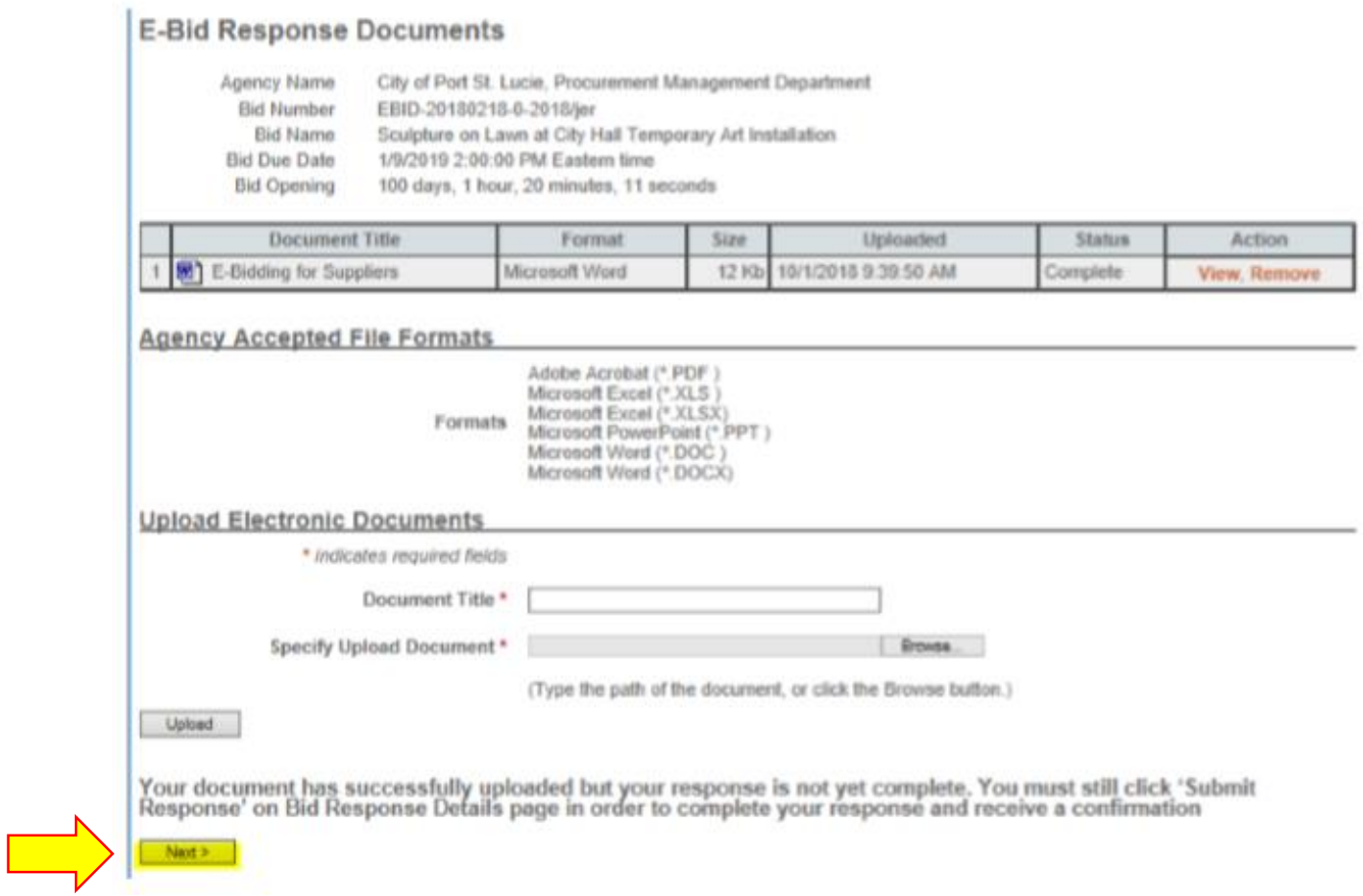
Upload your response documents in an accepted file format

Make sure that you have covered and uploaded all the required documents



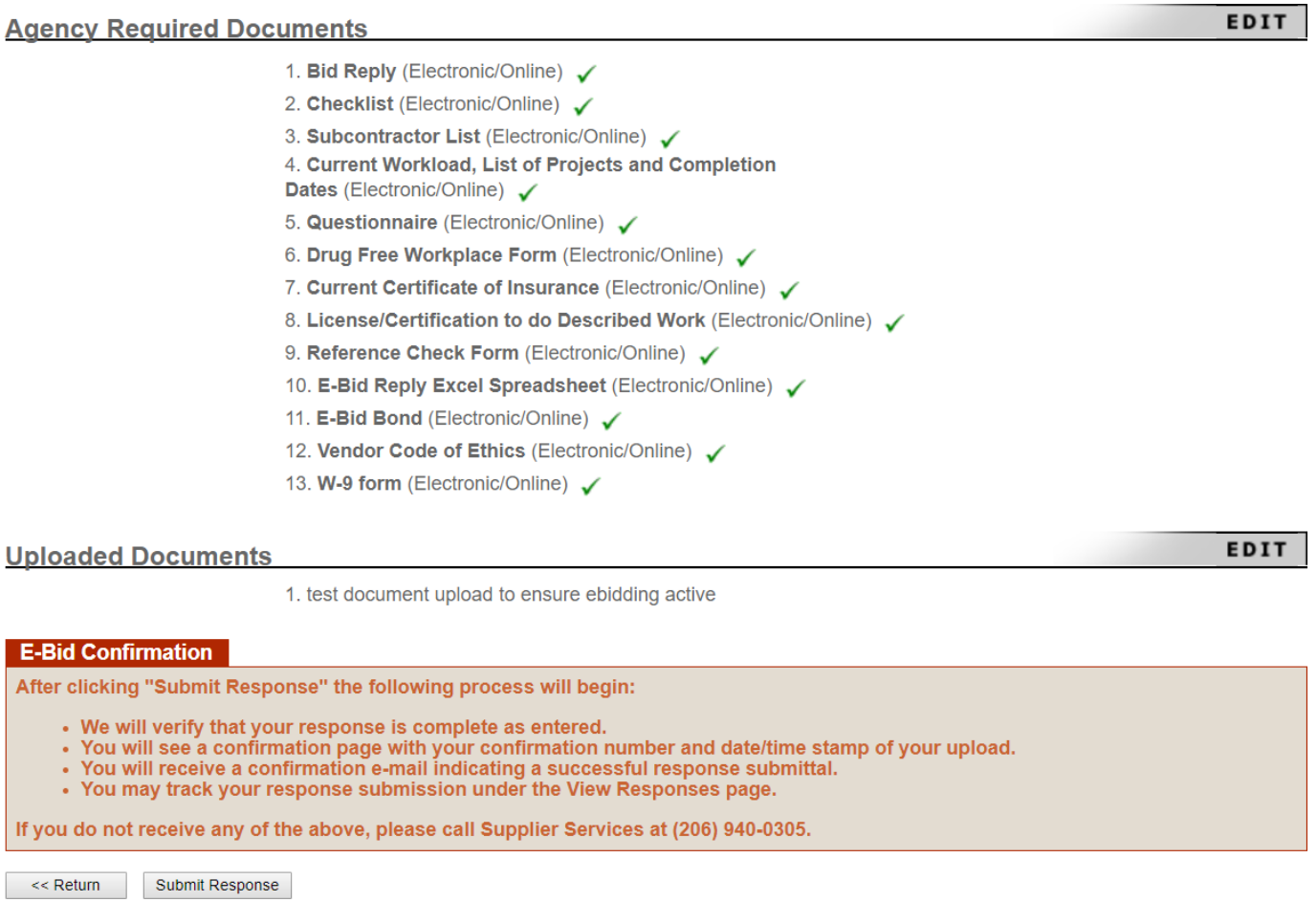
In order to do e-bidding

Once you decide you've uploaded all your documents that you would like to submit, make sure you click the **NEXT** button at the bottom of the screen



Completing your e-bid submittal

- Please **VERIFY** that you have attached **ALL** the required documents
- Click on the **Submit Response** button to complete your e-bid



Agency Required Documents EDIT

1. **Bid Reply** (Electronic/Online) ✓
2. **Checklist** (Electronic/Online) ✓
3. **Subcontractor List** (Electronic/Online) ✓
4. **Current Workload, List of Projects and Completion Dates** (Electronic/Online) ✓
5. **Questionnaire** (Electronic/Online) ✓
6. **Drug Free Workplace Form** (Electronic/Online) ✓
7. **Current Certificate of Insurance** (Electronic/Online) ✓
8. **License/Certification to do Described Work** (Electronic/Online) ✓
9. **Reference Check Form** (Electronic/Online) ✓
10. **E-Bid Reply Excel Spreadsheet** (Electronic/Online) ✓
11. **E-Bid Bond** (Electronic/Online) ✓
12. **Vendor Code of Ethics** (Electronic/Online) ✓
13. **W-9 form** (Electronic/Online) ✓

Uploaded Documents EDIT

1. test document upload to ensure ebidding active

E-Bid Confirmation

After clicking "Submit Response" the following process will begin:

- **We will verify that your response is complete as entered.**
- **You will see a confirmation page with your confirmation number and date/time stamp of your upload.**
- **You will receive a confirmation e-mail indicating a successful response submittal.**
- **You may track your response submission under the View Responses page.**

If you do not receive any of the above, please call Supplier Services at (206) 940-0305.

<< Return | Submit Response

Confirmation of Response

- When you complete you will receive a confirmation
- This is a confirmation that what you uploaded will be visible to the agency when the bid closes, **this is not** a confirmation that all your documents were fill out or submitted correctly

Post Submission Edits

If you feel like you missed something or need to make a change you can go back to your submittal response and edit your e-bid. By clicking on “DETAILS” then “EDIT” the section you wish

Bid Identifier	Agency Name	Bid Status	Broadcast	Date Due	Name	Status	Actions
EBID-20190077-0-2019/HF	City of Port St. Lucie, Procurement Management Department	Active	4/25/2019	5/31/2019	Purchase Breaching “Backpack” Kits, Gas Masks and Gas Mask Cartridges for the Police Department JAG Grant Funded	Incomplete	Details, Bid, History

Contact Information EDIT

Company Name	Sample DBE Company
Address 1	509 Olive Way
Address 2	
City	Seattle
State	Washington
Postal Code	98101
Phone	2063739233
Fax	2063739233
Country	United States of America
Bid Amount	$0.00
Alternate Bid Amount	
Notes	

Agency Required Documents EDIT

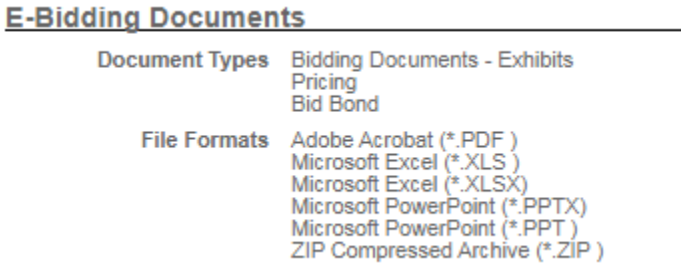
1. **Bid Reply** (Electronic/Online) ✓

DemandStar E-Bidding: Frequently Asked Questions

- Do suppliers need to be registered with DemandStar to participate in e-bidding?
  Yes. But if they don't already have an account with DemandStar, they can sign up and either
  - Be a subscriber for only your agency, at no charge, and be able to download documents at no charge and then receive notifications that match their commodity codes
  - Be a "basic supplier" for free - who researches on our platform and then pays $5 to download all documents, thus becoming a plan holder
  - Be a paid subscriber for a county, state, national and receive notifications from all included agencies

- Can suppliers respond with document uploads or do they simply fill in forms?
  Yes, they may respond with document uploads that are available to you via the DemandStar platform.

- What type of E-Bidding Documents can be uploaded?
  Acceptable file formats for sending back documents that the city will accept:



- Is there a maximum file size that I can upload?
  Vendors can simply upload a single file or multiple documents as long as it doesn't exceed 100 MBs (single or multiple files)

- After a bid opening, what document(s) are made public by DemandStar?
  None. Only the agency can see the vendor responses so you are the only ones who will determine what you want to download and make public.

- Who do I call if I have questions or problems with the DemandStar?
  The City strongly encourages each respondent to setup their account and to explore the eBidding module at least a couple of days before the bid due date.

  If you have questions or issues creating your account, accessing the eBidding module or submitting your bid prior to the bid due date, please contact DemandStar at 866.273.1863 or by email at hello@demandstar.com.