

**ADVERTISEMENT FOR BIDS
VILLAGE OF VILLA PARK
FRIDAY, NOVEMBER 18, 2016**

PROJECT: SOUTH MICHIGAN AVENUE RECONSTRUCTION PROJECT

This project consists of the reconstruction of South Michigan Avenue from West Madison Street to West Park Boulevard for an approximate length of 2,500 feet in the Village of Villa Park, DuPage County, Illinois. The project also includes combined sewer separation consisting of the installation of new storm sewer. The scope of work of the project includes pavement removal, earth excavation, aggregate subgrade improvements, structure adjustments, drainage improvements, hot-mix asphalt paving, combination concrete curb and gutter installation, driveway restoration, parkway restoration, sidewalk removal and replacement, and other related and incidental work.

BID DEADLINE: TUESDAY, DECEMBER 13, 2016, 10:00 A.M. LOCAL TIME

The Village reserves the right to extend the Bid Deadline from this date and time to accept Bids submitted after the Bid Deadline, as the Village, in its sole discretion, determines is in the best interest of the Village.

NOTICE: Separate, sealed proposals for the **SOUTH MICHIGAN AVENUE RECONSTRUCTION PROJECT** will be received by the Village of Villa Park, Illinois, at the reception desk of the Public Works Department, 11 West Home Avenue, Villa Park, Illinois, 60181, until the Bid Deadline. Immediately thereafter, the proposals will be publicly opened and read aloud at the offices of the Public Works Department. Notwithstanding the foregoing, the Village reserves the right to defer, postpone, delay, or reschedule the Bid Opening for such time and to such date as the Village, in its sole discretion, determines is in the best interest of the Village.

Proposals shall be submitted in accordance with the Bidding Documents prepared by Baxter & Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, Illinois 60012.

BIDDER QUALIFICATIONS: Bidders, in submitting a Bid, shall comply with all applicable Federal, State and Local laws and requirements; shall provide documentation of that compliance in accordance with the requirements of the Contract Documents or as requested by the Village; and, in submitting a Bid, Bidders affirm that they are qualified under all applicable laws and requirements to do so, and agree to be bound by the determination of the Village as to Bidder's compliance and qualifications.

BID SECURITY: Bid security in the amount of not less than five percent (5%) of the Bid shall accompany each Bid in accordance with the Bidding Documents.

CONTRACT SECURITY: The Bidder to whom a Contract is awarded shall be required to furnish both a Performance Bond and a Payment Bond acceptable to the Village for one-hundred percent (100%) of the Contract Price, in accordance with the requirements of the Contract Documents.

RIGHTS RESERVED: The Village will select the lowest, most responsible bidder. The Village reserves the right to reject any and all Bids, to waive any informalities or technicalities in bidding, and to accept the Bid which best serves the interests of the Village. The Village shall, in its sole discretion, determine what does or does not constitute an informality or technicality, and, in submitting a Bid, Bidder agrees to be bound by that determination.

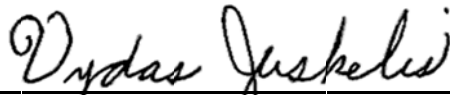
The Village may make such investigations as it deems necessary to determine the ability of the Bidder to perform the Work, and the Bidder shall furnish to the Village all such information and data for this purpose as the Village may request. The Village reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Village that such Bidder is properly qualified to carry out the obligations of the Agreement and to complete the Work contemplated therein.

WAGE RATES: All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the PROJECT shall apply to the contract throughout.

CONTRACT DOCUMENTS: The Bidding Documents are on file for inspection at the office of the Village of Villa Park Public Works Department, 11 West Home Avenue, Villa Park, Illinois, 60181, and may also be obtained from the Village of Villa Park Public Works Department at the address listed above for a non-refundable fee of twenty dollars (\$20.00).

PUBLISHED BY AUTHORITY OF THE VILLAGE OF VILLA PARK, DUPAGE COUNTY, ILLINOIS.

BY:



Vydas Juskeles, P.E.
Director of Public Works



Local Public Agency
Formal Contract Proposal

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

STATE OF ILLINOIS
 COUNTY OF DuPage
Village of Villa Park
 (Name of City, Village, Town or Road District)

FOR THE IMPROVEMENT OF
 STREET NAME OR ROUTE NO. South Michigan Avenue
 SECTION NO. N/A
 TYPES OF FUNDS Local

SPECIFICATIONS (required)

PLANS (required)

For Municipal Projects
 Submitted/Approved/Passed

Mayor President of Board of Trustees Municipal Official

Date

Department of Transportation
 Released for bid based on limited review

Regional Engineer

Date

For County and Road District Projects
 Submitted/Approved

Highway Commissioner

Date

Submitted/Approved

County Engineer/Superintendent of Highways

Date

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

NOT FOR BID

RETURN WITH BID

NOTICE TO BIDDERS

County DuPage
Local Public Agency Village of Villa Park
Section Number N/A
Route South Michigan Avenue

Sealed proposals for the improvement described below will be received at the office of The Public Works Director of Villa Park, 11 West Home Avenue, Villa Park, IL 60181 until 10:00am on December 13, 2016

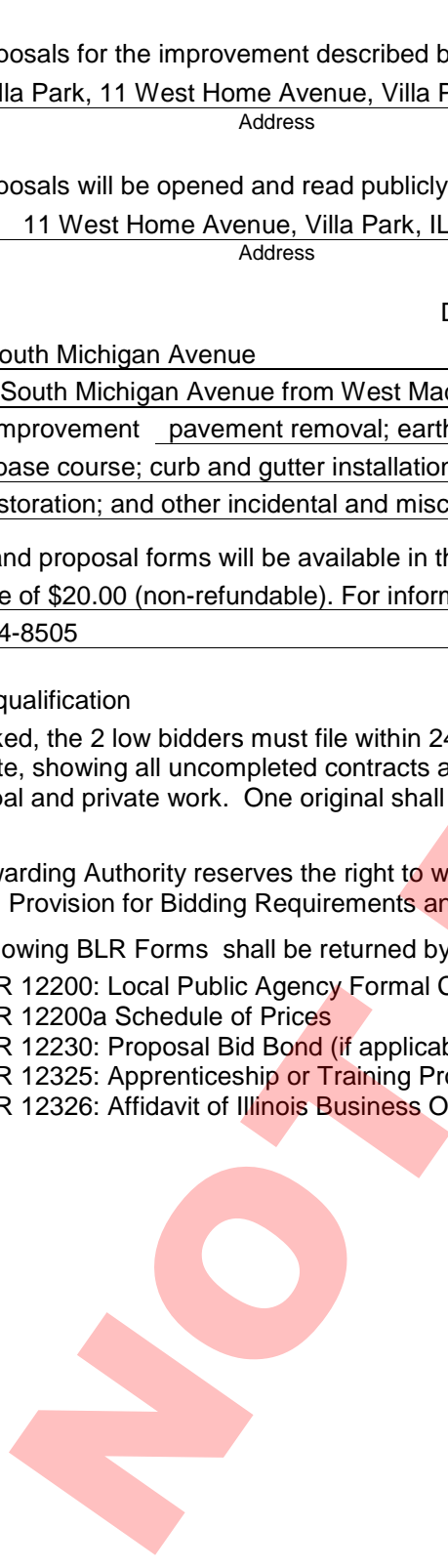
Sealed proposals will be opened and read publicly at the office of The Public Works Director of Villa Park 11 West Home Avenue, Villa Park, IL 60181 at 10:00am on December 13, 2016

DESCRIPTION OF WORK

Name South Michigan Avenue Length: 2,568 feet (0.486 miles)
Location South Michigan Avenue from West Madison Street to Park Boulevard, Villa Park, Dupage County.
Proposed Improvement pavement removal; earth excavation; installation of storm sewer; sanitary sewer repairs, aggregate base course; curb and gutter installation; hot-mix asphalt pavement; sidewalk removal and replacement; parkway restoration; and other incidental and miscellaneous items of work.

1. Plans and proposal forms will be available in the office of Villa Park Public Works, 11 West Home Avenue, Villa Park, IL for a fee of \$20.00 (non-refundable). For information on bidding proposals contact the Village of Villa Park at 630-834-8505

- 2. Prequalification
If checked, the 2 low bidders must file within 24 hours after the letting an "Affidavit of Availability" (Form BC 57), in duplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work. One original shall be filed with the Awarding Authority and one original with the IDOT District Office.
3. The Awarding Authority reserves the right to waive technicalities and to reject any or all proposals as provided in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals.
4. The following BLR Forms shall be returned by the bidder to the Awarding Authority:
a. BLR 12200: Local Public Agency Formal Contract Proposal
b. BLR 12200a Schedule of Prices
c. BLR 12230: Proposal Bid Bond (if applicable)
d. BLR 12325: Apprenticeship or Training Program Certification (do not use for federally funded projects)
e. BLR 12326: Affidavit of Illinois Business Office



NOT FOR BID

RETURN WITH BID

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.

NOT FOR

NOT FOR BID

RETURN WITH BID

PROPOSAL

County DuPage
Local Public Agency Village of Villa Park
Section Number N/A
Route South Michigan Avenue

- 1. Proposal of ... for the improvement of the above section by the construction of pavement removal; earth excavation; installation of storm sewer; sanitary sewer repairs, aggregate base course; curb and gutter installation; hot-mix asphalt pavement; sidewalk removal and replacement; parkway restoration; and other incidental and miscellaneous items of work.
2. The plans for the proposed work are those prepared by Baxter & Woodman, Inc. and approved by the Department of Transportation on N/A
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 92 calendar days or by ... unless additional time is granted in accordance with the specifications.
6. A proposal guaranty in the proper amount, as specified in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals, will be required. Bid Bonds WILL be allowed as a proposal guaranty. Accompanying this proposal is either a bid bond if allowed, on Department form BLR 12230 or a proposal guaranty check, complying with the specifications, made payable to: Village Treasurer of Villa Park
The amount of the check is Five percent (5%) of the bid amount ().
7. In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to the sum of the proposal guaranties, which would be required for each individual proposal. If the proposal guaranty check is placed in another proposal, it will be found in the proposal for: Section Number
8. The successful bidder at the time of execution of the contract WILL be required to deposit a contract bond for the full amount of the award. When a contract bond is not required, the proposal guaranty check will be held in lieu thereof. If this proposal is accepted and the undersigned fails to execute a contract and contract bond as required, it is hereby agreed that the Bid Bond or check shall be forfeited to the Awarding Authority.
9. Each pay item should have a unit price and a total price. If no total price is shown or if there is a discrepancy between the product of the unit price multiplied by the quantity, the unit price shall govern. If a unit price is omitted, the total price will be divided by the quantity in order to establish a unit price.
10. A bid will be declared unacceptable if neither a unit price nor a total price is shown.
11. The undersigned submits herewith the schedule of prices on BLR 12200a covering the work to be performed under this contract.
12. The undersigned further agrees that if awarded the contract for the sections contained in the combinations on BLR 12200a, the work shall be in accordance with the requirements of each individual proposal for the multiple bid specified in the Schedule for Multiple Bids below.

NOT FOR BID



**Illinois Department
of Transportation**

SCHEDULE OF PRICES

County DuPage
 Local Public Agency Village of Villa Park
 Section N/A
 Route South Michigan Avenue

Schedule for Multiple Bids

Combination Letter	Sections Included in Combinations	Total

Schedule for Single Bid

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

Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
1	TEMPORARY FENCE	FOOT	200		
2	TREE ROOT PRUNING	EACH	81		
3	EARTH EXCAVATION	CU YD	1,588		
4	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	1,603		
5	TRENCH BACKFILL	CU YD	2,888		
6	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	8,492		
7	PARKWAY RESTORATION	SQ YD	5,600		
8	SUPPLEMENTAL WATERING	UNIT	42		
9	PERIMETER EROSION BARRIER	FOOT	820		
10	INLET FILTERS	EACH	41		
11	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	980		
12	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	2,441		
13	AGGREGATE BASE COURSE, TYPE B 6"	SQ YD	8,241		
14	BITUMINOUS MATERIALS (TACK COAT)	POUND	4,780		
15	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	1,627		
16	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	834		

NOT FOR BID

RETURN WITH BID

Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
17	PROTECTIVE COAT	SQ YD	2,200		
18	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	663		
19	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	2,075		
20	DETECTABLE WARNINGS	SQ FT	220		
21	PAVEMENT REMOVAL	SQ YD	7,030		
22	DRIVEWAY PAVEMENT REMOVAL	SQ YD	1,402		
23	COMBINATION CURB AND GUTTER REMOVAL	FOOT	5,395		
24	SIDEWALK REMOVAL	SQ FT	2,715		
25	CLASS D PATCHES, 6 INCH	SQ YD	22		
26	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 1 12"	FOOT	231		
27	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 12"	FOOT	400		
28	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 18"	FOOT	361		
29	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 30"	FOOT	1,155		
30	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 36"	FOOT	252		
31	STORM SEWER REMOVAL	FOOT	318		
32	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	4		
33	CATCH BASINS, TYPE A, 5'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	2		
34	CATCH BASINS, TYPE C, TYPE 11 FRAME AND GRATE	EACH	23		
35	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	6		
36	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	9		
37	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	EACH	12		
38	VALVE VAULTS, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	4		

NOT FOR BID

RETURN WITH BID

Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
39	MANHOLES TO BE ADJUSTED	EACH	1		
40	VALVE VAULTS TO BE ADJUSTED	EACH	1		
41	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	5		
42	REMOVING MANHOLES	EACH	2		
43	REMOVING INLETS	EACH	18		
44	DUCTILE IRON WATER MAIN (OPEN CUT), 6"	FOOT	58		
45	WATER VALVE, 6"	EACH	4		
46	FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX	EACH	7		
47	WATER SERVICE CONNECTION, 1" LONG	EACH	15		
48	WATER SERVICE CONNECTION, 1" SHORT	EACH	5		
49	ADJUSTING WATER SERVICE LINES	EACH	15		
50	SANITARY SEWER SERVICE REPLACEMENT	FOOT	700		
51	FIRE HYDRANTS TO BE REMOVED	EACH	7		
52	VALVES AND VAULTS TO BE REMOVED	EACH	4		
53	SANITARY SEWER SERVICE RECONNECTION	EACH	20		
54	SANITARY SEWER PIPE, PVC SDR 26 ASTM D-2241, 6"	FOOT	50		
55	SANITARY SEWER PIPE, PVC SDR 26 ASTM D-2241, 12"	FOOT	20		
56	SANITARY SEWER PIPE, PVC SDR 26 ASTM D-2241, 15"	FOOT	25		
57	SANITARY SEWER PIPE, PVC SDR 26 ASTM D-2241, 18"	FOOT	15		
58	SANITARY MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	7		
59	COMBINATION CLEAN OUT-CHECK VALVE	EACH	10		
60	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)	FOOT	5,395		
61	NON-SPECIAL WASTE DISPOSAL	CU YD	150		
62	SOIL DISPOSAL ANALYSIS	EACH	1		

NOT FOR BID

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Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
63	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	105		
64	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	66		
65	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 4"	SQ YD	896		
66	CONSTRUCTION LAYOUT	L SUM	1		
67	DUST CONTROL WATERING	UNIT	43		
68	STORM SEWER (WATER MAIN QUALITY) 12 INCH	FOOT	493		
69	STORM SEWER (WATER MAIN QUALITY) 18 INCH	FOOT	62		
70	STORM SEWER (WATER MAIN REQUIREMENTS) EQUIVALENT ROUND-SIZE 36 INCH	FOOT	53		
71	REMOVE AND REINSTALL BRICK PAVER	SQ FT	50		
72	EXPLORATION TRENCH, SPECIAL	FOOT	200		
73	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	74		
74	TEMPORARY ACCESS (ROAD)	EACH	7		
75	SANITARY MANHOLES TO BE ADJUSTED	EACH	3		
76	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1		
77	PRE-CONSTRUCTION VIDEO RECORDING	L SUM	1		
78	PVC PIPE DRAINS SDR 26 ASTM D-2241, 6"	FOOT	150		
79	LIMESTONE SCREENINGS FA-5, 2"	SQ YD	275		
80	WATER USAGE DEDUCTION	TGAL	100	-\$8.85	-\$885.00
81	WATER USAGE CREDIT	TGAL	100	\$8.85	\$885.00
82	CONTINGENCY ALLOWANCE	DOLLAR	30,000	\$1.00	\$30,000.00

NOT FOR BID

RETURN WITH BID

CONTRACTOR CERTIFICATIONS

County	DuPage
Local Public Agency	Village of Villa Park
Section Number	N/A
Route	South Michigan Avenue

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

1. **Debt Delinquency.** The bidder or contractor or subcontractor, respectively, certifies that it is not delinquent in the payment of any tax administered by the Department of Revenue unless the individual or other entity is contesting, in accordance with the procedures established by the appropriate revenue Act, its liability for the tax or the amount of tax. Making a false statement voids the contract and allows the Department to recover all amounts paid to the individual or entity under the contract in a civil action.

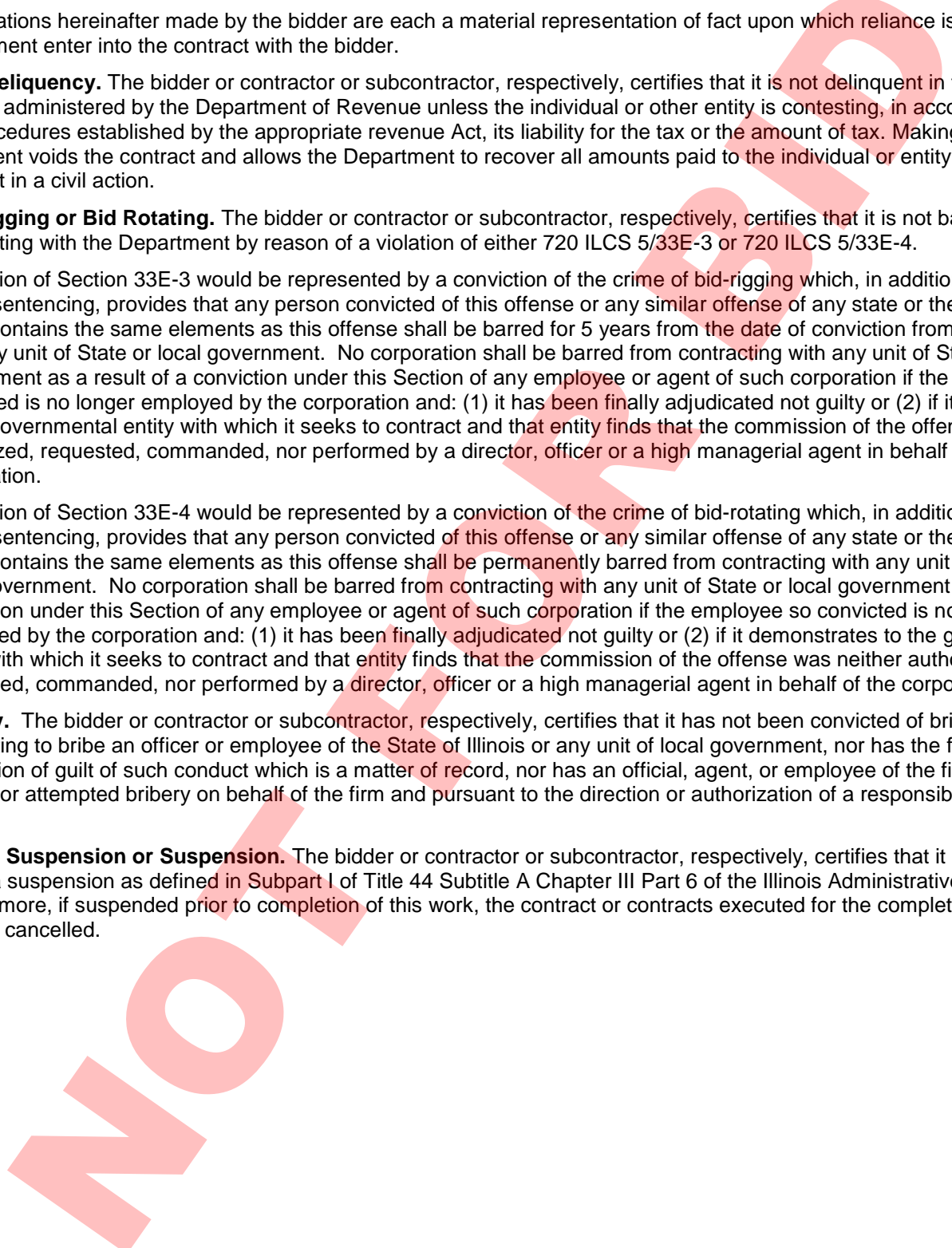
2. **Bid-Rigging or Bid Rotating.** The bidder or contractor or subcontractor, respectively, certifies that it is not barred from contracting with the Department by reason of a violation of either 720 ILCS 5/33E-3 or 720 ILCS 5/33E-4.

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

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

3. **Bribery.** The bidder or contractor or subcontractor, respectively, certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois or any unit of local government, nor has the firm made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a responsible official of the firm.

4. **Interim Suspension or Suspension.** The bidder or contractor or subcontractor, respectively, certifies that it is not currently under a suspension as defined in Subpart I of Title 44 Subtitle A Chapter III Part 6 of the Illinois Administrative Code. Furthermore, if suspended prior to completion of this work, the contract or contracts executed for the completion of this work may be cancelled.



NOT FOR BID

RETURN WITH BID

SIGNATURES

County DuPage
Local Public Agency Village of Villa Park
Section Number N/A
Route South Michigan Avenue

(If an individual)

Signature of Bidder
Business Address

(If a partnership)

Firm Name
Signed By
Business Address

Inset Names and Addressed of All Partners



(If a corporation)

Corporate Name
Signed By
Business Address

President

Inset Names of Officers



President
Secretary
Treasurer

Attest: Secretary

NOT FOR BID

Route South Michigan Avenue
 County DuPage
 Local Agency Village of Villa Park
 Section N/A

RETURN WITH BID

PAPER BID BOND

WE _____ as PRINCIPAL,
 and _____ as SURETY,

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

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

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

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

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

Principal

 (Company Name) _____ (Company Name)

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

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

Surety

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

STATE OF ILLINOIS,
 COUNTY OF _____

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

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

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

Given under my hand and notarial seal this _____ day of _____

My commission expires _____
 (Notary Public)

ELECTRONIC BID BOND

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

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

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Electronic Bid Bond ID Code

 (Company/Bidder Name)

 (Signature and Title) _____
 Date

NOT FOR BID



Illinois Department of Transportation

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

Affidavit of Availability For the Letting of South Michigan Avenue Village of Villa Park

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

Part I. Work Under Contract

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

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

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

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

						Accumulated Totals
Earthwork						
Portland Cement Concrete Paving						
HMA Plant Mix						
HMA Paving						
Clean & Seal Cracks/Joints						
Aggregate Bases & Surfaces						
Highway, R.R. and Waterway Structures						
Drainage						
Electrical						
Cover and Seal Coats						
Concrete Construction						
Landscaping						
Fencing						
Guardrail						
Painting						
Signing						
Cold Milling, Planning & Rotomilling						
Demolition						
Pavement Markings (Paint)						
Other Construction (List)						
						\$ 0.00
Totals						

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

NOT FOR BID

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					
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Amount Uncompleted					
Total Uncompleted					

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

Subscribed and sworn to before me
 this _____ day of _____, _____ Type or Print Name _____
 Officer or Director Title

Signed _____

Notary Public

My commission expires _____

(Notary Seal)

Company _____

Address _____

NOT FOR BID



Apprenticeship or Training Program Certification

Return with Bid

Route South Michigan Avenue
County DuPage
Local Agency Village of Villa Park
Section N/A

All contractors are required to complete the following certification:

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

Blank lines for listing deliver and install groups.

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

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

Blank lines for listing program sponsors and subcontracted work categories.

NOT FOR BID

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

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

Bidder: _____ By: _____ (Signature)
Address: _____ Title: _____

NOT FOR

NOT FOR BID



Affidavit of Illinois Business Office

County DuPage
Local Public Agency Villa Park
Section Number N/A
Route South Michigan Avenue

State of)
County of) ss.

I, (Name of Affiant) of (City of Affiant), (State of Affiant),

being first duly sworn upon oath, states as follows:

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

(Signature)
(Print Name of Affiant)

This instrument was acknowledged before me on day of , .

(SEAL)

(Signature of Notary Public)

NOT FOR BID



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

STATE OF ILLINOIS

COUNTY DuPage
Village of Villa Park
(Name of City, Village, Town or Road District)

FOR THE IMPROVEMENT OF
 STREET NAME OR ROUTE South Michigan Avenue
 SECTION NO. N/A
 TYPES OF FUNDS Local

SPECIFICATIONS (required)

PLANS (required)

CONTRACT BOND (when required)

For Municipal Projects
 Submitted/Approved/Passed

Mayor President of Board of Trustees Municipal Official

Date

Department of Transportation
 Concurrence in approval of award

Regional Engineer

Date

For County and Road District Projects
 Submitted/Approved

Highway Commissioner

Date

Submitted/Approved

County Engineer/Superintendent of Highways

Date

NOT FOR BID

County DuPage
Local Public Agency Villa Park
Section Number N/A
Route South Michigan Avenue

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

Attest: _____ The _____ of _____
Clerk By _____
Party of the First Part

(Seal) _____
Corporate Name _____
By _____
President Party of the Second Part
(If a Co-Partnership)

Attest: _____
Secretary

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

NOT FOR BID



Route South Michigan Avenue
 County DuPage
 Local Agency Villa Park
 Section N/A

We , _____

a/an) Individual Co-partnership Corporation organized under the laws of the State of _____ ,
as PRINCIPAL, and _____

_____ as SURETY,

are held and firmly bound unto the above Local Agency (hereafter referred to as "LA") in the penal sum of _____

_____ Dollars (_____), lawful money of the

United States, well and truly to be paid unto said LA, for the payment of which we bind ourselves, our heirs, executors, administrators, successors, jointly to pay to the LA this sum under the conditions of this instrument.

WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said Principal has entered into a written contract with the LA acting through its awarding authority for the construction of work on the above section, which contract is hereby referred to and made a part hereof, as if written herein at length, and whereby the said Principal has promised and agreed to perform said work in accordance with the terms of said contract, and has promised to pay all sums of money due for any labor, materials, apparatus, fixtures or machinery furnished to such Principal for the purpose of performing such work and has further agreed to pay all direct and indirect damages to any person, firm, company or corporation suffered or sustained on account of the performance of such work during the time thereof and until such work is completed and accepted; and has further agreed that this bond shall inure to the benefit of any person, firm, company or corporation to whom any money may be due from the Principal, subcontractor or otherwise for any such labor, materials, apparatus, fixtures or machinery so furnished and that suit may be maintained on such bond by any such person, firm, company or corporation for the recovery of any such money.

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

NOT FOR BID

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

PRINCIPAL

(Company Name)

(Company Name)

By: _____
(Signature & Title)

By: _____
(Signature & Title)

Attest: _____
(Signature & Title)

Attest: _____
(Signature & Title)

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

STATE OF ILLINOIS,
COUNTY OF _____

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

(Insert names of individuals signing on behalf of PRINCIPAL)

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

Given under my hand and notarial seal this _____ day of _____ A.D. _____

My commission expires _____ Notary Public **(SEAL)**

SURETY

(Name of Surety)

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

STATE OF ILLINOIS. **(SEAL)**
COUNTY OF _____

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

(Insert names of individuals signing on behalf of SURETY)

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

Given under my hand and notarial seal this _____ day of _____ A.D. _____

My commission expires _____ Notary Public **(SEAL)**

Approved this _____ day of _____, A.D. _____

Attest: _____

(Awarding Authority)

Clerk

(Chairman/Mayor/President)

NOT FOR BID

INDEX
FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2017

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS, frequently used RECURRING SPECIAL PROVISIONS, and LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction
(Adopted 4-1-16) (Revised 1-1-17)

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NOT FOR BID

Check Sheet for Recurring Special Provisions

Adopted January 1, 2017

The following RECURRING SPECIAL PROVISIONS indicated by an "X" are applicable to this contract and are included by reference:

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NOT FOR BID

**Check Sheet for
Local Roads and Streets Recurring Special Provisions**

Adopted January 1, 2017

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NOT FOR BID

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NOT FOR BID

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted April 1, 2016, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of South Michigan Avenue, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

DEFINITIONS

Contractor. The individual, firm, partnership, joint venture, or corporation contracting with the Village of Villa Park for performance of prescribed work.

Department, Owner or Village. The Village of Villa Park, DuPage County, Illinois.

Engineer. The Resident Engineer who is the authorized representative of the Village of Villa Park in immediate charge of the engineering details of a construction project.

QUALIFICATIONS OF BIDDERS

Bidders will comply with all applicable federal, state and local laws and requirements, and will further meet the qualifications prescribed in this and other applicable portions of these provisions. Bidder, in submitting a Bid, certifies that Bidder is in compliance with all applicable federal, state and local laws and requirements, and that Bidder further meets the qualifications prescribed in this and other applicable portions of these provisions. Owner's determination as to the compliance and qualifications of the Bidder will be final, and Bidder, in submitting a Bid, agrees to be bound by that determination.

Bidder, in submitting a Bid, certifies that Bidder is in compliance with the following requirements and qualifications. Bidder further certifies that Bidder is able to provide written evidence of Bidder's compliance with the following requirements and qualifications. Bidder shall, upon request by Engineer, submit such written evidence within five (5) calendar days of the Engineer's request, as well as any other written evidence which Engineer may deem necessary for the purpose of evaluating Bidder's qualifications.

- (a) Bidder shall be qualified to do business in the State of Illinois.
- (b) Bidder shall possess either a valid Federal Employer Tax Identification Number (FEIN) or a valid Social Security Number (SSN).

- (c) Bidder shall be able to provide a street address and description of the Bidder's place of business, and the mailing address of the business, if different from the street address.
- (d) Bidder shall be able to provide the number of years Bidder has been engaged in the contracting business under the present firm name, and the name of the state where incorporated.
- (e) Bidder shall be able to provide a list of the property and equipment available to the Bidder.
- (f) Bidder shall be able to provide a financial statement demonstrating that the Bidder has the financial resources to meet all obligations related to the Work.
- (g) Bidder shall maintain insurance policies with the coverages required by the Contract, and with the minimum limits of coverage required by the Contract. Bidder shall be able to provide current certificate(s) of insurance for the insurance policies held by Bidder, demonstrating that Bidder holds insurance policies with the coverages required by the contract, and with the minimum limits of coverage required by the Contract.
- (h) Bidder shall have constructed a minimum of three (3) projects of a similar nature in the immediate past five (5) years. Bidder shall be able to provide a list of all projects of a similar nature constructed by Bidder in the immediate past five (5) years, which list shall contain the minimum of three (3) such projects, which list shall provide a description and the location(s) of all such projects, and shall contain the Bidder's performance record and references, as well as the names and current contact information, including addresses and telephone numbers, of persons who acted as owners' representatives for those projects and who have knowledge of those projects, and whom Bidder agrees the Village may contact for the purpose of verifying Bidder's performance and references.
- (i) Bidder shall be able to provide a list of three (3) references (names, addresses and telephone numbers) with knowledge of the integrity and business practices of the bidder. Such references may not be persons who have been owners or officers of the firm, or have been employed by Bidder as employees.
- (j) Bidder shall be able to provide a list of projects presently under Contract, the awarded Contract amount of each, the approximate adjusted Contract amount of each (if applicable), and the dollar amount or percent of completion of each.
- (k) Bidder shall be able to provide a list of Contracts which have resulted in lawsuits, whether against Bidder as a prime contractor, against Bidder as a subcontractor, or

against Bidder as a party in any other capacity; or against subcontractors or suppliers performing work for Bidder or under Contract held by Bidder.

- (l) Bidder shall be able to provide a list of Contracts defaulted.
- (m) Bidder shall be able to provide a statement indicating whether or not Bidder has ever filed bankruptcy.
- (n) Bidder shall be able to provide a list of all owners and officers of the firm, which list shall also indicate those owners and officers who, while in the employ of the firm or in the employ of previous firms, were associated with Contracts which resulted in lawsuits, Contracts defaulted, or firms which filed for bankruptcy.
- (o) Bidder shall maintain personnel guaranteed to be employed in the responsible charge of the Work, which personnel possess sufficient technical experience to ensure the satisfactory completion of the Work. Bidder shall be able to provide the names and technical experience of such personnel, as well as statements as to whether the personnel have or have not performed satisfactorily on other contracts of like nature and magnitude or comparable difficulty at similar rate of progress.
- (p) Bidder shall be able to provide a list of subcontractors and suppliers anticipated to be employed by Bidder for the purpose of completing the Work, including the firm name, street address and description of place of business; mailing address of business (if different); phone, fax and e-mail contact information of business; name of primary contact; and a list of any projects or contracts for which Bidder currently owes monies to said firm, which list shall include a description of the project or contract, the amount currently due to said firm, the period of time for which those monies have been owed, and the expected date of payment of those monies.
- (q) Bidder shall participate in active apprenticeship and training programs approved by and registered with the United States Department of Labor Bureau of Apprenticeship and Training for each of the trades of work contemplated under the Contract. Bidder shall be able to provide evidence of Bidder's participation in such apprenticeship and training programs.
- (r) Bidder shall only employ subcontractors who meet the requirements prescribed in this section and other sections of these specifications.
- (s) Bidder shall be able to provide such other information as may assist Owner in determining whether the Bidder is adequately prepared to fulfill the Contract.

These requirements and qualifications are not intended to discourage bidding, to make it difficult for qualified Bidders to submit Bids, or to discourage beginning contractors. The purpose of these

requirements and qualifications is to allow Owner to obtain sufficient information about Bidder's financial state, available equipment, personnel, and previous work experience so that Owner may mitigate the hazards involved in awarding contracts to parties who may not be qualified to perform the Work as specified.

A copy of Village of Villa Park Ordinance No. 3733, amending the requirements of bidders for construction projects, is provided as Appendix A.

AWARD OF CONTRACT

The Award of Contract will be according to #LRS6 of the Supplemental Specifications except as modified herein.

Revise the third paragraph of Award of contract, to read:

“If a contract is not awarded within 60 days after the opening of proposals, bidders may file a written request with the Awarding Authority for the withdrawal of their bid, and the Awarding Authority will permit such withdrawal.”

INCREASED OR DECREASED QUANTITIES

The Village reserves the right to increase or decrease the amount of work shown in the plans in accordance with Section 109 of the Standard Specifications.

WORKING HOURS

Working hours will be between 7:00 A.M. and 5:00 P.M., Monday through Friday, excluding legal holidays as designated by the Contract.

Contractor will not permit the performance of Work outside these working hours without Owner's written consent, which may be given after prior written request to Engineer, except as otherwise required for the safety of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents.

If Contractor permits the performance of Work outside these working hours, Contractor will compensate Owner for the costs of inspection and other services provided by Engineer. Owner will determine the rates at which such inspection and other services are to be compensated. Owner will determine the interval or intervals at which billing will take place, and may, at Owner's discretion, submit invoices for payment to Contractor, or deduct the costs from any monies due or to become due to the Contractor from Owner.

WINTER WORK

If the contractor elects to begin any site work before or during winter, no additional compensation will be granted for any additional cost incurred by the contractor as a result of winter weather. The contractor will also be responsible for the implementation and cost of any winter shutdown provisions which are deemed necessary by the engineer.

HOLIDAYS

Revise the list of legal holidays in Article 107.09 of the Standard Specifications to read:

New Year's Day

Easter

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Thanksgiving Friday

Christmas Eve

Christmas Day

New Year's Eve

INSURANCE

Insurance and indemnification shall be according to applicable sections of the Standard Specifications, and shall also be according to the "IRMA Contractual Insurance Guidelines", incorporated herein as Appendix B. If a conflict is determined to exist between the requirements prescribed in the Standard Specifications and the requirements prescribed in the IRMA Contractual Insurance Guidelines, such conflict will be resolved as follows:

- a. If a particular type of insurance coverage is required by one standard but not by both, that type of insurance coverage will be required.
- b. If the minimum limits of insurance coverage required by one standard differ from those required by the other standard, the higher minimum limits of insurance coverage will prevail.
- c. If any other conflicts are determined to exist between the requirements prescribed in the two standards, the stricter of the two requirements will prevail. Owner will make the final determination as to what constitutes a stricter requirement.

MOBILIZATION

Mobilization will be according to Section 671 of the Standard Specifications except as modified herein.

Revise Article 671.02, Basis of Payment, to read:

"671.02 Basis of Payment. Mobilization will not be paid for separately but rather shall be included in the cost of the items for which this work applies."

Special Provisions
131011.40

Village of Villa Park
South Michigan Avenue
County: DuPage

LOCATION OF PROJECT

The project is located on South Michigan Avenue from Park Boulevard to Madison Avenue in the Village of Villa Park, DuPage County, Illinois. A location map is shown on the cover of the Plans.

DESCRIPTION OF WORK

The work consists of furnishing all labor, materials, equipment, and other incidentals necessary for the completion of curb and gutter and sidewalk repair; hot-mix asphalt resurfacing; adjustment of drainage structures; parkway restoration; and other incidental and miscellaneous items of work in accordance with the Plans, Standard Specifications, and these Special Provisions.

MAINTENANCE OF ROADWAYS:

Effective: September 30, 1985

Revised: November 1, 1996

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

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

HIGHWAY PERMIT

A DuPage County Division of Transportation permit is required for the work within the ROW between Park Boulevard and Central Boulevard. The Contractor shall execute all necessary permit forms, provide and pay for any fee and bond requirements, and execute and comply with all insurance and performance guarantee requirements. Work required to comply with these permit requirements shall be included as part of the contract.

DuPage DOT Tracking Number: AP150994

STATUS OF UTILITIES (D-1)

Effective: June 1, 2016

Utility companies and/or municipal owners located within the construction limits of this project have provided the following information in regard to 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 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 owners part can be secured.

Pre-Stage

STAGE / LOCATION	TYPE	DESCRIPTION	OWNER	ACTION
Crossing at 22+50 (N of Washington St)	Phone	Aerial Cable	AT&T	The contractor shall protect utility from damage during construction.
NE corner of Madison and S Michigan	Cable TV	Aerial Cable	Comcast	The contractor shall protect utility from damage during construction.
NE corner of Madison and S Michigan	Electrical	Aerial Cable	ComEd	The contractor shall protect utility from damage during construction.

Special Provisions
131011.40

Village of Villa Park
South Michigan Avenue
County: DuPage

STAGE / LOCATION	TYPE	DESCRIPTION	OWNER	ACTION
East Parkway	Gas	Underground Gas Main and Services	Nicor	The contractor shall protect utility from damage during construction.

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	Address	Phone	e-mail address
AT&T #ET3404	Janet Ahern	1000 Commerce Drive Oak Brook, IL 60523	630.573.6414	ja1763@att.com
Comcast	Martha Gieras	688 Industrial Drive Elmhurst, IL 60126	630.288.7637	Martha_Gieras@cable.comcast.com
ComEd	Ilyas Mohiuddin	25000 Governors Hwy. University Park, IL 60466	708.235.2692	Ilyas.Mohiuddin@ComEd.com
Nicor Gas #SC11258	Bruce Koppang	1844 Ferry Road Naperville, IL 6056	630.388.3830	bkoppan@aglresources.com

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 taken into account 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 in the action column 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 dates 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. The Department's contractor is responsible for contacting J.U.L.I.E. prior to any and all excavation work.

MAINTENANCE GUARANTEE

The Contractor shall execute and deliver to the Village of Villa Park, before final payment will be issued, a written warranty, in a form satisfactory to the Village, which guarantees that the work is in accordance with the Contract Documents and will not be defective. This warranty shall guarantee this work for a period of 1-year from the date of acceptance of the work and final payment by the Village of Villa Park.

If within this guarantee period, any work is found to be defective, as determined by the Village, the Contractor shall promptly, without cost to the Village of Villa Park, correct or repair such defective work, or remove and replace the defective work in accordance with the Special Provisions for the items in question.

The Contractor shall furnish a warranty bond in an amount equal to ten percent (10%) of the contract amount, or \$100,000, whichever is greater, by a surety satisfactory to the Village to guarantee Contractor's warranty to repair defective work.

SUBCONTRACTORS

Add the following to the end of Section 108.01 of the Standard Specifications.

"The apparent low Bidder shall submit to the office of Engineer within ten (10) days after the receipt of bids, a list of the names of Bidder's proposed subcontractors along with a description of the work to be performed by each."

APPLICATION FOR PAYMENT

Add the following to the end of Section 109.07 (a) of the Standard Specifications.

"The Contractor shall procure from each subcontractor and supplier of material or labor a waiver of any claim which they may have under the mechanics lien laws of the state in which the

Work is located, to insure the Municipality immunity from mechanics liens on subcontractors in carrying out the contract and any work orders for additions thereto, all as a condition of any payment by the Municipality. Any payments made by the Municipality without requiring compliance with this paragraph shall not be construed as a waiver by the Municipality of the right to require compliance with this paragraph as a condition to later payments.

The Contractor shall submit Partial Waivers of Lien from all subcontractors and suppliers with each partial payment estimate and Contractor's Affidavit for subcontractors and suppliers with second payment request for the previous payment estimates and then with all subsequent payment estimates."

Add the following to the end of Section 109.08 of the Standard Specifications.

"The Contractor shall furnish with his final application for payment a complete release of all liens arising out of this contract, or receipts in full in lieu thereof and an affidavit that the releases and receipts include all labor and material for which a lien could be filed."

LIMITATIONS ON ENGINEER'S AUTHORITY AND RESPONSIBILITIES

The authority and duties of Resident Engineer in Article 105.10 of the Standard Specifications are hereby deleted. The authority of Engineer is amended as follows.

"The Engineer will be the Municipality's representative during the construction period. The Engineer will furnish a Resident Project Representative (RPR) to assist the Engineer in providing job-site observation of the Contractor's Work. The RPR will assist the Contractor with interpretation of the Plans and Specifications, observe in general if the Contractor's Work is in conformity with the Contract Documents, and monitor the Contractor's progress as related to the date of completion. The Engineer will not supervise, direct, control or have authority over or be responsible for the Contractor's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of the Contractor to comply with Laws and Regulations applicable to the furnishing or performance of the Work. 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 any subcontractor, any supplier, or of any other person or organization performing or furnishing any of the Work.

These limitations on authority and responsibility set forth herein shall also apply to the Engineer's Consultants, Resident Project Representative and assistants."

ITEM #2 - TREE ROOT PRUNING

Tree root pruning shall be performed in accordance with Section 201 of the Standard Specifications, with the following modifications.

Fertilizer nutrients and supplemental watering will not be paid for separately, but will be included in the cost of TREE ROOT PRUNING.

ITEM #7 - PARKWAY RESTORATION

This work shall be done in accordance with Sections 211 and 252 of the Standard Specifications and the Details provided in the Plans, except where modified herein.

Description. The purpose of this work is to restore the areas disturbed by construction and/or to provide proper drainage in the parkways.

This work shall include restoring disturbed areas within the construction limits, removing excess backfill material, furnishing and placing topsoil in accordance with Section 211, compacting and grading to maintain positive slope, and sodding the areas in accordance with Section 252. Care should be taken to insure proper compaction as the Contractor will be responsible for repair of any areas where settlement occurs.”

211.02 Materials. Add the following to the end of the Article:

“Topsoil shall be a loamy mixture of black dirt having at least 90 percent passing a No. 10 sieve, and shall be free of large roots, brush, sticks, weeds, stones larger than 1/2-inch in diameter and any other litter. Topsoil, pH shall not be lower than 4.5 nor higher than 8.5 as determined in accordance with ASTM procedures for soil testing. Sod shall be salt tolerant.”

211.04 Placing Topsoil and Compost. Add the following to the end of the Article:

“The topsoil shall be spread to a smooth, compacted uniform thickness of not less than 4 inches.”

252.03 Ground Preparation. Add the following to the end of the Article:

“The removal of any excess backfill material shall be included in the pay item for PARKWAY RESTORATION.

Fertilizer nutrients shall be applied in accordance with Section 252.03 of the Standard Specifications and shall be included in the pay item for PARKWAY RESTORATION.”

252.06 Placing Sod. Add the following to the end of the Article:

“The Contractor shall provide subsequent resodding until a satisfactory growth of grass is produced or if settlement occurs.”

211.07 and 252.12 Method of Measurement. Delete the final paragraph of Article 252.12, Replace Article 211.07 and the first paragraph of 252.12 with the following:

“**Method of Measurement.** This work will be measured for payment in place, and the area computed in square yards. To be acceptable for final payment, the sod shall be growing in place for a minimum of 30 days in a live, healthy condition.”

211.08 and 252.13 Basis of Payment. Delete the final paragraph of Article 252.13, Replace Article 211.08 and the first three paragraphs of 252.13 with the following:

“**Basis of Payment.** This work will be paid for at the contract unit price per square yard for PARKWAY RESTORATION.”

ITEM #10 - INLET FILTERS

Inlet filter cleanings are included in the cost of INLET FILTERS. Inlet filters shall only be paid for once if they are reused on a new structure.

ITEM #11 - AGGREGATE SUBGRADE IMPROVEMENT

Add the following Section to the Standard Specifications:

“SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

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

303.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	1004.07
(b) Reclaimed Asphalt Pavement (RAP) (Notes 1, 2 and 3)	1031

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

Note 2. RAP having 100 percent passing the 1 1/2 in (37.5 mm) sieve and being well

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

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

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

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

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

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

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

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

303.10 Basis of Payment. This work will be paid for at the contract unit price per cubic yard for AGGREGATE SUBGRADE IMPROVEMENT.

Add the following to Section 1004 of the Standard Specifications:

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

- (a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete. The top 12 inches of the aggregate subgrade improvement shall be 3 inches of capping material and 9 inches of crushed gravel, crushed stone or crushed concrete. In applications where greater than 36 inches of subgrade material is required, rounded

gravel, meeting the CS01 gradation, may be used beginning at a depth of 12 inches below the bottom of pavement.

(b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials. Non-mechanically blended RAP may be allowed up to a maximum of 5.0 percent.

(c) Gradation.

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

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

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

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

ITEM #14 - BITUMINOUS MATERIALS (TACK COAT)

Description. This work shall be performed in accordance with Section 406 of the Standard Specifications, with the following modifications:

Bituminous tack coat shall be placed at least one hour in advance of the placement of HMA, but no more than forty-eight hours in advance of the placement of HMA. If Contractor places tack coat more than forty-eight hours in advance of the placement of HMA, the tack coat will not be measured for payment, and Contractor will place tack coat again in accordance with this provision. Tack coat will not be placed on weekends or on legal holidays unless permitted by the Engineer. Tack coat will not be placed before weekends or legal holidays when placement of HMA is not expected to take place until after the weekend or legal holiday, unless permitted by the Engineer.

Basis of Payment. This work will be paid for at the contract unit price per pound for BITUMINOUS MATERIALS (TACK COAT); which price shall include all labor, materials, and equipment necessary to complete the work as described herein.

ITEM #21 - PAVEMENT REMOVAL

This work shall be done in accordance with Section 440 of the Standard Specifications except as modified herein.

440.07 (c) Adjustment of quantities. Revise section to read:

“The quantity of pavement removal shall not be adjusted. Pavement removal includes any pavement or subgrade to a depth of 10 inches. If pavement thickness greater 10 inches is encountered the remaining pavement removal shall be paid for as EARTH EXCAVATION.”

ITEM #22 - DRIVEWAY PAVEMENT REMOVAL

This work shall be done in accordance with Section 440 of the Standard Specifications except as modified herein.

440.07 (c) Adjustment of quantities. Revise section to read:

“This work shall include all pavement removal and excavation required to reach the subgrade. A minimum excavation depth of 10 inches shall include the excavation for the proposed aggregate base which is included in the cost of this item.”

ITEM #25 - CLASS D PATCHES

This work shall be done in accordance with Section 442 of the Standard Specifications except as modified herein.

442.01 Description. Delete all reference to a specified “type” in this Article. Add Class D Patches 6” shall be placed with 4” Binder and 2” Surface.

442.11 Basis of Payment. Revise the second paragraph of this Article to Read:

“This work will be paid for at the contract unit price per square yard for CLASS D PATCHES, of the thickness specified.”

ITEM #31 - STORM SEWER REMOVAL

This work shall be done in accordance with Section 551 of the Standard Specifications except as modified herein.

551.06 Basis of Payment. Revise the paragraph of this Article to Read:

“This work will be paid for at the contract unit price per foot for STORM SEWER REMOVAL, as shown on the plans. Removal will not be paid for if proposed storm sewer is being installed in the same trench.

TRENCHING, BACKFILLING AND COMPACTING FOR SANITARY SEWER, STORM SEWER, AND WATER MAIN

SUMMARY: Trench, backfill, and compact shown on the plans, as specified herein and as needed for installation of water main and sanitary sewer in accordance with the “Standard Specification for Water and Sewer Main Construction in Illinois”.

QUALITY ASSURANCE: Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

Use equipment adequate in size, capacity, and numbers to accomplish the work in a timely manner.

Comply with requirements of governmental agencies having jurisdiction.

GRANULAR PIPE BEDDING AND COVERING MATERIALS: Provide well graded, washed, mixture of gravel or crushed stone aggregate free of clay, loam, dirt, calcareous or other foreign matter conforming to the IDOT "Standard Specifications" gradation No. CA 7, or the Standard Specifications for Water and Sewer Construction in Illinois, with the following gradation:

<u>Sieve Size</u>	<u>Percent Passing</u>
1 1/2-inch	100%
1-inch	90 -100%
1/2-inch	30 - 60%
No. 4	0 -10%

1. For flexible thermoplastic pipes including sewer pipes, sewage force mains, and water mains: Comply with ASTM D2321, Class I or II as modified below.
 - a. Exclude sharp angular granular materials.
 - b. Limit maximum particle size to 1/2-inch (IDOT CA 15 or CA 16).
 - c. Do not use Class II materials in wet conditions.
2. For rigid pipes comply with ASTM C12, Bedding Class B.

EXCAVATED BACKFILL MATERIALS IN NON-PAVED AREAS: Provide soil materials free from organic matter, rubble, or frozen material, containing no rocks or lumps over 6 inches, and with not more than 15 percent of the rocks or lumps larger than 2 inches.

GRANULAR BACKFILL MATERIALS: Provide granular backfill materials.

Granular Material: Use 100% crushed stone or gravel, virgin material, complying with Section 1004 in the IDOT Standard Specifications for gradation No. CA-6.

GEOTECHNICAL FABRIC: Provide geotechnical fabric for separation of granular material and native soil in areas where trench is over excavated to remove unsuitable materials.

1. Acceptable manufacturers:
 - a. Mirafi: 160N.
 - b. Synthetic Industries: 601.
 - c. Amaco: 4551.
 - d. Or approved equal.

GENERAL CONSTRUCTION REQUIREMENTS:

1. Protection of existing facilities:
 - a. Unless shown to be removed, protect existing structures, conduits, active utility lines and all other facilities shown on the Plans or otherwise made known to the Contractor. If damaged, repair, replace, or restore to a condition equal to or better than the original condition at no additional cost to the Contract.
 - b. Notify all persons, firms, corporations, or agencies owning or using any existing structures, conduits, or utilities which may be affected by the Work prior to the start of construction.
 - c. Make arrangements to locate, maintain, protect, and/or relocate facilities in order to complete the Work.
 - d. Make such exploration as is necessary to determine the exact location of underground utilities.
 - e. Exercise care during the progress of work in the area to prevent damage to the utilities.
 - f. Whenever it becomes necessary to relocate underground gas mains, telephone conduit, or electrical lines or support or relocate utility poles, the utility company involved will make such relocation or provide pole support. Notify the utility company promptly.
 - g. Whenever it becomes necessary to relocate water or other pipes or conduits in direct conflict with the proposed pipe (exclusive of culverts) which are not shown on the Plans, obtain the direction from the Engineer for the relocation. Compensation will be allowed only for such quantities as determined by the Engineer.
 - h. Do not obstruct accessibility of fire hydrants.
 - i. Maintain access to driveways at all times except when actual trench construction is crossing a driveway.

TRENCHING:

1. Do not advance trench excavation more than 50 feet ahead of completed pipe installation except as approved by the Engineer.
2. Provide and maintain sheeting, shoring, and bracing necessary for protection of the Work, adjacent property, and for the safety of personnel.
 - a. Remove temporary sheeting and bracing after backfilling to an elevation which will prohibit caving of exposed sidebanks.
 - b. Fill voids left by the withdrawal of sheeting with compacted sand.
 - c. The Engineer may direct that supports in trenches be cut off at any specific elevation to protect adjacent facilities or property. Compensation for support left in place will be negotiated.
 - d. No extra payment will be made for the supports left in place without the direction of the Engineer.
 - e. Do not leave supports within 4 feet of the ground or pavement surface in place without the permission of the Engineer.
3. Provide pumping, bailing, wellpointing, and construct ditches and dikes required to dewater and drain ground water, sewage, or stormwater to keep the excavation and site dry for the completion of the Work.
4. Excavation:
 - a. Excavate by open cut unless otherwise indicated on the Plans.
 - b. Excavate trenches to the depths and grades necessary for the pipelines with allowances for bedding material.
 - c. Over excavate organic, soft, spongy, or otherwise unsuitable soils found at or below the bottom of the trench to meet firm subsoil or as determined by the Engineer.
 - d. Comply with IDOT maximum widths for trench backfill.
 - e. If the Contractor elects to perform any non-open cut installation, the Contractor will be responsible for any damage to existing utilities.

EXCAVATION FOR APPURTENANCES:

1. Excavate for manholes and similar structures to the depths as shown on the Plans and to a distance sufficient to leave at least 12 inches clear between outer surfaces and the embankment or shoring that may be used to hold and protect the banks.
2. Over depth excavation beyond depths indicated on the Plans that has not been directed will be considered unauthorized. Fill with sand, gravel, or lean concrete as determined by the Engineer, and at no additional cost to the Contract.

BEDDING AND COVERING OF PIPE: Bedding is defined as the shaped and tamped material which supports the pipes. Covering is defined as the compacted material which protects and covers the pipes. Provide continuous bedding and covering for underground pipelines, except where concrete encasement, concrete cradles, boring or jacking are indicated.

Pipe bedding:

1. Provide compacted granular pipe bedding and covering material with a minimum thickness of 4 inches under pipe barrels and 2 inches under bells.
2. Wherever the trench is over-excavated due to removal of unsuitable material, refill the trench bottom to the bottom of the pipe bedding with granular material conforming to the IDOT "Standard Specifications" gradation No. CA 1 as determined by the Engineer.
 - a. Unless otherwise specified to be paid for, removal and replacement of material, or unsuitable material, to a depth of one foot below pipe barrel outside diameter is considered incidental to installation of the pipe.
3. Wherever the trench is over excavated to remove unsuitable material, install geotechnical fabric between native soil and granular material:
 - a. Install fabric to cover bottom and sides of trench to heights as follows:
 - (1) For all flexible pipe and rigid pipe 24-inch and smaller: to envelop entire bedding and covering material and overlap 1-foot at the top.
 - (2) For rigid pipe 27-inch and larger: to cover bedding material and from sides of trench to edge of pipe.
 - (3) Where undercut is of a depth that requires more than one piece of fabric to provide envelope, provide sewn seams between sections of fabric.
4. Wherever two or more pipes or conduits are placed in the same trench or excavated area, backfill the trench with granular pipe bedding and covering material to support the uppermost pipe or conduit.

Pipe covering:

1. Following placement of pipe and inspection of joints, provide compacted granular pipe bedding and covering material for the full width of the trench to 12 inches above the top of pipe.
2. Place granular pipe bedding and covering material in uniform loose layers not exceeding 8 inches thick.
 - a. Compact each layer firmly by ramming or tamping with tools approved by the Engineer in such a manner as not to disturb or injure the pipe to yield a minimum density of 95 percent of maximum dry density as determined according to ASTM D1557 or AASHTO-T180.
3. Where trench is widened by installation of structures or jacking pits, extend bedding and covering materials to total width of excavations.

TRENCH BACKFILLING AND COMPACTING: Backfill trench from the top of pipe cover to topsoil, paving subgrade, or foundation level as shown in the details in the plans.

For trench in lawns, parkways, and other improved areas not subject to vehicular traffic:

1. Backfill with excavated materials in uniform loose layer not exceeding 12 inches thick.
2. Compact each layer of trench backfill materials to yield a minimum of 85 percent of maximum dry density as determined according to ASTM D1557 or AASHTO-T180.

For trench in streets, parking areas, driveways, sidewalks, curb and gutter, or within 2 feet of any proposed curb and gutter, sidewalk, or other paved areas:

1. Backfilling with granular backfill materials:
 - a. Place in uniform loose layer not exceeding 12 inches thick and compact with vibrating roller or equivalent.
 - b. Water jetting may not be used in lieu of vibratory compaction.
 - c. Fill the top of trenches with temporary aggregate pavement material to the depth(s) required to provide aggregate base and pavement base, binder and surface courses of the depths shown on the Plans. Installation and removal is paid for as TRENCH BACKFILL.
1. Compacting requirements:
 - a. Compact each layer of trench backfill materials to yield a minimum density of 90 percent of maximum dry density as determined according to ASTM D1557 or AASHTO T-180.
 - b. The Engineer has the authority to request the services of an independent testing laboratory for the density tests at the Contractor's expense.
2. Maintain temporary pavement level with adjoining pavement surfaces until the permanent pavement is placed.

BACKFILL AND BEDDING FOR APPURTENANCES:

1. Provide 4 inches of granular bedding material unless otherwise shown on the Plans.
2. Do not backfill until new concrete has properly cured, and any required tests have been accepted.
3. Backfill in lawns and landscaped areas with excavated materials.
4. Backfill in pavement around manholes, catch basins, inlets, valve vaults, and other structures as determined by the Engineer with granular backfill materials.

FINISH GRADING:

1. Provide finish grading and filling to achieve the lines and grades.
2. Slope grades to drain away from structures.
3. Replace culverts damaged during the construction with new culverts. Temporary culverts may be provided if drainage improvements are part of the Contract.
4. Except where mounding over trenches is specified, grade smooth areas of the Work including previously grassed areas that have been disturbed, and adjacent transition areas.
5. Fill and compact depressions from settlement and round tops of embankments and breaks in grade.
6. Protect newly graded areas from traffic and erosion. Repair settlement or washing away that may occur prior to surface restoration and re-establish grades to the required elevations at no additional cost to the Contract.
7. Remove unsuitable and surplus excavated materials not used for backfilling from the project site.

8. Do not deposit on public or private property without written permission from property owner or authorized representative of appropriate public agency.

WATER DISTRIBUTION SYSTEM

SUMMARY: Provide the water distribution system as shown on the Plans, specified herein, and needed for a complete and proper installation, and in accordance with the latest edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois", except as revised herein.

Provide labor, materials, tools, chemicals and equipment necessary to perform the pressure and leakage tests and disinfection.

IRON AND STEEL MATERIALS: All iron and steel materials used on this project shall be domestically manufactured or produced and fabricated in accordance with Article 106.01 of the Standard Specifications.

BRASS AND BRONZE ALLOYS: All brass and bronze alloys supplied with the products shall contain less than 15 percent zinc, unless otherwise specified.

1. Brass that will come in contact with potable water shall contain no more than 0.25% lead.
 - a. Brass fittings shall be marked with industry standard marking to indicate the amount of lead (no lead, low lead, etc.) in the brass.
 - b. Brass for service saddles may contain more than 0.25% lead to improve ductility of the saddles.

PIPE AND FITTINGS: Provide ductile iron pipe materials in size 4-inch through 10-inch unless otherwise indicated on the Plans.

Ductile Iron Pipe: Provide ductile iron pipe complying with ANSI A21.51, special thickness Class 52, with joints complying with ANSI A21.11. Use cement lining complying with ANSI/AWWA, C104/A21.4 standard thickness.

1. Provide restrained joint pipe system, where indicated on the Plans, that utilizes one of the following methods:
 - a. Lock rings welded into place around pipe barrel.
 - b. Bolted rings installed around pipe barrels that fit inside pipe bells.
 - c. Gaskets which include stainless steel locking segments vulcanized into the gasket.
 - d. Mechanical joint retainer gland systems that provide locking segments shaped to pipe barrel that do not create stress points on pipe barrel.
 - (1) Do not use setpoint type retainer glands.
 - e. Acceptable products:
 - (1) American Fastite, Flex-ring, Lok-ring, and MJ coupled joint.
 - (2) Clow Tyton Joint – Type A or Type B, and Super-Lock.
 - (3) U.S. Pipe TR-Flex Gripper.

- (4) Griffin Bolt Lok or Snap Lok.
 - (5) Field Lok or Fast Grip Gasket Systems.
 - (6) Meg-A-Lug System.
 1. Series 1100 Megalug for MJ to pipe
 2. Series 1700 Megalug Harness for push on joint.
 - (7) Or approved equal.
2. Fittings:
- a. Use ductile iron fittings with mechanical joint complying with ANSI A21.10 or A21.53.
 - b. Use cement lining complying with ANSI A-21.4, standard thickness.
 - c. Bolts and nuts:
 - (1) Use Cor-blue bolts and nuts,
 - d. Provide restrained joint type fittings compatible with pipe system utilized, as specified by the pipe manufacturer.
 - e. Mechanical joint retainer gland systems that provide locking segments shaped to pipe barrel that do not create stress points on pipe barrel.
 - (1) Acceptable products:
 1. Meg-A-Lug System.
 - a. Series 2000PV Megalug for MJ to Pipe (C-900).
 - b. Series 1500 Megalug Harness for push on joint (C-900).
 - c. Series 1900 Megalug for MJ to Pipe (C-909).
 - d. Series 1900 Harness for push on joint (C-909).
3. Conductivity appurtenances:
- a. Provide wedges of serrated silicon bronze or #10-copper cable and tapping devices specifically designed for this purpose.
 - b. Use devices provided by the pipe manufacturer.
 - c. Standard mechanical joints, field lok, or meg-a-lug are not acceptable for the purpose of conductivity.

VALVES: Provide gate valves with clockwise closing direction.

1. Design in accordance with AWWA C509 (cast iron body), or AWWA C515 (ductile iron body) bronze fitted, resilient wedge and seat type with non-rising stem and O-ring packing.
2. Provide ANSI Class 125 flange ends or mechanical joint ends for valves installed in vaults as indicated on the Plans.
 - a. Provide restrained type joints for all mechanical joint end valves.
3. Acceptable valve manufacturers:
 - a. Waterous Model 2500
4. Acceptable valve box manufacturer:
 - a. Tyler 664-S

VALVE VAULTS:

1. Provide precast reinforced concrete manhole sections, bottoms, and flat top slabs complying with ASTM C478 unless otherwise indicated on the Plans.

2. Provide concentric cone section unless otherwise indicated on the Plans.
3. Provide precast reinforced concrete monolithic or separate base.
4. Design flat slab tops for AASHTO HS20-44 wheel loading.
5. Provide 4,000 psi concrete using Type I Portland Cement complying with ASTM C150.
6. Mortar: Mix one part Portland Cement to three parts fine aggregate.
7. Provide joints of either flexible watertight rubber gaskets or preformed bituminous plastic gaskets consisting of a homogeneous blend of refined hydrocarbon resins and plasticizing compound reinforced with inert mineral filler.
 - a. Acceptable preformed gasket products:
 - (1) K.T. Snyder Co., RAM-NEK.
 - (2) Concrete Sealants, Type CS-208.
 - (3) Or approved equal.
8. Frames and covers: Provide cast iron frames and covers with heavy duty, indented top with solid self-sealing lids and machined bearing surfaces, stamped with the words "VILLAGE OF VILLA PARK" and "WATER".
 - a. Acceptable products:
 - (1) Neenah R-1713;
 - (2) East Jordan 1050 EXHD;
 - (3) Or approved equal.
9. Flexible pipe connectors: Provide flexible rubber gasket collar for connecting pipe to the manhole.
 - a. Comply with ASTM C-923
 - b. Use PSX gasket system by Press-Seal Gasket Corporation.

FIRE HYDRANTS:

1. Comply with AWWA C502.
2. Factory painted red.
3. Match the hydrants generally installed in the Municipality's water system.
 - a. Acceptable manufacturers:
 - (1) Waterous Pacer Model WB 67-250
 - (2) Or approved equal.
4. Hydrant shall have a five foot and six inches (5.5') bury depth.
5. Provide compression type with a 5-1/4-inch and minimum size main valve assembly, O-ring seals, two 2-1/2-inch hose nozzles, and a 4-1/2-inch pumper nozzle with National Standard threads, a National Standard operating nut, and an above-ground break flange.
6. Provide a 6-inch auxiliary resilient seat type gate valve with restrained type joints or bituminous coated metal tie rods between the valves and the tee fittings.
7. Provide valve boxes with cover marked with the word "WATER".
8. Provide valve box stabilizers on all hydrant auxiliary valves.
 - a. Acceptable manufacturers:
 - (1) BLR Enterprises, Inc.
 - (2) Or approved equal.

WATER SERVICES:

1. Provide service saddles, corporation stops, curb stops, service boxes, and water service tubing. Comply with the most recent edition of AWWA C800 (or NSF/ANSI 372) for service lines and service line appurtenances. All new services and service adjustments should use flare and not compression fittings.
 - a. Service lines: 1-inch Type K soft temper seamless copper water tubing complying with ASTM B-88.
 - b. Service saddles: direct tap all water services to the existing water main, no service saddles will be used.
 - c. Corporation valves: Mueller 300 Ball Corporation Valve Model B-25000 with AWWA taper (Mueller "CC") thread inlet and copper flare straight connection outlet.
 - d. Curb valves: Mueller 300 Ball Curb Valve Model B-25154 with copper flare nuts on both ends, quarter turn check, and Minneapolis pattern thread top.
 - e. Curb boxes: Mueller Extension Type Curb Box Model H10302 with Minneapolis pattern base, 1 ½" inside diameter and 2 ½" base tapping diameter.
 - f. Unless otherwise specified, all fittings shall be no-lead brass.

TAPPING SLEEVES AND VALVES:

1. Tapping Sleeves:
 - a. Use two-piece bolted sleeve ductile iron or stainless steel type with mechanical joints.
 - b. Provide joint accessories.
 - c. Measure existing water main outside diameter to determine proper tapping sleeve size
 - d. All sleeves used to connect sections of old or new water mains shall be Hymax Grip couplings.
 - e. Acceptable manufacturers:
 - (1) Ductile iron: Clow F-5205, or approved equal.
 - (2) Stainless steel: Cascade CST extra heavy duty.
 - (3) Or approved equal.
2. Tapping valves:
 - a. Use fully ported gate valves complying with AWWA C500.
 - b. Use mechanical joints type, Clow F-5093, or approved equal.

RESTRAINED FLANGE ADAPTOR:

1. Provide a ductile iron flange adaptor dual ring system with bolt circles compatible with 125#/Class 150 bolt pattern.
 - a. Provide adaptor with individual actuated gripping wedges that utilize torque limiting screws to insure proper initial set.
 - b. Set screw "only" restraining adaptors are not acceptable.
 - c. Provide system that allows joint deflection of up to 5°.

- d. Provide a fluoropolymer coating to the wedge and wedge assembly and powder coating to the restraint body.
2. Acceptable Manufacturers:
 - a. Series 2100 Megaflange by Ebaa Iron;
 - b. Or approved equal.

WATER MAIN REPAIR:

1. Repair water main or water services damaged during construction utilizing products of type and manufacturers as approved by the Owner.
2. Pipe couplings for joining of sections of cut water main where a section of new pipe is used to replace a broken pipe.
 - a. Acceptable manufacturers:
 - (1) Dresser Style 38.
 - (2) Smith-Blair CC-441.
 - (3) Or equal.
3. Repair clamps for broken or cracked pipe and sealing of existing corporation stop opening.
 - a. Use full-circle single band all stainless steel clamps.
 - b. Acceptable manufacturers:
 - (1) Smith-Blair 261.
 - (2) Or approved equal.
 - c. Replace damaged service corporation stops by installation of full-circle single band all stainless steel clamps, with service outlet, matching manufacturer's and styles used for repair of a cracked pipe.

CONSTRUCTION REQUIREMENTS

PIPE INSPECTION, HANDLING, STORAGE, AND INSTALLATION: Install in accordance with pipe manufacturer's recommendations.

1. Ductile iron water mains and appurtenances:
 - a. Comply with AWWA C-600.
 - b. Install conductivity through joints by use of conductivity wedges or copper cable and taps.
 - (1) Use two wedges per joint.
 - (2) Use number of copper cable connectors per joint as recommended by the pipe manufacturer.

OPERATION OF APPURTENANCES: Village of Villa Park Public Works Department employees only shall operate any existing water distribution appurtenances (i.e. water valves, hydrants, etc.).

WATER DISRUPTIONS: A minimum forty-eight (48) hours advance notice to the Owner's Public Works Department is required for any water disruptions.

DEPTH OF PIPE COVER: Lay water mains and water service lines with a minimum depth of cover of five and one half feet below finished grade ground level unless otherwise indicated on the Plans.

1. Where new mains cross existing mains, install new main below existing main unless otherwise indicated on the Plans.

PIPE RESTRAINING SYSTEMS:

1. Provide protection from movement of water main piping, plugs, caps, tees, valves, hydrants, and bends of 11-1/4 degrees or greater.
2. Provide concrete thrust blocks at all locations unless restrained joint type fittings are utilized.
3. Where restrained joint type fittings are called for on the Plans, but cannot be utilized, provide concrete thrust blocks.
4. Concrete thrust blocks:
 - a. Provide precast or cast-in-place concrete thrust blocking with a compressive strength of 3000 psi in 28 days.
 - b. Locate thrust blocking between solid ground and the fitting to be anchored.
 - c. Unless otherwise shown or directed by the Engineer, place the base and thrust bearing sides of thrust blocking directly against undisturbed earth.
 - d. Sides of thrust blocking not subject to thrust may be placed against forms.
 - e. Place thrust blocking so the fitting joints will be accessible for repair.
 - f. When conditions prevent the use of concrete thrust blocks, use restrained joints of an approved type.
 - g. Minimum width of thrust block shall be 12 inches.
5. Restrained type pipe, fittings, and valves:
 - a. Provide restrained system as outlined in this Section or utilize metal tie rods, clamps, and lugs to prevent pipe and appurtenances from movement.
 - b. Protect tie rods and clamps with epoxy or bituminous paint.
 - c. Only restrained joint pipe indicated on the Plans will be paid for as a separate Pay Item.
 - i. Restraining gaskets or locking systems utilized on straight runs of push pipe are not considered as fittings, and are paid for as part of the Pay Item for restrained joint type pipe.

SEWER CROSSING: Separate water mains and water service lines from sanitary sewer, storm sewers, combined sewers, house sewer service connections, and drains in accordance with the "Standard Specifications for Water and Sewer Main Construction in Illinois".

VALVE VAULTS:

1. Install pipe through valve vault as shown on the Detail.
2. Make vault watertight with use of flexible manhole connectors.
3. Jointing:
 - a. Use flexible watertight gaskets for each joint.

- b. Trim smooth and free from surplus gaskets.
4. Frames and covers: Unless otherwise shown on the Plans or as determined by the Engineer, set frames and covers:
 - a. In paved areas: So that the top of the solid cover will be flush with the finished pavement; or
 - b. In unpaved areas: To drain away from the valve vault.
 - c. With flexible watertight gaskets.
 - d. With grade rings not to exceed 12 inches.

HYDRANT INSTALLATION:

1. Install hydrants plumb with the lowest hose connection at least 18 inches but not more than 24 inches above the finished grade ground level. Set hydrant bases and auxiliary valve on a precast concrete block to provide firm support for the base.
2. Brace the bases with solid concrete blocking between the base and undisturbed trench wall to counteract the reaction thrust of water pressure at the base. Provide mechanical joint anchoring fittings or approved restrained joints.
3. Brace the hydrant barrels during backfilling. Do not block the drain hole in hydrant.
4. Place a minimum of 1 cubic yards of washed coarse stone at and around the base for proper drainage. Cover stone with plastic before backfilling.
5. Place and compact backfill materials in 6-inch layers around the hydrant and auxiliary gate valve.
6. Cover new hydrant with plastic bag until new system is in service.
7. Where new hydrants are to be installed in the same location as existing, the contractor shall replace all nuts and bolts with new stainless steel nuts and bolts. All material and labor shall be included in the cost of the new hydrant.

WATER SERVICE CONNECTION:

1. Make service connections at locations shown on the Plans or determined by the Engineer at the time of construction.
2. Install water service pipe, corporation stop, curb stop, and service box as shown on the water service installation detail in the Plans.
3. Set curb stop on a precast concrete block.
4. Do not splice the water service pipe.
5. See TESTING AND INSPECTING for sequence of service line construction.
6. Service boxes:
 - a. Install service box over curb stop in a truly vertical position.
 - b. Set the top of box flush with the surrounding finished grade.
7. Direct tapping of polyethylene-encased D.I.P.:
 - a. Wrap two or three layers of polyethylene adhesive tape completely around the pipe to cover the tapping machine and chain mounting area.
 - b. Make the tap and install the corporation stop directly through the tap and polyethylene.

- c. After making the direct service connection, inspect the entire circumferential area for damage and make any necessary repairs.
- d. Wrap the corporation stop and a minimum distance of 3 feet of the copper service pipe with polyethylene.

TESTING AND INSPECTING:

Sequence of installation: Install new water main but do not install corporation stops, services lines, curb stops, or service boxes until after: conducting pressure test, leakage test, disinfection of new water main, flush main, and acceptance for putting new main into service. Finish by installing corporation stops, service lines, curb stops and service boxes, and test and disinfect prior to connection to existing service lines.

1. Hydrostatic tests:
 - a. Devise a method for disposal of waste water from hydrostatic tests, and for disinfection, as approved in advance by the Engineer.
2. Pressure tests:
 - a. Subject the new water mains, including valves and hydrants, to a hydrostatic pressure of 150 psi.
 - b. Hold the test pressure for a duration of two hours without pressure loss or further pressure application.
 - c. Carefully examine exposed pipe, joints, fittings, and valves.
 - d. Replace or remake joints showing visible leakage.
 - e. Remove cracked pipe, defective pipe, and cracked or defective joints, fittings and valves. Replace with sound material and repeat the test until results are satisfactory.
 - f. Make repair and replacement without additional cost to the Village.
 - g. Use only solid stainless full-body repair clamps as approved by the Engineer.
3. Leakage test:
 - a. Conduct a metered leakage test after the pressure test has been satisfactorily completed.
 - b. Duration of each leakage test: At least 24 hours.
 - c. During the test, subject water lines to a normal water pressure of the Municipality's water system.
 - d. Install water meter approved by the Engineer. Provide double check valve assembly between water meter and existing water main.
 - e. Maximum allowable leakage: As recorded by a meter approved by the Engineer, with leakage to not exceed the number of gallons per hour (gph) as determined by the following formula:

$$\text{gph} = LD (P^{1/2})/133,200$$

- in which:
- L = Length of pipe tested, in feet
 - D = Diameter of water main, in inches
 - P = Average pressure, in pounds per square inch (gage)

Should any test of pipe disclose leakage greater than the maximum allowable amount, locate and repair the defective joint or joints and then repeat the 24-hour metered leakage

test until the leakage is within the specified allowance, and at no additional cost to the Contract.

4. Time for making test:
 - a. Except for joint material setting and curing time for thrust blocks, pipelines jointed with rubber gaskets, mechanical, or push-on joints, or couplings may be subjected to hydrostatic pressure, inspected, and tested for leakage any time after partial completion of backfill.
 - b. Perform the pressure and leakage tests satisfactorily prior to requesting the Engineer to witness the official tests.
 - c. Notify the Engineer at least 48 hours prior to the time of the requested official tests.
 - d. Depending on traffic conditions, public hazard, or other reasons, the Engineer may direct when to conduct the tests, and may order the tests to be made in relatively short sections of water mains.

PRELIMINARY FLUSHING:

1. Prior to disinfection, flush main as thoroughly as possible.
 - a. Flush main until water runs clear.
 - b. Provide a minimum flushing velocity of 2.5 fps in the water main.
2. Coordinate time of flushing with Owner and Engineer, at least 72 hours in advance of flushing.
 - a. Do not initiate flush without Owner's permission.

DISINFECTION: After the water main work has been satisfactorily completed and tested, disinfect the work in accordance with AWWA C651, and "Standard Specifications for Water and Sewer Main Construction in Illinois".

1. Forms of applied chlorine:
 - a. Apply chlorine by gas feed or solution feed chlorinator, as approved by the Owner.
 - b. Provide effective diffusion of the gas or solution into the water within the water main.
 - c. Provide means for preventing the backflow of water into the feeder.
2. Requirement of chlorine:
 - a. Initial chlorine solution in pipe: At least 50 mg/l, but not more than 100 mg/l.
 - b. Retain the disinfecting solutions in the work for at least 24 hours
 - c. Chlorine residual after the retention period: At least 25 mg/l.
3. Flushing and testing:
 - a. Following chlorination, flush treated water thoroughly from the water mains until the chlorine concentration in the water flowing from the main is no higher than generally prevailing in the Municipality's system, or less than 1 mg/l.
 - b. After flushing, collect two water samples on successive days at least 24 hours apart in sterile bottles treated with sodium thiosulfate. Notify the Engineer and the Owner to witness sample collection.
 - c. Deliver the samples to a State approved laboratory for bacteriological analysis.

- d. Should the initial disinfection result in an unsatisfactory bacterial test, repeat the chlorination procedure until satisfactory results are obtained.
 - e. The Owner will provide the water for initial flushing and testing only.
 - f. Compensate the Owner for water used in subsequent flushing and testing.
4. Swabbing:
- a. Flush and swab the piping, valves, and fittings that must be placed in service immediately and cannot be disinfected by the above specified methods, with 5 percent solution of calcium hypochlorite prior to assembly.
 - b. Secure the Engineer's approval before applying this method of disinfection.

DECHLORINATION

1. Comply with AWWA C651-05 requirements to neutralize the residual chlorine in new water mains.
2. After new water mains have passed disinfection requirements, utilize portable diffusing dechlorinators that utilize sulfur dioxide or other chemicals listed in Appendix C of AWWA C651 to lower chlorine residuals prior to discharge to the drainage system. Lower concentration to 1 mg/l or less.

WATER MAIN REPAIR:

1. Whenever existing water mains or water service pipes are damaged during construction, stop the pipe installation work and immediately repair the damaged portion of the existing piping.
2. Contact the Engineer and Owner immediately to report the location and extent of the damage.
3. Repair the water main with methods complying with the "Standards for Water and Sewer Main Construction in Illinois", and any additional requirements required by the Owner.
4. Utilize only materials of repair as noted in the products section of this specification or as dictated by the Owner.
5. Where water services have been stripped or pulled from the water main, replace the corporation stop as instructed by the Engineer, and replace the water service pipe to a point as determined by the Engineer.
6. Comply with disinfection requirements as dictated by the Owner.
7. Do not cover the repair until work is inspected and approved by Engineer.

ITEM #32-34 - CATCH BASINS

This work shall be done in accordance with Section 602 of the Standard Specifications except as modified herein.

Removal of existing inlet or catch basin, if new catch basin is placed in the same location, is included in the cost of this item. Any trench backfill shall also be included in the cost of this item.

ITEM #35-36 - MANHOLES, TYPE A

This work shall be done in accordance with Section 602 of the Standard Specifications except as modified herein

Description. The work of this pay item consists of the installation of storm sewer manholes during open cut sewer installation complete in place, including sawcutting, removal and disposal of existing pavements, and excavation in excess of that required for standard trench construction; removal and disposal of waste excavated materials, bracing, sheeting, and shoring; protection, replacement, or repair of utilities; dewatering, including erosion and sedimentation control methods and devices to provide protection to the environment from all pumping operations; manhole bedding; manhole base; reducer cone if large diameter manholes are utilized; manhole risers; cone or flat top cover; concrete adjusting rings; watertight connection; frame and cover; steps; poured or pre-formed benches and inverts; backfilling with granular material; and including frame and cover adjustment to final grade at time of street or parkway final restoration.

Removal of existing manhole, if new manhole is placed in the same location, is included in the cost of this item.

Lids shall be stamped to indicate the structure type. Storm lids shall be stamped with "STORM". Stamping shall be included in the cost of the new lid. All closed lids shall be stamped with "Village of Villa Park".

Basis of Payment. The work will be paid for at the contract unit price per each MANHOLES, TYPE A of the diameter, type of frame and lid, as specified.

ITEM #37 - INLETS, TYPE A

This work shall be done in accordance with Section 602 of the Standard Specifications except as modified herein.

Removal of existing inlet, if new inlet is placed in the same location, is included in the cost of this item. Any trench backfill used shall also be included in the cost of this item.

ITEM #38 - VALVE VAULT

Description. This work shall be done in accordance with the Special Provision for "WATER DISTRIBUTION SYSTEM" and shall consist of installing valve vaults complete in place, including ASTM C-923 mechanical boot connection as shown in the detail on the Plans. This work shall include excavation; removal and disposal of waste excavated materials; protection, repair, or replacement of utilities; frames and lids; final adjustment of the frame to meet finished grade; joint protection; trench dewatering; erosion and siltation control methods and devices to protect the environment; backfilling with and compacting trench backfill material around the new vault; finish

grading.

Basis of Payment. This work will be paid for at the contract unit price each for VALVE VAULT, of the valve vault size and frame and lid type indicated.

ITEM #44 - DUCTILE IRON WATER MAIN (OPEN CUT)

Description. This work shall be done in accordance with the Special Provision for "WATER DISTRIBUTION SYSTEM", and "TRENCHING BACKFILLING AND COMPACTING FOR SANITARY SEWERS AND WATER MAIN", and shall consist of water main pipe complete in place, including excavation; removal and disposal of waste excavated materials; protection, replacement, or repair of utilities; trench dewatering, including erosion and siltation control methods and devices to provide protection to environment from all pumping operations; installation of pipe and pipe fittings; bracing; furnishing and installing concrete thrust blocks at all connections to existing pipe and at all bends, wyes, and tees; bedding and covering of pipe; trench backfilling with and compaction of excavated materials; testing; disinfection, finish grading; but not including backfilling with trench backfill material. All fittings will NOT be paid for separately but shall be included in the cost of the pipe.

This work shall also include relocating existing water main to avoid conflicts with proposed work where needed. Relocation shall include removal and disposal of material, all pipe and fittings, joint materials, tests, disinfection, casing pipe, and excavation as shown on the details in the plans.

Installing new mains in excess of five and one half feet of cover in order to cross existing mains, provide for future improvements or cross below sewer lines is included in the cost of installation of the water main, and no addition to the contract will be allowed.

Method of Measurement. This work will be measured in lineal feet along the centerline of the pipe, and the measurement shall extend through fittings and valves.

Basis of Payment. This work will be paid for at the contract unit price per lineal foot for DUCTILE IRON WATER MAIN (OPEN CUT), of the pipe sizes, joint type and material specified, regardless of depth.

Hydrant leader pipe shall be paid for as DUCTILE IRON WATER MAIN (OPEN CUT): 6".

Trench backfill with granular materials shall be paid for separately as TRENCH BACKFILL.

ITEM #45 - WATER VALVE

Description. This work shall be done in accordance with the Special Provision for "WATER DISTRIBUTION SYSTEM" and shall consist of the installation of a gate valve, complete in place,

at locations indicated on the Plans. This work shall include excavation; removal and disposal of waste excavated materials; protection, repair, or replacement of utilities; trench dewatering, erosion and sedimentation control methods and devices to protect the environment.

Basis of Payment. This work will be paid for at the contract unit price each for WATER VALVE of the size indicated.

Fire hydrant auxiliary valves will be paid for separately as part of the pay item for FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX.

ITEM #46 - FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX

Description. The work of this pay item shall be in accordance with the Special Provision for "WATER DISTRIBUTION SYSTEM" and shall consist of furnishing and installing fire hydrants with auxiliary valve and valve box complete in place at the locations shown on the drawings, including sawcutting, removal and disposal of existing pavements; excavation; removal and disposal of waste excavated materials; trench dewatering; thrust blocking; hydrant barrel drain washed stone pocket; support; testing; disinfection; and backfilling with and compacting of trench backfill material.

Method of measurement. This work will be measured for payment for each fire hydrant installed.

Basis of Payment. This work will be paid for at the contract unit price each for FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX. Hydrant leader pipe will be paid for as DUCTILE IRON WATER MAIN (OPEN CUT), 6".

ITEM #47-48 - WATER SERVICE CONNECTION

Description. This work shall be done in accordance with the Special Provision for "WATER DISTRIBUTION SYSTEM" and shall consist of providing and installing new 1-inch copper water service pipes by horizontal directional drilling method (both sides) or open cut method (short side services only) from the right of way line and terminate at the connection to the water main. The "LONG" side service connects from the west right of way to the water main and the "SHORT" side service connects from the east right of way to the water main. Any damage caused by directional drilling methods shall be repaired by contractor at contractor's expense. This work also includes connecting water service lines to the new main and to the existing water service pipes complete in place, corporation stops, curb stops, and service boxes. This work also includes all required fittings or adaptors necessary to connect to existing service lines, and backfilling with and compacting of trench backfill material. This work also includes removal and disposal of existing service boxes. Water service pipes must be installed by trenchless methods at locations where open cut would damage trees or tree roots.

This work will only be approved at the discretion of the engineer.

Method of Measurement. Water service connections will be measured as a per each item.

Basis of Payment. This work will be paid for at the contract unit price per each for WATER SERVICE CONNECTION of the size and type indicated.

ITEM #49 - ADJUSTING WATER SERVICE LINES

This work shall be done in accordance with Section 563 of the Standard Specifications and in accordance with the Special Provision for "WATER DISTRIBUTION SYSTEM" except as modified herein.

Water service adjustments will only be paid for if the Engineer determines the water service is in direct conflict with the utility being installed as a part of this project. If the contractor elects to adjust a water service that the Engineer has not determined to be in direct conflict, that work will be paid for at the Contractor's expense.

This pay item includes all sizes up to 1 inch. Any services determined to require replacement will not be paid for as "ADJUSTING WATER SERVICE LINES" but as "WATER SERVICE CONNECTION". If the contractor elects to adjust a service scheduled for replacement the adjustment will not be paid for.

563.06 Method of Measurement. Revise this section to read:

"This work will be measured for payment per each."

563.07 Basis of Payment. Revise this section to read:

"This work will be paid for at the contract unit price per each for ADJUSTING WATER SERVICE LINES."

ITEM #50 - SANITARY SEWER SERVICE REPLACEMENT

This work shall be completed in accordance with the applicable portions of the latest edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois" and the requirements of the Owner of the Sanitary Sewer, and shall consist of the repair of sanitary sewer building service lines when disturbed by other construction crossing the service line, complete in place including CCTV inspection, excavation; bracing; trench dewatering; removal of existing building service lines; repair of service lines with PVC SDR 26 ASTM 2241 pipe and non-shear couplings; bedding and covering of pipe; and trench backfilling with trench backfill materials. The materials used are to be in accordance with the specifications listed in the SANITARY SEWER SERVICE CONNECTION special provision. This Pay Item will only be used if the service is in direct conflict with the new pipe being installed, as determined by the Engineer.

Basis of Payment. This work will be paid for at the contract unit price per foot for SANITARY SEWER SERVICE REPLACEMENT regardless of pipe size.

ITEM #51 - FIRE HYDRANTS TO BE REMOVED

Description. This work shall be done in accordance with the Special Provision for "WATER DISTRIBUTION SYSTEM", and shall consist of the removal of existing fire hydrants. This work shall include pavement removal and disposal; excavation; cutting fire hydrant lead between auxiliary valve and water main; removing entire fire hydrant and auxiliary valve assembly; and preparing hydrant lead for new fire hydrant installation.

Basis of Payment. This work will be paid for at the contract unit price per each for FIRE HYDRANTS TO BE REMOVED.

ITEM #53 - SANITARY SEWER SERVICE RECONNECTION

Description. This work shall consist of removing and replacing the existing sanitary sewer service tee/wye connection fittings at locations shown on the drawings or at other locations as deemed necessary by the Engineer. Sanitary service reconnections will only be paid for if the Engineer determines the water service is in direct conflict with the utility being installed as a part of this project. If the contractor elects to reconnect the sanitary sewer service connection that the Engineer has not determined to be in direct conflict, that work will be paid for at the Contractor's expense. This work shall be done in accordance with the details included as part of the contract plans. The work shall be done in accordance with applicable portions of Section 563 of the Standard Specifications.

The Contractor shall install a new polyvinyl chloride wye or tee fitting at the location of the connection on the mainline sanitary sewer. The services shall be replaced from the new wye at the mainline sanitary sewer to the existing service pipe, using PVC pipe of the same diameter as the existing connection.

The Contractor is to coordinate with the Village 48 hours prior to disconnecting the existing sanitary sewer service. During this time, the Contractor is to ensure the residences are notified of any potential interruption in services. This work is incidental to this item. After the sanitary connection has been installed the Contractor shall be responsible for locating said sanitary connection lines for the remainder of the construction. The Village will not locate sanitary connections placed by the Contractor for the duration of the project. Any damage to the sanitary connection by the Contractor caused by the Contractor's failure to properly locate the sanitary connection shall be repaired by the Contractor at his own expense to the satisfaction of the Engineer.

563.02 Materials. The materials shall be in accordance with the applicable portions of Section

550 and 563 and the Sanitary Sewer System Specifications with the following exceptions:

Replacement sewer service material shall be Polyvinyl Chloride (PVC) pipe conforming to ASTM D-2241 with gasket joints conforming to ASTM D-3212 and a Standard Dimension Ratio (SDR) equal to 26. The wye fittings to be installed on the main shall be fabricated to fit the mainline pipe that conforms to ASTM D-3034 and the branch service pipe that conforms to ASTM D-2241. All supplied pipes must be from the same manufacturer. All supplied fittings must be from the same manufacturer. All connections to existing pipes shall be made with "FERNCO" RC Series" or "MISSION Flex –Seal" adjustable non-shear repair couplings equipped with stainless steel bands. Additional fittings and labor required to connect the new 6-inch sanitary service pipe to existing service pipes that are a size other than six inches is incidental to this item.

Basis of Payment. This work will be paid for at the contract unit price for each SANITARY SEWER SERVICE RECONNECTION which price is to include all labor, equipment, excavation, sawcutting of pavement, materials, removal of existing connection, bypass pumping, removal of spoils, and reconnection of new pipe to existing pipe. If the sanitary sewer main or service pipe is required to be replaced as determined in the field by Engineer, the pipe will be paid for per linear foot as SANITARY SEWER PIPE, PVC SDR 26, ASTM D-224, or SANITARY SEWER SERVICE REPLACEMENT, of the size specified.

ITEM #53-57 - SANITARY SEWER PIPE, PVC SDR 26 ASTM D-2241

Description. The work of this pay item shall consist of the removal and replacement of sections of sanitary main sewers including providing and installing pipe, fittings and couplings; connections to manholes; all material and equipment; sawcutting; excavation; sheeting, shoring, and dewatering; by-pass pumping; removal and disposal of excavated material; bedding and covering of pipe; making connections between different pipe materials; backfilling with granular trench backfill material; and any other labor and/or materials required to complete the work as specified herein.

If required, bypass pumping may be accomplished by supplying sufficient pumping equipment to bypass the sewage flow around the construction area to the downstream sanitary sewer. Before leaving the construction site each day, the Contractor shall connect the new sewer to the existing sewer to allow sewage flow by gravity.

The sanitary sewers shall be replaced with PVC SDR 26 ASTM D-2241 pipe and the sanitary sewer main pipe diameter shall be of the same diameter as the existing pipe and sanitary sewer service pipe shall be 6" diameter. Fittings shall meet the requirements of ASTM D-3212 and ASTM F477. The above pipe and fittings shall be furnished with elastomeric gasket joints conforming to ASTM D-3139. Connections to existing sewer mains and services shall be made with No-Shear Flex Couplings with two stainless steel bands at a point where the coupling cannot shift. Bedding material shall conform to IDOT gradations CA-7 or CA-11.

Basis of Payment. This work shall be measured and paid for at the contract unit price per lineal foot as SANITARY SEWER PIPE, PVC SDR 26 ASTM D-2241 of the size specified.

ITEM #58 - SANITARY MANHOLES

Description. The work of this pay item shall be completed in accordance with the Special Provisions for "SANITARY AND COMBINED SEWER SYSTEM", "TRENCHING, BACKFILLING AND COMPACTING FOR SANITARY SEWER, STORM SEWER, AND WATER MAIN", these Special Provisions and the detail on the Plans and shall consist of the installation of sanitary sewer manholes complete in place, including excavation in excess of that required for sanitary sewer; trenching; bracing, sheeting and shoring; dewatering, including erosion and siltation control methods and devices to provide protection to the environment from all pumping operation; backfilling with and compaction of excavated material or trench backfill materials; sanitary sewer manhole, including base, risers, cone, adjusting rings, steps, chimney seals, and frames and covers; watertight flexible connectors to match pipe; new pipe required to connect to manhole, connection to existing pipe, and non-shear mission couplings; poured inverts and benches; final adjustment of frame to final grade at time of surface restoration; finish grading; removal and disposal of waste excavated material; location, protection, and repair or replacement of existing structures, pipelines and utilities; and all other work necessary for a complete sanitary sewer manhole installation.

Removal of existing manhole, if new manhole is placed in the same location, is included in the cost of this item.

Lids shall be stamped to indicate the structure type. Sanitary lids shall be stamped with "SANITARY". Stamping shall be included in the cost of the new lid. All closed lids shall be stamped with "Village of Villa Park".

Basis of Payment. This work will be paid for at the contract unit price each for SANITARY MANHOLES of the type, diameter, and frame indicated.

ITEM #59 - COMBINATION CLEAN OUT-CHECK VALVE

Description. This work shall be done in accordance with the Special Provision for "SANITARY AND COMBINED SEWER SYSTEM" and shall consist of the installation of a combination clean out-check valve onto sanitary service lines. This work also includes cutting out sections of sanitary service pipe to connect the combination clean out-check valve onto the sanitary service pipe, all required fittings or adaptors necessary to connect to existing service lines; all material and equipment; sawcutting; excavation; sheeting, shoring, and dewatering; by-pass pumping; removal and disposal of excavated material; bedding and covering of the clean out-check valve; making connections between different pipe materials; backfilling with granular trench backfill material; and any other labor and/or materials required to complete the work as specified herein.

The combination clean out-check valve shall be a RectorSeal 6" PVC Extendable Clean Check

Backwater Valve, Model #31805 or approved equal. Contractor shall cut out a piece of existing sanitary service pipe, then install a piece of new PVC SDR 26 ASTM D-2241 pipe into each bell end of the clean out-check valve, and then connect the new pipe to the existing service pipe with No-Shear Flex Couplings with two stainless steel bands at a point where the coupling cannot shift. Bedding material shall conform to IDOT gradations CA-7 or CA-11.

Method of Measurement. Combination clean out-check valves will be measured as per each item.

Basis of Payment. This work will be paid for at the contract unit price each for COMBINATION CLEAN OUT-CHECK VALVE.

SANITARY AND COMBINED SEWER SYSTEM

SUMMARY: Provide sanitary sewer system improvements as shown on the Drawings or as directed by the Engineer, specified herein, and needed for a complete and proper installation, and in accordance with the latest revision of the "Standard Specifications for Water and Sewer Main Construction in Illinois", except as revised herein.

DELIVERY, STORAGE, AND HANDLING: Protect flexible thermoplastic pipes from direct sunlight.

PIPE AND FITTINGS:

PVC plastic sewer pipe:

1. For pipes 4 to 15 inch, comply with ASTM D-2241 for Type PSM polyvinyl chloride (PVC) Type 1, Grade 1, sewer pipe and fittings of minimum wall thickness SDR 26. For pipes 18-27 inch, comply with ASTM F679; PS46; PVC Type 1, Grade 1
2. Joints: Use either the solvent-weld type complying with ASTM D2564 and ASTM D2855, or the elastomeric gasket type complying with ASTM F477 and ASTM D3212.
3. Fittings:
 - a. Sizes 8-inches or less: Molded in one piece with elastomeric joints and minimum socket depths as specified in section 6.2 and 7.3.2 of ASTM D3034.
 - b. Sizes 10-inch or more: Molded or fabricated in accordance with Section 7.11 of ASTM D3034, with manufacturer's standard pipe bells and gaskets.
4. Gaskets for fittings and joints: Minimum cross-sectional area of 0.20 square inches complying with ASTM F477.

Branch fittings:

1. Use either factory fabricated type with attached main line coupling, minimum SDR-26.
2. Acceptable manufacturers:

- a. Harco.
- b. GPK Products.
- c. Multi Fittings.
- e. Plastic Trends.
- d. Or approved equal.

Flexible Boots:

1. Conform to ASTM C923
2. Kor-N-Tee
3. PSX by Press Seal, Inc.
4. Or equal

Risers:

1. Use SDR 26 solid wall type complying with ASTM 2241 for PVC pipe.

Couplings:

1. Provide flexible rubber couplings with non-shear type with adjustable stainless steel bands complying with ASTM C425 for connecting new pipe to existing sewer pipe and for repairing sewer pipe.
2. Acceptable products: Band-Seal Couplings by Mission Clay Products Corp., or approved equal.

MANHOLES:

1. Precast:
 - A. Provide precast reinforced concrete manhole sections, bottoms, and flat top slabs complying with ASTM C478 unless otherwise indicated on Plans.
 - B. Provide eccentric cone section unless otherwise indicated on the Plans.
 - C. Provide precast reinforced concrete monolithic base for new and existing sewer lines.
 - D. Design flat slab top for HS20-44 loading.
2. Concrete: Provide 4,000 psi concrete using Type I Portland Cement complying with ASTM C150.
3. Mortar: Mix one part Portland Cement to three parts fine aggregate.
4. Joints for precast sections: Provide tongue and groove joints with either flexible watertight rubber gaskets or preformed bituminous plastic gaskets consisting of a homogeneous blend of refined hydrocarbon resins and plasticizing compound reinforced with inert mineral filler.
 - A. Acceptable preformed gasket products:
 - a. K. T. Snyder Co., RAM-NEK.
 - b. Concrete Sealants, Type CS-102.
 - c. Or approved equal.

5. Steps: Provide steps with a minimum width of 12 inches and a minimum projection of 5 inches. Use steps consisting of copolymer polypropylene plastic with a continuous 1/2-inch steel reinforcement as manufactured by M.A. Industries, Inc., cast iron steps, Neenah R-1980-I, or approved equal.
6. Frames and covers:
 - A. Provide cast iron frames and covers with heavy duty indented top with solid self-sealing lids and machined bearing surfaces, stamped with the word "SANITARY" and "VILLAGE OF VILLA PARK".
 - a. Acceptable products: Neenah R-1713, East Jordan 1050 EXHD, or approved equal.
 - b. Do not coat or paint
7. Flexible pipe connectors: Provide flexible rubber gasket collar for connecting pipe to the manhole.
 - A. Comply with ASTM C-923.
 - B. Use PSX gasket system by Press-Seal Gasket Corporation, or approved equal.
8. Materials to be new and provided in unopened containers where applicable.

PIPE INSTALLATION:

1. Install sanitary sewer pipe in strict accordance with the latest revision of "Standard Specifications for Water and Sewer Main Construction in Illinois" and with this Special Provision and the Special Provision for "TRENCHING, BACKFILLING, AND COMPACTING FOR WATER MAIN AND SANITARY SEWER".
2. Install pipe in accordance with pipe manufacturer's recommendations.
3. Lay pipe by proceeding upgrade with the spigot ends of bell-and-spigot pipe pointing in direction of flow.
4. Lay each pipe accurately to the indicated line and grade, aligning so the sewer has a uniform invert.
5. Continually clear interior of the pipe free from foreign material.
6. Before making pipe joints, clean and dry all surfaces of the pipe to be joined.
7. Use lubricants, primers, and adhesives recommended for the purpose by the pipe manufacturer.
8. Comply with ASTM D2321 for flexible thermoplastic sewer pipe installation.

MANHOLE INSTALLATION

General:

- A. Shape the invert channels to be smooth and semicircular, conforming to the inside of the adjacent sewer section.
- B. Make changes in direction of flow with a smooth curve of as large a radius as the size of the manhole will permit.
- C. Make changes in size and grade of channels smoothly and evenly.
- D. Form the invert channels directly in the concrete of the manhole base, with mortar, or by laying full section sewer pipe through the manhole and breaking out the top half after surrounding concrete has hardened, or use preformed invert channels.
- E. Smooth the bench outside the channels, and slope toward the channels at not less than 1-inch per foot not more than 2 inches per foot.
- F. Grout all lift holes from the inside and outside with a non-shrink grout, prior to backfilling.

Manhole steps:

1. Provide each manhole with individual wall-mounted steps as shown on the manhole detail.
 2. Comply with the requirements of governmental agencies having jurisdiction.
 3. Do not locate steps directly above where pipes enter the manhole.
- G. Jointing:
1. Use flexible watertight gaskets for each joint, including grade ring joints.
 2. Trim smooth and free from surplus gaskets.
- H. Frames and covers: Unless otherwise shown on the Plans or as directed by the Engineer, set frames and covers:
1. In paved areas: So that the top of the cover will be flush with the finished pavement; or
 2. In unpaved areas: To drain away from the manhole.
 3. With flexible watertight gaskets.
 4. With grade rings not to exceed 8 inches.

SANITARY SERVICE CONNECTIONS

- A. Provide 6-inch branch fittings, riser pipes, and service lines at locations determined by the Engineer at the time of construction.
- B. Comply with the specifications for other sewers in the Work and the sanitary service details as shown on the Plans.

- C. Use wye branch fittings for connecting to PVC sewer pipes less than 20 feet deep.
- D. Keep a record of branch fittings, riser pipes, and service lines by measurement to the nearest downstream manhole.
- E. Deliver the records to the Engineer on completion of the Work.

SANITARY SEWER AND MANHOLE REMOVAL AND REPLACEMENT

- A. Where new sewers or structures are being installed at the same location as existing sewers or structures, existing sewers or structures will be removed incidental to the installation of the new sewer or structure.
- B. Sewers and services to be abandoned not being removed as part of the new sewer installation will be plugged with concrete brick and mortar at all locations where they are exposed by trenching or excavations for structures.
 - 1. Fill sewers to be abandoned with grout where indicated on the Plans.
 - a. Do not allow grout to enter existing sewers that are to remain in service or new sewers.
 - b. Fill sewers in the presence of the Engineer.
- C. Provide new manhole as a monolithic base unit and connect to main line sewer and service with short sections of pipe utilizing flexible watertight connectors.
 - 1. Provide pipe sections of size that matches existing pipes.
 - 2. Provide by-pass pumping if required.

TESTING AND INSPECTING

- A. The Owner or Engineer will inspect sanitary sewer pipe and service connections at the time they are installed. Contractor shall provide personnel, equipment and access to the work when requested by the Owner or Engineer.

ITEM #60 - COMBINATION CONCRETE CURB AND GUTTER (SPECIAL)

This work shall be done in accordance with Section 606 of the Standard Specifications and the Detail provided in the Plans, except as modified herein.

606.01 Description. Revise the Article to read:

“606.01 Description. This work shall consist of constructing combination concrete curb and gutter; which shall include all sawcutting; pavement removal for forming purposes; excavating for a 4-inch CA-6 granular subbase; backfilling in front of the curb with Class SI Concrete;

backfilling behind the curb with sand or suitable excavated material; and dowel bars at construction and expansion joints.”

606.04 Excavation. Add the following paragraphs to the end of this Article:

“A 4-inch thick CA-6 granular subbase shall be placed and compacted under the proposed curb and gutter as shown on the Detail provided in the Plans and shall be paid for separately as AGGREGATE BASE COURSE, TYPE B – 4 INCH.

Driveways removed for forming shall be backfilled with an approved granular material as temporary pavement.

606.07 Concrete Gutter and Curb and Gutter. Add following to the fourth paragraph of this Article:

“Contraction joints shall be provided at uniform intervals not to exceed 15 feet. Saw cut contraction joints within 24 hours of concrete pour. Construction joints with dowel bars shall be provided at the end of a day’s work. Expansion joints shall be 1-inch thick with two No. 6 (3/4”) smooth epoxy coated bars with greased cap and shall be constructed at intervals not to exceed 60 feet. The curb shall be tapered to the gutter in a five-foot length wherever the curb and gutter terminates.” Two No. 6 (3/4”) 18” in length, smooth epoxy coated bars shall be drilled into adjacent existing curb.

606.13 Backfill. Revise this Article to read:

“After the concrete has obtained the specified strength or as determined by the Engineer, the space in back of the construction shall be backfilled to the top of the proposed curb with sand or other material approved by the Engineer, and neatly graded to the satisfaction of the Engineer. Excess sand behind the curb shall be removed just prior to parkway restoration work.”

606.15 Basis of Payment. Revise the first paragraph of this Article to read:

“606.15 Basis of Payment. This work will be paid for at the contract unit price per foot for COMBINATION CONCRETE CURB AND GUTTER (SPECIAL), of the type specified. The cost of over cutting and filling behind and in front of the curb and gutter shall also be included in this contract unit price.

Removal of excess backfill material before parkway restoration work shall be included in the cost of PARKWAY RESTORATION.”

ITEM #65 - HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 4”

This work shall be performed in accordance with Articles 406.02, 406.03, 406.05, 406.06, 406.07, and 406.12 of the Standard Specifications, and the detail shown on the Plans, except as

modified herein. This work shall consist of placing 2 lifts of HMA Surface Course, Mix "D" N50, to a minimum thickness of 4 inches, or to match the existing HMA thickness, whichever is greater. Aggregate base course is not included but is paid for separately as AGGREGATE BASE COURSE, TYPE B, 6".

Method of Measurement. This work shall be measured for payment in place and the area computed in square yards.

Basis of Payment. This work will be paid for at the contract unit price per square yard for HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 4".

ITEM #67 - DUST CONTROL WATERING

This work shall consist of the control of dust resulting from construction operations by the uniform application of sprinkled water. DUST CONTROL WATERING shall be performed when directed by the Engineer. All equipment used for this work shall be approved by the Engineer prior to beginning the work and shall be equipped with adequate measuring devices for metering the exact amount of water discharged.

Method of Measurement. Dust Control Watering will be measured for payment in units of 1000 gallons of water applied. All water used shall be properly documented by ticket or other approved means.

Basis of Payment. This work will be paid for at the contract unit price per unit for DUST CONTROL WATERING.

ITEM #68-70 - STORM SEWERS (WATER MAIN QUALITY)

This work shall be done in accordance with Section 550 of the Standard Specifications except as modified herein.

550.02 Materials. Revise this Article to read:

"550.02 Materials. The storm sewer pipe shall be water main quality pipe meeting the requirements of sections 40 and 41 – 2.01 of the "Standard Specifications for Water and Sewer Main Construction in Illinois". PVC (SDR 26) pipe shall be used in accordance with ASTM D-2241, with joints conforming to ASTM D-3139 and flexible elastomeric gaskets meeting ASTM F-477 criteria."

550.10 Basis of Payment. Revise the first paragraph of this Article to read:

“550.10 Basis of Payment. This work will be paid for at the contract unit price per foot for STORM SEWERS (WATER MAIN QUALITY), of the diameter specified, which price shall also include connections to existing storm sewer structures and existing storm sewers.”

ITEM #71 - REMOVE AND REINSTALL BRICK PAVER

This work shall consist of removing existing brick pavement to the limits as determined by the Engineer and in accordance with Section 440, except as modified herein. Installation shall be in accordance with the included Local Roads Recurring Special Provision Check Sheet #14 except as modified herein. This work shall include the installation of a minimum 6 inches of Aggregate Base Course, Type B, in accordance with Section 351 of the Standard Specifications. This work shall also include installing edge restraints, spreading, compacting and leveling (with a screed) 1-inch of bedding sand, installing the bricks, filling and brushing the joints with fine sand, and compacting the brick pavers with a vibrating plate compactor. This work shall not be paid for separately but included in the cost of this item.

The layout and pattern shall match that of existing pavement. The Contractor shall make record of the existing layout and pattern prior to the removal of the existing pavement to ensure that the replaced pavement can be replaced to match the existing pavement prior to construction. Salvaged bricks from the brick pavement removal shall be used to reinstall the brick pavement; however any necessary replacement bricks shall match the color and shape of the brick paving units of the existing pavement. After removal the contractor shall safely store all bricks until they are installed. Any replacement bricks shall be included in the cost of this work.

New paving brick shall meet the requirements for ASTM C902, “Standard Specification for Pedestrian and Light Traffic Paving Brick”.

Edge restraints shall match the existing edge restrains in type and dimensions. If the existing edge restraints encountered on this job are concrete, the edge restraints shall be cast-in-place to existing dimensions and properly cured before replacing the brick driveway. The edge restraints shall be included in the cost of this item regardless of the type of edge restraint used.

Basis of Payment. This work shall be paid for at the contract unit price per square foot for REMOVE AND REINSTALL BRICK PAVER.

ITEM #72 - EXPLORATION TRENCH, SPECIAL

This work shall consist of constructing a trench for the purpose of verifying clearances and locations of existing private and public utilities prior to constructing proposed utilities. The exploration trench shall be constructed at the locations as directed by the Engineer and in accordance with Article 213.02 of the Standard Specifications, except as modified herein. This item can be used to locate known, unknown, marked, and unmarked utilities.

The depth of the trench shall be variable, but shall be deep enough to locate all potential conflicts. The width of the trench shall be sufficient to allow proper investigation of the entire trench.

Method of Measurement. This work will be measured for payment per lineal foot of actual trench constructed.

Basis of Payment. This work will be paid for at the contract unit price per foot for EXPLORATION TRENCH, SPECIAL, regardless of depth.

ITEM #73-74 - TEMPORARY ACCESS

This work shall consist of furnishing and placing aggregate for use as temporary access in accordance with section 402 of the Standard Specifications, except as modified herein.

Revise Article 402.10 of the Standard Specifications to read:

402.10 For Temporary Access. The contractor shall construct and maintain aggregate surface course for temporary access to private entrances, commercial entrances and roads according to Article 402.07 and as determined by the Engineer.

The aggregate surface course shall be constructed to the dimensions and grades specified below, except as modified by the plans or as determined by the Engineer. Material shall be well graded 100 percent crushed gravel or crushed stone aggregate free of clay, loam, dirt, calcareous or other foreign matter conforming to the Standard Specifications gradation No. CA-6.

- (a) Private Entrance. The minimum width shall be 12 ft. The minimum compacted thickness shall be 6 in. The maximum grade shall be eight percent, except as required to match the existing grade.
- (b) Commercial Entrance. The minimum width shall be 24 ft. The minimum compacted thickness shall be 9 in. The maximum grade shall be six percent, except as required to match the existing grade.
- (c) Road. The minimum width shall be 24 ft. The minimum compacted thickness shall be 9 in. The grade and elevation shall be the same as the removed pavement, except as required to meet the grade of any new pavement constructed.

Maintaining the temporary access shall include relocating and/or regrading the aggregate surface course for any operation that may disturb or remove the temporary access. The same type and gradation of material used to construct the temporary access shall be used to maintain it.

When use of the temporary access is discontinued, the aggregate shall be removed and utilized in the permanent construction at the discretion of the Engineer or disposed of according to Article 202.03”.

402.12 Method of Measurement. Add the following to this article:

“Aggregate surface Course for temporary access will be measured for payment as each for every private entrance, commercial entrance or road constructed for the purpose of temporary access. If a residential drive, commercial entrance, or road is to be constructed under multiple stages, the aggregate needed to construct the second or subsequent stages will not be measured for payment but shall be included in the cost per each of the type specified”.

402.13 Basis of Payment. Revise the second paragraph of this Article to read:

“Aggregate surface course for temporary access will be paid for at the contract unit price per each for TEMPORARY ACCESS (PRIVATE ENTRANCE) or TEMPORARY ACCESS (ROAD).

Partial payment of the each amount bid for temporary access, of the type specified, will be paid according to the following schedule:

- (a) Upon construction of the temporary access, sixty percent of the contract unit price per each, of the type constructed, will be paid.
- (b) Subject to the approval of the Engineer for the adequate maintenance and removal of the temporary access, the remaining forty percent of the pay item will be paid upon the permanent removal of the temporary access”.

ITEM #75 - SANITARY MANHOLES TO BE ADJUSTED

This work shall be done in accordance with Section 602 of the Standard Specifications and shall consist of the adjustment of sanitary manholes. Non-hardening butyl rubber mastic sealant; minimum thickness ¼-inch, shall be used between adjusting rings in place of mortar, or as required by the Owner of the Sanitary Sewer. Install new external frame seal in all locations. The installation of the external frame seal will not be paid for separately and will be considered included in this pay item.

The External Frame seal shall consist of the following:

- A. Provide frame seals consisting of a flexible external rubber sleeve and extension and stainless steel compression bands.
- B. Rubber sleeve and extension:
 1. Provide rubber sleeve and extension complying with ASTM C923.

2. Comply with a minimum 1500 psi tensile strength, maximum 18 percent compression set and a hardness (durameter) of 48±5.
3. Provide sleeve with a minimum thickness of 3/16-inch and unexpanded vertical heights of 6 or 9 inches.
- C. Provide extension having a minimum thickness of 3/16-inch.
- D. Compression band:
 1. Provide compression band to compress the sleeve against the manhole.
 2. Use 16 gauge stainless steel conforming to ASTM A240 Type 304 with no welded attachments and having a minimum width of 1-inch.
 3. Make a watertight seal having a minimum adjustment range of 2 diameter inches.
 4. Provide stainless steel screws, bolts, and nuts conforming to ASTM F593 and 594, Type 304.
- E. Acceptable products:
 1. Cretex Specialty Products.
 2. Or equal.
- F. Or as required by the Owner of the sanitary sewer system.

The External Frame Seal shall be installed as follows:

- A. Install external rubber gasket on the manhole frame and chimney.
 1. Provide watertight gasket to eliminate leakage between the frame and each adjusting ring down to and including cone section.
- B. Clean surface and prepare the lower 2 inches of the manhole frame and exterior of all adjusting rings and cone section/corbel surfaces.
 1. Realign frame on adjusting rings or corbel as required.
- C. Repair and apply mortar grout to the adjusting rings as required to provide a smooth, circular surface for the rubber gasket.
- D. Install rubber gasket in accordance with manufacturer's recommendations.
 1. Field verify for suitable dimensions and layout before installation.
 2. Utilize sealing caulk where required.
- E. Or as required by the Owner of the sanitary sewer system.

Basis of Payment. This work will be paid for at the contract unit price per each for SANITARY MANHOLES TO BE ADJUSTED, which price shall include all of the above.

ITEM #76 - TRAFFIC CONTROL AND PROTECTION (SPECIAL)

This work shall be done in accordance with applicable portions of Section 701 of the Standard Specifications, the Supplemental Specifications, the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", and any details and Highway Standards contained in the Plans and Special Provisions, and the Special Provisions contained herein, except as modified herein. This work shall cost no more than 5% of the total bid price.

Special Provisions
131011.40

Village of Villa Park
South Michigan Avenue
County: DuPage

Special Attention is called to Article 107.09 of the Standard Specifications and the following Highway Standards, Details, Recurring Local Roads and Streets Special Provisions, and Special Provisions contained herein, relating to traffic control.

HIGHWAY STANDARDS: 701301, 701501, 701801, 701901

DETAILS:

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

SPECIAL PROVISIONS (Included in these Special Provisions):

Maintenance of Roadways
Work Zone Traffic Control Surveillance (LRS 3)
Flaggers in Work Zones (LRS 4)
Sidewalk, Corner, or Crosswalk Closure (BDE)

The Contractor shall contact the Village at least 72 hours in advance of beginning work. Construction operations shall be conducted in a manner such that streets will be open to emergency traffic and accessible as required to local traffic. Advanced notice shall be provided to residents, police, fire, school districts and trash haulers when access to any street will be temporarily closed or limited. Removal and replacement of curb and gutter and driveways shall be planned so as to cause a minimum of inconvenience to the abutting property owners. The work shall be accomplished such that the streets will be left open to local traffic at the end of each working day.

701.19 Method of Measurement. Revise this Article to read:

“701.19 Method of Measurement. Traffic control and protection will be measured for payment on a lump sum basis.”

701.20 Basis of Payment. Revise this Article to read:

“701.20 Basis of Payment. Traffic control and protection will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL), which price shall include all of the above listed details, standards, and special provisions.”

ITEM #77 - PRECONSTRUCTION VIDEO RECORDING

Description. This work consists of performing color video and audio recording of the project area and other areas which may be impacted by construction.

Preconstruction video recordings will include coverage of the project area and all other areas which may be impacted by construction. Video recordings will also include construction easements when applicable. Video recordings will provide a visual record of all physical features within those areas, including, but not limited to, roadways, pavements, curbs, gutters, driveways,

driveway aprons, sidewalks, carriage walks, parkways, trees, landscaping, shrubbery, plantings, landscaping walls, retaining walls, signs, sign posts, fences, utility poles, light poles, utilities, equipment, manholes, b-boxes, cleanouts, valves, curb structures, pipelines, buildings, mailboxes, and any other features located within the project area.

Video recordings will begin with an audio narrative which provides the current date and time, the name of Owner and name of project, and a description of both the starting location and the location or locations to be recorded, including street name or names, street addresses, and any additional information which may be necessary to describe the location and subject of viewing. Video recordings will maintain viewer orientation by means of an audio commentary in the audio track of each video recording which provides an explanation of what is being viewed; and by videotaping landmarks and readily identifiable objects (property addresses, street signs, etc.) at appropriate intervals.

Preconstruction video recordings will be recorded at a rate of travel not exceeding 48 feet per minute, and zooming and panning rates will be controlled to provide clarity of features during playback. The finished product will be provided with bright, clear pictures and accurate colors free from distortion, tearing, rolls, or other forms of picture imperfection. The audio will have proper volume and clarity. All recordings will be performed at times of satisfactory visibility, and when no more than ten percent of ground is obscured by snow, leaves, or other cover.

If any element within or portion of the project area is not adequately documented by the preconstruction video recording so as to definitively demonstrate its condition prior to the start of construction, Contractor will assume responsibility for the repair, restoration or replacement of that element or portion of the project area. Such repair, restoration or replacement will be to equal or better condition than previously existing, and will further comply with all standards and provisions which govern the work in question.

Schedule. Preconstruction video recording will be performed according to the following schedule:

- (a) Preconstruction video recording will take place after a Notice to Proceed has been issued.
- (b) Preconstruction video recording will take place after the Joint Utility Locating Information for Excavators (JULIE) request for the project area has cleared.
- (c) Preconstruction video recording will take place before any equipment, materials, or other items are delivered to the site.
- (d) Preconstruction video recording will take place no more than seven (7) chargeable days prior to the start of construction.
- (e) Preconstruction video recording will take place, the required pre-construction video recording deliverables will be submitted to the Engineer, and the Engineer will review and issue written approval of the video before any activity other than utility locating will be permitted to start. Such activity will include, but not be limited to, delivery of materials and equipment, installation of traffic control and erosion control, and completion of construction layout and tree protection. No days will be charged against

the contract time while the video is under review by the Engineer, including the day the deliverables are submitted and the day a response is provided. If the video or any portions thereof are rejected, the contract time will commence to run until revisions are submitted.

- (f) The recording will be submitted to Engineer for review prior to commencement of any construction, and receive acceptance of recordings prior to commencement of construction. Any areas found not acceptable to the Owner will be re-filmed at no additional cost to the contract.

Deliverables. Video will be high-definition, with a minimum resolution of 1280 x 720 pixels per frame. Video will be filmed in a landscape aspect ratio. Video filmed in a portrait aspect ratio will be considered unacceptable and will be rejected.

Preconstruction video recordings will be provided as electronic files of .avi, .mp4, .m4v, .mkv, .wmv, or .mpg file format, or of such other file format as may be approved by Engineer. Preconstruction video recordings will be provided as independent digital container format files, which container files will include all video, audio, and other electronic information necessary to view the preconstruction video recording as intended.

Video DVD will be considered an unacceptable format for providing preconstruction video recordings, and will be rejected.

Preconstruction video recording electronic files will be provided on a portable electronic media device or devices of one of the following types: USB flash drive, SD flash memory card, CF flash memory card, data DVD, external hard drive, or such other portable electronic media device as may be approved by Engineer. Preconstruction video recording electronic files may also be provided via online file sharing, cloud storage, File Transfer Protocol (FTP), or other online or network file transfer methods if approved by Engineer.

Preconstruction video recording electronic files will be accompanied by corresponding logs which document the dates, times, and locations covered by each preconstruction video recording electronic file.

Contractor shall maintain copies of all items submitted to Engineer for Contractor's own use and record.

Method of Measurement. This work will be measured for payment on a lump sum basis. No measurement will be made of the individual components of this effort.

Basis of Payment. Preconstruction video recording will be paid for at the contract lump sum price for PRECONSTRUCTION VIDEO RECORDING.

ITEM #78 - PVC PIPE DRAINS SDR 26 ASTM D-2241

This work shall be done in accordance with Section 601 of the Standard Specifications except as modified herein.

601.01 Description. Add the following to the first paragraph of this Article:

“This pay item is intended to connect existing roof drains and sump pump lines to the existing or proposed storm sewer or pipe underdrains. This work shall include sump pump line, roof downspout or PVC Drain connections; connections to existing or proposed drainage structures or pipes; excavation and trench backfill; all necessary pipe, fittings, connectors, transition couplings, bends, saddles, and tees to connect the pipe drain to existing pipes, drainage structures, sump pump lines, or roof downspouts; and a PVC clean-out plug with an adaptor.”

601.02 Materials. Revise this Article to read:

“**601.02 Materials**. The pipe drains shall be polyvinyl chloride (PVC) SDR 26 ASTM D-2241

601.03 Pipe Drain Installation. Add the following paragraph to the end of this Article:

“Pipe drains shall be installed between the sump pump line, roof downspout or PVC Drain connection and the storm sewer or drainage structure as determined by the Engineer. The connection to the storm sewer or drainage structure shall consist of a machine-cored circular hole in the pipe or structure and a flexible boot or collar fitting to prevent the pipe drain from protruding into the storm sewer.”

601.07 Method of Measurement. Revise this article to read:

“**601.07 Method of Measurement**. Pipe drains will be measured for payment in feet measured horizontally from the existing discharge pipe or proposed PVC Drain to the storm sewer or storm structure wall. Any vertical distance shall be included in the cost of this item. The connection and all fittings shall be included in this item.”

601.08 Basis of Payment. Revise the first paragraph of this Article to read:

“**601.08 Basis of Payment**. This work will be paid for at the contract unit price per foot for PVC PIPE DRAINS SDR 26 ASTM D-2241, of the diameter specified.”

USE OF FIRE HYDRANTS

Revise Article 107.18, Use of Fire Hydrants, of the Standard Specifications to read:

“107.18 Use of Fire Hydrants. If Contractor requires water for the completion of construction operations, and desires to obtain water from the Village, the Contractor shall make written application to the Village. If such application is approved by the Village, the Contractor shall obtain water from the fire hydrant located at 100 West Home Avenue, adjacent to the Village of Villa Park Fleet Maintenance Garage. Contractor’s use of said hydrant and methods of obtaining water shall be in compliance with all applicable ordinances, rules, and regulations concerning such use. Contractor shall furnish all labor and equipment necessary to make a connection to said hydrant, and to obtain and transport water.

Prior to obtaining water, Contractor shall make written application to the Village for temporary use of a hydrant meter. If the application for temporary use of a hydrant meter is approved, the Contractor shall provide a deposit of three-thousand dollars (\$3,000.00) to the Village for the temporary use of said hydrant meter, which deposit will be held by the Village until such time that the meter is returned to the Village by the Contractor in satisfactory condition. Contractor shall use said hydrant meter when obtaining water, and shall comply with all conditions for the use of said meter. Contractor shall return the hydrant meter to the Village within 24 hours of project completion and within 24 hours of any request by the Village that the hydrant meter be returned.

If Contractor makes application for temporary use of a hydrant meter and the application is not approved, Contractor shall make record of the quantity of water obtained, along with the date and time obtained, and shall report such information after each use to the Village of Villa Park Public Works Department, 11 West Home Avenue. If such use takes place outside of the normal working hours of the Public Works Department, Contractor shall report such information immediately upon the commencement of normal working hours.

Contractor shall not use, operate or obtain water from any hydrants other than the hydrant prescribed. Contractor shall not obtain water from the Village for construction operations or activities not under contract with the Village.

If a water main break occurs and the Village determines that the water main break is a result of Contractor’s use of a hydrant, the Village may require the Contractor to repair the water main break in accordance with all applicable construction standards and requirements and at no cost to the contract, or may repair the water main break by other means and invoice the Contractor for reimbursement of the Village’s costs.

Water usage will be measured according to the Special Provisions WATER USAGE DEDUCTION and WATER USAGE CREDIT.”

ITEM #80 - WATER USAGE DEDUCTION

Description. Pay items are provided as a part of this contract for the purpose of documenting the quantity of water obtained from the Village by the Contractor.

If the Contractor elects to obtain water from the Village, the Contractor shall comply with the Special Provision USE OF FIRE HYDRANTS. The quantity of water obtained from the Village by the Contractor shall be deducted from the contract as WATER USAGE DEDUCTION, and shall be credited to the contract as WATER USAGE CREDIT.

The WATER USAGE DEDUCTION pay item for this contract has been established with a unit of measurement in thousands of gallons (TGAL), a quantity of one-hundred (100.00), and a contract unit price of a deduction of eight dollars and eighty-five cents (\$8.85), for a total WATER USAGE DEDUCTION contract price of a deduction of eight-hundred eighty-five dollars and no cents (\$885.00). Bidder, in submitting a bid, accepts the quantity, contract unit price, and total contract price of the WATER USAGE DEDUCTION pay item.

Method of Measurement. Water usage will be measured as the actual quantity of water obtained from the Village by the Contractor, which quantity shall be rounded up to the nearest 1,000 gallons.

Basis of Payment. The water usage deduction will be deducted at the contract unit price per thousand gallons (TGAL) for WATER USAGE DEDUCTION. The quantity deducted as WATER USAGE DEDUCTION will be equal to the quantity paid for as WATER USAGE CREDIT.

ITEM #81 - WATER USAGE CREDIT

Description. Pay items are provided as a part of this contract for the purpose of documenting the quantity of water obtained from the Village by the Contractor.

If the Contractor elects to obtain water from the Village, the Contractor shall comply with the Special Provision USE OF FIRE HYDRANTS. The quantity of water obtained from the Village by the Contractor shall be deducted from the contract as WATER USAGE DEDUCTION, and shall be credited to the contract as WATER USAGE CREDIT.

The WATER USAGE CREDIT pay item for this contract has been established with a unit of measurement in thousands of gallons (TGAL), a quantity of one-hundred (100.00), and a contract unit price of eight dollars and eighty-five cents (\$8.85), for a total WATER USAGE CREDIT contract price of eight-hundred eighty-five dollars and no cents (\$885.00). Bidder, in submitting a bid, accepts the quantity, contract unit price, and total contract price of the WATER USAGE CREDIT pay item.

Method of Measurement. Water usage will be measured as the actual quantity of water obtained

from the Village by the Contractor, which quantity shall be rounded up to the nearest 1,000 gallons.

Basis of Payment. The water usage credit will be paid for at the contract unit price per thousand gallons (TGAL) for WATER USAGE CREDIT. The quantity paid for as WATER USAGE CREDIT will be equal to the quantity deducted as WATER USAGE DEDUCTION.

ITEM #82 - CONTINGENCY ALLOWANCE

A contingency allowance pay item is provided as a part of this contract for the purpose of facilitating the completion of unforeseen or additional work not included in the contract as awarded, and which is determined by the Engineer to be necessary and germane to the contract.

Use of the contingency allowance will be at the discretion of the Engineer. The Engineer may, at his/her discretion, use the contingency allowance for any of the following reasons:

- (a) Facilitate a temporary payment allowance to the Contractor for work completed under existing contract pay items and for which completed quantities exceed contract quantities;
- (b) Facilitate a temporary payment allowance to the Contractor for work completed beyond the scope of existing contract pay items; or
- (c) Facilitate a temporary payment allowance to the Contractor for the purchase of equipment, materials or such other requisition as Engineer determines to be necessary for the completion of the Work.

Such use of the CONTINGENCY ALLOWANCE will be further subject to approval by Owner. Owner's decision with regard to use of the CONTINGENCY ALLOWANCE will be final.

- A. Any payments made to Contractor under the CONTINGENCY ALLOWANCE will be considered temporary, and will only be retained by Contractor until such time that an authorization of contract changes can be approved and incorporated into the contract.
- B. Contractor, in accepting payments made under the CONTINGENCY ALLOWANCE, agrees to the terms of this and other applicable special provisions. Contractor agrees to relinquish any monies and any claim to monies paid under the CONTINGENCY ALLOWANCE upon approval of an authorization of contract changes and payment for any work for which payment was previously made under the CONTINGENCY ALLOWANCE. Contractor further agrees to return any monies previously paid thereunder.

- C. The CONTINGENCY ALLOWANCE pay item for this contract has been established with a unit of measurement in dollars, a quantity of 30,000.00, and a contract unit price of one dollar (\$1.00), for a total CONTINGENCY ALLOWANCE contract price of thirty thousand dollars and no cents (\$30,000.00). Bidder, in submitting a bid, accepts the quantity, unit price, and total contract price of the CONTINGENCY ALLOWANCE.

Basis of Payment. This work will be paid for at the contract unit price per dollar for CONTINGENCY ALLOWANCE. The total bid amount for this item will be \$30,000.00.

DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (DISTRICT 1)

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.

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 \pm 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."

COARSE AGGREGATE FOR BACKFILL, TRENCH BACKFILL AND BEDDING (D-1)

Effective: November 1, 2011

Revised: November 1, 2013

This work shall be according to Section 1004.05 of the Standard Specifications except for the following:

Reclaimed Asphalt Pavement (RAP) maybe blended with gravel, crushed gravel, crushed stone crushed concrete, crushed slag, chats, crushed sand stone or wet bottom boiler slag. The RAP used shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications". The RAP shall be uniformly graded and shall pass the 1.0 in. (25 mm) screen. When RAP is blended with any of the coarse aggregate listed above, the blending shall be done mechanically with calibrated feeders. The feeders shall have an accuracy of ± 2.0 percent of the actual quantity of material delivered. The final blended product shall not contain more than 40 percent by weight RAP.

The coarse aggregate listed above shall meet CA 6 and CA 10 gradations prior to being blended with the processed and uniformly graded RAP. Gradation deleterious count shall not exceed 10% of total RAP and 5% of other by total weight.

HMA MIXTURE DESIGN REQUIREMENTS (D-1)

Effective: January 1, 2013
Revised: April 1, 2016

1) Design Composition and Volumetric Requirements

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

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

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

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

1/ CA 16 or CA 13 may be blended with the gradations listed.

2/ The coarse aggregates used shall be capable of being combined with stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation and mineral filler to meet the approved mix design and the mix requirements noted herein.

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

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

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

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

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

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

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

1/ Uses 19.0L binder mix.

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

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

“**1030.02 Materials.** Materials shall be according to the following.

Item.....	Article/Section
(a) Coarse Aggregate	1004.03
(b) Fine Aggregate	1003.03
(c) RAP Material	1031
(d) Mineral Filler	1011
(e) Hydrated Lime	1012.01
(f) Slaked Quicklime (Note 1)	
(g) Performance Graded Asphalt Binder (Note 2)	1032
(h) Fibers (Note 3)	
(i) Warm Mix Asphalt (WMA) Technologies (Note 4)	

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

Note 2. The asphalt binder shall be an SBS PG 76-28 when the SMA is used on a full-

depth asphalt pavement and SBS PG 76-22 when used as an overlay, except where modified herein. The asphalt binder shall be an Elvaloy or SBS PG 76-22 for IL-4.75, except where modified herein. The elastic recovery shall be a minimum of 80.

Note 3. A stabilizing additive such as cellulose or mineral fiber shall be added to the SMA mixture according to Illinois Modified AASHTO M 325. The stabilizing additive shall meet the Fiber Quality Requirements listed in Illinois Modified AASHTO M 325. Prior to approval and use of fibers, the Contractor shall submit a notarized certification by the producer of these materials stating they meet these requirements. Reclaimed Asphalt Shingles (RAS) may be used in Stone Matrix Asphalt (SMA) mixtures designed with an SBA polymer modifier as a fiber additive if the mix design with RAS included meets AASHTO T305 requirements. The RAS shall be from a certified source that produces either Type 1 or Type 2. Material shall meet requirements noted herein and the actual dosage rate will be determined by the Engineer.

Note 4. Warm mix additives or foaming processes shall be selected from the current Bureau of Materials and Physical Research Approved List, "Warm Mix Asphalt Technologies".

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

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

High ESAL, MIXTURE COMPOSITION (% PASSING) ^{1/}										
Sieve Size	IL-19.0 mm		SMA ^{4/} IL-12.5 mm		SMA ^{4/} IL-9.5 mm		IL-9.5 mm		IL-4.75 mm	
	min	max	min	max	min	max	min	max	min	max
1 1/2 in. (37.5 mm)										
1 in. (25 mm)		100								
3/4 in. (19 mm)	90	100		100						
1/2 in. (12.5 mm)	75	89	80	100		100		100		100
3/8 in. (9.5 mm)				65	90	100	90	100		100
#4 (4.75 mm)	40	60	20	30	36	50	34	69	90	100
#8 (2.36 mm)	20	42	16	24 ^{5/}	16	32 ^{5/}	34 ^{6/}	52 ^{2/}	70	90
#16 (1.18 mm)	15	30					10	32	50	65
#30 (600 μm)			12	16	12	18				
#50 (300 μm)	6	15					4	15	15	30
#100 (150 μm)	4	9					3	10	10	18
#200 (75 μm)	3	6	7.0	9.0 ^{3/}	7.5	9.5 ^{3/}	4	6	7	9 ^{3/}
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0

- 1/ Based on percent of total aggregate weight.
- 2/ The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with N_{design} = 90.
- 3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.
- 4/ The maximum percent passing the #635 (20 μm) sieve shall be 3 percent.
- 5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above the percentage stated on the table.

- 6/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.

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

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

VOLUMETRIC REQUIREMENTS High ESAL				
Ndesign	Voids in the Mineral Aggregate (VMA), % minimum			Voids Filled with Asphalt Binder (VFA), %
	IL-19.0	IL-9.5	IL-4.75 ^{1/}	
50	13.5	15.0	18.5	65 – 78 ^{2/}
70				
90				

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

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

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

- “(3) SMA Mixtures.

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

- 1/ Maximum draindown shall be 0.3 percent. The draindown shall be determined at the JMF asphalt binder content at the mixing temperature plus 30 °F.

- 2/ Applies when specific gravity of coarse aggregate is ≥ 2.760 .
- 3/ Applies when specific gravity of coarse aggregate is < 2.760 .
- 4/ Blending of different types of aggregate will not be permitted. For surface course, the coarse aggregate can be crushed steel slag, crystalline crushed stone or crushed sandstone. For binder course, coarse aggregate shall be crushed stone (dolomite), crushed gravel, crystalline crushed stone, or crushed sandstone.

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

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

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

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

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

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

2) Design Verification and Production

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

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

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

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

Illinois Modified AASHTO T 324 Requirements ^{1/}

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

- 1/ When produced at temperatures of 275 ± 5 °F (135 ± 3 °C) or less, loose Warm Mix Asphalt shall be oven aged at 270 ± 5 °F (132 ± 3 °C) for two hours prior to gyratory compaction of Hamburg Wheel specimens.

Note: For SMA Designs (N-80) the maximum rut depth is 6.0 mm at 20,000 repetitions.
For IL 4.75mm Designs (N-50) the maximum rut depth is 9.0mm at 15,000 repetitions.

- (2) Tensile Strength Criteria. The minimum allowable conditioned tensile strength shall be 60 psi (415 kPa) for non-polymer modified performance graded (PG) asphalt binder and 80 psi (550 kPa) for polymer modified PG asphalt binder. The maximum allowable unconditioned tensile strength shall be 200 psi (1380 kPa).”

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

“(a) High ESAL, IL-4.75, WMA, and SMA Mixtures. For each contract, a 300 ton (275 metric tons) test strip, except for SMA mixtures it will be 400 ton (363 metric ton), will be required at the beginning of HMA production for each mixture with a quantity of 3000 tons (2750 metric tons) or more according to the Manual of Test Procedures for Materials “Hot Mix Asphalt Test Strip Procedures”.

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

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

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

Method of Measurement:

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

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

Basis of Payment.

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

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

GROUND TIRE RUBBER (GTR) MODIFIED ASPHALT BINDER (D-1)

Effective: June 26, 2006

Revised: April 1, 2016

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:

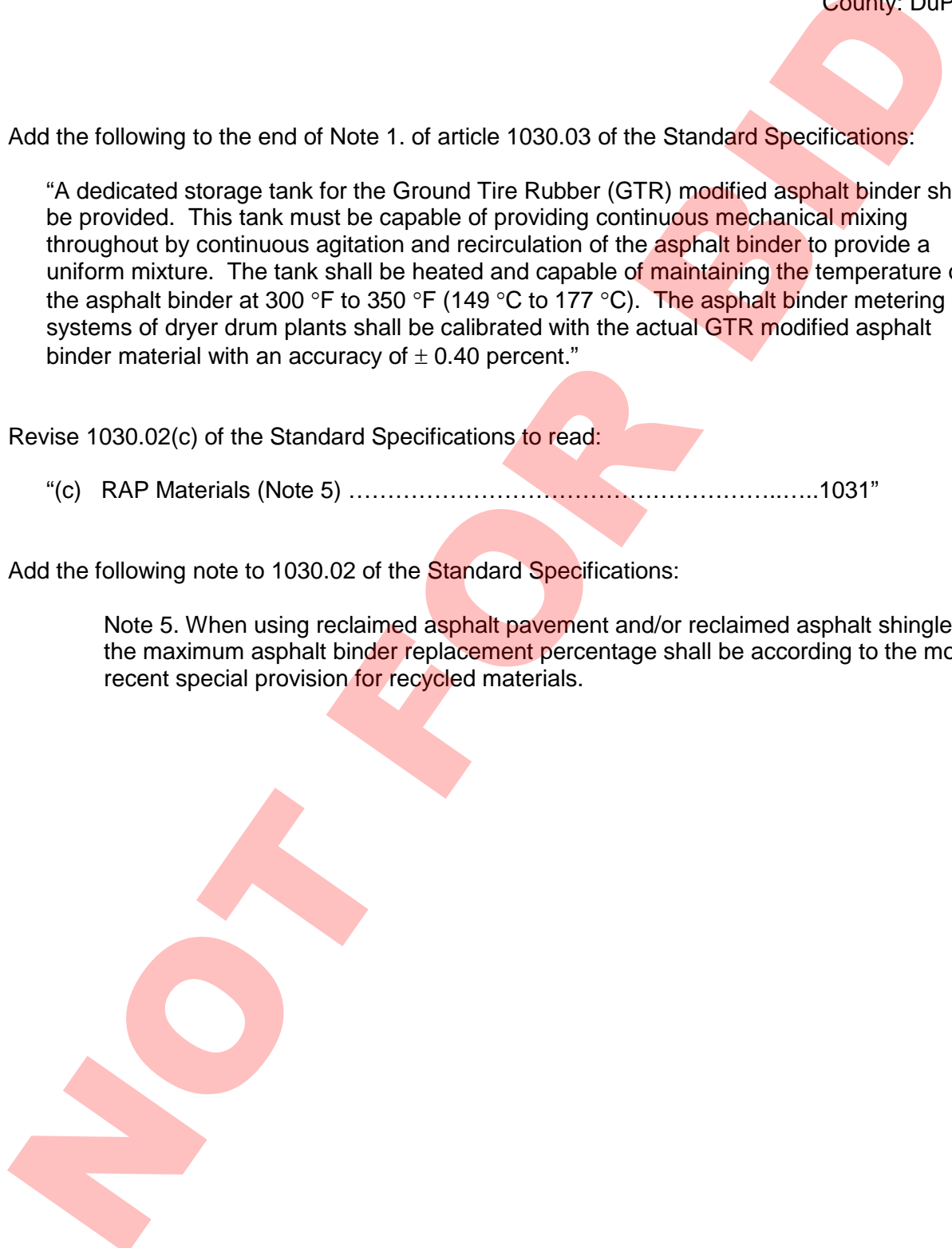
“A dedicated storage tank for the Ground Tire Rubber (GTR) modified asphalt binder shall be provided. This tank must be capable of providing continuous mechanical mixing throughout by continuous agitation and recirculation of the asphalt binder to provide a uniform mixture. The tank shall be heated and 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.”

Revise 1030.02(c) of the Standard Specifications to read:

“(c) RAP Materials (Note 5)1031”

Add the following note to 1030.02 of the Standard Specifications:

Note 5. When using reclaimed asphalt pavement and/or reclaimed asphalt shingles, the maximum asphalt binder replacement percentage shall be according to the most recent special provision for recycled materials.



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

Effective: November 1, 2012
Revise: April 2, 2016

Revise Section 1031 of the Standard Specifications to read:

“SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES

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

- (a) Reclaimed Asphalt Pavement (RAP). RAP is the material resulting from cold milling or crushing an existing hot-mix asphalt (HMA) pavement. RAP will be considered processed FRAP after completion of both crushing and screening to size. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.
- (b) Reclaimed Asphalt Shingles (RAS). Reclaimed asphalt shingles (RAS). RAS is from the processing and grinding of preconsumer or post-consumer shingles. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable material, as defined in Bureau of Materials and Physical Research Policy Memorandum, “Reclaimed Asphalt Shingle (RAS) Sources”, by weight of RAS. All RAS used shall come from a Bureau of Materials and Physical Research approved processing facility where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 90 percent passing the #4 (4.75 mm) sieve. RAS shall meet the testing requirements specified herein. In addition, RAS shall meet the following Type 1 or Type 2 requirements.
 - (1) Type 1. Type 1 RAS shall be processed, preconsumer asphalt shingles salvaged from the manufacture of residential asphalt roofing shingles.
 - (2) Type 2. Type 2 RAS shall be processed post-consumer shingles only, salvaged from residential, or four unit or less dwellings not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP).

1031.02 Stockpiles. RAP and RAS stockpiles shall be according to the following.

- (a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. Additional processed RAP (FRAP) shall be stockpiled in a separate working pile, as designated in the QC Plan, and only added to the sealed stockpile when test results for the working pile are complete and are found to meet tolerances specified herein for the original sealed FRAP stockpile. Stockpiles shall be

sufficiently separated to prevent intermingling at the base. All stockpiles (including unprocessed RAP and FRAP) shall be identified by signs indicating the type as listed below (i.e. "Non- Quality, FRAP -#4 or Type 2 RAS", etc...).

- (1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. All FRAP shall be processed prior to testing and sized into fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass the maximum sieve size specified for the mix the FRAP will be used in.
- (2) Restricted FRAP (B quality) stockpiles shall consist of RAP from Class I, Superpave (High ESAL), or HMA (High ESAL). If approved by the Engineer, the aggregate from a maximum 3.0 in. (75 mm) single combined pass of surface/binder milling will be classified as B quality. All millings from this application will be processed into FRAP as described previously.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed (FRAP) prior to testing. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from HMA shoulders, bituminous stabilized subbases or Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

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

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

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

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

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

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

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

(b) RAS Testing. RAS shall be sampled and tested during stockpiling according to Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources". The Contractor shall also sample as incoming material at the HMA plant.

(1) During Stockpiling. Washed extraction and testing for unacceptable materials shall be run at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 1000 tons (900 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a 1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS shall be in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.

(2) Incoming Material. For testing as incoming material at the HMA plant, washed extraction shall be run at the minimum frequency of one sample per 250 tons (227 metric tons). A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). The incoming material test results shall meet the tolerances specified herein.

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

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

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

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

Parameter	FRAP
No. 4 (4.75 mm)	± 6 %
No. 8 (2.36 mm)	± 5 %

No. 30 (600 μm)	± 5 %
No. 200 (75 μm)	± 2.0 %
Asphalt Binder	± 0.3 %
G _{mm}	± 0.03 ^{1/}

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

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

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

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

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

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

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

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

a minimum of once a month.

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

The Engineer will notify the Contractor of observed deficiencies.

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

Test Parameter	Acceptable Limits of Precision	
% Passing: ^{1/}	FRAP	RAS
1/2 in.	5.0%	
No. 4	5.0%	
No. 8	3.0%	4.0%
No. 30	2.0%	3.0%
No. 200	2.2%	2.5%
Asphalt Binder Content	0.3%	1.0%
G _{mm}	0.030	

1/ Based on washed extraction.

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

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

1031.05 Quality Designation of Aggregate in RAP and FRAP.

- (a) RAP. The aggregate quality of the RAP for homogeneous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.

- (1) RAP from Class I, Superpave/HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
- (2) RAP from Superpave/HMA (Low ESAL) IL-19.0L binder mixture is designated as

Class D quality coarse aggregate.

- (3) RAP from Class I, Superpave/HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.
 - (4) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.
- (b) FRAP. If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer.

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

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

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

quality or better. FRAP shall be considered equivalent to limestone for frictional considerations unless produced/screened to minus 3/8 inch.

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

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

Max Asphalt Binder Replacement for FRAP with RAS Combination

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

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the percent asphalt binder replacement shall not exceed 50 % of the total asphalt binder in the mixture.
- 2/ When the binder replacement exceeds 15 % for all mixes, except for SMA and IL-4.75, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 % binder replacement using a

virgin asphalt binder grade of PG64-22 will be reduced to a PG58-28). When constructing full depth HMA and the ABR is less than 15 %, the required virgin asphalt binder grade shall be PG64-28.

- 3/ When the ABR for SMA or IL-4.75 is 15 % or less, the required virgin asphalt binder shall be SBS PG76-22 and the elastic recovery shall be a minimum of 80. When the ABR for SMA or IL-4.75 exceeds 15%, the virgin asphalt binder grade shall be SBS PG70-28 and the elastic recovery shall be a minimum of 80.
- 4/ When FRAP or RAS is used alone, the maximum percent asphalt binder replacement designated on the table shall be reduced by 10 %.

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

- (a) FRAP and/or RAS. FRAP and /or RAS mix designs shall be submitted for verification. If additional FRAP or RAS stockpiles are tested and found to be within tolerance, as defined under "Evaluation of Tests" herein, and meet all requirements herein, the additional FRAP or RAS stockpiles may be used in the original design at the percent previously verified.
- (b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design. A RAS stone bulk specific gravity (Gsb) of 2.300 shall be used for mix design purposes.

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

To remove or reduce agglomerated material, a scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAS and FRAP feed system to remove or reduce oversized material. If material passing the sizing device adversely affects the mix production or quality of the mix, the sizing device shall be set at a size specified by the Engineer.

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

- (a) RAS. RAS shall be incorporated into the HMA mixture either by a separate weight depletion system or by using the RAP weigh belt. Either feed system shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes. The portion of RAS shall be controlled accurately to within ± 0.5 percent of the amount of RAS utilized. When using the weight depletion system, flow indicators or sensing devices shall be provided and interlocked with the plant controls

such that the mixture production is halted when RAS flow is interrupted.

(b) HMA Plant Requirements. HMA plants utilizing FRAP and/or RAS shall be capable of automatically recording and printing the following information.

(1) Dryer Drum Plants.

- a. Date, month, year, and time to the nearest minute for each print.
- b. HMA mix number assigned by the Department.
- c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- d. Accumulated dry weight of RAS and FRAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
- f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
- g. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.
- h. Aggregate RAS and FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAS and FRAP are printed in wet condition.)
- i. When producing mixtures with FRAP and/or RAS, a positive dust control system shall be utilized.
- j. Accumulated mixture tonnage.
- k. Dust Removed (accumulated to the nearest 0.1 ton (0.1 metric ton))

(2) Batch Plants.

- a. Date, month, year, and time to the nearest minute for each print.
- b. HMA mix number assigned by the Department.
- c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).

- d. Mineral filler weight to the nearest pound (kilogram).
- f. RAS and FRAP weight to the nearest pound (kilogram).
- g. Virgin asphalt binder weight to the nearest pound (kilogram).
- h. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.

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

1031.09 RAP in Aggregate Surface Course and Aggregate Wedge Shoulders, Type B.

The use of RAP or FRAP in aggregate surface course and aggregate shoulders shall be as follows.

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

NOT FOR BID

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

SPECIAL PROVISION
FOR
INSURANCE

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

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

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

Village of Villa Park

Baxter & Woodman, Inc.

Village Consultants

County of DuPage

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

NOT FOR BID

BDE SPECIAL PROVISIONS
For the January 20 and March 10, 2017 Lettings

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

<u>File Name</u>	<u>#</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80099	1	Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
80274	2	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
80192	3	Automated Flagger Assistance Device	Jan. 1, 2008	
80173	4	Bituminous Materials Cost Adjustments	Nov. 2, 2006	July 1, 2015
80241	5	Bridge Demolition Debris	July 1, 2009	
5026I	6	Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
5048I	7	Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
5049I	8	Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
5053I	9	Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
80366	10	Butt Joints	July 1, 2016	
80198	11	✓ Completion Date (via calendar days)	April 1, 2008	
80199	12	Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80293	13	Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	July 1, 2016
80311	14	Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
80277	15	Concrete Mix Design – Department Provided	Jan. 1, 2012	April 1, 2016
80261	16	✓ Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80029	17	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	July 2, 2016
* 80378	18	Dowel Bar Inserter	Jan. 1, 2017	
80229	19	Fuel Cost Adjustment	April 1, 2009	July 1, 2015
80304	20	Grooving for Recessed Pavement Markings	Nov. 1, 2012	Aug. 1, 2014
80246	21	✓ Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2016
80347	22	Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Nov. 1, 2014	April 1, 2016
80376	23	Hot-Mix Asphalt – Tack Coat	Nov. 1, 2016	
80367	24	Light Poles	July 1, 2016	
80368	25	Light Tower	July 1, 2016	
80336	26	Longitudinal Joint and Crack Patching	April 1, 2014	April 1, 2016
80369	27	Mast Arm Assembly and Pole	July 1, 2016	
80045	28	Material Transfer Device	June 15, 1999	Aug. 1, 2014
80165	29	Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
80349	30	Pavement Marking Blackout Tape	Nov. 1, 2014	April 1, 2016
80371	31	Pavement Marking Removal	July 1, 2016	
80298	32	Pavement Marking Tape Type IV	April 1, 2012	April 1, 2016
80377	33	Portable Changeable Message Signs	Nov. 1, 2016	
* 80359	34	Portland Cement Concrete Bridge Deck Curing	April 1, 2015	Jan. 1, 2017
80338	35	Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	April 1, 2014	April 1, 2016
80300	36	Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
80328	37	✓ Progress Payments	Nov. 2, 2013	
3426I	38	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157	39	Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
80306	40	Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	April 1, 2016
* 80340	41	Speed Display Trailer	April 2, 2014	Jan. 1, 2017
80127	42	Steel Cost Adjustment	April 2, 2004	July 1, 2015
* 80379	43	Steel Plate Beam Guardrail	Jan. 1, 2017	

<u>File Name</u>	<u>#</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80317	44	<input type="checkbox"/> Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	April 1, 2016
20338	45	<input type="checkbox"/> Training Special Provisions	Oct. 15, 1975	
80318	46	<input type="checkbox"/> Traversable Pipe Grate	Jan. 1, 2013	April 1, 2014
* 80381	47	<input type="checkbox"/> Traffic Barrier Terminal, Type 1 Special	Jan. 1, 2017	
* 80380	48	<input type="checkbox"/> Tubular Markers	Jan. 1, 2017	
80288	49	<input checked="" type="checkbox"/> Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
80302	50	<input type="checkbox"/> Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
80289	51	<input type="checkbox"/> Wet Reflective Thermoplastic Pavement Marking	Jan. 1, 2012	
80071	52	<input type="checkbox"/> Working Days	Jan. 1, 2002	

The following special provisions are in the 2017 Supplemental Specifications and Recurring Special Provisions.

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
80360	Coarse Aggregate Quality	Article 1004.01	July 1, 2015	
80363	Engineer's Field Office	Article 670.07	April 1, 2016	
80358	Equal Employment Opportunity	Recurring CS #1 and #5	April 1, 2015	
80364	Errata for the 2016 Standard Specifications	Supplemental	April 1, 2016	
80342	Mechanical Side Tie Bar Inserter	Articles 420.03, 420.05, and 1103.19	Aug. 1, 2014	April 1, 2016
80370	Mechanical Splicers	Article 1006.10	July 1, 2016	
80361	Overhead Sign Structures Certification of Metal Fabricator	Article 106.08	Nov. 1, 2015	April 1, 2016
80365	Pedestrian Push-Button	Article 888.03	April 1, 2016	
80353	Portland Cement Concrete Inlay or Overlay	Recurring CS #34	Jan. 1, 2015	April 1, 2016
80372	Preventive Maintenance – Bituminous Surface Treatment (A-1)	Recurring CS #28	Jan. 1, 2009	July 1, 2016
80373	Preventive Maintenance – Cape Seal	Recurring CS #29	Jan. 1, 2009	July 1, 2016
80374	Preventive Maintenance – Micro-Surfacing	Recurring CS #30	Jan. 1, 2009	July 1, 2016
80375	Preventive Maintenance – Slurry Seal	Recurring CS #31	Jan. 1, 2009	July 1, 2016
80362	Steel Slag in Trench Backfill	Articles 1003.01 and 1003.04	Jan. 1, 2016	
80355	Temporary Concrete Barrier	Articles 704.02, 704.04, 704.05, and 704.06	Jan. 1, 2015	July 1, 2015

The following special provisions require additional information from the designer. The additional information needs to be included in a separate document attached to this check sheet. The Project Development and Implementation section will then include the information in the applicable special provision. The Special Provisions are:

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

COMPLETION DATE (VIA CALENDAR DAYS) (BDE)

Effective: April 1, 2008

The Contractor shall complete all work on or before the completion date of this contract which will be based upon 92 calendar days.

The completion date will be determined by adding the specified number of calendar days to the date the Contractor begins work, or to the date ten days after execution of the contract, whichever is the earlier, unless a delayed start is granted by the Engineer.

80198

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

NOT FOR BID

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

Effective: January 1, 2010

Revised: April 1, 2016

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

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

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

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

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

Revise the Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

“Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density Minimum
IL-4.75	Ndesign = 50	93.0 – 97.4% ^{1/}	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 & 80	93.5 – 97.4%	91.0%”

PROGRESS PAYMENTS (BDE)

Effective: November 2, 2013

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

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

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

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

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

80328

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



Route <input type="text"/>	Marked Route South Michigan Avenue	Section <input type="text"/>
Project Number <input type="text"/>	County DuPage	Contract Number <input type="text"/>

This plan has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issues by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name Vydas Juskelis	Title Director of Public Works	Agency Village of Villa Park
Signature <i>Vydas Juskelis</i>		Date 11-21-16

I. Site Description

- A. Provide a description of the project location (include latitude and longitude):
- B. Provide a description of the construction activity which is subject of this plan:
- C. Provide the estimated duration of this project:
- D. The total area of the construction site is estimated to be 4.1 acres.
The total area of the site estimated to be disturbed by excavation, grading or other activities is 2.0 acres.
- E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:
- F. List all soils found within project boundaries. Include map unit name, slope information and erosivity:
- G. Provide an aerial extent of wetland acreage at the site:
- H. Provide a description of potentially erosive areas associated with this project:
- I. The following is a description of soil disturbing activities by stages, their locations, and their erosive factors (e.g. steepness of slopes, length of scopes, etc.):

After removing the existing pavement and excavating for storm sewer and water main construction, the exposed soil will be susceptible to erosion from storm events. Foreslopes that drain away from the road are slopes of 10:1 or flatter to the ROW.

J. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent off site sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm water is discharged to surface water including wetlands.

K. Identify who owns the drainage system (municipality or agency) this project will drain into:

Village of Villa Park

L. The following is a list of General NPDES ILR40 permittees within whose reporting jurisdiction this project is located.

M. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. The location of the receiving waters can be found on the erosion and sediment control plans:

The project site directly discharges to existing municipal storm sewers, which ultimately discharge to Salt Creek.

N. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes, highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.

None

O. The following sensitive environmental resources are associated with this project, and may have the potential to be impacted by the proposed development:

- Floodplain
- Wetland Riparian
- Threatened and Endangered Species
- Historic Preservation
- 303(d) Listed receiving waters for suspended solids, turbidity, or siltation
- Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity, or siltation
- Applicable Federal, Tribal, State or Local Programs
- Other

1. 303(d) Listed receiving waters (fill out this section if checked above):

a. The name(s) of the listed water body, and identification of all pollutants causing impairment:

b. Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:

c. Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:

d. Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:

2. TMDL (fill out this section if checked above)

a. The name(s) of the listed water body:

- b. Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:

- c. If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet the allocation:

P. The following pollutants of concern will be associated with this construction project:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Soil Sediment | <input checked="" type="checkbox"/> Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) |
| <input checked="" type="checkbox"/> Concrete | <input checked="" type="checkbox"/> Antifreeze / Coolants |
| <input checked="" type="checkbox"/> Concrete Truck waste | <input checked="" type="checkbox"/> Waste water from cleaning construction equipment |
| <input checked="" type="checkbox"/> Concrete Curing Compounds | <input type="checkbox"/> Other (specify) _____ |
| <input checked="" type="checkbox"/> Solid waste Debris | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Paints | <input type="checkbox"/> Other (specify) _____ |
| <input checked="" type="checkbox"/> Solvents | <input type="checkbox"/> Other (specify) _____ |
| <input checked="" type="checkbox"/> Fertilizers / Pesticides | <input type="checkbox"/> Other (specify) _____ |

II. Controls

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in I.C. above and for all use areas, borrow sites, and waste sites. For each measure discussed, the Contractor will be responsible for its implementation as indicated. The Contractor shall provide to the Resident Engineer a plan for the implementation of the measures indicated. The Contractor and subcontractors, will notify the Resident Engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the Permit ILR10. Each such Contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

- A. **Erosion and Sediment Controls:** At a minimum, controls must be coordinated, installed, and maintained to:
1. Minimize the amount of soil exposed during construction activity;
 2. Minimize the disturbance of steep slopes;
 3. Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible;
 4. Minimize soil compaction and, unless infeasible, preserve topsoil.
- B. **Stabilization Practices:** Provided below is a description of interim and permanent stabilization practices, including site- specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II(B)(1) and II(B)(2), stabilization measures shall be initiated **immediately** where construction activities have temporarily or permanently ceased, but in no case more than **one (1) day** after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days.
1. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
 2. On areas where construction activity has temporarily ceased and will resume after fourteen (14) days, a temporary stabilization method can be used.

The following stabilization practices will be used for this project:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Preservation of Mature Vegetation | <input type="checkbox"/> Erosion Control Blanket / Mulching |
| <input type="checkbox"/> Vegetated Buffer Strips | <input checked="" type="checkbox"/> Sodding |
| <input checked="" type="checkbox"/> Protection of Trees | <input type="checkbox"/> Geotextiles |
| <input checked="" type="checkbox"/> Temporary Erosion Control Seeding | <input type="checkbox"/> Other (specify) _____ |

- | | |
|--|--|
| <input type="checkbox"/> Temporary Turf (Seeding, Class 7) | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Temporary Mulching | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Permanent Seeding | <input type="checkbox"/> Other (specify) _____ |

Describe how the stabilization practices listed above will be utilized during construction:

Areas outside the pavement will be permanently stabilized with sod after construction of roadway items and sidewalk is complete.

Describe how the stabilization practices listed above will be utilized after construction activities have been completed:

The contractor will provide supplemental watering to permanent sod locations as needed. Once sod establishes into stabilized vegetation, erosion control barriers and inlet filters will be removed.

- C. **Structural Practices:** Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The following stabilization practices will be used for this project:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Perimeter Erosion Barrier | <input type="checkbox"/> Rock Outlet Protection |
| <input type="checkbox"/> Temporary Ditch Check | <input type="checkbox"/> Riprap |
| <input checked="" type="checkbox"/> Storm Drain Inlet Protection | <input type="checkbox"/> Gabions |
| <input type="checkbox"/> Sediment Trap | <input type="checkbox"/> Slope Mattress |
| <input type="checkbox"/> Temporary Pipe Slope Drain | <input type="checkbox"/> Retaining Walls |
| <input type="checkbox"/> Temporary Sediment Basin | <input type="checkbox"/> Slope Walls |
| <input type="checkbox"/> Temporary Stream Crossing | <input type="checkbox"/> Concrete Revetment Mats |
| <input type="checkbox"/> Stabilized Construction Exits | <input type="checkbox"/> Level Spreaders |
| <input type="checkbox"/> Turf Reinforcement Mats | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Permanent Check Dams | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Permanent Sediment Basin | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Aggregate Ditch | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Paved Ditch | <input type="checkbox"/> Other (specify) _____ |

Describe how the structural practices listed above will be utilized during construction:

Perimeter Erosion Barrier will be placed along all areas that slope away from the project. Parkway structures and curb structures with open grates will be protected with inlet filters.

Describe how the structural practices listed above will be utilized after construction activities have been completed:

All structural practices listed above will remain in place until the permanent sod has established as stabilized vegetation.

D. **Treatment Chemicals**

Will polymer flocculents or treatment chemicals be utilized on this project: Yes No

If yes above, identify where and how polymer flocculents or treatment chemicals will be utilized on this project.

- E. **Permanent Storm Water Management Controls:** Provided below is a description of measures that will be installed during the construction process to control volume and pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water act.

1. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

The practices selected for implementation were determined on the basis of the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT Bureau of Design & Environment Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.

2. Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of permanent storm water management controls:

Runoff will be directed to existing and proposed storm sewer structures which will be protected with Inlet Filters. There are no outfall structures requiring velocity dissipation along this project.

- F. **Approved State or Local Laws:** The management practices, controls, and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, site permits, storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI, to be authorized to discharge under the Permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

All management practices, controls, and other provisions provided in this plan are in accordance with IDOT Standard Specifications for Road and Bridge Construction.

- G. **Contractor Required Submittals:** Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342a.

1. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:
 - Approximate duration of the project, including each stage of the project
 - Rainy season, dry season, and winter shutdown dates
 - Temporary stabilization measures to be employed by contract phases
 - Mobilization time frame
 - Mass clearing and grubbing/roadside clearing dates
 - Deployment of Erosion Control Practices
 - Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
 - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
 - Paving, saw-cutting, and any other pavement related operations
 - Major planned stockpiling operations
 - Time frame for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
 - Permanent stabilization activities for each area of the project
2. The Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:

- Vehicle Entrances and Exits - Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
- Material delivery, Storage, and Use - Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
- Stockpile Management - Identify the location of both on-site and off-site stockpiles. Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
- Waste Disposal - Discuss methods of waste disposal that will be used for this project.
- Spill Prevention and Control - Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.).
- Concrete Residuals and Washout Wastes - Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
- Litter Management - Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
- Vehicle and Equipment Cleaning and Maintenance - Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Dewatering Activities - Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.
- Polymer Flocculants and Treatment Chemicals - Identify the use and dosage of treatment chemicals and provide the Resident Engineer with Material Safety Data Sheets. Describe procedures on how the chemicals will be used and identify who will be responsible for the use and application of these chemicals. The selected individual must be trained on the established procedures.
- Additional measures indicated in the plan.

III. Maintenance

When requested by the Contractor, the Resident Engineer will provide general maintenance guides to the Contractor for the practices associated with this project. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. It will be Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

All erosion and sediment control measures should be checked weekly and after each significant rainfall, 0.5 inch or greater in a 24 hour period, or equivalent snowfall. Additionally, during winter months, all measures should be checked after each additional snowmelt. All erosion and sediment control measures should be included in the list of items to be inspected. All maintenance of erosion control systems is the responsibility of the contractor, and is a requirement of the contract.

IV. Inspections

Qualified personnel shall inspect disturbed areas of the construction site which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site using IDOT Storm Water Pollution Prevention Plan Erosion Control Inspection Report (BC 2259). Such inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm or by the end of the following business or work day that is 0.5 inch or greater or equivalent snowfall.

Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly inspections will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs.

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by e-mail at: epa.swnoncomp@illinois.gov, telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

The Incidence of Non-Compliance shall be mailed to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Compliance Assurance Section
1021 North Grand East
Post Office Box 19276
Springfield, Illinois 62794-9276

Additional Inspections Required:

--

V. Failure to Comply

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of a National Pollutant Discharge Elimination System/Erosion and Sediment Control Deficiency Deduction against the Contractor and/or penalties under the Permit ILR10 which could be passed on to the Contractor.

NOT FOR BID



Prior to conducting any professional services at the site covered by this contract, the Contractor and every subcontractor must complete and return to the Resident Engineer the following certification. A separate certification must be submitted by each firm. Attach to this certification all items required by Section II.G of the Storm Water Pollution Prevention Plan (SWPPP) which will be handled by the Contractors/subcontractor completing this form.

Route	Marked Route	Section
	South Michigan Avenue	
Project Number	County	Contract Number
	DuPage	

This certification statement is a part of SWPPP for the project described above, in accordance with the General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency.

I certify under penalty of law that I understand the terms of the Permit No. ILR10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

In addition, I have read and understand all of the information and requirements stated in SWPPP for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the Permit ILR10 and SWPPP and will provide timely updates to these documents as necessary.

- Contractor
 Sub-Contractor

Print Name	Signature
Title	Date
Name of Firm	Telephone
Street Address	City/State/Zip

Items which the Contractor/subcontractor will be responsible for as required in Section II.G. of SWPPP:

--

NOT FOR BID



Bureau of Water • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Division of Water Pollution Control Notice of Intent (NOI) for General Permit to Discharge Storm Water Associated with Construction Site Activities

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Permit Section at the above address.

For Office Use Only

OWNER INFORMATION

Permit No. ILR10 _____

Company/Owner Name: Village of Villa Park
Mailing Address: 20 South Ardmore Phone: 630-834-8505
City: Villa Park State: IL Zip: 60181 Fax: 630-834-8509
Contact Person: Vydas Juskelis E-mail: juskelis@invillapark.com
Owner Type (select one) City

CONTRACTOR INFORMATION

MS4 Community: Yes No

Contractor Name: _____
Mailing Address: _____ Phone: _____
City: _____ State: _____ Zip: _____ Fax: _____

CONSTRUCTION SITE INFORMATION

Select One: New Change of information for: ILR10 _____
Project Name: South Michigan Avenue Reconstruction County: DuPage
Street Address: S. Michigan, Madison to Park City: Villa Park IL Zip: 60181
Latitude: 41 52 42.21 Longitude: 87 59 7.35 9 39N 11E
(Deg) (Min) (Sec) (Deg) (Min) (Sec) Section Township Range
Approximate Construction Start Date Apr 3, 2017 Approximate Construction End Date Aug 1, 2017

Total size of construction site in acres: 4.0
If less than 1 acre, is the site part of a larger common plan of development?
 Yes No

Fee Schedule for Construction Sites:
Less than 5 acres - \$250
5 or more acres - \$750

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

Has the SWPPP been submitted to the Agency? Yes No
(Submit SWPPP electronically to: epa.constilr10swppp@illinois.gov)

Location of SWPPP for viewing: Address: 20 South Ardmore City: Villa Park
SWPPP contact information: Inspector qualifications: _____
Contact Name: Vydas Juskelis P.E. _____
Phone: 630-834-8505 Fax: 630-834-8509 E-mail: juskelis@invillapark.com
Project inspector, if different from above Inspector qualifications: _____
Inspector's Name: _____
Phone: _____ Fax: _____ E-mail: _____

TYPE OF CONSTRUCTION (select one)

Construction Type Transportation

SIC Code: _____

Type a detailed description of the project:

The project includes pavement removal, earth excavation, storm sewer installation, water main installation, aggregate base course, curb and gutter, HMA binder and surface courses, parkway restoration, and other miscellaneous items.

The project is located on South Michigan Avenue from W Madison Ave to W Park Boulevard, in the Village of Villa Park, Illinois.

HISTORIC PRESERVATION AND ENDANGERED SPECIES COMPLIANCE

Has the project been submitted to the following state agencies to satisfy applicable requirements for compliance with Illinois law on:

Historic Preservation Agency Yes No

Endangered Species Yes No

RECEIVING WATER INFORMATION

Does your storm water discharge directly to: Waters of the State or Storm Sewer

Owner of storm sewer system: Village of Villa Park

Name of closest receiving water body to which you discharge: Salt Creek

Mail completed form to: Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276
or call (217) 782-0610
FAX: (217) 782-9891

Or submit electronically to: epa.constilr10swppp@illinois.gov

I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a storm water pollution prevention plan and a monitoring program plan, will be complied with.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))


Owner Signature:

Vydas Juskelis
Printed Name:

11/21/2016

Date:

Director of Public Works
Title:

INSTRUCTIONS FOR COMPLETION OF CONSTRUCTION ACTIVITY NOTICE OF INTENT (NOI) FORM

Submit original, electronic or facsimile copies. Facsimile and/or electronic copies should be followed-up with submission of an original signature copy as soon as possible. Please write "copy" under the "For Office Use Only" box in the upper right hand corner of the first page.

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Permit Section at:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276
or call (217) 782-0610
FAX: (217) 782-9891

Or submit electronically to: epa.constilr10swppp@illinois.gov

Reports must be typed or printed legibly and signed.

Any facility that is not presently covered by the General NPDES Permit for Storm Water Discharges From Construction Site Activities is considered a new facility.

If this is a change in your facility information, renewal, etc., please fill in your permit number on the appropriate line, changes of information or permit renewal notifications do not require a fee.

NOTE: FACILITY LOCATION IS NOT NECESSARILY THE FACILITY MAILING ADDRESS, BUT SHOULD DESCRIBE WHERE THE FACILITY IS LOCATED.

Use the formats given in the following examples for correct form completion.

	Example	Format
Section	12	1 or 2 numerical digits
Township	12N	1 or 2 numerical digits followed by "N" or "S"
Range	12W	1 or 2 numerical digits followed by "E" or "W"

For the Name of Closest Receiving Waters, do not use terms such as ditch or channel. For unnamed tributaries, use terms which include at least a named main tributary such as "Unnamed Tributary to Sugar Creek to Sangamon River."

Submission of initial fee and an electronic submission of Storm Water Pollution Prevention Plan (SWPPP) for Initial Permit prior to the Notice of Intent being considered complete for coverage by the ILR10 General Permits. Please make checks payable to: Illinois EPA at the above address.

Construction sites with less than 5 acres of land disturbance - fee is \$250.

Construction sites with 5 or more acres of land disturbance - fee is \$750.

SWPPP should be submitted electronically to: epa.constilr10swppp@illinois.gov When submitting electronically, use Project Name and City as indicated on NOI form.

NOT FOR BID

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		[Hatched Box]

ALIGNMENT ITEMS	EX	PR
Baseline	—	—
Centerline	—	—
Centerline Break Circle	○	○
Baseline Symbol	⊕	⊕
Centerline Symbol	⊕	⊕
PI Indicator	△	△
Point Indicator	○	○
Horizontal Curve Data (Half Size)	<p>CURVE P.I. STA=</p> <p>A=</p> <p>D=</p> <p>R=</p> <p>L=</p> <p>E=</p> <p>T=</p> <p>Q=</p> <p>S.I.E. RUN=</p> <p>S.E. STA=</p> <p>P.C. STA=</p> <p>P.T. STA=</p>	<p>CURVE P.I. STA=</p> <p>A=</p> <p>D=</p> <p>R=</p> <p>L=</p> <p>E=</p> <p>T=</p> <p>Q=</p> <p>S.I.E. RUN=</p> <p>S.E. STA=</p> <p>P.C. STA=</p> <p>P.T. STA=</p>

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	—	—
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)	⊕	⊕

CONTOUR ITEMS	EX	PR
Approx. Index Line	---	---
Approx. Intermediate Line	---	---
Index Contour	—	—
Intermediate Contour	—	—
DRAINAGE ITEMS		
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	—	—
Ribrap	⊕	⊕

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
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STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS (Sheet 2 of 8)

STANDARD 000001-06

Illinois Department of Transportation PASSED January 1, 2011 ENGINEER OF POLICY AND PROCEDURES APPROVED January 1, 2011 ENGINEER OF DESIGN AND ENVIRONMENT	ISSUED 1-1-97
--	---------------

EROSION & SEDIMENT CONTROL ITEMS

EX

PR

Cleaning & 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	

NON-HIGHWAY IMPROVEMENT ITEMS

EX

PR

Noise Att'n./Levee	
Field Line	
Fence	
Base of Levee	
Mailbox	
Multiple Mailboxes	
Pay Telephone	
Advertising Sign	

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	
Shade Tree	

LIGHTING

EX

PR

Duct	
Conduit	
Electrical Aerial Cable	
Electrical Buried Cable	
Controller	
Underpass Luminaire	
Power Pole	

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
(Sheet 3 of 8)
STANDARD 000001-06

Illinois Department of Transportation
PASSED January 1, 2011
Michael Beard
ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1, 2011
Spencer
ENGINEER OF DESIGN AND ENVIRONMENT
ISSUED 1-1-97

LIGHTING
(contd.)

EX

PR

Pull Point



Handhole



Heavy Duty Handhole



Junction Box



Light Unit Comb.



Electrical Ground



Traffic Flow Arrow



High Mast Pole
(trif. 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

Bike Lane Symbol



Bike Lane Text



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



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



**STANDARD SYMBOLS,
ABBREVIATIONS
AND PATTERNS**
(Sheet 4 of 8)

STANDARD 000001-06

Illinois Department of Transportation
 PASSED January 1, 2011
 Michael Beard
 ENGINEER OF POLICY AND PROCEDURES
 APPROVED January 1, 2011
 Stephen
 ENGINEER OF DESIGN AND ENVIRONMENT
 ISSUED 1-1-97

PAVEMENT MARKINGS
(cont'd.)

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 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

EX



ONLY ONLY ONLY



ONLY ONLY ONLY



PR



ONLY ONLY ONLY



RAILROAD ITEMS

Abandoned Railroad

Railroad

Railroad Point

Control Box

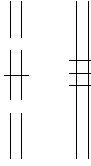
Crossing Gate

Flashing Signal

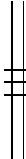
Railroad Cant, Mast Arm

Crossbuck

EX



PR



REMOVAL ITEMS

Removal Tic

Bituminous Removal

Hatch Pattern

Tree Removal Single

EX



RIGHT OF WAY ITEMS

Future ROW Corner Monument

ROW Marker

ROW Line

Easement

Temporary Easement

EX



PR



**STANDARD SYMBOLS,
ABBREVIATIONS
AND PATTERNS**
(Sheet 5 of 8)

STANDARD 000001-06

PAVEMENT MARKINGS
(cont'd.)

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 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

EX



ONLY ONLY ONLY



ONLY ONLY ONLY



PR



ONLY ONLY ONLY



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SIGNING ITEMS
(cont'd.)

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 R3-1100L
(Half Size)

Keep Left R4-TAL
(Half Size)

Keep Left R4-TBL
(Half Size)

Keep Right R4-TAR
(Half Size)

Keep Right R4-TBR
(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)

STRUCTURES ITEMS

Box Culvert Barrel

Box Culvert Headwall

Bridge Pier

Bridge

Retaining Wall

Temporary Sheet Piling

TRAFFIC SHEET ITEMS

Cable Number

Left Turn Green

Left Turn Yellow

Signal Backplate

Signal Section 8' (200 mm)

Signal Section 12' (300 mm)

Walk/Don't Walk Letters

Walk/Don't Walk Symbols

TRAFFIC SIGNAL ITEMS

Galv. Steel Conduit

Underground Cable

Detector Loop Line

Detector Loop Large

Detector Loop Small

Detector Loop Quadrangle

PR

EX

STRUCTURES ITEMS

TRAFFIC SHEET ITEMS

PR

EX

STRUCTURES ITEMS

TRAFFIC SHEET ITEMS

PR

EX

STRUCTURES ITEMS

TRAFFIC SHEET ITEMS

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EX

STRUCTURES ITEMS

TRAFFIC SHEET ITEMS

PR

TRAFFIC SIGNAL ITEMS (contd.)

Detector Raceway		PR
Aluminum Mast Arm		
Steel Mast Arm		
Veh. Detector Magnetic		
Conduit Splice		
Controller		
Curbbox 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		

UNDERGROUND UTILITY ITEMS

Cable TV		EX	PR	ABANDONED
Electric Cable				
Fiber Optic				
Gas Pipe				
Oil Pipe				
Sanitary Sewer				
Telephone Cable				
Water Pipe				

UTILITIES ITEMS

Controller		EX	PR
Double Handhole			
Fire Hydrant			
GuyWire or Deadman Anchor			
Handhole			
Heavy Duty Handhole			
Junction Box			
Light Pole			
Manhole			
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.)

Traffic Signal		EX	PR
Traffic Signal Control Box			
Water Meter			
Water Meter Valve Box			
Profile Line			
Aerial Power Line			

VEGETATION ITEMS

Deciduous Tree		EX	PR
Bush or Shrub			
Evergreen Tree			
Stump			
Orchard/Nursery Line			
Vegetation Line			
Woods & Bush Line			

WATER FEATURE ITEMS

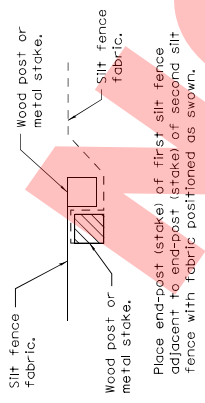
Stream or Drainage Ditch		EX	PR
Waters Edge			
Water Surface Indicator			
Water Point			
Disappearing Ditch			
Marsh			
Marsh/Swamp Boundary			

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

(Sheet 8 of 8)

STANDARD 000001-06

Illinois Department of Transportation PASSED January 1, 2011 ENGINEER OF POLICY AND PROCEDURES APPROVED January 1, 2011 ENGINEER OF DESIGN AND ENVIRONMENT	ISSUED 1-1-97
	January 1, 2011 Michael Beard January 1, 2011 Scott Bess January 1, 2011
	January 1, 2011 Scott Bess January 1, 2011
	January 1, 2011 Scott Bess January 1, 2011



STEP 1

Place end-post (stake) of first silt fence adjacent to end-post (stake) of second silt fence with fabric positioned as shown.

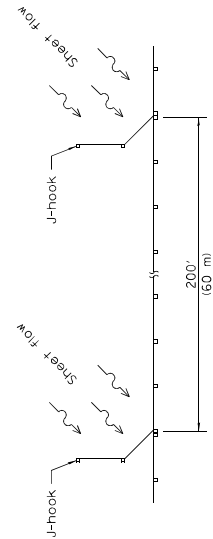


STEP 2

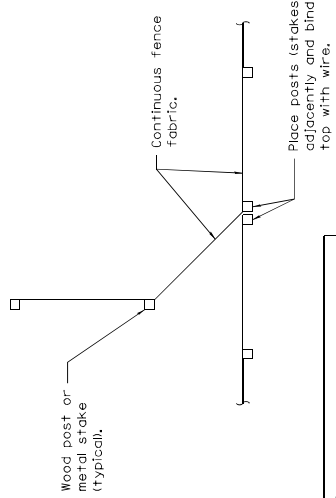
Rotate posts (stakes) together 180° clockwise and drive both posts (stakes) 18 (450) into ground.

ATTACHING TWO SILT FILTER FENCES

(NOT applicable for J-hooks)

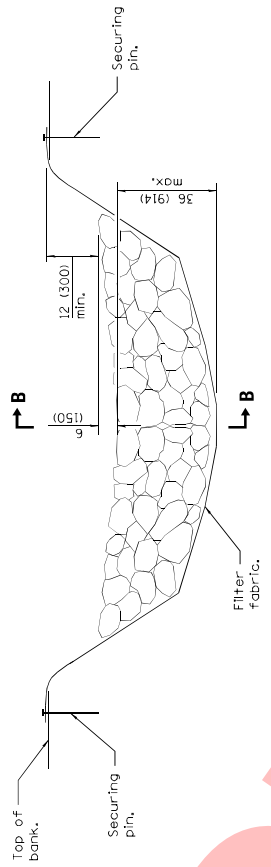


SILT FILTER J-HOOK PLACEMENT



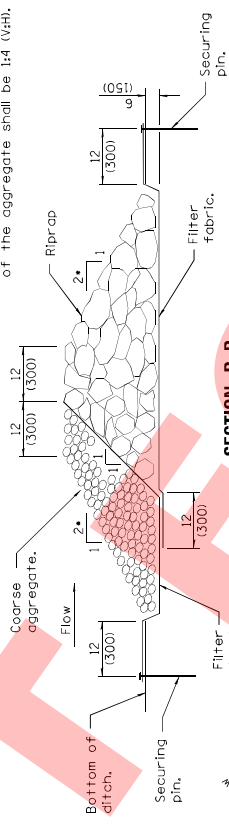
J-HOOK

Place posts (stakes) adjacently and bind at top with wire.



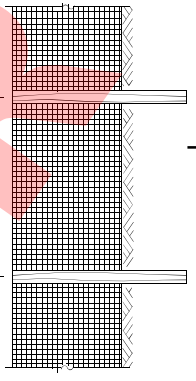
ELEVATION

When the ditch check is within the clear zone and the road is open to traffic, the traffic approach slope of the aggregate shall be 1:4 (V:H).



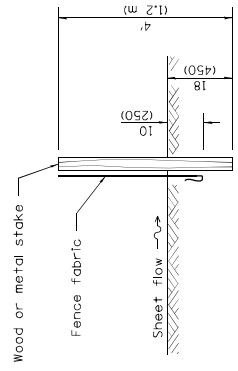
SECTION B-B

AGGREGATE DITCH CHECK

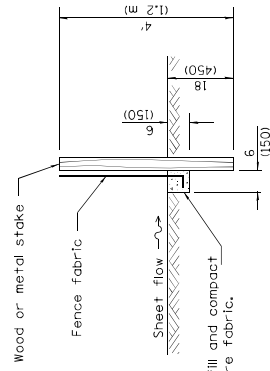


ELEVATION

SILT FILTER FENCE AS A PERIMETER EROSION BARRIER



SLICE METHOD



TRENCH METHOD

SECTION A-A

Excavate, backfill and compact trench to secure fabric.

GENERAL NOTES

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

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

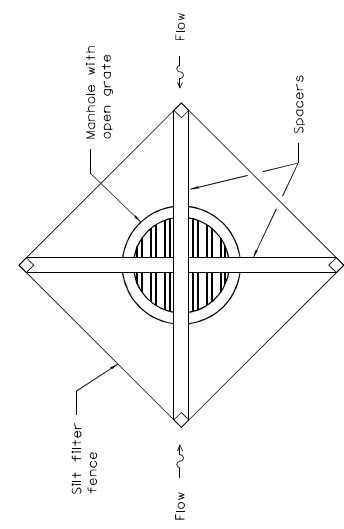
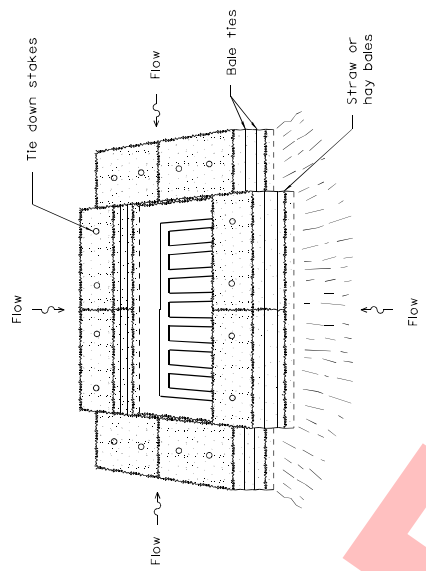
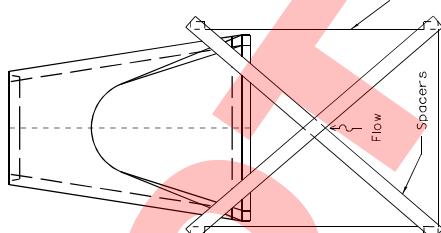
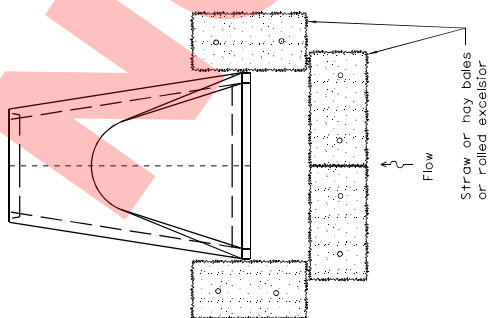
DATE	REVISIONS
1-1-13	Corrected notation for flowline (L) on SEDIMENT BASIN ELEVATION.
1-1-12	Omitted hay/straw perimeter barrier. Added SLICE METHOD TO SECTION A-A.

TEMPORARY EROSION CONTROL SYSTEMS

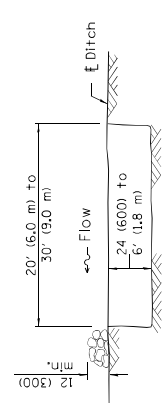
(Sheet 1 of 2)

STANDARD 280001-07

Illinois Department of Transportation PASSED January 1, 2013 ENGINEER OF POLICY AND PROCEDURES APPROVED January 1, 2013 ENGINEER OF DESIGN AND ENVIRONMENT	ISSUED 1-1-97
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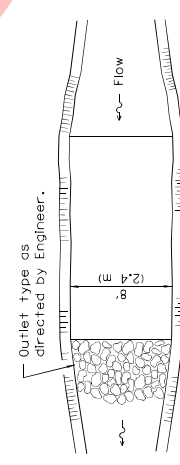


INLET AND PIPE PROTECTION



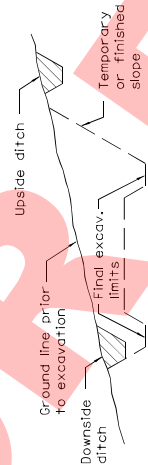
The performance of the basin will improve if put into a series.

ELEVATION

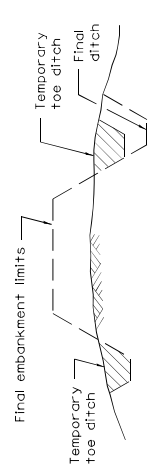


The long dimension should be parallel with the direction of the flow. Accumulated silt shall be removed anytime the basins become 75% filled.

PLAN



TYPICAL CUT CROSS-SECTION



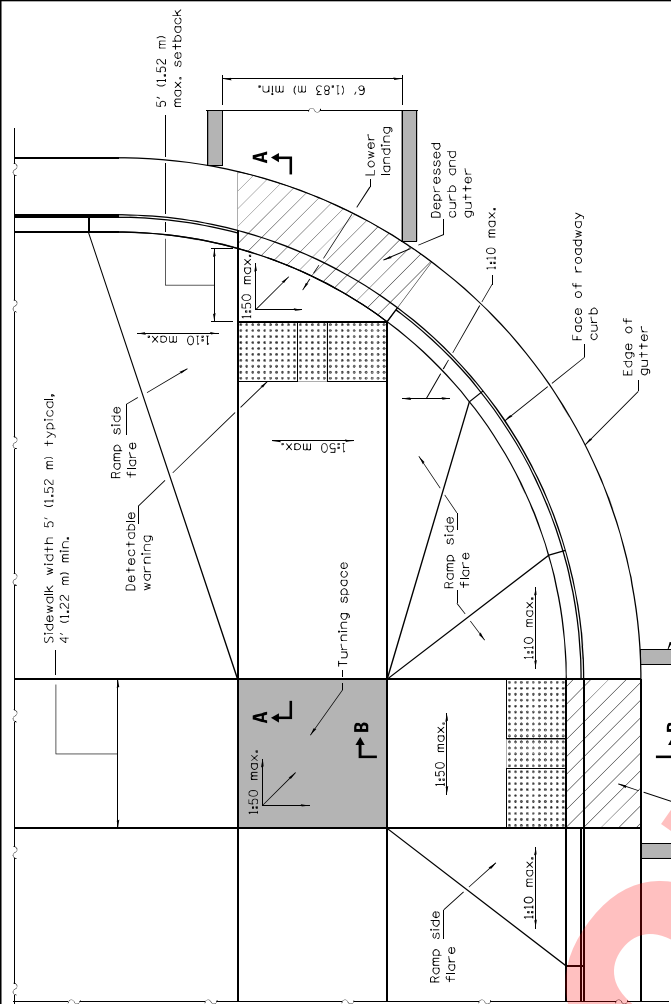
TYPICAL FILL CROSS-SECTION

SEDIMENT BASIN

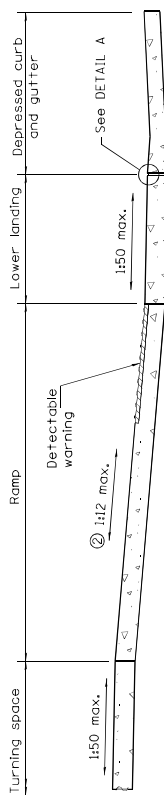
TEMPORARY DITCHES FOR CUT & FILL SECTIONS

Illinois Department of Transportation	ISSUED	1-1-97
PASSED	January 1, 2013	
APPROVED BY	Michael Bond	
ENGINEER OF POLICY AND PROCEDURES		
APPROVED BY	January 1, 2013	
ENGINEER OF DESIGN AND ENVIRONMENT		

TEMPORARY EROSION CONTROL SYSTEMS	(Sheet 2 of 2)
STANDARD 280001-07	

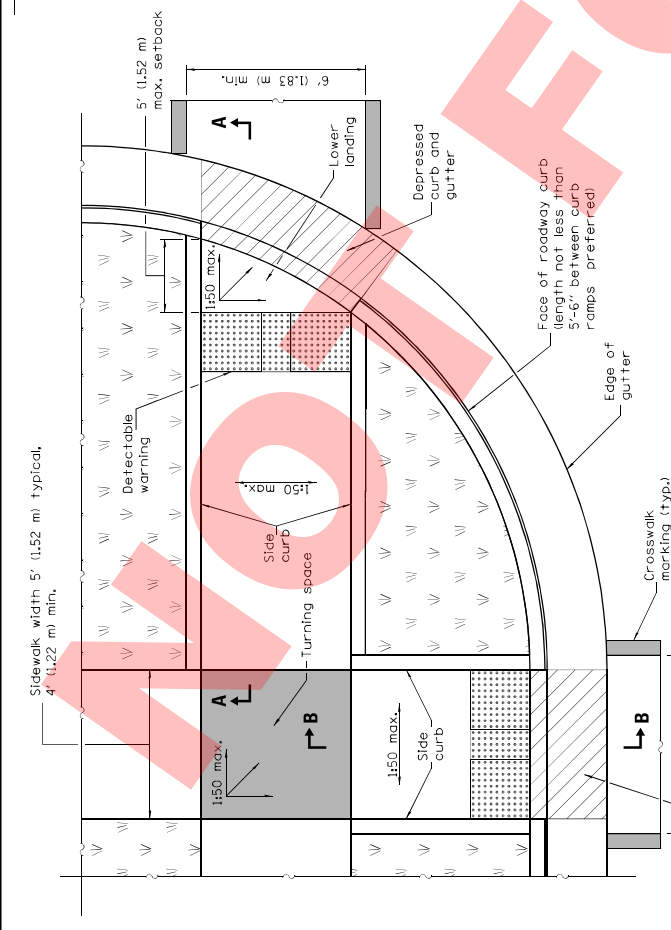


RAMPS IN LANDSCAPED AREA
SETBACK ≤ 5'

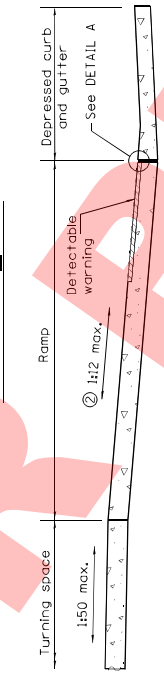


SECTION A-A

② The running slope of the curb Ramp shall not require the ramp length to exceed 15' (4.5 m).



RAMPS IN PAVED AREA
SETBACK ≤ 5'



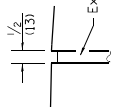
SECTION B-B

② The running slope of the curb Ramp shall not require the ramp length to exceed 15' (4.5 m).

Flush with top of roadway curb and top of sidewalk



SIDE CURB DETAIL



DETAIL A

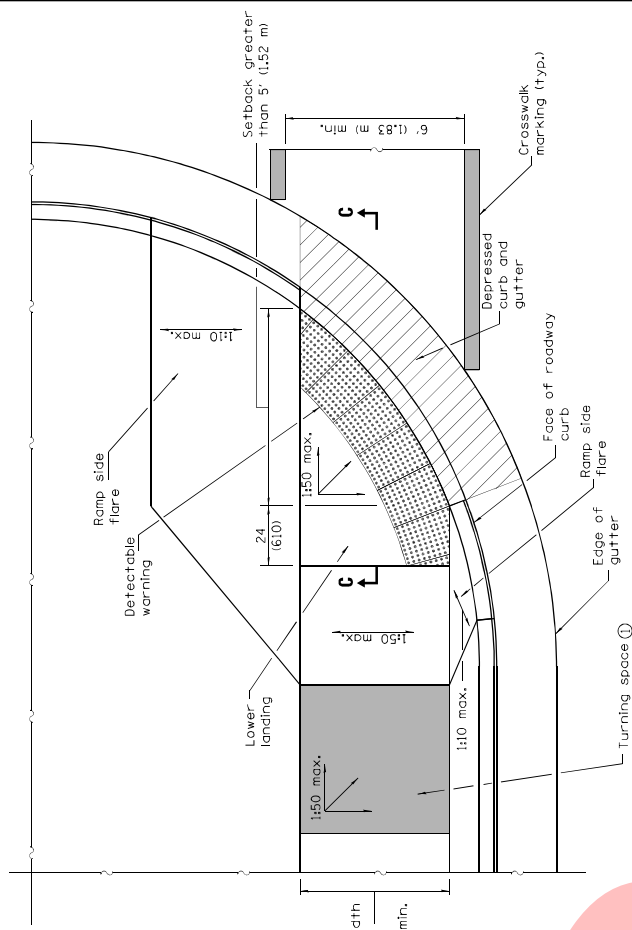
See Sheet 2 For GENERAL NOTES.

PERPENDICULAR CURB RAMPS FOR SIDEWALKS
(Sheet 1 of 2)

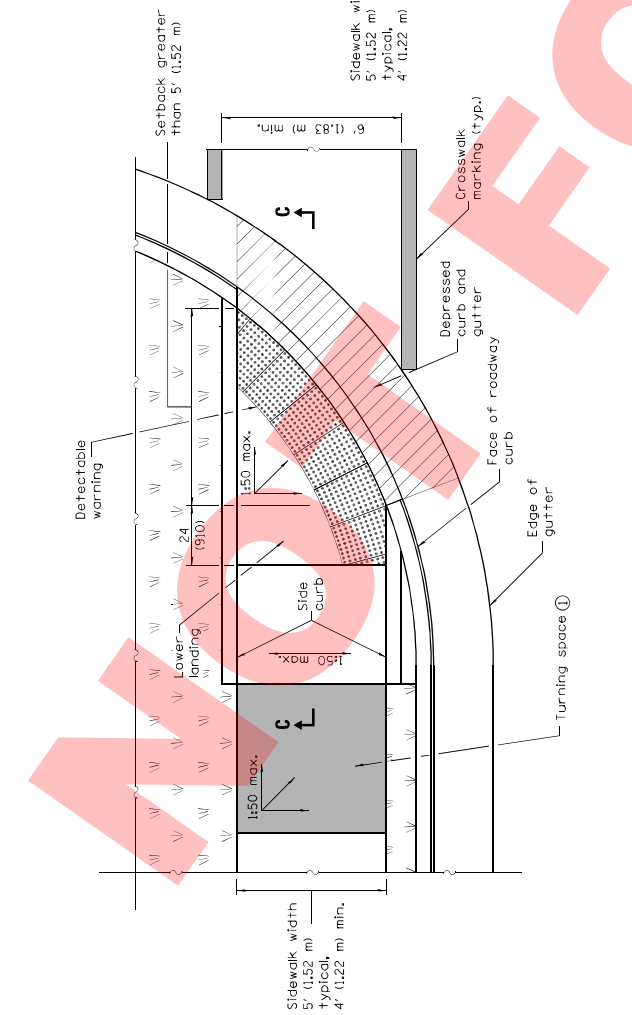
DATE	REVISIONS
1-1-17	Added 2' dimension to det. warnings for setbacks greater than 5'.
1-1-15	① not appl. to int. sidewalks. Rev. gen. notes. Chd Upper landing to turning space.

STANDARD 424001-09

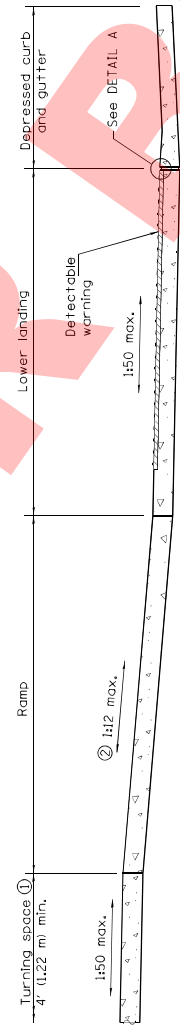
Illinois Department of Transportation
 PASSED JANUARY 11, 2017
 ENGINEER OF POLICY AND PROCEDURES
 APPROVED: [Signature] JANUARY 11, 2017
 ENGINEER-IN-CHARGE DESIGN AND ENVIRONMENT
 ISSUED 1-1-97



RAMP IN LANDSCAPED AREA
SETBACK > 5'



RAMP IN PAVED AREA
SETBACK > 5'



SECTION C-C

- ① Turning space not required for ramp slopes flatter than 1:20.
- ② The running slope of the curb ramp shall not require the ramp length to exceed 15' (4.5 m).

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 slope 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.

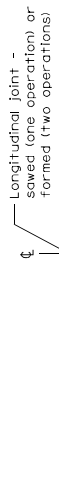
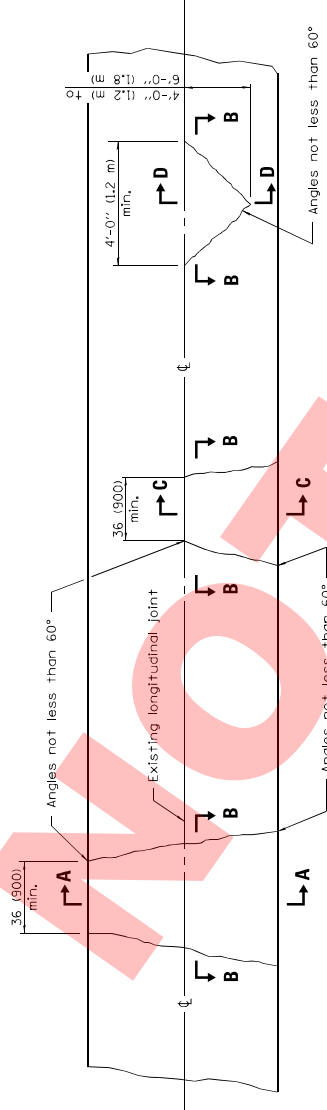
See Standard 606001 for details of depressed curb adjacent to curb ramp.

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

PERPENDICULAR CURB RAMPS FOR SIDEWALKS
 STANDARD 424001-09
 (Sheet 2 of 2)

Illinois Department of Transportation PASSED January 1, 2017 ENGINEER OF POLICY AND PROCEDURES APPROVED January 1, 2017 ENGINEER OF DESIGN AND ENVIRONMENT	ISSUED 1-1-97
	Michael Beard Matthew J. Beck

CLASS C



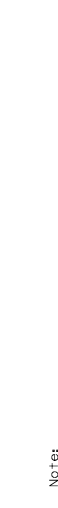
SECTION A-A



SECTION B-B



SECTION C-C

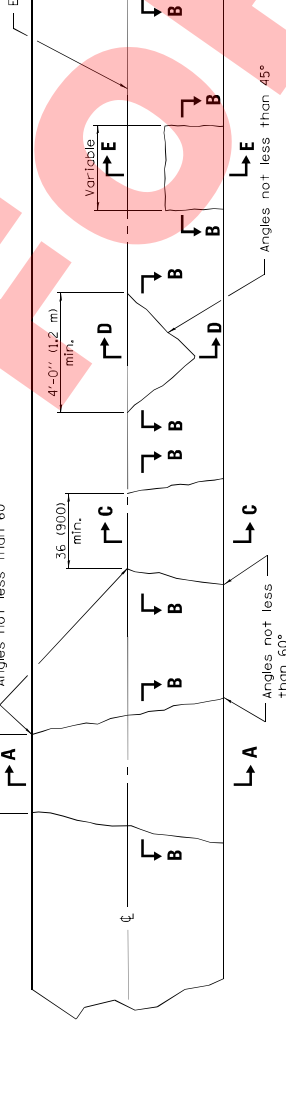


SECTION D-D

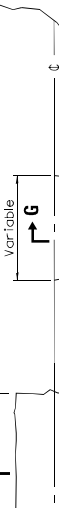
DETAIL OF SAWED CONTRACTION JOINT

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.

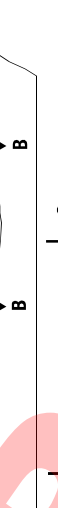
CLASS D



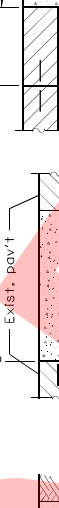
SECTION A-A



SECTION B-B



SECTION C-C



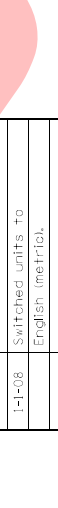
SECTION D-D



SECTION E-E



SECTION F-F



SECTION G-G

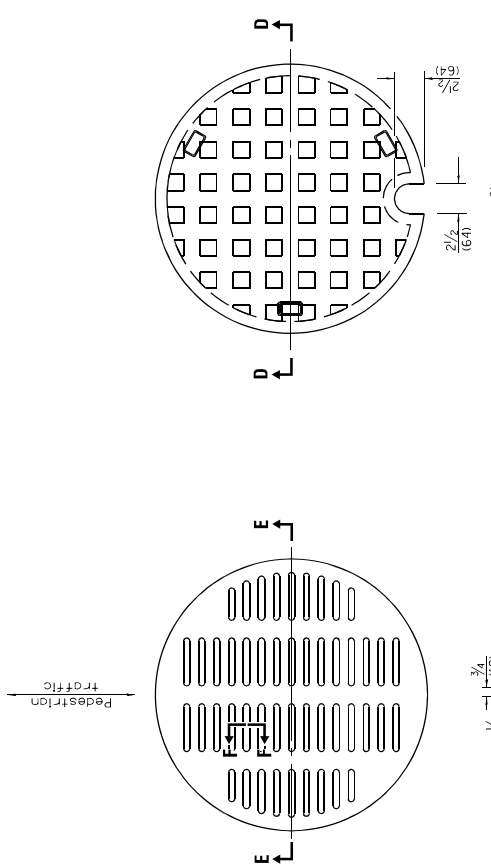
GENERAL NOTES
Existing tie bars shall be either cut or removed. Marginal bars shall be cut. All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation	ISSUED 1-1-97
PASSED January 1, 2008	
ENGINEER OF POLICY AND PROCEDURES	
APPROVED January 1, 2008	
DESIGNER	

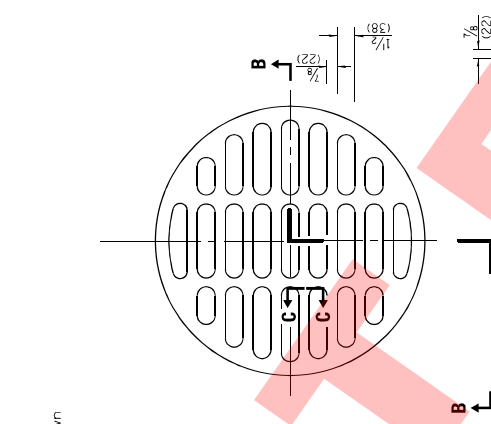
DATE	REVISIONS
1-1-08	Switched units to English (metric).
1-1-07	Revised Note for Class C patches.

CLASS C and D PATCHES

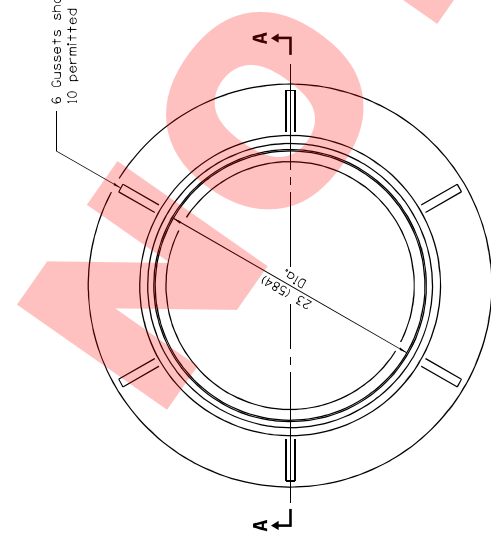
STANDARD 442201-03



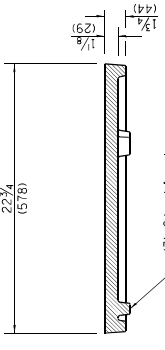
CAST FRAME



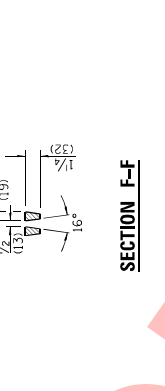
CAST OPEN LID



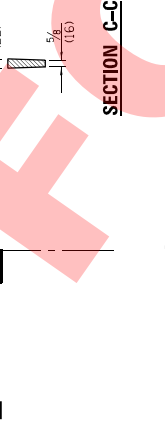
CAST CLOSED LID
Gray Iron Lid



SECTION A-A
Gray Iron



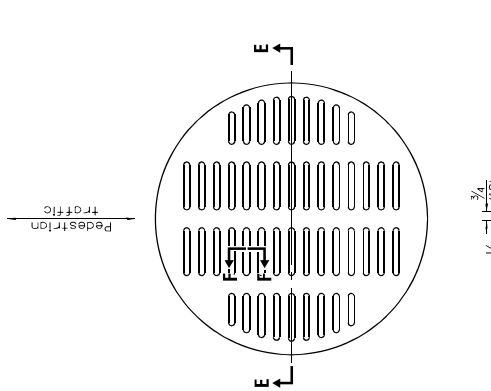
SECTION B-B
• 3/4 (19) (typ.)



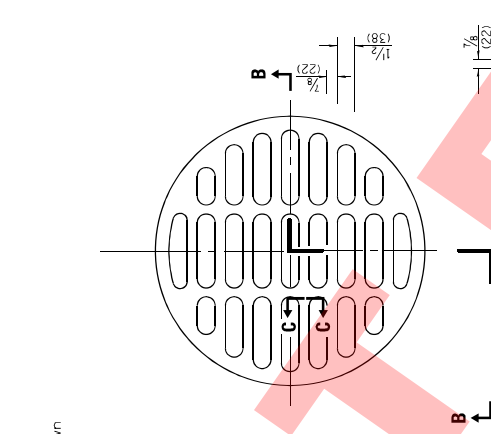
SECTION C-C



SECTION D-D



SECTION E-E



SECTION F-F

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

DATE	REVISIONS
I-1-15	Revised dimensioning of frame. Added ADA compliant open lid.
I-1-09	Switched units to English (metric).

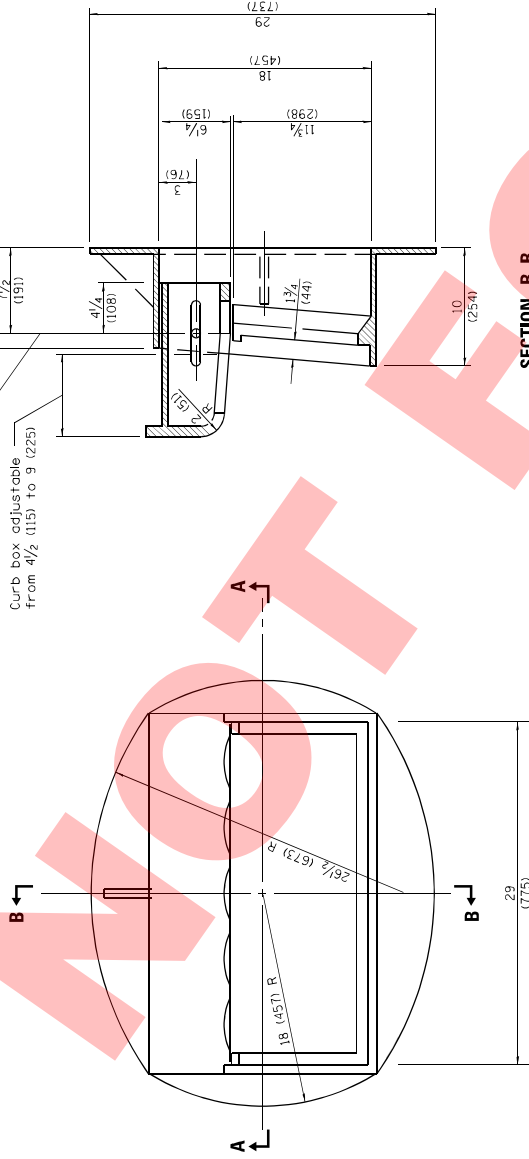
ADA COMPLIANT CAST OPEN LID

FRAME AND LIDS TYPE 1

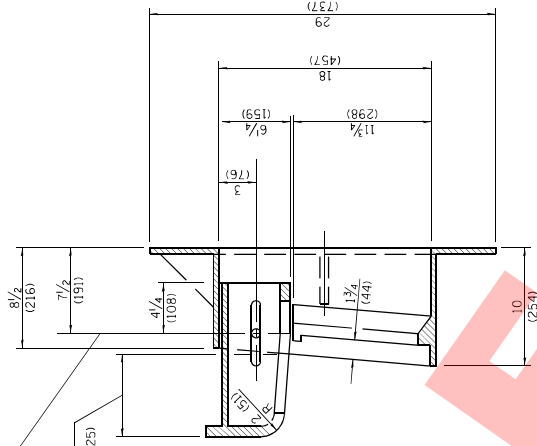
STANDARD 604001-04

Illinois Department of Transportation PASSED ENGINEER OF POLICY AND PROCEDURES APPROVED ENGINEER OF DESIGN AND ENVIRONMENT	JUNE 11, 2015 Michael Bond JUNE 11, 2015 	ISSUED 1-1-15
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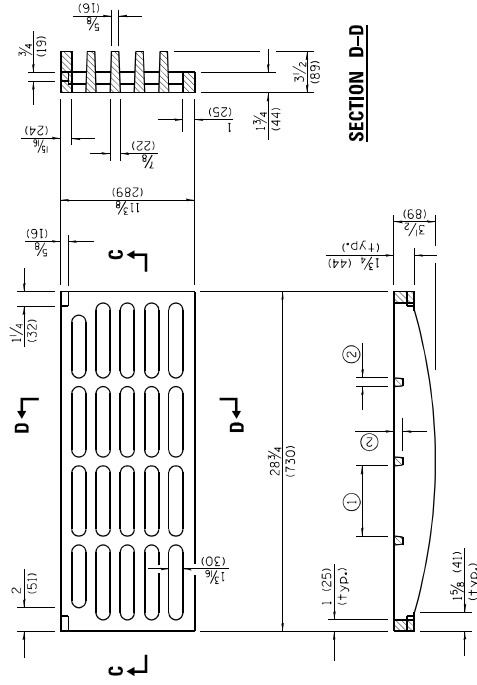
$\frac{5}{16}$ (10) Dia. hole and $\frac{5}{8} \times \frac{5}{2}$ (16x140) slotted hole for galvanized $\frac{1}{2}$ (M12) bolt, nut, and washer.
 Curb box adjustable from $4\frac{1}{2}$ (115) to 9 (225)



SECTION A-A
CAST FRAME

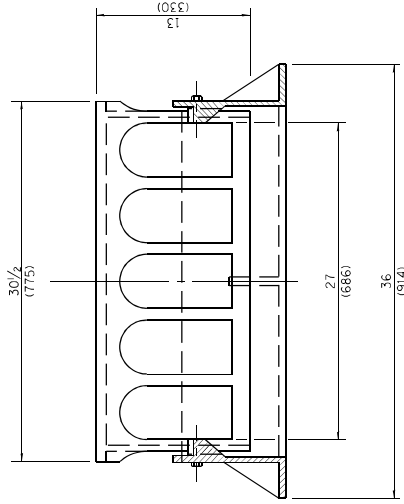


SECTION B-B

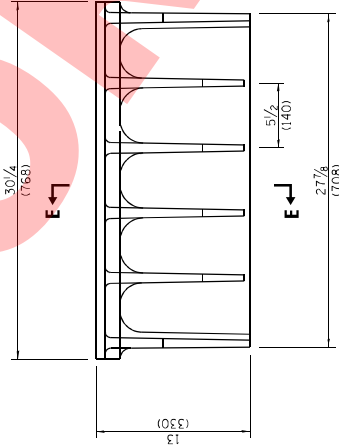


SECTION C-C

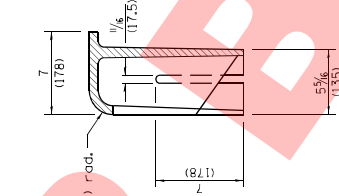
- ① = $\frac{6}{4}$ (159) max. (typ.)
- ② = $\frac{3}{4}$ (19) min. (typ.)



SECTION A-A



SECTION E-E
ALTERNATE CURB BOX



SECTION E-E
CAST GRATE

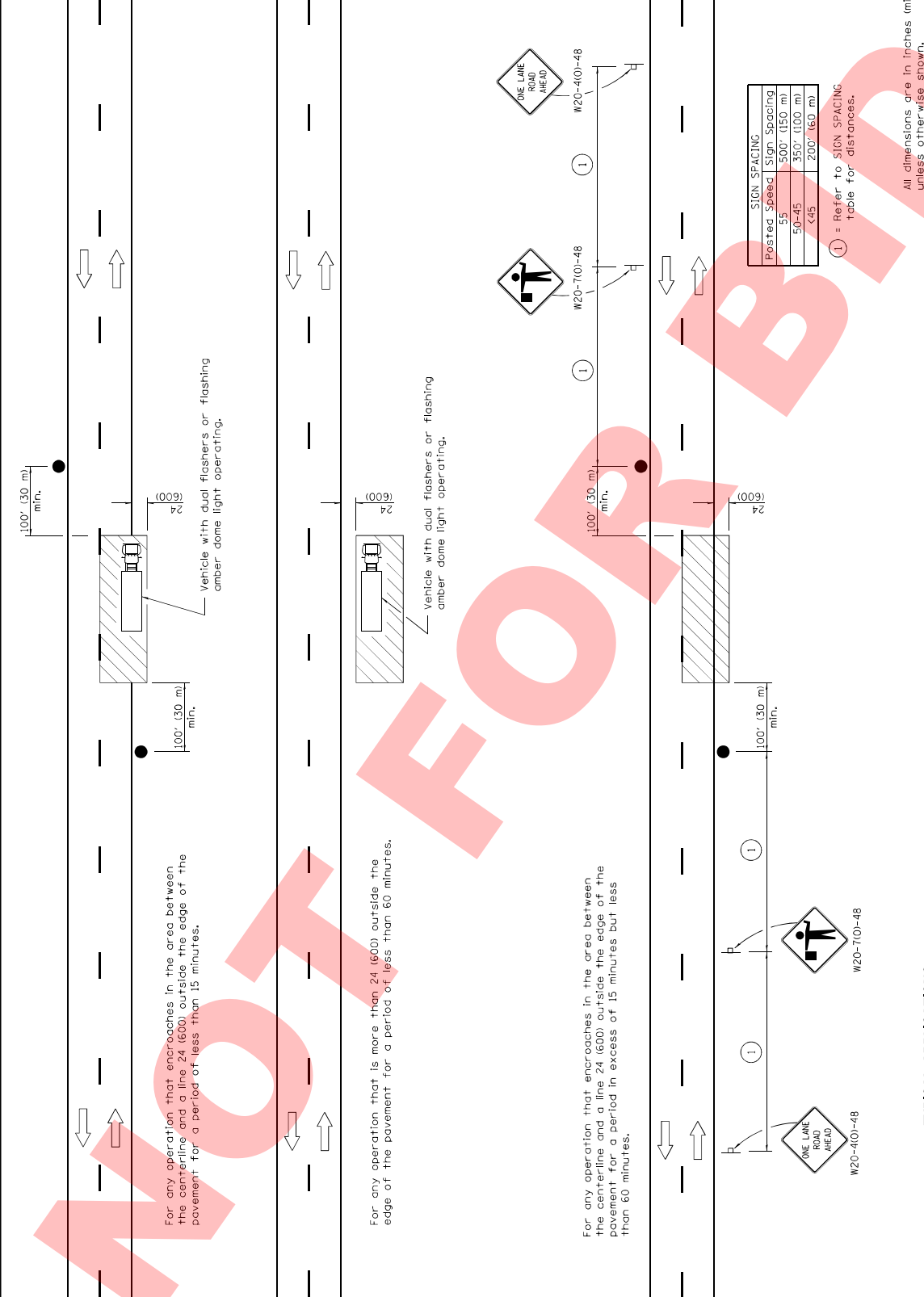
All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation PASSED January 1, 2015 ENGINEER OF POLICY AND PROCEDURES APPROVED January 1, 2015 ENGINEER OF DESIGN AND ENVIRONMENT	ISSUED 1-1-97
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DATE	REVISIONS
1-1-15	Revised dimensions of frame and alternate curb box.
4-1-09	Switched units to English (metric).

**FRAME AND GRATE
TYPE 11**

STANDARD 604051-04



For any operation that encroaches in the area between the centerline and a line 24 (600) outside the edge of the pavement for a period of less than 15 minutes.

For any operation that is more than 24 (600) outside the edge of the pavement for a period of less than 60 minutes.

For any operation that encroaches in the area between the centerline and a line 24 (600) outside the edge of the pavement for a period in excess of 15 minutes but less than 60 minutes.

Posted Speed	Sign Spacing
55	500' (150 m)
50-45	350' (100 m)
<45	200' (60 m)

① : Refer to SIGN SPACING table for distances.

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

DATE	REVISIONS
I-1-11	Revised flagger sign.
I-1-09	Switched units to English/metric.

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

STANDARD 701301-04

SYMBOLS

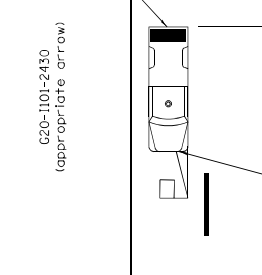
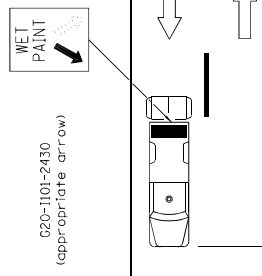
- Work area
- Sign on portable or permanent support
- Flagger with traffic control sign

TYPICAL APPLICATIONS

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

Illinois Department of Transportation APPROVED: <i>[Signature]</i> 2011 ENGINEER OF SAFETY ENGINEERING APPROVED: <i>[Signature]</i> 2011 ENGINEER OF DESIGN AND ENVIRONMENT	ISSUED: I-1-97
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NOT FOR BIDDING



200' (60 m)
min. •

- Distance varies depending on terrain and susceptibility of pavement marking or crack sealant to wheel tracking.

TYPICAL APPLICATIONS

- Landscaping work
- Utility work
- Pavement marking
- Need spraying
- Roadmeter measurements
- Debris cleanup
- Crack pouring

SYMBOLS

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

GENERAL NOTES

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

For shoulder operations not encroaching on the pavement, use DETAIL A, Standard 701426. All dimensions are in inches (millimeters) unless otherwise shown.

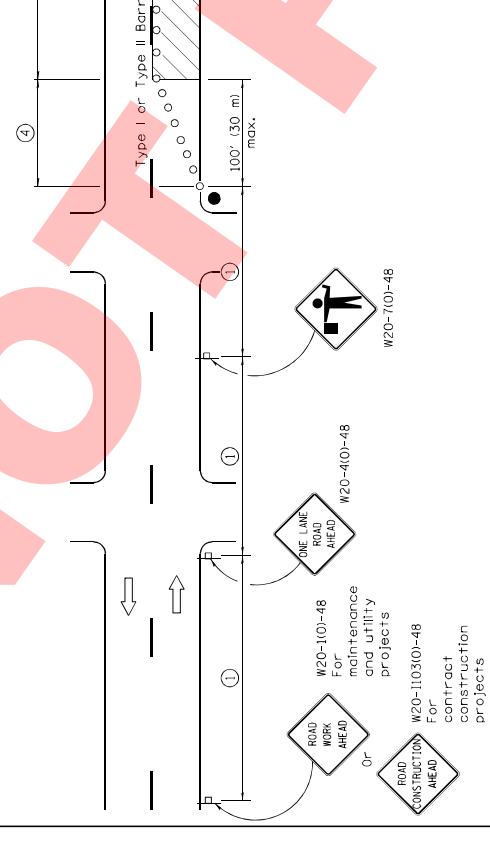
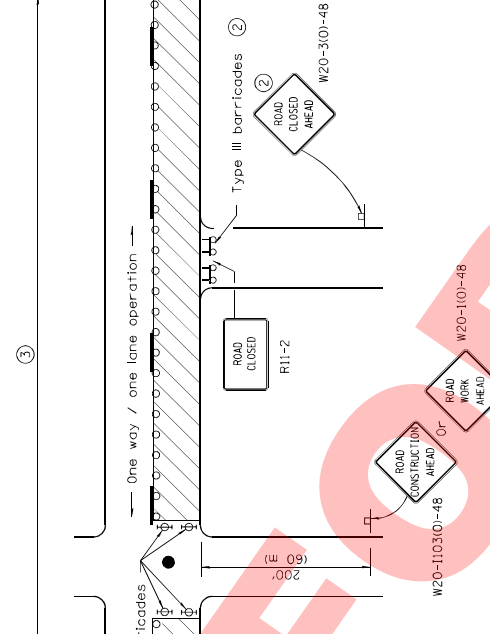
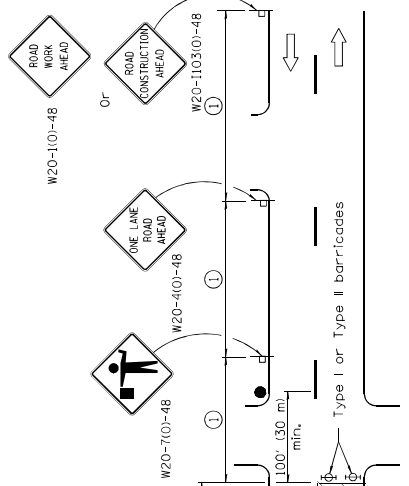
DATE	REVISIONS
1-1-09	Switched units to English (metric). Omitted Pass With Care sign.
1-1-00	Elim. speed restrictions in Standard Title.

LANE CLOSURE 2L, 2W MOVING OPERATIONS—DAY ONLY

STANDARD 701311-03

Illinois Department of Transportation APPROVED: <i>[Signature]</i> JUNE 1, 2009 ENGINEER OF OPERATIONS	ISSUED 1-1-97
	APPROVED: <i>[Signature]</i> JUNE 1, 2009 ENGINEER OF OPERATIONS APPROVED: <i>[Signature]</i> JUNE 1, 2009 MEMBER OF DESIGN AND ENVIRONMENT

NOT FOR BLDG



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 side-road 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

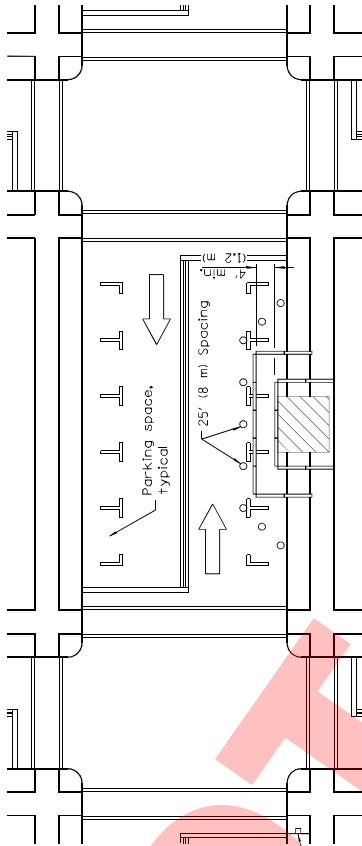
This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of one traffic lane in an urban area. All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-11	Revised Flagger sign.
1-1-09	Switched units to English (metric).
	Corrected sign No.'s.

Illinois Department of Transportation	
APPROVED	2011
ENGINEER OF SAFETY ENGINEERING	
APPROVED	2011
ENGINEER OF DESIGN AND ENVIRONMENT	

**URBAN LANE CLOSURE,
2L, 2W, UNDIVIDED**

STANDARD 701501-06

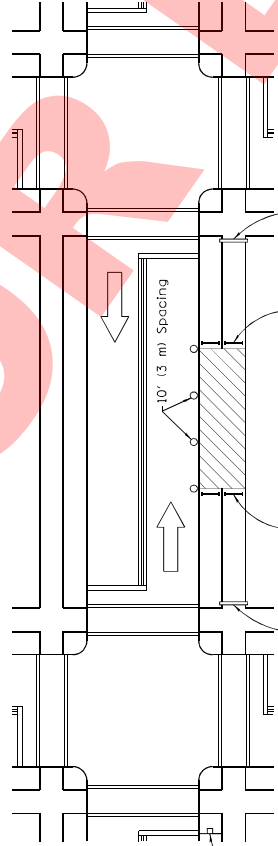


① W20-1103101-48 for contract construction projects

or

① W20-1101-48 for maintenance and utility projects

SIDEWALK DIVERSION



① W20-1103101-48 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

① Omit whenever duplicated by road work traffic control.

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 to each end of the closure. Where the closure occurs at a corner, the signs shall be erected on the corner's 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 placed as shown in "ROAD CLOSED TO ALL TRAFFIC" detail on Standard 701801.

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

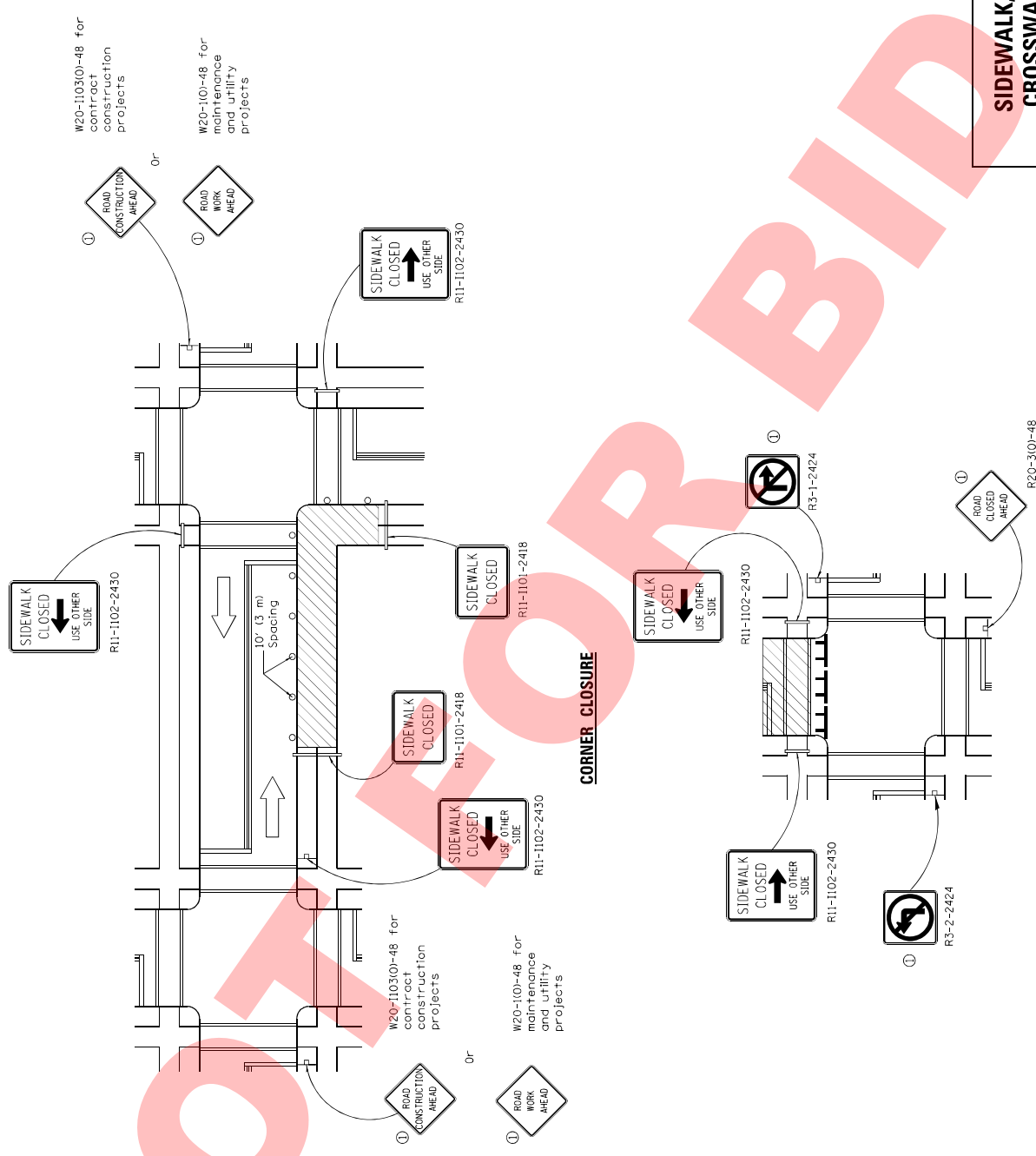
DATE	REVISIONS
4-1-16	Omitted orange safety fence from standard as this is covered in the std. spec.
1-1-12	Added SIDEWALK DIVERSION.
	Modified appearance of plan views. Renamed STD.

SIDEWALK, CORNER OR CROSSWALK CLOSURE

(Sheet 1 of 2)

STANDARD 701801-06

Illinois Department of Transportation
 APPROVED: APRIL 1, 2016
 ENGINEER OF SAFETY ENGINEERING
 APPROVED: APRIL 1, 2016
 ENGINEER OF DESIGN AND ENVIRONMENT
 ISSUED 1-1-97



W20-1103(0)-48 for contract construction projects

W20-110-48 for maintenance and utility projects

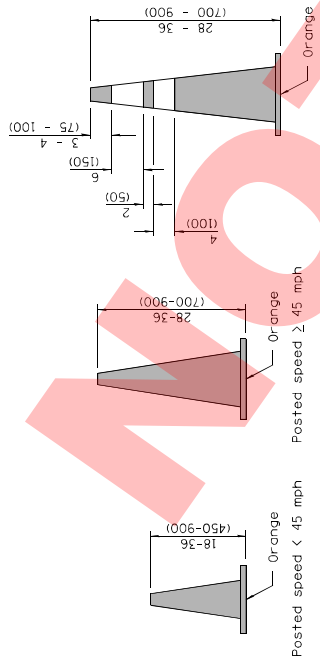
W20-1103(0)-48 for contract construction projects

W20-110-48 for maintenance and utility projects

SIDEWALK, CORNER OR CROSSWALK CLOSURE
(Sheet 2 of 2)

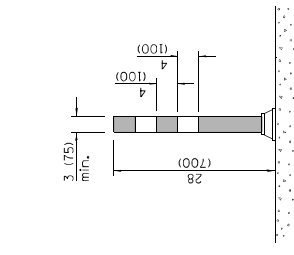
STANDARD 701801-06

Illinois Department of Transportation APPROVED: APRIL 1, 2016 ENGINEER OF SAFETY ENGINEERING APPROVED: APRIL 1, 2016 ENGINEER OF DESIGN AND ENVIRONMENT	ISSUED 1-1-97
---	---------------

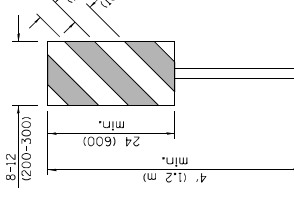


CONE FOR DAYTIME
Posted speed < 45 mph

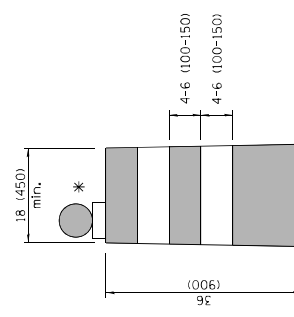
REFLECTORIZED CONE FOR NIGHTTIME
Posted speed ≥ 45 mph



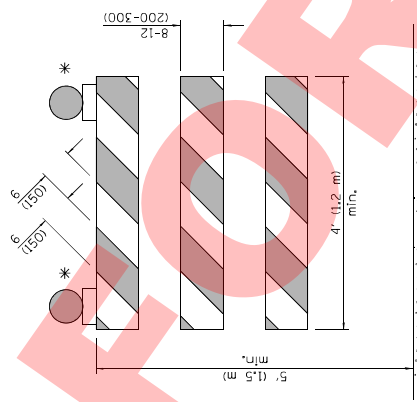
TUBULAR MARKER



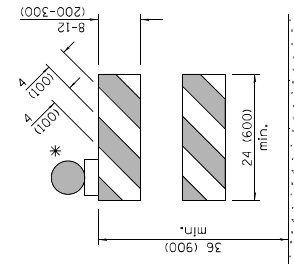
VERTICAL PANEL POST-MOUNTED



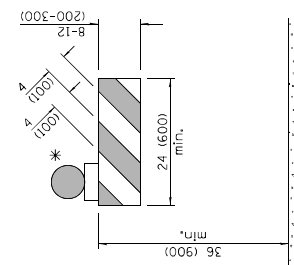
DRUM



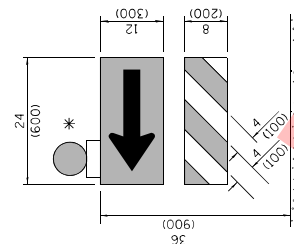
TYPE III BARRICADE



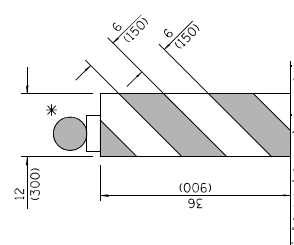
TYPE II BARRICADE



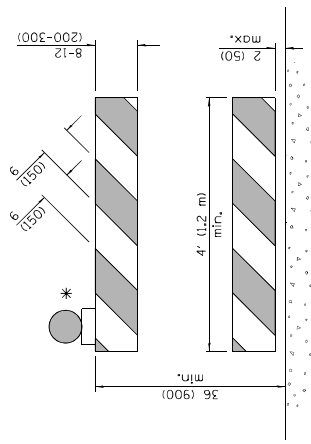
TYPE I BARRICADE



DIRECTION INDICATOR BARRICADE



VERTICAL BARRICADE



DETECTABLE PEDESTRIAN CHANNELIZING BARRICADE

* Warning lights (if required)

GENERAL NOTES
All heights shown shall be measured above the pavement surface.
All dimensions are in inches (millimeters) unless otherwise shown.

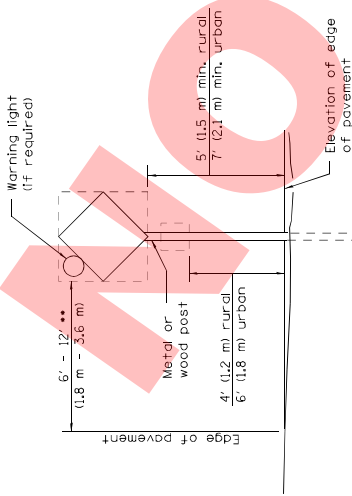
DATE	REVISIONS
1-1-17	Changed FLEXIBLE DELINEATOR TO TUBULAR MARKER.
4-1-16	Add dims to barricades, Rev. note for post-mnt. signs.
	Rev. cone dths. Add W2-103.

TRAFFIC CONTROL DEVICES

(Sheet 1 of 3)

STANDARD 701901-06

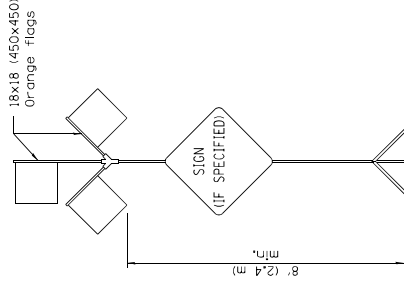
Illinois Department of Transportation	ISSUED 1-1-97
APPROVED: <i>[Signature]</i> 2017	
ENGINEER OF OPERATIONS	
APPROVED: <i>[Signature]</i> 2017	
ENGINEER OF DESIGN AND ENVIRONMENT	



5' (1.5 m) min. embedment

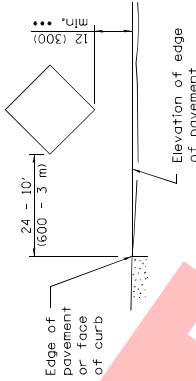
POST MOUNTED SIGNS

.. 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.



HIGH LEVEL WARNING DEVICE

... 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.



SIGNS ON TEMPORARY SUPPORTS

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

END CONSTRUCTION
G20-1105(O)-6024

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

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

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

Dual sign displays shall be utilized on multi-lane highways.

WORK LIMIT SIGNING

WORK ZONE
W21-1105(O)-3618

SPEED LIMIT
R2-1-3648

PHOTO ENFORCED
R10-1108p-3618

SXXX FINE MINIMUM
R2-1106p-3618

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

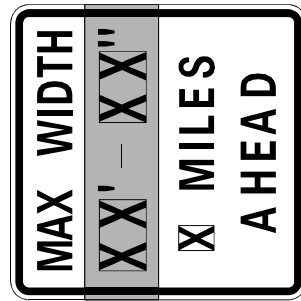
END WORK ZONE SPEED LIMIT
G20-1103(O)-6036

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

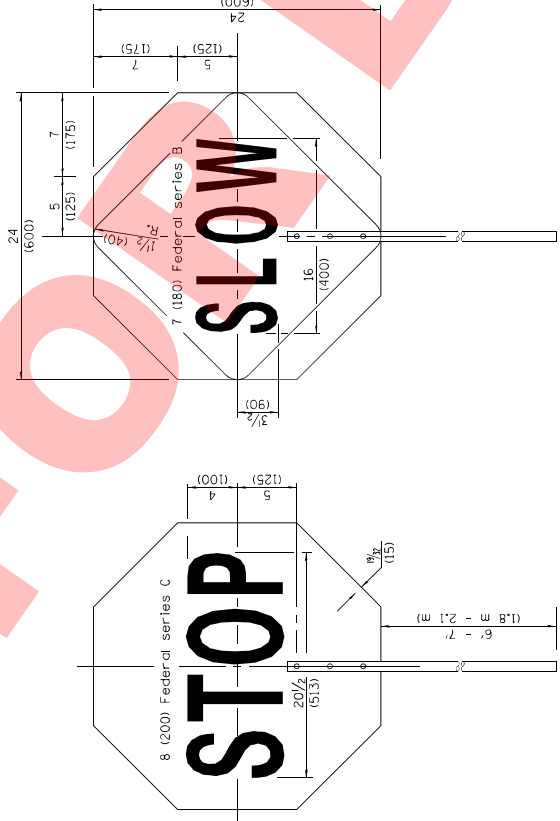
HIGHWAY CONSTRUCTION SPEED ZONE SIGNS

WIDTH RESTRICTION SIGN

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



W12-1103-4848



REVERSE SIDE

FRONT SIDE

FLAGGER TRAFFIC CONTROL SIGN

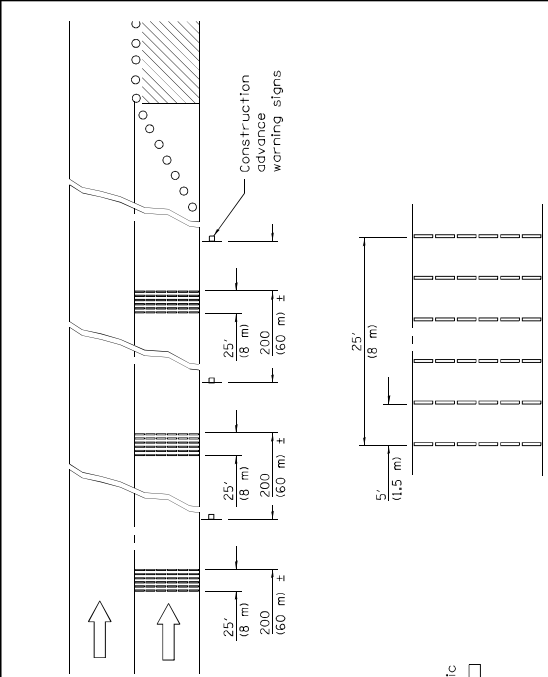
TRAFFIC CONTROL DEVICES

(Sheet 2 of 3)

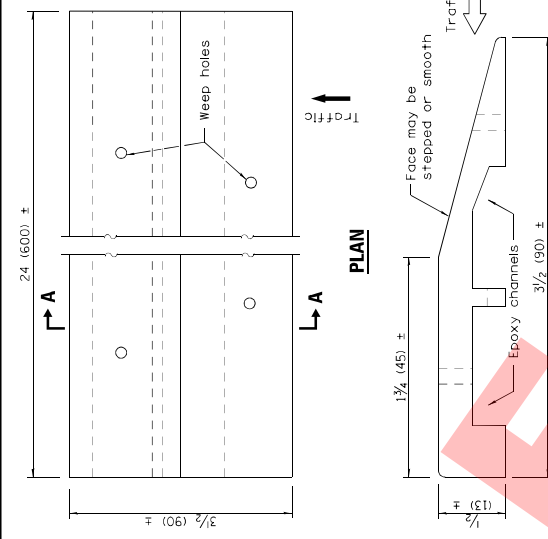
STANDARD 701901-06

APPROVED	APPROVED	ISSUED
APRIL 1, 2017	APRIL 1, 2017	1-1-97
ENGINEER OF OPERATIONS	ENGINEER OF OPERATIONS	
APPROVED	APPROVED	
APRIL 1, 2017	APRIL 1, 2017	
ENGINEER OF DESIGN AND ENVIRONMENT	ENGINEER OF DESIGN AND ENVIRONMENT	

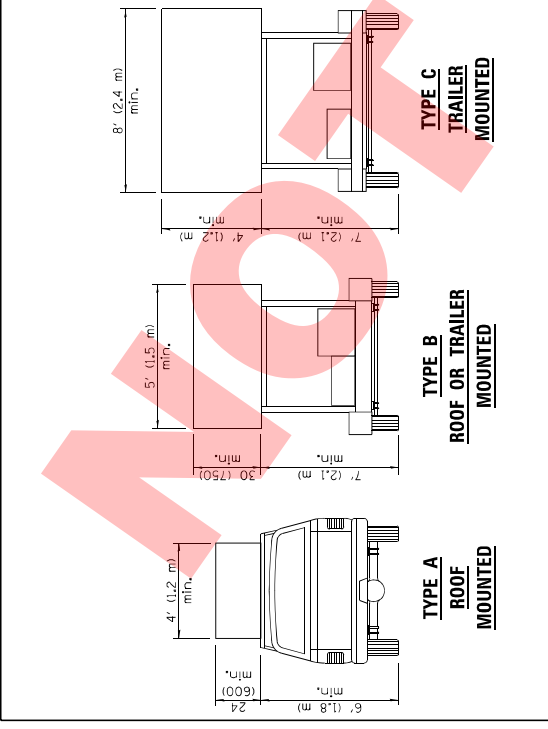
Illinois Department of Transportation



TYPICAL INSTALLATION



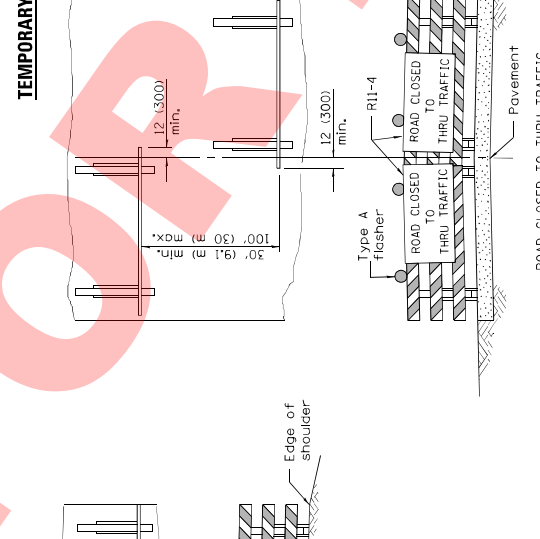
SECTION A-A



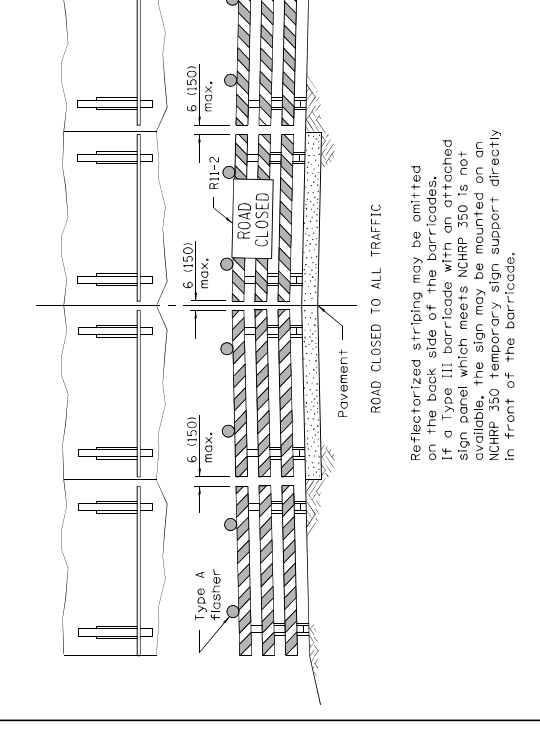
ARROW BOARDS



TEMPORARY RUMBLE STRIPS



TYPICAL APPLICATIONS OF TYPE III BARRICADES CLOSING A ROAD



ROAD CLOSED TO THRU TRAFFIC

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.

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	ISSUED	1-1-97
APPROVED: [Signature]	APPROVED: [Signature]	2017
ENGINEER OF OPERATIONS	APPROVED: [Signature]	2017
ENGINEER OF DESIGN AND ENVIRONMENT	APPROVED: [Signature]	2017

TRAFFIC CONTROL DEVICES

(Sheet 3 of 3)

STANDARD 701901-06

NOT FOR BID



June 22, 2014
File No. 21495

Mr. Kevin Mantels
Village of Villa Park
20 South Ardmore Avenue
Villa Park, IL 60181

Re: **Geotechnical Investigation**
South Michigan Avenue
Villa Park, Illinois

Dear Mantels:

The following is our report of findings for the geotechnical investigation completed along South Michigan Avenue from Park Boulevard to Madison Street in the Village of Villa Park, Illinois.

The investigation was requested to determine existing pavement sections and subgrade soil support conditions for use in determination of viable reconstruction solutions.

SCOPE OF THE INVESTIGATION

The field investigation included visual examination of the pavement surface and adjacent site conditions. A total of 8 test locations were established as shown on the enclosed location sketch. The pavement section was cored to determine material types and thicknesses. The supporting soils were visually and texturally classified in the field to depths of 15.0 feet. Soil samples were obtained immediately beneath the pavement materials using a split barrel sampler. Additional samples were obtained from the auger flights at the deeper elevations.

Pavement materials and soil samples obtained during the field investigation were returned to our laboratory for review and testing. Soil testing included determination of moisture content. Cohesive soils obtained by split barrel sampling were further tested to determine dry unit weight and unconfined compressive strength. The results of all field and laboratory testing are included in summary with this report.

EXISTING CONDITIONS

Visual examination of the pavement reveals areas of very significant distress. These include cold joint cracking, meandering cracks, alligating, material raveling, potholes, and settlement. Patching of previously distressed areas was noted. The poor surface condition prevents effective water run-off. This allows additional water to be present within the pavement materials and subgrade soils resulting in increased pavement failures during periods of freeze-thaw.

The following table summarizes the types and thicknesses of materials encountered at these boring locations:

<u>Location</u>	<u>HMA (in.)</u>	<u>PCC (in.)</u>	<u>Total (in.)</u>
B-1	2.5	7.0	9.5
B-2	1.5	7.25	8.75
B-3	1.5	6.75	8.25
B-4	2.0	7.75	9.75
B-5	1.5	6.25	7.75
B-6	1.25	8.0	9.25
B-7	1.25	7.5	8.75
B-8	1.5	10.25	11.75

The bituminous concrete is generally in very poor condition and failed in most areas. Wire mesh was present in the PCC cores taken at locations 1 through 7 with delamination noted in PCC cores 2 through 6.

Buried topsoil was encountered directly underlying the concrete pavement at locations 1, 3, 4, 5 and 7. The topsoil is classified as black silt/clay mixtures and was found extending to depths of 1.0 feet to 3.5 feet beneath the pavement surface.

Underlying soil conditions consist primarily of cohesive soils. These are classified as tough to hard clay/silt mixtures with lesser portions of sand and gravel. The upper portions of these soils are sometimes high in moisture content with values in excess of 26% determined. Cobbles and boulders may be present within the soil at any elevation, although none were encountered while drilling.

DISCUSSION

We understand a full reconstruction of the pavement is planned for this portion of South Michigan Avenue. The complete reconstruction of the pavement would include the removal of all the existing pavement materials. The subgrade would then be excavated to the design elevation, compacted and proof rolled. Proof-rolling is expected to reveal some areas of unstable soil conditions due to the presence of buried topsoil and underlying high moisture content soils.

If the proof-rolling reveals unstable soil conditions, the organic soils should be removed and the high moisture content soils aerated or removed. Discing and aeration of the non-organic soil can be effective to depths of up to 1.0 foot depending upon the equipment used. If the high

moisture content condition extends to depths greater than the effective depth of discing, removal of the unstable soils will be necessary.

Areas which require removal should be replaced with large crushed aggregate, possibly in conjunction with the use of an appropriate geotextile fabric. The new aggregate base would then be placed and compacted followed by the placement of the designed thickness of bituminous concrete binder and bituminous concrete surface courses.

An inspection by a Soil Engineer is recommended during subgrade soil preparation, particularly in the noted problem areas. A period of dry weather prior to the beginning of the earthwork may result in improved soil moisture content conditions near the surface and decreased subgrade soil preparation costs. A period of wet weather may create the need for increased discing and drying efforts. Problem soil conditions should be reviewed at the time of subgrade preparation to verify that planned treatments will be effective for the actual soil conditions encountered.

CONCLUSION

This report has been prepared to assist in initial determination of existing pavement sections and supporting soil conditions. Locally varying conditions may be present between test locations.

Any questions concerning the information presented in this report should be directed to our office.

Very truly yours,

SOIL AND MATERIAL CONSULTANTS, INC.



Thomas P. Johnson, P.E.
President

TPJ:ek
Enc.

cc: Mr. Thomas M. Slattery, P.E. – Baxter & Woodman, Inc.



SMC		SOIL AND MATERIAL CONSULTANTS, INC.	LOCATION SKETCH
Client:	VILLAGE OF VILLA PARK		
Project:	SOUTH MICHIGAN AVENUE		
Location:	VILLA PARK, ILLINOIS		
File No.	21495	Date: 6-12-14	Scale: NONE

SOIL AND MATERIAL CONSULTANTS, INC.

8 WEST COLLEGE DRIVE OFFICE: (847) 870-0544
ARLINGTON HEIGHTS, IL 60004 FAX: (847) 870-0661

Date: 6/4/14
File No.: 21495

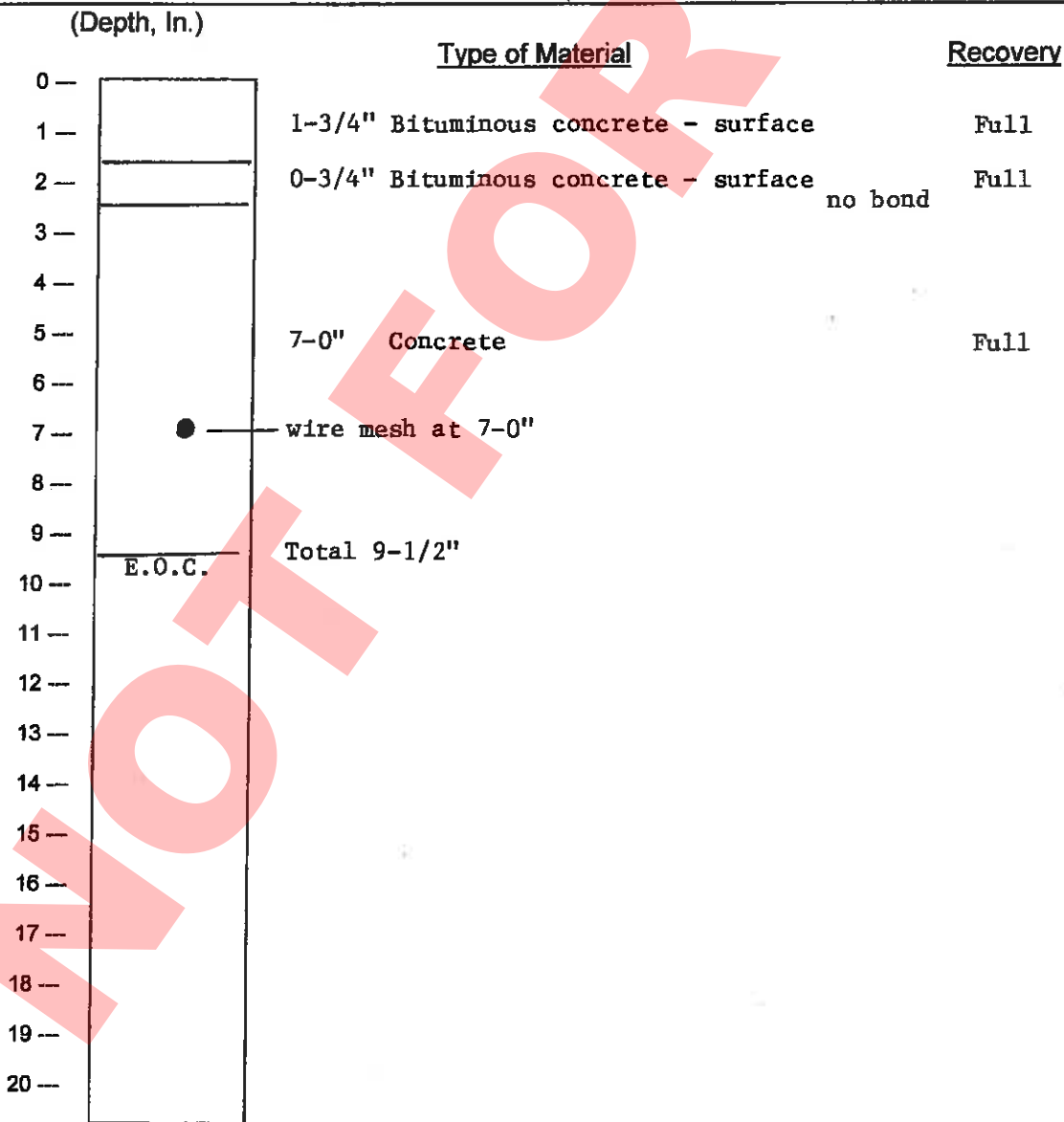
CORE LOG

Client: Village of Villa Park Reference South Michigan Ave., Villa Park, IL

Core No: 1 Work Done By: DB & JL

Location of Core: 402 South Michigan Ave., 5' E. of CL

Comments: _____



SOIL AND MATERIAL CONSULTANTS, INC.

Date: 6/4/14

File No.: 21495

8 WEST COLLEGE DRIVE OFFICE: (847) 870-0544
ARLINGTON HEIGHTS, IL 60004 FAX: (847) 870-0661

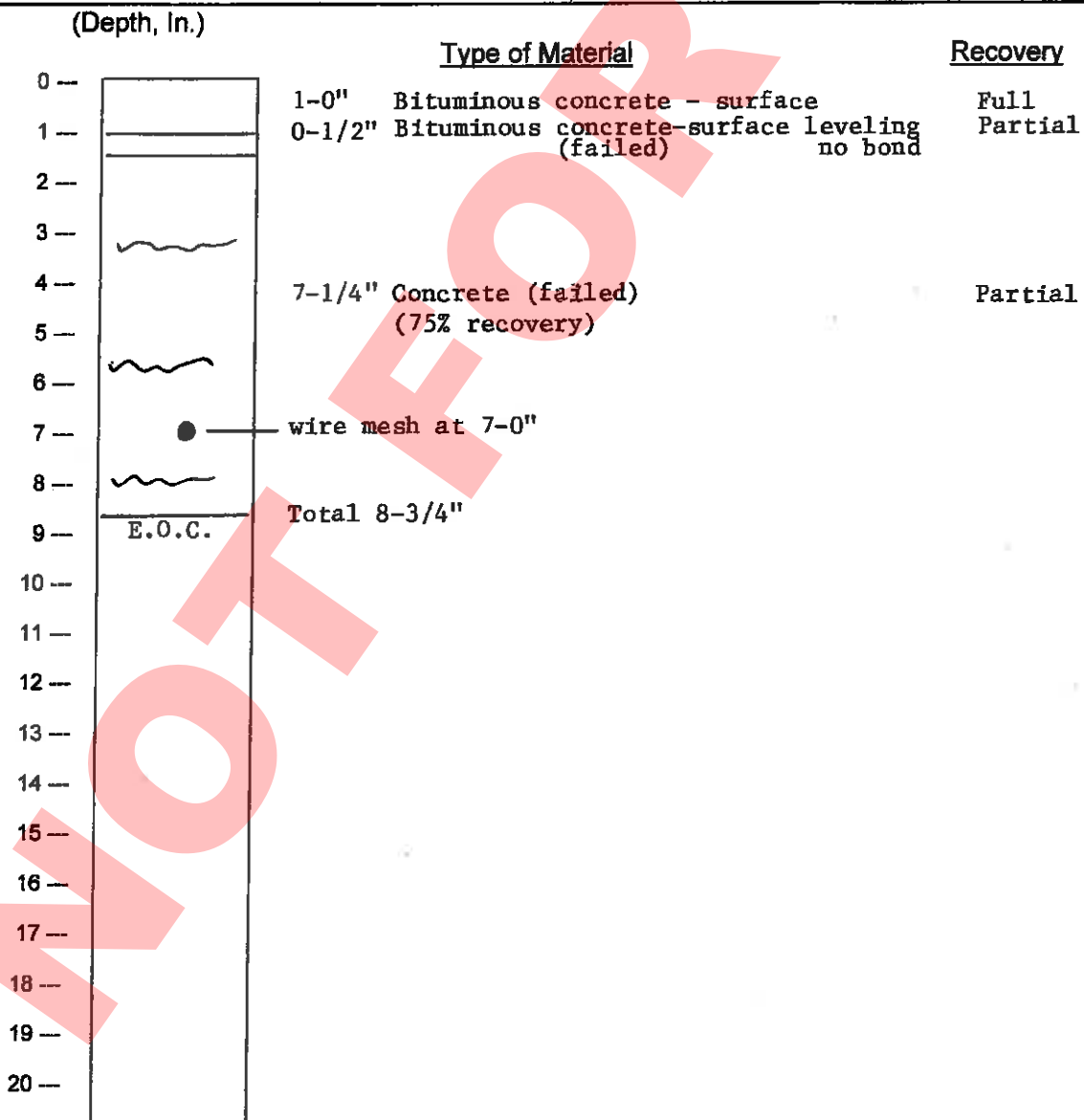
CORE LOG

Client: Village of Villa Park Reference South Michigan Ave., Villa Park, IL

Core No: 2 Work Done By: DB & JL

Location of Core: 432 South Michigan Ave., 7' W. of CL

Comments: _____



SOIL AND MATERIAL CONSULTANTS, INC.

8 WEST COLLEGE DRIVE OFFICE: (847) 870-0544
ARLINGTON HEIGHTS, IL 60004 FAX: (847) 870-0661

Date: 6/4/14

File No.: 21495

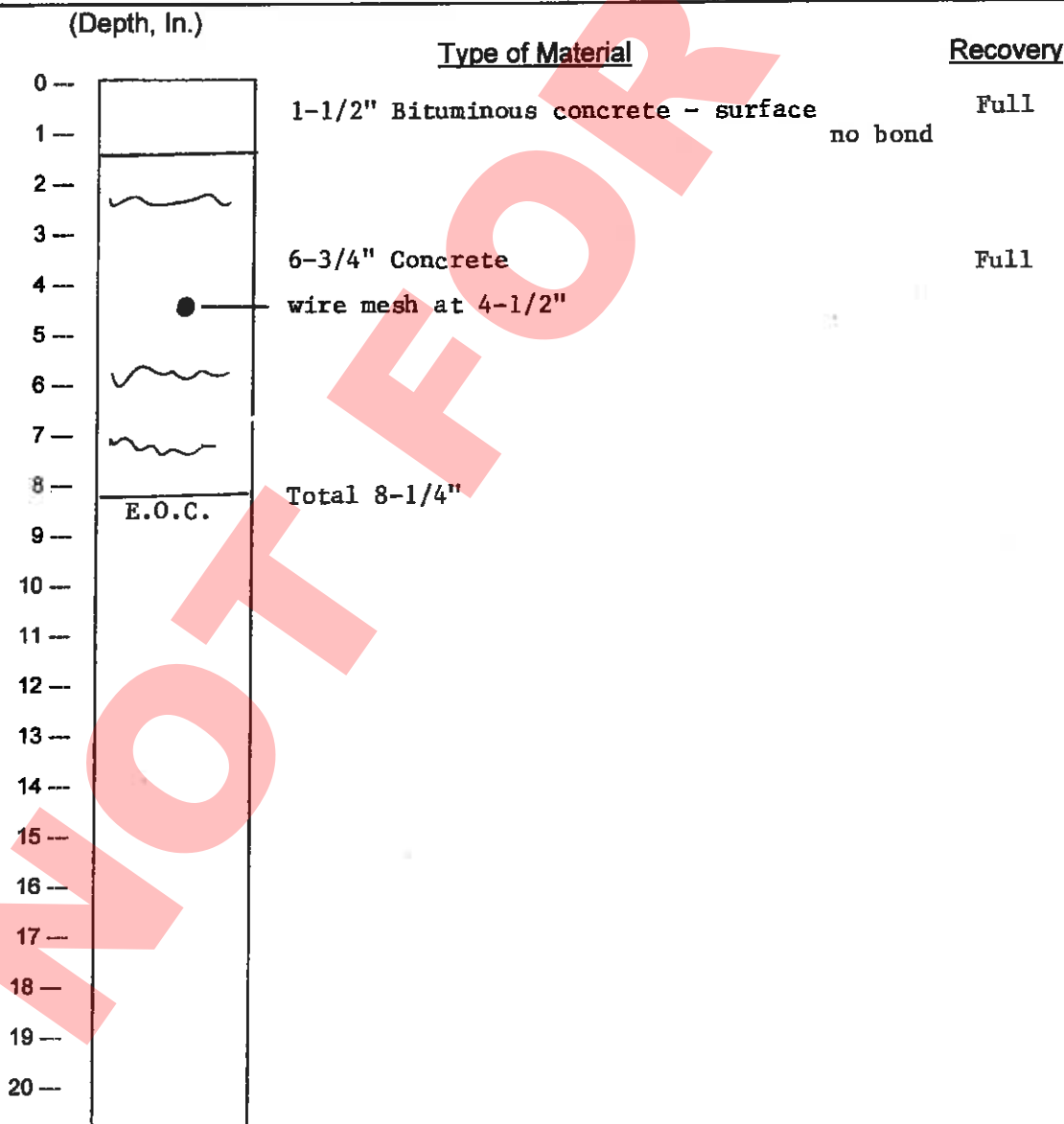
CORE LOG

Client: Village of Villa Park Reference South Michigan Ave., Villa Park, IL

Core No: 3 Work Done By: DB & JL

Location of Core: 451 South Michigan Ave., 6' E. of CL

Comments: _____



SOIL AND MATERIAL CONSULTANTS, INC.

8 WEST COLLEGE DRIVE OFFICE: (847) 870-0544
ARLINGTON HEIGHTS, IL 60004 FAX: (847) 870-0661

Date: 6/4/14
File No.: 21495

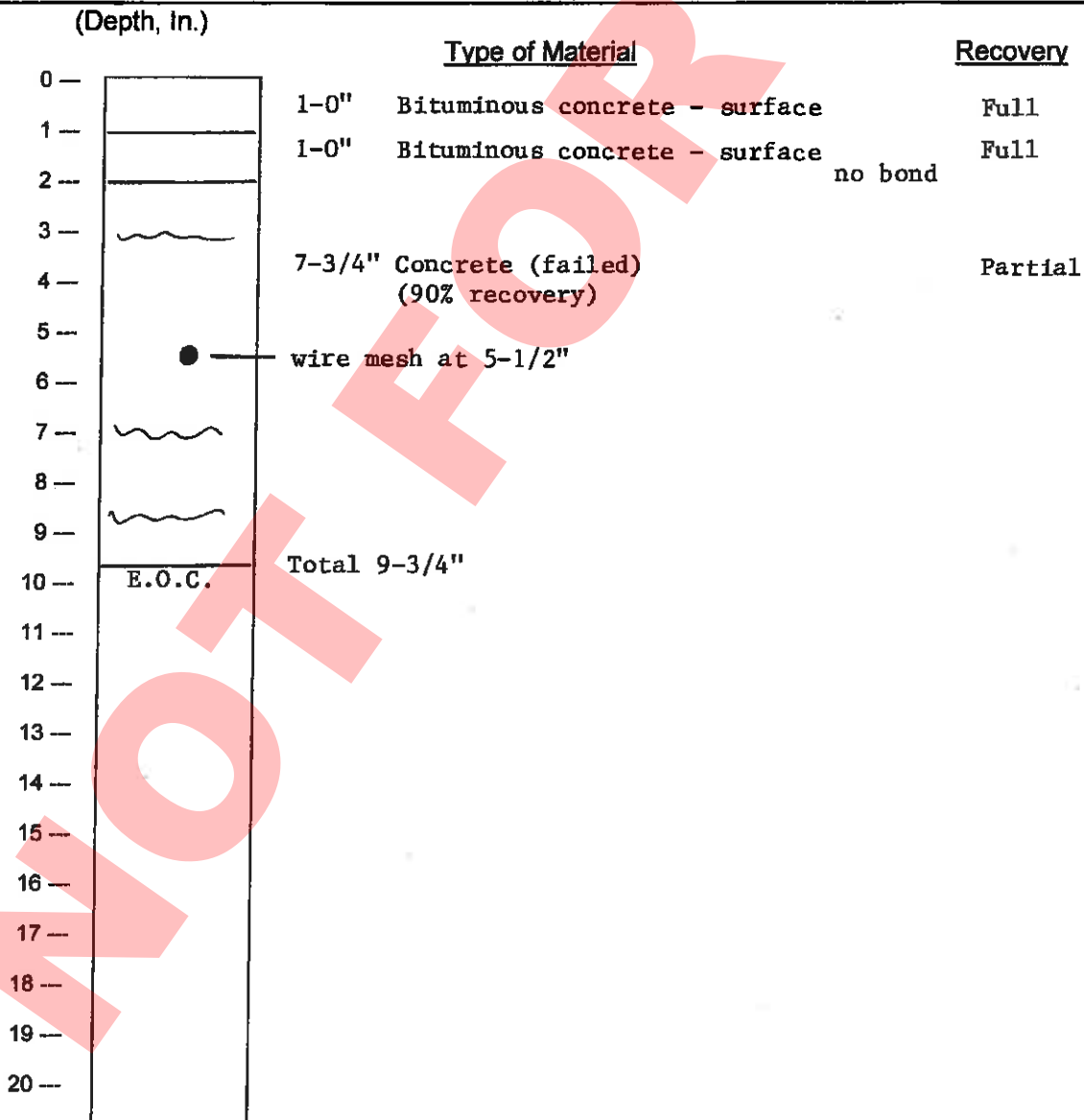
CORE LOG

Client: Village of Villa Park Reference South Michigan Ave., Villa Park, IL

Core No.: 4 Work Done By: DB & JL

Location of Core: 510 South Michigan Ave., 7' W. of CL

Comments: _____



SOIL AND MATERIAL CONSULTANTS, INC.

8 WEST COLLEGE DRIVE
ARLINGTON HEIGHTS, IL 60004

OFFICE: (847) 870-0544
FAX: (847) 870-0661

Date: 6/4/14
File No.: 21495

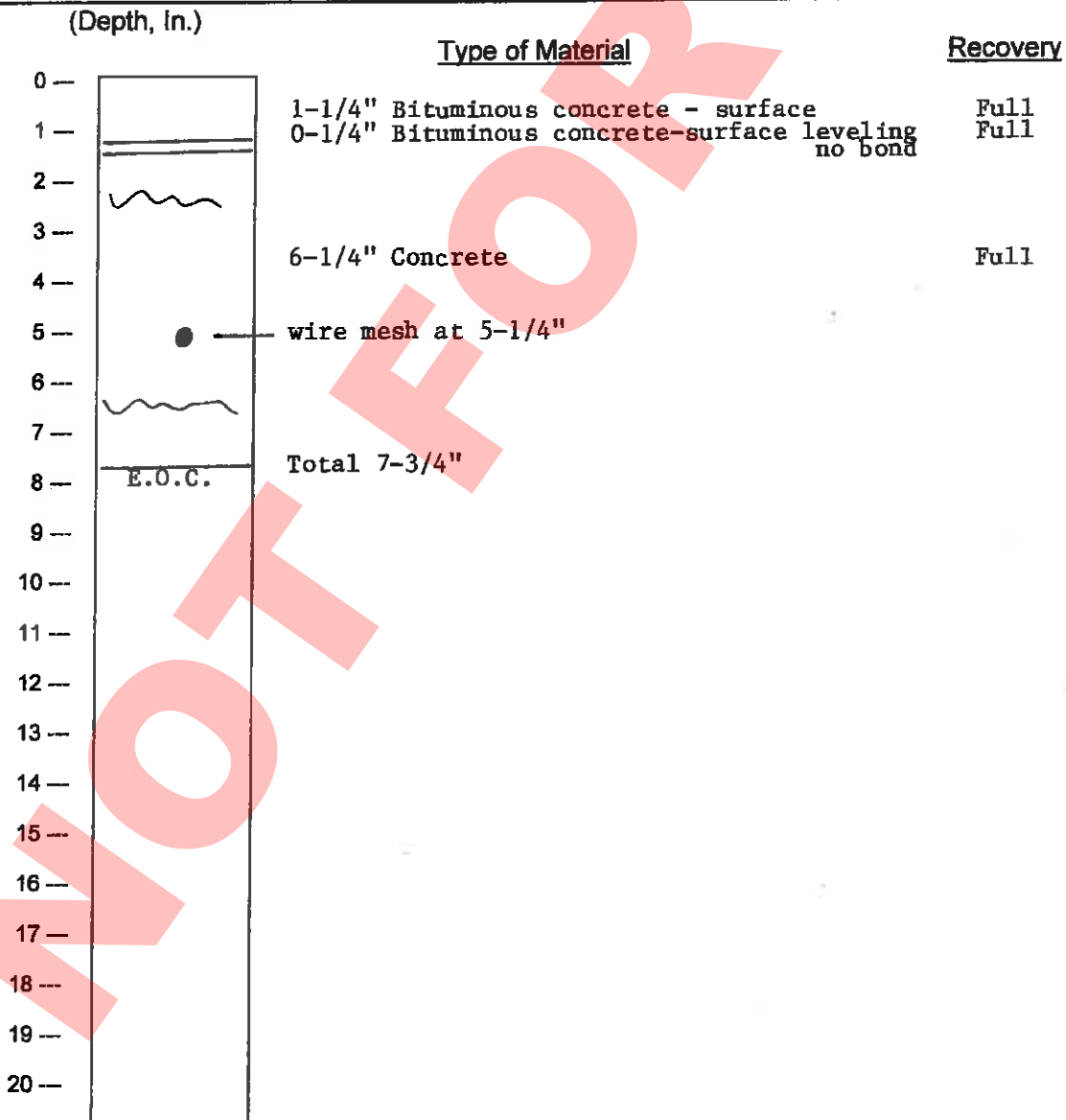
CORE LOG

Client: Village of Villa Park Reference South Michigan Ave., Villa Park, IL

Core No: 5 Work Done By: DB & JL

Location of Core: 539 South Michigan Ave., 5' E. of CL

Comments: _____



SOIL AND MATERIAL CONSULTANTS, INC.

8 WEST COLLEGE DRIVE OFFICE: (847) 870-0544
ARLINGTON HEIGHTS, IL 60004 FAX: (847) 870-0661

Date: 6/4/14

File No.: 21495

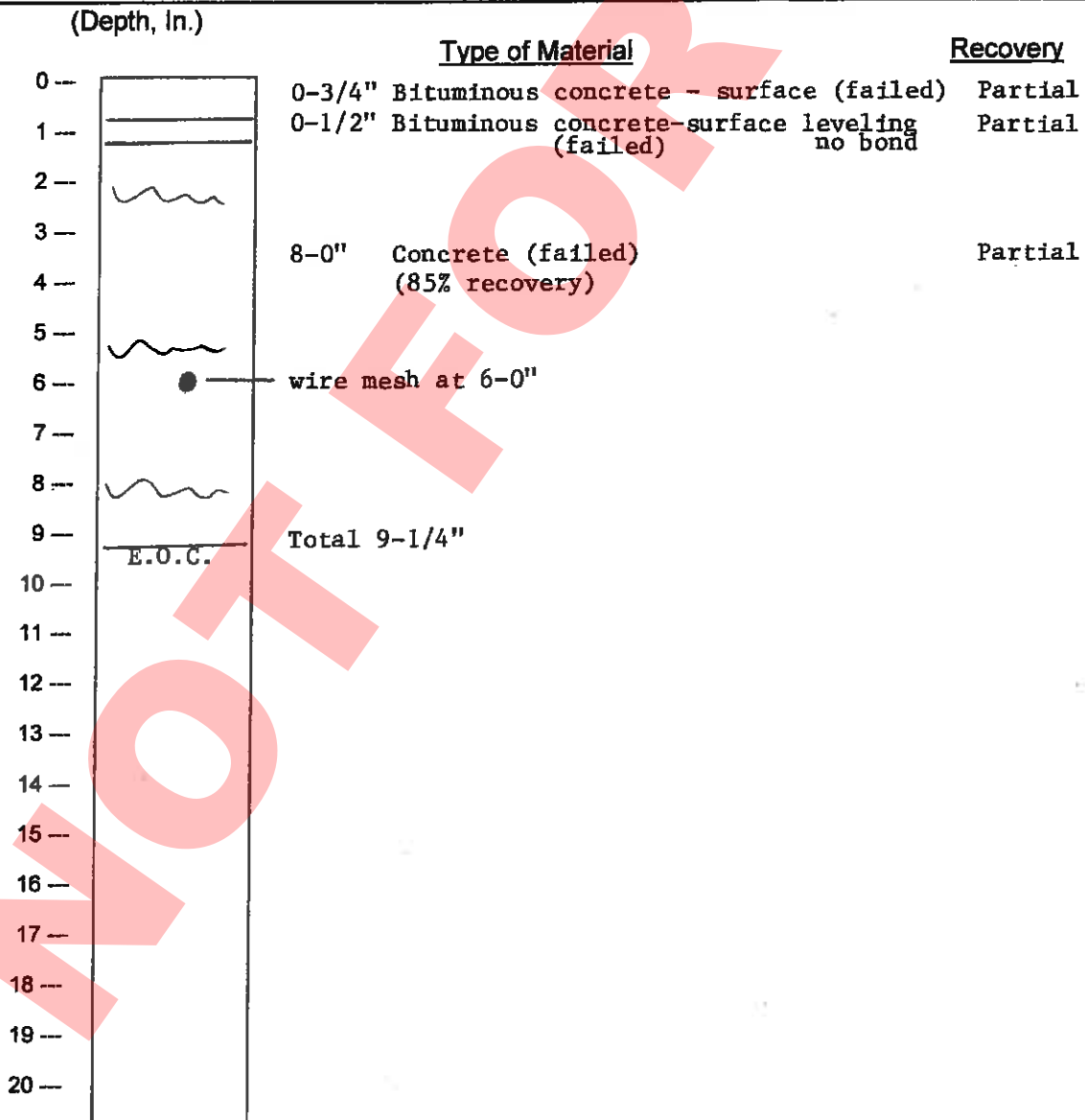
CORE LOG

Client: Village of Villa Park Reference South Michigan Ave., Villa Park, IL

Core No: 6 Work Done By: DB & JL

Location of Core: 626 South Michigan Ave., 6' W. of CL

Comments: _____



SOIL AND MATERIAL CONSULTANTS, INC.

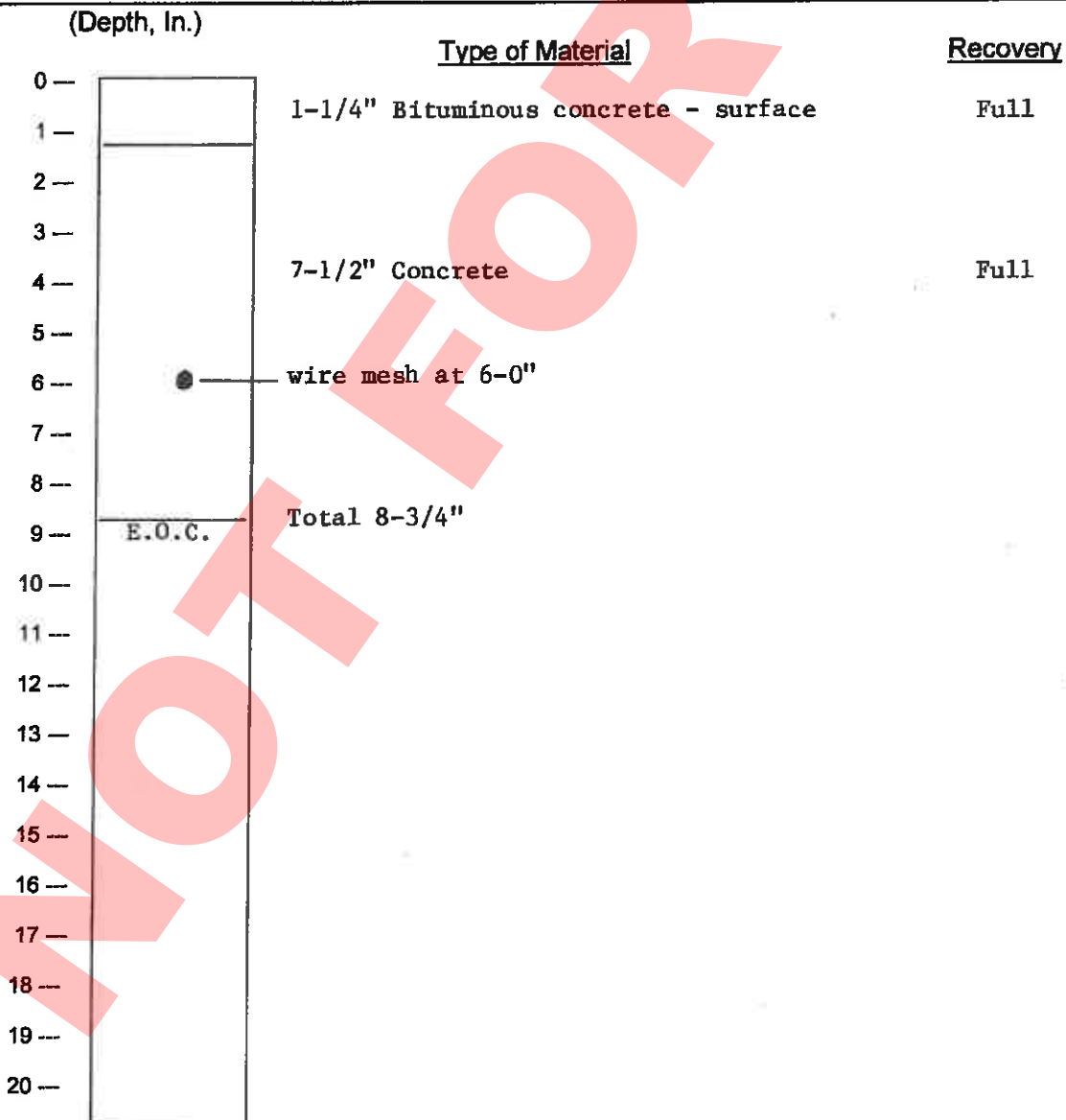
8 WEST COLLEGE DRIVE OFFICE: (847) 870-0544
ARLINGTON HEIGHTS, IL 60004 FAX: (847) 870-0661

Date: 6/4/14
File No.: 21495

CORE LOG

Client: Village of Villa Park Reference South Michigan Ave., Villa Park, IL
Core No: 7 Work Done By: DB & JL
Location of Core: 711 South Michigan Ave., 7' E. of CL

Comments: _____



SOIL AND MATERIAL CONSULTANTS, INC.

8 WEST COLLEGE DRIVE OFFICE: (847) 870-0544
ARLINGTON HEIGHTS, IL 60004 FAX: (847) 870-0861

Date: 6/4/14
File No.: 21495

CORE LOG

Client: Village of Villa Park Reference South Michigan Ave., Villa Park, IL

Core No: 8 Work Done By: DB & JL

Location of Core: 738 South Michigan Ave., 5' W. of CL

Comments: _____

(Depth, In.)	Type of Material	Recovery
0 -	1-1/2" Bituminous concrete - surface	Full
1 -		
2 -	no bond	
3 -		
4 -		
5 -		
6 -		
7 -	10-1/4" Concrete	Full
8 -		
9 -		
10 -		
11 -		
12 -	Total 11-3/4"	
12 -	E.O.C.	
13 -		
14 -		
15 -		
16 -		
17 -		
18 -		
19 -		
20 -		

SOIL BORING LOG 1

Logged By: DA Page: 1 of 1

Client: Village of Villa Park

File No. 21495 Date Drilled: 6/12/14

Reference: South Michigan Avenue
Villa Park, IL

Comments: 402 S. Michigan Ave., 5' E. of CL

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION
Elevation Existing Surface
(See Core Log)
(a) see below

Brown clay, some silt, trace sand & gravel, damp, very damp-damp, tough to very tough

Gray clay, some silt, trace sand & gravel, damp, very tough to hard

End of Boring
(a) Black silt, some clay, trace sand, damp, very loose (topsoil)

depth, ft.

5

10

15

20

25

30

35

40

standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	unconfined compressive strength, tons/sq.ft.	penetrometer reading, tons/sq.ft.	standard penetration "N", blows/ft.	moisture content, %
X	Δ	γ	○	1.0 2.0 3.0 4.0	●	10 20 30 40	△
5	22.2 26.5	93.1	1.3				
5	20.0	107.1	3.0				
6	19.4	111.2	2.3				
12	17.8	114.6	3.7				
15	15.0	118.8	3.5				
16	14.7	120.5	4.5				

NOT FIELD

Water encountered at dry feet during drilling operations (W.D.).
Water recorded at dry feet on completion of drilling operations (A.D.).
Water recorded at dry feet hours after completion of drilling operations (A.D.).



Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 2

Logged By: DA

Page: 1 of 1

Client: Village of Villa Park

File No. 21495

Date Drilled: 6/12/14

Reference: South Michigan Avenue
Villa Park, IL

Comments: 432 S. Michigan Ave., 7' W. of CL

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION
Elevation Existing Surface
(See Core Log)

5 - Brown clay, some silt, trace sand & gravel, damp, tough to hard
10 - Brown clay, some silt, trace sand & gravel, damp, very tough
15 - Gray clay, some silt, trace sand & gravel, damp, very tough
End of Boring

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	unconfined compressive strength, tons/sq.ft.			
	X	Δ	⊗	○	1.0	2.0	3.0	4.0
					penetrometer reading, tons/sq.ft.			
					standard penetration "N", blows/ft.			
					moisture content, %			
					10	20	30	40
7		17.8	114.7	1.8	X	●		
12		18.2	111.2	3.9	X	Δ		○
13		18.0	113.4	4.0	X	Δ		○
22		15.3	117.5	3.4		Δ	X	○
16		15.2	121.2	2.8		Δ	X	●
11		15.7	119.6	2.4	X	Δ	●	○

NOT FOR CONSTRUCTION

Water encountered at feet during drilling operations (W.D.).
 Water recorded at dry feet on completion of drilling operations (A.D.).
 Water recorded at feet hours after completion of drilling operations (A.D.).

SOIL BORING LOG 4

Logged By: DA

Page: 1 of 1

Client: Village of Villa Park

File No. 21495

Date Drilled: 6/12/14

Reference: South Michigan Avenue
Villa Park, IL

Comments: 510 S. Michigan Ave., 7' W. of CL

depth, ft.	Equipment: <input checked="" type="checkbox"/> CME 45B <input type="checkbox"/> CME 55 <input type="checkbox"/> Hand Auger <input type="checkbox"/> Other	standard penetration	moisture content	dry unit weight lb./cu.ft.	unconfined compressive strength	unconfined compressive strength, tons/sq.ft.			
	CLASSIFICATION					Elevation	Existing Surface	(See Core Log)	1.0
	(a) see below	X	Δ	⊗	○				
	Brown clay, some silt, trace sand & gravel, damp, tough to very tough	7	30.0 23.7	98.4	1.8	X	●	○	Δ
5		8	16.8	112.6	3.5	X	Δ	○	●
		8	20.7	108.1	1.9	X	○	Δ	●
10		16	18.6	110.6	3.7	X	Δ	○	
	Gray clay, some silt, trace sand & gravel, damp, hard to very tough	15	16.0	117.2	5.2	X	Δ	●	○
15	End of Boring	13	16.5	116.5	2.8	X	Δ	○	●
	(a) Black silt, some clay, trace sand, damp, loose (topsoil)								
20									
25									
30									
35									
40									

NOT FOR

Water encountered at dry feet during drilling operations (W.D.).
 Water recorded at dry feet on completion of drilling operations (A.D.).
 Water recorded at feet hours after completion of drilling operations (A.D.).

SOIL BORING LOG 5

Logged By: DA

Page: 1 of 1

Client: Village of Villa Park

File No. 21495

Date Drilled: 6/12/14

Reference: South Michigan Avenue
Villa Park, IL

Comments: 539 S. Michigan Ave., 5' E. of CL

depth, ft.	Equipment: <input checked="" type="checkbox"/> CME 45B <input type="checkbox"/> CME 55 <input type="checkbox"/> Hand Auger <input type="checkbox"/> Other	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	unconfined compressive strength, tons/sq.ft.			
	CLASSIFICATION					<input type="checkbox"/> standard penetration "N", blows/ft. <input type="checkbox"/> moisture content, %	1.0	2.0	3.0
Elevation	Existing Surface (See Core Log)	X	Δ	⊗	○	10	20	30	40
	Black silt, some clay, trace sand, very damp-damp, loose (topsoil)	5	35.4			X			Δ
5	Dark gray to brown-gray clay, some silt, trace sand & gravel, damp-very damp, tough	6	30.1	87.4	1.4	X	●	○	Δ
	Brown-gray silt, some sand, trace clay, very damp, loose to very loose	6	26.9	96.7	1.3	X	●	○	Δ
10	Brown-gray clay, some silt, trace sand & gravel, damp, very tough	6	17.5	112.7	2.3	X	Δ	○	●
	Gray clay, some silt, trace sand & gravel, damp, very tough	9	17.5	111.6	2.8	X	Δ	○	●
15	End of Boring	14	11.9	133.4	3.6		Δ		○

Water encountered at 9.0 feet during drilling operations (W.D).
 Water recorded at 12.5 feet on completion of drilling operations (A.D).
 Water recorded at _____ feet _____ hours after completion of drilling operations (A.D).

SOIL BORING LOG 6

Logged By: DA Page: 1 of 1

Client: Village of Villa Park

File No. 21495 Date Drilled: 6/12/14

Reference: South Michigan Avenue
 Villa Park, IL

Comments: 626 S. Michigan Ave., 6' W. of CL

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION
 Elevation Existing Surface
 (See Core Log)

5 - Brown-gray clay, some silt, trace sand & gravel, damp, very tough to hard
 10 - Brown-gray clay, some silt, trace sand & gravel, damp, very tough
 15 - Gray clay, some silt, trace sand & gravel, damp, very tough

End of Boring



depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	unconfined compressive strength, tons/sq.ft.			
	X	Δ	γ	○	○	●	○	○
					1.0	2.0	3.0	4.0
					X	Δ	○	○
					10	20	30	40
6		18.1	114.4	2.3	X	Δ	○	
10		20.6	105.9	3.6	X	Δ	○	●
12		16.5	117.6	4.3	X	Δ		○
13		15.6	118.5	3.3	X	Δ	○	
13		15.7	116.9	3.2	X	Δ	●	○
15		16.7	117.4	2.6	X	Δ	●	○

NOT FOR CONSTRUCTION

Water encountered at dry feet during drilling operations (W.D.).
 Water recorded at dry feet on completion of drilling operations (A.D.).
 Water recorded at feet hours after completion of drilling operations (A.D.).

SOIL BORING LOG 8

Logged By: DA

Page: 1 of 1

Client: Village of Villa Park

File No. 21495

Date Drilled: 6/12/14

Reference: South Michigan Avenue
Villa Park, IL

Comments: 738 S. Michigan Ave., 5' W. of CL

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION
Elevation Existing Surface
(See Core Log)

Brown clay, some silt, trace sand & gravel, damp, tough to hard

Brown-gray to gray clay, some silt, trace sand & gravel, damp, very tough to tough

End of Boring

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	unconfined compressive strength, tons/sq.ft.			
					1.0	2.0	3.0	4.0
					penetrometer reading, tons/sq.ft.			
					standard penetration "N", blows/ft.			
					moisture content, %			
					10	20	30	40
8	X	Δ	⊗	○				
12	X	Δ	⊗	○				
14	X	Δ	⊗	○				
15	X	Δ	⊗	○				
9	X	Δ	⊗	○				
7	X	Δ	⊗	○				

NOT FOR

Water encountered at dry feet during drilling operations (W.D.).
 Water recorded at dry feet on completion of drilling operations (A.D.).
 Water recorded at feet hours after completion of drilling operations (A.D.).

SAMPLE CLASSIFICATION

Soil sample classification is based on the Unified Soil Classification System, the Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), ASTM D-2488, the Standard Test Method for Classification of Soils for Engineering Purposes, ASTM D-2487 (when applicable), and the modifiers noted below.

CONSISTENCY OF COHESIVE SOILS

Term	Qu -tons/sq. ft.	N (unreliable)
Very Soft	0.00 - 0.25	0 - 2
Soft	0.26 - 0.49	3 - 4
Stiff	0.50 - 0.99	5 - 8
Tough	1.00 - 1.99	9 - 15
Very Tough	2.00 - 3.99	16 - 30
Hard	4.00 - 7.99	30 +
Very Hard	8.00 +	

RELATIVE DENSITY OF GRANULAR SOILS

Term	N - blows/foot
Very Loose	0 - 4
Loose	5 - 9
Medium Dense	10 - 29
Dense	30 - 49
Very Dense	50 +

IDENTIFICATION AND TERMINOLOGY

Term	Size Range
Boulder	over 8 in.
Cobble	3 in. to 8 in.
Gravel	-coarse 1 in. to 3 in.
	-medium 3/8 in. to 1 in.
	-fine #4 sieve to 3/8 in.
Sand	-coarse #10 sieve to #4 sieve
	-medium #40 sieve to #10 sieve
	-fine #200 sieve to #40 sieve
Silt	0.002 mm to #200 sieve
Clay	smaller than 0.002 mm

Modifying Term	Percent by Weight
Trace	1 - 10
Little	11 - 20
Some	21 - 35
And	36 - 50

Moisture Condition

Dry
Damp
Very Damp
Saturated

DRILLING, SAMPLING & SOIL PROPERTY SYMBOLS

CF	- Continuous Flight Auger
HS	- Hollow Stem Auger
HA	- Hand Auger
RD	- Rotary Drilling
AX	- Rock Core, 1-3/16 in. diameter
BX	- Rock Core, 1-5/8 in. diameter
NX	- Rock Core, 2-1/8 in. diameter
S	- Sample Number
T	- Type of Sample
J	- Jar
AS	- Auger Sample
SS	- Split-spoon (2 in. O.D. with 1-3/8 in. I.D.)
ST	- Shelby Tube (2 in. O.D. with 1-7/8 in. I.D.)
R	- Recovery Length, in.
B	- Blows/ 6 in. interval, Standard Penetration Test (SPT)
N	- Blows/ foot to drive 2 in. O.D. split-spoon sampler with 140 lb. hammer falling 30 in., (STP)
Pen.	- Pocket Penetrometer reading, tons/ sq. ft.
W	- Water Content, % of dry weight
Uw	- Dry Unit Weight of soil, lbs./ cu. ft.
Qu	- Unconfined Compressive Strength, tons/ sq. ft.
Str	- % Strain at Qu.
WL	- Water Level
WD	- While Drilling
AD	- After Drilling
DCI	- Dry Cave-in
WCI	- Wet Cave-in
LL	- Liquid Limit, %
PL	- Plastic limit, %
PI	- Plasticity Index (LL-PL)
LI	- Liquidity Index [(W-PL)/PI]

NOT FOR BID

Ordinance No. 3733**AN ORDINANCE OF THE VILLAGE OF VILLA PARK, DUPAGE COUNTY, ILLINOIS AMENDING THE REQUIREMENTS OF BIDDERS FOR CONSTRUCTION PROJECTS**

WHEREAS, the Village of Villa Park (the “*Village*”) is a duly organized and validly existing non home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and,

WHEREAS, section 8-9-1 of the Illinois Municipal Code (65 ILCS 5/8-9-2) allows the Village to require competitive bidding after advertising for bids in the manner prescribed by ordinance; and,

WHEREAS, the President and Board of Trustees desire to adopt purchasing procedures to provide for additional requirements of bidders for construction projects to have active apprenticeship and training programs approved and registered with the United States Department of Labor’s Bureau of Apprenticeship and Training and to have bidders show three similar projects they constructed within the last five years.

NOW, THEREFORE, BE IT ORDAINED by the President and Board of Trustees of the Village of Villa Park, DuPage County, Illinois, as follows:

Section 1. That Section 2-219 of the Villa Park Municipal Code, as amended, be and is hereby amended by placing the existing text as subsection A. and adding a new subsection B. to read as follows:

“B. A responsible bidder for the construction of public works projects shall meet and submit evidence of compliance with the following requirements:

- (1) All applicable laws prerequisite to doing business in the State of Illinois,
- (2) A federal employer tax identification number or social security number,
- (3) Provision of Section 2000(e) of Chapter 21, Title 42 of the United States Code and Federal Executive Order No. 11246 as amended by Executive Order No. 11375 (known as the Equal Opportunity Employer provisions),
- (4) Certificates of insurance indicating the following coverage’s: general liability, worker’s compensation, completed operations, automobile, hazardous occupation and product liability
- (5) Compliance with all provisions of the Illinois Prevailing Wage Act, including wages, medical and hospitalization insurance and retirement for those trades covered in the Act,
- (6) The bidder and all bidder’s sub-contractors must participate in active apprenticeship and training programs approved and registered with the United States Department of Labor’s Bureau of Apprenticeship and Training for each of the trades of work contemplated under the proposed contract,
- (7) All contractors and sub-contractors are required to file certified payrolls as specified in Illinois Public Act 94-0515, and follow all provisions of the Employee Classification Act (820 ILCS 185/1 et seq.), and

(8) All bidders must provide three (3) projects of a similar nature constructed in the immediate past five (5) years with the name, address and telephone number of the contact person having knowledge of the project along with three (3) references (name, address, and telephone number) with knowledge of the integrity and business practices of the bidder.”

Section 2. This Ordinance shall be in full force and effect upon its passage, approval, and publication as provided by law.

Passed this 11 day of February, 2013.

AYES: ALL

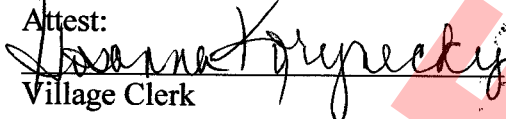
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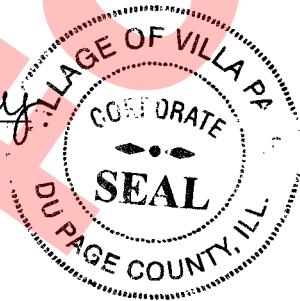
ABSENT: _____

Approved this 11 day of February, 2013.



Village President

Attest:

Village Clerk



Published in pamphlet form:

2-11, 2013

IRMA

CONTRACTUAL INSURANCE GUIDELINES

I. INSURANCE REQUIREMENTS

Contractor shall procure and maintain, for the duration of the 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, his agents, representatives, employees or subcontractors.

MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

- A. Insurance Services Office Commercial General Liability occurrence form CG 0001 with the member named as additional insured, on a form at least as broad as the attached sample endorsement including ISO Additional Insured Endorsement CG 2010 (Exhibit A), CG 2026 (Exhibit B).

CG2037 - Completed Operations – (Exhibit C)
Required if box is checked ; and

- B. Owners and Contractors Protective Liability (OCP) policy with the member as insured

Required if box is checked ; and

- C. Insurance Service Office Business Auto Liability coverage form number CA 0001, Symbol 01 "Any Auto."

- D. Workers' Compensation as required by the Workers' Compensation Act of the State of Illinois and Employers' Liability insurance.

Coverage required for employee exposure to lead, if box is checked

- E. Builder Risk Property Coverage with member as loss payee

Required if box is checked .

- F. Environmental Impairment/Pollution Liability Coverage for pollution incidents as a result of a claim for bodily injury, property damage or remediation costs from an incident at, on or migrating beyond the contracted work site. Coverage shall be extended to Non-Owned Disposal sites resulting from a pollution incident at, on or mitigating beyond the site; and also provide coverage for incidents occurring during transportation of pollutants.

Required if box is checked .

MINIMUM LIMITS OF INSURANCE

Contractor shall maintain limits no less than the following, **if required under above scope**:

- A. Commercial General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, and property damage and \$1,000,000 per occurrence for personal injury. The general aggregate shall be twice the required occurrence limit. Minimum General Aggregate shall be no less than \$2,000,000 or a project/contract

specific aggregate of \$1,000,000.

- B. Owners and Contractors Protective Liability (OCP): \$1,000,000 combined single limit per occurrence for bodily injury and property damage.
- C. Business Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage.
- D. Workers' Compensation and Employers' Liability: Workers' Compensation coverage with statutory limits and Employers' Liability limits of \$500,000 per accident.
- E. Builder's Risk: Shall insure against "All Risk" of physical damage, including water damage (flood and hydrostatic pressure not excluded), on a completed replacement cost basis.
- F. Environmental Impairment/Pollution Liability: \$1,000,000 combined single limit per occurrence for bodily injury, property damage and remediation costs.

DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions must be declared to and approved by the member. At the option of the member, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the member, its officials, employees, agents and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigation, claim administration and defense expenses.

OTHER INSURANCE PROVISIONS

The policies are to contain, or be endorsed to contain, the following provisions:

A. General Liability and Automobile Liability Coverages

- 1. The member, its officials, agents, employees and volunteers are to be covered as additional insureds as respects: liability arising out of the Contractor's work, including activities performed by or on behalf of the Contractor; products and completed operations of the Contractor; premises owned, leased or used by the Contractor; or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the member, its officials, agents, employees and volunteers.
- 2. The Contractor's insurance coverage shall be primary as respects the member, its officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the member, its officials, agents, employees and volunteers shall be excess of Contractor's insurance and shall not contribute with it.
- 3. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the member, its officials, employees, agents and volunteers.
- 4. The Contractor's insurance shall contain a Severability of Interests/Cross Liability clause or language stating that Contractor's insurance shall apply

APPENDIX B

separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

5. If any commercial general liability insurance is being provided under an excess or umbrella liability policy that does not "follow form," then the Contractor shall be required to name the member, its officials, employees, agents and volunteers as additional insureds.
6. All general liability coverages shall be provided on an occurrence policy form. Claims-made general liability policies will not be accepted.
7. The contractor and all subcontractors hereby agree to waive any limitation as to the amount of contribution recoverable against them by member. This specifically includes any limitation imposed by any state statute, regulation, or case law including any Workers' Compensation Act provision that applies a limitation to the amount recoverable in contribution such as Kotecki v. Cyclops Welding.

B. Workers' Compensation and Employers' Liability Coverage

The insurer shall agree to waive all rights of subrogation against the member, its officials, employees, agents and volunteers for losses arising from work performed by Contractor for the municipality.

1. NCCI Alternate Employer Endorsement (WC 000301) in place to insure that workers' compensation coverage applies under contractor's coverage rather than member's if the member is borrowing, leasing or in day to day control of contractor's employee.

Required if box is checked .

C. Professional Liability (Required if box is checked)

1. Professional liability insurance with limits not less than \$1,000,00 each claim with respect to negligent acts, errors and omissions in connection with professional services to be provided under the contract, with a deductible not-to-exceed \$50,000 without prior written approval.
2. If the policy is written on a claims-made form, the retroactive date must be equal to or preceding the effective date of the contract. In the event the policy is cancelled, non-renewed or switched to an occurrence form, the Contractor shall be required to purchase supplemental extending reporting period coverage for a period of not less than three (3) years.
3. Provide a certified copy of actual policy for review.
4. Recommended Required Coverage (architect, engineer, surveyor, consultant): Professional liability insurance that provides indemnification and defense for injury or damage arising out of acts, errors, or omissions in providing the following professional services, but not limited to the following:
 - a. Preparing, approving or failure to prepare or approve maps, drawings, opinions, report, surveys, change orders, designs or specifications;
 - b. Providing direction, instruction, supervision, inspection, engineering

services or failing to provide them, if that is the primary cause of injury or damage.

D. All Coverages

Each insurance policy required shall have the member expressly endorsed onto the policy as a Cancellation Notice Recipient. Should any of the policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

ACCEPTABILITY OF INSURERS

Insurance is to be placed with insurers with a Best's rating of no less than A-, VII and licensed to do business in the State of Illinois.

VERIFICATION OF COVERAGE

Contractor shall furnish the member with certificates of insurance naming the member, its officials, employees, agents and volunteers as additional insureds (Exhibit D), and with original endorsements affecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be received and approved by the member before any work commences. The following additional insured endorsements may be utilized: ISO Additional Insured Endorsements CG 2010 (Exhibit A) or CG 2026 (Exhibit B), and CG 2037 (Exhibit C) – Completed Operations, where required. The member reserves the right to request full certified copies of the insurance policies and endorsements.

SUBCONTRACTORS

Contractor shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

ASSUMPTION OF LIABILITY

The contractor assumes liability for all injury to or death of any person or persons including employees of the contractor, any sub-contractor, any supplier or any other person and assumes liability for all damage to property sustained by any person or persons occasioned by or in any way arising out of any work performed pursuant to this agreement.

II. INDEMNITY/HOLD HARMLESS PROVISION

To the fullest extent permitted by law, the Contractor hereby agrees to defend, indemnify and hold harmless the member, its officials, employees and agents against all injuries, deaths, loss, damages, claims, patent claims, suits, liabilities, judgments, cost and expenses, which may in anywise accrue against the member, its officials, agents and employees, arising in whole or in part or in consequence of the performance of this work by the Contractor, its employees, or subcontractors, or which may in anywise result therefore, except that arising out of the sole legal cause of the member, its employees or agents, the Contractor shall, at its own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefore or incurred in connections

therewith, and, if any judgment shall be rendered against the member, its officials, employees and agents, in any such action, the Contractor shall, at its own expense, satisfy and discharge the same.

Contractor expressly understands and agrees that any performance bond or insurance policies required by this contract, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the member, its officials, employees and agents as herein provided.

The Contractor further agrees that to the extent that money is due the Contractor by virtue of this contract as shall be considered necessary in the judgment of the member, may be retained by the member to protect itself against said loss until such claims, suits, or judgments shall have been settled or discharged and/or evidence to that effect shall have been furnished to the satisfaction of the member.

III. SAFETY/LOSS PREVENTION

Safety/Loss Prevention Program Requirements

- Successful bidder will provide written confirmation that a safety/loss prevention program was in place at least 90 days prior to submitting the bid proposal.
- Evidence of completed employee safety training can be provided.

Regulatory Requirements

- Successful bidder must comply with all applicable laws, regulations, and rules promulgated by any Federal, State, County, Municipal and/or other governmental unit or regulatory body now in effect or which may be in effect during the performance of the work. Included within the scope of the laws, regulations, and rules referred to in this paragraph but in no way to operate as a limitation, are Occupational Safety & Health Act (OSHA), Illinois Department of Labor (IDOL), Department of Transportation, all forms of traffic regulations, public utility, Intrastate and Interstate Commerce Commission regulations, Workers' Compensation Laws, Prevailing Wage Laws, the Social Security Act of the Federal Government and any of its titles, the Illinois Department of Human Rights, Human Rights Commission, or EEOC statutory provisions and rules and regulations.
- Evidence of specific regulatory compliance will be provided by bidder, if required by owner.

EXHIBIT A

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
CG 20 10 07 04

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – OWNERS, LESSEES OR
CONTRACTORS – SCHEDULED PERSON OR
ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location(s) Of Covered Operations

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

EXHIBIT B

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
CG 20 26 07 04

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – DESIGNATED
PERSON OR ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf.

- A. In the performance of your ongoing operations; or
- B. In connection with your premises owned by or rented to you.

EXHIBIT
C

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
CG 20 37 07 04

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – OWNERS, LESSEES OR
CONTRACTORS – COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location And Description Of Completed Operations
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

