INVITATION TO BID

For work to be constructed under the provisions of the Standard Specifications for Road and Bridge Construction published by the Illinois Department of Transportation, current edition.

The Village of Hoffman Estates is accepting sealed bids for the proposed work officially known as the **Eagle Way Sewer Replacement Project**, and is located along Eagle Way between Lakewood Boulevard and Central Road, and along Central Road between Eagle Way and Center Drive in Hoffman Estates, Illinois.

Sealed proposals for the improvement described herein will be received at the Office of the Village Clerk of the Village of Hoffman Estates, Cook County, Illinois, **until 10:00 a.m., Wednesday, May 4, 2022.** All bids will be publicly opened and immediately read thereafter.

The proposed improvements include, but are not limited to, 4,017 LF of sanitary sewer 12", precast manholes installation, trench backfill and asphalt street patching, PCC drive apron and sidewalk removal and installation, erosion control and restoration of the site and other work necessary to complete the project as shown on the plans and as described herein.

Plans and proposal forms are available for download from the Village of Hoffman Estates website at www.hoffmanestates.org/business/rfps-rfqs-bids beginning Wednesday, April 20, 2022.

All proposals must be accompanied by a proposal guaranty as provided in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals contained in the "Local Roads and Streets Recurring Special Provisions".

The Village of Hoffman Estates strongly encourages minority firms and women's business enterprises to apply. If subcontracts are to be let, the primary contractor shall take these same affirmative steps to solicit bids from minority and women's firms.

The Village of Hoffman Estates reserves the right to reject any or all proposals and waive any informality in bidding and to accept the proposal deemed most advantageous to it, all in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals contained in the "Local Roads and Streets Recurring Special Provisions".

By order of the President and Board of Trustees of the Village of Hoffman Estates.

Bev Romanoff
Village Clerk

Date of Publication: Wednesday, April 20, 2022

Illinois Department of Transportation

Local Public Agency
Formal Contract Proposal

COVER SHEET

Proposal Submitted By:

Contractor's Name

Contractor's Address | City | State | Zip Code

STATE OF ILLINOIS

Local Public Agency: Village of Hoffman Estates | County: Cook | Section Number: 19-00112-00-XX

Route(s) (Street/Road Name): N. Eagle Way/Central Road | Type of Funds: Private Contributions

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

Submitted/Approved
For Local Public Agency:

For a County and Road District Project

Submitted/Approved

Highway Commissioner Signature | Date

Submitted/Approved

County Engineer/Superintendent of Highways | Date

For a Municipal Project

Submitted/Approved/Passed

Signature | Date

Official Title: President Board of Trustees

Department of Transportation

Released for bid based on limited review

Regional Engineer Signature | Date

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

Local Public Agency	County	Section Number	Route(s) (Street/Road Name)
Village of Hoffman Estates	Cook	19-00112-00-XX	N. Eagle Way/Central Road

NOTICE TO BIDDERS

Sealed proposals for the project described below will be received at the office of the Village Clerk
Name of Office

1900 Hassell Road, Hoffman Estates, IL 60169 until 10:00 AM on 05/04/2022.
Address Time Date

Sealed proposals will be opened and read publicly at the office of Frank Alexa Room
Name of Office

1900 Hassell Road, Hoffman Estates, Il 60169 at 10:00 AM on 05/04/2022.
Address Time Date

DESCRIPTION OF WORK

Location	Project Length
N. Eagle Way and Central Road	+/- 4,100

Proposed Improvement

New Village sanitary sewer main and abandon of existing 10" sewer

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

Plans and proposal forms are available for download from the Village of Hoffman Estates website at www.hoffmanestates.org/business/rfps-rfqs-bids beginning April 18, 2022.

2. [X] Prequalification

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

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

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

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

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

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

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

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

Local Public Agency	County	Section Number	Route(s) (Street/Road Name)
Village of Hoffman Estates	Cook	19-00112-00-XX	N. Eagle Way/Central Road

PROPOSAL

1. Proposal of _____
Contractor's Name

_____.
Contractor's Address

2. The plans for the proposed work are those prepared by WMA, Ltd., 207 S. Naperville Rd., Wheaton, IL 60187
~~and approved by the Department of Transportation on~~ _____.

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

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

5. The undersigned agrees to complete the work within N/A working days or by Nov. 18, 2022 unless additional time is granted in accordance with the specifications.

6. 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 of check shall be forfeited to the Awarding Authority.

7. Each pay item should have a unit price and a total price. If no total price is shown or if there is a discrepancy between the products of the unit price multiplied by the quantity, the unit price shall govern. If a unit price is omitted, the total price will be divided by the quantity in order to establish a unit price. A bid may be declared unacceptable if neither a unit price nor a total price is shown.

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

9. The undersigned further agrees that if awarded the contract for the sections contained in the combinations on BLR 12201, the work shall be in accordance with the requirements of each individual proposal for the multiple bid specified in the Schedule for Multiple Bids below.

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

Attach Cashier's Check or Certified Check Here

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

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

Local Public Agency	County	Section Number	Route(s) (Street/Road Name)
Village of Hoffman Estates	Cook	19-00112-00-XX	N. Eagle Way/Central Road

CONTRACTOR CERTIFICATIONS

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

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

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

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

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

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

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

Local Public Agency	County	Section Number	Route(s) (Street/Road Name)
Village of Hoffman Estates	Cook	19-00112-00-XX	N. Eagle Way/Central Road

SIGNATURES

(If an individual)

Signature of Bidder | Date

Business Address

City | State | Zip Code

(If a partnership)

Firm Name

Signature | Date

Title

Business Address

City | State | Zip Code

Insert the Names and Addresses of all Partners

(If a corporation)

Corporate Name

Signature | Date

Title

Business Address

City | State | Zip Code

Insert Names of Officers

President

Secretary

Attest:

Secretary

Treasurer

Illinois Department of Transportation

Schedule of Prices

Contractor's Name

Contractor's Address | City | State | Zip Code

Local Public Agency: Village of Hoffman Estates | County: Cook | Section Number: 19-00112-00-XX

Route(s) (Street/Road Name): N. Eagle Way/Central Road

Schedule for Multiple Bids

Combination Letter	Section Included in Combinations	Total

Schedule for Single Bid

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

Item Number	Items	Unit	Quantity	Unit Price	Total
20800150	TRENCH BACKFILL	CU YD	3,475		
21101625	TOPSOIL F&P, 6"	SQ YD	7,285		
25000100	SEEDING, CLASS 1	ACRE	0.72		
25000210	SEEDING, CLASS 2A	ACRE	0.78		
25000400	NITROGEN FERT NUTR	POUND	65.3		
25000500	PHOSPHORUS FERT NUTR	POUND	39.2		
25000600	POTASSIUM FERT NUTR	POUND	26.2		
25100630	EROSION CONTR BLANKET	SQ YD	7,285		
28000400	PERIMETER EROS BAR	FOOT	4,825		
28000510	INLET FILTERS	EACH	25		
40600290	BIT MATLS TACK CT	POUND	1,475		
40604062	HMA SC IL-9.5 D N70	TON	88		
42400200	PCC SIDEWALK, 5"	SQ FT	1,918		
HE424015	DEC CONC MED (BRICK), 6"	SQ FT	460		
42400800	DETECTABLE WARNINGS	SQ FT	16		
44000157	HMA SURF REM, 2"	SQ YD	801		
44000600	SIDEWALK REMOVAL	SQ FT	1,918		
44003100	MEDIAN REMOVAL	SQ FT	460		
HE442100	CLASS D PATCH SPL, 10"	SQ YD	1,336		
HE550ADJ	ADJUST STORM SEWERS	EACH	7		

Local Public Agency	County	Section Number	Route(s) (Street/Road Name)
Village of Hoffman Estates	Cook	19-00112-00-XX	N. Eagle Way/Central Rd

Item Number	Items	Unit	Quantity	Unit Price	Total
52200020	TEMP SOIL RETEN SYSTM	SQ FT	12,950		
HE563006	SAN SEWER PVC 6" SPL	FOOT	13		
HE563008	SAN SEWER PVC 8" SPL	FOOT	31		
HE563010	SAN SEWER PVC 10" SPL	FOOT	14		
HE563012	SAN SEWER PVC 12" SPL	FOOT	4,031		
HE563108	SAN SEWER REM 8" SPL	FOOT	31		
HE563110	SAN SEWER REM 10" SPL	FOOT	1,504		
HE563500	SEWER TESTING	LS	1		
HE563550	POST CONSTR TELEVISING	LS	1		
HE563800	CONNECT TO EX WET WELL	EACH	1		
HE563900	LIVE SEWER BYPASS	LS	1		
HE564400	SAN MANHOLES 4' DIA SPL	EACH	11		
HE564450	SAN DROP MH 4' DIA SPL	EACH	1		
HE604061	F&L SAN TY 1 CL LID SPL	EACH	12		
60500040	REMOVING MANHOLES	EACH	3		
HE605500	ABANDON MANHOLES SPL	EACH	8		
HE606300	COMB CONC C&G R&R SPL	FOOT	305		
HE701014	TR CONT & PROT	LS	1		
HE720010	REMOVE & RESET SIGN	EACH	2		
78009000	MOD URETH PM LTR-SYM	SQ FT	124		
78009004	MOD URETH PM LINE 4"	FOOT	1,768		
78009006	MOD URETH PM LINE 6"	FOOT	440		
78009012	MOD URETH PM LINE 12"	FOOT	88		
78009024	MOD URETH PM LINE 24"	FOOT	37		
				Bidder's Total Proposal	

1. Each pay item should have a unit price and a total price.
2. 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.
3. If a unit price is omitted, the total price will be divided by the quantity in order to establish a unit price.
4. A bid may be declared unacceptable if neither a unit price or total price is shown.

Illinois Department of Transportation

Local Public Agency
Proposal Bid Bond

Local Public Agency	County	Section Number
Village of Hoffman Estates	Cook	19-00112-00-XX

WE, _____ as PRINCIPAL, and

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

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

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

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

IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this _____ (Day) of _____ (Month and Year)

Principal

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

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

Surety

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

STATE OF IL

COUNTY OF

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

_____

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

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

Given under my hand and notarial seal this _____ (Day) day of _____ (Month and Year) .

Notary Public Signature

(SEAL)

Date commission expires _____

Local Public Agency	County	Section Number
Village of Hoffman Estates	Cook	19-00112-00-XX

ELECTRONIC BID BOND

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

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

Electronic Bid Bond ID Code

Company/Bidder Name

Signature

Date

Title

Illinois Department of Transportation

Affidavit of Illinois Business Office

Local Public Agency	County	Street Name/Road Name	Section Number
Village of Hoffman Estates	Cook	N. Eagle Way/Central Rd.	19-00112-00-XX

I, _____ of _____ , _____ ,
Name of Affiant City of Affiant State of Affiant
being first duly sworn upon oath, state as follows:

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

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

3. That, if selected under the proposal described above, _____ , will maintain a business office in the
Bidder
State of Illinois, which will be located in _____ County, Illinois.
County

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

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

Signature | Date

Print Name of Affiant

Notary Public

State of IL

County _____

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

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

_____ .
Bidder

Signature of Notary Public

(SEAL)

My commission expires _____

INDEX
FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2022

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

No ERRATA this year.

SUPPLEMENTAL SPECIFICATIONS

Illinois Department of Transportation

Check Sheet for Recurring Special Provisions

Local Public Agency	County	Section Number
Village of Hoffman Estates	Cook	19-00112-00-XX

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

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

Recurring Special Provisions

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

Local Public Agency	County	Section Number
Village of Hoffman Estates	Cook	19-00112-00-XX

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

Local Roads And Streets Recurring Special Provisions

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

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

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

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

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

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

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

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

VILLAGE OF HOFFMAN ESTATES
N. Eagle Way/Central Road Sewer Replacement

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2022 (hereinafter referred to as the "Standard Specifications"), the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures of Materials" in effect on the date of invitation of bids, and the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein, which apply to and govern the construction of the North Eagle Way Central Road Sewer Replacement, in Hoffman Estates, Cook County, and in case of conflict with any part, or parts, of said specifications, the said Special Provisions shall take precedence and shall govern.

DEFINITION

When referring to the "Department" or "State" in all IDOT Specifications and Special Provisions, the Contractor should be aware that this also means the Village of Hoffman Estates, its agents and/or representatives.

PROJECT DESCRIPTION

The improvements included in this Contract consist of furnishing all of the materials, labor and equipment required for includes new sanitary sewer main, abandon existing sanitary sewer, curb and gutter removal and replacement, concrete sidewalk removal and replacement, reconstruction of manhole structures, pavement excavation, installation of stone, binder asphalt, surface asphalt, pavement markings, restoration of parkway areas, and together with all other incidental work necessary to complete this improvement according to the Plans, Standard Specifications and Special Provisions.

SCOPE OF WORK

The intent of the contract is to provide a complete outline of the work that the Contractor undertakes in full compliance with the plans and specifications. The Contractor shall perform all earthwork, construct all base and surface courses, structures, and such additional, extra, and incidental construction as may be necessary to complete the work to the finished lines, grades and cross sections in an acceptable manner. Due to budgetary constraints, the Village may increase or decrease contract quantities or remove locations of work. No compensation shall be provided to the contractor for any mobilization costs, specifically for changes to quantities.

GENERAL

The Contractor is herein notified that the Village of Hoffman Estates will require that any questions or clarifications on the contract documents must be made in writing at least three working days prior to the bid opening. No questions or clarifications received after that time will

be responded to by the Village. All Contractors who picked up bid documents will receive written responses to all inquiries made by all contractors during the bid process no later than two working days prior to the bid opening.

PROJECT SUPERVISOR

The Contractor shall designate an employee as Project Supervisor. The Project Supervisor shall be required to assume the responsibility for general supervision of the Contractor and subcontractors' operations. The Project Supervisor and the Engineer shall work together to properly control and complete the work for the proposed improvements.

The Project Supervisor is responsible for distribution of the plans to the appropriate construction personnel. Failure of the appropriate construction personnel, doing the actual construction, to have a set of plans with them will be considered cause for stoppage of the construction work from proceeding.

PERMITTED HOURS OF WORK

The Hoffman Estates Municipal Code restricts all construction activity within 500 yards of a residence to the period from 7:00 a.m. to 7:00 p.m. on weekdays and 8:00 a.m. to 6:00 p.m. on weekends and all construction activity greater than 500 yards of a residence to the period from 7:00 a.m. to 10:00 p.m. on weekdays and 8:00 a.m. to 10:00 p.m. on weekends.

PROJECT SCHEDULE

Prior to commencing construction operations, the Contractor shall meet with the Engineer for the purposes of a preconstruction meeting and present, in writing, his proposed construction schedule for reconstructing and resurfacing streets in accordance with article 108.02 of the Standard Specifications. Once approved, the Contractor must adhere to the schedule so that resident notification and field markings of all items of work may proceed in advance of actual construction.

Emergency vehicle access must be maintained at all times. Failure to comply will result in liquidated damages in the amount of $1,425 per calendar day.

ITEMS INCLUDED IN THE COST OF OTHER ITEMS

The Contractor’s attention is called to several specific work items as noted on the Contract Plans and Special Provisions and in addition to the lists in the Standard Specifications. Listed below is a listing of these items for general information only. The list is not intended to be all inclusive and, therefore, the Contractor is responsible to perform all work according to the Plans, Special Provisions and the Standard Specifications.

• The contractor shall maintain all drainage facilities during construction and shall repair any drainage facilities damaged during construction. Cost of this work shall be included in the cost of applicable pay items.

• Inlet filters shall be placed in all drainage structures within and/or adjacent to project limits before the start of any work at that location. Inlet filters shall remain in place and be kept free from debris to the satisfaction of the engineer until final restoration is complete. This work shall be paid for as INLET FILTERS.

• Whenever, during construction operations, any loose material is deposited in the flow line of drainage structures, ditches, gutters, etc. such that the natural flow of water is obstructed, the loose material will be removed at the close of each working day. This work shall be considered included in the cost of INLET FILTERS.

• Concrete curing materials shall be applied to all new concrete gutter flags, faces and tops of curbs, sidewalks, and driveway pavements in accordance with the requirements of Section 1022 of the Standard Specifications. The protective coat shall be a clear curing compound of similar specifications to W.R. Meadows Seal Tight 1130 clear, Chemmasters Safe-Cure Clear, or Dayton Superior Day-Chem Rez Cure (J-11-W). The contractor shall abide by the Manufacturer's specifications in the preparation and application of the membrane curing compound. This work will not be paid for separately but shall be included in the cost of the applicable pay items.

• Concrete washout shall be provided for all work locations at a location approved by the Engineer. The concrete washout shall follow plan details or approved equivalent. This work will not be paid for separately but shall be included in the cost of the applicable pay items.

• Saw cutting shall be performed at locations designated on the plans, or as directed by the engineer, and shall be considered included in the cost of applicable pay items. Cleaning and removal of any and all saw cut debris shall also be included.

• Pavement shall be saw cut 6" from the edge of the curb at all locations with Curb and Gutter Removal & Replacement, Special. This area shall be front-filled with Class SI Concrete. Cost of this work shall not be paid for separately but shall be included in the cost of applicable pay items.

• Temporary HMA ramps shall be provided and maintained in the roadway at all sidewalk ramp locations upon completion of sidewalk work, prior to completion of pavement surface course. The removal and maintenance of the ramps shall not be paid for separately but shall be included in the cost of the contract.

• It is the responsibility of the contractor to protect all pavement openings, open holes, equipment, and rubble. Open holes shall not be allowed during non-working hours. All open holes shall be backfilled or covered with steel plates at the end of each working day. The contractor shall maintain high visibility of all temporary hazards to pedestrians and motorists. This work will be considered included in the cost of the associated removal pay items.

• The contractor shall use all necessary precautions and protection measures required to maintain existing utilities, sewers, and appurtenances that must be kept in operation. In particular, the contractor will take adequate measures to prevent the undermining of utilities

and sewers which are still in service. It shall be the contractor's responsibility to protect excavation trenches during the installation of the sanitary sewer to include any shoring or dewatering equipment necessary. This work shall be considered included in the cost of the associated storm sewer pay items.

• The locations of public or private utilities shown on the plans are approximate and the village does not guarantee their accuracy. The contractor shall have the respective utility company field locate all their facilities prior to beginning construction. The contractor shall cooperate with all utility owners in accordance with Standard Specifications, if utility relocation, adjustment, or protection is necessary. The Village of Hoffman Estates cannot be held responsible and charged by the contractor for any time delays. The contractor shall also verify the depths of the existing utilities if necessary to verify that grade conflicts will not occur with any proposed construction. Any relocation or lowering of utilities shall be coordinated by the contractor. The cost of this exploration shall be included in the cost of associated pay items.

• Only precast concrete adjustment rings, maximum of 2 rings 12” in height, will be allowed in the adjustment or reconstruction of catch basin, manhole, inlet, and valve vault structures. Common bricks will not be allowed. The rings shall be included in the cost of the adjustment item.

• The contractor shall provide portable toilets at all active project locations. Cost of this work will not be paid for separately but shall be included in the cost of the contract.

APPLICATION FOR PAYMENT

A written application for payment for work completed shall be submitted to the Village by the Contractor not more than once monthly on a date specified by the Village. The Contractor must submit Partial Waivers of Lien from all subcontractors and suppliers for all materials and labor involved, in the amount of the sum total of the application for payment. When the request for final payment is made, Final Waivers of Lien shall be supplied by the Contractor, subcontractors and all firms which supplied materials or services under this Contract, agreeing that said Contract has been performed, constructed, finished and delivered to the Village free from all claims, liens or charges in the nature of mechanics' liens either in favor of the Contractor or any party, firm or corporation entitled to such lien. The Contractor shall furnish an affidavit stating that all Waivers submitted are the total amount of Waivers required to be submitted. No applications for payment shall be submitted by the Engineer to the Village unless the required Waivers are supplied. Waivers must be furnished by the Contractor to the Engineer at least five days prior to the application for payment submittal date. All contractors and subcontractors shall comply with all applicable state and federal laws including, but not limited to, the Illinois Prevailing Wage Act. Certified Payroll is required from the Contractor and from all subcontractors before payment is released. Failure of the Contractor to submit correct Waivers of Lien at the required time may cause a delay in payment. The issuance of payments for work performed shall in no way lessen the responsibilities of the Contractor.

RETAINAGE

Retainage will be held in the amount of ten percent (10%) of the completed work for the first 50 percent of the contract. After 50 percent or more of the work is completed, retainage will be held in the amount of 5 percent. After 75 percent or more of the work is completed, retainage will be held at 5 percent or lower, at the discretion of the Engineer. Retainage will be withheld until all work and punch list deficiencies are completed to the satisfaction of the Engineer.

ACCIDENT REPORTING

All accidents occurring on the job which damage public or private property, or result in injuries to worker or other persons, shall be promptly reported to the Engineer. Accidents involving utilities shall also be reported to the appropriate utility. This applies to all accidents, including, but not limited to, traffic accidents, broken pipelines, power and telephone facilities, and damage to adjacent properties.

GENERAL CONTRACTOR OR SUBCONTRACTOR HOLD HARMLESS AGREEMENT

The Contractor shall indemnify and hold harmless the Municipality, its agents, and its employees from and against all claims for personal injury or property damage, including claims against the Village, its agents, or servants, arising out of the Illinois Structural Work Act, and all losses and expenses, including attorney's fees that may be incurred by the Village, defending such claims, arising out of or resulting from the performance of the work and caused in whole or in part by any negligent act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by the party indemnified hereunder. In any and all claims against the Village or any of its agents, or servants by an employee of a Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation of benefits payable by or for the Contractor or subcontractor under Workers' Compensation Acts, Disability Acts, or their Employee Benefit Acts.

MATERIAL INSPECTION

All Hot-Mix Asphalt and P.C. Concrete materials used on this project shall be tested and inspected for compliance with the requirements of the IDOT Standard Specifications and the Project Procedure Guide. The Contractor shall contact the Engineer and Village's testing consultant 48-hours in advance of construction for inspection of all Hot-Mix Asphalt and PCC materials used on this project. The Contractor is to submit a Q/C plan for HMA and PCC materials to the Q/A Manager for approval prior to construction operations commencing. All Q/C reports shall be sent to the Village's Q/A Manager as well as to the Engineer.

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.

TRAFFIC CONTROL PLAN

Traffic Control shall be in accordance with the applicable sections of the Standard Specifications, the Supplemental Specifications, the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", any IDOT Highway Standards contained in the plans, the Traffic Specifications and the Special Provisions contained herein. Special attention is called to Article 107.09 of the Standard Specifications and the following IDOT Highway Standards, Details, and Special Provisions contained herein, relating to traffic control.

STANDARDS: 701006, 701501, 701601, 701901

DETAILS:

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

SPECIAL PROVISIONS:

Maintenance of Roadways
Traffic Control and Protection
Public Convenience and Safety (District 1)
Work Zone Traffic Control Surveillance (LRS 3)
Flaggers in Work Zones (LRS 4)

The contractor shall notify the Engineer at least 72 hours in advance of any change in traffic staging.

BASIS OF PAYMENT: All traffic control and protection will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION.

DECORATIVE CONCRETE MEDIAN (BRICK PATTERN), 6 INCH

This work shall be performed in accordance with applicable parties of Section 606 of the Standard Specifications, and as modified herein.

The work shall consist of construction of a 6 inch thick Portland Cement Concrete median on approved sub grade.

The concrete shall be finished by means of a stamped brick pattern. The concrete shall be integrally colored red at the concrete batch plant.

The contractor is required to receive approval of a show drawing for the stamped brick pattern and approval of the concrete mix design before work shall begin on this item.

This work shall be paid for at the Contract Unit Price per square foot for DECORATIVE CONCRETE MEDIAN (BRICK PATTERN), 6 INCH, which price shall include all labor, equipment, materials and incidentals necessary to complete this item described above.

CLASS D PATCH, SPECIAL

This work consists of removal and replacement of the existing pavement in accordance with the applicable portions of Section 442 of the Standard Specifications and as modified herein. An estimated quantity is included in these specifications; the Engineer in the field will determine actual limits of removal and replacement.

The Contractor shall saw cut a clean joint between the portion of pavement to be removed and that to be left in place. This is to prevent damage to the remaining surface when the pavement is broken out and the saw cutting shall be considered incidental to this pay item. The patching shall consist of removal and disposal of all pavement materials including, but not limited to, hot-mix asphalt, sub-base, and stone, to the specified depth. The area to be patched shall then be leveled and compacted. The patch shall be completed using the appropriate mix type as referenced on the Hot-Mix Asphalt Mixture Requirement chart.

This work shall be paid for at the Contract Unit Price per square yard for CLASS D PATCH, SPECIAL, 10 INCH which price shall include all labor, equipment, materials and incidentals required to complete the work described above.

ADJUST STORM SEWERS

The work shall consist of removal and replacement of existing storm sewer laterals within the trench of new sewer construction.

Contractor shall provide support for existing storm laterals within trenched areas to ensure that line and grade of storm laterals is maintained throughout construction and after backfill. If removal and replacement of storm laterals within the trench is necessary than replacement shall be completed utilizing like size and material and connected with concrete collar or non-shear coupling as approved by the Engineer.

This work shall be paid for at the Contract Unit Price per each for ADJUST STORM SEWERS which price shall include all labor, materials, equipment, and incidentals necessary to complete the work as described above.

SANITARY SEWER, PVC SDR 26, SPECIAL

This item consists of furnishing and installing sanitary sewer at locations shown on the plans or as directed by the Engineer. This work shall be done in accordance with the Village of Hoffman Estates Development Requirements and Standards Manual, Chapter 6 and the Standard Specifications for Water and Sewer Construction in Illinois, 6th Edition.

The sanitary sewer pipe material shall be thick-walled PVC pipe conforming to the requirements of ASTM D-2241, SDR 26, push-type joint. The pipe joints shall conform to ASTM D-3212 and F-477 for PVC pipe.

Trench backfill shall be installed in accordance with the trench cross-section detail, as shown in the plans. Trench backfill shall be paid for at the Contract Unit Price per Cubic Yard for TRENCH BACKFILL.

The connection to existing pipe shall be made with non-shear couplings, as approved by the Engineer. The cost of connection to existing shall not be paid for separately but shall be included in the cost of this pay item.

This work shall be paid for at the Contract Unit Price per foot for SANITARY SEWER, PVC SDR 26, (6", 8", 10", or 12"), SPECIAL which price shall include all labor, materials, equipment, and incidentals necessary to complete the work as described above.

SANITARY SEWER REMOVAL, SPECIAL

This work shall consist of the removal and off-site disposal of sanitary sewer as indicated on the Plans or otherwise directed by the Engineer. This work shall be done in accordance with the Village of Hoffman Estates Development Requirements and Standards Manual, Chapter 6.

Any necessary excavation required to remove the sanitary sewer shall be considered incidental. At locations where new sanitary sewer is not being installed, trench backfill will be paid for at the Contract Unit Price per Cubic Yard for TRENCH BACKFILL. All backfill material shall conform to trench cross-section details in the plans.

Where designated on the plans, the abandoned sanitary sewer line shall be removed to a location of two feet behind the back of curb. The abandoned sanitary sewer, as designated by the Engineer, shall be plugged at both ends with minimum 2 foot long non-shrink concrete/mortar plug to the satisfaction of the Engineer.

This work will be paid for at the Contract Unit Price per foot for SANITARY SEWER REMOVAL, (8" or 10"), SPECIAL which price shall include all labor, materials, equipment and incidentals as necessary to complete the work as directed above.

SEWER TESTING

The work shall consist of the completing required air and mandrel testing upon installation of the sewer.

Air Test

Immediately after backfilling the entire length of the sewer trench, including stubs, it shall be air tested. The procedure for air testing shall be the time pressure drop method as specified by the American Public Works Association. All testing shall be performed in the presence of the Engineering. Only one section or sections between manholes will be allowed for testing at a time.

Mandrel Test

All PVC sanitary sewers shall be deflection tested with a mandrel. All PVC sanitary sewers shall meet the following specifications:

The 5% deflection test for pipe sizes six (6) to fifteen (15) inches in diameter is to be run using a nine-arm mandrel having a diameter equal to 95% of the base diameter of the pipe as established in ASTM D-3034. For pipe sizes eighteen (18) to twenty-seven (27) inches diameter, the nine-arm mandrel size shall be 95% of the inside diameter and wall thickness dimensions shown in Table 1 of ASTM F-679, latest issue. The test shall be performed without mechanical pulling devices.

The individual lines shall be tested no sooner than 45 days after they have been installed.

Wherever possible and practical, the testing shall initiate at the downstream lines and proceed towards the upstream lines.

No pipe shall exceed a deflection of 5%.

Where deflection is found to be in excess of 5% of the original pipe diameter, the contractor shall excavate to the point of excess deflection and carefully compact around the point where excess deflection was found. The line shall then be retested for deflection. However, should after the initial testing the deflected pipe fail to return to the original size, (inside diameter) the line shall be replaced.

This work shall be paid for at the Contract Unit Price per lump sum for SEWER TESTING which price shall include all labor, materials, equipment, and incidentals necessary to complete the work as described above.

POST CONSTRUCTION TELEVISING

The work shall consist of the completing of post construction televising of all newly installed sanitary sewer. The televising shall be provided to the Engineer to review on an acceptable electronic format. Footage shall be catalogued from manhole to manhole.

This work shall be paid for at the Contract Unit Price per lump sum for POST CONSTRUCTION TELEVISING which price shall include all labor, materials, equipment, and incidentals necessary to complete the work as described above.

CONNECT TO EXISTING WET WELL

The work shall consist of the providing connection from the new sewer to the existing wet well per project plans and details.

The new 12" sewer shall connect to the existing wet well at the same invert and location as the exiting 10" sewer. The existing 10" pipe shall be removed, and a new core and boot installed per ASTM C-923. The existing sewer shall remain active through approved live sewer bypass methods.

This work shall be paid for at the Contract Unit Price per each for CONNECT TO EXISTING WET WELL which price shall include all labor, materials, equipment, and incidentals necessary to complete the work as described above.

LIVE SEWER BYPASS

The work shall consist of ensuring live sewer flow during construction of new sewer by means detailed on the plans and approved by the Engineer.

Live sewer bypass shall be provided to ensure that an estimated sewer flow of 500 gpm is maintained throughout construction. Temporary overnight connections shall be allowed so overnight pumping can be avoided. It is ultimately the contractor's responsibility and decision on how to maintain flow in the sewer during construction of the new line. The means of live sewer bypass need to be approved prior by the Engineer.

This work shall be paid for at the Contract Unit Price per lump sum for LIVE SEWER BYPASS which price shall include all labor, materials, equipment, and incidentals necessary to complete the work as described above.

MANHOLES

This work shall be done in accordance with Section 602 of the Standard Specifications. This work shall consist of constructing and installing manholes as shown on the Plans and as directed by the Engineer.

Disposal of all excavated materials, existing manhole and general cleanup shall be the responsibility of the Contractor. The work performed installing the manholes shall follow the details in the Plans. All trench backfill used for this work is considered incidental and will not be paid for separately.

The constructing and installing of manholes will be paid for at the Contract Unit Price per each for SANITARY MANHOLES, 4 FOOT DIAMETER, SPECIAL, which price shall include furnishing all

materials, labor, trench backfill and equipment necessary to complete the work as herein specified and for the satisfaction of the Engineer.

SANITARY DROP MANHOLES, SPECIAL

This work shall be done in accordance with Section 602 of the Standard Specifications. This work shall consist of constructing and installing sanitary drop manholes as shown on the Plans and as directed by the Engineer.

Manholes shall be constructed per the Manhole and Drop Connection details included in the plans.

Disposal of all excavated materials, existing manhole and general cleanup shall be the responsibility of the Contractor. The work performed installing the catch basins, manholes, and inlets shall follow the details in the Plans. All trench backfill used for this work is considered incidental and will not be paid for separately.

The constructing and installing of sanitary drop manholes will be paid for at the Contract Unit Price per each for SANITARY DROP MANHOLES, 4 FOOT DIAMETER, SPECIAL which price shall include furnishing all materials, labor, trench backfill and equipment necessary to complete the work as herein specified and for the satisfaction of the Engineer.

FRAMES AND GRATES

This work shall consist of replacing an existing frame and/or grate with a new frame and/or grate at the locations shown on the plans or as directed by the Engineer. The work shall be done in accordance with the applicable portions of Section 604 of the Standard Specifications.

For storm manholes, sanitary manholes, or water vaults the frame and closed lids shall be East Jordan 1050Z1 with Type A solid cover, Neenah R-1713, or approved equal, with embossed "Village of Hoffman Estates" and "Storm", "Sanitary", or "Water". The Contractor will be required to deliver all salvaged castings to the Village or use them elsewhere if indicated on the plans or directed by the Engineer.

This work shall be paid for at the Contract Unit Price per each for FRAMES AND LIDS, SANITARY, TYPE 1, CLOSED LID, SPECIAL, which price shall include all labor, equipment, materials and incidentals required to complete the work as described above.

ABANDONING MANHOLES, SPECIAL

The work shall consist of the plugging of abandoned sanitary sewers and abandonment of manholes as shown on the plans and as directed by the Engineer.

No abandonment shall occur prior to all proposed sewer being active. Prior to filling manhole all existing pipe connections shall be abandoned with a minimum two foot long non-shrink concrete or mortar plug.

The existing frame & lid, adjusting rings, and other portion of the structure within one foot of the proposed finished grade shall be removed. The manhole shall be filled with fine aggregate in accordance with Article 1003.04 to six inches below finished grade. The trench backfill shall be properly consolidated to avoid settlement. Trench backfill shall not be paid for separately and shall be included in the cost of the item.

All labor, equipment, and materials shall not be paid for separately but shall be considered included in the price of this item. This work shall be paid for at the Contract Unit Price per each ABANDONING MANHOLES, SPECIAL.

COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT SPECIAL

This work shall be done in accordance with Section 606 and Section 440 of the Standard Specifications, applicable project Special Provisions, and as modified herein. This work shall consist of the removal and satisfactory disposal of the **partial** existing curb and gutter at the locations shown on the plans as directed by the Engineer. The work shall consist of constructing **partial** combination curb and gutter of the type specified at the locations shown on the plans or as directed by the Engineer.

The Contractor shall saw cut six (6) inches from the curb edge into the existing pavement at all removal locations or as directed by the Engineer. The Contractor shall front fill this area with concrete at least one inch below the front edge of the curb and gutter. The concrete front filling must be a separate pour from the curb and gutter. No extra compensation shall be allowed for the additional excavation in width of the existing pavement or in the thickness of the pavement, saw cutting, and front filling of concrete.

The proposed combination concrete curb and gutter shall be B6.12 or M3.12 as shown in the curb detail in the plans. New curb and gutter or curb shall have a gutter thickness equal to the pavement thickness at all locations. The Engineer must approve forming methods for pouring the curb and gutter.

Opposite each water shutoff box a “W” two (2) inches high shall be pressed into the concrete.

Backfilling of excavated or disturbed areas behind the new curb and gutter shall be done within 10 calendar days of placement of the curb and gutter, but not before 3 calendar days. Backfill material shall consist of approved clay, sand, or topsoil placed in compacted layers until a minimum of 6-inches in depth remains from the top of the curb and gutter. Compaction of this

material is essential and must be done in a proper manner by the contractor. This work shall not be paid for separately, but shall be considered incidental to the contract.

The construction shall include the placement of three (3) inches of aggregate material meeting the requirements of AGGREGATE SUBGRADE IMPROVEMENT, prior to the placement of the curb and gutter. The base shall be compacted to the satisfaction of the Engineer. The sub grade shall be tamped or rolled until thoroughly compacted before the aggregate materials are placed. This work shall not be paid for separately, but shall be incidental to the Contract Unit Price for this pay item.

This work shall be paid for at the Contract Unit Price per foot for COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT, SPECIAL which price shall include all labor, equipment, materials, and incidentals to complete the work described above.

TRAFFIC CONTROL AND PROTECTION

Traffic Control and Protection shall be provided as called for in the plans, details, Special Provisions, Highway Standards, applicable sections of the Standard Specifications, or as directed by the Engineer. The work shall be performed in accordance applicable portions of Section 701 of the Standard Specifications.

This work shall be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION which price shall include all labor, materials, transportation, handling, and incidentals necessary to furnish, install, maintain, replace, relocate, and remove all traffic control devices indicated in the plans and specifications.

REMOVE AND RESET SIGN

This work shall be done in accordance with Section 720, 723, 724, and 729 of the Standard Specifications and as modified herein. This work shall consist of removing existing sign assemblies and reinstalling at locations shown on the plans or as designated by the engineer.

Any damaged sign panels or posts shall be replaced, with similar or better materials, to the satisfaction of the Engineer, at the contractor's expense.

This work shall be paid for at the Contract Unit Price per each for REMOVE AND RESET SIGN, which price shall include all labor, equipment, materials and incidentals required to complete the work as described above.

STATUS OF UTILITIES (D1)
Effective: June 1, 2016
Revised: January 1, 2020

Utility companies and/or municipal owners located within the construction limits of this project have provided the following information regarding their facilities and the proposed improvements. The tables below contain a description of specific conflicts to be resolved and/or facilities which will require some action on the part of the Department's contractor to proceed with work. Each table entry includes an identification of the action necessary and, if applicable, the estimated duration required for the resolution.

UTILITIES TO BE ADJUSTED

No conflicts to be resolved

UTILITIES TO BE WATCHED AND PROTECTED

Village of Hoffman Estates – Storm Sewer
Village of Hoffman Estates – Water Main

Wide Open West (WOW) – Buried Fiber
AT&T – Buried Fiber
Com Ed – Underground Electric
Comcast – Buried Fiber
Nicor - Gas

DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (~~BDE~~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.~~After the casting has been adjusted and Class SI concrete has been placed, the work shall be protected by a barricade and two lights for at least 72 hours.~~

When castings are under traffic before the final surfacing operation has been started, properly sized temporary ramps shall be placed around the drainage and/or utility castings according to the following methods.

(a) Temporary Asphalt Ramps. Temporary hot-mix asphalt ramps shall be placed around the casting, flush with its surface and decreasing to a featheredge in a distance of 2 ft (600 mm) around the entire surface of the casting.

(b) Temporary Rubber Ramps. Temporary rubber ramps shall only be used on roadways with permanent posted speeds of 40 mph or less and when the height of the casting to be protected meets the proper sizing requirements for the rubber ramps as shown below.

HOT-MIX ASPHALT BINDER AND SURFACE COURSE (D-1)
Effective: November 1, 2019 Revised: February 1, 2020

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

Materials. Revise Article 1004.03(c) to read:

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

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

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

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

3/ The specified coarse aggregate gradations may be blended.

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

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

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

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

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

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

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

Item	Article/Section
(a) Coarse Aggregate	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 a SBS PG 76-22 for IL-4.75, except where modified herein. The elastic recovery shall be a minimum of 80.

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

Note 4. Warm mix additives or foaming processes shall be selected from the Department's Qualified Producer List, "Technologies for the Production of Warm Mix Asphalt (WMA)"."

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

High ESAL, MIXTURE COMPOSITION (% PASSING) [1/]										
Sieve Size	IL-19.0 mm		SMA 12.5		SMA 9.5		IL-9.5mm		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 [4/]	16	32 [4/]	34 [5/]	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/]
#635 (20 µm)			≤ 3.0		≤ 3.0					
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0

1/ Based on percent of total aggregate weight.

2/ The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with Ndesign = 90.

3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.

4/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above the percentage stated on the table.

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

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

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

VOLUMETRIC REQUIREMENTS High ESAL				
	Voids in the Mineral Aggregate (VMA), % minimum			Voids Filled with Asphalt Binder (VFA), %
Ndesign	IL-19.0; Stabilized Subbase IL- 19.0	IL-9.5	IL-4.75[1/]	
50	13.5	15.0	18.5	65 – 78 [2/]
70				65 - 75
90				

1/ Maximum draindown for IL-4.75 shall be 0.3 percent.

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

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

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

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

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

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

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

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

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

a. Confined Edge. Each confined edge density shall be represented by a one-minute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.

b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced 10 ft (3 m) apart longitudinally along the unconfined pavement edge and centered at the random density test location.

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

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

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

1/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge.

2/ 92.0 % when placed as first lift on an unimproved subgrade."

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

"(h) Oscillatory Roller. The oscillatory roller shall be self-propelled and provide a smooth operation when starting, stopping, or reversing directions. The oscillatory roller shall be able to operate in a mode that will provide tangential impact force with or without vertical impact force by using at least one drum. The oscillatory roller shall be equipped with water tanks and sprinkling devices, or other approved methods, which shall be used to wet the drums to prevent material pickup. The drum(s) amplitude and frequency of the tangential and vertical impact force shall be approximately the same in each direction and meet the following requirements:

(1) The minimum diameter of the drum(s) shall be 42 in. (1070 mm);

(2) The minimum length of the drum(s) shall be 57 in. (1480 mm);

(3) The minimum unit static force on the drum(s) shall be 125 lb/in. (22 N/m); and

(4) The minimum force on the oscillatory drum shall be 18,000 lb (80 kN)."

Construction Requirements.

Add the following to Article 406.03 of the Standard Specifications:

"(j) Oscillatory Roller .....1101.01"

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

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

Revise Article 406.05(c) to read.

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

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

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

Revise Article 406.06(d) to read:

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

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

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

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

"TABLE 1 - MINIMUM ROLLER REQUIREMENTS FOR HMA				
	Breakdown Roller (one of the following)	Intermediate Roller	Final Roller (one or more of the following)	Density Requirement
Binder and Surface [1/]	V_D, P [3/], T_B, 3W, O_T, O_B	P [3/], O_T, O_B	V_S, T_B, T_F, O_T	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).
IL-4.75 and SMA [4/ 5/]	T_B, 3W, O_T	- -	T_F, 3W, O_T	
Bridge Decks [2/]	T_B	- -	T_F	As specified in Articles 582.05 and 582.06.

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

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

"O_T - Oscillatory roller, tangential impact mode. Maximum speed is 3.0 mph (4.8 km/h) or 264 ft/min (80 m/min).

O_B - Oscillatory roller, tangential and vertical impact mode, operated at a speed to produce not less than 10 vertical impacts/ft (30 impacts/m)."

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

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

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

(a.) Sufficient collected dust (baghouse) is available for production of the SMA mix for the entire project.

(b.) A mix design was prepared based on collected dust (baghouse).

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

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

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

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

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 at the beginning of each construction year according to the Manual of Test Procedures for Materials "Hot Mix Asphalt Test Strip Procedures". At the request of the Producer, the Engineer may waive the test strip if previous construction during the current construction year has demonstrated the constructability of the mix using Department test results."

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

"The Hamburg Wheel test shall also be conducted on all HMA mixtures from a sample taken within the first 500 tons (450 metric tons) on the first day of production or during start up with a split reserved for the Department. The mix sample shall be tested according to the Illinois Modified AASHTO T 324 and shall meet the requirements specified herein. Mix production shall not exceed 1500 tons (1350 metric tons) or one day's production, whichever comes first, until the testing is completed and the mixture is found to be in conformance. The requirement to cease mix production may be waived if the plant produced mixture demonstrates conformance prior to start of mix production for a contract.
If the mixture fails to meet the Hamburg Wheel criteria, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria"

Method of Measurement:

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

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

Basis of Payment. Replace the second through the fifth paragraphs of Article 406.14 with the following:

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

PUBLIC CONVENIENCE AND SAFETY (DIST 1)
Effective: May 1, 2012
Revised: July 15, 2012

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

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

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

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

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

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

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 Hoffman Estates

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

BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE)

Effective: November 2, 2006
Revised: August 1, 2017

Description. Bituminous material cost adjustments will be made to provide additional compensation to the Contractor, or credit to the Department, for fluctuations in the cost of bituminous materials when optioned by the Contractor. The bidder shall indicate with their bid whether or not this special provision will be part of the contract.

The adjustments shall apply to permanent and temporary hot-mix asphalt (HMA) mixtures, bituminous surface treatments (cover and seal coats), and preventative maintenance type surface treatments that are part of the original proposed construction, or added as extra work and paid for by agreed unit prices. The adjustments shall not apply to bituminous prime coats, tack coats, crack filling/sealing, joint filling/sealing, or extra work paid for at a lump sum price or by force account.

Method of Adjustment. Bituminous materials cost adjustments will be computed as follows.

$CA = (BPI_P - BPI_L) \times (\%AC_V / 100) \times Q$

Where: CA = Cost Adjustment, $.
BPI_P = Bituminous Price Index, as published by the Department for the month the work is performed, $/ton ($/metric ton).
BPI_L = Bituminous Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price, $/ton ($/metric ton).
$\%AC_V$ = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the % AC_V will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC_V and undiluted emulsified asphalt will be considered to be 65% AC_V.
Q = Authorized construction Quantity, tons (metric tons) (see below).

For HMA mixtures measured in square yards: Q, tons = A x D x (G_{mb} x 46.8) / 2000. For HMA mixtures measured in square meters: Q, metric tons = A x D x (G_{mb} x 1) / 1000. When computing adjustments for full-depth HMA pavement, separate calculations will be made for the binder and surface courses to account for their different G_{mb} and % AC_V.

For bituminous materials measured in gallons: Q, tons = V x 8.33 lb/gal x SG / 2000
For bituminous materials measured in liters: Q, metric tons = V x 1.0 kg/L x SG / 1000

Where: A = Area of the HMA mixture, sq yd (sq m).
D = Depth of the HMA mixture, in. (mm).
G_{mb} = Average bulk specific gravity of the mixture, from the approved mix design.

V = Volume of the bituminous material, gal (L).
SG = Specific Gravity of bituminous material as shown on the bill of lading.

Basis of Payment. Bituminous materials cost adjustments may be positive or negative but will only be made when there is a difference between the BPI_L and BPI_P in excess of five percent, as calculated by:

Percent Difference = $\{(BPI_L - BPI_P) \div BPI_L\} \times 100$

Bituminous materials cost adjustments will be calculated for each calendar month in which applicable bituminous material is placed; and will be paid or deducted when all other contract requirements for the work placed during the month are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

80173

COMPENSABLE DELAY COSTS (BDE)

Effective: June 2, 2017
Revised: April 1, 2019

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

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

(1) Minor Delay. A minor delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two hours, but not to exceed two weeks.

(2) Major Delay. A major delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two weeks.

(3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the rate of production on the work in conflict with the utility in an unanticipated location decreases by more than 25 percent and lasts longer than seven calendar days."

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

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

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

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

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

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to two weeks plus the cost of move-out to either the

Contractor's yard or another job and the cost to re-mobilize, whichever is less. Rental equipment may be paid for longer than two weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.

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

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

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

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

(1) When adverse weather prevents work on the controlling item.

(2) When job conditions due to recent weather prevent work on the controlling item.

(3) When conduct or lack of conduct by the Department or its consultants, representatives, officers, agents, or employees; delay by the Department in making the site available; or delay in furnishing any items required to be furnished to the Contractor by the Department prevents work on the controlling item.

(4) When delays caused by utility or railroad adjustments prevent work on the controlling item.

(5) When strikes, lock-outs, extraordinary delays in transportation, or inability to procure critical materials prevent work on the controlling item, as long as these delays are not due to any fault of the Contractor.

(6) When any condition over which the Contractor has no control prevents work on the controlling item."

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

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

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

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

Add the following to Section 109 of the Standard Specifications.

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

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

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

(a) Escalated Material and/or Labor Costs. When the delay causes work, which would have otherwise been completed, to be done after material and/or labor costs have increased, such increases will be paid. Payment for escalated material costs will be limited to the increased costs substantiated by documentation furnished by the Contractor. Payment for escalated labor costs will be limited to those items in Article 109.04(b)(1) and (2), except the 35 percent and 10 percent additives will not be permitted.

(b) Extended Project Overhead. For the duration of the delay, payment for extended project overhead will be paid as follows.

(1) Direct Jobsite and Offsite Overhead. Payment for documented direct jobsite overhead and documented direct offsite overhead, including onsite supervisory and administrative personnel, will be allowed according to the following table.

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

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

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

(c) Extended Traffic Control. Traffic control required for an extended period of time due to the delay will be paid for according to Article 109.04.

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

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

80384

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

HOT-MIX ASPHALT – PATCHING (BDE)

Effective: April 1, 2022

Replace Article 442.08(b) of the Standard Specifications with the following:

"(b) Density. The density of the compacted HMA shall be according to Articles 1030.06, 1030.09(b), 1030.09(c), and 1030.09(f)."

80444

PORTLAND CEMENT CONCRETE – HAUL TIME (BDE)

Effective: July 1, 2020

Revise Article 1020.11(a)(7) of the Standard Specifications to read:

"(7) Haul Time. Haul time shall begin when the delivery ticket is stamped. The delivery ticket shall be stamped no later than five minutes after the addition of the mixing water to the cement, or after the addition of the cement to the aggregate when the combined aggregates contain free moisture in excess of two percent by weight (mass). If more than one batch is required for charging a truck using a stationary mixer, the time of haul shall start with mixing of the first batch. Haul time shall end when the truck is emptied for incorporation of the concrete into the work. The maximum haul time shall be as follows.

Concrete Temperature at Point of Discharge, °F (°C)	Maximum Haul Time 1/ (minutes)	
	Truck Mixer or Truck Agitator	Nonagitator Truck
50 - 64 (10 - 17.5)	90	45
> 64 (> 17.5) - without retarder	60	30
> 64 (> 17.5) - with retarder	90	45

1/ To encourage start-up testing for mix adjustments at the plant, the first two trucks will be allowed an additional 15 minutes haul time whenever such testing is performed.

For a mixture which is not mixed on the jobsite, a delivery ticket shall be required for each load. The following information shall be recorded on each delivery ticket: (1) ticket number; (2) name of producer and plant location; (3) contract number; (4) name of Contractor; (5) stamped date and time batched; (6) truck number; (7) quantity batched; (8) amount of admixture(s) in the batch; (9) amount of water in the batch; and (10) Department mix design number.

For concrete mixed in jobsite stationary mixers, the above delivery ticket may be waived, but a method of verifying the haul time shall be established to the satisfaction of the Engineer."

80430

VEHICLE AND EQUIPMENT WARNING LIGHTS (BDE)

Effective: November 1, 2021

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

"The Contractor shall equip all vehicles and equipment with high-intensity oscillating, rotating, or flashing, amber or amber-and-white, warning lights which are visible from all directions. The lights shall be in operation while the vehicle or equipment is engaged in construction operations."

80439

WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: March 2, 2020

Add the following to Article 701.03 of the Standard Specifications:

"(q) Temporary Sign Supports .....1106.02"

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

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

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

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

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

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

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, plastic drums, and delineators, with no attachments (e.g. lights). Category 1 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 1 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2024.

Category 2 includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. These include vertical panels with lights, barricades, temporary sign supports, and Category 1 devices with attachments (e.g. drums with lights). Category 2 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 2 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2024.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions (impact

attenuators), truck mounted attenuators, and other devices not meeting the definitions of Category 1 or 2. Category 3 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 3 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2029. Category 3 devices shall be crash tested for Test Level 3 or the test level specified.

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

For each type of device, when no more than one MASH-16 compliant is available, an NCHRP 350 or MASH-2009 compliant device may be used, even if manufactured after December 31, 2019."

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

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

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

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

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

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

80427

Geotechnical Engineering Report

Microsoft CHI05 – Offsite Sanitary Upgrades
Hoffman Estates, Illinois
December 3, 2021
Terracon Project No. MR215137

Prepared for:
Syska Hennessy Group
Chicago, Illinois

Prepared by:
Terracon Consultants, Inc.
Glendale Heights, Illinois

December 3, 2021

Syska Hennessy Group
330 N. Wabash Avenue, Suite 1505
Chicago, Illinois 60611

Attn: Mr. Andrew Krebs, P.E. LEED AP
P: (312) 588-3567
E: akrebs@syska.com

Re: Geotechnical Engineering Report
Microsoft CHI05 – Offsite Sanitary Upgrades
Lakewood and N. Eagle Way
Hoffman Estates, Illinois
Terracon Project No. MR215137

Dear Mr. Kerbs:

We have completed our geotechnical engineering evaluation for the above referenced project. This study was performed in general accordance with Terracon Proposal No. PMR215137 dated July 28, 2021. This report presents the findings of the subsurface exploration and provides geotechnical recommendations concerning the design and construction of proposed sanitary sewer for the proposed project.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further service, please contact us.

Sincerely,
Terracon Consultants, Inc.

Daniel B. Mabirizi, E.I.T.
Senior Staff Engineer

Tony A. Kiefer, P.E.
Senior Engineering Consultant

REPORT TOPICS

Note: **Orange Bold** text in the report indicates a referenced section heading. The PDF version also includes hyperlinks which direct the reader to that section and clicking on the ***GeoReport*** logo will bring you back to this page.

ATTACHMENTS

Note: Refer to each individual Attachment for a listing of contents.

Geotechnical Engineering Report

Microsoft CHI05 – Offsite Sanitary Upgrades
Lakewood and N. Eagle Way
Hoffman Estates, Illinois

Terracon Project No. MR215137
December 3, 2021

INTRODUCTION

This report presents the results of our subsurface exploration and geotechnical engineering services performed for the proposed sanitary sewer to be located along Eagle Way and Central Avenue in Hoffman Estates, Illinois. The purpose of these services is to provide information and geotechnical engineering recommendations relative to:

- Subsurface soil conditions
- Groundwater conditions
- Excavation considerations
- Groundwater control
- Pipe bedding and backfill

The geotechnical engineering Scope of Services for this project included the advancement of 14 test borings to depths ranging from approximately 25 to 30 feet below existing ground surface.

Maps showing the site and boring locations are shown in the **Site Location** and **Exploration Plan** sections, respectively. The results of the laboratory testing performed on soil samples obtained from the site during the field exploration are included on the boring logs in the **Exploration Results** section.

SITE CONDITIONS

The following description of site conditions is derived from our site visit in association with the field exploration.

Item	Description
Parcel Information	The project alignment begins from the intersection of Lakewood and N. Eagle Way and extends approximately 2,900 linear feet south along Eagle Way to W. Central Avenue and then continues about 1,400 linear feet east along Central Avenue to W. ATT Central Drive in Hoffman Estates, Illinois. See **Site Location**

Item	Description
Existing Improvements	n Underground utilities such as 10-inch sanitary sewer line, waterline, and communication line. n Sidewalks, and asphalt roadways with curb-and-gutter and roadside ditch.
Current Ground Cover	Grass and asphalt pavement
Existing Topography	Sloping from north to south of project alignment. Surface elevations range from about EL. 833 to 791 feet.

PROJECT DESCRIPTION

Our understanding of the project is as follows:

Item	Description
Project Description	Construction of approximately 4,300 linear feet of 12-inch diameter sanitary sewer with invert depths ranging from 8 to 22 feet below grade.

GEOTECHNICAL CHARACTERIZATION

We have developed a general characterization of the subsurface conditions based upon our review of the subsurface exploration, laboratory data, geologic setting and our understanding of the project. This characterization, termed GeoModel, forms the basis of our geotechnical evaluation. Conditions encountered at each boring location are indicated on the individual logs. The individual logs and GeoModel can be found in the **Exploration Results** section of this report. Stratification boundaries on the boring logs represent the approximate location of changes in soil types, the transition between materials may be gradual.

Subsurface Profile

As part of our analyses, we identified the following model layers within the subsurface profile. For a more detailed view of the model layer depths at each boring location, refer to the GeoModel.

Based on the borings, differing soil and groundwater conditions were encountered along Eagle Way (Borings B-1 to B-10) versus Central Road (Borings B-11 to B-14). Along Eagle Way, the soils to the maximum excavation depth were predominantly clayey with little free water. The only exception to this was Boring B-6 where a wet sand layer was found from about 10 to 18 feet below grade. Along Central Road, soil conditions were more variable with deeper fill and shallow sand soils encountered. The fill and shallow sand contained shallow perched water.

Model Layer	Layer Name	General Description
1	Surficial Topsoil or Pavement	Topsoil; about 6 to 18 inches Asphalt Pavement; about 10.5 to 12 inches
2	Fill Soils	Lean Clay, Sandy Lean Clay, and Clayey Silt; trace sand and gravel
3	Native Clays	Lean Clay and Silty Clay; trace sand and gravel, medium stiff to hard
4	Sands	Sand and Gravel and Poorly Graded Sand; with gravel, wet, medium dense to dense

Groundwater Conditions

The boreholes were observed while drilling and after completion for the presence and level of groundwater. The water levels observed in the boreholes can be found on the boring logs in **Exploration Results** and are summarized below.

Boring No.	Approximate Depth to Groundwater while Drilling (feet) [1]	Approximate Depth to Groundwater after Drilling (feet) [1]	Pipe Invert Depth below Ground Surface (feet) [1]
B-1	9	20	12.7
B-2	Not encountered	Not encountered	19.5
B-3	Not encountered	Not encountered	22.1
B-4	Not encountered	Not encountered	20.5
B-5	Not encountered	Not encountered	18.8
B-6	9	10	18.1
B-7	Not encountered	Not encountered	16
B-8	Not encountered	Not encountered	12.3
B-9	24	24	9.3
B-10	3	20	12.4
B-11	3	18.5	10.5
B-12	5	23.5	7.5
B-13	3	21	9
B-14	3.5	23.5	11.2

1. Below ground surface at the time of our field program.

In Borings B-1 to B-9 along Eagle Way, relatively little free water was encountered within predominantly clay soils. Based on soil color it appears the long-term water level was 10 to 13 feet below grade. Along Central Road, the ground elevation was significantly lower than long Eagle Way and shallow perched water was found at a typical depth of 3 feet while drilling within the fill soils overlying mostly sand soils. However, after drilling the water levels were typically measured to be below 15 feet.

Groundwater level fluctuations occur due to seasonal variations in the amount of rainfall, runoff and other factors not evident at the time the borings were performed. Therefore, groundwater levels during construction or at other times in the life of the structure may be different than the levels indicated on the boring logs. The possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

GROUNDWATER CONTROL

Based on the groundwater conditions observed during our field program, relatively little groundwater is expected to be encountered within the clay soils along Eagle Way even though excavation depth will be up to 22 feet. Thus, open excavation or trench boxes along with sump pits and pumps should suffice for dewatering. The one exception to this was Boring B-6 where a saturated sand layer was encountered from 10 to 18 feet below grade. At this location steel sheeting driven into the underlying clay may be needed to provide a groundwater cutoff. Alternatively, deeper wells or a well point system could be needed to allow the excavation more than 8 feet below the water level in sand.

Along Central Road where the excavation depth is up to 12 feet in depth, shallow perched water is expected at a depth of 3 feet. However, ordinary sump pit and pumps are likely sufficient to control this ground water since the water levels after drilling in the deeper sand layers were measured to be below 15 feet and would be expected below the level of the excavations. Trench boxes or open excavations are likely sufficient along Central Road.

The contractor is responsible for designing, implementing, and maintaining temporary dewatering measures to control water seepage and facilitate construction. Water seepage that may occur in the excavations can possibly be managed by sump pits and pumps depending on the groundwater conditions at the time of construction. The number of sumps should be determined by the contractor and will depend on the amount of water entering the excavations. The pumps should be adequately filtered to prevent pumping of fines. Where excavation occur below the water table level in sands, deeper wells or well points may be needed to dewater to a depth of at least 2 feet below the excavation level.

Dewatering of sand soils might cause subsidence or compression of adjacent soils and adjacent structures, in spite of safeguards and methodology selected and used. For this reason, the dewatering operations should be accomplished in a manner that will preserve the strength of the

soils, will not cause instability of the excavation, and will not result in damage to existing structures.

As stated previously, the groundwater levels will fluctuate with seasonal and climatic changes and should be evaluated prior to construction. To further evaluate the groundwater conditions at the time of construction, piezometers may be installed just prior to construction. As an alternative, test pits may be excavated to the planned excavation depth. Based on the results, the contractor should determine positive methods of groundwater management prior to starting excavation operations.

TRENCH EXCAVATIONS

Based on the plan and profile drawings provided to us, the sanitary sewer line is planned to be installed at depths generally ranging from 8 to 22 feet using open excavation methods. In addition, they are nearby existing underground utilities and roadways near the sewer alignment.

For vertical cut excavations greater than 5 feet in depth, excavations will require the use of a trench box or shoring and bracing to prevent sloughing and caving of the soil into the excavation. At the location near B-6, interlocking steel sheeting may be needed to provide a groundwater cut-off. The contractor should use a trench box, shoring or sheeting and bracing as necessary to maintain a safe and clean excavation which meets Occupational Safety and Health Administration (OSHA) requirements.

As a minimum, excavations should be performed in accordance with OSHA 29 CFR, Part 1926, Subpart P, “Excavations” and its appendices, and in accordance with any applicable local, and/or state regulations. The contractor is responsible for designing and constructing stable, temporary excavations and should shore, slope or bench the sides of the excavations as required, to maintain stability of both the excavation sides and bottom. All excavations should comply with applicable local, state and federal safety regulations, including the current OSHA Excavation and Trench Safety Standards.

Excavations should be performed with equipment capable of providing a relatively clean bearing area. Excavating equipment should not disturb the soil beneath the design excavation bottom and should not leave large amounts of loose soil in the excavation. The excavation bottom should be properly sloped to allow any water infiltrating into the excavation to be collected at a convenient location along the edge of the excavation. Water should not be allowed to stand within the bearing area. The bearing surface should be protected against disturbance and deterioration by completing the utility construction, installation, and backfilling operations as quickly as possible. The length of open trench should be held to a minimum. Due to anticipated perched groundwater conditions and the planned excavation depths, the site soils could be susceptible to slope failure, even with relatively flat slopes, and this should be considered during construction.

PIPE BEDDING AND BACKFILL

It may be necessary to place a layer of clean crushed stone over the base of the trench excavation to provide a uniform support of the sewer line and prevent disturbance to the bearing subgrade. The pipe should be carefully bedded in accordance with the pipe manufacturer's recommendations or the requirements of the agency with jurisdiction (whichever is more stringent) in order to provide uniform support.

Pipe placed on unstable or disturbed subgrades can result in settlement and distress to the pipe. Care should be taken so that the subgrade at the base of the excavations is not disturbed during construction. If loosening or disturbance of subgrade soils occurs, the affected soils should be recompacted in-place or over-excavated and properly replaced and compacted. Aggregate material such as IDOT CA-6 crushed stone or that indicated in the standard specifications for sewer and water construction of the local jurisdiction authority, could be used as replacement material below standard bedding material.

Soft soils were encountered in Boring B-13 in the upper 13 feet. If excavation for the pipe extends into these softer zones, there is a potential for overexcavation to be required below the pipe bedding material to remove a portion of the soft soils. If overexcavations are performed, we recommend the use of clean IDOT CA-6 crushed stone material as backfill below the standard pipe bedding material. Alternatively, if conditions are wet, an open-graded bridging layer like IDOT graded CA-7 could be used. An appropriately selected geotextile could also be considered below the crushed stone to provide filtering characteristics and increase the stability of the excavation base.

In accordance with Standard Specification for Water and Sewer Main Construction in Illinois, the pipe should be bedded with a minimum of 4 inches of select granular fill and this select fill should be placed around the pipe and to within one foot above the top of the pipe. IDOT graded CA-6 or CA-7 gravel are typically specified, though other sand and gravel gradations are also acceptable.

Trench backfill materials should be free of organic matter and debris and consist of material meeting the requirements of the Agency with jurisdiction. The backfill may consist of the excavated, in-situ soils. To prevent damage to the pipe, caution should be exercised while compacting fill lifts immediately above and around the pipe. The backfill should be prepared in accordance with the recommendations presented the **Subgrade Preparation** section of this report to achieve compaction and develop a stable fill section.

SUBGRADE PREPARATION

The following sections provide recommendations material and type and compaction requirements for engineered fill materials.

Fill Material Types

Earthen materials used for engineered fill should meet the following material property requirements:

Soil Type [1, 2]	USCS Classification	Acceptable Location for Placement
Cohesive	CL, CL-ML (LL ≤ 45 and PI ≤ 23)	General backfill more than 1 foot above the pipe
Granular	GW, GP, GM, , SW, SP, SM, IDOT gradations CA-6, CA-7, CA-11, FA-5, FA-6	Select fill below, adjacent and 1 foot above pipe

1. Engineered fill soils should consist of approved materials free of organic matter and debris. Frozen material should not be used, and fill should not be placed on a frozen subgrade. A sample of each material type should be submitted to the Geotechnical Engineer for evaluation prior to use on this site.
2. Any organic material, rock fragments larger than 3 inches, and other unsuitable material should be removed prior to use of these soils as fill.

Fill Compaction Requirements

Engineered fill should meet the following compaction requirements.

Item	Description
Maximum Lift Thickness	9 inches or less in loose thickness when heavy, self-propelled compaction equipment is used 4 to 6 inches in loose thickness when hand-guided equipment (i.e. jumping jack or plate compactor) is used
Minimum Compaction Requirements [1, 2, 3]	90% of modified Proctor (ASTM D1557) maximum dry density in non-pavement areas. 95% of modified Proctor (ASTM D1557) maximum dry density within 2 feet of surface pavement.
Water Content Range [1]	Cohesive: -2% to +3% of modified Proctor optimum moisture content (ASTM D1557) at the time of placement and compaction. Granular: As required to achieve minimum compaction requirements.

Item	Description
1.	We recommend that engineered fill be tested for moisture content and compaction during placement. If the results of the in-place density tests indicate the specified moisture or compaction limits have not been met, the area represented by the test should be reworked and retested as required until the specified moisture and compaction requirements are achieved.
2.	If the granular material is a coarse sand or gravel, is of uniform size, or has a low fines content, compaction comparison to relative density (ASTM D4253 and D4254) may be more appropriate. In this case, granular materials should be compacted to at least 70% relative density (ASTM D4253 and D4254.
3.	Moisture levels should be maintained to achieve compaction without bulking during placement or pumping when proof-rolled.

GENERAL COMMENTS

Our analysis and opinions are based upon our understanding of the project, the geotechnical conditions in the area, and the data obtained from our site exploration. Natural variations will occur between exploration point locations or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction. Terracon should be retained as the Geotechnical Engineer, where noted in this report, to provide observation and testing services during pertinent construction phases. If variations appear, we can provide further evaluation and supplemental recommendations. If variations are noted in the absence of our observation and testing services on-site, we should be immediately notified so that we can provide evaluation and supplemental recommendations.

Our Scope of Services does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

Our services and any correspondence or collaboration through the ***GeoReport*** system are intended for the sole benefit and exclusive use of our client for specific application to the project discussed and are accomplished in accordance with generally accepted geotechnical engineering practices with no third-party beneficiaries intended. Any third-party access to services or correspondence is solely for information purposes to support the services provided by Terracon to our client. Reliance upon the services and any work product is limited to our client, and is not intended for third parties. Any use or reliance of the provided information by third parties is done solely at their own risk. No warranties, either express or implied, are intended or made.

Site characteristics as provided are for design purposes and not to estimate excavation cost. Any use of our report in that regard is done at the sole risk of the excavating cost estimator as there may be variations on the site that are not apparent in the data that could significantly impact excavation cost. Any parties charged with estimating excavation costs should seek their own site characterization for specific purposes to obtain the specific level of detail necessary for costing.

Site safety, cost estimating, excavation support, and dewatering requirements/design are the responsibility of others. If changes in the nature, design, or location of the project are planned, our conclusions and recommendations shall not be considered valid unless we review the changes and either verify or modify our conclusions in writing.

ATTACHMENTS

EXPLORATION AND TESTING PROCEDURES

Field Exploration

Boring No.	Boring Depth (feet)	Location
B-1 thru B-8	30	Sanitary sewer alignment
B-9 thru B-14	25	

Boring Layout and Elevations: Field measurements from existing site features were utilized to locate the borings. Approximate surface elevations were obtained by interpolation from the site specific, surveyed topographic map provided by the Client.

Subsurface Exploration Procedures: We advanced the borings with an ATV-mounted rotary drill rig using hollow stem augers. Sampling was performed using a split-barrel sampling procedure, in which a standard 2-inch outer diameter split-barrel sampling spoon is driven into the ground by a 140-pound automatic hammer falling a distance of 30 inches. The number of blows required to advance the sampling spoon the last 12 inches of a normal 18-inch penetration is recorded as the Standard Penetration Test (SPT) resistance value. The SPT resistance values, also referred to as N-values, are indicated on the boring logs at the test depths. We observed and recorded groundwater levels during drilling and upon completion of drilling. For safety purposes, all borings were backfilled with auger cuttings and bentonite chips after their completion.

The samples were placed in appropriate containers and taken to our laboratory for testing and classification by the project engineer. Our exploration team prepared field logs to record visual classifications of the materials encountered during drilling and our interpretation of the subsurface conditions between samples. The sampling depths, penetration distances, and other sampling information were also recorded on the field logs. The computer-generated boring logs provided in **Exploration Results** were prepared from the field logs and represents the project engineer's interpretation of the field logs and includes modifications based on observations and tests of the samples in our laboratory.

Laboratory Testing

The project engineer reviewed the field data and assigned laboratory tests to understand the engineering properties of the various soil strata, as necessary, for this project. The following tests were performed for this project.

- Water content
- Hand penetrometer (on clay soil samples)

The test results are provided on the boring logs included in **Exploration Results**.

We classified the soil samples based on visual observation, texture, and the laboratory testing described above. The soil descriptions presented on the boring logs are in accordance with the enclosed General Notes and the Unified Soil Classification System (USCS). The estimated USCS group symbols for the soils are shown on the boring logs, and a brief description of the USCS is included in this report.

SITE LOCATION AND EXPLORATION PLANS

Contents:

Site Location Plan
Exploration Plan (3 pages)

Note: All attachments are one page unless noted above.

SITE LOCATION

Microsoft CHI05 – Offsite Sanitary Upgrades ■ Hoffman Estates, Illinois
December 3, 2021 ■ Terracon Project No. MR215137

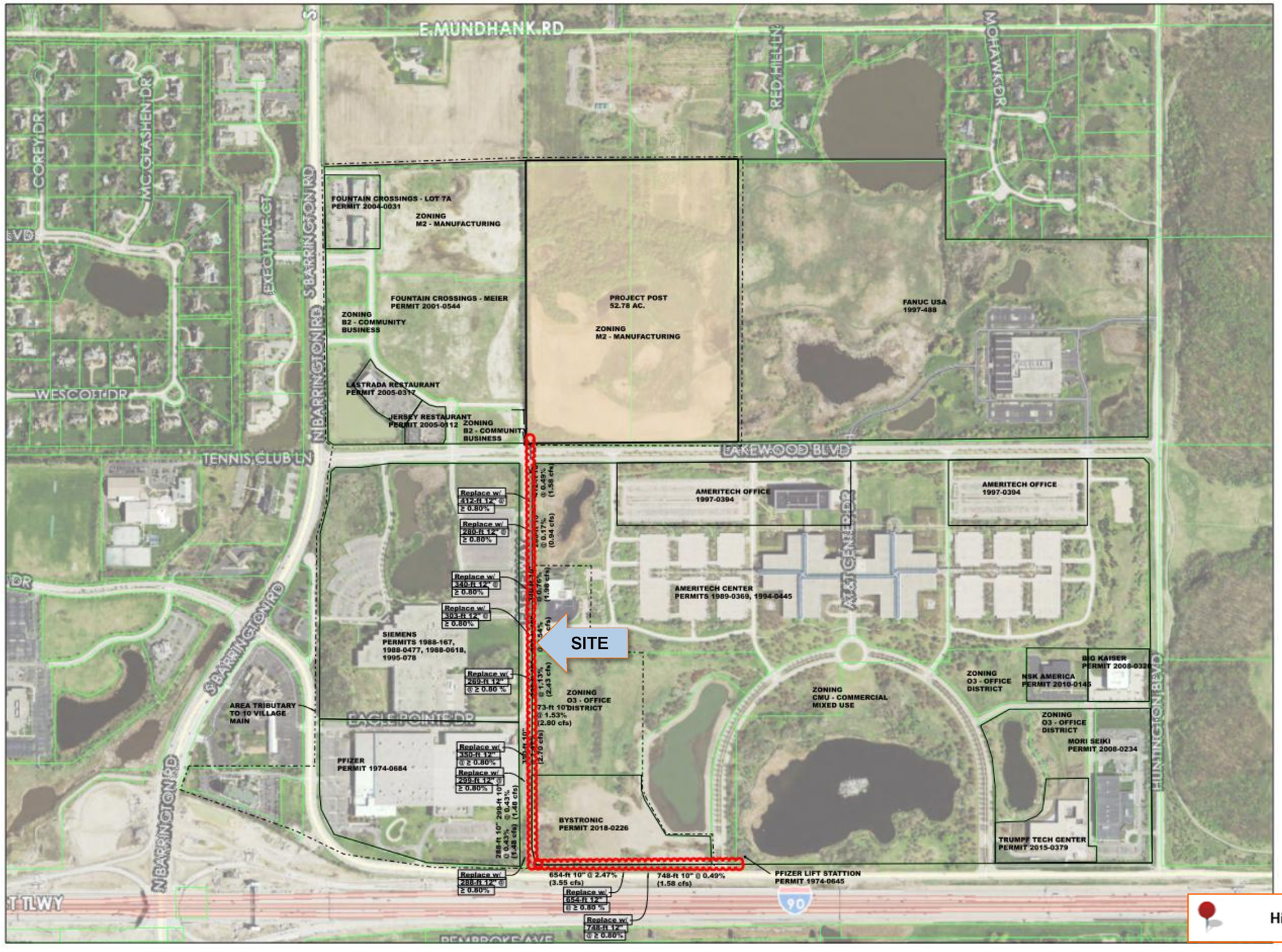


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

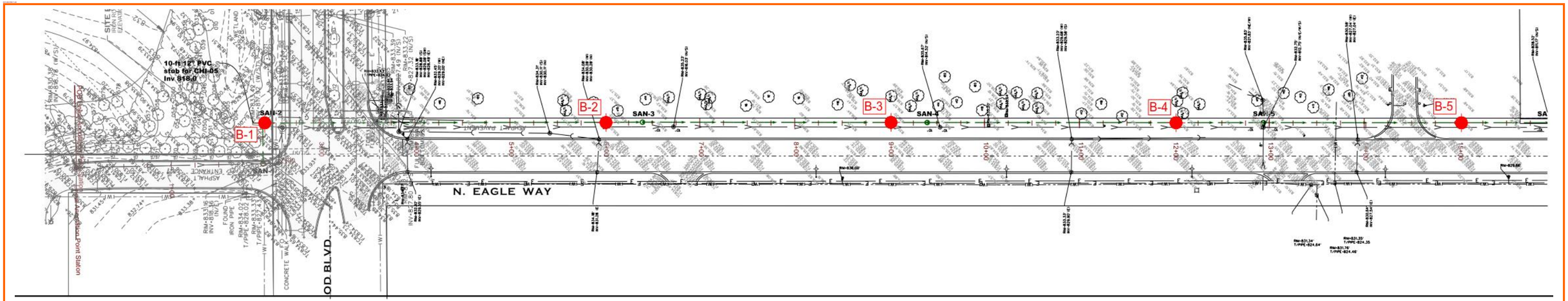
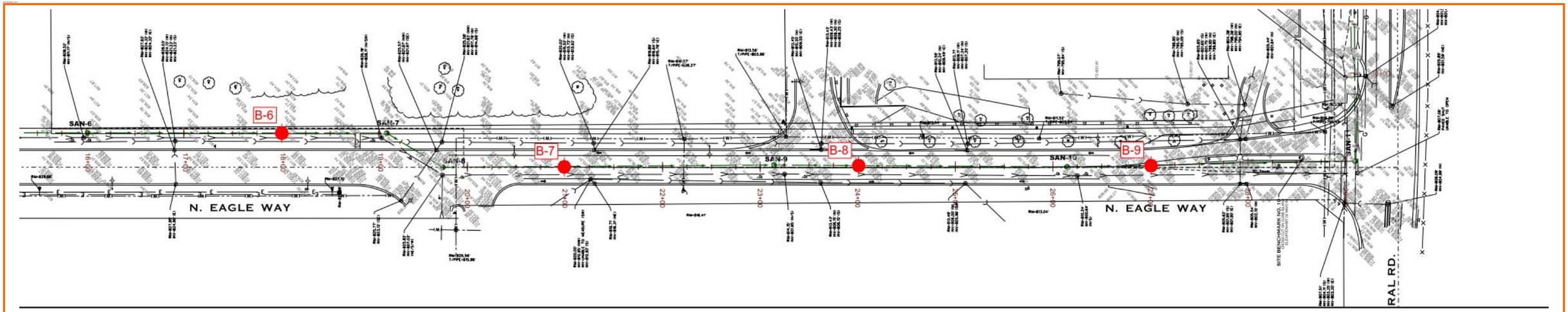


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY CLIENT



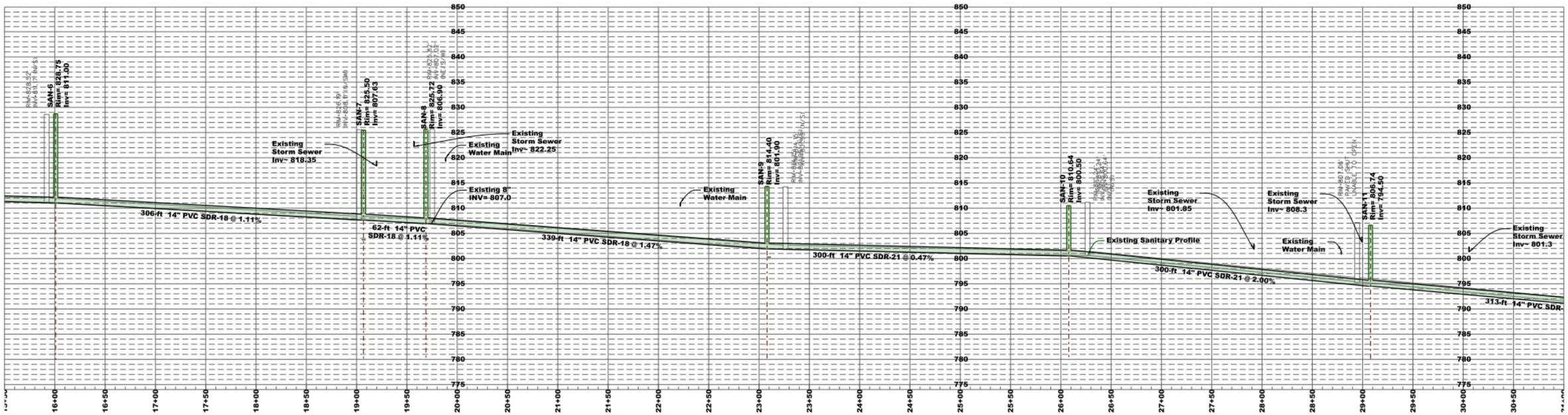
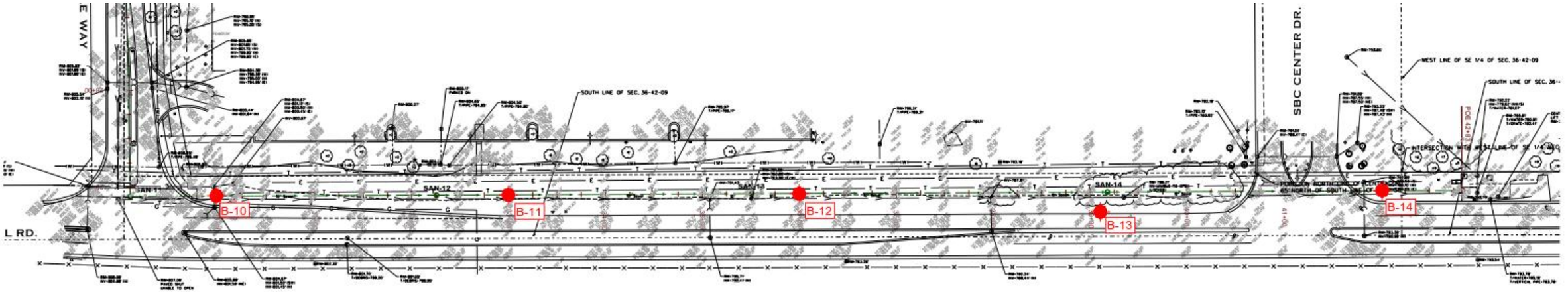


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY CLIENT



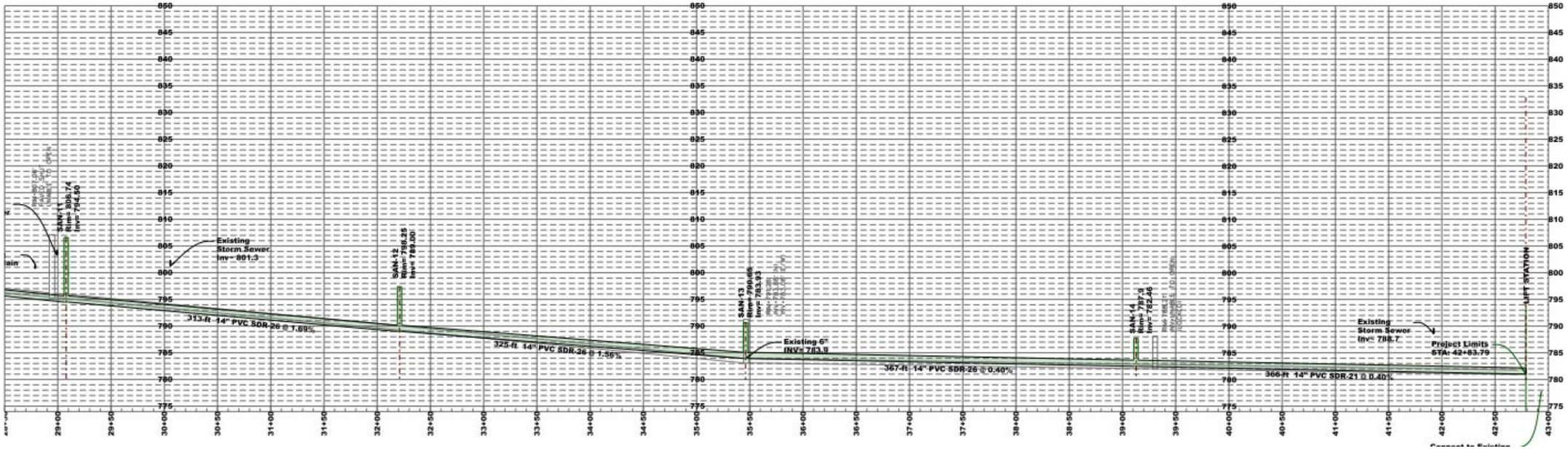


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY CLIENT

EXPLORATION RESULTS

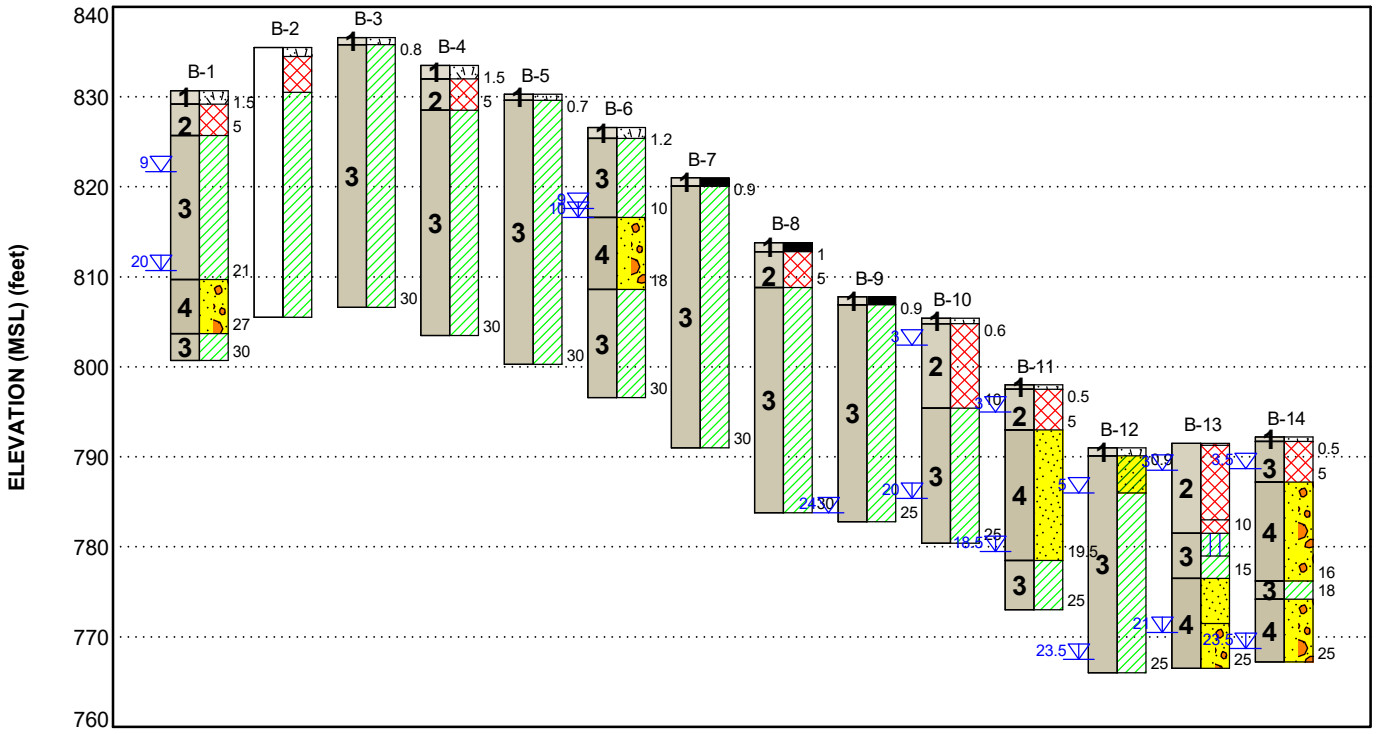
Contents:

Note: All attachments are one page unless noted above.

GEOMODEL

MIcrosoft CHI05 Offsite Sanitary Upgrades ■ Hoffman Estates, IL
Terracon Project No. MR215137

Terracon GeoReport



This is not a cross section. This is intended to display the Geotechnical Model only. See individual logs for more detailed conditions.

Model Layer	Layer Name	General Description
1	Surfical Topsoil or Pavement	- Topsoil; about 6 to 18 inches - Asphalt Pavement; about 10.5 and 12 inches
2	Fill Soils	Lean Clay, Sandy Lean Clay, Clayey Silt; trace sand and gravel
3	Native Clays	Lean Clay and Silty Clay; trace sand and gravel, medium stiff to hard
4	Sands	Sand and Gravel, Poorly Graded Sand; medium dense to dense

LEGEND

- Topsoil
- Fill
- Lean Clay
- Poorly-graded Sand with Gravel
- Asphalt
- Poorly-graded Sand
- Sandy Lean Clay
- Silty Clay

▽ First Water Observation
▽ Second Water Observation

Groundwater levels are temporal. The levels shown are representative of the date and time of our exploration. Significant changes are possible over time. Water levels shown are as measured during and/or after drilling. In some cases, boring advancement methods mask the presence/absence of groundwater. See individual logs for details.

NOTES:
Layering shown on this figure has been developed by the geotechnical engineer for purposes of modeling the subsurface conditions as required for the subsequent geotechnical engineering for this project. Numbers adjacent to soil column indicate depth below ground surface.

BORING LOG NO. B-1

PROJECT: MIcrosoft CHI05 Offsite Sanitary Upgrades

CLIENT: Syska Hennesey Group, Inc.
Chicago, IL

SITE: Lakewood Blvd. and N. Eagle Way
Hoffman Estates, IL

LOCATION See Exploration Plan

Latitude: 42.0745° Longitude: -88.1361°

Approximate Surface Elev.: 830.7 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)
1		0.0	830.7+/-							
		TOPSOIL, about 18 inches								
		1.5	829+/-							
2		**FILL - LEAN CLAY (CL)**, trace sand, dark gray				X	8	2-2-2 N=4	2.75 (HP)	19.9
		5.0	825.5+/-	5						
3		**LEAN CLAY (CL)**, trace sand and gravel, grayish brown, stiff to very stiff			▽	X	9	1-1-1 N=2	1.00 (HP)	21.1
				10		X	13	1-1-2 N=3	Dist.	14.8
		- gray at 13.5 feet				X	14	3-3-6 N=9	1.00 (HP)	19.5
				15		X	17	3-4-7 N=11	3.00 (HP)	18.7
					▽	X	18	4-8-9 N=17	3.00 (HP)	16.4
		21.0	809.5+/-	20						
4		**SAND AND GRAVEL**, gray, wet, medium dense				X	16	8-11-12 N=23		10.1
						X	14	6-6-8 N=14		12.1
				25						
		27.0	803.5+/-							
3		**LEAN CLAY (CL)**, trace sand, gray, very stiff				X	10	6-7-9 N=16	2.50 (HP)	19.0
		30.0	800.5+/-	30						
		Boring Terminated at 30 Feet								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
3.25" Hollow Stem Auger

Abandonment Method:
Boring backfilled with soil cuttings and bentonite chips upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:
Dist. means distrubed sample.

WATER LEVEL OBSERVATIONS

▽ *9 ft while drilling*

▽ *20 ft upon completion*

Terracon
192 Exchange Blvd
Glendale Heights, IL

Boring Started: 10-14-2021 | Boring Completed: 10-14-2021

Drill Rig: D-50 | Driller: GEOCON/DJ

Project No.: MR215137

BORING LOG NO. B-2

PROJECT: MIcrosoft CHI05 Offsite Sanitary Upgrades

CLIENT: Syska Hennesey Group, Inc.
Chicago, IL

SITE: Lakewood Blvd. and N. Eagle Way
Hoffman Estates, IL

LOCATION See Exploration Plan

Latitude: 42.0735° Longitude: -88.1361°

Approximate Surface Elev.: 835.5 (Ft.) +/-

DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)
							28.9
1.0	834.5+/-						
TOPSOIL, 01, about 12 inches							
FILL - LEAN CLAY (CL), trace sand, gray, 03							
			X	17	6-7-7 N=14	4.50+ (HP)	16.2
5.0	830.5+/-	5					
LEAN CLAY (CL), trace sand and gravel, brown, very stiff, 03							
			X	14	6-6-8 N=14	3.00 (HP)	14.1
		10					
			X	16	6-6-8 N=14	4.00 (HP)	13.1
- gray at 13.5 feet							
			X	18	4-4-5 N=9	3.00 (HP)	13.9
		15					
			X	16	4-5-6 N=11	3.00 (HP)	17.2
			X	18	3-5-7 N=12	3.25 (HP)	19.4
		20					
			X	18	4-3-4 N=7	2.25 (HP)	18.1
			X	18	5-5-7 N=12	2.75 (HP)	14.5
		25					
			X	16	4-5-7 N=12	2.25 (HP)	14.0
30.0	805.5+/-	30					
Boring Terminated at 30 Feet							

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
3.25" Hollow Stem Auger

Abandonment Method:
Boring backfilled with soil cuttings and bentonite chips upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
192 Exchange Blvd
Glendale Heights, IL

Boring Started: 10-12-2021 | Boring Completed: 10-12-2021

Drill Rig: D-50 | Driller: GEOCON/DJ

Project No.: MR215137

BORING LOG NO. B-3

PROJECT: MIcrosoft CHI05 Offsite Sanitary Upgrades

CLIENT: Syska Hennesey Group, Inc.
Chicago, IL

SITE: Lakewood Blvd. and N. Eagle Way
Hoffman Estates, IL

LOCATION See Exploration Plan

Latitude: 42.0727° Longitude: -88.1361°

Approximate Surface Elev.: 836.6 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)
1		0.8	836+/-							24.5
		TOPSOIL, about 10 inches								
		LEAN CLAY (CL), trace sand and gravel, brown, stiff to hard				X	14	4-10-6 N=16	4.50+ (HP)	11.7
				5						
						X	14	4-7-9 N=16	4.50 (HP)	16.9
				10						
		- gray at 11 feet				X	16	5-7-8 N=15	3.50 (HP)	13.1
3						X	14	5-4-8 N=12	3.00 (HP)	13.4
				15						
						X	16	3-3-5 N=8	2.50 (HP)	18.2
						X	18	3-4-5 N=9	2.25 (HP)	18.4
				20						
						X	18	3-3-4 N=7	1.75 (HP)	17.0
						X	18	3-3-6 N=9	2.00 (HP)	18.6
				25						
						X	12	3-6-6 N=12	2.75 (HP)	11.1
		30.0	806.5+/-	30						
		Boring Terminated at 30 Feet								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
3.25" Hollow Stem Auger

Abandonment Method:
Boring backfilled with soil cuttings and bentonite chips upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
192 Exchange Blvd
Glendale Heights, IL

Boring Started: 10-12-2021 | Boring Completed: 10-12-2021

Drill Rig: D-50 | Driller: GEOCON/DJ

Project No.: MR215137

BORING LOG NO. B-4

PROJECT: MIcrosoft CHI05 Offsite Sanitary Upgrades

CLIENT: Syska Hennesey Group, Inc.
Chicago, IL

SITE: Lakewood Blvd. and N. Eagle Way
Hoffman Estates, IL

LOCATION See Exploration Plan

Latitude: 42.0719° Longitude: -88.1361°

Approximate Surface Elev.: 833.5 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)
1		0.0								29.4
		TOPSOIL, about 18 inches								
		1.5	832+/-							
2		**FILL - LEAN CLAY (CL)**, trace sand and gravel, dark gray and brown								
						X	6	5-5-5 N=10	2.00 (HP)	27.4
		5.0	828.5+/-	5						
3		**LEAN CLAY (CL)**, trace sand and gravel, brown, stiff to very stiff				X	12	4-4-5 N=9	3.00 (HP)	17.8
				10						
		- gray at 11 feet				X	6	5-5-9 N=14	2.00 (HP)	12.0
						X	6	4-4-5 N=9	Dist.	26.7
				15						
						X	16	3-4-5 N=9	2.00 (HP)	14.1
						X	18	5-5-6 N=11	3.00 (HP)	16.4
				20						
						X	18	3-4-7 N=11	1.50 (HP)	15.7
						X	18	3-4-6 N=10	1.25 (HP)	18.4
				25						
						X	18	5-6-9 N=15	2.50 (HP)	16.4
		30.0	803.5+/-	30						
		Boring Terminated at 30 Feet								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
3.25" Hollow Stem Auger

Abandonment Method:
Boring backfilled with soil cuttings and bentonite chips upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:
Dist. means distrubed sample.

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
192 Exchange Blvd
Glendale Heights, IL

Boring Started: 10-12-2021 | Boring Completed: 10-12-2021

Drill Rig: D-50 | Driller: GEOCON/DJ

Project No.: MR215137

BORING LOG NO. B-5

PROJECT: MIcrosoft CHI05 Offsite Sanitary Upgrades

CLIENT: Syska Hennesey Group, Inc.
Chicago, IL

SITE: Lakewood Blvd. and N. Eagle Way
Hoffman Estates, IL

LOCATION See Exploration Plan

Latitude: 42.0711° Longitude: -88.1361°

Approximate Surface Elev.: 830.3 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)
1		0.7	829.5+/-							24.0
		TOPSOIL, about 8 inches								
		LEAN CLAY (CL), trace sand and gravel, brown, stiff to hard				X	12	5-4-6 N=10	4.50+ (HP)	15.8
				5						
		- gray at 8.5 feet				X	14	5-3-5 N=8	2.50 (HP)	15.6
				10		X	14	3-4-4 N=8	3.00 (HP)	16.5
3						X	16	3-2-4 N=6	1.00 (HP)	17.9
				15		X	18	2-3-3 N=6	1.50 (HP)	17.8
						X	18	3-4-6 N=10	2.00 (HP)	16.9
				20		X	18	3-3-5 N=8	2.00 (HP)	18.0
						X	18	4-2-3 N=5	2.00 (HP)	17.9
				25						
		30.0	800.5+/-			X	18	4-5-6 N=11	2.00 (HP)	17.8
		Boring Terminated at 30 Feet		30						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
3.25" Hollow Stem Auger

Abandonment Method:
Boring backfilled with soil cuttings and bentonite chips upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
192 Exchange Blvd
Glendale Heights, IL

Boring Started: 10-12-2021 | Boring Completed: 10-12-2021

Drill Rig: D-50 | Driller: GEOCON/DJ

Project No.: MR215137

BORING LOG NO. B-6

PROJECT: MIcrosoft CHI05 Offsite Sanitary Upgrades

CLIENT: Syska Hennesey Group, Inc.
Chicago, IL

SITE: Lakewood Blvd. and N. Eagle Way
Hoffman Estates, IL

LOCATION See Exploration Plan

Latitude: 42.0702° Longitude: -88.1361°

Approximate Surface Elev.: 826.6 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)
1		1.2	825.5+/-							19.1
3			**TOPSOIL**, about 14 inches **LEAN CLAY (CL)**, trace sand and gravel, grayish brown, stiff to hard	5			10	4-5-4 N=9	4.50+ (HP)	25.3
					▽		14	2-2-3 N=5	1.00 (HP)	23.0
		10.0	816.5+/-	10	▽					
4			**SAND AND GRAVEL**, grayish brown, wet, medium dense				12	5-8-11 N=19		11.3
				15			8	6-10-16 N=26		12.2
							6	14-10-7 N=17		17.7
		18.0	808.5+/-							
3			**LEAN CLAY (CL)**, trace sand and gravel, gray, stiff to very stiff	20			12	5-6-7 N=13	2.25 (HP)	15.5
							12	5-7-9 N=16	1.00 (HP)	15.1
			- piece of gravel in sample	25			6	5-6-8 N=14	Dist.	18.3
							16	4-6-4 N=10	1.25 (HP)	18.8
		30.0	796.5+/-	30						
			Boring Terminated at 30 Feet							

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
3.25" Hollow Stem Auger

Abandonment Method:
Boring backfilled with soil cuttings and bentonite chips upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:
Dist. means distrubed sample.

WATER LEVEL OBSERVATIONS

▽ *9 ft while drilling*

▽ *10 ft upon completion*

Terracon
192 Exchange Blvd
Glendale Heights, IL

Boring Started: 10-12-2021 | Boring Completed: 10-12-2021

Drill Rig: D-50 | Driller: GEOCON/DJ

Project No.: MR215137

BORING LOG NO. B-7

PROJECT: MIcrosoft CHI05 Offsite Sanitary Upgrades

CLIENT: Syska Hennesey Group, Inc.
Chicago, IL

SITE: Lakewood Blvd. and N. Eagle Way
Hoffman Estates, IL

LOCATION See Exploration Plan

Latitude: 42.0694° Longitude: -88.1363°

Approximate Surface Elev.: 821 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)
1		0.9 **ASPHALT**, about 10.5 inches	820+/-							
3		**LEAN CLAY (CL)**, trace sand and gravel, brown, stiff to hard		5		X	12	3-3-5 N=8	1.00 (HP)	27.7
				10		X	12	4-6-7 N=13	3.25 (HP)	16.6
		- brownish gray at 11 feet				X	14	6-8-10 N=18	4.50+ (HP)	16.0
		- gray at 13.5 feet		15		X	12	4-6-9 N=15	4.50+ (HP)	17.5
						X	16	4-6-7 N=13	2.75 (HP)	19.2
				20		X	18	3-5-7 N=12	2.50 (HP)	20.5
						X	18	3-4-7 N=11	2.75 (HP)	18.9
				25		X	14	3-4-6 N=10	2.25 (HP)	23.4
		30.0	791+/-			X	16	4-5-7 N=12	2.50 (HP)	14.5
		Boring Terminated at 30 Feet		30						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
3.25" Hollow Stem Auger

Abandonment Method:
Boring backfilled with soil cuttings and bentonite chips upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
192 Exchange Blvd
Glendale Heights, IL

Boring Started: 10-12-2021 | Boring Completed: 10-12-2021

Drill Rig: D-50 | Driller: GEOCON/DJ

Project No.: MR215137

BORING LOG NO. B-8

PROJECT: MIcrosoft CHI05 Offsite Sanitary Upgrades

CLIENT: Syska Hennesey Group, Inc.
Chicago, IL

SITE: Lakewood Blvd. and N. Eagle Way
Hoffman Estates, IL

LOCATION See Exploration Plan

Latitude: 42.0686° Longitude: -88.1363°

Approximate Surface Elev.: 813.8 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)
1		1.0	813+/-							
2			**ASPHALT**, about 12 inches **FILL - SANDY LEAN CLAY (CL)**, trace sand, brown			X	12	15-4-3 N=7	Dist.	15.2
		5.0	809+/-	5						
3			**LEAN CLAY (CL)**, trace sand and gravel, brown, stiff to hard			X	14	4-3-3 N=6	2.00 (HP)	21.2
				10		X	16	2-3-4 N=7	2.25 (HP)	18.3
			- grayish brown at 13.5 feet			X	12	3-3-4 N=7	4.50+ (HP)	17.7
				15						
			- gray at 16 feet			X	14	4-6-6 N=12	4.50 (HP)	17.4
						X	14	4-5-7 N=12	4.00 (HP)	19.0
				20		X	16	4-4-7 N=11	3.75 (HP)	19.3
						X	18	3-3-7 N=10	2.75 (HP)	19.7
				25						
		30.0	784+/-			X	8	6-5-7 N=12	2.00 (HP)	15.9
			Boring Terminated at 30 Feet	30						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
3.25" Hollow Stem Auger

Abandonment Method:
Boring backfilled with soil cuttings and bentonite chips upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:
Dist. means distrubed sample.

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
192 Exchange Blvd
Glendale Heights, IL

Boring Started: 10-12-2021 | Boring Completed: 10-12-2021

Drill Rig: D-50 | Driller: GEOCON/DJ

Project No.: MR215137

BORING LOG NO. B-9

PROJECT: MIcrosoft CHI05 Offsite Sanitary Upgrades

CLIENT: Syska Hennesey Group, Inc.
Chicago, IL

SITE: Lakewood Blvd. and N. Eagle Way
Hoffman Estates, IL

LOCATION See Exploration Plan

Latitude: 42.0678° Longitude: -88.1363°

Approximate Surface Elev.: 807.8 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)
1		0.9	807+/-							
3		**ASPHALT**, about 10.5 inches **LEAN CLAY (CL)**, trace sand and gravel, brown, stiff to hard		5		X	12	8-7-9 N=16	4.50+ (HP)	11.9
						X	14	2-2-3 N=5	2.00 (HP)	21.8
		- gray at 11 feet		10		X	18	4-4-5 N=9	1.75 (HP)	16.1
				15		X	16	6-8-7 N=15	2.25 (HP)	13.7
						X	16	5-5-6 N=11	2.00 (HP)	19.2
				20		X	18	5-7-8 N=15	2.50 (HP)	18.9
		- piece of gravel in sample				X	14	5-7-9 N=16	4.00 (HP)	10.3
					▽	X	16	7-6-7 N=13	2.75 (HP)	13.8
		25.0	783+/-	25						
		Boring Terminated at 25 Feet								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
3.25" Hollow Stem Auger

Abandonment Method:
Boring backfilled with soil cuttings and bentonite chips upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

WATER LEVEL OBSERVATIONS

▽ *24 ft while drilling*

Terracon
192 Exchange Blvd
Glendale Heights, IL

Boring Started: 10-12-2021 | Boring Completed: 10-12-2021

Drill Rig: D-50 | Driller: GEOCON/DJ

Project No.: MR215137

BORING LOG NO. B-10

PROJECT: MIcrosoft CHI05 Offsite Sanitary Upgrades

CLIENT: Syska Hennesey Group, Inc.
Chicago, IL

SITE: Lakewood Blvd. and N. Eagle Way
Hoffman Estates, IL

LOCATION See Exploration Plan

Latitude: 42.0672° Longitude: -88.1359°

Approximate Surface Elev.: 805.4 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)
1		0.6	805+/-							
			TOPSOIL, about 7 inches							
			FILL - LEAN CLAY (CL), trace sand, dark gray							
			- trace roots 3.5 to 5 feet sample	5			11	4-4-5 N=9	1.25 (HP)	28.5
2		10.0	795.5+/-	10			10	3-3-4 N=7	1.00 (HP)	25.5
			LEAN CLAY (CL), trace sand and gravel, brown, very stiff to hard				14	2-4-4 N=8	2.25 (HP)	22.0
			- gray at 13.5 feet	15			18	4-5-7 N=12	4.50+ (HP)	16.9
3							18	5-7-10 N=17	3.75 (HP)	17.8
				20			18	6-6-8 N=14	2.25 (HP)	13.5
							18	4-4-8 N=12	3.00 (HP)	15.7
		25.0	780.5+/-	25			18	3-4-6 N=10	3.50 (HP)	15.5
			Boring Terminated at 25 Feet							

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
3.25" Hollow Stem Auger

Abandonment Method:
Boring backfilled with soil cuttings and bentonite chips upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

WATER LEVEL OBSERVATIONS

3 ft while drilling

20 ft upon completion

Terracon
192 Exchange Blvd
Glendale Heights, IL

Boring Started: 10-14-2021

Boring Completed: 10-14-2021

Drill Rig: D-50

Driller: GEOCON/DJ

Project No.: MR215137

BORING LOG NO. B-11

PROJECT: MIcrosoft CHI05 Offsite Sanitary Upgrades

CLIENT: Syska Hennesey Group, Inc.
Chicago, IL

SITE: Lakewood Blvd. and N. Eagle Way
Hoffman Estates, IL

LOCATION See Exploration Plan

Latitude: 42.0672° Longitude: -88.1347°

Approximate Surface Elev.: 798 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)
1		0.5	797.5+/-							
2			**TOPSOIL**, about 6 inches **FILL - LEAN CLAY (CL)**, with sand, gray and brown		▽	X	12	2-3-6 N=9		9.5
		5.0	793+/-	5						
4			**POORLY GRADED SAND (SP)**, with gravel, brown, wet, medium dense to dense			X	14	5-5-7 N=12		16.4
				10		X	16	13-14-11 N=25		14.1
						X	18	7-13-19 N=32		11.8
				15		X	15	13-16-18 N=34		8.7
		19.5	778.5+/-		▽	X	13	17-18-6 N=24	1.00 (HP)	22.7
3			**LEAN CLAY (CL)**, trace sand, gray, stiff	20		X	8	4-4-7 N=11	1.00 (HP)	21.6
		25.0	773+/-			X		5-5-6 N=11	1.50 (HP)	20.7
			Boring Terminated at 25 Feet	25						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
3.25" Hollow Stem Auger

Abandonment Method:
Boring backfilled with soil cuttings and bentonite chips upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

WATER LEVEL OBSERVATIONS

▽ *3 ft while drilling*

▽ *18.5 ft upon completion*

Terracon
192 Exchange Blvd
Glendale Heights, IL

Boring Started: 10-14-2021 | Boring Completed: 10-14-2021

Drill Rig: D-50 | Driller: GEOCON/DJ

Project No.: MR215137

BORING LOG NO. B-12

PROJECT: MIcrosoft CHI05 Offsite Sanitary Upgrades

CLIENT: Syska Hennesey Group, Inc.
Chicago, IL

SITE: Lakewood Blvd. and N. Eagle Way
Hoffman Estates, IL

LOCATION See Exploration Plan

Latitude: 42.0672° Longitude: -88.1336°

Approximate Surface Elev.: 791 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)
1		0.9	790+/-							21.0
			TOPSOIL, about 11 inches							
			SANDY LEAN CLAY (CL), brown, stiff							
			- with sand seams 3.5 to 5 feet			X	16	4-5-5 N=10	1.00 (HP)	14.8
		5.0	786+/-	5	▽					
			LEAN CLAY (CL), trace sand and gravel, gray, stiff to very stiff			X	14	5-5-6 N=11	1.00 (HP)	17.2
				10						
			- gray at 11 feet			X		6-4-3 N=7	3.00 (HP)	18.7
3			- cobble fragments on sample			X		6-9-9 N=18	Dist.	14.9
				15						
						X		5-8-10 N=18	2.00 (HP)	17.4
						X		4-5-9 N=14	1.75 (HP)	19.8
				20						
						X		3-3-7 N=10	2.75 (HP)	17.9
					▽					
						X		4-3-6 N=9		
		25.0	766+/-	25						
			Boring Terminated at 25 Feet							

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
3.25" Hollow Stem Auger

Abandonment Method:
Boring backfilled with soil cuttings and bentonite chips upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:
Dist. means distrubed sample.

WATER LEVEL OBSERVATIONS

▽ *5 ft while drilling*

▽ *23.5 ft upon completion*

Terracon
192 Exchange Blvd
Glendale Heights, IL

Boring Started: 10-12-2021 | Boring Completed: 10-12-2021

Drill Rig: D-50 | Driller: GEOCON/DJ

Project No.: MR215137

BORING LOG NO. B-13

PROJECT: MIcrosoft CHI05 Offsite Sanitary Upgrades

CLIENT: Syska Hennesey Group, Inc.
Chicago, IL

SITE: Lakewood Blvd. and N. Eagle Way
Hoffman Estates, IL

LOCATION See Exploration Plan

Latitude: 42.0672° Longitude: -88.1325°

Approximate Surface Elev.: 791.5 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	ORGANIC CONTENT (%)
1		0.2	791.5+/-								
			GRAVEL, about 2.5 inches								
			FILL - LEAN CLAY (CL), trace sand and gravel, brown								
2				5		X	13	4-5-2 N=7	0.50 (HP)	19.1	
		8.5	783+/-								
			POSSIBLE FILL - POSSIBLE CLAYEY SILT SEDIMENT, trace shell fragments, gray			X	16	2-2-2 N=4		73.7	3.9
		10.0	781.5+/-	10							
			SILTY CLAY (CL-ML), trace sand, gray, medium stiff			X	14	2-2-2 N=4	0.50 (HP)	39.2	5.1
3		12.5	779+/-								
			LEAN CLAY (CL), trace sand and gravel, gray, stiff			X	12	4-8-9 N=17	1.50 (HP)	15.2	
		15.0	776.5+/-	15							
			POORLY GRADED SAND (SP), brownish gray, wet, medium dense			X	17	5-7-9 N=16		12.2	
						X	10	4-4-6 N=10		9.2	
4		20.0	771.5+/-	20							
			POORLY GRADED SAND WITH GRAVEL (SP), brownish gray, wet, medium dense to dense			X	18	6-7-7 N=14		14.4	
						X	16	8-16-15 N=31		9.5	
		25.0	766.5+/-	25							
			Boring Terminated at 25 Feet								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
3.25" Hollow Stem Auger

Abandonment Method:
Boring backfilled with soil cuttings and bentonite chips upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

WATER LEVEL OBSERVATIONS

3 ft while drilling

21 ft upon completion

Terracon
192 Exchange Blvd
Glendale Heights, IL

Boring Started: 10-12-2021 | Boring Completed: 10-12-2021

Drill Rig: D-50 | Driller: GEOCON/DJ

Project No.: MR215137

BORING LOG NO. B-14

PROJECT: MIcrosoft CHI05 Offsite Sanitary Upgrades

CLIENT: Syska Hennesey Group, Inc.
Chicago, IL

SITE: Lakewood Blvd. and N. Eagle Way
Hoffman Estates, IL

LOCATION See Exploration Plan

Latitude: 42.0672° Longitude: -88.1314°

Approximate Surface Elev.: 792.2 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)
1		0.5	791.5+/-							25.0
3			**TOPSOIL**, about 6 inches **FILL - LEAN CLAY (CL)**, trace sand, dark gray and brown		▽					
		5.0	787+/-	5		X	8	3-5-5 N=10	1.50 (HP)	18.0
4			**POORLY GRADED SAND WITH GRAVEL (SP)**, brown, wet, medium dense			X	13	7-12-13 N=25		7.3
				10		X	12	8-9-12 N=21		11.0
						X	16	9-9-11 N=20		11.9
		16.0	776+/-	15						
3			**LEAN CLAY (CL)**, trace sand and gravel, grayish brown, stiff			X	18	8-5-6 N=11	1.00 (HP)	21.1
		18.0	774+/-							
4			**POORLY GRADED SAND WITH GRAVEL (SP)**, brown, wet, medium dense to dense	20		X	14	9-7-9 N=16		15.0
						X	4	9-17-16 N=33		14.6
					▽	X		8-16-18 N=34		19.4
		25.0	767+/-	25						
			Boring Terminated at 25 Feet							

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
3.25" Hollow Stem Auger

Abandonment Method:
Boring backfilled with soil cuttings and bentonite chips upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan.

Notes:

WATER LEVEL OBSERVATIONS

▽ *3.5 ft while drilling*

▽ *23.5 ft upon completion*

Terracon
192 Exchange Blvd
Glendale Heights, IL

Boring Started: 10-12-2021 | Boring Completed: 10-12-2021

Drill Rig: D-50 | Driller: GEOCON/DJ

Project No.: MR215137

SUPPORTING INFORMATION

Contents:

Note: All attachments are one page unless noted above.

GENERAL NOTES

DESCRIPTION OF SYMBOLS AND ABBREVIATIONS

MIcrosoft CHI05 Offsite Sanitary Upgrades ■ Hoffman Estates, IL

Terracon Project No. MR215137

Terracon GeoReport

SAMPLING	WATER LEVEL	FIELD TESTS
Standard Penetration Test	**Water Initially Encountered** **Water Level After a Specified Period of Time** **Water Level After a Specified Period of Time** **Cave In Encountered** Water levels indicated on the soil boring logs are the levels measured in the borehole at the times indicated. Groundwater level variations will occur over time. In low permeability soils, accurate determination of groundwater levels is not possible with short term water level observations.	**N** Standard Penetration Test Resistance (Blows/Ft.) **(HP)** Hand Penetrometer **(T)** Torvane **(DCP)** Dynamic Cone Penetrometer **UC** Unconfined Compressive Strength **(PID)** Photo-Ionization Detector **(OVA)** Organic Vapor Analyzer

DESCRIPTIVE SOIL CLASSIFICATION

Soil classification as noted on the soil boring logs is based Unified Soil Classification System. Where sufficient laboratory data exist to classify the soils consistent with ASTM D2487 "Classification of Soils for Engineering Purposes" this procedure is used. ASTM D2488 "Description and Identification of Soils (Visual-Manual Procedure)" is also used to classify the soils, particularly where insufficient laboratory data exist to classify the soils in accordance with ASTM D2487. In addition to USCS classification, coarse grained soils are classified on the basis of their in-place relative density, and fine-grained soils are classified on the basis of their consistency. See "Strength Terms" table below for details. The ASTM standards noted above are for reference to methodology in general. In some cases, variations to methods are applied as a result of local practice or professional judgment.

LOCATION AND ELEVATION NOTES

Exploration point locations as shown on the Exploration Plan and as noted on the soil boring logs in the form of Latitude and Longitude are approximate. See Exploration and Testing Procedures in the report for the methods used to locate the exploration points for this project. Surface elevation data annotated with +/- indicates that no actual topographical survey was conducted to confirm the surface elevation. Instead, the surface elevation was approximately determined from topographic maps of the area.

STRENGTH TERMS

RELATIVE DENSITY OF COARSE-GRAINED SOILS (More than 50% retained on No. 200 sieve.) Density determined by Standard Penetration Resistance		CONSISTENCY OF FINE-GRAINED SOILS (50% or more passing the No. 200 sieve.) Consistency determined by laboratory shear strength testing, field visual-manual procedures or standard penetration resistance		
Descriptive Term (Density)	**Standard Penetration or N-Value Blows/Ft.**	**Descriptive Term (Consistency)**	**Unconfined Compressive Strength Qu, (tsf)**	**Standard Penetration or N-Value Blows/Ft.**
Very Loose	0 - 3	Very Soft	less than 0.25	0 - 1
Loose	4 - 9	Soft	0.25 to 0.50	2 - 4
Medium Dense	10 - 29	Medium Stiff	0.50 to 1.00	4 - 8
Dense	30 - 50	Stiff	1.00 to 2.00	8 - 15
Very Dense	> 50	Very Stiff	2.00 to 4.00	15 - 30
		Hard	> 4.00	> 30

RELEVANCE OF SOIL BORING LOG

The soil boring logs contained within this document are intended for application to the project as described in this document. Use of these soil boring logs for any other purpose may not be appropriate.

UNIFIED SOIL CLASSIFICATION SYSTEM

Terracon GeoReport

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests [A]					Soil Classification	
					Group Symbol	Group Name [B]
Coarse-Grained Soils: More than 50% retained on No. 200 sieve	**Gravels:** More than 50% of coarse fraction retained on No. 4 sieve	**Clean Gravels:** Less than 5% fines [C]	Cu ³ 4 and 1 £ Cc £ 3 [E]		GW	Well-graded gravel [F]
			Cu < 4 and/or [Cc<1 or Cc>3.0] [E]		GP	Poorly graded gravel [F]
		Gravels with Fines: More than 12% fines [C]	Fines classify as ML or MH		GM	Silty gravel [F, G, H]
			Fines classify as CL or CH		GC	Clayey gravel [F, G, H]
	Sands: 50% or more of coarse fraction passes No. 4 sieve	**Clean Sands:** Less than 5% fines [D]	Cu ³ 6 and 1 £ Cc £ 3 [E]		SW	Well-graded sand [I]
			Cu < 6 and/or [Cc<1 or Cc>3.0] [E]		SP	Poorly graded sand [I]
		Sands with Fines: More than 12% fines [D]	Fines classify as ML or MH		SM	Silty sand [G, H, I]
			Fines classify as CL or CH		SC	Clayey sand [G, H, I]
Fine-Grained Soils: 50% or more passes the No. 200 sieve	**Silts and Clays:** Liquid limit less than 50	**Inorganic:**	PI > 7 and plots on or above “A”		CL	Lean clay [K, L, M]
			PI < 4 or plots below “A” line [J]		ML	Silt [K, L, M]
		Organic:	Liquid limit - oven dried	< 0.75	OL	Organic clay [K, L, M, N]
			Liquid limit - not dried			Organic silt [K, L, M, O]
	Silts and Clays: Liquid limit 50 or more	**Inorganic:**	PI plots on or above “A” line		CH	Fat clay [K, L, M]
			PI plots below “A” line		MH	Elastic Silt [K, L, M]
		Organic:	Liquid limit - oven dried	< 0.75	OH	Organic clay [K, L, M, P]
			Liquid limit - not dried			Organic silt [K, L, M, Q]
Highly organic soils:	Primarily organic matter, dark in color, and organic odor				PT	Peat

[A] Based on the material passing the 3-inch (75-mm) sieve.

[B] If field sample contained cobbles or boulders, or both, add “with cobbles or boulders, or both” to group name.

[C] Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

[D] Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay.

[E] $Cu = D_{60}/D_{10}$ $\quad Cc = \dfrac{(D_{30})^2}{D_{10} \times D_{60}}$

[F] If soil contains ³ 15% sand, add “with sand” to group name.

[G] If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

[H] If fines are organic, add “with organic fines” to group name.

[I] If soil contains ³ 15% gravel, add “with gravel” to group name.

[J] If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

[K] If soil contains 15 to 29% plus No. 200, add “with sand” or “with gravel,” whichever is predominant.

[L] If soil contains ³ 30% plus No. 200 predominantly sand, add “sandy” to group name.

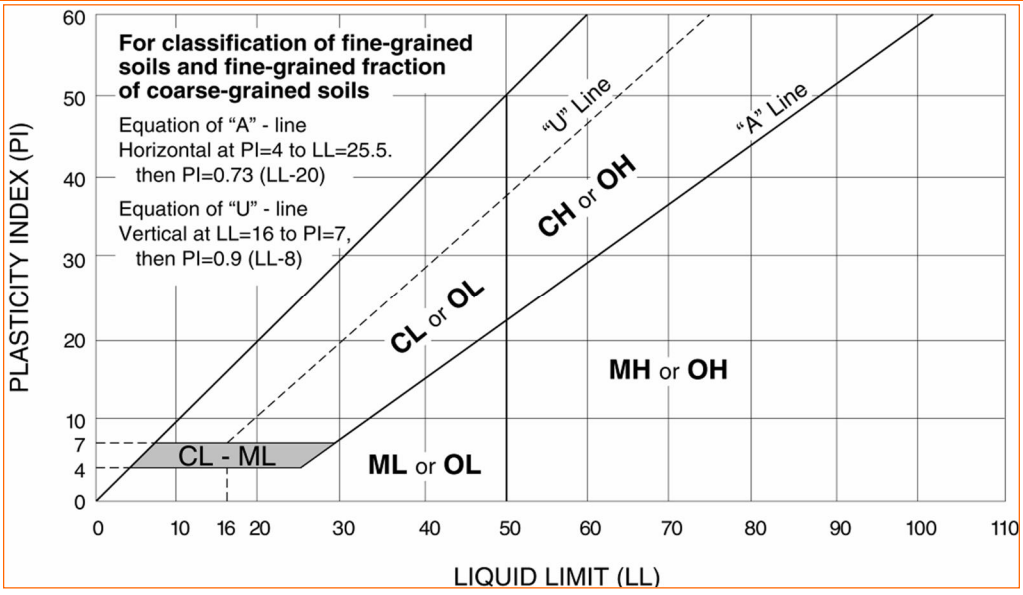
[M] If soil contains ³ 30% plus No. 200, predominantly gravel, add “gravelly” to group name.

[N] PI ³ 4 and plots on or above “A” line.

[O] PI < 4 or plots below “A” line.

[P] PI plots on or above “A” line.

[Q] PI plots below “A” line.



Applied GeoScience, Inc.
Geotechnical, Environmental & Materials Engineering

April 14, 2022

Mr. Alan Wenderski, P.E.
Village of Hoffman Estates
1900 Hassell Road
Hoffman Estates, Illinois 60169
Via Email: alan.wenderski@hoffmanestates.org

Reference: **Environmental Investigation for Disposal**
Proposed New Sewer Improvements
North Eagle Way – Hoffman Estates, Illinois
AGI Project No. 22-136

Dear Mr. Wenderski:

Applied GeoScience, Inc. (AGI) performed soil sampling at the above-referenced site on April 6, 2022. One (1) representative soil sample was collected from the site. The sample was taken from the proposed work area at an approximate depth of 1.0 to 2.0 feet below ground surface. The sample was collected in a 4-ounce pre-cleaned borosilicate glass jar with a Teflon lined lid and laboratory-suppled, pre-preserved vials accordance with USEPA Method 5035. The sample was kept at approximately 4º Celsius and was then submitted to STAT Analysis Corporation for laboratory analysis. The sample location is listed on the LPC-663 Form found in Attachment D.

Samples from the soil borings were monitored with a photoionization detector (PID) and were examined for physical evidence of contamination. The PID was calibrated to an isobutylene standard for direct readings in parts per million (ppm) of total volatile organic compounds. The PID has a range of 0 to 2,000 ppm, with a sensitivity of 1 ppm. For field monitoring, readings were taken with the PID probe held one-to-two inches from freshly exposed soil samples placed in sealed Ziploc™ bags and allowed to equilibrate for ten minutes. Field personnel used new disposable latex gloves during collection of each sample to reduce the risk of cross-contamination. PID readings ranged from 0.0 to 0.1ppm.

It is our understanding, the proposed construction consists of new sewer improvements.

Based on our historic aerial investigation, it appears that the area was farmland before the earliest aerial photographs taken. However, the surrounding area became commercial around 1994.

Review of Illinois Environmental Protection Agency (IEPA), United States Environmental Protection Agency (USEPA), and Illinois Office of State Fire Marshal (OSFM) has revealed no records of previous incidents at the subject property and surrounding areas.

Analysis was performed for Polynuclear Aromatic Hydrocarbons (PNAs), Resource Conservation and Recovery Act (RCRA) Metals, Benzene, Ethylbenzene, Toluene, and Xylene (BETX), and pH. The laboratory results were compared to the applicable Illinois Pollution Control Board (IPCB) Maximum Allowable Concentrations (MACs) of Chemical Constituents in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations (35 Ill. Adm. Code 1100.Subpart F).

Laboratory results indicated that none of the chemical constituents tested were present at concentrations exceeding the most stringent MACs. Therefore, the soil may be certified as uncontaminated for disposal at a Clean Construction and Demolition Debris (CCDD) or uncontaminated soil fill site in accordance with Ill. Adm. Code 22.51a(d)(2)(B).

A regulatory comparison table, laboratory results, chain of custody documentation, and a signed copy of IEPA Form LPC 663 for the site with uncontaminated soils are attached to this letter report. If you have any questions concerning this report, please do not hesitate to contact the undersigned.

Sincerely,
APPLIED GEOSCIENCE, INC.

Brenda Lodyga
Environmental Specialist

ATTACHMENT A

Sample Location Diagram

PROJECT NUMBER: **22-136**	APPENDIX A: **Soil Sample Location Diagram**	N Not to Scale	*Applied GeoScience, Inc.* 2385 Hammond Drive, Suite 6 Schaumburg, Illinois 60173 (847) 303-0300
CLIENT NAME: **Village of Hoffman Estates**	SITE LOCATION: **North Eagle Way** **Hoffman Estates, Illinois**		
DATE: **April 6, 2022**			

ATTACHMENT B

Regulatory Comparison Table

Laboratory ID : 22040172-001
Client Sample ID : B-1
Date Collected : 04/06/2022

Analyte	Test Method	Units	
Percent Moisture	D2974	wt%	22.1
Benzene	SW5035/8260B	mg/Kg-dry	< 0.0048
Ethylbenzene	SW5035/8260B	mg/Kg-dry	< 0.0048
Toluene	SW5035/8260B	mg/Kg-dry	< 0.0048
Xylenes, Total	SW5035/8260B	mg/Kg-dry	< 0.015
Acenaphthene	SW8270C	mg/Kg-dry	< 0.042
Acenaphthylene	SW8270C	mg/Kg-dry	< 0.042
Anthracene	SW8270C	mg/Kg-dry	< 0.042
Benz(a)anthracene	SW8270C	mg/Kg-dry	< 0.042
Benzo(a)pyrene	SW8270C	mg/Kg-dry	0.048
Benzo(b)fluoranthene	SW8270C	mg/Kg-dry	0.062
Benzo(g,h,i)perylene	SW8270C	mg/Kg-dry	< 0.042
Benzo(k)fluoranthene	SW8270C	mg/Kg-dry	< 0.042
Chrysene	SW8270C	mg/Kg-dry	0.068
Dibenz(a,h)anthracene	SW8270C	mg/Kg-dry	< 0.042
Fluoranthene	SW8270C	mg/Kg-dry	0.21
Fluorene	SW8270C	mg/Kg-dry	< 0.042
Indeno(1,2,3-cd)pyrene	SW8270C	mg/Kg-dry	< 0.042
Naphthalene	SW8270C	mg/Kg-dry	< 0.042
Phenanthrene	SW8270C	mg/Kg-dry	0.13
Pyrene	SW8270C	mg/Kg-dry	0.14
pH	SW9045C	pH Units	7.60
Arsenic	SW6020A	mg/Kg-dry	8.3
Barium	SW6020A	mg/Kg-dry	120
Cadmium	SW6020A	mg/Kg-dry	< 0.59
Chromium	SW6020A	mg/Kg-dry	33
Lead	SW6020A	mg/Kg-dry	23
Mercury	SW7471B	mg/Kg-dry	0.045
Selenium	SW6020A	mg/Kg-dry	1.5
Silver	SW6020A	mg/Kg-dry	< 1.2
Chromium	SW1311/6020A	mg/L	< 0.010
Selenium	SW1311/6020A	mg/L	< 0.010

Laboratory ID : 22040172-001
Client Sample ID : B-1
Date Collected : 04/06/2022

	CAS No.	Analyte	Route Specific Values for Soil		Soil Component of Groundwater Ingestion Exposure Route Values			
			Ingestion	Inhalation	Class I	Class II	ADL	
BTEX	71-43-2	Benzene	12	0.8	0.03	0.17		< 0.0048
	100-41-4	Ethylbenzene	7,800	400 / 58*	13	19		< 0.0048
	108-88-3	Toluene	16,000	650 / 42*	12	29		< 0.0048
	1330-20-7	Xylenes, Total	16,000	320 / 5.6*	150	150		< 0.015
PNA	83-32-9	Acenaphthene	4,700	---	570	2,900		< 0.042
	208-96-8	Acenaphthylene						< 0.042
	120-12-7	Anthracene	23,000	---	12,000	59,000		< 0.042
	56-55-3	Benz(a)anthracene	0.9	---	2	8		< 0.042
	50-32-8	Benzo(a)pyrene	0.09	---	8	82		0.048
	205-99-2	Benzo(b)fluoranthene	0.9	---	5	25		0.062
	191-24-2	Benzo(g,h,i)perylene						< 0.042
	207-08-9	Benzo(k)fluoranthene	9	---	49	250		< 0.042
	218-01-9	Chrysene	88	---	160	800		0.068
	53-70-3	Dibenz(a,h)anthracene	0.09	---	2	7.6		< 0.042
	206-44-0	Fluoranthene	3,100	---	4,300	21,000		0.21
	86-73-7	Fluorene	3,100	---	560	2,800		< 0.042
	193-39-5	Indeno(1,2,3-cd)pyrene	0.9	---	14	69		< 0.042
	91-20-3	Naphthalene	1,600	170 / 1.8*	12	18		< 0.042
	85-01-8	Phenanthrene						0.13
	129-00-0	Pyrene	2,300	---	4,200	21,000		0.14
INORG	7440-38-2	Arsenic	13.0/11.3	750				8.3
	7440-39-3	Barium	5,500	690,000				120
	7440-43-9	Cadmium	78	1,800				< 0.59
	7440-47-3	Chromium	230	270				33
	7439-92-1	Lead	400	---				23
	7439-97-6	Mercury	23	10 / 0.1*				0.045
	7782-49-2	Selenium	390	---				1.5
	7440-22-4	Silver	390	---				< 1.2
TCLP	**7440-47-3**	**Chromium**			**0.1**	**1.0**		**< 0.010**
	7782-49-2	**Selenium**			**0.05**	**0.05**		**< 0.010**

* - Construction Worker Inhalation Objective from Appendix B, Table B.

Laboratory ID : 22040172-001
Client Sample ID : B-1
Date Collected : 04/06/2022

	CAS No.	Analyte	Industrial/Commercial Route Specific Values for Soil		Construction Worker Route Specific Values for Soil		Soil Component of Groundwater Ingestion Exposure Route Values		ADL	
			Ingestion	Inhalation	Ingestion	Inhalation	Class I	Class II		
BTEX	71-43-2	Benzene	100	1.6	2,300	2.2	0.03	0.17		< 0.0048
	100-41-4	Ethylbenzene	200,000	400	20,000	58	13	19		< 0.0048
	108-88-3	Toluene	410,000	650	410,000	42	12	29		< 0.0048
	1330-20-7	Xylenes, Total	410,000	320	41,000	5.6	150	150		< 0.015
PNA	83-32-9	Acenaphthene	120,000	---	120,000	---	570	2,900		< 0.042
	208-96-8	Acenaphthylene								< 0.042
	120-12-7	Anthracene	610,000	---	610,000	---	12,000	59,000		< 0.042
	56-55-3	Benz(a)anthracene	8	---	170	---	2	8		< 0.042
	50-32-8	Benzo(a)pyrene	0.8	---	17	---	8	82		0.048
	205-99-2	Benzo(b)fluoranthene	8	---	170	---	5	25		0.062
	191-24-2	Benzo(g,h,i)perylene								< 0.042
	207-08-9	Benzo(k)fluoranthene	78	---	1,700	---	49	250		< 0.042
	218-01-9	Chrysene	780	---	17,000	---	160	800		0.068
	53-70-3	Dibenz(a,h)anthracene	0.8	---	17	---	2	7.6		< 0.042
	206-44-0	Fluoranthene	82,000	---	82,000	---	4,300	21,000		0.21
	86-73-7	Fluorene	82,000	---	82,000	---	560	2,800		< 0.042
	193-39-5	Indeno(1,2,3-cd)pyrene	8	---	170	---	14	69		< 0.042
	91-20-3	Naphthalene	41,000	270	4,100	1.8	12	18		< 0.042
	85-01-8	Phenanthrene								0.13
	129-00-0	Pyrene	61,000	---	61,000	---	4,200	21,000		0.14
INORG	7440-38-2	Arsenic	13.0/11.3	1,200	61	25,000				8.3
	7440-39-3	Barium	140,000	910,000	14,000	870,000				120
	7440-43-9	Cadmium	2,000	2,800	200	59,000				< 0.59
	7440-47-3	Chromium	6,100	420	4,100	690				33
	7439-92-1	Lead	800	---	700	---				23
	7439-97-6	Mercury	610	16	61	0.1				0.045
	7782-49-2	Selenium	10,000	---	1,000	---				1.5
	7440-22-4	Silver	10,000	---	1,000	---				< 1.2
TCLP	**7440-47-3**	**Chromium**					**0.1**	**1.0**		**< 0.010**
	7782-49-2	**Selenium**					**0.05**	**0.05**		**< 0.010**

			Laboratory ID :	22040172-001
			Client Sample ID :	B-1
			Date Collected :	04/06/2022
CAS No.	Analyte		Maximum Allowable Concentration	
83-32-9	Acenaphthene		570	< 0.042
120-12-7	Anthracene		12,000	< 0.042
7440-38-2	Arsenic	within a MSA county	13.0	8.3
		within a non-MSA county	11.3	8.3
7440-39-3	Barium		1,500	120
71-43-2	Benzene		0.03	< 0.0048
56-55-3	Benz(a)anthracene	within Chicago corporate lir	1.1	< 0.042
		within a populated area in M	1.8	< 0.042
		within a populated area in n	0.9	< 0.042
205-99-2	Benzo(b)fluoranthene	within Chicago corporate lir	1.5	0.062
		within a populated area in M	2.1	0.062
		within a populated area in n	0.9	0.062
207-08-9	Benzo(k)fluoranthene		9	< 0.042
50-32-8	Benzo(a)pyrene	within Chicago corporate lir	1.3	0.048
		within a populated area in M	2.1	0.048
		within a populated area in n	0.98	0.048
		outside populated area	0.09	0.048
7440-43-9	Cadmium		5.2	< 0.59
7440-47-3	Chromium		21	**33**
218-01-9	Chrysene		88	0.068
53-70-3	Dibenz(a,h)anthracene	within Chicago corporate lir	0.20	< 0.042
		within a populated area in M	0.42	< 0.042
		within a populated area in n	0.15	< 0.042
		outside populated area	0.09	< 0.042
100-41-4	Ethylbenzene		13	< 0.0048
206-44-0	Fluoranthene		3,100	0.21
86-73-7	Fluorene		560	< 0.042
193-39-5	Indeno(1,2,3-cd)pyrene	within a populated area in M	1.6	< 0.042
		within Chicago corporate lir	0.9	< 0.042
7439-92-1	Lead		107	23
7439-97-6	Mercury	elemental (analyzed as total	0.1	0.045
		ionic (analyzed as total merc	0.89	0.045
91-20-3	Naphthalene		1.8	< 0.042
129-00-0	Pyrene		2,300	0.14
7782-49-2	Selenium		1.3	**1.5**
7440-22-4	Silver		4.4	< 1.2
108-88-3	Toluene		12	< 0.0048
1330-20-7	Xylenes, Total		5.6	< 0.015
	pH		6.25 - 9.0	7.60

Based on 35 IAC Part 1100.Subpart F.

ATTACHMENT C

Laboratory Results and Chain of Custody Documentation

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

April 14, 2022

Applied Geoscience, Inc.
2385 Hammond Drive, Suite 6
Schaumburg, IL 60173
Telephone: (847) 303-0300
Fax: (847) 303-0900

Analytical Report for STAT Work Order: 22040172 Revision 1

RE: 22-136, Sewer Improvement, N. Eagle Way

Dear Applied Geoscience, Inc.:

STAT Analysis received 1 sample for the referenced project on 4/6/2022 5:00:00 PM. The analytical results are presented in the following report.

This report is revised to reflect additional analysis requested after the last report revision.

All analyses were performed in accordance with the requirements of 35 IAC Part 186 / NELAP standards. Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided. A listing of accredited methods/parameters can also be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 733-0551.

Sincerely,

Justice Kwateng
Project Manager

STAT Analysis Corporation

Date: April 14, 2022

Client: Applied Geoscience, Inc.
Project: 22-136, Sewer Improvement, N. Eagle Way
Work Order: 22040172 Revision 1

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
22040172-001A	B-1		4/6/2022	4/6/2022
22040172-001B	B-1		4/6/2022	4/6/2022

STAT Analysis Corporation

Date: *April 14, 2022*

CLIENT:	Applied Geoscience, Inc.
Project:	22-136, Sewer Improvement, N. Eagle Way
Work Order:	22040172 Revision 1

CASE NARRATIVE

The metals Matrix Spike/Matrix Spike Duplicate (MS/MSD) prepared from sample B-1(22040172-001B) had Barium recovery outside control limits (168%/162% (MS/MSD) recovery, QC limits 75-125%).

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Accreditations:IEPA ELAP 100445;ORELAP IL300001;AIHA-LAP, LLC 101160;NVLAP LabCode 101202-0

Date Reported: April 14, 2022
Date Printed: April 14, 2022

ANALYTICAL RESULTS

Client: Applied Geoscience, Inc.
Work Order: 22040172 Revision 1
Project: 22-136, Sewer Improvement, N. Eagle Way
Lab ID: 22040172-001

Client Sample ID: B-1
Collection Date: 4/6/2022
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
BTEX in Soil by GC/MS	**SW5035/8260B**			Prep Date: **4/7/2022**		Analyst: **ERP**
Benzene	ND	0.0048		mg/Kg-dry	1	4/12/2022
Ethylbenzene	ND	0.0048		mg/Kg-dry	1	4/12/2022
Toluene	ND	0.0048		mg/Kg-dry	1	4/12/2022
Xylenes, Total	ND	0.015		mg/Kg-dry	1	4/12/2022
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **4/7/2022**		Analyst: **TEM**
Acenaphthene	ND	0.042		mg/Kg-dry	1	4/7/2022
Acenaphthylene	ND	0.042		mg/Kg-dry	1	4/7/2022
Anthracene	ND	0.042		mg/Kg-dry	1	4/7/2022
Benz(a)anthracene	ND	0.042		mg/Kg-dry	1	4/7/2022
Benzo(a)pyrene	0.048	0.042		mg/Kg-dry	1	4/7/2022
Benzo(b)fluoranthene	0.062	0.042		mg/Kg-dry	1	4/7/2022
Benzo(g,h,i)perylene	ND	0.042		mg/Kg-dry	1	4/7/2022
Benzo(k)fluoranthene	ND	0.042		mg/Kg-dry	1	4/7/2022
Chrysene	0.068	0.042		mg/Kg-dry	1	4/7/2022
Dibenz(a,h)anthracene	ND	0.042		mg/Kg-dry	1	4/7/2022
Fluoranthene	0.21	0.042		mg/Kg-dry	1	4/7/2022
Fluorene	ND	0.042		mg/Kg-dry	1	4/7/2022
Indeno(1,2,3-cd)pyrene	ND	0.042		mg/Kg-dry	1	4/7/2022
Naphthalene	ND	0.042		mg/Kg-dry	1	4/7/2022
Phenanthrene	0.13	0.042		mg/Kg-dry	1	4/7/2022
Pyrene	0.14	0.042		mg/Kg-dry	1	4/7/2022
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **4/7/2022**		Analyst: **JG**
Arsenic	8.3	1.2		mg/Kg-dry	10	4/11/2022
Barium	120	1.2		mg/Kg-dry	10	4/11/2022
Cadmium	ND	0.59		mg/Kg-dry	10	4/11/2022
Chromium	33	1.2		mg/Kg-dry	10	4/11/2022
Lead	23	0.59		mg/Kg-dry	10	4/11/2022
Selenium	1.5	1.2		mg/Kg-dry	10	4/11/2022
Silver	ND	1.2	*	mg/Kg-dry	10	4/11/2022
TCLP Metals by ICP/MS	**SW1311/6020A (SW3005A)**			Prep Date: **4/13/2022**		Analyst: **JG**
Chromium	ND	0.010		mg/L	5	4/13/2022
Selenium	ND	0.010		mg/L	5	4/13/2022
Mercury	**SW7471B**			Prep Date: **4/7/2022**		Analyst: **LB**
Mercury	0.045	0.022		mg/Kg-dry	1	4/8/2022
pH (25 °C)	**SW9045C**			Prep Date: **4/7/2022**		Analyst: **BAS**
pH	7.60			pH Units	1	4/7/2022

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Accreditations:IEPA ELAP 100445;ORELAP IL300001;AIHA-LAP, LLC 101160;NVLAP LabCode 101202-0

Date Reported: April 14, 2022
Date Printed: April 14, 2022

ANALYTICAL RESULTS

Client: Applied Geoscience, Inc.
Work Order: 22040172 Revision 1
Project: 22-136, Sewer Improvement, N. Eagle Way
Lab ID: 22040172-001

Client Sample ID: B-1
Collection Date: 4/6/2022
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Percent Moisture	**D2974**			Prep Date: **4/11/2022**		Analyst: **HYM**
Percent Moisture	22.1	0.2	*	wt%	1	4/12/2022

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

STAT Analysis Corporation
2242 W. Harrison Suite 200, Chicago, Illinois 60612 Phone: (312) 733-0551 Fax: (312) 733-2386
e-mail address: STATinfo@STATAnalysis.com

CHAIN OF CUSTODY RECORD

Nº: 921824 **Page : ____ of ____**

Company: Applied GeoScience Inc
Project Number: 22-136 Client Tracking No.:
Project Name: Sewer Improvement
Project Location: N Eagle Way
Sampler(s): SB
Report To: Sarah@appliedgeo.net Phone: 847 303 0300
Fax: 847 303 0900
e-mail: Sarah@appliedgeo.net
QC Level: 1 ____ 2 ____ 3 ____ 4 ____

Quote No.:
P.O. No.:
Turn Around Time (Days): by monday
1 (2) 3 4 5 - 7 10
Results Needed: 12:00
4 / 11 / 22 am/pm

Client Sample Number/Description:	Date Taken	Time Taken	Matrix	Comp.	Grab	Preserv.	No. of Containers	BETX	PNAs	RCRA metals	pH	Additional Information:	Lab No.:
B-1	4-6-22		Soil					X	X	X	X		001

Relinquished by: (Signature) Date/Time: 4/6/22 5pm
Received by: (Signature) Date/Time: 4/6/22 1700
Relinquished by: (Signature) Date/Time:
Received by: (Signature) Date/Time:
Relinquished by: (Signature) Date/Time:
Received by: (Signature) Date/Time:

Comments:

Laboratory Work Order No.: 22040172

Received on Ice: Yes ☑ No ☐

Temperature: 1.2 °C

Preservation Code: A = None B = HNO_3 C = NaOH
D = H_2SO_4 E = HCl F = 5035/EnCore G = Other

STAT Analysis Corporation

Sample Receipt Checklist

Client Name AGI

Date and Time Received: 4/6/2022 5:00:00 PM

Work Order Number 22040172

Received by: MM

Checklist completed by: _____ 4-6-22
Signature | Date

Reviewed by: _____ 4/7/22
Initials | Date

Matrix: Carrier name Client Delivered

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels/containers?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container or Temp Blank temperature in compliance?	Yes ☑	No ☐	Temperature 1.2 °C
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☐	No ☐
Water - Samples pH checked?	Yes ☐	No ☐	Checked by: _____
Water - Samples properly preserved?	Yes ☐	No ☐	pH Adjusted? _____

Any No response must be detailed in the comments section below.

Comments: _____

Client / Person contacted: _____ Date contacted: _____ Contacted by: _____

Response: _____

Justice Kwateng

From: brenda appliedgeo.net <brenda@appliedgeo.net>
Sent: Tuesday, April 12, 2022 2:15 PM
To: Justice Kwateng; adam appliedgeo.net; katie appliedgeo.net; kevin appliedgeo.net; Sarah Bolock
Subject: RE: 22-136, Sewer Improvement, N. Eagle Way STAT 22040172

Good afternoon Justice,

Please run TCLP for Chromium and Selenium.

Thanks,

Brenda Lodyga
Environmental Specialist
Applied GeoScience, Inc.
2385 Hammond Drive, Suite 6
Schaumburg, Illinois 60173

Office: 847-303-0300
Fax: 847-303-0900
Cell: 847-722-8614
Email: Brenda@appliedgeo.net
Website: www.appliedgeo.net

From: Justice Kwateng [mailto:JKwateng@STATAnalysis.com]
Sent: Tuesday, April 12, 2022 1:18 PM
To: adam appliedgeo.net <adam@appliedgeo.net>; brenda appliedgeo.net <brenda@appliedgeo.net>; katie appliedgeo.net <katie@appliedgeo.net>; kevin appliedgeo.net <kevin@appliedgeo.net>; Sarah Bolock <sarah@appliedgeo.net>
Subject: 22-136, Sewer Improvement, N. Eagle Way STAT 22040172
Importance: High

Please find the attached report for your 22-136, Sewer Improvement, N. Eagle Way project.
STAT 22040172

Thank you for choosing STAT for your testing needs.

In an effort to increase efficiency and conserve resources, STAT Analysis has adopted paperless reporting. The attached pdf files can be printed as the final copy. You will not receive a hardcopy in the mail.

Best Regards,

Justice Kwateng

ATTACHMENT D

IEPA LPC-663 Forms

Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: Proposed New Sewer Improvements Office Phone Number, if available:

Physical Site Location (address, including number and street):
North Eagle Way

City: Hoffman Estates State: IL Zip Code: 60192

County: Cook Township:

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.07143 (Decimal Degrees) Longitude: -88.13613 (-Decimal Degrees)

Identify how the lat/long data were determined:

○ GPS ⊘ Map Interpolation ○ Photo Interpolation ○ Survey ○ Other

IEPA Site Number(s), if assigned: BOL: BOW: BOA:

Approximate Start Date (mm/dd/yyyy): Apr 14, 2022 Approximate End Date (mm/dd/yyyy): Jan 31, 2023

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Village of Hoffman Estates
Street Address:
PO Box:
City: State:
Zip Code: Phone:
Contact: Alan Wenderski
Email, if available: alan.wenderski@hoffmanestates.org

Site Operator

Name: Village of Hoffman Estates
Street Address:
PO Box:
City: State:
Zip Code: Phone:
Contact: Alan Wenderski
Email, if available: alan.wenderski@hoffmanestates.org

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: Proposed New Sewer Improvements Latitude: 42.07143 Longitude: - 88.13613

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

One representative sample was determined to be sufficient based on the volume and composition of soils. The soil sample point corresponds with the Latitude and Longitude identified above.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0,including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201 (g), 1100.205(a), 1100.610]:

A representative sample analyzed for polynuclear hydrocarbons (PNAs), benzene, ethylbenzene, toluene, and xylene (BETX), RCRA Metals, and pH. The laboratory report and chain of custody documentation are attached.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Adam M. Moghamis (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

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

Company Name: Applied GeoScience, Inc.

Street Address: 2385 Hammond Drive, Suite 6

City: Schaumburg State: IL Zip Code: 60173

Phone: 847-303-0300

Adam M. Moghamis
Printed Name:

Adam M Moghamis
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

Apr 14, 2022
Date:

P.E or L.P.G. Seal: