



Meeting of the Village of Buffalo Grove
Village Board
Regular Meeting
May 20, 2024 at 7:30 PM

Fifty Raupp Blvd
Buffalo Grove, IL 60089-2100
Phone: 847-459-2500

1. Call to Order

- A. Pledge of Allegiance

2. Approval of Minutes

- A. Village Board - Regular Meeting - Apr 15, 2024 7:30 PM
B. Village Board - Committee of the Whole - May 6, 2024 7:30 PM

3. Approval of Warrant

- A. Approval of Warrant #1368 (Trustee Bocek) (Staff Contact: Chris Black)

4. Village President's Report

- A. 2024-25 Village Board Portfolios (President Smith) (Staff Contact: Dane Bragg)
B. Appointment of Board, Commission, and Committee Members (President Smith) (Staff Contact: Dane Bragg)

5. Village Manager's Report

6. Special Business

7. Reports from Trustees

8. Consent Agenda

All items listed on the Consent Agenda, which are available in this room this evening, are considered to be routine by the Village Board and will be enacted by one motion. There will be no separate discussion of these items unless a Board member or citizen so requests, in which event, the item will be removed from the General Order of Business and considered after all other items of business on the Regular Agenda under New Business. (Attached).

- A. Proclamation Recognizing Emergency Medical Services Week (Trustee Cesario) (Staff Contact: Mike Baker)

A proclamation recognizing May 19th through May 25th, 2024 as National Emergency Medical Services Week.

- B. Proclamation Recognizing May as National Cities, Towns, and Villages Month (President Smith) (Staff Contact: Chris Stilling)

Summary: Proclamation recognizing May as National Cities, Towns, and Villages Month.

- C. R-2024-13 Resolution Approving an Agreement Updating the Village's Participation in the Illinois Emergency Management Mutual Aid System (Trustee Ottenheimer) (Staff Contact: Dane Bragg)

Summary: Staff recommends approval of an agreement updating the Village's participation in the Illinois Emergency Management Mutual Aid System in accordance with Chapter 2.54 of the Municipal Code.

- D. O-2024-48 Ordinance Approving an Amendment to Solid Waste Agency of Northern Cook County (SWANCC) Founding Agreement and Bylaws (Trustee Cesario) (Staff Contact: Dane Bragg)
- Summary: Staff requests approval of an amendment to the Solid Waste Agency of Northern Cook County (SWANCC) founding agreement and bylaws to allow additional alternate members.
- E. R-2024-14 Resolution Appointing a Director and Alternates to the Solid Waste Agency of Northern Cook County (SWANCC) (Trustee Cesario) (Staff Contact: Dane Bragg)
- Summary: The attached resolution appoints Eric Smith, Village President as the Village's Director on the Board of Directors of the Agency, appoints Dane C. Bragg, Village Manager as Alternate Director and appoints Christopher Stilling, Deputy Village Manager as Alternate Director.
- F. O-2024-49 Award of Bid Pump House Improvements (Trustee Stein) (Staff Contact: Kyle Johnson)
- Staff recommends that the Village Board authorize the Village Manager to execute a contract with William T. Connelly Inc., for the Variable Frequency Drive (VFD) Replacement Project at Pumping Stations 6 & 7 in an amount not to exceed \$125,400.00 pending review and approval by the Village attorney.
- G. O-2024-50 Ordinance Authorizing License Agreement with Buffalo Grove Park District (Trustee Stein) (Staff Contact: Brian Budds)
- Summary: The Buffalo Grove Police Department requests approval of License Agreement with the Buffalo Grove Park District to allow for the placement of Flock ALPR Cameras on Park District Property.
- H. O-2024-51 Ordinance Amending Chapter 5.20 Liquor Controls (President Smith) (Staff Contact: Jessie Brown)
- SUMMARY: Three liquor licenses are being removed from the list of authorized licenses. They include K1 Speed, Inc at 301 Hastings Lane, Roundy's Illinois, LLC d/b/a Mariano's is hereby removed, as the business now holds a Class C license and WJ Sports Entertainment, LLC at 1380 Busch Parkway is hereby removed.
- I. O-2024-52 Ordinance Amending Chapter 5.20 Liquor Controls (President Smith) (Staff Contact: Jessie Brown)
- SUMMARY: Themis Pizza d/b/a Giordano's of Buffalo Grove at 270 McHenry Road, Nino's Pizzeria, Inc. at 960 Buffalo Grove Road and Black Pepper, Inc. d/b/a Rivaj Indian Cuisine at 1024 Weiland Road have all requested a change in liquor license from a Class A-1 to a Class A.
- J. O-2024-53 An Ordinance Authorizing Execution of an Agreement with FQC Construction Management for Pre-Construction Management Services (Trustee Cesario) (Staff Contact: Larry Kane)
- Summary: Staff recommends entering into an agreement with Fredrick Quinn Construction (FQC) for pre-construction services for Station 25 project in an amount not to exceed \$18,750.00, pending Village Attorney approval.
- K. O-2024-54 An Ordinance Authorizing Execution of an Agreement with Gewalt Hamilton Associates, Inc. for Professional Surveying and Engineering Services (Trustee Cesario) (Staff Contact: Larry Kane)
- Summary: Staff is recommends entering into a contract with GeWalt Hamilton Associates for site work, surveying and engineering services for the station 25 project in the total amount of \$146,095.00.

- L. O-2024-55 An Ordinance Authorizing Execution of an Agreement with True North Consultants for Hazardous Materials Survey and Soil Assessment Services (Trustee Cesario) (Staff Contact: Larry Kane)

Summary: Staff recommends entering into a contract with True North Consultants for the hazardous materials survey and soil assessment on the Station 25 project in an amount not to exceed \$8,167.00.
- M. O-2024-56 Certificate of Initial Acceptance and Approval: Flex Parking Lot Development Improvements (Trustee Stein) (Staff Contact: Kyle Johnson)

SUMMARY: Attached is the Certificate of Initial Acceptance for the parking lot development located at 751 Corporate Grove Drive. Staff recommends approval to begin the one year maintenance period on May 20, 2024.
- N. O-2024-57 Ordinance Authorizing Purchase of Radio Equipment (Trustee Cesario) (Staff Contact: Mike Baker)

Summary: Staff recommends the Village Board authorize fire department staff to purchase replacement radio equipment at a total amount not to exceed \$69,570.08 from Motorola Solutions through a cooperative purchasing contract.
- O. R-2024-15 Bernard Drive IDOT Resolution for Phase II Engineering Design (Trustee Stein) (Staff Contact: Kyle Johnson)

Summary: Staff recommends approval of the enclosed IDOT Resolution allowing the Village to utilize Motor Fuel Tax funds to pay for Phase II Design Engineering for the Bernard Road Reconstruction Project.

9. Ordinances and Resolutions

- A. O-2024-58 Approve a Preliminary Plan, an Amendment to the Special Use, and Variations from the Fence Code for Improvements to Athletic Fields at Buffalo Grove High School at 1100 W Dundee Rd (Trustee Weidenfeld) (Staff Contact: Nicole Woods)
- B. O-2024-59 Ordinance Authorizing a Development Improvement Agreement with Township High School District 214 (Trustee Stein) (Staff Contact: Kyle Johnson)
- C. O-2024-60 Ordinance Authorizing an Engineering Services Agreement with Christopher B. Burke Engineering, Ltd. (Trustee Stein) (Staff Contact: Kyle Johnson)
- D. O-2024-61 Ordinance Authorizing Execution of a Contract with Morton Salt Inc for Road Salt (Lake County Joint Bid) (Trustee Bocek) (Staff Contact: Tom Wisniewski)
- E. O-2024-62 Ordinance Amending Fiscal Year 2023 Budget for the Village of Buffalo Grove (Trustee Bocek) (Staff Contact: Chris Black)

10. Unfinished Business

11. New Business

12. Public Comment

Public Comment is limited to items that are not on the regular agenda. In accordance with Section 2.02.070 of the Municipal Code, discussion on questions from the audience will be limited to 5 minutes and should be limited to concerns or comments regarding issues that are relevant to Village Board business. All members of the public addressing the Village Board shall maintain proper decorum and refrain from making disrespectful remarks or comments relating to individuals. Speakers shall use every attempt to not be repetitive of points that have been made

by others. The Village Board may refer any matter of public comment to the Village Manager, Village staff or an appropriate agency for review.

13. Executive Session

14. Adjournment

The Village Board will make every effort to accommodate all items on the agenda by 10:30 p.m. The Board, does, however, reserve the right to defer consideration of matters to another meeting should the discussion run past 10:30 p.m.

The Village of Buffalo Grove, in compliance with the Americans with Disabilities Act, requests that persons with disabilities, who require certain accommodations to allow them to observe and/or participate in this meeting or have questions about the accessibility of the meeting or facilities, contact the ADA Coordinator at 459-2525 to allow the Village to make reasonable accommodations for those persons.

**MINUTES OF THE REGULAR MEETING OF THE VILLAGE PRESIDENT & BOARD OF
TRUSTEES OF THE VILLAGE OF BUFFALO GROVE HELD IN THE JEFFREY S. BRAIMAN
COUNCIL CHAMBERS, 50 RAUPP BOULEVARD, BUFFALO GROVE, ILLINOIS
MONDAY, APRIL 15, 2024**

CALL TO ORDER

President Smith called the meeting to order at 7:30 P.M. Those present stood and pledged allegiance to the Flag.

ROLL CALL

Roll call indicated the following present: President Smith; Trustees Johnson, Cesario, Ottenheimer, Stein, Bocek, and Weidenfeld.

Also present were: Dane Bragg, Village Manager; Patrick Brankin, Village Attorney; Chris Stilling, Deputy Village Manager; Mike Skibbe, Deputy Village Manager/Director of Public Works; Katie Golbach, Human Resources Director; Molly Gillespie, Director of Communications; Chris Black, Director of Finance; Jim Warnstedt, Deputy Public Works Director; Brett Robinson, Administrative Services Director; Geoff Tollefson, Director of Golf Operations; Fire Chief Baker; Deputy Fire Chief Kane; Tyler Grace, Fire Department Analyst; and Police Chief Budds.

APPROVAL OF MINUTES

Moved by Ottenheimer, seconded by Cesario, to approve the minutes of the March 18, 2024, Regular Meeting. Upon roll call, Trustees vote as follows:

AYES: 6 – Johnson, Cesario, Ottenheimer, Stein, Bocek, Weidenfeld

NAYS: 0 – None

Motion declared carried.

Moved by Weidenfeld, seconded by Johnson, to approve the minutes of the April 1, 2024, Committee of the Whole Meeting. Upon roll call, Trustees vote as follows:

AYES: 6 – Johnson, Cesario, Ottenheimer, Stein, Bocek, Weidenfeld

NAYS: 0 – None

Motion declared carried.

WARRANT #1367

Mr. Black read Warrant #1367. Moved by Bocek, seconded by Weidenfeld, to approve Warrant #1367 in the amount of \$6,987,316.78 authorizing payment of bills listed, after which he answered questions from the Board. Upon roll call, Trustees voted as follows:

AYES: 6 – Johnson, Cesario, Ottenheimer, Stein, Bocek, Weidenfeld

NAYS: 0 – None

Motion declared carried.

VILLAGE PRESIDENT'S REPORT

Trustee Johnson read a Proclamation recognizing May 2024 as **Mental Health Awareness Month** in the Village of Buffalo Grove, encouraging all residents to educate themselves and others about mental health conditions, treatment options and available resources.

Trustee Bocek read a Proclamation recognizing the week of May 1st through May 7th, 2024, as **Be Kind to Animals Week** in the Village of Buffalo Grove, reminding all pet owners that they are responsible for the well-being of their pets.

Minutes Acceptance: Minutes of Apr 15, 2024 7:30 PM (Approval of Minutes)

VILLAGE MANAGER'S REPORT

There is no Village Manager's report tonight.

TRUSTEE REPORTS

There were no reports from Trustees tonight.

CONSENT AGENDA

President Smith explained the Consent Agenda, stating that any member of the audience or the Board could request that an item be removed for full discussion; there were no such requests. The Village Clerk read a brief synopsis of each of the items on the Consent Agenda.

Proclamation - National Public Safety Telecommunicators Week

Motion to approve a Proclamation recognizing April 14 through April 20, 2024, as National Public Safety Telecommunicators week.

Proclamation - Arbor Day

Motion to approve a Proclamation designating Friday, April 26, 2024, as Arbor Day in Buffalo Grove. This Proclamation is one of four criteria to qualify for the Tree City U.S.A. Award.

Resolution No. 2024-9 - Semi-Annual Review of Closed Session Minutes

Motion to pass Resolution No. 2024-9 relating to the Semi-Annual Review of Closed Session Minutes. The Corporate Authorities of the Village determine that the need for confidentiality still exists with regard to the following approved minutes: September 18, 2023, December 4, 2023, January 2, 2024, January 16, 2024, February 5, 2024, and March 4, 2024.

Resolution No. 2024-10 - Food Service at the Buffalo Grove Commuter Rail Station

Motion to pass Resolution No. 2024-10 authorizing the Execution of a License Agreement for Food Service at the Buffalo Grove Commuter Rail Station. The current owner of the coffee shop at the Metra commuter rail station has elected to sell their business to another operator. Staff believes it is in the best interests of the Village to continue to license food and beverage services at this location.

Ordinance No. 2024-37 - Title 10 of the Village of Buffalo Grove Municipal Code

Motion to pass Ordinance No. 2024-37 amending Title 10 of the Village of Buffalo Grove Municipal Code. This is an ordinance proposing updates to the speed restrictions portion of the Village's vehicle and traffic code incorporating school zone speed limits around Ivy Hall School.

Ordinance No. 2024-38 - Fire Station 27 Generator Replacement

Motion to pass Ordinance No. 2024-37 authorizing the Village Manager to execute a contract with Kellenberger Electric, for the Fire Station 27 Generator Replacement Project in an amount not to exceed \$70,505.00 pending final review and approval of the contract by the Village Attorney.

Ordinance No. 2024-39 - Shared Risk Manager Intergovernmental Agreement

Motion to pass Ordinance No. 2024-39, Shared Risk Manager Intergovernmental Agreement with the Villages of Highland Park and Elk Grove.

Ordinance 2024-40 - Title 12 of the Village of Buffalo Municipal Code

Motion to pass Ordinance No. 2024-40 amending Title 12 of the Village of Buffalo Municipal Code pertaining to planting and tree care management.

Minutes Acceptance: Minutes of Apr 15, 2024 7:30 PM (Approval of Minutes)

Ordinance No. 2024-41 - Chapter 5.20 Liquor Controls

Motion to pass Ordinance No. 2024-41 amending Chapter 5.20 Liquor Controls. As part of the comprehensive amendment to Village Code, which occurred in December 2023, staff is recommending a further amendment to align the new liquor license classes with the upcoming license period beginning May 1, 2024.

Ordinance No. 2024-42 - Chapter 5.20 Liquor Controls

Motion to pass Ordinance No. 2024-42 amending Chapter 5.20 Liquor Controls. A Class A-1 liquor license is reserved for PYX Brands LLC d/b/a Yeero Revolution at 700 E. Lake Cook Road, 105. This reservation is subject to the applicant completing Village requirements for said license on or before July 15, 2024.

Water Facility Improvements

Motion to authorize bid waiver and negotiate for Water Facility Security Improvements as detailed in the memo contained in Board packets.

Moved by Ottenheimer, seconded by Weidenfeld, to approve the Consent Agenda as presented. Upon roll call, Trustees voted as follows on the Consent Agenda:

AYES: 6 – Johnson, Cesario, Ottenheimer, Stein, Bocek, Weidenfeld

NAYS: 0 – None

Motion declared carried.

ORDINANCE NO. 2024-43– LINK TOGETHER COALITION

Moved by Cesario, seconded by Johnson, to pass Ordinance No. 2024-43, a \$5,000.00 donation from the Opioid Settlement Funds for the purchase of at-home drug disposal systems and multi-pill bottle lock boxes.

Trustee Stein recused himself from this discussion.

Chief Budds reviewed the proposed ordinance, details of which are contained in his memo of April 9, 2024, to Mr. Bragg, after which he answered questions from the Board.

Upon roll call, Trustees voted as follows:

AYES: 5 – Johnson, Cesario, Ottenheimer, Bocek, Weidenfeld

NAYS: 0 – None

RECUSED: 1 – Stein

Motion declared carried.

Trustee Stein returned to the meeting.

RESOLUTION NO. 2024-11 – BG DAYS

Moved by Johnson, seconded by Cesario, to pass Resolution No. 2024-11 authorizing the Village Manager to execute an Agreement with the Buffalo Grove Park District and the Buffalo Grove Rotary Club for the 2024 BG Days Event.

Ms. Gillespie reviewed the proposed resolution, details of which are contained in the memo that she and Joe Zimmermann sent to the Buffalo Grove Village Board and the Buffalo Grove Park District Commissioners dated April 8, 2024, after which she answered questions from the Board.

Upon roll call, Trustees voted as follows:

AYES: 6 – Johnson, Cesario, Ottenheimer, Stein, Bocek, Weidenfeld

NAYS: 0 – None

Motion declared carried.

ORDINANCE NO. 2024-44 – FIRE STATION 25

Moved by Cesario, seconded by Johnson, to pass Ordinance No. 2024-44 authorizing the Village Manager to execute an agreement with FGM Architects for architectural services for the design of Station 25 in an amount not to exceed 8.5% of the estimated \$10.4 million project cost resulting in a total of \$884,000.00, plus a 10% Village Manager controlled contingency (\$88,400.00) due to the GMP not being established, pending review and approval by the Village Attorney.

Deputy Fire Chief Kane reviewed the proposed ordinance, details of which are contained in the memo to Mr. Bragg of March 14, 2024, from him, Mr. Stilling and Chief Baker, after which he answered questions from the Board. There will be no disruption to emergency services during this process.

Upon roll call, Trustees voted as follows:

AYES: 6 – Johnson, Cesario, Ottenheimer, Stein, Bocek, Weidenfeld

NAYS: 0 – None

Motion declared carried.

ORDINANCE NO. 2024-45 – FF/PM CONTRACT

Moved by Ottenheimer, seconded by Bocek, to pass Ordinance No. 2024-45 approval of a contract between the Village of Buffalo Grove Professional Firefighter/Paramedic Association Local 3177, IAFF, AFL-CIO, CLC for the period of May 1, 2023, through April 30, 2025, and to authorize the Village Manager to sign such agreement.

Ms. Golbach reviewed the proposed ordinance, as well as the next two agenda items, details of which are contained in her memo to Mr. Bragg of April 15, 2024.

President Smith thanked staff and the union for their diligence in getting the negotiations for this contract done so quickly and noted that the entire Board and our residents appreciate the services provided by our firefighter/paramedics.

Upon roll call, Trustees voted as follows:

AYES: 6 – Johnson, Cesario, Ottenheimer, Stein, Bocek, Weidenfeld

NAYS: 0 – None

Motion declared carried.

ORDINANCE NO. 2024-46 – FF/PM AGREEMENT

Moved by Ottenheimer, seconded by Johnson, to pass Ordinance No. 2024-46 approving a Letter of Agreement between the Village of Buffalo Grove and the Buffalo Grove Professional Firefighter/Paramedic Association to include wages for the period of May 1, 2024, to April 30, 2025.

Upon roll call, Trustees voted as follows:

AYES: 6 – Johnson, Cesario, Ottenheimer, Stein, Bocek, Weidenfeld

NAYS: 0 – None

Motion declared carried.

RESOLUTION NO. 2024-12 – REVISED 2024 PAY RANGES

Moved by Ottenheimer, seconded by Weidenfeld, to pass Resolution No. 2024-12 approval of the Revised 2024 Pay Ranges. Upon roll call, Trustees voted as follows:

AYES: 6 – Johnson, Cesario, Ottenheimer, Stein, Bocek, Weidenfeld

NAYS: 0 – None

Motion declared carried.

ORDINANCE NO. 2024-47 – WATER METERS

Moved by Bocek, seconded by Weidenfeld, to pass Ordinance No. 2024-47 authorizing the waiver of bids to purchase water meters.

Mr. Robinson reviewed the proposed ordinance, details of which are contained in the memo to Mr. Bragg of March 25, 2024, from Chris Krase, after which he answered questions from the Board.

Upon roll call, Trustees voted as follows:

AYES: 6 – Johnson, Cesario, Ottenheimer, Stein, Bocek, Weidenfeld

NAYS: 0 – None

Motion declared carried.

QUESTIONS FROM THE AUDIENCE

President Smith reviewed the parameters to be followed by speakers and asked if there were any questions from the audience on items not on tonight's agenda; there were no such questions.

ADJOURNMENT

Moved by Cesario, seconded by Johnson, to adjourn the meeting. Upon roll call, Trustees voted as follows:

AYES: 6 – Johnson, Cesario, Ottenheimer, Stein, Bocek, Weidenfeld

NAYS: 0 – None

Motion declared carried.

The Regular Meeting was adjourned at 8:02 P.M.

Janet M. Sirabian, Village Clerk

APPROVED BY ME THIS 20th DAY OF May 2024

Village President

Minutes Acceptance: Minutes of Apr 15, 2024 7:30 PM (Approval of Minutes)

**MINUTES OF THE COMMITTEE OF THE WHOLE MEETING OF THE VILLAGE PRESIDENT &
BOARD OF TRUSTEES OF THE VILLAGE OF BUFFALO GROVE HELD IN THE
JEFFREY S. BRAIMAN COUNCIL CHAMBERS AT VILLAGE HALL, 50 RAUPP BOULEVARD,
BUFFALO GROVE, ILLINOIS, MONDAY MAY 6, 2024**

CALL TO ORDER

President Smith called the meeting to order at 7:30 P.M. Those present stood and pledged allegiance to the Flag.

ROLL CALL

Roll call indicated the following present: President Smith; Trustees Johnson, Cesario, Ottenheimer, Stein, Bocek, and Weidenfeld.

Also present were: Chris Stilling, Acting Village Manager; Patrick Brankin, Village Attorney; Mike Skibbe, Deputy Village Manager/Director of Public Works; Chris Black, Finance Director; Katie Golbach, Director of Human Resources; Molly Gillespie, Communications Director; Timothy Kirsininkas, Communications Coordinator; Nicole Woods, Director of Community Development; Brett Robinson, Administrative Services Director; Geoff Tollefson, Director of Golf Operations; Police Chief Budds; Fire Chief Baker; Deputy Fire Chief Kane; and Tyler Grace, Fire Department Analyst.

The **Committee of the Whole Meeting** consisted of staff reports and Board discussion on the listed topics, with staff answering questions from the Board on each topic.

4C STEM CLUB

President Smith recognized students who are with us from the 4C Stem Club and who had a tour of the Village prior to the meeting. President Smith reviewed the mission of the Club and thanked them for being here tonight.

Chief Budds also acknowledged the students and thanked them for their donation to the Village of Buffalo Grove, which will be put toward the Junior Police Academy hosted by the Buffalo Grove Police Department each year.

POLICE OFFICERS

Chief Budds introduced Buffalo Grove's two newest officers, **Officer Drew Stephans** and **Officer Oliver Sorisho**. Chief Budds reviewed the credentials of each of the officers as they were welcomed by the audience and the Board. Both officers noted that they are honored to be a part of the Buffalo Grove Police Department and look forward to serving the residents of Buffalo Grove.

FIREFIGHTER OF THE YEAR

Chief Baker reviewed the process and criteria for choosing the Firefighter of the Year, after which he introduced Shawn Collins, President of the Buffalo Grove Rotary Club to present the award.

Mr. Collins summarized the mission of Rotary and the history of the Firefighter of the Year award, after which he introduced this year's honoree, **Lieutenant Dan Pasquarella** and shared the highlights of Lieutenant Pasquarella's career.

As he was congratulated by the audience and the Board, Lieutenant Pasquarella thanked the Rotary Club, the Board, his family, and his fellow firefighters for this honor.

Minutes Acceptance: Minutes of May 6, 2024 7:30 PM (Approval of Minutes)

PROCLAMATION – ORIGINAL BAGEL & BIALY

President Smith read a Proclamation honoring Lon Gitler, owner of Original Bagel & Bialy, expressing our gratitude to Lon Gitler for his service and generosity to the Buffalo Grove community and beyond.

Debi Moritz, Chair of the Buffalo Grove Health Commission, commented on the Blood Drives that are held quarterly by the Commission, noting the vital role that blood donations play in healthcare. Ms. Moritz thanked the dedicated volunteers that staff the drives and urged residents to donate blood if they are able. Ms. Moritz then presented a plaque to Mr. Gitler in appreciation for the contributions that Original Bagel & Bialy provides for the drives.

PROCLAMATION – JEWISH AMERICAN HERITAGE MONTH

President Smith read a Proclamation declaring the month of May 2024 as Jewish American Heritage Month in the Village of Buffalo Grove and called upon our citizens to commemorate this occasion by appropriately celebrating the contributions to our Country and Village of Buffalo Grove of the Jewish community's history, heritage, and culture. President Smith then presented the Proclamation to Jane Charney, representing the Jewish United Fund.

PROCLAMATION – NATIONAL POLICE WEEK

Trustee Ottenheimer read a Proclamation designating the week of May 12-18, 2024, as Police Week in the Village of Buffalo Grove, commemorating police officers, past and present who, by their faithful and loyal devotion to their responsibilities, have rendered a dedicated service to their communities and in doing so, have established for themselves an enviable and enduring reputation for preserving the rights and security of all citizens.

PROCLAMATION – MUNICIPAL CLERKS WEEK

President Smith read a Proclamation recognizing the week of May 5-11, 2024, as Professional Municipal Clerks Week and expressed appreciation to Clerk Janet Sirabian and Deputy Clerk Jessie Brown and all municipal clerks for the vital services they perform and their exemplary dedication to the communities they represent.

PROCLAMATION – PUBLIC WORKS WEEK

President Smith read a Proclamation designating the week of May 19-25, 2024, as National Public Works Week in the Village of Buffalo Grove, urging all citizens to recognize the substantial contributions they make to protecting our national health, safety and advancing quality of life for all.

BG DAYS UPDATE

Ms. Gillespie reviewed a PowerPoint presentation highlighting the activities and the status of the planning for the upcoming BG Days event to take place over Labor Day weekend.

QUESTIONS FROM THE AUDIENCE

President Smith reviewed the parameters to be followed by speakers and asked if there were any questions from the audience on items not on tonight's agenda.

The students representing the **4C Stem Club** spoke about the mission of their Club and how their Club is beneficial to our community and our residents, as well as the students who are members, and thanked the Board for allowing them to participate tonight.

A resident of **Appletree Court** shared an issue that she and others are having with a neighbor which makes her feel vulnerable and unsafe. Mr. Brankin noted that this matter is pending in adjudication and that he has been in touch with the association manager and the association management company.

ADJOURNMENT

Moved by Johnson, seconded by Stein, to adjourn the meeting. Upon roll call, Trustees voted as follows:

AYES: 6 – Johnson, Cesario, Ottenheimer, Stein, Bocek, Weidenfeld

NAYS: 0 – None

Motion declared carried.

The meeting was adjourned at 8:10 P.M.

Janet M. Sirabian, Village Clerk

APPROVED BY ME THIS 20th DAY OF May 2024

Village President

Minutes Acceptance: Minutes of May 6, 2024 7:30 PM (Approval of Minutes)



Action Item : Approval of Warrant #1368

Recommendation of Action

Staff recommends approval.

TOTAL WARRANT #1368- \$8,140,358.47

ATTACHMENTS:

- Warrant 1368 summary for 5-20-2024 meeting (PDF)

Trustee Liaison

Bocek

Staff Contact

Chris Black, Finance

Monday, May 20, 2024	
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VILLAGE OF BUFFALO GROVE WARRANT #1368
20-May-24

General Fund:	831,547.84
Parking Lot Fund:	383.99
Motor Fuel Tax Fund:	0.00
Debt Service Fund:	894,653.13
School & Park Donations:	136,096.61
Lake Cook Rd TIF Fund:	0.00
Capital Projects-Facilities:	118,643.34
Capital Projects-Vehicles/Equipment:	30,381.96
Capital Projects-Streets:	734,172.35
Retiree Health Savings (RHS):	0.00
Water Fund:	2,456,812.96
Buffalo Grove Golf Fund:	94,061.04
Arboretum Golf Fund:	131,397.02
Refuse Service Fund:	177,530.00
Information Technology Internal Service Fund:	281,167.17
Central Garage Internal Service Fund:	41,966.35
Building Maintenance Internal Service Fund:	57,577.73
	<u>5,986,391.49</u>
PAYROLL PERIOD ENDING 4/7/2024	1,142.17
PAYROLL PERIOD ENDING 4/21/2024	1,067,563.51
PAYROLL PERIOD ENDING 5/05/2024	1,085,261.30
TOTAL WARRANT #1368	<u><u>8,140,358.47</u></u>

APPROVED FOR PAYMENT BY THE PRESIDENT AND BOARD OF TRUSTEES OF
 THE VILLAGE OF BUFFALO GROVE, ILLINOIS

 Village Clerk

 Village President

Attachment: Warrant 1368 summary for 5-20-2024 meeting (2024-6 : Approval of Warrant #1367)



Information Item : 2024-25 Village Board Portfolios

Recommendation of Action

No action required.

The 2024-25 Village Board portfolios have been assigned. To streamline the Village Board's efforts, the portfolios have been aligned with the Strategic Plan focus areas.

ATTACHMENTS:

- 2024-25 Village Board Portfolios (PDF)

Trustee Liaison
Smith

Staff Contact
Dane Bragg, Office of the Village Manager

Monday, May 20, 2024	
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Village Board Portfolios





Information Item : Appointment of Board, Commission, and Committee Members

Recommendation of Action

N/A.

President Smith will make appointments to the Village's Boards, Commissions, and Committees.

ATTACHMENTS:

- 2024 Committee_Commission_Board_Appointments 2024-2025 (DOCX)

Trustee Liaison
Smith

Staff Contact
Dane Bragg, Office of the Village Manager

Monday, May 20, 2024	
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2024-2025 Committees, Commissions, and Board Appointments

Board of Fire and Police Commissioners

- Edward McKee (Chair)
- Stuart Berman
- Kevin Dryman
- Scott Fishman
- Marc Blumenthal

Planning and Zoning Commission

Bookmark not defined.

- Mitchel Weinstein (Chair)
- Amy Au
- Adam Moodhe
- Kevin Richards
- Neil Worlikar
- Marc Spunt
- Jason Davis
- Sujat Saxena

Health Commission¹

- Deb Moritz (Chair)
- Mike Garfield
- Karleen Pitchford
- Doug Pitchford
- Dr. Becky Bergman
- Nisha Patalay

Farmers Market Committee

- Paulette Greenberg (Chair)
- Larry King
- Ed Muldoon
- Sarah Lee
- Jackie Beegun

- Jane Primack
- Beth Nudelman
- David Bergman
- Mindy Lazor
- Steve McLellan
- Maanasha Sankareswari – Ramesh
- Narayanasamy Ramesh

Rick Kahen Commission for Residents with Disabilities

Members

- Judy Samuels (Chair)
- Martin Sussman (Vice Chair)
- Donna Garfield
- Dean Klassman
- Beth Shapiro
- Jack Shapiro
- Mark Weiner
- Debbie Verson
- Lexi Robinson
- Leo Njongmeta
- Matthew Dragon
- Allie Zalay
- Avi Samuels
- Gowri Magati

Volunteers

- David Morton

Police Pension Board

- Jeffrey Feld
- Kenneth Fox

Firefighters Pension Board

- Christopher Black
- Larry Stanley

Ethics Commission¹

- Jeff Berman (Chair)
- Pragnesh Patel²
- Leslie Abella
- Richard Bellows*
- Danielle Rodbro*

¹ One or more vacancies

* New appointment



Action Item : Proclamation Recognizing Emergency Medical Services Week

Recommendation of Action

Staff recommends proclamation.

A proclamation recognizing May 19th through May 25th, 2024 as National Emergency Medical Services Week.

ATTACHMENTS:

- EMS Week Proclamation 2024(DOCX)

Trustee Liaison
Cesario

Staff Contact
Mike Baker, Fire

Monday, May 20, 2024	
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Village of Buffalo Grove
NATIONAL EMERGENCY MEDICAL SERVICES WEEK
“Honoring Our Past. Forging Our Future”
May 19th through May 25th, 2024

WHEREAS, emergency medical services is a vital public service; and

WHEREAS, the members of the Buffalo Grove Fire Department are ready to provide lifesaving care to those in need 24 hours a day, seven days a week; and

WHEREAS, access to quality emergency medical care dramatically improves the survival and recovery rate of those who experience sudden illness or injury; and

WHEREAS, emergency medical services has grown to fill a gap by providing important, out of hospital care, including preventative medicine, follow-up care, and access to telemedicine; and

WHEREAS, the emergency medical services system consists of first responders, emergency medical technicians, paramedics, emergency medical dispatchers, firefighters, police officers, educators, administrators, pre-hospital nurses, emergency nurses, emergency physicians, trained members of the public, and other out of hospital medical care providers; and

WHEREAS, the members of emergency medical services teams, engage in thousands of hours of specialized training and continuing education to enhance their lifesaving skills; and

WHEREAS, it is appropriate to recognize the value and the accomplishments of emergency medical services providers by designating Emergency Medical Services Week;

NOW, THEREFORE, the Village President and Board of Trustees of the Village of Buffalo Grove recognize the week of May 19th through the 25th, 2024 as EMERGENCY MEDICAL SERVICES WEEK, “Honoring Our Past. Forging Our Future” in the Village of Buffalo Grove.

Proclaimed this 20th day of May, 2024

 Eric N. Smith,
 Village President

Attachment: EMS Week Proclamation 2024 (2024-7 : EMS Week Proclamation)



Action Item : Proclamation Recognizing May as National Cities, Towns, and Villages Month

Recommendation of Action

N/A

Summary: Proclamation recognizing May as National Cities, Towns, and Villages Month.

ATTACHMENTS:

- Nat Village Month Proc (DOCX)

Trustee Liaison
Smith

Staff Contact
Chris Stilling, Community Development

Monday, May 20, 2024



Village of Buffalo Grove

National Cities, Towns and Villages Month

Whereas, the National League of Cities was founded in 1924 in Lawrence, Kansas, as the American Municipal Association by state municipal leagues seeking more coordination and national representation as cities, towns, and villages expanded rapidly;

Whereas, the nonpartisan National League of Cities is the oldest and largest organization representing municipal governments throughout the United States, representing the interests of more than 19,000 cities, towns, and villages across the country;

Whereas today, the National League of Cities works in partnership with 49 state municipal leagues across the country to strengthen local leadership, drive innovation, and influence the federal policies that impact local programs and operations;

Whereas, as the voice of cities, towns, and villages in Washington, DC, the National League of Cities has successfully championed federal legislative solutions that support municipalities and has worked closely with Congress and the Executive Branch to educate policymakers on the realities of local implementation;

Whereas, local governments are the bedrock of American democracy, providing 336 million residents with the most accountable, responsive, inclusive, ethical, and transparent government in the world;

Whereas, from the nation's smallest villages to its largest cities, America's local governments have been essential in transforming the United States of America into the greatest, most influential nation in world history;

NOW THEREFORE, I, Eric Smith, President of the Village of Buffalo Grove, do hereby proclaim May 2024 as **National Cities, Towns, and Villages Month** in celebration of America's local governments and the National League of Cities' historic centennial anniversary.

Proclaimed this 20th day of May, 2024.

Eric N. Smith,
Village President



Resolution No. R-2024-13 : Resolution Approving an Agreement Updating the Village's Participation in the Illinois Emergency Management Mutual Aid System

Recommendation of Action

Staff recommends approval.

Summary: Staff recommends approval of an agreement updating the Village's participation in the Illinois Emergency Management Mutual Aid System in accordance with Chapter 2.54 of the Municipal Code.

ATTACHMENTS:

- 06-20-24 JEMS Mutual Aid Agreement (DOCX)
- IEMMAS Agreement Resolution 06-20-24 (DOCX)
- IEMMAS Letter (PDF)
- IEMMAS Agreement Revision Final v6 (DOCX)

Trustee Liaison

Ottenheimer

Staff Contact

Dane Bragg, Office of the Village Manager

Monday, May 20, 2024

VILLAGE OF BUFFALO GROVE



MEMORANDUM

DATE: May 16, 2024

TO: Village President Eric Smith and Trustees

FROM: Dane Bragg, Village Manager *[Signature]*

SUBJECT: IEMMAS Mutual Aid Intergovernmental Service Agreement

Recommendation

Staff recommends approval of an agreement updating the Village's participation in the Illinois Emergency Management Mutual Aid System in accordance with Chapter 2.54 of the Municipal Code.

Background

The Village participates in multiple layers of emergency management functions, including a locally designated emergency management agency, the Joint Emergency Management System (JEMS) and a designated Emergency Management Director (Fire Chief Baker). As part of the National Incident Management System (NIMS), service agreements are required for interagency coordination of resources and response to disasters and emergency situations. The Village has participated in the IEMMAS mutual aid system for several decades.

IEMMAS has updated its intergovernmental service agreement to reflect current trends in emergency management, risk management, indemnification and mutual aid. The agency has requested all member agencies to update their service agreements prior to the end of calendar year 2024.

The proposed agreement does not modify the Village's obligations or opportunities to participate in IEMMAS support. During a significant incident, the support of other local jurisdictions (municipal, county, township) as well as statewide resources can be critical to mitigating and or preventing injury, death and property damage.

Next Steps

Once the Village Board has approved the updated intergovernmental service agreement, a copy will be retained with the Emergency Management Director and placed on file with IEMMAS and the Joint Emergency Management System.

RESOLUTION 2024-_____

**RESOLUTION AUTHORIZING PARTICIPATION AS A MEMBER IN THE ILLINOIS
EMERGENCY MANAGEMENT MUTUAL AID SYSTEM RESPONSE PURSUANT TO AN
INTERGOVERNMENTAL AGREEMENT FOR THE ESTABLISHMENT OF A MUTUAL AID
INTERGOVERNMENTAL SERVICE AGREEMENT**

WHEREAS, the Village of Buffalo Grove (“*Village*”) is a home rule, municipal corporation existing in accordance with the Illinois Constitution of 1970; and

WHEREAS, the Village Board has long since, pursuant to Ordinance, established an Emergency Management Agency/Emergency Services and Disaster Agency of the Village pertaining to appropriate functions in the case of an emergency; and

WHEREAS, it is recognized that at any given time emergency situations may occur that are beyond the capacities of the Buffalo Grove Emergency Management Agency/ Emergency Services and Disaster Agency to deal effectively with in terms of personnel, equipment and material resources; and

WHEREAS, in adopting the Illinois Emergency Management Mutual Aid System Intergovernmental Service Agreement the Village Board, as one of the Members thereof, hereby expresses its intent to assist a nearby member jurisdiction by assigning as appropriate some of its personnel, equipment or material resources to the requesting member jurisdiction as situations allow; and

WHEREAS, said Service Agreement is authorized by the Illinois Emergency Management Act, Section 3305/13 and pursuant to the Ordinances of the Village Board allowing for the participation in various mutual aid agreements; and

WHEREAS, it is in the best interests of the Village Board to provide as much as possible for assistance to the residents of Buffalo Grove and other Members of said Mutual Aid Service Agreement.

NOW, THEREFORE, BE IT RESOLVED by the Corporate Authorities of the Village of Buffalo Grove, Cook and Lake Counties, Illinois, as follows:

Section 1: That the above and foregoing recitals are incorporated as findings of fact in this Resolution.

Section 2: That the Village Board, a body politic, may participate as a

Member of the Illinois Emergency Management Mutual Aid System pursuant to that certain Mutual Aid Intergovernmental Service Agreement which is attached to this Resolution hereto and incorporated herein and identified as "Exhibit A".

Section 3: That the Village President be and is hereby authorized to execute, on behalf of the Village Board, said Agreement and that the Village Clerk is authorized to attest to said Agreement.

Section 4: That the Emergency Management Agency Director is hereby authorized to take such actions necessary to implement this agreement in accordance with Chapter 2.54 of the Municipal Code.

PASSED this _____ day of _____, 2024.

AYES:

NAYS:

ABSENT:

ABSTAIN:

APPROVED this __ day of _____, 2024.

Mayor Eric Smith

ATTEST:

Village Clerk Janet Sirabian



"Coordinating the efforts of our members in a common course to protect the lives and property of the citizens we serve"

12/05/2023

RE: Updated IEMMAS Agreement

Dear IEMMAS Signatory,

Attached to this letter you will find a revised Illinois Emergency Management Mutual Aid System Agreement and a template resolution. As a Board we have been working on a revision to this agreement for well over a year. We have worked to ensure that our agreement was structured in a way that maximizes the flexibility of our assistance while incorporating modern best practices, and reflecting changes in the overall mutual aid landscape in Illinois.

Why is this agreement important? The updates to the agreement are a culmination of many aspects of the existing agreement becoming obsolete or no longer reflecting the way that we provide agency to agency support in emergency management. The previous agreement memorialized concepts such as the Mobile Support Team agreement, indemnification, and reimbursement that have since changed. For example, the changes to how the Mobile Support Teams are structured no longer include the local-to-local support that we have traditionally provided. Based on lessons learned from MABAS and ILEAS, the language regarding insurance, indemnification, and reimbursement has been modernized. This agreement is a critical piece in our ability to request or provide support in the way of personnel, equipment, or facilities to one another while ensuring that we have the legal framework in place to do so.

Why is this necessary? The emergency management community in our State is a tightknit group of people who are willing to help one another. Many of our neighbors may not have all the resources to respond to or recover from an emergency or disaster all on their own. Not every disaster is going to reach the level of a State declaration, and we need to be able to call on each other for assistance when necessary. This formalized document promotes the sharing of people and resources across jurisdictional boundaries.

How is it different from the previous agreement? This agreement is different from the previous version in a number of ways.

- Focuses on the whole of agency. This agreement provides more detail on what is considered emergency management personnel and assets. Where a jurisdiction may have equipment, staff, or facilities that fall under the control or management of emergency management this document takes those assets into account.
- Establishment of a governing body. Although IESMA's goal is to further the mission of emergency management, not all Counties and Municipalities who are signatories to the IEMMAS agreement are IESMA members. The new agreement establishes a governance structure for the oversight of emergency management mutual aid. IESMA will have a role in establishing this governing body and the initial governance structure, but the intent is for the IEMMAS governing body to self-determining.



"Coordinating the efforts of our members in a common course to protect the lives and property of the citizens we serve"

- Agreement between signatories. This agreement has a single signature line where each signatory agrees to be a party to the agreement along with every other entity that has signed the agreement. The previous agreement had three signatories which gave the impression that an agreement needed to be approved for it to be in effect. The new agreement is more flexible in the execution.

How will this be executed? Each signatory will need to adopt the new agreement by signature and resolution. Executed copies of the new agreement must be sent to the IESMA President for record keeping.

When do we want this done by? We would like the new agreement executed and returned to the IESMA President no later than December 1st, 2024. All previous agreements will be considered void as of December 1st, 2024.

If you have any additional questions, please feel free to reach out to your Regional Vice President or myself.

Thank you,

Michael Fleming
Illinois Emergency Services Management Association, President

Attachment A: Resolution Explanation

Attachment B: Resolution Example

Attachment C: IEMMAS Agreement

Illinois Emergency Management MUTUAL AID SYSTEM AGREEMENT

This Agreement is made and entered into the date set forth next to the signature of the respective parties, by and between the units of local government subscribed hereto (hereafter "Unit(s)") that have approved this Agreement and adopted same in manner as provided by law and are hereafter listed at the end of this Agreement.

WHEREAS, the Constitution of the State of Illinois, 1970, Article VII, Section 10, authorizes units of local government to contract or otherwise associate among themselves in any manner not prohibited by law or ordinance; and,

WHEREAS, the "Intergovernmental Cooperation Act", 5 ILCS 220/1 et seq., provides that any power or powers, privileges or authority exercised, or which may be exercised by a unit of local government may be exercised and enjoyed jointly with any other unit of local government; and,

WHEREAS, Section 5 of the Intergovernmental Cooperation Act, 5 ILCS 220/5, provides that any one or more public agencies may contract with any one or more public agencies to perform any governmental service, activity or undertaking which any of the public agencies entering into the contract is authorized by law to perform, provided that such contract shall be authorized by the governing body of each party to the contract; and,

WHEREAS, the parties hereto have determined that it is in their best interests to enter into this Agreement to secure to each the benefits of mutual aid in emergency management and the protection of life and property from an emergency or disaster; and,

WHEREAS, the parties hereto have determined that it is in their best interests to enter into this Agreement to secure to each the benefits of mutual aid in the preparedness and mitigation phases of emergency management; and,

WHEREAS, the parties hereto have determined that it is in their best interests to form an association to provide for communications procedures, training and other necessary functions to further the provision of said protection of life and property from an emergency or disaster.

NOW, THEREFORE, in consideration of the foregoing recitals, the Unit's membership in the Illinois Emergency Management Mutual Aid System (IEMMAS) and the covenants contained herein, **THE PARTIES HERETO AGREE AS FOLLOWS:**

SECTION ONE

Purpose

Certain situations arise, including, but not limited to, emergencies, natural disasters, man-made catastrophes, and special events, in which the Parties recognize that the use of an individual Member Unit's personnel and equipment to perform functions outside the territorial limits of the Member Unit is desirable and necessary to preserve and protect the health, safety and welfare of

the public. During such situations, one Member Unit's personnel and equipment may be called upon to perform functions within the territorial limits of another Member Unit, as is desirable and necessary to preserve and protect the health, safety and welfare of the public. Further, it is acknowledged that coordination of mutual aid through the Illinois Emergency Management Mutual Aid System is desirable for the effective and efficient provision of mutual aid.

SECTION TWO

Definitions

For the purpose of this Agreement, the following terms as used in this agreement shall be defined as follows:

- A. "Illinois Emergency Management Mutual Aid System" (hereinafter referred to as "IEMMAS", also "Agreement"): A definite and prearranged plan whereby response and assistance is provided to a Requesting Unit by the Aiding Unit(s) in accordance with the system established and maintained by the IEMMAS member Units and amended from time to time.
- B. "Unit": (also "Member Unit") Any unit of government, including but not limited to a city, village, or county having an Emergency Management Program, another unit of local government, or any other political subdivision of the State of Illinois, or an intergovernmental agency and the units of which such intergovernmental agency is comprised, which is a signatory to the IEMMAS Agreement, and has been appropriately authorized by their governing body to enter into the IEMMAS Agreement and otherwise and comply with the rules and regulations of IEMMAS.

- C. "Requesting Unit": Means any Unit requesting assistance of another Unit under this Agreement.
- D. "Aiding Unit": A Member Unit furnishing equipment, personnel, and/or services to a Requesting Unit.
- E. "Emergency": Any occurrence or condition which results in a situation where assistance is requested to supplement local efforts and capabilities to save lives, protect property and protect the public health and safety, or to lessen or avert the threat of a catastrophe or Disaster or other Serious Threat to Public Health and Safety.
- F. "Disaster": An occurrence or threat of widespread or severe damage, injury, or loss of life or property resulting from a natural or human-made cause, including fire, severe weather event, environmental contamination, utility failure, radiological incident, structural collapse, explosion, transportation accident, hazardous materials incident, epidemic, pandemic, or any other calamity.
- G. "IEMMAS Regions": The geographically associated Member Units or unit of which have been grouped for operational efficiency and representation of those Member Units. The State of Illinois shall be divided into eight (8) regions which as identified by Exhibit A, hereto attached and incorporated by this reference.
- H. "Training": The regular scheduled practice of emergency procedures during non-emergency drills or exercises to implement the necessary joint operations of IEMMAS.
- I. "IEMMAS Board": The governing body of IEMMAS shall be comprised of

elected representatives from each of the Member Units of the IEMMAS, in the manner detailed by this Agreement.

- J. "Special Event": Any non-routine event, that places a strain on any Member Unit's resources. Such an event may, but is not required to, involve a large number of people. Such an event should generally require additional planning, preparation, and mitigation for public safety.
- K. "Emergency Management Coordinator": Means the Emergency Management Coordinator or agency head of a Unit, or their designee.
- L. "Emergency Management Staff": includes any person who is an authorized employee or agent of a Unit. An Emergency Management Staff includes, without limitation, the following: full time, part time, volunteer, paid-on-call, paid on premises, and contracted personnel, as well as emergency operations center staff, support personnel, and authorized members of non-governmental response Units.
- M. "Emergency Services": means the provision of personnel, equipment, or other support to a Requesting Unit in the preparedness of, prevention of, response to, recovery from, or mitigation of any Disaster, Emergency, or Special Event, and includes joint training for the provision of any such services by a Unit.
- N. "Initial Governing Board": The first Governing Board of IEMMAS established after two or more Public Agencies enter into this Agreement.
- O. "Public Agency": A public agency shall have the same meaning as in the Illinois Intergovernmental Cooperation Act (5 ILCS 220/2(1)).
- P. "IEMMAS Regional Directors": The elected members of the Governing Board,

representing the IEMMAS Regions.

SECTION THREE

Authority and Action to Effect Mutual Aid

The Parties hereby authorize and direct their respective Emergency Management Coordinators, to take any reasonably necessary and proper action to render and request Mutual Aid to and from the other Parties to the Agreement, and to participate in Training activities, in furtherance of effective and efficient provision of Mutual Aid pursuant to this Agreement.

In accordance with a Party's policies and within the authority provided to its Emergency Management Coordination, upon an Aiding Unit's receipt of a request from a Requesting Unit for Emergency Services, the Emergency Management Coordinator may commit the requested Mutual Aid in the form of Emergency Management Staff, and/or Emergency Services to the Requesting Unit. All Mutual Aid rendered shall be to the extent of available personnel and equipment, taking into consideration the resources required for adequate protection of the territorial limits of the Aiding Unit. The decision of the Emergency Management Coordinator of the Aiding Unit as to the personnel and equipment available to render aid, if any, shall be final.

Whenever an Emergency, Disaster, or Special Event occurs and conditions are such that the Emergency Management Coordinator of the Requesting Unit determines it advisable to request aid pursuant to this Agreement he shall notify the Aiding Unit of the nature and location of the Emergency, Disaster, or Special Event, and the type and amount of equipment, Emergency Management Staff, and/or Emergency Services requested from IEMMAS.

The Emergency Management Coordinator of the Aiding Unit shall take the following

action immediately upon being requested for aid:

1. Determine what equipment, Emergency Management Staff, and/or Emergency Services is requested;
2. Determine if the requested equipment, Emergency Management Staff, and/or Emergency Services can be committed in response to the request from the Requesting Unit;
3. Dispatch the requested equipment, Emergency Management Staff and/or Emergency Services is, to the extent available, to the location of the event or location reported by the Requesting Unit in accordance with the procedures of IEMMAS; and
4. Notify the Requesting Unit if any or all of the requested equipment, Emergency Management Staff, and/or Emergency Services cannot be provided.

SECTION FOUR

Compensation for Aid

Equipment, Emergency Management Staff, and/or Emergency Services provided pursuant to this Agreement shall be at no charge to the party requesting aid; however, any expenses recoverable from third parties, including but not limited to reimbursements, fees, grants, or insurance proceeds tied to the events from which the Emergency, Disaster, or Special Event arose, shall be equitably distributed among responding parties, in the manner described by this Section Four of the Agreement.

Nothing herein shall operate to bar any recovery of funds from any third party, local, state, or federal agency under any existing statutes, or other authority. Each Aiding Unit is responsible for the compensation of its Emergency Responders providing Mutual Aid, equipment expenses, Emergency Services, and for any additional costs incurred to ensure its jurisdiction has adequate resources during the rendering of Mutual Aid.

Day-to-day Mutual Aid should remain free of charge because the administrative requirements of reimbursement make it infeasible to charge for day-to-day Mutual Aid. However, the following exceptions may apply:

1. Third Party Reimbursement. – Expenses for Emergency Services recovered from third parties shall be proportionally distributed to all participating Units by the Unit recovering such payment from a third party. The Unit responsible for seeking payment from a third party shall provide timely notice to Aiding Units of a date by which submission of a request for reimbursement must be received. Reimbursement shall be based on the accurate and timely submission of allowable costs and documentation attributable to the incident by each Aiding Unit. These costs include personnel, use of equipment and materials provided, damage or loss of equipment, use of facilities, and any other costs associated with the Aid provided that may be recoverable. The Unit recovering payment from a third party shall notify Aiding Units that such payment has been made, and such Unit will reimburse the other Aiding Units. If the third party payment is less than the full amount of all Units' cost submittals, the funds shall be proportionally distributed based on each Unit's submitted costs compared to the total of all costs submitted.
2. Intrastate Emergency Management Agency Tasking. Expenses recovered related to a

response to an Emergency or Disaster at the request of The Illinois Emergency Management Agency and Office of Homeland Security (IEMA-OHS) or other State or federal authority shall be based on the accurate and timely submission of allowable costs and documentation attributable to the response by each Aiding Unit. These costs include personnel, use of equipment and materials provided, damage or loss of equipment, use of facilities, and any other costs associated with the aid that may be recoverable. The Unit recovering payment from the State or Federal Government shall notify Aiding Units that such payment has been made, and such Unit will reimburse the other Aiding Units. If the payment is less than the full amount of all Units' cost submittals, the funds shall be proportionally distributed based on each Unit's submitted costs compared to the total of all costs submitted.

3. Interstate Emergency Management Assistance Compact ("EMAC") Response - Expenses recovered related to a response to an Emergency or Disaster at the request of another emergency management agency or the authority of another state government pursuant to an EMAC response. Reimbursement shall be based on the accurate and timely submission of allowable costs and documentation attributable to the response by each Aiding Unit. These costs include personnel, use of equipment and materials provided, damage or loss of equipment, use of facilities, and any other costs associated with the aid that may be recoverable. If these payments are not made directly to the participating Units, the Unit recovering payment from another state or emergency management agency shall notify Aiding Units that such payment has been made, and such Unit will reimburse the other Aiding Units. If the payment is less than the full amount of all Units' cost submittals, the

funds shall be proportionally distributed based on each Unit's submitted costs compared to the total of all costs submitted.

SECTION FIVE

Insurance

Each Party shall procure and maintain, at its sole and exclusive expense, insurance coverage, including comprehensive liability, personal injury, property damage, workers' compensation, auto, and, if applicable, watercraft, aircraft, or drone liability. The obligations of this Section may be satisfied by a Party's membership in a self-insurance pool, a self-insurance plan, or arrangement with an insurance provider approved by the jurisdiction. To the extent permitted by governing law, each Party agrees to waive subrogation rights it may acquire, and to require any insurer to waive subrogation rights they may acquire, by virtue of the payment of claims, suits, or other loss arising out of this Agreement, and shall, as to any insurer, obtain any endorsement necessary to effectuate such waiver of subrogation.

SECTION SIX

Jurisdiction Over Personnel, Equipment, and Assets

Emergency Management Staff, equipment, or other assets dispatched to aid a Requesting Unit pursuant to this Agreement shall, at all times, remain employees, agents, or equipment of the Aiding Unit, and are entitled to receive any benefits and compensation to which they may otherwise be entitled under the laws, regulations, or ordinances of the United States of America, their respective States, and their respective political subdivisions. This includes, but is not limited

to, benefits for pension, relief, disability, death, and workers' compensation. If a person from an Aiding Unit is injured or killed while rendering assistance under this Agreement, benefits shall be afforded in the same manner and on the same terms as if the injury or death were sustained while the person from the Aiding Unit was rendering assistance for or within the Aiding Unit's own jurisdiction.

Emergency Management Staff, equipment, or other assets of the Aiding Unit will come under the operational control of the Requesting Unit's Emergency Management Coordinator, or other appropriate authority, until released or withdrawn. The Aiding Unit shall, at all times, have the right to withdraw any and all aid upon the order of its Emergency Management Coordinator. The Aiding Unit shall notify the Requesting Unit of the extent of any withdrawal, and coordinate the withdrawal to minimize jeopardizing the safety of the operation or other personnel.

If, for any reason, an Aiding Unit determines that it cannot respond to a Requesting Unit, the Aiding Unit shall promptly notify the Requesting Unit of the Aiding Unit's inability to respond; however, failure to promptly notify the Requesting Party of such inability to respond shall not be deemed to be noncompliance with the terms of this Agreement and no liability may be assigned. No liability of any kind shall be attributed to or assumed by a Party, for failure or refusal to render aid, or for withdrawal of aid.

The obligations and duties set forth in this Section shall survive the end or termination of this Agreement.

SECTION SEVEN

Liability

Each Party will be solely responsible for the acts of its own governing body, officers, employees, agents, and subcontractors, expressly including, but not limited to, all of its Emergency Management Staff, the costs associated with those acts, and the defense of those acts. No Party shall be responsible to another Party for any liability or costs arising from the act of an employee or agent of another Party. Each Party hereto shall hold all other Parties hereto harmless for any liability or costs arising from the act of an employee or agent of another Party. The Provisions of this Section shall survive the termination of this Agreement by any Party.

Any Party responding under this Agreement to another state shall be considered agents of the Requesting Unit in the other state for tort liability and immunity purposes related to third-party claims to the extent permissible under the laws of both states. Nothing in this Section shall be deemed a waiver by any Party of its right to dispute any claim or assert statutory and common law immunities as to third parties.

SECTION EIGHT

Term

This Agreement shall be in effect for a term of one year from the date of signature hereof and shall automatically renew for successive one-year terms unless terminated in accordance with this Section.

Any party hereto may terminate its participation in this Agreement at any time, provided that the party wishing to terminate its participation in this Agreement shall give written notice to the IEMMAS specifying the date of termination, such notice to be given at least 90 calendar days prior to the specified date of termination of participation. The written notice provided herein shall

be given by personal delivery, registered mail, or certified mail.

SECTION NINE

Effectiveness

This Agreement shall be in full force and effective for each Party, upon approval by that Party's governing body in the manner provided by law and upon proper execution of this Agreement.

SECTION TEN

Binding Effect

This Agreement shall be binding upon and inure to the benefit of any successor of entity which may assume the obligations of any party hereto. Provided, however, that this Agreement may not be assigned by a Member Unit without prior written consent of the parties hereto; and this Agreement shall not be assigned by IEMMAS without prior written consent of the parties hereto.

SECTION ELEVEN

Validity

The invalidity of any provision of this Agreement shall not render invalid any other provision. If, for any reason, any provision of this Agreement is determined by a court of competent jurisdiction to be invalid or unenforceable, that provision shall be deemed severable, and this Agreement may be enforced with that provision severed or modified by court order.

SECTION TWELVE

Notices

Notices given under this Agreement shall be in writing and shall be delivered by one or more of the following processes: personally delivered, sent by express delivery service, certified mail, or first-class US mail postage prepaid to the head of the governing body of the participating Member Unit.

SECTION THIRTEEN

Governing Law

This Agreement shall be governed, interpreted, and construed in accordance with the laws of the State of Illinois.

SECTION FOURTEEN

Execution in Counterparts

This Agreement may be executed in multiple counterparts or duplicate originals, each of which shall constitute and be deemed as one and the same document.

SECTION FIFTEEN

IEMMAS Board

By agreement by and between each Member Unit to this Agreement, there shall exist a third party Public Agency, created by the Member Unit parties to this agreement, which shall be

known as the Illinois Emergency Management Mutual Aid System (hereinafter referred to as “IEMMAS”). IEMMAS that shall be considered a Public Agency, as that term is defined in 5 ILCS 220/2(1). The Public Agency IEMMAS shall have a governing board, consistent with the meaning of the phrase “governing board” in 5 ILCS 220/2(1), which shall be known as the “IEMMAS Board.”

The IEMMAS Board is hereby identified as the authority to consider, adopt and amend from time to time, as needed, rules, procedures, by-laws, and any other matters deemed necessary. For the avoidance of doubt, it is expressly understood that as a Public Body, the IEMMAS Board shall be subject to the Illinois Open Meetings Act (5 ILCS 120/1-1, et seq.), Illinois Freedom of Information Act (5 ILCS 140/1-1, et seq.), and any other laws and regulations of the state for which Public Bodies must comply.

An Initial Governing Board, created upon enactment of the IEMMAS agreement by two or more Public Agencies, shall serve as the IEMMAS Board. One (1) representative from each of the eight (8) IEMMAS regions, the State of Illinois shall be divided into eight (8) regions as identified by Exhibit A. Such representatives shall be selected by the President of IESMA, and along with the President of IESMA, (a total of nine (9) individuals), who shall serve as the Initial Governing Board of IEMMAS. If a member of the Initial Governing Board is not able to complete their term, the IESMA President shall appoint a replacement with a candidate from the same IEMMAS region as the person who was unable to complete the term. If there are no parties interested in the position from the IEMMAS region, the IESMA President can then appoint a replacement from any of the IEMMAS regions to finish the term.

The Initial Governing Board shall identify the process to be used for the election of the

permanent IEMMAS Board members. The proposed election process shall be approved by a vote of the eight (8) interim IEMMAS Regional Directors with a simple majority. If the vote on the election process should result in a split decision, the IESMA president shall cast the tie breaking vote. The Initial Governing Board shall conduct the election process to identify the eight (8) IEMMAS Regional Directors.

After the eight (8) IEMMAS Regional Directors have been duly elected, a date to transfer the responsibilities from the Initial Governing Board to the IEMMAS board shall be determined. Upon the transfer of responsibilities, all governing board powers are hereby transferred to the elected IEMMAS Board.

The composition IEMMAS Board after the Initial Governing Board have served their term shall consist of the following:

A. Eight (8) IEMMAS Regional Directors elected from each of the eight (8) IEMMAS Regions.

B. The President of IESMA, or their designee, will hold a permanent, and non-elective IEMMAS Board membership.

The eight (8) IEMMAS Regional Directors shall serve as the voting representative of their region on IEMMAS matters. Those elected to represent their region on the IEMMAS Board may appoint a designee to serve temporarily in their stead. The eight (8) IEMMAS Regional Directors shall be from a Member Unit within their respective IEMMAS Region and shall have all rights and privileges attendant to a representative of that region. Every Governing Board Member must be affiliated by employment with, or relation to, a signatory Member Unit.

The Public Agency IEMMAS shall have a President, Vice President, Secretary, and

Treasurer who shall be appointed by and from the elected members of the IEMMAS Board, at its discretion. The officers shall have the duties, responsibilities and powers accorded to them by the Bylaws of IEMMAS as the Bylaws are established and may be amended from time to time by the IEMMAS Board.

SECTION SIXTEEN

Duties of the IEMMAS Board

The IEMMAS Board shall meet regularly to conduct business and to consider and publish the rules and procedures of the IEMMAS.

SECTION SEVENTEEN

Rules and Procedures

The IEMMAS Board shall establish rules and procedures of the IEMMAS as deemed necessary for the purpose of administrative functions, the exchange of information and the common welfare of the IEMMAS, subject to the laws governing Public Bodies in the State of Illinois.

SECTION EIGHTEEN

Revocation of Prior Agreements

This Agreement shall replace all prior Illinois Emergency Management Mutual Aid System agreements effective at 12:01 a.m. Central Standard Time on January 1, 2025. Any Member Unit that has not become a Party to this Agreement by 12:01 a.m. Central Standard Time

on January 1, 2025, shall no longer be affiliated with IEMMAS in any capacity, shall not continue to benefit from its prior association with IEMMAS, and shall not rely on IEMMAS for emergency responses, until subsequently rejoining IEMMAS by the adoption of an approving ordinance or resolution and entering into this Agreement, as may be amended from time to time. The effective date for any new Member Unit joining after January 1, 2025, shall be the date set forth next to the signature of that new Member Unit.

SECTION NINETEEN

Amendments

This Agreement may only be amended by written consent of all the parties hereto. This shall not preclude the amendment of rules, procedures of the IEMMAS as established by the IEMMAS Board to this Agreement. The undersigned unit of local government or public agency hereby has adopted, and subscribes to, and approves this MUTUAL AID SYSTEM Agreement to which this signature page will be attached and agrees to be a party thereto and be bound by the terms thereof.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF,

This Signatory certifies that this Illinois Emergency Management Mutual Aid System Agreement has been adopted and approved by ordinance, resolution, or other manner approved by law, a copy of which document is attached hereto. A certified copy of the approving ordinance, resolution or authority, along with the executed Agreement is included and shall be sent to the IEMMAS Board.

In Witness Whereof, the Signatory Public Agency designated below enters into this agreement with all other Signatory Public Agencies who have signed or will sign this agreement pursuant to legal authorization granted to is under the Constitution of the State of Illinois (III. Const. Art. VII, § 10), the Illinois Intergovernmental Cooperation Act (5 ILCS 220/1 et seq.) and the final approval required of an entity such as the undersigned Public Agency

Public Agency Name

By: _____
Legally Authorized Agent

Printed Name: _____

Title: _____

Date: _____

State of Illinois)
) ss
County of _____)

_____, after being duly sworn on oath, deposes and states under penalty of perjury that he/she is the duly authorized agent for the Public Agency shown above, that he/she has read the agreement in its entirety, that the entity shown above the “Public Agency Name” line, above, is a Public Agency within the meaning of 5 ILCS 220/1 et seq. and that he/she signs this document pursuant to proper authority granted by that public agency.

EXHIBIT A





Ordinance No. O-2024-48 : Ordinance Approving an Amendment to Solid Waste Agency of Northern Cook County (SWANCC) Founding Agreement and Bylaws

Recommendation of Action

Staff recommends approval.

Summary: Staff requests approval of an amendment to the Solid Waste Agency of Northern Cook County (SWANCC) founding agreement and bylaws to allow additional alternate members.

ATTACHMENTS:

- SWANCC Memo (DOCX)
- Ordinance Amending the SWANCC Agreement and By-Laws 05-20-24 (DOCX)

Trustee Liaison
Cesario

Staff Contact
Dane Bragg, Office of the Village Manager

Monday, May 20, 2024

VILLAGE OF BUFFALO GROVE



MEMORANDUM

DATE: May 16, 2024

TO: Village President Eric Smith and Trustees

FROM: Dane Bragg, Village Manager *[Signature]*

SUBJECT: SWANCC Amended Founding Agreement and Appointment Resolution

Recommendation

Staff recommends approval of an ordinance amending the founding resolution for the Solid Waste Agency of Northern Cook County (SWANCC) to permit more flexible alternate directors and further recommends approval of an amended appointment resolution appointing Chris Stilling, Deputy Village Manager, as an Alternate Director to the agency.

Background

The SWANCC founding agreement and bylaws currently permit the a) Mayor or President of a Member, b) another elected member of the corporate authorities of a Member, or c) the chief administrative officer of a Member to participate as a voting member of the board of directors. At present, Village President Eric Smith serves as a Director and Village Manager Dane Bragg serves as an Alternate Director to the agency.

The SWANCC board of directors wishes to amend the founding agreement and bylaws (as attached in strikethrough and underline format) to allow an additional Alternate Director who is a staff person the Member community. Often, subject matter experts on staff such as a department director or deputy/assistant village manager should be able to participate and vote upon matters before the SWANCC board of directors.

Next Steps

Once all members have approved the amended founding agreement and bylaws, SWANCC will amend its corporate filing with the Illinois Secretary of State. At that time, any new Alternate Director appointments made by Member communities would become effective.

THE VILLAGE OF BUFFALO GROVE, ILLINOIS

ORDINANCE NO. 2024 – _____

**AN ORDINANCE APPROVING AMENDMENTS TO
THE AGREEMENT ESTABLISHING
THE SOLID WASTE AGENCY OF NORTHERN COOK COUNTY
AS A MUNICIPAL JOINT ACTION AGENCY
AND
TO THE BYLAWS OF THE SOLID WASTE AGENCY
OF NORTHERN COOK COUNTY**

Adopted by the Village Board
of the Village of Buffalo Grove
this ____ day of _____, 2024

Published in pamphlet form by direction
and authority of The Village of Buffalo Grove,
Cook and Lake Counties, Illinois
this ____ day of _____, 2024

THE VILLAGE OF BUFFALO GROVE

ORDINANCE NO. 2024 - _____

**AN ORDINANCE APPROVING AMENDMENTS TO
THE AGREEMENT ESTABLISHING
THE SOLID WASTE AGENCY OF NORTHERN COOK COUNTY
AS A MUNICIPAL JOINT ACTION AGENCY
AND
TO THE BYLAWS OF THE SOLID WASTE AGENCY
OF NORTHERN COOK COUNTY**

WHEREAS, the Village of Buffalo Grove (“*Village*”) is a home rule, municipal corporation existing in accordance with the Illinois Constitution of 1970; and

WHEREAS, Section 6(a) of Article VII of the Illinois Constitution of 1970 authorizes home rule units, such as the Village, to “exercise any power and perform any function pertaining to its government and affairs;” and

WHEREAS, Section 10 of Article VII of the Illinois Constitution of 1970 authorizes units of local government, such as the Village, to contract or otherwise associate amongst themselves in any manner not otherwise prohibited by law or ordinance; and

WHEREAS, Section 3 of the Illinois Intergovernmental Cooperation Act, 5 ILCS 220/3, permits any powers, privileges, functions or authority exercised or which may be exercised by a unit of local government, such as the Village, to be combined and exercised jointly with any other unit of local government; and

WHEREAS, pursuant to such authorization, the Village has entered into an Agreement with other municipalities establishing the Solid Waste Agency of Northern Cook County (“SWANCC”) as a municipal joint action agency (“Agreement”); and

WHEREAS, as a member of SWANCC, the Village has approved By-Laws that, together with the Agreement, govern the function and operation of SWANCC; and

WHEREAS, the Village now desires, and finds it in the best interest of the health, safety, morals and welfare of the Village, to amend the Agreement and the By-Laws of SWANCC

concerning the appointment of representatives authorized to represent the Village at meetings of SWANCC, all as set forth in this Ordinance.

NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE BOARD OF TRUSTEES OF BUFFALO GROVE, COUNTIES OF COOK AND LAKE, STATE OF ILLINOIS, AS FOLLOWS:

SECTION ONE: Recitals. The foregoing recitals are hereby adopted by this reference as findings of the Village Board of Trustees and are hereby incorporated into this Section as if fully set forth.

SECTION TWO: Amendment to Agreement Section 8, "Governance," subsections *.3 and 8.4, are hereby amended as follows (added text is shown as **bold, double-underlined text** and deleted text is shown as ~~stricken text~~):

Section 8. Governance.

8.1 The Agency shall be governed and administered as provided in this Section and in the By-Laws, adopted pursuant to, and subject to the limitations of, this Agreement.

8.2 The governing body of the Agency shall be the Board of Directors. There shall be one Director for each Member, who shall be appointed by vote of the corporate authorities of the Member and who at the time of appointment shall be the (i) Mayor or President of a Member (if such Member is a municipality) or the President or Chairman of a Member (if such Member is a County), (ii) another elected member of the corporate authorities of the Member or, (iii) the chief administrative officer of the Member. The term of each initial Director shall begin when he or she is appointed and shall continue until April 30, 1991 and until his or her successor is appointed. Thereafter, all Directors shall be appointed for two-year terms expiring on April 30 of odd numbered years. Except as provided in paragraph 8.4, a person serving as a Director shall serve until his or her term expires, and thereafter until his or her respective successor is appointed. Each Director shall have one vote on the Board of Directors.

8.3 Any Member may appoint one or more persons to serve as the Alternate Director. Any such appointee shall meet the qualifications for office as a Director established in paragraph 8.2 **or shall be a staff person of the Member appointed by its corporate authority and granted the authority to act on the**

Member's behalf. The Alternate Director may attend any meeting of the Board of Directors and may vote as the Director in the absence of the Director from that Member or if there is a vacancy in the position of Director from that Member. The term of an Alternate Director shall be the same as the term of the Director from the appointing Member. Except as provided in paragraph 8.4, a person serving as Alternate Director shall serve until his or her term expires and thereafter until the successor is appointed.

8.4 All appointments of Directors and Alternate Directors shall be by ordinance or resolution of the corporate authorities of the appointing Member, a certified copy of which shall be filed with the Secretary of the Agency. Should any Director or Alternate Director cease to serve as the President, Mayor, Chairman, elected member of the corporate authorities ~~or~~, chief administrative officer of the appointing Member, **or staff person of the Member granted authority to act on the Member's behalf**, that person shall simultaneously cease to serve as Director or Alternate Director of the Agency and the position shall be vacant. Any vacancy in the office of Director or Alternate Director shall be filled by appointment by the Member with respect to which the vacancy exists. Directors and Alternate Directors shall receive no compensation for their service in this capacity but may be reimbursed by the Agency for reasonable and necessary expenses incurred in performance of their duties.

/remainder unchanged/

SECTION TWO: Amendment to By-Laws Section 1, "Members and Powers," is hereby amended as follows (added text is shown as **bold, double-underlined text** and deleted text is shown as ~~stricken text~~):

1. **Members and Powers.** The Board of Directors of the Agency shall be comprised as provided in the Agreement and the By-Laws and shall exercise those powers specified in the Agreement and the By-Laws. If any Director **or Alternate Director** ceases to serve as the President, Mayor, Chairman, elected member of the corporate authorities ~~or~~, chief administrative officer of the Member which appointed such person, **or staff person of the Member granted authority to act on the Member's behalf**, becomes incapacitated or is otherwise removed as a Director **or Alternate Director** by the corporate authorities of the appointing Member, that seat on the Board of Directors shall, subject to the provision for participation by Alternate Directors contained in Section 2 of this Article, be vacant

until a successor is appointed by that Member. (For purposes of the By-Laws, "Member" shall have the same meaning as in the Agreement.)

SECTION FOUR: Superseder. In the event a conflict exists between the terms of this Ordinance and any other ordinance or resolution of the Village, the terms of this Ordinance shall govern.

SECTION FIVE: Severability. If any section, paragraph, clause, phrase, provision or part of this Ordinance shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph, clause, phrase, provision or part shall not affect the validity of any of the remaining provisions of this Ordinance.

SECTION SIX: Effective Date. This Ordinance shall be in full force and effect upon its passage, approval, and publication in pamphlet form in the manner provided by law.

Passed this ____ day of _____, 2024.

AYES:

NAYS:

ABSENT:

ABSTAIN:

Approved this __ day of _____, 2024.

Mayor Eric Smith

ATTEST:

Village Clerk Janet Sirabian



Resolution No. R-2024-14 : Resolution Appointing a Director and Alternates to the Solid Waste Agency of Northern Cook County (SWANCC)

Recommendation of Action

Staff recommends approval.

Summary: The attached resolution appoints Eric Smith, Village President as the Village's Director on the Board of Directors of the Agency, appoints Dane C. Bragg, Village Manager as Alternate Director and appoints Christopher Stilling, Deputy Village Manager as Alternate Director.

ATTACHMENTS:

- SWANCC Appointment Resolution 2024 (DOCX)

Trustee Liaison
Cesario

Staff Contact
Dane Bragg, Office of the Village Manager

Monday, May 20, 2024

RESOLUTION NO. 2024 –
A RESOLUTION APPOINTING A DIRECTOR AND
ALTERNATE DIRECTORS TO THE
SOLID WASTE AGENCY OF NORTHERN COOK COUNTY

BE IT RESOLVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF BUFFALO GROVE, COOK COUNTY AND LAKE COUNTIES, ILLINOIS, AS FOLLOWS:

SECTION ONE : The Village of Buffalo Grove is a member of the Solid Waste Agency of Northern Cook County ("the Agency") and, pursuant to the Agency Agreement establishing the Agency, is entitled to appoint a Director and one or more Alternate Directors to the Board of Directors in the Agency.

SECTION TWO: The President and the Board of Trustees appoints Eric Smith, Village President as the Village's Director on the Board of Directors of the Agency, appoints Dane C. Bragg, Village Manager as Alternate Director and appoints Christopher Stilling, Deputy Village Manager as Alternate Director in each case for a term expiring April 30, 2027 or until a successor is appointed.

SECTION THREE: This Resolution shall be in full force and effect upon passage and approval and effective as of May 20, 2024.

AYES:

NAYES: 0 – None

ABSENT: 0 – None

PASSED: May 20, 2024

APPROVED: May 20, 2024

Village President

ATTEST:

Village Clerk



Ordinance No. O-2024-49 : Award of Bid Pump House Improvements

Recommendation of Action

Staff recommends approval.

Staff recommends that the Village Board authorize the Village Manager to execute a contract with William T. Connelly Inc., for the Variable Frequency Drive (VFD) Replacement Project at Pumping Stations 6 & 7 in an amount not to exceed \$125,400.00 pending review and approval by the Village attorney.

ATTACHMENTS:

- Pump House Improvements Memo (DOCX)
- Pump House Improvements Ordinance (DOCX)
- PS6-7 VFD Bid Recommendation & Bid Tab (PDF)
- VFD Replacement PS6 -PS7- Contract(PDF)

Trustee Liaison
Stein

Staff Contact
Kyle Johnson, Engineering

Monday, May 20, 2024	
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VILLAGE OF BUFFALO GROVE



MEMORANDUM

DATE: May 16, 2024

TO: Dane Bragg, Village Manager

FROM: Chris Krase, Utility Superintendent

SUBJECT: Variable Frequency Drive Replacement Project at Pumping Station 6&7 Award of Bid

Staff Recommendation

Staff recommends that the Village Board authorize the Village Manager to execute a contract with William T. Connelly Inc., for the Variable Frequency Drive (VFD) Replacement Project at Pumping Stations 6 & 7 in an amount not to exceed \$125,400.00 pending review and approval by the Village attorney.

Overview

The Variable Frequency Drive (VFD) Replacement Project at Pumping Stations 6 & 7 was advertised for bids and opened on May 9th, 2024. The lowest qualified bid was in the amount of \$114,000.00 from William T. Connelly Inc. The project includes replacement of six (6) VFD's at Pump Station Number Six (6) at 120 Horatio Blvd and two (2) VFD's at Pump Station Number Seven (7). These drives are either out of service or reaching the end of their designed life limiting the capacity of flow able to be distributed from the pump stations.

Attached is a copy of the Tabulation of Bids for the Project indicating the lowest qualified bid of \$114,000.00 from William T. Connelly Inc. Staff sought assistance in preparing this project from AECOMM Technical Services, Inc. Staff recommends that the Village Board award the contract to William T. Connelly Inc. based upon AECOMM's recommendation (letter attached) as the firm is qualified to perform the work and is the lowest bidder. Due to the size and scope of the project, staff recommends a contingency fund be created and controlled by the Village in the amount of \$11,400.00 (10.0% of the project cost). As bids came in below the engineers estimate Public Works staff will consult with the Village Manager prior to exceeding the low bid price of \$114,000.00.

This Project is entirely funded through the Water fund and the work done at Pump Station Six (\$79,000.00) is to be reimbursed from a Deco Grant for improvements at the site.

ORDINANCE 2024-_____

AN ORDINANCE AUTHORIZING EXECUTION OF A CONTRACT WITH WILLIAM T. CONNELLY INC., FOR PUMP HOUSE IMPROVEMENTS

WHEREAS, the Village of Buffalo Grove is a home rule unit pursuant to the Illinois Constitution of 1970; and

WHEREAS, the Village sought out companies qualified to provide the requested services and materials; and

WHEREAS, the Village engaged in a competitive procurement process to obtain the best value for money.

NOW THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS, as follows:

SECTION 1. The foregoing recitals are hereby adopted and incorporated and made a part of this Ordinance as if fully set forth herein.

SECTION 2. The Village Manager is authorized to execute a contract with William T. Connelly Inc., for the Variable Frequency Drive (VFD) Replacement Project at Pumping Stations 6 & 7 at a price not to exceed \$125,400.00, pending review and approval by the Village Attorney.

SECTION 3. If any section, paragraph, clause or provision of this Ordinance shall be held invalid, the invalidity thereof shall not affect any other provision of this Ordinance.

SECTION 4. This Ordinance shall be in full force and effect from and after its passage and approval and not be codified.

AYES: _____

NAYES: _____

ABSENT: _____

PASSED: _____, 2024

APPROVED: _____, 2024

APPROVED:

Eric N. Smith, Village President

ATTEST:

Janet Sirabian, Village Clerk

Attachment: Pump House Improvements Ordinance (O-2024-49 : Award of Bid Pump House Improvements)



AECOM
303 East Wacker Drive
Suite 1400
Chicago, IL 60601
www.aecom.com

312 373 7700 tel
312 373 6800 fax

May 9, 2024

Mr. Kyle E. Johnson, P.E.
Assistant Public Works Director
Village of Buffalo Grove
51 Raupp Boulevard
Buffalo Grove, IL 60089-2198

Reference: Village of Buffalo Grove, Illinois
VFD Replacements Pumping Stations No.6 and 7
Pump Station Nos. 6 and 7
AECOM Project 60715566

Dear Mr. Johnson:

Bid documents for the above-referenced project were opened and read out loud by Mr. Tom C. Wisniewski of Village of Buffalo Grove on Thursday, May 6, 2024, at 9:00 AM.

Four (4) complete bids were received for the project. In compliance therewith, we submit the Official Record of Bids Received, which we reviewed and are certified by our Chad Laucamp, P.E. The bids are tabulated in order of the low bidder first and second low bidder second, etc. A summary of the Total Base Bids received for the project is listed below.

No.	Contractor	Bid Item 1 PS No.6	Bid Item 2 PS No.7	Total Base Bid Amount	Addendum 1	Addendum 2
1	William T. Connelly, Inc	\$79,000.00	\$35,000.00	\$114,000.00	Bid Yes	Email Yes Bid Yes
2	Control Service Inc	\$81,000.00	\$34,000.00	\$115,000.00	Bid Yes	Email No Bid No
3	MK Industries Inc	\$81,200.00	\$40,500.00	\$121,700.00	No	No
4	Okeh Electric Company	\$93,190.00	\$45,500.00	\$138,690.00	Bid Yes	Email Yes Bid No
Engineer's Estimate:				\$114,600.00		

The low bid is \$114,000 or 0.5% percent lower than the Engineer's Estimate. All the bids received adhered to the Contract Documents. It is important to note that there were two (2) addendums issued during bidding, and the table above summarizes acknowledgements for each. While all bidders acknowledged addenda in Exhibit B, Addendum No.2 required acknowledgement by email and for a signed copy of addendum to be attached in bid proposal. Out of the four bidders only bidder number 1 submitted email acknowledgement and provided signed attachment in bid proposal.

Attachment: PS6-7 VFD Bid Recommendation & Bid Tab (O-2024-49 : Award of Bid Pump House Improvements)

Kyle E. Johnson, P.E.
May 9, 2024
Page 2

AECOM

William T. Connelly Inc is the low, responsive, responsible bidder and there were no irregularities; therefore, we recommend that the Village award a contract to them. Please advise us if a contract award is made and to whom. We can then assist with the preparation of the Contract Documents for execution by the Contractor and the Village.

If you have any questions regarding the above, please do not hesitate to contract us.

Very truly yours,

AECOM TECHNICAL SERVICES, INC.



Chad R. Laucamp, P.E.
Project Principal

Attachment

Attachment: PS6-7 VFD Bid Recommendation & Bid Tab (O-2024-49 : Award of Bid Pump House Improvements)



303 East Wacker Drive
Suite 1400
Chicago, IL 60601

Village of Buffalo Grove
VFD Replacements Pumping Stations No. 6 and 7
5/9/2024 at 9:00 AM
Virtual Teams Meeting

Contractor	Address	Addendum #1 Accepted	Addendum #2 Accepted	10% Bid Bond	Bid Item 1 PS No.6	Bid Item 2 PS No.7	Total Base Bid Amount
William T. Connelly. Inc	40 S. Addison Rd #100, Addison, IL 60101	Yes	Yes	Yes	\$79,000.00	\$35,000	\$114,000
Control Service Inc	529 10th Pl Kenosha, WI 54140	Yes	Yes	Yes	\$81,000.00	\$34,000	\$115,000
MK Industries Inc	998 Forest Edge Dr, Vernon Hills, IL 60061	No	No	Yes	\$81,200.00	\$40,500	\$121,700
Okeh Electric Company	825 W University Dr, Arlington Heights, IL 60004	Yes	No	Yes	\$93,190.00	\$45,500	\$138,690
Engineer's Estimate	AECOM 303 E. Wacker Dr. Suite 1400 Chicago, IL 60601	\$114,600					

VFD REPLACEMENTS PUMPING STATIONS NO. 6 AND 7 PROJECT CONTRACT

VFD Replacements Pumping Stations No. 6 and 7 (the “**Contract**”) is entered between the Village of Buffalo Grove (hereinafter the “**Village**” or “**Owner**”), an Illinois home-rule unit of government, and _____ an [_____] (hereinafter the “**Contractor**”) on this ____ day of _____, 2024 (the “**Effective Date**”). The Village and the Contractor are hereinafter sometimes collectively referred to as the “**Parties**” and individually as a “**Party**”.

RECITALS

WHEREAS, the Village has solicited bids for the Work (defined below), Contractor has submitted a bid for the Work and Village has selected Contractor for the Work based on their bid; and

WHEREAS, the Contractor wishes to enter into this Contract with the Village and the Village wishes to enter into this Contract with the Contractor for the Work;

NOW THEREFORE, for and in consideration of the mutual covenants and promises herein contained, the adequacy and sufficiency of which are hereby acknowledged by the Parties, it is agreed as follows:

ARTICLE I - WORK TO BE DONE BY THE CONTRACTOR

The Village does hereby hire and contract with the Contractor to provide all the labor, equipment, materials and/or services described more thoroughly on Contract **Exhibit A** (the “**Work**”) which is incorporated into the Contract by this reference.

ARTICLE II - CONTRACT DOCUMENTS

The following exhibits are attached hereto and incorporated herein by this reference:

- Contract Exhibit A – Description of the Work**
- Contract Exhibit B – Schedule of Prices**
- Contract Exhibit C – Performance Bond**
- Contract Exhibit D – Partial Lien Waiver**
- Contract Exhibit E – Final Lien Waiver**
- Contract Exhibit F- Conditions of the Contract**

If any term or provision of this Contract shall conflict with any term or provision of the exhibits referenced above, the more restrictive term or provision shall prevail.

ARTICLE III - CONTRACT AMOUNT

The Village agrees to pay the Contractor for the proper and timely performance of the Work in strict accordance with this Contract as detailed in **Contract Exhibit B** (the “**Schedule of Prices**”) Unless explicitly provided otherwise in this Contract, the detailed sums shall be the full and exclusive compensation owed to the Contractor for the Work; and Contractor may not seek additional payments from the Village.

The Village of Buffalo Grove reserves the right to reject a proposed price increase and terminate the Contract.

ARTICLE IV – APPLICATION FOR PAYMENT

The Contractor shall be paid at most once a month and only after providing the Village the following:

1. An executed and notarized Contractor's Sworn Statement in a form similar to AIA G702 or AIA G703;
2. Either a partial or final lien waiver from every subcontractor, sub-subcontractor, or materialman in substantially the same form as attached here as **Contract Exhibit D** and **Contract Exhibit E**;
3. Certified payroll necessary for the Prevailing Wage Act; and

All payments under this Contract must be approved by the Village's Board at regularly scheduled meetings. The Village reserves the right to request any receipts, invoices, proof of payments as the Village, in its sole discretion, may deem necessary to justify the payment requested *prior* to paying the requested payment. The Contractor shall furnish with his final application for payment a Final Lien Waiver from itself and, if not already provided, from every subcontractor and materialman of the Work.

The Contractor acknowledges that the Village is a unit of local government and that all payments under the Contract are subject to the Local Government Prompt Payment Act, 50 ILCS 505 et seq. To that extent, the Village shall have forty-five calendar (45) days from receipt of a bill or invoice to pay the same before it is considered late under the Contract. Interest, if any, charged for any late payments will be subject to the interest rate caps specified in the Prompt Payment Act.

ARTICLE V – CONTRACT TIME

The Contractor shall fully, and not substantially, complete all the Work and the Work shall be accepted by the Director of Public Works, provided that acceptance by the Director of Public Works shall not be unreasonably delayed, on or before **October 3, 2024**.

If the Contractor shall fail to complete the work within the Contract Time which shall include any proper extension granted by the Village, the Contractor shall pay to the Village an amount equal to **Seven Hundred Fifty dollars (\$750)** per calendar day for each day past the Contract Time until final acceptance by the Village, as liquidated damages and not as a penalty.

Termination of Contract. The Contract may be terminated, in whole or in part, by either party if the other party substantially fails to fulfill its obligations under the Contract through no fault of the terminating party; or the Village may terminate the Contract, in whole or in part, for its convenience. However, no such termination may be affected unless the terminating party gives the other party: (1) not less than thirty (30) calendar days written notice by certified mail of intent to terminate, and (2) an opportunity for a meeting with the terminating party before termination.

ARTICLE VI – PERFORMANCE BOND

The Contractor shall provide the Village with a performance bond in substantially the same form as on **Contract Exhibit C** (the "**Performance Bond**") prior to Contractor beginning any Work and within 10 calendar days of the Notice of Award sent to the Contractor.

ARTICLE VII – ACCIDENT PREVENTION

The Contractor shall exercise every precaution at all times to protect itself, the property of the Village and the property of others. The safety provision of all applicable laws and ordinances shall be strictly observed by the Contractor at all times. Any practice deemed hazardous or dangerous by the Director of Public Works or his authorized representatives shall be immediately discontinued by the Contractor upon receipt of instructions from the Director of Public Works or his authorized representatives. To the fullest extent permitted by law, the Contractor shall be solely responsible for all safety-related matters.

ARTICLE VIII – INDEMNIFICATION

To the fullest extent permitted by law, the Contractor agrees to defend, pay on behalf of, indemnify, and hold harmless the Village, its elected and appointed officials, agents, employees and volunteers and others working on behalf of the Village against any and all claims, demands, suits or loss, including all costs connected therewith, and for any damages which may be asserted, claimed or recovered against or from the Village, its elected and appointed officials, agents, employees and volunteers and others working on behalf of the Village, by reason of personal injury, including bodily injury and death, and/or property damage, whether damage to property of the Village or of a third party, including loss of use thereof, which arises out of or is in any way connected or associated with the Contract and the Work.

ARTICLE IX – INSURANCE

Contractor shall procure and maintain, for the duration of the Contract and any maintenance period, insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors.

A. Minimum Scope of Insurance: Coverage shall be at least as broad as:

Insurance Services Office Commercial General Liability occurrence form CG 0001 with the Village of Buffalo Grove named as additional insured on a primary and non-contributory basis. This primary, non-contributory additional insured coverage shall be confirmed through the following required policy endorsements: ISO Additional Insured Endorsement CG 20 10 or CG 20 26 and CG 20 01 04 13

1. Insurance Services Office Commercial General Liability occurrence form CG 0001 with the Village named as additional insured, on a form at least as broad as the ISO Additional Insured Endorsement CG 2010 and CG 2026
2. Insurance Service Office Business Auto Liability coverage form number CA 0001, Symbol 01 "Any Auto."
3. Workers' Compensation as required by the Labor Code of the State of Illinois and Employers' Liability insurance.
4. Owners and Contractors Protective Liability (OCP) policy with the Village of Buffalo Grove as insured.
5. Builder Risk Property Coverage with Village as loss payee

B. Minimum Limits of Insurance: Contractor shall maintain limits no less than:

1. Commercial General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. The general aggregate shall be twice the required occurrence limit. Minimum General Aggregate shall be no less than \$2,000,000 or a project/contract specific aggregate of \$1,000,000.
2. Business Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage.

3. Workers' Compensation and Employers' Liability: Workers' Compensation coverage with statutory limits and Employers' Liability limits of \$500,000 per accident.
4. Owners and Contractors Protective Liability (OCP): \$1,000,000 combined single limit per occurrence for bodily injury and property damage.
5. Builder's Risk: Shall insure against "All Risk" of physical damage, including water damage (flood and hydrostatic pressure not excluded), on a completed replacement cost basis.

C. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the Village. At the option of the Village, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as it respects the Village, its officials, agents, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigation, claim administration and defense expenses.

D. Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability Coverages:
 - a. The Village, its officials, agents, employees and volunteers are to be covered as insureds as respects: liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor; premises owned, leased or used by the Contractor; or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the Village, its officials, agents, employees and volunteers.
2. The Contractor's insurance coverage shall be primary and non-contributory as respects the Village, its officials, agents, employees and volunteers. Any insurance or self-insurance maintained by the Village, its officials, agents, employees and volunteers shall be excess of Contractor's insurance and shall not contribute with it.
3. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Village, its officials, agents, employees and volunteers.
4. The Contractor's insurance shall contain a Severability of Interests/Cross Liability clause or language stating that Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
5. If any commercial general liability insurance is being provided under an excess or umbrella liability policy that does not "follow form," then the Contractor shall be required to name the Village, its officials, employees, agents and volunteers as additional insureds
6. All general liability coverages shall be provided on an occurrence policy form. Claims-made general liability policies will not be accepted.
7. The contractor and all subcontractors hereby agree to waive any limitation as to the amount of contribution recoverable against them by the Village. This specifically includes any limitation imposed by any state statute, regulation, or case law including any Workers' Compensation Act provision that applies a limitation to the amount recoverable in contribution such as Kotecki v. Cyclops Welding.

E. All Coverages:

1. No Waiver. Under no circumstances shall the Village be deemed to have waived any of the insurance requirements of this Contract by any act or omission, including, but not limited to:
 - a. Allowing work by Contractor or any subcontractor to start before receipt of Certificates of Insurance and Additional Insured Endorsements.

- b. Failure to examine, or to demand correction of any deficiency, of any Certificate of Insurance and Additional Insured Endorsement received.
- 2. Each insurance policy required shall have the Village expressly endorsed onto the policy as a Cancellation Notice Recipient. Should any of the policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

F. Acceptability of Insurers

Insurance is to be placed with insurers with a Best's rating of no less than A-, VII and licensed to do business in the State of Illinois.

G. Verification of Coverage

Contractor shall furnish the Village with certificates of insurance naming the Village, its officials, agents, employees, and volunteers as additional insured's and with original endorsements, affecting coverage required herein. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be received and approved by the Village before any work commences. The Village reserves the right to request full certified copies of the insurance policies and endorsements.

The Certificate of Insurance shall state the Village of Buffalo Grove has been endorsed as an "additional insured" by the Vendor's insurance carrier. Specifically, this Certificate must include the following language: **"The Village of Buffalo Grove, and its respective elected and appointed officials, employees, agents, consultants, attorneys and representatives, are, and have been endorsed, as an additional insured under the above reference policy number _____ on a primary and non- contributory basis for general liability and automobile liability coverage for the duration of the agreement term."**

H. Subcontractors

Contractor shall include all subcontractors as insured's under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage's for subcontractors shall be subject to all of the requirements stated herein.

I. Assumption of Liability

The contractor assumes liability for all injury to or death of any person or persons including employees of the contractor, any subcontractor, any supplier or any other person and assumes liability for all damage to property sustained by any person or persons occasioned by or in any way arising out of any work performed pursuant to the Contract.

J. Workers' Compensation and Employers' Liability Coverage

The insurer shall agree to waive all rights of subrogation against the Village of Buffalo Grove, its officials, employees, agents and volunteers for losses arising from work performed by Contractor for the municipality.

K. Failure to Comply

In the event the Contractor fails to obtain or maintain any insurance coverage's required under this contract, The Village may purchase such insurance coverage's and charge the expense thereof to the Contractor.

ARTICLE X – CERTIFICATE OF AUTHORITY AND SURETY CERTIFICATE

The Contractor shall furnish the Village with a current Certificate of Authority or Surety Certificate issued by the Illinois Department of Insurance for the bonding company and insurance company they are using. In lieu of a Certificate of Authority of Surety Certificate, the Contractor may provide certificate of good standing from the Illinois Department of Insurance's website.

ARTICLE XI – COPYRIGHTS AND LICENSES

The Contractor agrees that all documents of any kind whatsoever, and in whatever medium expressed, prepared by the Contractor and the Contractor's consultants in connection with the Work (collectively, the "**Documents**") or otherwise pursuant to this Contract and all rights therein (including trademarks, trade names, rights or use, copyrights and/or other proprietary rights) shall be and remain the sole property of the Village (regardless of whether the Village or the Contractor terminates this Contract for any reason whatsoever). The Contractor hereby agrees that the Documents are or shall be deemed to be "Works for Hire" within the meaning of Section 101 of the Copyright Act, and the Contractor hereby assigns to the Village all right, title and interest therein. Notwithstanding, the Contractor shall indemnify and hold harmless the Village, its appointed and elected officials, employees, agents and volunteers from and against all claims, damages, losses, and expenses (including attorneys' fees and court and arbitration costs) arising out of any infringement of patent rights or copyrights incident to the Documents and the Work.

ARTICLE XII – NOTICE

All notices, demands, requests, consents, approvals and other communications required or permitted to be given hereunder (a "**Notice**") shall be in writing and shall be deemed effective three (3) business days after mailing if mailed by certified mail with return receipt requested and immediately if served personally, and shall be addressed to the following:

IF TO THE VILLAGE: Village of Buffalo Grove
50 Raupp Blvd
Buffalo Grove, IL 60089
mskibbe@vbg.org
ATTN: **Director of Public Works**

WITH COPIES TO: Cc: pbrankin@schainbanks.com
Cc: tcwisniewski@vbg.org

IF TO THE CONTRACTOR: _____

ATTN: _____

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

ARTICLE XIII – CHANGE ORDERS

If the Village requests any change to the Work the Village shall do so by delivering Notice of the same to the Contractor and the change requested by the Village shall be effective upon receipt of the Notice by the Contractor. The Contractor may propose a change to the Work by delivering Notice of the proposed change along with a description of the changes full effect on the Work to the Village; provided, such requested change shall not be deemed accepted until the Village has delivered to the Contractor Notice of the same. Prior to approving a proposed change to the Work by the Contractor, the Village may request such additional documentation as it deems necessary to investigate the proposed change. The Contractor shall be responsible for informing all its employees and subcontractors of any changes to the Work, whether such change is requested by the Contractor or the Village.

ARTICLE XIV – NOTICE OF STARTING WORK

The Contractor shall provide Notice to the Village prior to the Contractor, or its employees or subcontractors, starting the Work or any phase of the Work.

ARTICLE XV – SEQUENCE OF THE WORK

The Director of Public Works shall have the power to direct the order and sequence of the Work. On any major portion of the Work, all accessories shall be set coincident with the main construction. Payment for major portions of the Work may be withheld until proper completion of accessories.

ARTICLE XVI – SUPERVISION

The Director of Public Works shall have override power to superintend and direct the Work, and the Contractor shall perform all of the Work herein specified to the satisfaction, approval and acceptance of the Director of Public Works. The Contractor shall have at all times a competent foreman or superintendent at the Work's site, who shall have full authority to act for the Contractor and to receive and execute orders from the Director of Public Works, and any instructions given to such superintendent or person, executing work for the Contractor, shall be binding on the Contractor as though it was personally given to the Contractor.

ARTICLE XVII – STANDARD OF WORK AND WORKERS

The Contractor shall employ competent staff and shall discharge, at the request of the Director of Public Works, any incompetent, unfaithful, abusive or disorderly workers in its employ. Where experts or skilled workers must be employed, only expert or skilled workers shall be employed.

ARTICLE XVIII – CONDITIONS OF THE WORK SITE

The Contractor shall provide and maintain such sanitary accommodations for the use of its employees as may be necessary to comply with the State and local Board of Health requirements. Public nuisances will not be permitted. The Contractor shall leave said Work's site(s) in the best possible condition to the complete satisfaction of the Director of Public Works. No vehicles of any kind shall be placed, parked, or operated upon any grass areas at any time except as authorized by the Director of Public Works or his authorized representative. Further, the Contractor shall exercise every precaution for the protection of all persons and all property. The safety provisions of all-applicable laws and ordinances shall be strictly observed. Any practice hazardous in the opinion of the Director of Public Works or his authorized representatives shall be immediately discontinued by the Contractor upon his receipt of instructions from the Director of Public Works or his authorized representative. To the maximum extent permitted by law, the Contractor shall be responsible for all safety-related matters.

ARTICLE XIX – WARRANTY PERIOD

All material and workmanship shall be warranted and guaranteed according to manufacturer's recommendation after inspection and approval by the Director of Public Works or his designated representative. All work performed by the Contractor shall be warranted by the Contractor following completion and final acceptance of the Work for a period of twenty four (24) months from the date of final, and not substantial, completion.

ARTICLE XX – ACCIDENTS

In the event of any accident of any kind that involves the general public or property of the Village or a third party, the Contractor shall immediately notify the Director of Public Works by phone as well as provide Notice of the same. The Notice shall include a full accounting of all details of the accident. The Contractor shall furnish the Village with copies of all reports of such accidents at the same time that the reports are forwarded to any other interested parties.

ARTICLE XXI – NO ASSIGNMENT

If the Contractor sublets or assigns any part of the Work then the Contractor shall not under any circumstances be relieved of its liabilities hereunder. All transactions of the Village shall be with the Contractor. Subcontractors shall be recognized only in the capacity of employees or workmen and shall be subject to the same requirements as to character and competence. The Contractor shall not assign, transfer, convey, sell or otherwise dispose of the whole or any part of this Contract to any person, firm or corporation without written consent of the Director of Public Works or his authorized representative.

ARTICLE XXII – DEFAULT

The following shall constitute a default an “**Event of Default**” by the Contractor under this Contract:

- A. If the Contractor shall fail to strictly observe or perform one or more of the terms, conditions, covenants and agreements of this Contract;
- B. If there shall be placed on any property owned by the Village any mechanics', materialmens' or suppliers' lien;
- C. If there shall be instituted any proceeding against the Contractor seeking liquidation, dissolution or similar relief and the same shall not be dismissed within forty-five (45) calendar days;
- D. If there shall be appointed any trustee, receiver or liquidator of the Contractor and such appointment shall not have been vacated within forty-five (45) calendar days; and
- E. If the Contractor fails to maintain or obtain any and all permits, licenses and the like, if any, required by the Village, State or Federal governments for the Work.

Upon any Event of Default the Village shall have the option of (i) terminating the Contract; (ii) pursuing any remedy available to it at law or in equity; or (iii) pursuing both simultaneously. In addition, upon an Event of Default, the Village may withhold payments due to the Contractor until it has hired a replacement of the Contractor and deducted all costs of hiring a replacement.

ARTICLE XXIII – DELAYS

The Contractor shall not be liable in damages for delays in performance when such delay is the result of fire, flood, strike, acts of God, or by any other circumstances which are beyond the control of the Contractor; provided, however, under such circumstances the Village may, at its option, cancel the Contract.

ARTICLE XXIV – COMPLIANCE WITH LAWS

The Contractor shall comply with all applicable laws, regulations and rules promulgated by any federal, state, local, or other governmental authority or regulatory body pertaining to all aspects of the Work, now in effect, or which may become in effect during the performance of the Work. The scope of the laws, regulations, and rules referred to in this paragraph includes, but is in no way limited to, the Illinois Human Rights Act, Illinois Equal Pay Act of 2003, Occupational Safety & Health Act along with the standards and regulations promulgated pursuant thereto (including but not limited to those safety requirements involving work on elevated platforms), all forms of traffic regulations, public utility, Interstate and Intrastate Commerce Commission regulations, Workers' Compensation Laws, Public Construction Bond Act, Public Works Preference Act, Employment of Illinois Workers on Public Works Act, USA Security Act, federal Social Security Act (and any of its titles), and any other law, rule or regulation of the Illinois Department of Labor, Department of Transportation, Illinois Environmental Protection Act, Illinois Department of Natural Resources, Illinois Department of Human Rights, Human Rights Commission, EEOC, and the Village of Buffalo Grove. Notwithstanding the following, the Contractor shall particularly note that:

A. NO DISCRIMINATION – The Contractor shall comply with the provisions of the Illinois Public Works Employment Discrimination Act and the Illinois Human Rights Act/Equal Opportunity Clause which, pursuant to Illinois law, are deemed to be part of this Contract.

B. FREEDOM OF INFORMATION - The Contractor agrees to furnish all documentation related to the Contract, the Work and any documentation related to the Village required under an Illinois Freedom of Information Act (ILCS 140/1 et. seq.) (“FOIA”) request within five (5) calendar days after the Village issues Notice of such request to the Contractor. The Contractor agrees to defend, indemnify and hold harmless the Village, and agrees to pay all reasonable costs connected therewith (including, but not limited to attorney’s and witness fees, filing fees and any other expenses) for the Village to defend any and all causes, actions, causes of action, disputes, prosecutions, or conflicts arising from Contractor’s actual or alleged violation of FOIA or the Contractor’s failure to furnish all documentation related to a FOIA request within five (5) calendar days after Notice from the Village for the same. Furthermore, should the Contractor request that the Village utilize a lawful exemption under FOIA in relation to any FOIA request thereby denying that request, Contractor agrees to pay all costs connected therewith (such as attorneys' and witness fees, filing fees and any other expenses) to defend the denial of the request. This defense shall include, but not be limited to, any challenged or appealed denials of FOIA requests to either the Illinois Attorney General or a court of competent jurisdiction.

C. ILLINOIS WORKERS ON PUBLIC WORKS ACT - To the extent applicable, the Contractor shall comply with the Illinois Workers on Public Works Act, 30 ILCS 570/1 et seq., and shall provide to the Village any supporting documentation necessary to show such compliance.

D. NOT A BLOCKED PERSON - The Contractor affirms and covenants that neither the Contractor nor any individual employed by the Contractor for this Work or under this Contract is a person forbidden from doing business with a unit of local government under Executive Order No. 13224 (Sept 23, 2001), 66 Fed.Reg. 49,079 (Sept 23, 2001) or is a person registered on the Specially Designated Nationals and Blocked Persons List. The Contractor shall indemnify the Village from all costs associated with failure to comply with this paragraph.

E. SUBSTANCE ABUSE PREVENTION ON PUBLIC WORKS ACT - The Contractor knows, understands and acknowledges its obligations under the Substance Abuse Prevention on Public Works Act (820 ILCS 265/1 et seq.), and shall comply and require all subcontractors and lower tiered contractors to comply with the requirements and provisions thereof.

F. PREVAILING WAGE ACT - The Village is an Illinois unit of local government and the Work hereunder is subject to the Illinois Prevailing Wage Act, 820 ILCS 130/0.01, et seq.

Pursuant to PA 100-1177 the Illinois Department of Labor (IDOL) has activated an electronic database (Payroll Portal) capable of accepting and retaining certified payrolls submitted under the State of Illinois Prevailing Wage Act (820 ILCS/130/1). All contractors and subcontractors completing work for the Village of Buffalo Grove pursuant to the Act must submit all certified payroll through the IDOL Payroll Portal.

Consequently, the Contractor and each subcontractor shall submit with their application for payment(s) the email certification received from their IDOL Payroll Portal submittal with each of their pay requests. Any delay in processing the payments due to a lack of aforementioned email certification shall not be an event of default by the Village and shall not excuse any delay by the Contractor who shall proceed with the Work as if no delay in payment has occurred. The Contractor and Village shall agree to take any further steps not outlined above to ensure compliance with the Prevailing Wage Act. Upon two business days' Notice, the Contractor and each subcontractor shall make available to the Village their records to confirm compliance with the Prevailing Wage Act. Finally, to ensure compliance with Prevailing Wage Act, the Contractor and each subcontractor shall keep for a period of not less than 5 years after the Work has been completed records of all laborers, mechanics, and other workers employed by them for the Work; the records shall include each worker's name, address, telephone number, classification or classifications, the hourly wages paid in each period, the number of hours worked each day, the starting and ending times of work each day and, when available, last four digits of the social security number.

Current rates can be located on the Illinois Department of Labor website.

<https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx>

ARTICLE XXV – NO WAIVER OF RIGHTS

A waiver by the Village of any Event of Default or any term of provision of this Contract shall not be a waiver of the same Event of Default, another Event of Default or any other term or provision of this Contract.

ARTICLE XXVI – CONTROLLING LAW AND VENUE

This Contract is entered into in the State of Illinois, for work to be performed in the State of Illinois and shall be governed by and construed in accordance with the laws of the State of Illinois. Any legal matters or dispute shall be resolved in the Circuit Court of Cook County and the Parties hereby submit to the jurisdiction of such Circuit Court. This Contract shall be construed without regard to any presumption or other rule requiring construction against the Party causing the Contract to be drafted.

ARTICLE XXVII – MISCELLANEOUS

A. AMENDMENT – This Contract may be amended only in writing executed by both Parties.

B. NO RECORDING – This Contract, or a memorandum thereof, may not be recorded in any form by either Party. If either Party records this Contract, or a memorandum thereof, they shall immediately file a release of the same.

- C. COUNTERPARTS** – This Contract may be executed by the Parties in any any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute an original instrument.
- D. SECTION HEADINGS** – The headings in the Contract are intended for convenience only and shall not be taken into consideration in any construction or interpretation of the Contract.
- E. NO THIRD-PARTY BENEFICIARIES** – This Contract does not confer any rights or benefits on any third party.
- F. BINDING EFFECT** – This Contract shall be binding and inure to the benefit of the Parties hereto, their respective legal representatives, heirs and successors-in-interest.
- G. ENTIRE AGREEMENT** – This Contract supersedes all prior agreements and understandings and constitutes the entire understanding between the Parties relating to the subject matter hereof.
- H. SEVERABILITY** - If any term, condition or provision of the Contract is adjudicated invalid or unenforceable, the remainder of the Contract shall not be affected and shall remain in full force and effect, to the fullest extent permitted by law.
- I. TORT IMMUNITY DEFENSES** - Nothing contained in this Contract is intended to constitute nor shall constitute a waiver of the rights, defenses, and immunities provided or available to the Village under the Local Governmental and Governmental Employees Tort Immunity Act, 745 ILCS 10 *et seq.*
- J. CALENDAR DAYS AND TIME.** Unless otherwise provided in this Contract, any reference in this Contract to “day” or “days” shall mean calendar days and not business days. If the date for giving of any notice required to be given, or the performance of any obligation, under this Contract falls on a Saturday, Sunday or federal holiday, then the notice or obligation may be given or performed on the next business day after that Saturday, Sunday or federal holiday.
- K. COUNTERPARTS** – This Contract may be executed by the Parties in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute an original instrument.

IN WITNESS WHEREOF, the Parties hereto have caused the Contract to be executed as of the Effective Date.

Village of Buffalo Grove,
an Illinois home-rule unit of government

Company
[An Illinois _____ company]

By: _____
Name: Dane Bragg
Title: Village Manager

By: _____
Name: _____
Title: _____

CONTRACT EXHIBIT C – PERFORMANCE BOND
FORM OF PERFORMANCE BOND

Bond Number: _____

KNOW ALL MEN BY THESE PRESENTS, That _____(the “**Principal**”) and _____(the “**Surety**”), are held and firmly bound unto the Village of Buffalo Grove, an Illinois home-rule unit of government (the “**Village**”), the full and just sum of _____Dollars (\$_____) in lawful money of the UNITED STATES OF AMERICA as herein provided.

THE CONDITION OF THIS OBLIGATION is such that the Principal and Surety agree to bind themselves, their successors, assigns, executors, heirs and administrators, jointly and severally, for the full and faithful performance of the Work as defined in that particular **VFD Replacements Pumping Stations No. 6 and 7** contract between Principal and the Village dated __day of _____, 20__, (hereinafter referred to as the “**Contract**”), a copy of which is attached and incorporated by reference as though fully set forth herein.

NOW THE CONDITIONS OF THIS OBLIGATION ARE SUCH that if the said Principal (i) shall in all respects keep and perform all the undertakings, covenants, terms, conditions and agreements of the Contract; (ii) shall pay all sums of money due or to become due, for any labor, materials, apparatus, fixtures or equipment furnished for the Work provided in said Contract; and (iii) shall remove and replace any defects in workmanship or materials which may be apparent or may develop within the ARTICLE XIX – WARRANTY PERIOD of the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or the Work thereunder shall in any way affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the Work.

IN WITNESS WHEREOF, we have hereunto set our hands and sea ____day of _____, 20__.

SURETY

PRINCIPAL

By: _____
Name: _____
Title: _____

By: _____
Name: _____
Title: _____

ATTEST

ATTEST

By: _____

By: _____

NOTE: Date of Bond must not be prior to date of Contract.
If Contractor is Partnership, all partners should execute Bond.
IMPORTANT: Surety companies executing Bonds must appear on the Treasury Departments most current list (Circular 570 as amended) and be authorized to transact business in the state where the Work is located

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

CONTRACT EXHIBIT D – PARTIAL LIEN WAIVER

PARTIAL LIEN WAIVER

STATE OF ILLINOIS

COUNTY OF _____

TO WHOM IT MAY CONCERN:

WHEREAS the undersigned has been employed by _____
to furnish _____
for the premises known as _____
of which _____ is the owner.
THE undersigned, for and in consideration of _____
(\$ _____)

) Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged, do(es) hereby waive and release any and all lien or claim of, or right to, lien, under the statutes of the State of Illinois, relating to mechanics' liens, with respect to and on said above-described premises, and the improvements thereon, and on the material, fixtures, apparatus or machinery furnished, and on the moneys, funds or other considerations due or to become due from the owner, on account of all labor, services, material, fixtures, apparatus or machinery, furnished to this date by the undersigned for the above-described premises, INCLUDING EXTRAS.*
DATE _____ COMPANY NAME _____
ADDRESS _____
SIGNATURE AND TITLE _____

*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN, TO THE CONTRACT

CONTRACTOR'S AFFIDAVIT

STATE OF ILLINOIS

COUNTY OF _____

TO WHOM IT MAY CONCERN:

THE UNDERSIGNED, (NAME) _____ BEING DULY SWORN, DEPOSES
AND SAYS THAT HE OR SHE IS (POSITION) _____ OF
(COMPANY NAME) _____ WHO IS THE
CONTRACTOR FURNISHING _____ WORK ON THE BUILDING
LOCATED AT _____
OWNED BY _____
That the total amount of the contract including extras* is \$ _____ on which he or she has received payment of
\$ _____ prior to this payment. That all waivers are true, correct and genuine and delivered unconditionally and that there is no claim either legal or equitable to defeat the validity of said waivers. That the following are the names and addresses of all parties who have furnished or delivered material or labor, or both, for said work and all parties having contracts or sub contracts for specific portions of said work or for material entering into the construction thereof and the amount due or to become due to each, and that the items mentioned include all labor and material required to complete said work according to plans and specifications:

NAMES AND ADDRESSES	WHAT FOR	CONTRACT PRICE INCLUDING EXTRAS*	AMOUNT PAID	THIS PAYMENT	BALANCE DUE
TOTAL LABOR AND MATERIAL INCLUDING EXTRAS* TO COMPLETE.					

That there are no other contracts for said work outstanding, and that there is nothing due or to become due to any person for material, labor or other work of any kind done or to be done upon or in connection with said work other than above stated.
DATE _____ SIGNATURE: _____
SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____,
*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN, TO THE CONTRACT. _____ NOTARY PUBLIC

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

CONTRACT EXHIBIT A – DESCRIPTION OF THE WORK

[Description of the Work]

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

PROJECT MANUAL

FOR

VILLAGE OF BUFFALO GROVE, ILLINOIS

VARIABLE FREQUENCY DRIVE (VFD) REPLACEMENTS
PUMPING STATIONS NO. 6 AND 7

PRE-FINAL SUBMITTAL

APRIL 2024

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, ILLINOIS 60601

60715566

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared By



Endorsed By



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National Society of Professional Engineers
1420 King Street, Alexandria, VA 22314-2794
(703) 684-2882
www.nspe.org

American Council of Engineering Companies
1015 15th Street N.W., Washington, DC 20005
(202) 347-7474
www.acec.org

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400
(800) 548-2723
www.asce.org

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NOTE: EJCDC publications may be purchased at www.ejcdc.org, or from any of the sponsoring organizations above.

Contract Exhibit F- Conditions of the Contract

GUIDELINES FOR USE OF EJCDC® C-700, STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

1.0 PURPOSE AND INTENDED USE OF THE DOCUMENT

EJCDC® C-700, Standard General Conditions of the Construction Contract (2018), is the foundation document for the EJCDC Construction Series. The General Conditions define the basic rights, responsibilities, risk allocations, and contractual relationship of the Owner and Contractor, and establish how the Contract is to be administered.

2.0 OTHER DOCUMENTS

EJCDC documents are intended to be used as a system and changes in one EJCDC document may require a corresponding change in other documents. Other EJCDC documents may also serve as a reference to provide insight or guidance for the preparation of this document.

These General Conditions have been prepared for use with either EJCDC® C-520, Agreement Between Owner and Contractor for Construction Contract (Stipulated Price), or EJCDC® C-525, Agreement Between Owner and Contractor for Construction Contract (Cost-Plus-Fee) (2018 Editions). The provisions of the General Conditions and the Agreement are interrelated, and a change in one may necessitate a change in the other.

To prepare supplementary conditions that are coordinated with the General Conditions, use EJCDC® C-800, Supplementary Conditions of the Construction Contract (2018).

The full EJCDC Construction series of documents is discussed in the EJCDC® C-001, Commentary on the 2018 EJCDC Construction Documents (2018).

3.0 ORGANIZATION OF INFORMATION

All parties involved in a construction project benefit significantly from a standardized approach in the location of subject matter throughout the documents. Experience confirms the danger of addressing the same subject matter in more than one location; doing so frequently leads to confusion and unanticipated legal consequences. Careful attention should be given to the guidance provided in EJCDC® N-122/AIA® A521, Uniform Location of Subject Matter (2012 Edition) when preparing documents. EJCDC® N-122/AIA® A521 is available at no charge from the EJCDC website, www.ejcdc.org, and from the websites of EJCDC's sponsoring organizations.

If CSI MasterFormat™ is used for organizing the Project Manual, consult CSI MasterFormat™ for the appropriate document number (e.g., under 00 11 00, Advertisements and Invitations), and accordingly number the document and its pages.

4.0 EDITING THIS DOCUMENT

Remove these Guidelines for Use. Some users may also prefer to remove the two cover pages.

Although it is permissible to revise the Standard EJCDC Text of C-700 (the content beginning at page 1 and continuing to the end), it is common practice to leave the Standard EJCDC Text of C-700 intact and unaltered, with modifications and supplementation of C-700's provisions set forth in EJCDC® C-800, Supplementary Conditions of the Construction Contract (2018). If the Standard Text itself is revised, the

user must comply with the terms of the License Agreement, Paragraph 4.0, Document-Specific Provisions, concerning the tracking or highlighting of revisions. The following is a summary of the relevant License Agreement provisions:

1. The term “Standard EJCDC Text” for C-700 refers to all text prepared by EJCDC in the main body of the document. Document covers, logos, footers, instructions, or copyright notices are not Standard EJCDC Text for this purpose.
2. During the drafting or negotiating process for C-700, it is important that the two contracting parties are both aware of any changes that have been made to the Standard EJCDC Text. Thus, if a draft or version of C-700 purports to be or appears to be an EJCDC document, the user must plainly show all changes to the Standard EJCDC Text, using “Track Changes” (redline/strikeout), highlighting, or other means of clearly indicating additions and deletions.
3. If C-700 has been revised or altered and is subsequently presented to third parties (such as potential bidders, grant agencies, lenders, or sureties) as an EJCDC document, then the changes to the Standard EJCDC Text must be shown, or the third parties must receive access to a version that shows the changes.
4. Once the document is ready to be finalized (and if applicable executed by the contracting parties), it is no longer necessary to continue to show changes to the Standard EJCDC Text. The user may produce a final version of the document in a format in which all changes are accepted, and the document at that point does not need to include any “Track Changes,” redline/strikeout, highlighting, or other indication of additions and deletions to the Standard EJCDC Text.

5.0 LICENSE AGREEMENT

This document is subject to the terms and conditions of the **License Agreement, 2018 EJCDC® Construction Series Documents**. A copy of the License Agreement was furnished at the time of purchase of this document, and is available for review at www.ejcdc.org and the websites of EJCDC’s sponsoring organizations.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The document prepared by Contractor, in a form acceptable to Engineer, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The Advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*
 - a. A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times; contesting an initial decision by Engineer concerning the

requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract.

- b. A demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal, or seeking resolution of a contractual issue that Engineer has declined to address.
 - c. A demand or assertion by Owner or Contractor, duly submitted in compliance with the procedural requirements set forth herein, made pursuant to Paragraph 12.01.A.4, concerning disputes arising after Engineer has issued a recommendation of final payment.
 - d. A demand for money or services by a third party is not a Claim.
11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
 12. *Contract*—The entire and integrated written contract between Owner and Contractor concerning the Work.
 13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
 14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
 15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
 16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
 17. *Cost of the Work*—See Paragraph 13.01 for definition.
 18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
 19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
 20. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.
 21. *Electronic Means*—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the

recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.

22. *Engineer*—The individual or entity named as such in the Agreement.
23. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
24. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.
 - a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.
 - b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.
 - c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.
25. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
26. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
27. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.
28. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
29. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
30. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
31. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor's plan to accomplish the Work within the Contract Times.
32. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.

33. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.
34. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
35. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals.
36. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
37. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
38. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Contractor.
39. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
40. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
41. *Submittal*—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers' instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.
42. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion of such Work.

43. *Successful Bidder*—The Bidder to which the Owner makes an award of contract.
44. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
45. *Supplier*—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
46. *Technical Data*
- a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.
 - b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.
 - c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated on the Drawings.
47. *Underground Facilities*—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.
48. *Unit Price Work*—Work to be paid for on the basis of unit prices.
49. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
50. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives:* The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day:* The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective:* The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - 1. does not conform to the Contract Documents;
 - 2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - 3. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).
- E. *Furnish, Install, Perform, Provide*
 - 1. The word “furnish,” when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 - 2. The word “install,” when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 - 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.
 - 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

- F. *Contract Price or Contract Times*: References to a change in “Contract Price or Contract Times” or “Contract Times or Contract Price” or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term “or both” is not expressed.
- G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Performance and Payment Bonds; Evidence of Insurance*

- A. *Performance and Payment Bonds*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner the performance bond and payment bond (if the Contract requires Contractor to furnish such bonds).
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each additional insured (as identified in the Contract), the certificates, endorsements, and other evidence of insurance required to be provided by Contractor in accordance with Article 6, except to the extent the Supplementary Conditions expressly establish other dates for delivery of specific insurance policies.
- C. *Evidence of Owner’s Insurance*: After receipt of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each additional insured (as identified in the Contract), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully signed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 2. a preliminary Schedule of Submittals; and
 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work

into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work, and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other Submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review the schedules submitted in accordance with Paragraph 2.03.A. No progress payment will be made to Contractor until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.
 - 4. If a schedule is not acceptable, Contractor will have an additional 10 days to revise and resubmit the schedule.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.
- B. If the Contract does not establish protocols for Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents (including any printed copies derived from such electronic versions) and the printed record version, the printed record version will govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.
- F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- G. Nothing in the Contract Documents creates:
 - 1. any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or
 - 2. any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 *Reference Standards*

- A. *Standards Specifications, Codes, Laws and Regulations*
 - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, means the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard specification, manual, reference standard, or code, and no instruction of a Supplier, will be effective to change the duties or responsibilities of Owner, Contractor, or Engineer from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility

inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work.

- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media versions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein precludes Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the 30th day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the 60th day after the day of Bid opening or the 30th day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work may be done at the Site prior to such date.

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the

established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times must be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Such an adjustment will be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
 - 1. Severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 - 2. Abnormal weather conditions;
 - 3. Acts or failures to act of third-party utility owners or other third-party entities (other than those third-party utility owners or other third-party entities performing other work at or adjacent to the Site as arranged by or under contract with Owner, as contemplated in Article 8); and
 - 4. Acts of war or terrorism.

- D. Contractor's entitlement to an adjustment of Contract Times or Contract Price is limited as follows:
1. Contractor's entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.
 2. Contractor shall not be entitled to an adjustment in Contract Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor. Such a concurrent delay by Contractor shall not preclude an adjustment of Contract Times to which Contractor is otherwise entitled.
 3. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11.
- E. Each Contractor request or Change Proposal seeking an increase in Contract Times or Contract Price must be supplemented by supporting data that sets forth in detail the following:
1. The circumstances that form the basis for the requested adjustment;
 2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;
 3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;
 4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference; and
 5. The impact on Contract Price, in accordance with the provisions of Paragraph 11.07.
- Contractor shall also furnish such additional supporting documentation as Owner or Engineer may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.
- F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.
- G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

ARTICLE 5—SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.

- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*

1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.
- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.
 - C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment

and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:

1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;
2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data; and
3. Technical Data contained in such reports and drawings.

- B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

- C. *Reliance by Contractor on Technical Data:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.

- D. *Limitations of Other Data and Documents:* Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
 3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
 4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site:
1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate;
 2. is of such a nature as to require a change in the Drawings or Specifications;
 3. differs materially from that shown or indicated in the Contract Documents; or
 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- E. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in

Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. Such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
 - c. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise;
 - b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice required by Paragraph 5.04.A.
 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
 4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.
- F. *Underground Facilities; Hazardous Environmental Conditions:* Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all of the following are included in the Contract Price, and Contractor shall have full responsibility for:
1. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 2. complying with applicable state and local utility damage prevention Laws and Regulations;

3. verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction;
 4. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 5. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated on the Drawings, or was not shown or indicated on the Drawings with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing regarding such Underground Facility.
- C. *Engineer's Review:* Engineer will:
1. promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy;
 2. identify and communicate with the owner of the Underground Facility; prepare recommendations to Owner (and if necessary issue any preliminary instructions to Contractor) regarding the Contractor's resumption of Work in connection with the Underground Facility in question;
 3. obtain any pertinent cost or schedule information from Contractor; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and
 4. advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the Underground Facility may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the Underground Facility in question and conditions affected by its presence have been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- F. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, to the extent that any existing Underground Facility at the Site that was not shown

or indicated on the Drawings, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - b. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E; and
 - c. Contractor gave the notice required in Paragraph 5.05.B.
2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.
 4. The information and data shown or indicated on the Drawings with respect to existing Underground Facilities at the Site is based on information and data (a) furnished by the owners of such Underground Facilities, or by others, (b) obtained from available records, or (c) gathered in an investigation conducted in accordance with the current edition of ASCE 38, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, by the American Society of Civil Engineers. If such information or data is incorrect or incomplete, Contractor's remedies are limited to those set forth in this Paragraph 5.05.F.

5.06 *Hazardous Environmental Conditions at Site*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;
2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
3. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures

- of construction to be employed by Contractor, and safety precautions and programs incident thereto;
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by Contractor, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.
- H. If, after receipt of such written notice, Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special

conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.

- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I obligates Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J obligates Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of Contractor's obligations under the Contract. These bonds must remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the terms of a prescribed bond form, the Supplementary Conditions, or other provisions of the Contract.
- B. Contractor shall also furnish such other bonds (if any) as are required by the Supplementary Conditions or other provisions of the Contract.
- C. All bonds must be in the form included in the Bidding Documents or otherwise specified by Owner prior to execution of the Contract, except as provided otherwise by Laws or

Regulations, and must be issued and signed by a surety named in “Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies” as published in Department Circular 570 (as amended and supplemented) by the Bureau of the Fiscal Service, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual’s authority to bind the surety. The evidence of authority must show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.

- D. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue bonds in the required amounts.
- E. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer in writing and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which must comply with the bond and surety requirements above.
- F. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner’s termination rights under Article 16.
- G. Upon request to Owner from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Owner shall provide a copy of the payment bond to such person or entity.
- H. Upon request to Contractor from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Contractor shall provide a copy of the payment bond to such person or entity.

6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized in the state or jurisdiction in which the Project is located to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Alternative forms of insurance coverage, including but not limited to self-insurance and “Occupational Accident and Excess Employer’s Indemnity Policies,” are not sufficient to meet the insurance requirements of this Contract, unless expressly allowed in the Supplementary Conditions.
- D. Contractor shall deliver to Owner, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Contractor has obtained and is maintaining the policies and coverages required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, full disclosure of all relevant exclusions, and evidence of insurance required to be purchased and maintained by

- Subcontractors or Suppliers. In any documentation furnished under this provision, Contractor, Subcontractors, and Suppliers may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those applicable to this Contract.
- E. Owner shall deliver to Contractor, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Owner has obtained and is maintaining the policies and coverages required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, and full disclosure of all relevant exclusions. In any documentation furnished under this provision, Owner may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those relevant to this Contract.
 - F. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, will not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
 - G. In addition to the liability insurance required to be provided by Contractor, the Owner, at Owner's option, may purchase and maintain Owner's own liability insurance. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.
 - H. Contractor shall require:
 - 1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner and Engineer (and any other individuals or entities identified in the Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and
 - 2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.
 - I. If either party does not purchase or maintain the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
 - J. If Contractor has failed to obtain and maintain required insurance, Contractor's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate set-off against payment for any associated costs (including but not limited to the cost of purchasing necessary insurance coverage), and exercise Owner's termination rights under Article 16.
 - K. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect (but is in no way obligated) to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price will be adjusted accordingly.

- L. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests. Contractor is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that Contractor deems necessary.
- M. The insurance and insurance limits required herein will not be deemed as a limitation on Contractor's liability, or that of its Subcontractors or Suppliers, under the indemnities granted to Owner and other individuals and entities in the Contract or otherwise.
- N. All the policies of insurance required to be purchased and maintained under this Contract will contain a provision or endorsement that the coverage afforded will not be canceled, or renewal refused, until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.

6.03 Contractor's Insurance

- A. *Required Insurance:* Contractor shall purchase and maintain Worker's Compensation, Commercial General Liability, and other insurance pursuant to the specific requirements of the Supplementary Conditions.
- B. *General Provisions:* The policies of insurance required by this Paragraph 6.03 as supplemented must:
 - 1. include at least the specific coverages required;
 - 2. be written for not less than the limits provided, or those required by Laws or Regulations, whichever is greater;
 - 3. remain in effect at least until the Work is complete (as set forth in Paragraph 15.06.D), and longer if expressly required elsewhere in this Contract, and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract;
 - 4. apply with respect to the performance of the Work, whether such performance is by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable; and
 - 5. include all necessary endorsements to support the stated requirements.
- C. *Additional Insureds:* The Contractor's commercial general liability, automobile liability, employer's liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies, if required by this Contract, must:
 - 1. include and list as additional insureds Owner and Engineer, and any individuals or entities identified as additional insureds in the Supplementary Conditions;
 - 2. include coverage for the respective officers, directors, members, partners, employees, and consultants of all such additional insureds;
 - 3. afford primary coverage to these additional insureds for all claims covered thereby (including as applicable those arising from both ongoing and completed operations);

4. not seek contribution from insurance maintained by the additional insured; and
5. as to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by Contractor's acts or omissions, or the acts and omissions of those working on Contractor's behalf, in the performance of Contractor's operations.

6.04 *Builder's Risk and Other Property Insurance*

- A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.
- B. *Property Insurance for Facilities of Owner Where Work Will Occur*: Owner is responsible for obtaining and maintaining property insurance covering each existing structure, building, or facility in which any part of the Work will occur, or to which any part of the Work will attach or be adjoined. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, providing coverage consistent with that required for the builder's risk insurance, and will be maintained until the Work is complete, as set forth in Paragraph 15.06.D.
- C. *Property Insurance for Substantially Complete Facilities*: Promptly after Substantial Completion, and before actual occupancy or use of the substantially completed Work, Owner will obtain property insurance for such substantially completed Work, and maintain such property insurance at least until the Work is complete, as set forth in Paragraph 15.06.D. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, and provide coverage consistent with that required for the builder's risk insurance. The builder's risk insurance may terminate upon written confirmation of Owner's procurement of such property insurance.
- D. *Partial Occupancy or Use by Owner*: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide advance notice of such occupancy or use to the builder's risk insurer, and obtain an endorsement consenting to the continuation of coverage prior to commencing such partial occupancy or use.
- E. *Insurance of Other Property; Additional Insurance*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, then the entity or individual owning such property item will be responsible for insuring it. If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.04, it may do so at Contractor's expense.

6.05 *Property Losses; Subrogation*

- A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04 (or an installation floater policy if authorized by the Supplementary Conditions), will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against

Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.

1. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.
 2. None of the above waivers extends to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Any property insurance policy maintained by Owner covering any loss, damage, or consequential loss to Owner's existing structures, buildings, or facilities in which any part of the Work will occur, or to which any part of the Work will attach or adjoin; to adjacent structures, buildings, or facilities of Owner; or to part or all of the completed or substantially completed Work, during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06, will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them, and that the insured is allowed to waive the insurer's rights of subrogation in a written contract executed prior to the loss, damage, or consequential loss.
1. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from fire or any of the perils, risks, or causes of loss covered by such policies.
- C. The waivers in this Paragraph 6.05 include the waiver of rights due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other insured peril, risk, or cause of loss.
- D. Contractor shall be responsible for assuring that each Subcontract contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from fire or other peril, risk, or cause of loss covered by builder's risk insurance, installation floater, and any other property insurance applicable to the Work.

6.06 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of property insurance required by Paragraph 6.04 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.04 shall maintain such proceeds in a segregated account, and distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, Contractor shall repair or replace the damaged Work, using allocated insurance proceeds.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 *Contractor's Means and Methods of Construction*

- A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to (1) Contractor's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.03 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site.

- B. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of Suppliers and Subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work, just as Contractor is responsible for Contractor's own acts and omissions.
- C. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.04 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.05 *"Or Equals"*

- A. *Contractor's Request; Governing Criteria:* Whenever an item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that an item of equipment or material proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer will deem it an "or equal" item. For the purposes of this paragraph, a proposed item of equipment or material will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that the proposed item:
 - 1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

- 2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) has a proven record of performance and availability of responsive service; and
 - 4) is not objectionable to Owner.
- b. Contractor certifies that, if the proposed item is approved and incorporated into the Work:
- 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) the item will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense*: Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal," which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer's Determination*: Neither approval nor denial of an "or-equal" request will result in any change in Contract Price. The Engineer's denial of an "or-equal" request will be final and binding, and may not be reversed through an appeal under any provision of the Contract.
- E. *Treatment as a Substitution Request*: If Engineer determines that an item of equipment or material proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer consider the item a proposed substitute pursuant to Paragraph 7.06.

7.06 Substitutes

- A. *Contractor's Request; Governing Criteria*: Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.
1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of equipment or material from anyone other than Contractor.
 2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.

3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:
 - a. will certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design;
 - 2) be similar in substance to the item specified; and
 - 3) be suited to the same use as the item specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from the item specified; and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost*: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

- E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding, and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Proposal.

7.07 *Concerning Subcontractors and Suppliers*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.
- B. Contractor shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.
- E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.
- F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.

- H. On a monthly basis, Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.
- J. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.
- K. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.
- L. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.
- M. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.

7.08 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If an invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights will be disclosed in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.09 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

7.10 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.11 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It is not Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this does not relieve Contractor of its obligations under Paragraph 3.03.
- C. Owner or Contractor may give written notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such written notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.12 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.
- B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.
- C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- D. All damage, injury, or loss to any property referred to in Paragraph 7.13.C.2 or 7.13.C.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- E. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.
- F. Contractor shall notify Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities (if the identity of such owners is known to Contractor); and other contractors and utility owners performing work at or adjacent to the Site, in writing, when Contractor knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- G. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.
- H. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.

- I. Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).
- J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of safety data sheets (formerly known as material safety data sheets) or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency, or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

7.16 *Submittals*

A. *Shop Drawing and Sample Requirements*

1. Before submitting a Shop Drawing or Sample, Contractor shall:
 - a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determine and verify:
 - 1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;
 - 2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;
 - c. confirm that the Submittal is complete with respect to all related data included in the Submittal.
2. Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.

3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.
- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.
1. *Shop Drawings*
 - a. Contractor shall submit the number of copies required in the Specifications.
 - b. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide, and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.C.
 2. *Samples*
 - a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.
 3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Engineer's Review of Shop Drawings and Samples*
1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals. Engineer's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.
 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will

document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.

5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.
6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.
8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. Resubmittal Procedures for Shop Drawings and Samples

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous Submittals.
2. Contractor shall furnish required Shop Drawing and Sample submittals with sufficient information and accuracy to obtain required approval of an item with no more than two resubmittals. Engineer will record Engineer's time for reviewing a third or subsequent resubmittal of a Shop Drawing or Sample, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved Shop Drawing or Sample, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

E. Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs

1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:
 - a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.
 - b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.
 - c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.

- d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance, and resubmit an acceptable document.
- 2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03, 2.04, and 2.05.
- F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 Contractor's General Warranty and Guarantee

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer is entitled to rely on Contractor's warranty and guarantee.
- B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:
 - 1. Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and
 - 2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.
- C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 - 1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 - 2. normal wear and tear under normal usage.
- D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:
 - 1. Observations by Engineer;
 - 2. Recommendation by Engineer or payment by Owner of any progress or final payment;
 - 3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 - 4. Use or occupancy of the Work or any part thereof by Owner;
 - 5. Any review and approval of a Shop Drawing or Sample submittal;
 - 6. The issuance of a notice of acceptability by Engineer;
 - 7. The end of the correction period established in Paragraph 15.08;
 - 8. Any inspection, test, or approval by others; or

9. Any correction of defective Work by Owner.

- E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A will not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

7.19 *Delegation of Professional Design Services*

- A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.
- B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.
- C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.

- D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.
- E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:
 - 1. Checking for conformance with the requirements of this Paragraph 7.19;
 - 2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and
 - 3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.
- F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.
- G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8—OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.
- D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.

- E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.
- F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. An itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. The extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract, and any remedies available to Contractor under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Contract Price will be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times or Contract Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.

- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
 - 1. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this Paragraph 8.03.B.
 - 2. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due Contractor.
- C. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9—OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents will be that of the former Engineer.

9.03 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 *Lands and Easements; Reports, Tests, and Drawings*

- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 *Insurance*

- A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 *Change Orders*

- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.08 *Inspections, Tests, and Approvals*

- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 *Limitations on Owner's Responsibilities*

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.10 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract (including obligations under proposed changes in the Work).

9.12 *Safety Programs*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.07. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Resident Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in the Supplementary Conditions and in Paragraph 10.07.
- B. If Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions.

10.04 *Engineer's Authority*

- A. Engineer has the authority to reject Work in accordance with Article 14.
- B. Engineer's authority as to Submittals is set forth in Paragraph 7.16.
- C. Engineer's authority as to design drawings, calculations, specifications, certifications and other Submittals from Contractor in response to Owner's delegation (if any) to Contractor of professional design services, is set forth in Paragraph 7.19.
- D. Engineer's authority as to changes in the Work is set forth in Article 11.

E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.06 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.07 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Contractor under Paragraph 15.06.A, will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 also apply to the Resident Project Representative, if any.

10.08 *Compliance with Safety Program*

A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs of which Engineer has been informed.

ARTICLE 11—CHANGES TO THE CONTRACT

11.01 *Amending and Supplementing the Contract*

- A. The Contract may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
- B. If an amendment or supplement to the Contract includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.
- C. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer.

11.02 *Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - 1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 - 2. Changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and
 - 4. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.

11.03 *Work Change Directives*

- A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.

- B. If Owner has issued a Work Change Directive and:
1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.
 2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 *Field Orders*

- A. Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly.
- B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.05 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.
- B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.
- C. Nothing in this Paragraph 11.05 obligates Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:

1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);
 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or
 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).
- C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit will be determined as follows:
1. A mutually acceptable fixed fee; or
 2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;
 - b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;
 - c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;
 - d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and
 - f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

11.08 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12.
- B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.

11.09 *Change Proposals*

- A. *Purpose and Content:* Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.

- B. *Change Proposal Procedures*

- 1. *Submittal:* Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.
- 2. *Supporting Data:* The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.
 - a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.
 - b. Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

- 3. *Engineer's Initial Review:* Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.
- 4. *Engineer's Full Review and Action on the Change Proposal:* Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change

Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

5. *Binding Decision*: Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- C. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.
- D. *Post-Completion*: Contractor shall not submit any Change Proposals after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12—CLAIMS

12.01 *Claims*

- A. *Claims Process*: The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:
 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;
 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and
 4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.
- B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge

and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.

- C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation*
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.
 - 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim will be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13—COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 - 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or

2. When needed to determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included:* Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:
1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.
 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Contractor shall make provisions so that they may be obtained.
 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, which will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work.
 5. Other costs consisting of the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are

consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

- 1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.

c. *Construction Equipment Rental*

- 1) Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner as to price (including any surcharge or special rates applicable to overtime use of the construction equipment or machinery), and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts must cease when the use thereof is no longer necessary for the Work.
 - 2) Costs for equipment and machinery owned by Contractor or a Contractor-related entity will be paid at a rate shown for such equipment in the equipment rental rate book specified in the Supplementary Conditions. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs.
 - 3) With respect to Work that is the result of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price ("changed Work"), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.
- d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of builder's risk or other property insurance established in accordance with Paragraph 6.04), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses will be included in the Cost of the Work for the purpose of determining Contractor's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. *Costs Excluded:* The term Cost of the Work does not include any of the following items:

- 1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
- 2. The cost of purchasing, renting, or furnishing small tools and hand tools.
- 3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 6. Expenses incurred in preparing and advancing Claims.
- 7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. *Contractor's Fee*

- 1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:
 - a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.
 - b. for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:
 - 1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.
 - 2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.
- 2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change

Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.

- E. *Documentation and Audit*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances*: Contractor agrees that:
1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment for any of the foregoing will be valid.
- C. *Owner's Contingency Allowance*: Contractor agrees that an Owner's contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor for Work covered by allowances, and the Contract Price will be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision

thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order, subject to the provisions of the following paragraph.

E. *Adjustments in Unit Price*

1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:
 - a. the quantity of the item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
 - b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.
2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work will be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 3. by manufacturers of equipment furnished under the Contract Documents;
 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests will be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 Defective Work

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt written notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs,

losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work will be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work,

or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work will not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace defective Work as required by Engineer, then Owner may, after 7 days' written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15—PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 *Progress Payments*

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments*
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
 - 2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation

establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

3. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. *Review of Applications*

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work;
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid by Owner; or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
 5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
 6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.
- D. *Payment Becomes Due***
1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.
- E. *Reductions in Payment by Owner***
1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. Claims have been made against Owner based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;

- b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. The Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. The Contract Price has been reduced by Change Orders;
 - i. An event has occurred that would constitute a default by Contractor and therefore justify a termination for cause;
 - j. Liquidated or other damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or
 - l. Other items entitle Owner to a set-off against the amount recommended.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed will be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.01.D.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time

submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.

- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without

significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:

1. At any time, Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through 15.03.E for that part of the Work.
2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

A. *Application for Payment*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.
2. The final Application for Payment must be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.

- d. a list of all duly pending Change Proposals and Claims; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.
- B. *Engineer's Review of Final Application and Recommendation of Payment:* If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10 days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.
- C. *Notice of Acceptability:* In support of its recommendation of payment of the final Application for Payment, Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.07.
- D. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work.
- E. *Final Payment Becomes Due:* Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.

15.07 *Waiver of Claims*

- A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding Claim,

appeal under the provisions of Article 17, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.

- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim, or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), Owner gives Contractor written notice that any Work has been found to be defective, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 1. correct the defective repairs to the Site or such adjacent areas;
 2. correct such defective Work;
 3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and
 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.
- B. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B.
- C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.
- D. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

- F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times directly attributable to any such suspension. Any Change Proposal seeking such adjustments must be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);
 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and
 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects,

attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate for Convenience*

- A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 7 days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The

provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17—FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this article:
 - 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and
 - 2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this article, Owner or Contractor may:
 - 1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions;
 - 2. agree with the other party to submit the dispute to another dispute resolution process; or
 - 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18—MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:
 - 1. in person, by a commercial courier service or otherwise, to the recipient's place of business;
 - 2. by registered or certified mail, postage prepaid, to the recipient's place of business; or
 - 3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Assignment of Contract*

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.09 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.10 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

March 2024

Project 60715566

Village of Buffalo Grove
VFD Replacements Pumping Stations
No. 6 and 7

DOCUMENT 00800

SUPPLEMENTARY CONDITIONS

1.1 SUPPLEMENTARY CONDITIONS

- A. These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract, EJCDC C-700, 2020 Edition, and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.
- B. The terms used in these Supplementary Conditions which are defined in the Standard General Conditions of the Construction Contract, EJCDC C-700, 2020 Edition, have the meanings assigned to them in the General Conditions.

SC-1 DEFINITIONS

- 1) Add the following new paragraph immediately after paragraph 1.01.A.33

33A. Products: Means materials and equipment that Contractor furnishes and provides, other than labor and services.

- 2) Also, ADD following additional definitions to the definitions included in Article 1 of the General Conditions of the Contract:

52. *"Final acceptance"* -- The date when the construction of the project is complete in accordance with the Contract Drawings so that the entire project can be utilized for the purposes for which it is intended and all monies due Contractor have been paid him in the final Application for Payment.

53. *"Major Equipment"* --The major equipment items listed by name in the Bid Form, in the Agreement and which are to be furnished and installed under the Contract.

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54. *"Modification"* -- (a) A written amendment of the Contract Documents signed by both parties, (b) a Change Order, or (c) a Field Order. A modification may only be issued after the effective date of the Agreement.

55. *"Products"*: New material, machinery, components, equipment, fixtures, and systems forming the Work, but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.

- 3) CHANGE the definition for ENGINEER to read as follows:

"ENGINEER -- The firm of AECOM, Inc., Chicago, Illinois, acting through its authorized representatives."

- 4) CHANGE the definition for OWNER to read as follows:

"OWNER -- The Village of Buffalo Grove, Illinois."

- 5) CHANGE the definition of Resident Project Representative to read as follows:

"Resident Project Representative" --The authorized representative of Engineer or OWNER who is assigned to the site or any part thereof."

- 6) ADD the following paragraph to Section 1.02.A Terminology

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SUPPLEMENTARY CONDITIONS

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

"As shown", "as indicated", "as detailed", or words of similar import refer to the Drawings unless stated otherwise.

SC-2.02 Copies of Documents

CHANGE paragraph 2.02A of the General Conditions to read as follows:

"Owner shall furnish to CONTRACTOR up to five copies of the Contract Documents as are reasonably necessary for the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction."

SC-2.03 CHANGE paragraph 2.03 to read as follows:

"...than the ninetieth day after the day of Bid opening or the thirtieth day after..."

SC-2.04 ADD the following to paragraph 2.04:

"Contractor shall notify the Owner in writing a minimum of 48 hours prior to starting the work at the site of the work of his intention to do so. In case of a temporary suspension of work, Contractor shall give reasonable notice before resuming work."

SC-2.01.B CHANGE paragraph 2.01 B to read as follows:

"Before any Work at the site is started, CONTRACTOR shall deliver to OWNER, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either Owner or any additional insured may reasonably request) which CONTRACTOR is required to purchase and maintain in accordance with paragraphs 5.04, 5.06 and 5.07."

SC-2.08 ADD the following paragraph following paragraph 2.07 of the General Conditions.

"The contractor is specifically denied the right of using in any form or medium the name of the Village for public advertisement unless expressly written permission is granted by the Village."

SC-3.01.D Add the following new paragraph immediately after paragraph 3.01.C:

"Sections of Division 1 - General Requirements govern the execution of the work of all sections of the specifications."

SC-5.01.A Amend paragraph 5.01.A to require bond values as follows:

Furnish a 100 percent Performance Bond.

Furnish a 100 percent Payment Bond.

SC-5.01.B Add the following language at the end of paragraph 5.01.B:

1. Furnish Performance Bond on the bond form provided in these documents.
2. Furnish Payment Bond on the bond form provided on these documents.

S.C-5.0 BONDS AND INSURANCE

DELETE paragraphs 5.03 through 5.10 inclusive and replace with the following:

"5.03 Certificate of Insurance

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A. Prior to starting any Work at the site, CONTRACTOR shall deliver to OWNER, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either Owner or any additional insured may reasonably request) which CONTRACTOR is required to purchase and maintain.

5.04 CONTRACTOR'S Liability Insurance

Refer to Article IX – Insurance in the Project Contract for insurance requirements.

SC-6.02 Labor: Working Hours

ADD the following subparagraph to paragraph 6.02 of the General Conditions.

“C. The Owner shall charge to the Contractor and may deduct from the periodical and final payment for the work all engineering and inspection expenses incurred by the Owner in connection with any overtime work. For any such overtime during the regular specified construction period beyond the regular 40-hour week and for any time worked on Saturday, Sunday or holidays, the charges for such personnel will be as shown in the following schedule.

Schedule of Charges

	Personnel Classification Per Each Hour
Resident Engineer	\$120.00
Assistant Resident Engineer	\$100.00
Inspector	\$ 80.00

SC-6.03 Services, Materials, and Equipment

ADD the following subparagraph to paragraph 6.03 of the General Conditions:

“D. If, within the guarantee period, repairs or changes are required in connection with guaranteed work which, in the opinion of the Engineer, is rendered necessary as the result of the use of materials, equipment or workmanship which is inferior, defective, or not in accordance with the terms of the Contract, Contractor shall, promptly upon receipt of notice from Owner and without expense to Owner, do the following:

1. Place in satisfactory condition in every particular all of such guaranteed work and correct all defects therein.
2. Make good all damage to any pipeline, utility, or site, or equipment, or contents thereof which, in the opinion of Engineer, is the result of the use of materials, equipment or workmanship which is inferior, defective, or not in accordance with the terms of the Contract.
3. Make good any work or material, or the equipment and any pipeline or utility structure, or site disturbed in fulfilling any such guarantee.
4. Submit a work schedule showing the dates of starting and completing the repair work.
5. If Contractor, after notice, fails within 10 days to proceed to comply with the terms of this guarantee, Owner may have the defects corrected, and Contractor and his surety shall be liable for all expense incurred; provided, however, that in case of an emergency where, in the opinion of the Owner, delay would cause loss or damage, repairs may be started without notice being given to Contractor and Contractor shall pay the cost thereof.

6. If minor repairs are made by Owner without notice to Contractor, or if Owner's personnel are used to assist Contractor or an equipment supplier in making repairs to defective work, Contractor will be billed for and shall pay the costs of the minor repairs and the costs associated with the use of Owner's personnel.

7. If, in order to make required repairs, it is considered necessary by the Contractor or the manufacturer that the repairs be made at the manufacturer's factory, Contractor shall pay the cost of removing, crating, shipping, repairing, and re-installing the equipment."

SC-6.20 Indemnification

ADD the following subparagraph to paragraph 6.20 of the General Conditions:

"D. Contractor shall indemnify and save harmless Owner, Engineer, and all of their partners officers, agents, and employees from all suits, actions, or claims of any character brought for or on account of any injuries to or death of or damages received by any person, persons, or property resulting from the operations of Contractor or any of their subcontractors in prosecuting the Work under this Contract, except only such damage, injury, or death as shall have been occasioned by the sole negligence of Owner or Engineer."

SC-12 CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

ADD the following paragraphs to Article 12 of the General Conditions

"12.04 Avoidable delays in the prosecution or completion of the Work shall include all delays which might have been avoided by the exercise of care, prudence, foresight, or diligence on the part of Contractor.

Delays in the prosecution of parts of the work which may in themselves be unavoidable but do not necessarily prevent or delay the prosecution of other parts of the work nor the completion of the whole Work within the time herein specified; reasonable loss of time resulting from the necessity of submitting drawings to ENGINEER for approval and from the making of surveys, measurements, and inspections; and such interruptions as may occur in the prosecution of the work on account of the reasonable interference of other contractors employed by OWNER, which do not necessarily prevent the completion of the whole work within the time herein specified, will be deemed avoidable delays within the meaning of this Contract. Delays due to adverse weather conditions will be regarded as avoidable delays as the Contractor should understand that such conditions are to be expected and plan his work accordingly.

12.05 If the work called for under this Contract is not finished and completed by Contractor, in all parts and in accordance with all requirements, within the time specified for completion elsewhere in these Contract Documents, including extensions of time granted because of unavoidable delay; or if at any time prior to the expiration of said time it should appear to OWNER that Contractor will be unable to finish and complete said work as aforesaid within said time; and if Contractor's failure or inability to finish the complete said work as aforesaid within said time should be due, as determined by OWNER, to avoidable delay or delays, then in that event OWNER, if it finds such to be for the best interests of OWNER, may, but will not be required to, grant to Contractor an extension or extensions of time within which to finish and complete all said work.

12.06 If such an extension of time is granted, Contractor will be charged liquidated damages as provided for in the Agreement.

12.07 In addition, if the time limit be so extended, OWNER shall charge to Contractor, and may deduct from the final payment for the work, all engineering and inspection expenses incurred by OWNER in connection with the work during the period of such extension or extensions, except that the cost of final inspections and preparation of final estimates will not be included in such charges. Such expenses of OWNER shall be computed on the basis of the hourly schedule of charges set forth in these Supplementary Conditions of the Contract.

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12.08 The granting of any extension of time on account of delays which in the judgement of OWNER are avoidable delays shall in no way operate as a waiver on the part of OWNER of its rights under this Contract.

12.09 Time is of the essence for this Contract. In case all work called for by the Contract is not finished and completed in all parts and in accordance with all requirements of the Contract on or before the time specified for completion in the Contract Documents (extended by extensions of time granted because unavoidable delay), substantial damage will be sustained by OWNER. If, because of avoidable delay, OWNER should grant to Contractor an extension of time to finish and complete all the work, it will be difficult and impracticable to determine the actual amount of damage which OWNER will sustain by reason of Contractor's failure to complete the Contract within the time specified as extended. In that event, Contractor shall pay to OWNER as liquidated damages as described in the Agreement. Liquidated damages shall be in addition to such other amounts as Contractor may be required to pay virtue of other provisions of the Contract because of the granted extensions of time necessitated by avoidable delays.

12.10 These Supplementary Conditions of the Contract provide for the payment by Contractor to OWNER of certain engineering and inspection expenses in the event OWNER should grant to Contractor an extension or extensions of time because of avoidable delay. The amount of said engineering and inspection expenses shall be computed and determined on the basis of the per hour schedule of charges as shown in the following schedule.

12.11 Schedule of Charges

For each hour

Resident Engineer	\$ 120.00
Assistant Resident Engineers	\$ 100.00
Inspectors	\$80.00"

SC-17 MISCELLANEOUS

ADD the following paragraphs to Article 17 of the General Conditions

"17.07 Engineering and Inspection Costs and Expenses

- A. The Contractor shall be responsible and liable for all engineering and inspection costs and expenses incurred by the Owner caused by, or related in any way to, the failure of the Contractor to perform its services in the time and manner set forth in the Agreement, the General Conditions and the Supplemental Conditions. The Owner may charge to the Contractor, and may deduct from the periodical payments and the final payment for the Contractor's work, the full amount of such engineering and inspection costs and expenses including Owner's and Engineer's costs.
 1. The Engineer's charges will be based on the Engineer's actual labor and expenses at the same rate the Owner is charged.
- B. For any engineering costs and expenses beyond the regular eight-hour day and for any time work on Saturday, Sunday, or holidays, the charges for such personnel will be one and one-half times the rate established above.

17.08 Archeological Finds:

Notwithstanding anything to the contrary herein, in the event any archaeological artifacts within the project are discovered during the course of the work, Owner shall have and retain all right, title, and interest to such artifacts and shall have the further right, during the course of the Contract, to examine or cause to have examined, the site of the work for any such artifacts and to perform or have performed

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archaeological excavations and all other related work to explore for, discover, recover and remove such artifacts from the site of the work. In the event the work of archaeological examination and related work delays Contractor's work, he shall be entitled to an extension of time to complete the work equal to the number of days he is thus delayed."

END OF DOCUMENT

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

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CONTRACT FORMS

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Village of Buffalo Grove
VFD Replacements Pumping Stations
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NOTICE TO PROCEED

To: _____

Date: _____

Project: Village of Buffalo Grove

Variable Frequency Drive (VFD)
Replacements
Pumping Stations No. 6 and 7

You are hereby notified to commence WORK in accordance with the Agreement dated _____, 20__ on or before _____, 20__, and you are to complete the WORK within _____ consecutive calendar days thereafter.

The date of completion of all WORK is therefore _____, 20__.

(Owner)

By _____

Title _____

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED

Is hereby acknowledged by _____

_____.

This the _____ day of

_____, 20__.

By _____

Title _____

END OF SECTION

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

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CERTIFICATE OF THE CONTRACTOR OR HIS DULY AUTHORIZED REPRESENTATIVE

To the best of my knowledge and belief, I certify that all items, units, quantities, and prices of work and material shown on the face of Sheet(s) of this Periodical Estimate are correct that all work has been performed and materials supplied in full accordance with the terms and conditions of the corresponding construction contract documents between the undersigned as CONTRACTOR and as OWNER, dated: , and all authorized changes thereto; that the following is a true and correct statement of the contract account up to and including the last day of the period covered by this estimate and that no part of the "Total Amount Due" has been received:

- (a) Total amount earned (col. 6)..... \$
- (b) Retained percentage (10%) \$
- (c) Total earned less retained percentage \$
- (d) Total previously certified (line (c) from previous estimate No.) \$
- (e) Amount due this estimate \$
- (f) Excess cost of field engineering and inspection..... \$
- (g) Total Amount Due \$

I further certify that all claims outstanding as of this date against the undersigned as CONTRACTOR for labor, materials, and expendable equipment employed in the performance of said contract up to this date have been paid in full in accordance with the requirements of said contract.

CONTRACTOR: Date:

By: Title:

CERTIFICATE OF THE OWNER'S CONSULTING ENGINEERS

I certify that I have verified this Periodical Estimate, and that to the best of my knowledge and belief it is a true and correct statement of work performed and materials supplied under the Contract, and that the Contractor's certified statement of his account and the amount due him is correct and just, and that all work and material included in this Periodical Estimate have been performed in full accordance with the terms and conditions of the corresponding construction contract documents and authorized changes thereto.

Name: AECOM, INC.

By: Resident Engineer

Date:

OWNER'S RECOMMENDATION FOR PAYMENT

Approved and Payment Recommended:

OWNER

RECEIVED BY:

By:

Title:

Date:

PROJECT ENGINEER

: OWNER

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House

PERIODICAL ESTIMATE FOR PARTIAL PAYMENT NO. _____
PROJECT: _____
FOR THE PERIOD: _____ TO _____, INCLUSIVE
CONTRACTOR'S NAME AND ADDRESS: _____
CONTRACT PRICE (LUMP SUM), \$ _____ ESTIMATED COST (UNIT PRICE), \$ _____

CONTRACT NO. _____
SHEET _____ OF _____
AECOM PROJECT NO. _____

	NO. AND DESCRIPTION OF UNIT			WORK PERFORMED TO DATE		
Item No. (1)	Detailed Estimate (2)	Unit Price (3)	Cost Estimate (4)	No. of Units (5)	Amount Earned To Date (6)	% Complete (7)

_____ : OWNER

PERIODICAL ESTIMATE FOR PARTIAL PAYMENT NO. _____
PROJECT: _____
FOR THE PERIOD: _____ TO _____, INCLUSIVE
CONTRACTOR'S NAME AND ADDRESS: _____
CONTRACT PRICE (LUMP SUM), \$ _____ ESTIMATED COST (UNIT PRICE), \$ _____

CONTRACT NO. _____
SHEET _____ OF _____
AECOM PROJECT NO. _____

	NO. AND DESCRIPTION OF UNIT			WORK PERFORMED TO DATE		
Item No. (1)	Detailed Estimate (2)	Unit Price (3)	Cost Estimate (4)	No. of Units (5)	Amount Earned To Date (6)	% Complete (7)
	FUTURE ITEMS					
	MATERIALS STORED ON SITE (FOR DETAILED BREAKDOWN SEE ATTACHED SHEET)					
		TOTAL				

SUPPLEMENT TO PERIODICAL ESTIMATE FORM

SHEET ____ OF ____ SHEETS

PROJECT AND LOCATION: _____ CONTRACT NO. _____ AECOM PROJECT NO. _____ PARTIAL PAYMENT NO. _____ CONTRACTOR _____			
DETAIL OF MATERIALS STORED ON SITE			
DESCRIPTION OF ITEM	NO. OF UNITS	COST PER UNIT	AMOUNT
TOTAL			\$

NOTE: This form must be filled out and securely attached to Periodical Estimate Form whenever credit is taken for materials stored on site.

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No. 6 and 7

CHANGE ORDER NO. _____

Dated _____

PROJECT NAME: _____

OWNER PROJECT NO: _____ ENGINEER PROJECT NO: _____

LOCATION: _____

CONTRACTOR: _____

CONTRACT FOR: _____

I. A. DESCRIPTION OF CHANGES INVOLVED:B. REASON FOR CHANGE:II. CHANGE ORDER CONDITIONS:

1. The Contract completion date established in the Original Contract or as modified by the previous Change Orders is hereby changed by (extended) (reduced) _____ calendar days, making the final completion date _____.
2. Any additional work to be performed under this Change Order shall be carried out in compliance with the specifications included in the preceding Description of Changes Involved, with the Supplemental Contract Drawings designated as _____, and under the provisions of the Original Contract, including compliance with the applicable Specifications for the same type of work.
3. This Change Order, unless otherwise provided herein, does not relieve the Contractor from strict compliance with the guarantee provisions of the Original Contract, particularly those pertaining to performance and operation of equipment.

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

4. The Contractor expressly agrees that he will place under coverage of his Performance and Payment Bonds and Contractor's insurance all work covered by this Change Order. The Contractor will furnish to the Owner evidence of increased coverage of his Performance and Payment Bonds for the accrued value of all Change Orders which exceeds the Original Contract Price by twenty percent (20%).
5. The costs established under this Change Order are acknowledged as including any and all costs associated with the work described herein and including any and all costs associated with any and all work performed or to be performed by the Contractor which may be affected in any manner by the work described herein.

III. ADJUSTMENTS IN AMOUNT OF CONTRACT:

- | | | |
|----|--|----------|
| 1. | Original Contract Price | \$ _____ |
| 2. | Net (Addition) (Reduction) due to all previous Change Orders | \$ _____ |
| 3. | Contract Price not including this Change Order | \$ _____ |
| 4. | Net (Addition) (Reduction) resulting from this Change Order | \$ _____ |
| 5. | Current Contract Price including this Changer Order | \$ _____ |

OWNER: _____

By _____

Date _____

RECOMMENDED FOR ACCEPTANCE:

For AECOM, Inc.

Date _____

ACCEPTED:

CONTRACTOR: _____

By _____

Date _____

END OF SECTION

TECHNICAL SPECIFICATIONS

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DIVISION 1 – GENERAL REQUIREMENTS

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VFD Replacements Pumping Stations
No. 6 and 7

SECTION 01100

SUMMARY

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Contract description.
- B. Contractor's use of site.
- C. Owner occupancy.
- D. Care and protection of property.
- E. Work coordination and sequence.
- F. Protection and relocation of existing structures and utilities.
- G. Specification conventions.

1.2 CONTRACT DESCRIPTION

- A. Work of the Project includes the replacement of six (6) Variable Frequency Drive's (VFD) for Pumps 1-6 in Pump Station No. 6. Replacement of two (2) Variable Frequency Drive's (VFD) for Pump 6 and Pump 8 in Pump Station No. 7. Replacement of VFD's is assumed to be in-kind with no changes to station capacity and compatible with the existing MCC with no modifications required.

1.3 CONTRACTOR'S USE OF SITE

- A. Limit use of site to allow:
 - 1. Owner occupancy.
 - 2. Work by Others and Work by Owner.
 - 3. Use of site by the public.
 - 4. Limit operations to public right-of-way or Owner obtained easements.
- B. Access to the site shall be coordinated with the Owner.
- C. Time restrictions for performing work: as coordinated with the Owner.
- D. Utility Outages and Shutdown: Coordinate with Engineer and Owner.
- E. Where applicable, the Contractor and his Sub-contractors shall abide by the OSHA's Fall Protection Regulation 29 CFR 1926 Subpart M and all OSHA requirements for construction projects.
- F. Contractor shall assume full responsibility for protection and safekeeping of materials and equipment under this Contract.

1.4 OWNER OCCUPANCY

- A. The Owner will occupy the site for the conduct of normal operations.

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SUMMARY

- B. Cooperate with Owner to minimize conflict, and to facilitate Owner's operations.
- C. Schedule the Work to accommodate Owner occupancy.

1.5 CARE AND PROTECTION OF PROPERTY

- A. Contractor shall be responsible for the preservation of all public and private property and use every precaution necessary to prevent damage thereto. If any direct or indirect damage is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work on the part of the Contractor, restore such property to a condition similar or equal to that existing before the damage was done, or make good the damage in other manner acceptable to the Engineer.

1.6 WORK COORDINATION AND SEQUENCE

- A. Construct Work in stages to accommodate Owner's occupancy requirements during construction period, coordinate construction schedule and operations with Owner and Engineer

1.7 PROTECTION AND RELOCATION OF EXISTING STRUCTURES AND UTILITIES

- A. The Contractor shall assume full responsibility for the protection of all building, structures, and utilities, public and private, including poles, signs, services to buildings, sewers, drains, and electric and telephone cables, whether or not they are on the Drawings. The Contractor shall carefully support and protect all such structures and utilities from damage of any kind. Any damage resulting from the Contractor's operations shall be repaired at Contractor's own expense.
- B. Protection and temporary removal and replacement of existing utilities and structures shall be part of the work under this Contract and all costs in connection therewith shall be included in the total bid amount in the Bid Form.

1.8 SPECIFICATION CONVENTIONS

- A. These specifications are written in imperative mood and streamlined form. This imperative language is directed to the Contractor, unless specifically noted otherwise. The words "shall be" are included by inference where a colon (:) is used within sentences or phrases.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

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SECTION 01200

PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Schedule of values.
- B. Applications for payment.
- C. Change procedures.
- D. Defect assessment.

1.2 SCHEDULE OF VALUES

- A. Submit a printed schedule on Owner approved form.
- B. Submit Schedule of Values in duplicate within 15 calendar days after date of Owner-Contractor Agreement.
 - 1. Format: Identify each line item with number and title of major specification Section. Identify site mobilization, bonds and insurance.
- C. Include within each line item, direct proportional amount of Contractor's overhead and profit.
- D. Revise schedule to list approved Change Orders, with each Application for Payment.

1.3 APPLICATIONS FOR PAYMENT

- A. Submit three (3) copies of each application on the periodic payment form contained within this document.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- C. Submit an updated construction schedule with each Application for Payment.
- D. Payment Period: Submit at intervals stipulated in the Agreement.
- E. Submit with transmittal letter as specified for Submittals in Section 01330.
- F. Submit partial waivers of lien including subcontractors and stored materials with each application of payment. Trailing waivers of lien are acceptable as approved by Owner.

1.4 CHANGE PROCEDURES

- A. Submittals: Submit name of individual authorized to receive change documents, and be responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

- B. The Engineer will advise of minor changes in the Work not involving an adjustment to Contract Sum/Price or Contract Time as authorized by the Conditions of the Contract.
- C. The Engineer may issue a Proposal Request including a detailed description of proposed change with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change with stipulation of overtime work required and the period of time during which the requested price will be considered valid. Contractor will prepare and submit estimate within 15 days.
- D. Contractor may propose changes by submitting a request for change to Engineer, describing proposed change and its full effect on the Work. Include a statement describing reason for the change, and effect on Contract Sum/Price and Contract Time with full documentation. Document requested substitutions in accordance with Section 01600.
- E. Stipulated Sum/Price Change Order: Based on Proposal Request or Notice of Change and Contractor's estimated price quotation or contractor's request for a Change order as approved by Engineer and Owner.
- F. Time and Material Change Order: Submit itemized account and supporting data after completion of change, within time limits indicated in Conditions of the Contract. Engineer will determine change allowable in Contract Sum/Price and Contract Time as provided in Contract Documents.
- G. Maintain detailed records of work done on Time and Material basis. Provide full information required for evaluation of proposed changes, and to substantiate costs for changes in the Work.
- H. Document each quotation for change in cost or time with sufficient data to allow evaluation of quotation. On request, provide additional data to support computations.
- I. Change Order Forms: Utilize forms included herein.
- J. Execution of Change Orders: Engineer will issue Change Orders for signatures of parties as provided in Conditions of the Contract.
- K. Correlation of Contractor Submittals:
 - 1. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as separate line item and adjust Contract Sum/Price.
 - 2. Promptly revise progress schedules to reflect change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
 - 3. Promptly enter changes in Project Record Documents.

1.5 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.
- B. If, in the opinion of the Engineer, it is not practical to remove and replace the Work, the Engineer will direct appropriate remedy or adjust payment as approved by Owner.
- C. The defective Work may remain, but unit sum/price will be adjusted to a new sum/price at discretion of Owner.

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Village of Buffalo Grove
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- D. Defective Work will be partially repaired to instructions of Engineer; unit sum/price will be adjusted to new sum/price at discretion of Engineer and approved by Owner.
- E. Individual specification sections may modify these options or may identify specific formula or percentage sum/price reduction.
- F. With Owner approval, authority of Engineer to assess defects and identify payment adjustment is final.
- G. Non-Payment for Rejected Products: Payment will not be made for rejected products for any of the following:
 - 1. Products wasted or disposed of in a manner that is not acceptable.
 - 2. Products determined as unacceptable before or after placement.
 - 3. Products not completely unloaded from transporting vehicle.
 - 4. Products placed beyond lines and levels of required Work.
 - 5. Products remaining on hand after completion of the Work.
 - 6. Loading, hauling, and disposing of rejected products.

PART 2 PRODUCTS

NOT USED.

PART 3 EXECUTION

NOT USED.

END OF SECTION

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

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SECTION 01270

UNIT PRICES, MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Unit prices.
- B. Items of the proposal.

1.2 UNIT PRICES

- A. Take measurements and compute quantities. The Engineer or Owner's Representative will verify measurements and quantities.
- B. Unit Quantities: Quantities and measurements indicated in the Bid Form are for contract purposes only. Actual quantities provided or installed shall determine payment.
 - 1. If the actual Work requires more or fewer quantities than those quantities indicated, provide the required quantities at the unit sum/prices contracted.
 - 2. If the actual Work requires a 25 percent or greater change in quantity than those quantities indicated, the Owner or Contractor may claim for a Contract Price adjustment.
- C. Payment will only be made for items listed in the Bid Form. Any work not specifically listed in the Bid Form will be considered incidental to the project at no additional cost. The Owner will make no allowances for any additional items unless specifically approved by Owner in a Change Order.
- D. Payment Includes: Full compensation for required labor, products, taxes, tools, construction dewatering, equipment, plant and facilities, transportation, services and incidentals; erection, application or installation of an item of the Work; required testing; start-up assistance; insurance; overhead and profit; and all other items necessary to complete the Work specified herein, whether specifically mentioned or implied.
- E. Final payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities accepted by the Engineer multiplied by the unit sum/price for Work which is incorporated in or made necessary by the Work.
- F. Measurement of Quantities:
 - 1. Weigh Scales: Inspected, tested and certified by the applicable state Weights and Measures department within the past year.
 - 2. Certified Platform Scales: Of sufficient size and capacity to accommodate the conveying vehicle.
 - 3. Metering Devices: Inspected, tested and certified by the applicable State department within the past year.
 - 4. Measurement by Weight: Concrete reinforcing steel, rolled or formed steel or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook or scale weight. Other items such as asphalt, gravel, aggregate, contaminated soil, etc. will be measured by scale weight.

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UNIT PRICES, MEASUREMENT AND PAYMENT

5. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness for soil/aggregates, compacted in place. For liquids, such as contaminated groundwater, by a flow metering device inspected, tested and certified by the applicable state Weights and Measures department within the past year.
6. Measurement by Area: Measured by square dimension using mean length and width or radius.
7. Linear Measurement: Measured by linear dimension, at the item centerline or mean chord.
8. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as a completed item or unit of the Work.
9. Measurement by Each: Measured by each instance or item provided.
10. Measurement by Lump Sum: Measure includes all associated work.

1.3 ITEMS OF THE PROPOSAL

- A. Item No. 1: Variable Frequency Drives, completed as specified.
 1. Basis of Payment: Lump Sum, per the unit price as listed in the Bid Form.
 2. Basis of Unit Price: Includes all labor, material and equipment necessary for a complete replacement of six (6) Variable Frequency Drives (VFD) for the existing Pump Station No. 6 detailed within these Contract Documents.
 3. Basis of Measurement: Per schedule of values, percentage of work complete.

PART 2 PRODUCTS

NOT USED.

PART 3 EXECUTION

NOT USED.

END OF SECTION

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Project 60715566

Village of Buffalo Grove
VFD Replacements Pumping Stations
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SECTION 01300

ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Coordination and project conditions.
- B. Field engineering.
- C. Preconstruction meeting.
- D. Progress meetings.
- E. Cutting and Patching.

1.2 COORDINATION AND PROJECT CONDITIONS

- A. Coordinate scheduling, submittals, and Work of various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements.
- B. Verify utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, operating equipment.
- C. Coordinate space requirements, supports, and installation of mechanical and electrical Work indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. Check compatibility with equipment and Work of other sections, and operational control requirements.
- E. Coordinate controls, interlocks, wiring of pneumatic switches, and relays.
- F. Coordinate wiring and control diagrams.
- G. Review the effect of any changes on work of other sections.
- H. In finished areas, conceal pipes, ducts, and wiring within construction. Coordinate locations of fixtures and outlets with finish elements.
- I. Coordinate completion and clean-up of Work of separate sections in preparation for Substantial Completion.

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

- J. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.3 FIELD ENGINEERING

- A. Verify set-backs and easements; confirm drawing dimensions and elevations.
- B. Provide field engineering services. Establish elevations, lines, and levels, utilizing recognized engineering survey practices.
- C. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- D. Promptly report to Engineer loss or destruction of reference point or relocation required because of changes in grades or other reasons.
- E. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Engineer.

1.4 PRECONSTRUCTION MEETING

- A. Engineer will schedule a meeting after Notice of Award.
- B. Attendance Required: Owner, Engineer, and Contractor.
- C. Agenda:
 - 1. Execution of Owner-Contractor Agreement.
 - 2. Submission of executed bonds and insurance certificates.
 - 3. Distribution of Contract Documents.
 - 4. Submission of list of Subcontractors, list of products, schedule of values, and progress schedule.
 - 5. Designation of personnel representing the parties in Contract, and the Engineer.
 - 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 - 7. Scheduling.
 - 8. Underground utility conflicts.
 - 9. Scheduling activities of Geotechnical Engineer, if required.

1.5 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum monthly intervals.
- B. Make arrangements for meetings, prepare agenda with copies for participants, and preside at meetings.
- C. Attendance Required: Job superintendent, major subcontractors and suppliers, Owner, Engineer, as appropriate to agenda topics for each meeting.
- D. Agenda:
 - 1. Review minutes of previous meetings.

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2. Review of Work progress.
 3. Field observations, problems, and decisions.
 4. Identification of problems impeding planned progress.
 5. Review of submittals schedule and status of submittals.
 6. Review of off-site fabrication and delivery schedules.
 7. Maintenance of progress schedule.
 8. Corrective measures to regain projected schedules.
 9. Planned progress during succeeding work period.
 10. Coordination of projected progress.
 11. Maintenance of quality and work standards.
 12. Effect of proposed changes on progress schedule and coordination.
 13. Other business relating to Work.
- E. Record minutes and distribute copies within two days after meeting to participants, with copies to Engineer, Owner, and those affected by decisions made.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 CUTTING AND PATCHING

- A. Employ skilled and experienced installer to perform cutting and patching.
- B. Submit written request in advance of cutting or altering elements affecting:
 1. Structural integrity of element.
 2. Integrity of weather-exposed or moisture-resistant elements.
 3. Efficiency, maintenance, or safety of element.
 4. Visual qualities of sight exposed elements.
 5. Work of Owner or separate contractor.
- C. Execute cutting, fitting, and patching including excavation and fill, to complete Work, and to:
 1. Fit the several parts together, to integrate with other Work.
 2. Uncover Work to install or correct ill-timed Work.
 3. Remove and replace defective and non-conforming Work.
- D. Execute work by methods to avoid damage to other Work, and to provide proper surfaces to receive patching and finishing.
- E. Cut masonry and concrete materials using masonry saw or core drill.
- F. Restore Work with new products in accordance with requirements of Contract Documents.
- G. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- H. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.

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- I. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for an assembly, refinish entire unit.
- J. Identify hazardous substances or conditions exposed during the Work to Owner for decision or remedy.

END OF SECTION

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

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SECTION 01330 SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Submittal procedures.
- B. Construction progress schedules.
- C. Proposed products list.
- D. Product data.
- E. Shop drawings.
- F. Samples.
- G. Test Reports.
- H. Certificates.
- I. Manufacturer's instructions.
- J. Construction photographs.

1.2 SUBMITTAL PROCEDURES

- A. Transmit each submittal with Engineer accepted form.
- B. Sequentially number transmittal forms. Mark revised submittals with original number and sequential alphabetic suffix.
- C. Identify Project, Contractor, subcontractor and supplier; pertinent drawing and detail number, and specification section number, appropriate to submittal.
- D. In a clear space above title block, or on back, hand stamp the following, and enter required information:

Village of Buffalo Grove, IL
Department of Public Works
VFD Replacements Pumping Stations No. 6 and 7

Date _____
Project No. _60715566_____
Identification _____
Contract Drawing Number _____
Specification Section _____

This document has been checked for accuracy of content
and for compliance with the contract documents and is

01330-1

SUBMITTAL PROCEDURES

hereby approved for submittal. The information contained herein has been coordinated with all involved contractors.

Contractor _____
Signed _____

- E. Schedule submittals to expedite Project, and deliver to Engineer at 303 E. Wacker Dr., Suite 1400, Chicago, Illinois 60601. Coordinate submission of related items.
- F. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
- G. Identify variations from Contract Documents and product or system limitations which may be detrimental to successful performance of completed Work.
- H. Allow space for Contractor and Engineer review stamps.
- I. When revised for resubmission, identify changes made since previous submission.
- J. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report inability to comply with requirements.
- K. Submittals not requested will not be recognized or processed.
- L. Coordinate each submittal with the requirements of Contract Documents.
- M. No claim will be allowed for damages or extension of time because of delays in the work resulting from rejection of material or from revision and resubmittal of shop drawings, project data or samples.
- N. Do not install materials or equipment which require submittals until the submittals are returned with Engineer's stamp and initials or signature indicating approval.
- O. Contractor's responsibility of errors, omissions, and deviations from requirements of Contract Documents in submittals is not relieved by the Engineer's review.
- P. Revise and resubmit as required, identify all changes made since previous submittal. In the event that more than two re-submittals of any required submittal is necessary to make such required submittal conform to the contract requirements, contractor shall be charged the total cost incurred by the Engineer for all subsequent reviews or required submittals. If the amount due Contractor is not sufficient to cover such cost, contractor shall reimburse Owner for such cost upon demand.
 - 1. The Engineer's charges will be based on the Engineer's actual labor and expenses at the same rate the Owner is charged.
- Q. Submit new project data and samples when the initial submittal is returned disapproved.

1.3 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit initial schedules within 15 days after date of Owner-Contractor Agreement. After review, resubmit required revised data within ten days.
- B. Submit revised schedules with each Application for Payment, identifying changes since previous version.

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- C. Distribute copies of reviewed schedules to Project site file, subcontractors, suppliers, and other concerned parties.
- D. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules.
- E. Submit computer generated horizontal bar chart with separate line for each section of Work, identifying first work day of each week.
- F. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate early and late start, early and late finish, float dates, and duration.
- G. Indicate estimated percentage of completion for each item of Work at each submission.
- H. Indicate submittal dates required for shop drawings, product data, samples and product delivery dates.
- I. Revisions to Schedules:
 - 1. Indicate progress of each activity to date of submittal, and projected completion date of each activity.
 - 2. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.

1.4 PROPOSED PRODUCTS LIST

- A. Within 15 days after date of Owner-Contractor Agreement, submit complete list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
- B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

1.5 PRODUCT DATA

- A. Product Data: Submit to Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
- B. Submit number of copies Contractor requires, plus three copies Engineer will retain.
- C. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- D. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- E. After review, produce copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents described in Section 01700.

1.6 SHOP DRAWINGS

- A. Shop Drawings: Submit to Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.

- B. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. Submit number of opaque reproductions Contractor requires, plus three copies which will be retained by Owner and Engineer.
- D. After review, produce copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents described in Section 01700.

1.7 SAMPLES

- A. Samples: Submit to Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents
- B. Samples for Selection as Specified in Product Sections:
 - 1. Submit to Engineer for aesthetic, color, or finish selection.
 - 2. Submit samples of finishes, textures, and patterns for Engineer selection.
- C. Submit samples to illustrate functional and aesthetic characteristics of Products, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
- D. Submit samples of finishes from the full range of manufacturer's standard colors in custom colors selected, textures and patterns for Engineer's selection.
- E. Include identification on each sample, with full Project information.
- F. Submit number of samples specified in individual specification sections; Engineer will retain one sample.
- G. Reviewed samples which may be used in the Work are indicated in individual specification sections.
- H. Samples will not be used for testing purposes unless specifically stated in specification section.
- I. After review, produce copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents described in Section 01700.

1.8 TEST REPORTS

- A. Submit for Engineer's knowledge as contract administrator or for Owner.
- B. Submit test reports for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

1.9 CERTIFICATES

- A. When specified in individual specification sections, submit certification by manufacturer, installation/application subcontractor or Contractor to Engineer, in quantities specified in PRODUCT DATA article.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

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- C. Certificates may be recent or previous test results on material or Product but must be acceptable to Engineer.

1.10 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, to Engineer for delivery to Owner in quantities specified for Product Data.
- B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

1.11 CONSTRUCTION PHOTOGRAPHS

- A. Provide photographs of construction throughout progress of Work produced by an experienced photographer, acceptable to Engineer.
- B. Each month submit photographs with Application for Payment.
- C. Photographs: Two prints; color, glossy; 4 x 6 inch size; soft card stock, with left edge binding margin for three hole punch.
- D. Identify each photograph with date and orientation of view.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

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No. 6 and 7SECTION 01400
QUALITY REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Quality control and control of installation.
- B. Tolerances.
- C. References.
- D. Testing and inspection services.
- E. Examination.
- F. Preparation.

1.2 QUALITY CONTROL AND CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. When manufacturers' instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform Work by persons qualified to produce required and specified quality.
- F. Verify field measurements are as indicated on Shop Drawings or as instructed by manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.3 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. When manufacturers' tolerances conflict with Contract Documents, request clarification from Engineer before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

1.4 REFERENCES

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard, except when more rigid requirements are specified or are required by applicable codes.
 - 1. Applicable Codes:
 - a. BOCA National Building Code, latest version.
 - b. The National Electrical Code, NFPA 70, latest version.
 - c. The Life Safety Code, NFPA 101, latest version.
- B. Conform to reference standard by date of issue current on date of Contract Documents, except where specific date is established by code.
- C. Obtain copies of standards where required by product specification sections.
- D. When specified reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.
- E. Neither contractual relationships, duties, or responsibilities of parties in Contract nor those of Engineer shall be altered from Contract Documents by mention or inference otherwise in reference document.

1.5 TESTING AND INSPECTION SERVICES

- A. Employ and pay for services of an independent testing agency or laboratory acceptable to Owner to perform specified testing.
 - 1. Prior to start of Work, submit testing laboratory name, address, and telephone number, and names of full time specialist and responsible officer.
 - 2. Submit copy of report of laboratory facilities inspection made by Materials Reference Laboratory of National Bureau of Standards during most recent inspection, with memorandum of remedies of deficiencies reported by inspection.
- B. The independent firm will perform tests, inspections and other services specified in individual specification sections and as required by Engineer and Owner.
- C. Reports will be submitted by the independent firm to Engineer and Contractor, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.
- D. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage, safe access, and assistance by incidental labor as requested.
 - 1. Notify Engineer and independent firm 24 hours prior to expected time for operations requiring services.
 - 2. Make arrangements with independent firm and pay for additional samples and tests required for Contractor's use.
- E. Testing and employment of testing agency or laboratory shall not relieve Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
- F. Re-testing or re-inspection required because of non-conformance to specified requirements shall be performed by same independent firm on instructions by Engineer. Payment for re-testing or re-inspection will be charged to Contractor by deducting testing charges from Contract Sum/Price.
- G. Agency Responsibilities:

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1. Test samples of mixes submitted by Contractor.
 2. Provide qualified personnel at site. Cooperate with Engineer and Contractor in performance of services.
 3. Perform specified sampling and testing of products in accordance with specified standards.
 4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 5. Promptly notify Engineer and Contractor of observed irregularities or non-conformance of Work or products.
 6. Perform additional tests required by Engineer.
- H. Agency Reports: After each test, promptly submit two copies of report to Engineer and to Contractor. When requested by Engineer, provide interpretation of test results. Include the following:
1. Date issued.
 2. Project title and number.
 3. Name of inspector.
 4. Date and time of sampling or inspection.
 5. Identification of product and specifications section.
 6. Location in Project.
 7. Type of inspection or test.
 8. Date of test.
 9. Results of tests.
 10. Conformance with Contract Documents.
- I. Limits on Testing Authority:
1. Agency or laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.
 2. Agency or laboratory may not approve or accept any portion of the Work.
 3. Agency or laboratory may not assume duties of Contractor.
 4. Agency or laboratory has no authority to stop the Work.
- 1.6 MANUFACTURERS' FIELD SERVICES
- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, as applicable, and to provide instructions when necessary.
- B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
- C. Refer to Section 01330 - SUBMITTAL PROCEDURES, MANUFACTURERS' FIELD REPORTS article.

PART 2 PRODUCTS

Not Used.

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PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Verify utility services are available, of correct characteristics, and in correct locations.

3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

END OF SECTION

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SECTION 01420

REFERENCES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Quality assurance.
- B. Schedule of references.

1.2 RELATED SECTIONS

- A. Document - General Conditions: Reference Standards.

1.3 QUALITY ASSURANCE

- A. For products or workmanship specified by association, trade, or Federal Standards, complies with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date for receiving bids except where a specific date is established by code.
- C. Obtain copies of standards when required by product specification sections.
- D. Maintain copy at jobsite during submittals, planning, and progress of the specific work, until Substantial Completion when required.
- E. Should specified reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.
- F. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.4 SCHEDULE OF REFERENCES

AA	Aluminum Association 818 Connecticut Avenue, N.W. Washington, DC 20006
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street, N.W. Washington, DC 20001

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

ACI	American Concrete Institute Box 19150 Reford Station Detroit, MI 48219
ADC	Air Diffusion Council 230 North Michigan Avenue Chicago, IL 60601
AGC	Associated General Contractors of America 1957 E Street, N.W. Washington, DC 20006
AI	Asphalt Institute Asphalt Institute Building College Park, MD 20740
AIA	American Institute of Architects 1735 New York Avenue, N.W. Washington, DC 20006
AISC	American Institute of Steel Construction 400 North Michigan Avenue Eighth Floor Chicago, IL 60611
AISI	American Iron and Steel Institute 1000 16th Street, N.W. Washington, DC 20036
AMCA	Air Movement and Control Association 30 West University Drive Arlington Heights, IL 60004
ANSI	American National Standards Institute 1430 Broadway New York, NY 10018
ARI	Air-Conditioning and Refrigeration Institute 1501 Wilson Boulevard Arlington, VA 22209
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers 1791 Tullie Circle, N.E. Atlanta, GA 30329
ASCE	American Society of Civil Engineers 1801 Alexander Bell Drive Reston, VA 20191

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REFERENCES

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ASME	American Society of Mechanical Engineers 345 East 47th Street New York, NY 10017
ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103
AWS	American Welding Society 550 LeJeune Road, N.W. Miami, FL 33135
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235
BHMA	Builders Hardware Manufacturers Association, Inc.
BIA	Brick Institute of America 11490 Commerce Park Drive Reston, VA 22091
CDA	Copper Development Association 57th Floor, Chrysler Building 405 Lexington Avenue New York, NY 10174
CFR	Code of Federal Regulations Office of the Federal Register National Archives and Records Administration Washington, DC 20408
CLFMI	Chain Link Fence Manufacturers Institute 1101 Connecticut Avenue, N.W. Washington, DC 20036
CRSI	Concrete Reinforcing Steel Institute 933 Plum Grove Road Schaumburg, IL 60195
DHI	Door and Hardware Institute 7711 Old Springhouse Road McLean, VA 22102
DIPRA	Ductile Iron Pipe Research Association 245 Riverchase Parkway East, Suite O Birmingham, AL 35244

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EIA	Electronics Industry Association 2001 Eye Street, Northwest Washington, D. C. 20006
EJCDC	Engineers' Joint Contract Documents Committee American Consulting Engineers Council 1015 15th Street, N.W. Washington, DC 20005
EJMA	Expansion Joint Manufacturers Association 25 North Broadway Tarrytown, NY 10591
FGMA	Flat Glass Marketing Association 3310 Harrison White Lakes Professional Building Topeka, KS 66611
GA	Gypsum Association 1603 Orrington Avenue Evanston, IL 60201
IES	Illuminating Engineering Society of North America 345 East 47th Street New York, N. Y. 10017
ICBO	International Conference of Building Officials 5360 S. Workman Mill Road Whittier, CA 90601
IEEE	Institute of Electrical and Electronics Engineers 345 East 47th Street New York, NY 10017
IMIAC	International Masonry Industry All-Weather Council International Masonry Institute 815 15th Street, N.W. Washington, DC 20005
ISA	Instrument Society of American 67 Alexander Drive P.O. Box 12277 Research Triangle Park North Carolina 27709

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ISO	International Organization for Standardization 1, Rue de Varembe Case Postale 56 CH-1211 Geneve 20 Switzerland
LCDOT	Lake County Division of Transportation 600 W. Winchester Rd Libertyville, IL 60048
MSS	Manufacturers Standardization Society of the Valves and Fittings Industry, Inc. 127 Park Street N. E., Vienna, VA 22180
MBMA	Metal Building Manufacturer's Association 1230 Keith Building Cleveland, OH 44115
MCAA	Mechanical Contractors Association of America 1385 Piccard Drive Rockville, MD 20850
ML/SFA	Metal Lath/Steel Framing Association 221 North LaSalle Street Chicago, IL 60601
NAAMM	National Association of Architectural Metal Manufacturers 221 North LaSalle Street Chicago, IL 60601
NCMA	National Concrete Masonry Association P.O. Box 781 Herndon, VA 22070
NEBB	National Environmental Balancing Bureau 8224 Old Courthouse Road Vienna, VA 22180
NEMA	National Electrical Manufacturers' Association 2101 'L' Street, N.W. Washington, DC 20037
NFPA	National Fire Protection Association Battery March Park Quincy, MA 02269

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NSWMA	National Solid Wastes Management Association 4301 Connecticut Ave NW, #300 Washington, DC 20008
NSFI	National Sanitary Foundation 789 Dixboro Road/ P.O. Box 13010 Ann Arbor, MI 48113-0140
NWMA	National Woodwork Manufacturers Association 205 W. Touhy Avenue Park Ridge, IL 60068
OSHA	Occupational Safety & Health Administration 200 Constitution Avenue, NW Washington, DC 20210
PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077
PCI	Prestressed Concrete Institute 201 North Wells Street Chicago, IL 60606
PS	Product Standard U. S. Department of Commerce Washington, DC 20203
SDI	Steel Deck Institute P.O. Box 9506 Canton, OH 44711
SDI	Steel Door Institute 712 Lakewood Center North 14600 Detroit Avenue Cleveland, OH 44107
SIGMA	Sealed Insulating Glass Manufacturers Association 111 East Wacker Drive Chicago, IL 60601
SJI	Steel Joist Institute 1205 48th Avenue North Suite A Myrtle Beach, SC 29577

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- SMACNA

Sheet Metal and Air Conditioning Contractors' National Association
8224 Old Court House Road
Vienna, VA 22180
- SPFA

Steel Plate Fabricators Association
11305 Reed Hartman Highway, Suite 202
Cincinnati, Ohio 45241
- SSPC

Steel Structures Painting Council
4400 Fifth Avenue
Pittsburgh, PA 15213
- UL

Underwriters' Laboratories, Inc.
333 Pfingston Road
Northbrook, IL 60062

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

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SECTION 01500

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Temporary Utilities:
 - 1. Temporary electricity.
 - 2. Temporary lighting for construction purposes.
 - 3. Temporary heating.
 - 4. Temporary water service.
 - 5. Temporary sanitary facilities.
- B. Construction Facilities:
 - 1. Vehicular access.
 - 2. Parking.
 - 3. Progress cleaning and waste removal.
- C. Temporary Controls:
 - 1. Barriers.
 - 2. Enclosures and fencing.
 - 3. Security
 - 4. Water control.
 - 5. Dust control.
 - 6. Erosion and sediment control.
 - 7. Noise control.
 - 8. Pollution control.
- D. Removal of utilities, facilities, and controls.

1.2 TEMPORARY ELECTRICITY

- A. Owner will pay cost of energy used. Exercise measures to conserve energy. Utilize Owner's existing power service.
- B. Provide temporary electric feeder from existing building electrical service at location as directed by Owner. Do not disrupt Owner's use of service.
- C. Complement existing power service capacity and characteristics as required for construction operations.
- D. Provide power outlets, with branch wiring and distribution boxes located as required for construction operations. Provide flexible power cords as required for portable construction tools and equipment.
- E. Provide main service disconnect and over-current protection at convenient location.
- F. Permanent convenience receptacles may not be utilized during construction.

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1.3 TEMPORARY LIGHTING FOR CONSTRUCTION PURPOSES

- A. Provide and maintain incandescent lighting for construction operations to achieve a minimum lighting level of 2 watt/sq ft.
- B. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps for specified lighting levels.
- C. Maintain lighting and provide routine repairs.
- D. Permanent building lighting may be utilized during construction.

1.4 TEMPORARY HEATING

- A. Provide heating devices and heat as needed to maintain specified conditions for construction operations.

1.5 TEMPORARY WATER SERVICE

- A. Provide and pay for suitable quality water service as needed to maintain specified conditions for construction operations.
- B. Extend branch piping with outlets located so water is available by hoses with threaded connections. Provide temporary pipe insulation to prevent freezing.

1.6 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures. Provide facilities at time of project mobilization.
- B. At end of construction, return existing facilities used for construction operations to same or better condition as original condition.

1.7 VEHICULAR ACCESS

- A. Provide unimpeded access for emergency vehicles. Maintain 20 foot width driveways with turning space between and around combustible materials.
- B. Provide and maintain access to fire hydrants and control valves free of obstructions.
- C. Provide means of removing mud from vehicle wheels before entering streets.

1.8 PARKING

- A. Locate as approved by Owner.
- B. When site space is not adequate, provide additional off-site parking.
- C. Maintenance:
 - 1. Maintain traffic and parking areas in a sound condition free of excavated material, construction equipment, products, mud, snow, and ice.
- D. Removal, Repair:
 - 1. Remove temporary materials and construction at Substantial Completion.
 - 2. Repair existing facilities damaged by use, to original condition.

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TEMPORARY FACILITIES AND CONTROLS

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Village of Buffalo Grove
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No. 6 and 7**1.9 PROGRESS CLEANING AND WASTE REMOVAL**

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition.
- B. Collect and remove waste materials, debris, and rubbish from site periodically and dispose off-site.

1.10 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide protection for plants designated to remain. Replace damaged plants.
- C. Protect non-owned vehicular traffic, stored materials, site and structures from damage.

1.11 ENCLOSURES AND FENCING

- A. Construction: Commercial grade chain link fence.
- B. Provide 6 foot high fence around construction site; equip with vehicular gates with locks.

1.12 SECURITY

- A. Security Program:
 - 1. Protect Work, existing premises and Owner's operations from theft, vandalism, and unauthorized entry.
 - 2. Maintain program throughout construction period until project acceptance by Owner/Engineer.
- B. Entry Control:
 - 1. Restrict entrance of persons and vehicles into Project site and existing facilities.
 - 2. Allow entrance only to authorized persons with proper identification.
 - 3. Maintain log of workers and visitors, make available to Owner on request.
 - 4. Owner will control entrance of persons and vehicles related to Owner's operations.

1.13 WATER CONTROL

- A. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- B. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.

1.14 DUST CONTROL

- A. Execute Work by methods to minimize raising dust from construction operations.
- B. Provide positive means to prevent air-borne dust from dispersing into atmosphere.

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1.15 EROSION AND SEDIMENT CONTROL

- A. Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
- B. Minimize surface area of bare soil exposed at one time.
- C. Provide temporary measures including berms, dikes, and drains, and other devices to prevent water flow.
- D. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
- E. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.

1.16 NOISE CONTROL

- A. Provide methods, means, and facilities to minimize noise produced by construction operations.

1.17 POLLUTION CONTROL

- A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.
- B. Comply with pollution and environmental control requirements of authorities having jurisdiction.

1.18 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion inspection.
- B. Remove underground installations to minimum depth of 2 feet below grade at site.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

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No. 6 and 7SECTION 01600
PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Products.
- B. Product delivery requirements.
- C. Product storage and handling requirements.
- D. Product options.
- E. Product substitution procedures.

1.2 PRODUCTS

- A. Furnish products of qualified manufacturers suitable for intended use. Furnish products of each type by single manufacturer unless specified otherwise.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by Contract Documents.
- C. Furnish interchangeable components from same manufacturer for components being replaced.

1.3 PRODUCT DELIVERY REQUIREMENTS

- A. Transport and handle products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

1.4 PRODUCT STORAGE AND HANDLING REQUIREMENTS

- A. Store and protect products in accordance with manufacturers' instructions.
- B. Store with seals and labels intact and legible.
- C. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- D. For exterior storage of fabricated products, place on sloped supports above ground.
- E. Provide off-site storage and protection when site does not permit on-site storage or protection.

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PRODUCT REQUIREMENTS

- F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation and degradation of Products.
- G. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- H. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained under acceptable condition.

1.5 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of one of manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit request for substitution for any manufacturer not named in accordance with the following article.

1.6 PRODUCT SUBSTITUTION PROCEDURES

- A. Engineer will consider requests for Substitutions only within 30 days after date of Owner-Contractor Agreement.
- B. Substitutions may be considered when a product becomes unavailable through no fault of Contractor.
- C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that Contractor:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of specified product.
 - 2. Will provide same warranty for Substitution as for specified product.
 - 3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.
 - 4. Waives claims for additional costs or time extension which may subsequently become apparent.
 - 5. Will reimburse Owner and Engineer for review or redesign services associated with re-approval by authorities having jurisdiction.
- E. Substitutions will not be considered when they are indicated or implied on Shop Drawing or Product Data submittals, without separate written request, or when acceptance will require revision to Contract Documents.
- F. Substitution Submittal Procedure:
 - 1. Submit three copies of request for Substitution for consideration. Limit each request to one proposed Substitution.
 - 2. Submit Shop Drawings, Product Data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.

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3. Engineer will notify Contractor in writing of decision to accept or reject request.

PART 2 PRODUCTS

2.1 EQUIPMENT ELECTRICAL CHARACTERISTICS AND COMPONENTS

- A. Motors: Specific motor type is specified in individual specification sections.
- B. Wiring Terminations: Provide terminal lugs to match branch circuit conductor quantities, sizes, and materials indicated. Include lugs for terminal box.
- C. Cord and Plug: Provide minimum 6 foot cord and plug including grounding connector for connection to electric wiring system. Cord of longer length is specified in individual specification sections.

PART 3 EXECUTION

NOT USED.

END OF SECTION

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SECTION 01610

DELIVERY, STORAGE AND HANDLING

PART 1 GENERAL

1.1 GENERAL:

- A. This Section specifies the general requirements for the delivery handling, storage and protection for all items required in the construction of the work. Specific requirements, if any, are specified with the related item.

1.2 TRANSPORTATION AND DELIVERY:

- A. Transport and handle items in accordance with manufacturer's printed instructions.
- B. Schedule delivery to reduce long term on-site storage prior to installation and/or operation. Under no circumstances shall material be delivered to the site more than one month prior to installation without written authorization from the Owner.
- C. Coordinate delivery with installation to ensure minimum holding time for items that are hazardous, flammable, easily damaged or sensitive to deterioration.
- D. Deliver products to the site in manufacturer's original sealed containers or other packing systems, complete with instructions for handling, storing, unpacking, protecting and installing.
- E. Assume responsibility for equipment material and spare parts just before unloading from carrier at site.
- F. All items delivered to the site shall be unloaded and placed in a manner which will not hamper the Contractor's normal construction operation or those of subcontractors and other contractors and will not interfere with the flow of necessary traffic.
- G. Provide equipment and personnel to unload all items delivered to the site..
- H. Promptly inspect shipment to assure that products comply with requirements, quantities are correct, and items are undamaged. For items furnished by others (i.e. Owner, other Contractors), perform inspection in the presence of the Owner. Notify Owner verbally, and in writing, of any problems.
- I. Pay all demurrage charges if failed to promptly unload items.

1.3 STORAGE AND PROTECTION:

- A. Store and protect products in accordance with the manufacturer's instructions, with seals and labels intact and legible

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- B. Arrange storage of products to permit access for inspection. Periodically inspect to make sure products and equipment are undamaged and are maintained under specified conditions.
- C. Store loose granular materials on solid flat surface in a well-drained area. Prevent mixing with foreign matter.
- D. Cement and lime shall be stored under a roof and off the ground and shall be kept completely dry at all times. All structural, miscellaneous and reinforcing steel shall be stored off the ground or otherwise to prevent accumulation of dirt or grease, and in a position to prevent accumulations of standing water and to minimize rusting. Masonry products shall be handled and stored in manner to reduce breakage, cracking and spalling to a minimum.

PART 2 PRODUCTS

NOT USED.

PART 3 EXECUTION

NOT USED.

END OF SECTION

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No. 6 and 7SECTION 01700
EXECUTION REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Closeout procedures.
- B. Final cleaning.
- C. Starting of systems.
- D. Demonstration and instructions.
- E. Testing, adjusting and balancing.
- F. Protecting installed construction.
- G. Project record documents.
- H. Operation and maintenance data.
- I. Manual for materials and finishes.
- J. Manual for equipment and systems.
- K. Spare parts and maintenance products.
- L. Product warranties and product bonds.
- M. Equipment maintenance schedule.
- N. Maintenance service.

1.2 CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect/Engineer's review.
- B. Provide submittals to Architect/Engineer required by authorities having jurisdiction.
- C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, sum remaining due, and final waivers of lien.

1.3 FINAL CLEANING

- A. Execute final cleaning prior to final project assessment.

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- B. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces.
- C. Clean equipment and fixtures to sanitary condition with cleaning materials appropriate to surface and material being cleaned.
- D. Clean debris from roofs, gutters, downspouts, and drainage systems.
- E. Clean site; sweep paved areas, rake clean landscaped surfaces.
- F. Remove waste and surplus materials, rubbish, and construction facilities from site.

1.4 STARTING OF SYSTEMS

- A. Coordinate schedule for start-up of various equipment and systems.
- B. Notify Engineer seven days prior to start-up of each item.
- C. Verify each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions which may cause damage.
- D. Verify tests, meter readings, and specified electrical characteristics agree with those required by equipment or system manufacturer.
- E. Verify wiring and support components for equipment are complete and tested.
- F. Execute start-up under supervision of applicable manufacturer's representative or Contractors' personnel in accordance with manufacturers' instructions.
- G. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check, and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- H. Submit a written report in accordance with Section 01330 that equipment or system has been properly installed and is functioning correctly.

1.5 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of products to Owner's personnel two weeks prior to date of Substantial Completion.
- B. Demonstrate Project equipment and train/instruct Owner's personnel, at agreed upon location, and instructed by a qualified manufacturer's representative who is knowledgeable about the Project.
- C. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owner's personnel in detail to explain all aspects of operation and maintenance.
- D. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at agreed upon time, at equipment location.

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- E. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.

1.6 TESTING, ADJUSTING AND BALANCING

- A. Adjust operating Products and equipment to ensure smooth and unhindered operation.

1.7 PROTECTING INSTALLED CONSTRUCTION

- A. Protect installed Work and provide special protection where specified in individual specification sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- F. Prohibit traffic from landscaped areas.

1.8 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed Shop Drawings, Product Data, and Samples.
 - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress, not less than weekly.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured depths of foundations in relation to finish floor datum.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.

3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
4. Field changes of dimension and detail.
5. Details not on original Contract drawings.

G. Delete Architect/Engineer title block and seal from all documents.]

H. Submit documents to Architect/Engineer with claim for final Application for Payment.

1.9 OPERATION AND MAINTENANCE DATA

- A. Submit data bound in 8-1/2 x 11 inch text pages, three D side ring binders with durable plastic covers.
- B. Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project, and subject matter of binder when multiple binders are required.
- C. Internally subdivide binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
- D. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- E. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, typed on 24 pound white paper, in three parts as follows:
 1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, Subcontractors, and major equipment suppliers.
 2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
 - a. Significant design criteria.
 - b. List of equipment.
 - c. Parts list for each component.
 - d. Operating instructions.
 - e. Maintenance instructions for equipment and systems.
 - f. Maintenance instructions for [special] finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
 - g. Internal wiring and piping diagrams.
 3. Part 3: Project documents and certificates, including the following:
 - a. Shop drawings and product data.
 - b. Air and water balance reports.
 - c. Certificates.
 - d. Photocopies of warranties and bonds.
- F. Submit one draft copy of completed volumes in final form 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Architect/Engineer comments. Revise content of all document sets as required prior to final submission.
- G. Submit two sets of revised final volumes, within 10 days after final inspection.

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1.10 SPARE PARTS AND MAINTENANCE PRODUCTS

- A. Furnish spare parts, maintenance, and extra products in quantities specified in individual specification sections.
- B. Deliver to Project site and place in location as directed by Owner; obtain receipt prior to final payment.
- C. Coat parts to protect from moisture.
- D. Stencil on containers:
 - 1. Manufacturer/supplier name.
 - 2. Unit name.
 - 3. Spare part name.
 - 4. Manufacturer catalogue number.
 - 5. Other identifying information.

1.11 PRODUCT WARRANTIES AND PRODUCT BONDS

- A. Obtain warranties and bonds executed in duplicate by responsible subcontractors, suppliers, and manufacturers, within ten days after completion of applicable item of work.
- B. Execute and assemble transferable warranty documents and bonds from subcontractors, suppliers, and manufacturers.
- C. Verify documents are in proper form, contain full information, and are notarized.
- D. Co-execute submittals when required.
- E. Include Table of Contents and assemble in three D side ring binder with durable plastic cover.
- F. Submit prior to final Application for Payment.
- G. Time of Submittals:
 - 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within ten days after acceptance.
 - 2. Make other submittals within ten days after Date of Substantial Completion, prior to final Application for Payment.
 - 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within ten days after acceptance, listing date of acceptance as beginning of warranty or bond period.

1.12 EQUIPMENT MAINTENANCE SCHEDULE

- A. Submit, in addition to the operation and maintenance data, an equipment maintenance schedule for each piece of equipment. Include the following:
 - 1. Identity of Equipment.
 - 2. Routine manufacturer recommended preventative maintenance
 - a. Daily
 - b. Weekly
 - c. Monthly
 - d. Quarterly
 - e. Semi-Annually

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f. Annually

B. Equipment maintenance schedule in uniformed format for all equipment.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

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SECTION 01784

FIELD INSPECTION AND ACCEPTANCE TESTS

PART 1 GENERAL

1.1 DESCRIPTION:

- A. Perform electrical system tests to demonstrate that each component of each system is in proper working order and in accordance with applicable codes, manufacturer's instructions, drawings and specifications. Tests are in addition to, and no substitution for, factory tests of individual equipment.
 - 1. Perform insulation and ground resistance tests before operating tests.
 - 2. Determine proper rotation of motors before permanent connections are made.
- B. Testing shall be performed to:
 - 1. Provide initial acceptance tests and recorded data that can be used as a bench mark for future routine maintenance and trouble shooting by facility operating staff.
 - 2. Ensure a successful start-up with a minimum of last minute interruptions and problems.
 - 3. Determine the suitability of the equipment and systems for energization and placing into operating service.
 - 4. Provide assurance that each system component is not only installed satisfactorily but performs, and will continue to perform, its function in the system with reasonable reliability throughout the life of the facility.
- C. Provide all supervision and labor, materials, tools, test instruments or other equipment or services and expenses required to test, adjust, set, calibrate, functionally and operationally check all work and components of the various electrical systems and circuitry throughout the installation. Provide sufficient personnel to assist in any additional checks they may require for acceptance, start-up, run-in and placing the equipment and systems into continuous service.
- D. The tests and inspections performed shall in no way relieve the Contractor of the responsibility for the performance of the tests, check outs, and inspections specified under other sections of the specification during construction.
- E. The listings and descriptions of the tests, and checks described herein shall not be considered as complete and all inclusive. Additional normal standard construction (and sometimes repetitive) checks and tests may be necessary throughout the job, prior to final acceptance by the Owner.
- F. Pay all costs for tests including expenses incident to retests occasioned by defects and failures of equipment to meet specifications.
 - 1. Replace wiring and equipment found defective, or failing to meet specified requirements, without charge, unless written acceptance for repair is given by Engineer.
 - 2. Unless otherwise specified, the Owner will supply electric power necessary for tests.

1.2 REFERENCES:

01784-1

FIELD INSPECTION AND
ACCEPTANCE TESTS

- A. All inspections and tests shall be in accordance with the following applicable codes and standards latest revisions except as provided otherwise herein.
1. All Standard, Special and Supplemental Conditions of the Contract.
 2. Association of Edison Illuminating Companies (AEIC).
 3. American National Standards Institute (ANSI):
 - a. Z244-1: American National Standard for Personnel Protection
 4. American Society for Testing and Materials International (ASTM).
 5. Insulated Cable Engineers Association (ICEA).
 6. Institute of Electrical and Electronic Engineers (IEEE).
 - a. C2: National Electrical Safety Code
 7. National Electrical Manufacturer's Association (NEMA).
 8. International Electrical Testing Association (NETA):
 - a. ATS: Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.
 9. National Fire Protection Association (NFPA):
 - a. 70: National Electrical Code
 - b. 70B: Electrical Equipment Maintenance
 - c. 70E: Electrical Safety Requirements for Employer Workplaces
 - d. 101: Life Safety Code
 10. Occupational Safety and Health Administration (OSHA):
 - a. Part 1926; Subpart V, 1926.950 through 1926.960
 11. State and Local Codes and Ordinances.
- B. All inspections and tests shall utilize the following references:
1. Project Design Specifications
 2. Project Design Drawings
 3. Project Electrical System Studies
 4. Manufacturer's instruction manuals applicable to each particular apparatus

1.3 SUBMITTALS:

- A. Submit the following shop drawings in accordance with Section.
1. Submit test plans and test data in accordance with the requirements of Section .
 2. Submit in 3-ring notebook, test plans for each system and piece of equipment to be inspected and tested. Provide sample test data sheets with blanks identified where test data will be recorded, test instrument identification, calibration date, and blanks provided to identify the person performing the test and the person witnessing the test.
 3. Submit test results.

1.4 SCHEDULING:

- A. The Contractor shall be responsible for the preparation of proposed procedures and schedules for all inspections, tests, settings and calibrations specified or otherwise required prior to or during the check out for start-up and acceptance of all the electrical components, equipment and systems. This work shall be coordinated and to be compatible with both the work of other crafts and the project schedule. The above must be organized and submitted with all proposed testing and check out forms. The procedures shall provide specific instructions for the checking and testing of each component in addition to the system functional checks. Tests and inspections shall be

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scheduled as the job progresses and may require repetition in greater detail at a later stage of construction. All procedures submitted shall include job safety rules proposed.

- B. Equipment shall be inspected and tested to determine its condition. See other applicable sections of the specifications and contract documents for required checks and responsibilities.
- C. At any stage of construction and when observed, any electrical equipment or system determined to be damaged, faulty, or requiring repairs shall be reported to the Engineer. Corrective action may require prior approval.
- D. Prior to check out and testing for start-up, ensure that all equipment and wiring is properly and permanently identified with nameplates and other identification as specified elsewhere. Check and tighten all terminals and connection points, remove all shipping blocks and hardware, thoroughly clean all equipment, repair all damaged or scratched finishes, inspect for broken and missing parts and review and collect manufacturer's drawings and instructions for submittal to the Engineer. Make routine checks and tests as the job progresses and as necessary to insure that all wiring and equipment is properly installed and wired.
- E. All testing and checkout work shall be performed with fully qualified personnel skilled in the particular tests being conducted. This is essential for obtaining and properly evaluating data while the tests are in progress and for insuring that important facts and questionable data are reported.
- F. All inspections, tests, and calibrations shall be reported in writing on forms submitted for review under Submittals. The recorded data form shall have the signatures of the persons conducting the tests and authorized witnesses. The forms shall be designed to serve as the test and inspection checklist for inspection requirements. "As-found" and "as-left" test data shall be recorded and reported in writing.
- G. The sequence of all tests and checks shall be such that the equipment can be energized immediately after the completion of the applicable tests.
- H. When applicable electrical tests and inspections specified herein, or otherwise required are completed and results reported and reviewed then the Contractor may consider that portion of the electrical equipment system or installation electrically complete. The Contractor shall then affix appropriate dated completion or calibration labels to the tested equipment. The Contractor shall notify the Engineer and Owner of electrical completion. If the Engineer or Owner finds completed work unacceptable, the Contractor will be notified in writing of the unfinished or deficient work which shall be corrected by the Contractor. The Contractor shall notify the Engineer in writing when all exceptions have been corrected. If later in-service operation or further testing determines problems attributable to the Contractor, these shall be corrected by the Contractor or suitable arrangements shall be made to suit operating circumstances.

PART 2 PRODUCTS

2.1 TESTING EQUIPMENT:

- A. Calibration:
 - 1. Furnish all material, test equipment, and power sources required for testing, calibrating and check out. All calibration and setting checks by the independent

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testing laboratory shall be performed with laboratory calibrated test instruments of appropriate accuracy. This test equipment shall have calibrations traceable to the National Bureau of Standards. Testing laboratory dated calibration labels shall be visible on all test equipment. Calibrations over 6 months old will not be acceptable on field test instruments. The accuracy of all test instruments shall be at least twice that of the accuracy of the equipment, device, relay or meter under test. All testing instruments shall be checked to insure satisfactory operation prior to proceeding with the tests. Serial and model numbers of the instruments used shall be recorded on the test forms.

2. Make necessary openings in circuits for testing instruments and place and connect all instruments, equipment, and devices, necessary for the tests. Upon completion of tests, remove instruments and instrument connections and restore all circuits to permanent condition.

2.2 TESTING:

A. Coordination:

1. Coordinate activities, and cooperate with others on project, to ensure that systems are energized when required, loads applied, and other requirements of Section are carried out on timely, coordinated basis.
2. Conduct tests in presence of Engineer. Notify Engineer seven calendar days or more in advance when any test to be performed, and do not start tests without Engineer's permission.
3. Other Sections of specifications require services of one or more manufacturer's representatives, to ensure that equipment supplied has been installed properly and adjusted to proper working order. Advise representative of all applicable tests in this Section, so that work will be coordinated, and tests combined where feasible.
4. It is important that equipment warranties or guarantees not be voided by testing and checkout work. The checks and tests to normally be supplemental to and compatible with the manufacturer's installation instruction leaflets and literature. Where deviations are apparent, the manufacturer's review shall be obtained prior to testing. Reasonable cooperation shall be extended to permit witnessing by the manufacturer's representative if so requested. Where any questionable repairs, modifications, significant adjustments, tests or checks are to be made, the Contractor shall contact the Engineer to determine if the work should be performed by or with the manufacturer's representative.

B. Preparation:

1. Make up no high and/or medium-voltage connections at service entrance, transformers, substations, motors, medium voltage motor control centers, switchgear and generator permanently until correct phase rotation of all equipment is determined. Install and insulate these connections temporarily, if necessary, while determining proper rotation. Make permanent connections after proper rotation has been established and subsequent to completion of insulation resistance and dielectric tests.

PART 3 EXECUTION

3.1 INSULATION TESTS OF EQUIPMENT, CABLE, AND CIRCUITS:

A. General:

1. Perform DC insulation tests of the type specified on electrical equipment, apparatus and cables under any one or more of the conditions described as

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follows: At the time equipment such as motors, generators, transformers, power circuit breakers and switches, switchgear, motor control centers, bus duct, and similar electrical equipment is:

- a. Delivered to the site for care, storage, and/or installation,
 - b. Prior to energization and/or placing into service and acceptance by the Owner,
 - c. When damage to the insulation is suspected or known to exist,
 - d. After repairs or modifications to the equipment affecting the insulation,
 - e. Routinely as necessary to determine or evaluate the condition of the insulation, especially moisture conditions, to determine the need for drying, cleaning or other maintenance work or protection,
 - f. Where lightning or other surge conditions are known to have existed on the circuit.
2. List each circuit and measured resistance as test data.
 3. Maintain record of all insulation resistance values. Identify conductor, or equipment, date that value was taken and resistance value. Arrange information in suitable neat tabular form and submit to Engineer.

3.2 SPECIFIC TESTS AND INSPECTIONS BY THE CONTRACTOR:

- A. General:
 1. The following specific items of work shall be performed by the Contractor. The list is not all inclusive, nor does it define how the tests and checks are to be made. Refer to applicable sections of NETA and equipment specifications for additional details. The equipment and cable shall be deenergized and isolated as necessary to perform the tests.
 2. The Contractor shall perform all tests and inspections as defined in the other sections of this specification. Tests and inspections required by these sections are not necessarily repeated under specific equipment.
 3. All equipment received for the job and for which the Contractor is responsible to be stored and cared for per the manufacturer's instructions. It is the Contractor's responsibility to obtain such information even where the instructions are not shipped with the equipment.
- B. Equipment Test and Inspection During Construction and Prior to Acceptance Testing:
 1. Motors (5 Hp and larger):
 - a. At the time of motor receipt, each motor shall be visually inspected for any physical damage and the motor meggered as described in Paragraph 1.e below.
 - b. All voltage motors shall be provided with adequate heating during storage.
 - c. Before energizing any machine, visually inspect for serviceability. Check manufacturer's instruction manual for correct lubrication and ventilation. Verify that proper alignment has been performed. Check nameplate for electrical power requirements.
 - d. Test run all motors preferably uncoupled or unloaded, before placing into regular service. A check on the motor for rotation, speed, current and temperature rise to be made and results recorded. The proper color codes for phase identifications to be maintained. This may require lead swaps at the motor for proper rotation. A motor phase rotation meter shall be used prior to connection at motor to prevent later swaps.
 - e. Complete visual inspection and electrical test per NETA ATS. Section 7.15.1
 2. Medium Voltage Switchgear, Medium Voltage Motor Controllers and Medium Voltage Switches:

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- a. At the time of equipment receipt, the exterior shall be visually checked for any damage and the interior checked for damaged or loose components with special attention to insulators.
 - b. Prior to connecting cable leads to the equipment, internal bus bars and power connection shall be megger tested. If moisture is a problem, the equipment may have to be dried out before going into service. If the insulation resistance between conductors and ground reads below 50 megohms with the fuses or current breakers removed, moisture, dirt or other contaminants may be a problem.
 - c. Cable phasing and identification to be checked prior to connecting cable leads.
 - d. Check to insure proper fuse sizes and settings of overload elements or relays in control centers.
 - e. Physically and functionally check all control circuits and devices and key, mechanical, and/or electrical interlock system. Alignment of circuit breaker elements or motor controllers with fixed connections in cubicles to be checked for ease of insertion and withdrawal.
 - f. Motor controllers, medium voltage switches, and disconnects shall be checked for proper fuse sizes and types and the information recorded and properly reported on the forms.
 - g. Check all bolted bus joints and all other power and control terminal connections. Calibrated torque wrench methods in accordance with manufacturer's instructions to be used on bus connections or where needed.
 - h. Complete inspection and electrical tests requirements per NETA ATS:
 - 1) Section 7.1 - Metal Enclosed Switchgear and Switchboard Assemblies
 - 2) Section 7.5 - Switches
 - 3) Section 7.6 - Circuit Breakers
 - 4) Section 7.19 - Surge Arresters
 - 5) Section 7.10 - Instrument Transformers
 - 6) Section 7.11 – Metering Devices
3. Grounding Systems:
- a. All grounding loops and major equipment grounds shall be tested to remote earth or directly referenced to an extremely low resistance (approximately 1 ohm) reference ground bench mark. Visual inspection of all systems, raceway and equipment grounds shall be made to determine the adequacy and integrity of the grounding. All ground testing results shall be properly recorded, witnessed, and submitted.
 - b. Ground tests shall be performed in accordance with NETA ATS, Section 8.13 using a J. G. Biddle Company low resistance, Null balance type, ground testing with 'ohmmeter with test lead compensation in

- place. The test instrument shall be the type which compensates for potential and current rod resistances.
- c. Test each ground rod and submit tabulation of results to Engineer. Include identification of electrode, date of reading and ground resistance value in results.
 - d. Test each entire grounding system for continuity of connections and for resistance. Ensure that ground resistance of conduits, equipment cases, and supporting frames does not vary appreciably from that of system as whole and does not exceed 5 Ohms.
 - e. Where ground test results indicate the need for additional grounding conductors or rods that are not indicated on drawings or specified, additional grounding provisions shall be initiated to obtain the acceptable values. The Contractor shall be responsible for the proper installation of the grounding shown on drawings or specified and for the correction of improper installations as determined by inspections and tests.
4. Power Transformers:
 - a. At the time of equipment receipt, the exterior to be visually checked for any damage or any defects.
 - b. Perform complete inspection and electrical tests in accordance with NETA ATS, Section 7.2.
 5. Low Voltage Switchgear: Refer to NETA ATS, Section 7.2. Perform all applicable tests and checks as described in NETA ATS, Section 7.2.
 6. Protective Relays and Metering:
 - a. Prior to final check out as described in Paragraph 3.03, visually inspect and correct, where appropriate, all relays, meters, wiring and related circuitry for tightness of connections, physical damage, compliance with specifications and Vendor data, mechanical condition, freedom of movement, and presence of or possibility of moisture, dust, or other contaminants.
 - b. Clean, check, and pre-set all protective relays.
 - c. Complete inspection and electrical tests per NETA ATS. Section 7.9.
 7. Low Voltage Motor Control Centers:
 - a. At the time of equipment receipt, the motor control centers shall be visually checked for any damage.
 - b. Perform inspection checks and electrical tests in accordance with NETA ATS. Section 7.16.2.
- C. Distribution Transformers:
1. All 480 volt primary, air-cooled, transformers shall be given an insulation test, by means of a megger, after connections with the primary cables are complete. The supply cable shall be meggered with the primary winding and to the open air circuit breaker. Secondary leads may be meggered with the secondary windings to the open load breakers.
 2. Continuity and correctness of connections of all windings, and ratings shall be checked.
 3. Perform inspection checks, and electrical tests in accordance with NETA ATS Section 7.2.3.
- D. Wire and Cable:
1. Before energizing, the continuity and insulation resistance of every circuit external to equipment shall be measured with a megger from each wire to all

- others and ground and test results recorded on forms. Tests shall normally be conducted at voltages 500 volts or lower.
2. Insulation resistance measurements shall be taken of the following.
 - a. Motor Feeders: With motors disconnected, measure and record insulation resistance from load side of contactors or circuit breakers. Repeat this test after motors are connected and just before energizing at lower voltage as limited by the maximum test voltage for the motor.
 - b. Motor Control Circuits (600 Volts): With push buttons and overcurrent devices connected, measure and record insulation resistance from phase to ground only. It will be necessary to lift the neutral ground on the control transformers to perform this test. Also, isolate any control elements that should not be meggered.
 - c. Lighting Branch Circuits: Measure and record insulation resistance after all lampholders, receptacles, fixtures, etc., are connected but before lamping.
 3. All cables and wires shall be checked for proper identification numbering and/or color coding.
- E. Overhead Conduit Systems:
1. The overhead conduit system shall be checked for proper installation by using the following check list: (This list not to be considered all inclusive but as a guide for inspection).
 - a. Conduits are supported on appropriate independent supports (i.e., not on process piping, pipe ways, or piping hangers).
 - b. Exposed conduits are run in a neat workmanlike manner, parallel or perpendicular to structural members.
 - c. Conduits are routed as far away from possible fire hazards and heat sources as practical.
 - d. Conduits are supported at the required intervals.
 - e. Pull boxes and fittings are installed so that covers are easily removable. Verify that all covers are installed and tightly bolted with gaskets provided where needed.
 - f. Number of bends in the conduit does not exceed 270 degrees without a pull box installed.
 - g. Circular cross sectional area is uniform at conduit bends. Single bends do not exceed 90 degrees.
 - h. Conduits are terminated in threaded hubs or bushings to prevent damage to wire.
 - i. Conduits joints have joint compound of the type specified and are tight and conduit ends are properly reamed and threaded not to engage less than 5 threads.
 - j. Pull fittings are of adequate size such that cable can be installed and replaced at a later date without the bending radius of the cable being less than code or manufacturer's requirements.
 - k. Seal fittings and/or sealing compound is installed at moisture barriers to prevent entry of moisture into equipment and/or where shown on plans.
 - l. Drains and conduit seals are installed on vertical conduit runs entering devices, equipment, and enclosures to prevent entrance of moisture.
 - m. Flexible conduit is installed at motors and other equipment as specified or required. Verify that all cabling and conduit runs are properly identified at each end.
- F. Underground Conduit Systems:
1. Underground conduit systems shall be inspected and checked for compliance with standard practices, plans and specifications as the job progresses.

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2. Upon construction completion of the underground conduit banks or runs and prior to backfill, the routing and the elevation and depth below grade shall be checked and any deviations from plans and/or specification to be recorded and in addition noted on record drawings.
- G. Relay Panels, Operator and Instrument Control Panels, Communications Systems, Static Equipment, Programmable Controllers, Micro-Processors, Battery Systems and Other Miscellaneous Equipment:
1. Upon receipt of equipment, each item shall be inspected for damage, loose or missing parts.
 2. Upon completion of equipment installation, all equipment and their control devices shall be visually and functionally tested for tightness of connections and for proper operation. In the case of battery systems, static inverters and the like, manufacturer's recommended test and installation manuals shall be reviewed and complied with. In the case of operator, instrument, and relay panels and cabinets or devices used solely for control, each circuit, where possible, shall be functionally tested for proper operation and conformance with drawings. Where functional testing is deemed undesirable by the Owner's Representative from a safety or plant operational standpoint, then continuity and terminal connection verification checks will be adequate. The Contractor shall insure that instruments and associated components cannot be energized until instructed by the Owner's Representative. For functional, operational, and calibration checks of instrument loops, refer to the instrument installation specifications.
- H. Sealing of Openings: The Contractor shall inspect the entire job with the Engineer to insure that all openings are properly sealed as specified elsewhere.
- I. Record Drawings: The Contractor shall maintain a master set or record drawings that shows changes and any other deviations from the base drawing. The markups shall be made as the changes are done. At the conclusions of the job, these master record drawings shall be complete and delivered to the Owner's Representative for forwarding to the design group.
- 3.3 CONTRACT CLOSEOUT:
- A. Provide in accordance with Section .

END OF SECTION

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

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SECTION 01825

ELECTRICAL SYSTEM DEMONSTRATIONS

PART 1 GENERAL

1.1 SUMMARY:

- A. Demonstrate proper operation of electrical systems and equipment in presence of Engineer.

1.2 SUBMITTALS:

- A. Submit the following shop drawings in accordance with Section .
- B. Demonstration log.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 PERFORMANCE:

- A. Demonstrations:
 - 1. Each piece of equipment.
 - 2. Each integrated system.
- B. Demonstration Log:
 - 1. Keep log of individual demonstrations.
 - 2. Data:
 - a. Date and time of demonstration.
 - b. Owner's representative.
 - c. Equipment or system demonstrated.
 - d. Result of demonstration.
 - 1) Success or fail.
 - 2) If failure, description of failure.
 - 3) Corrective action taken.
 - 4) New demonstration result.

3.2 CLOSEOUT activities:

- A. Provide in accordance with Section .

END OF SECTION

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ELECTRICAL SYSTEM DEMONSTRATIONS

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DIVISION 16 – ELECTRICAL

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SECTION 16050

BASIC MATERIALS AND METHODS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
1. Raceway Systems
 2. Wire, Cables and Connectors
 3. Wiring Devices
 4. Motor Starters
 5. Motor and Circuit Disconnects
 6. Fuses
 7. Panelboards
 8. Transformers

1.2 SUBMITTALS

- A. Approval of equipment supplied in this section is contingent upon CONTRACTOR verification of available fault current from electric utility..
1. Notify ENGINEER if available fault current is higher than specified equipment.
- B. Product Data:
1. Submit for disconnects, motor starters, panelboards, circuit breakers, overcurrent protective devices, and transformers.
- C. Shop Drawings:
1. Submit for motor starters.
 2. Show enclosure dimensions, nameplate nomenclature, electrical ratings, and thermal unit schedule.
 3. Wiring diagrams and schematics. .
- D. Operation and Maintenance (O&M) Data:
1. Maintenance data for materials and products for inclusion in Operating and Maintenance Manual.
- E. Submit in accordance with Section 01340.

1.3 QUALITY ASSURANCE

- A. Items provided under this section shall be listed or labeled by UL or other Nationally Recognized Testing Laboratory (NRTL).
1. Term "NRTL" shall be as defined in OSHA Regulation 1910.7.
 2. Terms "listed" and "labeled" shall be as defined in National Electrical Code, Article 100.
- B. Regulatory Requirements:
1. National Electrical Code (NEC): Components and installation shall comply with National Fire Protection Association (NFPA) 70.

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PART 2 PRODUCTS

2.1 METAL CONDUIT AND TUBING

- A. Galvanized Rigid Steel Conduit: ANSI C80.1.
- B. Plastic Coated Steel Conduit and Fittings: NEMA RN 1.
- C. Electrical Metallic Tubing and Fittings: ANSI C80.3 with compression type fittings.
- D. Flexible Metal Conduit: Zinc coated steel.
- E. Liquidtight Flexible Metal Conduit: Flexible steel conduit with PVC jacket

2.2 NONMETALLIC CONDUIT

- A. Rigid Nonmetallic Polyvinyl Chloride (PVC) Conduit: NEMA TC 2, 80 PVC.

2.3 FITTINGS

- A. Fittings for steel conduits:
 - 1. Steel or malleable iron, zinc galvanized or cadmium plated.
 - 2. Do not use set screw or indentor type fittings.
 - 3. Do not use aluminum or die cast fittings.
 - 4. EMT and GRS Connectors and Couplings:
 - a. Threaded.
 - b. Insulated throat.
 - c. Gland compression type.
 - d. Rain and concrete type.
 - 5. Comply with ANSI C80.4.
 - 6. Comply with NEMA FB 1, compatible with conduit materials.
- B. Conduit bodies:
 - 1. Malleable iron with galvanized finish.
- C. Fittings for flexible metal conduit.
 - 1. Insulated throat type.
 - 2. Threaded.
 - 3. Grounding type.
 - 4. Liquidtight: 1 piece sealing "O" rings with connectors when entering boxes or enclosures.
- D. Expansion Joints:
 - 1. Conduit expansion fittings complete with copper bonding jumper, Cooper Crouse Hinds Type XJ.
 - 2. Conduit expansion/deflection fittings with copper bonding jumper, Cooper Crouse Hinds Type XD.
- E. Seals:
 - 1. Wall entrance, OZ/Gedney Type FSK or FSC.

2.4 BOXES

- A. Of indicated types, sizes and NEMA enclosure classes. Where not indicated, provide units of types, sizes, and classes appropriate for use and location. Provide items

complete with covers and accessories required for intended use. Provide gaskets for units in damp or wet locations.

- B. Fasteners:
 - 1. General Use: Corrosion resistant screws and hardware including cadmium and zinc plated items.
 - 2. Damp or Wet Locations: Stainless steel screws and hardware.
- C. Outlet Boxes:
 - 1. Boxes shall be of type, shape, size, and depth to suit each location and application.
 - 2. Steel Boxes: Sheet steel with stamped knockouts, threaded screw holes and accessories suitable for each location including mounting brackets and straps, cable clamps, exterior rings and fixture studs.
 - 3. Cast Boxes: Iron alloy, waterproof, with threaded raceway entries and features and accessories suitable for each location, including mounting ears, threaded screw holes for devices and closure plugs.
- D. Pull and Junction Boxes:
 - 1. Boxes shall have screwed or bolted on covers of material same as box and shall be of size and shape to suit application.
 - 2. Galvanized Steel Boxes: Flat rolled, code gauge, sheet steel with welded seams. Hot dip galvanized after fabrication. Cover shall be gasketed.
 - 3. Stainless Steel Boxes: Fabricate of stainless steel conforming to Type 304 of ASTM A167. Cover shall be gasketed.
 - 4. Galvanized Cast Iron Boxes: Molded of cast iron alloy with gasketed cover and integral threaded conduit entrances.
 - 5. Boxes Approved for Classified Locations: Cast metal or cast nonmetallic boxes conforming to UL 886 listed and labeled for use in specific location classification, and with specific hazardous material encountered. Conduit entrances shall be integral threaded type.

2.5 WIRES, CABLES, AND CONNECTORS

- A. Building wires and cables with insulation type, cable construction, and rating as required to meet application and NEC requirements.
- B. Manufacturers:
 - 1. Wire and Cable:
 - a. Southwire.
 - b. Houston Wire and Cable.
 - c. Belden.
 - d. American Insulated Wire Corp.
 - e. Republic Wire.
 - f. Superior Essex.
 - 2. Connectors:
 - a. FCI-Burndy.
 - b. Thomas and Betts.
 - 3. Blackburn, Thomas and Betts.
- C. Copper wire only.
- D. 600 v insulation (ASTM standard compounds) and color code conductors for low voltage (secondary feeders and branch circuits) as required by NEC.

1. Type THWN Stranded: Single conductor No. 12 AWG minimum for branch circuit and feeder conductors size No. 8 AWG and smaller.
 2. Type XHHW Stranded: Single conductor for branch circuits, feeders, and service conductors larger than No. 8 AWG.
 3. Provide grounding conductor when run with circuit conductors with same insulation as circuit conductors.
 4. Type USE Stranded: Single conductor for under ground direct burial.
 5. Type THWN Stranded: Single conductor No. 12 AWG minimum for 120 v control wiring and No. 14 AWG minimum for graphic indication, nonshielded instrumentation and other control wiring operating at less than 120 v unless otherwise noted on Drawings.
 - a. Provide high density polyethylene jacketed multi wire cable assemblies in underground conduit or duct.
 6. PVC insulation, tinned copper (19 by 27) stranded, No. 16 AWG, twisted pair cabled with aluminum mylar shielding, stranded, tinned, No. 18 AWG copper drain wire, and overall black FR PVC, 90°C, 600 volt jacket for interference sensitive instrumentation wiring.
 7. Vinyl insulated, tinned copper, solid, twisted pair, cabled conductors and silver gray vinyl jacket for telephone inter communications.
 - a. Up to 4 conductors/cable, 22 AWG solid wire.
 - b. Over 4 conductors/cable, 24 AWG solid wire.
 - c. Provide high density polyethylene jacketed multi wire cable assemblies in underground conduit or duct.
- E. 2000v insulation:
1. For VFD motors: Belden VFD cable per manufacturer recommendations.
 2. No substitutes.
- F. Joints, Taps, and Splices:
1. Joints, Taps, and Splices in Conductors No. 10 AWG and Smaller: UL listed preinsulated compression spring type solderless connectors.
 2. Joints, Taps, and Splices in Conductors No. 8 AWG and Larger: Solderless 2 or 4 bolt compression type connectors of type that will not loosen under vibration or normal strains.
- G. Terminations:
1. Power Conductors: Compression crimp type lugs.
 2. Control and Instrumentation Conductors: Compression crimp type fork tongue, insulated support type lugs on terminal strips. Do not splice.

2.6 WIRING DEVICES

- A. Manufacturers:
1. Hubbell Wiring Device Division.
 2. Pass and Seymour/Legrand
 3. Appleton Electric Company.
 4. Cooper Crouse Hinds Company.
- B. Color: Ivory unless otherwise indicated or required by NEC.
- C. Switches:
1. General Use Lighting Switches: 20 amp toggle, equal to Hubbell No. 1221 I series.
- D. Receptacles:

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1. General use duplex receptacles: NEMA No. 5 20R, grounding type, 20 amp Hubbell No. 5362 Specification Grade.
 2. Special purpose receptacles as shown on Drawings and schedules.
- E. Ground Fault Circuit Interrupter Receptacles (GFCI).
1. Ratings: 120 vac., 20 amp.
 2. Tripping Requirement: UL Class A.
 3. Construction:
 - a. Shallow depth.
 - b. Line and load terminal screws.
 - c. Noise suppression.
 - d. Feed through.
 - e. Standard duplex wall plates shall fit.
 - f. NEMA 5 20R configuration.
 4. Meet requirements of UL 943 ground fault circuit interrupters.
- F. Wiring Device Plates and Covers:
1. Wall plates for wiring devices with ganging and cut outs as indicated, provided with metal screws for securing plates to devices, screw heads colored to match finish of plate.
 2. Plates for Flush Mounted Devices:
 - a. Hubbell high-impact smooth nylon in Ivory color.
 3. Device plates for surface mounted Type FS or FD boxes to be Type FSK galvanized steel.
 4. Device plates for surface mounted, 4 in. sq boxes to be 1/2 in. raised galvanized steel covers.
 5. Weatherproof plates and covers for exterior devices or devices in damp locations to be galvanized gray cast malleable with gasketed, lift cover plate.
 6. Weatherproof plates and covers suitable for wet locations while in use.
 - a. Hinged and gasketed cover/enclosure to maintain weather tight seal while the equipment is plugged into it. TayMac or equal.

2.7 FUSES

- A. Manufacturers:
1. Cooper Bussmann.
 2. Ferraz Shawmut.
 3. Littelfuse.
- B. 250 v Fuses:
1. Class RK 1, 1 end rejection or to fit mountings specified, 1/10 to 600 amps, 200,000 amp interrupting rating.
 - a. Bussmann Low Peak. LPN R, dual element, time delay with short circuit protection for motor, transformer, welder, feeder, and main service protection.
- C. Spare Fuses:
1. 10%, minimum of 3, of each type and rating of installed fuses.

PART 3 EXECUTION

3.1 RACEWAY SYSTEMS

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- A. Outdoors, Damp or Wet Locations: Use following wiring methods unless otherwise noted on Drawings:
 - 1. Exposed: Galvanized rigid steel.
 - 2. Concealed: Galvanized rigid steel.
 - 3. Underground Power: Schedule 80 PVC or PVC-coated rigid steel conduit.
 - 4. Underground Shielded Instrumentation Cables: Schedule 80 PVC or PVC-coated rigid steel conduit.
 - 5. Connection to Vibrating Equipment (including transformers and hydraulic, pneumatic, or electric solenoid or motor driven equipment): Liquidtight flexible metal conduit.
 - 6. Underground Control Cables: Schedule 80 PVC or PVC-coated rigid steel conduit.
- B. Indoor Dry Locations: Use following wiring methods unless otherwise noted on Drawings.
 - 1. Connection to Vibrating Equipment (including transformers and hydraulic, pneumatic, or electric solenoid or motor driven equipment): Flexible metal conduit.
 - 2. Exposed: Galvanized rigid steel conduit.
 - 3. Concealed: Electrical metallic tubing.
- C. Examine surfaces to receive raceways, wireways, and fittings for compliance with installation tolerances and other conditions affecting performance of raceway system.
- D. Coordinate layout and installation of raceway and boxes with other construction elements to ensure adequate headroom, working clearance, and access.
- E. Complete conduit installation prior to installing cables.
- F. Raceway systems shall be continuous from outlet to outlet and from outlets to cabinets, junction or pull boxes.
- G. Enter and secure to boxes ensuring electrical continuity from point of service to outlets.
- H. Conduit shall be run concealed except exposed surface conduit may be installed where noted on Drawings or where concealment found to be impractical or impossible, and only with approval of ENGINEER.
- I. Provide watertight conduit system where installed in wet places, underground or where buried in masonry or concrete.
 - 1. Use threaded hubs when entering top of enclosures.
 - 2. Use sealing type locknuts when entering sides or bottom of enclosures.
- J. Conduit runs extending through areas of different temperature or atmospheric conditions or partly indoors and partly outdoors shall be sealed, drained, and installed in manner preventing drainage of condensed or entrapped moisture into cabinets, motors or equipment enclosures.
- K. Route conduit runs above suspended acoustical ceilings not interfering with tile panel removals.
- L. Cap conduits after installation to prevent entry of debris.
- M. Connections to motors and equipment subject to vibration shall be maximum of 3 ft long. Locate where least subject to physical abuse.

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- N. Install conduit expansion fittings complete with bonding jumper in following locations.
 - 1. Conduit runs crossing structural expansion joint.
 - 2. Conduit runs attached to 2 separate structures.
 - 3. Conduit runs where movement perpendicular to axis of conduit may be encountered.
- O. Keep raceways at least 6 in. away from parallel runs of flues and steam or hot water pipes. Install horizontal raceway runs above water and steam piping.
- P. Install separate ground conductor inside flexible conduit connections.
- Q. Use approved flexible connections in hazardous locations.
- R. Use explosionproof fittings and seals in hazardous areas in accordance with NEC.

3.2 BOXES

- A. Cap unused knockout holes where blanks have been removed and plug unused conduit hubs.
- B. Not used.
- C. Do not burn holes, use knockout punches or saw.
- D. Provide outlet box accessories as required for each installation such as mounting brackets, fixture studs, cable clamps, and metal straps for supporting outlet boxes compatible with outlet boxes being used and meeting requirements of individual wiring situations.
- E. Sizes shall be adequate to meet NEC volume requirements, but in no case smaller than sizes indicated.
- F. Location of outlets and equipment shown on Drawings is approximate. Verify exact location.
- G. Flush outlets shall have edges or plaster flush with finished wall or ceiling surfaces so plates can be drawn tightly to wall or ceiling surfaces.
- H. Minor modification in location of outlets and equipment is considered incidental up to distance of 10 ft with no additional compensation, provided notification of modification is given prior to roughing in of outlet.
- I. Outlet Boxes and Fittings: Install outlet and device boxes and associated covers and fittings of materials and NEMA types for each location in conformance with following requirements unless otherwise noted on Drawings:
 - 1. Interior Dry Locations: Sheet steel, NEMA type 1 for flush mounting and ferrous Type FS or FD cast boxes with threaded conduit hubs for surface mounting.
 - 2. Locations Exposed to Weather or Dampness: Galvanized, cast metal, NEMA Type 3R.
 - 3. Wet Locations: Stainless Steel, NEMA type 4X enclosures.
 - 4. Hazardous (Classified) Locations: NEMA type listed and labeled for location and class of hazard indicated.

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- J. Pull and Junction Boxes: Install pull and junction boxes of materials and NEMA types suitable for each location.
- K. Mounting height as follows unless otherwise shown on Drawings:
 - 1. Switches: 48 in. above floor.
 - 2. ac Receptacles and Telephone Outlets: 15 in. above floor or 6 in. above counters, counter back splashes, and baseboard radiators in finished areas; 48 in. above floor in unfinished areas.
 - 3. Pushbuttons: 48 in. above floor.
 - 4. Motor Starters and Disconnect Switches: 60 in. above floor.
 - 5. Thermostats: 60 in. above floor.

3.3 WIRE AND CABLE

- A. Install wires and cables as indicated, according to manufacturer's written instructions and NECA "Standard of Installation".
- B. Run wire and cable in conduit unless otherwise indicated on Drawings.
- C. On branch circuits, use standard colors.
- D. Run ground wire with power circuits; conduit shall not be grounding path.
- E. Provide separate conduit systems for following.
 - 1. Line voltage control.
 - 2. Low voltage control.
 - 3. Shielded instrumentation.
 - 4. Exit lights.
 - 5. As required by NEC.
- F. Where power cables and instrument/signal cables enter and pass through same handhole or distribution box, steel barrier or steel conduit separation shall be maintained to avoid magnetic interaction between power cables and instrumentation conductors. In manholes and handholes, provide Type C conduit outlet body with 3/16 in. holes drilled in bottom for drainage.
- G. Run instrumentation cable into control cabinets only if terminated therein.
- H. Terminate control, instrumentation, and communication cables on terminal strips in separate terminal cabinets located near conduit entrances of buildings or as shown on Drawings.
- I. Color Coding: Conductors for lighting and power wiring as indicated below.

Phase	208/120 v	480/277 v
A	Black	Brown
B	Red	Orange
C	Blue	Yellow
Travelers	Pink	Purple
Neutral	White	White with non-green stripe
Ground	Green	Green

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- J. Color coding for intrinsically safe systems shall be light blue.

3.4 JOINTS, TAPS, AND SPLICES

- A. Where preinsulated spring connectors are used for motor and equipment connections, tape connector to wire to prevent loosening under vibration.
- B. Each tap, joint or splice in conductors No. 8 AWG and larger shall be taped with 2 half lap layers of vinyl plastic electrical tape and finish wrap of color coding tape where required by code.
- C. Cable splices shall be made only in handholes, wireways, distribution boxes, and junction boxes.

3.5 WIRING DEVICES

- A. Do not install devices until wiring is complete.
- B. Do not use terminals on wiring devices (hot or neutral) for feed through connections, looped or otherwise. Make circuit connections by using wire connectors and pigtails.
- C. Install gasket plates for devices or system components having light emitting features such as switch with pilot light and dome lights. Where installed on rough textured surfaces, seal with black self adhesive polyfoam.
- D. Ground receptacles with insulated green ground wire from device ground screw to bolted outlet box connection or as shown on Drawings.
- E. Install GFCI receptacles as required by NEC.

3.6 FIELD QUALITY CONTROL

- A. Control Circuits, Branch Circuits, Feeders, Motor Circuits, and Transformers:
1. Megger check of phase to phase and phase to ground insulation levels.
 - a. Do not megger check solid state equipment.
 2. Continuity.
 3. Short circuit.
 4. Operational check.
- B. Wiring Devices
1. Test receptacles with Hubbell 5200, Woodhead 1750 or equal tester for correct polarity, proper ground connection, and wiring faults.

3.7 ADJUSTMENT AND CLEANING

- A. Motor Starters and Disconnects:
1. Adjust covers and operating mechanisms for free mechanical movement.
 2. Tighten wire and cable connections.
 3. Verify overcurrent protection thermal unit size with motor nameplate to provide proper operation and compliance with NEC.
 4. Clean interior of enclosures.
 5. Touch up scratched or marred surfaces to match original finish.
- B. Circuit Breakers:

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1. Adjustable settings shall be set to provide selective coordination, proper operation, and compliance with NEC.

END OF SECTION

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

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SECTION 16292

VARIABLE FREQUENCY DRIVES

PART 1 GENERAL

1.1 DESCRIPTION

- A. Provide complete simplex type Variable Frequency Drive (VFD) units and appurtenances including drive reactors, DC chokes, harmonic filters, enclosures, and certain auxiliary items, as indicated and as specified, to provide a complete operating system as indicated and in compliance with Contract Documents.
- B. VFD units shall be furnished as indicated on the plans and as stated in these specifications.
- C. VFD units to be installed in existing Allen Bradley Centerline Motor Control Center (MCC) at Station 6 and 7.

1.2 REFERENCES

- A. General:
 - 1. The following documents form part of the Specifications to the extent stated. Where differences exist between codes and standards, the one affording the greatest protection shall apply.
 - 2. Unless otherwise noted, the edition of the referenced code or standard that is current at the time of the "date of record" for the Work shall be considered the effective code or standard for the duration of the project.
 - 3. Refer to Division 01 Section "General Requirements" for the list of applicable regulatory requirements.
 - 4. Refer to specific Division 16 Sections for additional referenced codes and standards.
- B. ASTM International (ASTM):
 - 1. D178: Standard Specification for Rubber Insulating Matting
- C. National Electrical Manufacturers Association (NEMA):
 - 1. ICS 2: Industrial Control and Systems Controllers, Contactors, and Overload Relays Rated 600 Volts.
 - 2. ICS 6: Enclosures for Industrial Controls and Systems.
 - 3. AB 1: Molded-Case Circuit Breakers, Molded Case Switches, and Circuit-Breaker Enclosures.
 - 4. KS 1: Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum).
 - 5. MG 1: Motors and Generators.
- D. National Fire Protection Association (NFPA):
 - 1. 70: National Electrical Code (NEC).
- E. Underwriter's Laboratories Inc. (UL):
 - 1. 198C: High-Intensity Capacity Fuses; Current-Limiting Types
 - 2. 489: Molded-Case Breakers, Molded-Case Switches, and Circuit Breaker Enclosures.
 - 3. 508: Electrical Industrial Control Equipment.

4. 1066: Low Voltage AC and DC Power Circuit Breakers Used in Enclosures.

F. National Electrical Contractors Association (NECA)

1. NECA Standard of Installation

G. Electrical Safety Program, Electrical Equipment Safety Program, and Lockout/Tagout Program of NTMWD.

1.3 SUBMITTALS

- A. Submit shop drawings and manufacturers' product data in accordance with the requirements of Section 16050 "Basic Materials and Methods".
- B. Complete list of equipment and materials, including manufacturer's descriptive and technical literature, catalog cuts, and installation instructions for all major components.
- C. Complete wiring and schematic diagrams for the equipment furnished. Each wiring diagram shall be legible and not reduced from the original design drafted format. Provide a list of equipment on each wiring diagram for which it is applicable.
- D. Panel layout and front view drawings.
- E. Time versus current curves for protection devices.
- F. Data sheets for all devices provided as part of the assembly.
- G. All other details required to demonstrate that system has been coordinated and will properly function as a unit.
- H. Provide enclosure drawings and details showing all dimensions and construction details.
- I. Submit information relative to location and expertise of local service office and personnel.
- J. Submit a Statement of Compliance indicating conformance to the Seismic Requirements specified. Certificate shall be signed and sealed by a Professional Structural Engineer holding current registration in the state for work of this project.
- K. For informational purposes only, submit manufacturer's printed installation instructions.
- L. Spare Parts Data: Submit a list of spare parts for the equipment specified.

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- M. Operating and Maintenance Instruction Manuals:
1. Furnish:
 - a. Operating instruction manuals outlining step-by-step procedures required for system startup and operation.
 - b. Manufacturer's name, model number, service manual parts list.
 - c. Brief description of equipment and basic operating features.
 - d. Maintenance instruction manuals outlining maintenance procedures.
 - e. Troubleshooting guide listing possible breakdown and repairs.
 - f. Point-to-point connection wiring diagram for the system.
 - g. Performance Test Reports: Upon completion of installed system, submit in booklet form all shop and field tests performed to prove compliance with specified performance criteria.
- N. Submit Pump, Motor and VFD Statement of Compliance Coordinate Certificate.

1.4 QUALITY ASSURANCE

- A. Provide in accordance with Section 01 43 00 "Quality Requirements" and as specified.
- B. Provide VFDs in accordance with UL 508A, supplement SB, and Article 409 of the NEC. All VFD units shall be provided with a UL label.
- C. The manufacturer shall confirm and state the measure of and the set of the features that support the ease and speed of which corrective maintenance (CM) and preventive maintenance (PM) can be conducted on the proposed system. The Mean Time to Repair (MTTR), the measure used to quantify the time required to perform CM and Mean Preventive Maintenance Time (MPMT), a measure commonly used to quantify the time required to perform PM are to be confirmed by the manufacturer.
- D. Ensure that conduit size and wire quantity, size, and type are suitable for the equipment supplied. Coordinate all design information with the Electrical Contractor. Review the proper installation of each type of VFD unit with the equipment supplier prior to installation.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Provide in accordance with Section 01600 "Deliver, Storage and Handling" and as specified.
- B. Shipping:
 1. Ship equipment and materials, except where partial disassembly is required by transportation regulations or for protection, complete with identification and quantity of items.
 2. Pack spare parts in containers bearing labels clearly designating contents and pieces of equipment for which intended.
 3. Deliver spare parts after installation but as specified before start-up of drives. Deliver to Owner after completion of work.
- C. Storage:
 1. Inspect and inventory items upon delivery to site.
 2. Store and safeguard equipment, material and spare parts.
 - a. If the equipment cannot be placed into service after its receipt, store in a closed building or structure, in a clean, dry and ventilated area free from

temperature, dirt and moisture extremes. Acceptable storage temperatures are from 32 degrees F (0 degrees C) to 104 degrees F (40 degrees C) with temporary heaters provided within enclosures to prevent condensation. Provide heavy plastic envelope directly over motor control center to protect against dust, dirt, and moisture. Provide lifting angles outside of envelope.

1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials per manufacturer's recommendation and as approved by Owner. Extra materials shall match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1.7 WARRANTY AND SERVICE

- A. Guarantee components, parts, and assemblies supplied by manufacturer against defects in materials and workmanship for a period of 24 months after turning the equipment over to the Owner, and in this time period include onsite, parts and labor warranty. All labor to be performed by local factory trained service engineers.
- B. Ensure that equipment manufacturer has local branch office staff with trained, full-time employees who are capable of performing testing, inspecting, repair, and maintenance services.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturer shall have at least five years commercial experience in the manufacture, operation and servicing of equipment of type, size, quality, performance, and reliability equal to that specified.
- B. Variable Frequency Drive Units:
 1. ABB Drives, ACQ580-01 Series Drives.
 2. Eaton, PowerXL DG1 Series Drives.
 3. Rockwell Automation, PF753 ND 6 Series Drives.

2.2 SYSTEM DESCRIPTION

- A. General Requirements for VFDs:
 1. VFDs and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
 2. Comply with NEMA ICS 7, NEMA ICS 61800-2, and UL 508C.
- B. Application: Constant torque and variable torque. Provide as required for the application.
- C. VFD Description: Variable Frequency Drive, consisting of power converter that employs pulse-width-modulated inverter, factory built and tested in an enclosure, with integral disconnecting means and overcurrent and overload protection; listed and labeled by an NRTL as a complete unit; arranged to provide self-protection, protection, and adjustable-

speed control of one or more three-phase induction motors by adjusting output voltage and frequency.

1. Units suitable for operation of NEMA MG 1, Design A and Design B motors, as defined by NEMA MG 1, Section IV, Part 30, "Application Considerations for Constant Speed Motors Used on a Sinusoidal Bus with Harmonic Content and General Purpose Motors Used with Adjustable-Voltage or Adjustable-Frequency Controls or Both."
 2. Units suitable for operation of inverter-duty motors as defined by NEMA MG 1, Section IV, Part 31, "Definite-Purpose Inverter-Fed Polyphase Motors."
 3. Listed and labeled for integrated short-circuit current (withstand) rating by an NRTL acceptable to authorities having jurisdiction.
- D. Design and Rating: Match load type, such as fans, blowers, and pumps; and type of connection used between motor and load such as direct or through a power-transmission connection.
- E. Output Rating: Three phase; 10 to 66 Hz, with torque constant as speed changes; maximum voltage equals input voltage.
- F. Unit Operating Requirements:
1. Input AC Voltage Tolerance: Plus 10 and minus 10 percent of VFD input voltage rating.
 2. Input AC Voltage Unbalance: Not exceeding 3 percent.
 3. Input Frequency Tolerance: Plus or minus 3 percent of VFD frequency rating.
 4. Minimum Efficiency: 96 percent at 60 Hz, full load.
 5. Minimum Displacement Primary-Side Power Factor: 96 percent under any load or speed condition.
 6. Minimum Short-Circuit Current (Withstand) Rating: Refer to plans.
 7. Ambient Temperature Rating: Not less than 32 deg F (0 deg C) and not exceeding 104 deg F (40 deg C).
 8. Humidity Rating: Less than 95 percent (noncondensing).
 9. Altitude Rating: Not exceeding 3300 feet.
 10. Starting Torque: Minimum 100 percent of rated torque from 3 to 60 Hz.
 11. Speed Regulation: Plus or minus 5 percent.
 12. Output Carrier Frequency: Selectable; 0.5 to 15 kHz.
 13. Stop Modes: Programmable; includes fast, free-wheel, and dc injection braking.
- G. Inverter Logic: Microprocessor based, 16 bit, isolated from all power circuits.
- H. Isolated Control Interface: Allows VFDs to follow remote-control signal over a minimum 40:1 speed range.
1. Signal: Electrical.
- I. Internal Adjustability Capabilities:
1. Minimum Speed: 5 to 25 percent of maximum rpm.
 2. Maximum Speed: 80 to 100 percent of maximum rpm.
 3. Acceleration: 0.1 to 999.9 seconds.
 4. Deceleration: 0.1 to 999.9 seconds.
 5. Current Limit: 30 to minimum of 150 percent of maximum rating.
- J. Self-Protection and Reliability Features:
1. Loss of Input Signal Protection: Selectable response strategy, including speed default to a percent of the most recent speed, a preset speed, or stop; with alarm.
 2. Under- and overvoltage trips.

3. Inverter overcurrent trips.
 4. VFD and Motor-Overload/Overtemperature Protection: Microprocessor-based thermal protection system for monitoring VFDs and motor thermal characteristics, and for providing VFD overtemperature and motor-overload alarm and trip; settings selectable via the keypad.
 5. Critical frequency rejection, with three selectable, adjustable deadbands.
 6. Instantaneous line-to-line and line-to-ground overcurrent trips.
 7. Loss-of-phase protection.
 8. Reverse-phase protection.
 9. Short-circuit protection.
 10. Motor-overtemperature fault.
- K. Automatic Reset/Restart: Attempt three restarts after drive fault or on return of power after an interruption and before shutting down for manual reset or fault correction; adjustable delay time between restart attempts.
- L. Bidirectional Autospeed Search: Capable of starting VFD into rotating loads spinning in either direction and returning motor to set speed in proper direction, without causing damage to drive, motor, or load.
- M. Torque Boost: Automatically varies starting and continuous torque to at least 1.5 times the minimum torque to ensure high-starting torque and increased torque at slow speeds.
- N. Motor Temperature Compensation at Slow Speeds: Adjustable current fallback based on output frequency for temperature protection of self-cooled, fan-ventilated motors at slow speeds.
- O. Integral Input Disconnecting Means and OCPD: UL 489, instantaneous-trip circuit breaker with pad-lockable, door-mounted handle mechanism.
 1. Disconnect Rating: Not less than 115 percent of VFD input current rating.
 2. NO alarm contact that operates only when circuit breaker has tripped.
- P. To avoid damage of output IGBT components or slamming to motors, an E-stop operation shall trigger a freewheel stop on the drive before the main 3 phase contacts open from the E-stop.

2.3 PERFORMANCE REQUIREMENTS

- A. The term "withstand" means "the unit will remain in place without separation of any parts when subjected to the seismic forces specified."

2.4 CONTROLS AND INDICATION

- A. Refer to existing record and shop drawings for control diagrams showing wiring connections. Remove existing drive and reconnect control wiring to match existing functionality.
- B. Panel-Mounted Operator Station/Human Machine Interface (HMI): Manufacturer's standard front-accessible, sealed keypad and plain-English-language digital display;

allows complete programming, program copying, operating, monitoring, and diagnostic capability.

1. Keypad: In addition to required programming and control keys, include keys for HAND, OFF, and AUTO modes.
 2. Indicating Devices: Digital display mounted flush in VFD door and connected to display VFD parameters including, but not limited to:
 - a. Output frequency (Hz).
 - b. Motor speed (rpm).
 - c. Motor status (running, stop, fault).
 - d. Motor current (amperes).
 - e. Motor torque (percent).
 - f. Fault or alarming status (code).
 - g. PID feedback signal (percent).
 - h. DC-link voltage (V dc).
 - i. Set point frequency (Hz).
 - j. Motor output voltage (V ac).
 3. Security Access: Provide electronic security access to controls through identification and password with at least three levels of access: View only; view and operate; and view, operate, and service.
 - a. Control Authority: Supports at least four conditions: Off, local manual control at VFD, local automatic control at VFD, and automatic control through a remote source.
- C. Historical Logging Information and Displays:
1. Real-time clock with current time and date.
 2. Running log of total power versus time.
 3. Total run time.
 4. Fault log, maintaining last four faults with time and date stamp for each.
- D. Control Signal Interfaces:
1. Electric Input Signal Interface:
 - a. A minimum of two programmable analog inputs: 4-20mA dc.
 - b. A minimum of six multifunction programmable digital inputs.
- E. Output Signal Interface: A minimum of two programmable analog output signal(s) 4-20mA dc, which can be configured for any of the following:
1. Output frequency (Hz).
 2. Output current (load).
 3. DC-link voltage (V dc).
 4. Motor torque (percent).
 5. Motor speed (rpm).
 6. Set point frequency (Hz).
- F. Remote Indication Interface: A minimum of six programmable dry-circuit relay outputs (120-V ac, 1 A) for remote indication of the following:
1. Motor running.
 2. Set point speed reached.
 3. Fault and warning indication (overtemperature or overcurrent).
 4. PID high- or low-speed limits reached.
 5. Drive in remote.
- G. Provide an Ethernet port for network connection.
1. VFD shall be capable of communicating via Modbus TCP/IP protocol.
 2. Network to allow a selection of standard and custom register values to communicate drive parameters, including:

- a. Drive fault
 - b. Overload
 - c. Trip
 - d. Loss of control power
 - e. Speed
 - f. Power (kW)
 - g. Amps (Phase A, B and C)
 - h. Voltage (Phase A-B, B-C, C-A)
3. Provide all components and drive programming to allow network interface with control system.

2.5 LINE CONDITIONING AND FILTERING

- A. All VFDs shall include 3% effective impedance. If integral to the VFD, a DC choke shall be used. External line reactors must be used if no DC Choke is integral to the VFD.
- B. All VFDs shall include 5% effective line impedance. If integral to the VFD, a DC choke may be used in series with a 3% reactor. An external 5% impedance reactor must be used if no DC Choke is integral to the VFD.

2.6 SHOP TESTING

- A. Provide in accordance with Section 01400.
- B. Provide a factory performance test for each VFD unit. The test to consist of simulating the expected load to be driven. The drive to operate the actual motor load through the expected speed ranges. Test length to be a minimum of two hours.
- C. Provide a factory burn-in test for 24 hours minimum and a control and alarm test on each drive unit by simulating each control signal and each alarm function to verify proper and correct drive unit action.
- D. Provide typical prototype factory test data for short circuit testing of each type of drive supplied. Data to verify that each drive can be started into a line-to-line fault and line-to-ground fault on the drive terminals. Each drive can be operating at full load and be subjected to a line-to-line fault and line-to-ground fault on the drive terminals. All phases (A, B & C) to be included in test data.
- E. Provide certified documentation of all tests performed.
- F. Provide above stated tests in addition to routine factory tests.

PART 3 EXECUTION

3.1 INSPECTION

- A. Examine VFD location for satisfactory preparation. Check conduits and raceway location for connection to units.
- B. Visually inspect delivered unit(s) and accessories for conformance with specification and drawings.
- C. Verify availability of appropriate pacing signal.

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- D. Maintain VFD in upright position at all times.
- E. Protect VFD against damage. Store drive in clean, dry environment with temperature and humidity within range as specified by drive manufacturer. Energize space heaters during storage as recommended by manufacturer.

3.2 INSTALLATION

- A. Erect, install, and start-up equipment.
- B. The VFDs shall be installed as shown on the drawings, in accordance with the manufacturer's installation instructions, and accepted shop drawings.
- C. Install VFDs to allow complete door swing required for component removal. This is specifically required where a VFD is set in the corner of a room.
- D. Factory-trained service personnel, other than sales representatives, shall supervise field installation, inspect, make final adjustments and operational checks, make functional checks of spare parts, and prepare a final report for record purposes. Adjust control and instrument equipment until this equipment has been field tested.

3.3 FIELD TESTING

- A. Provide in accordance with Section 01400 "Quality Requirements".
- B. Perform testing checkout, and start-up for VFD equipment under technical direction of manufacturer's service engineer. Under no circumstances energize any portion of the drive system without authorization from manufacturer's technical representative.
- C. Field Tests:
 - 1. Test each drive over the total speed range that it will be required to operate through for the load being driven for a minimum of two hours. Determine for each drive, motor, and load combination the following at minimum speed, maximum speed, and at 1/3 and 2/3 points between the minimum and maximum speeds:
 - a. Input power (kW), voltage, current and RMS power factor on the line side of the drive isolation device.
 - b. Output to the driven load in kilowatts.
 - c. For each drive, measure the harmonic voltage distortion and harmonic current distortion for each harmonic at the main distribution bus for maximum and minimum load conditions.
 - d. Measure the total harmonic voltage distortion and total harmonic current distortion at each PCC for maximum and minimum load conditions.
 - 2. Test each drive by using the actual control signal for remote and local operation.
 - 3. Test each drive's alarm functions.
 - 4. Perform all tests in the presence of the Owner's representative.
 - 5. Perform the above test in addition to the manufacturer's normal field tests.
 - 6. Submit final test report with summary comparing field test data with harmonic analysis design calculated values for each drive.
 - 7. Testing determined not in compliance with Contract documents shall be repeated by the Contractor at no additional cost to the Owner.

3.4 DEMONSTRATION

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- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, reprogram, and maintain the equipment.
- B. Training shall be a minimum of four (4) hours in operation and maintenance for up to five (5) Owner representatives. Schedule training with at least five (5) working days advance notification.

3.5 CONTRACT CLOSEOUT

- A. Provide in accordance with Section 01700 "Execution and Closeout Requirements".

END OF SECTION

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

VILLAGE OF BUFFALO GROVE, ILLINOIS DEPARTMENT OF PUBLIC WORKS

VARIABLE FREQUENCY DRIVE (VFD) REPLACEMENTS PUMPING STATIONS NO. 6 AND 7

APRIL 2024

PRE-FINAL SUBMITTAL

PUMPING STATION NO. 6 LOCATION

120 HORATIO BLVD.
BUFFALO GROVE, IL 60089

PUMPING STATION NO. 7 LOCATION

400 LASALLE LN.
BUFFALO GROVE, IL 60089

SHEET INDEX

<u>SHEET No.</u>	<u>SHEET TITLE</u>
G1	TITLE SHEET AND DRAWING INDEX
E1	SYMBOLS
E2	SYMBOLS
E3	PUMPING STATION NO. 6 POWER PLAN
E4	PUMPING STATION NO. 6 MCC-A ONE-LINE DIAGRAM
E5	PUMPING STATION NO. 6 MCC-A AND MCC-B FRONT ELEVATIONS
E6	PUMPING STATION NO. 6 MCC-B ONE LINE DIAGRAM
E7	PUMPING STATION NO. 7 POWER PLAN
E8	PUMPING STATION NO. 7 EXISTING ONE LINE DIAGRAM
E9	STANDARD ELECTRICAL DETAILS

AECOM

303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601

AECOM PROJECT NUMBER: 60715566

SHEET 1 OF 10

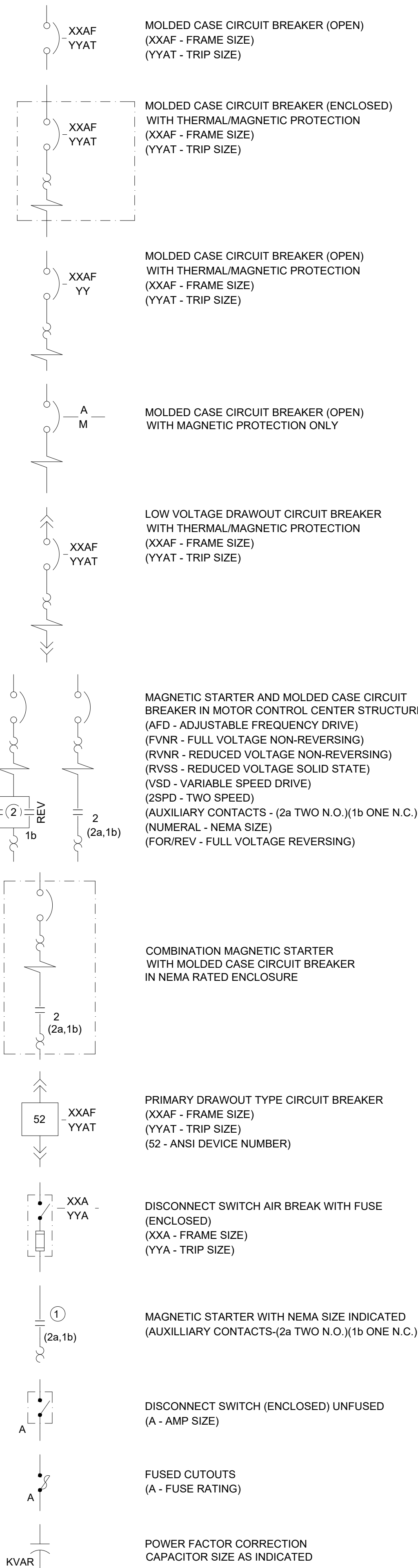
Packet Pg. 264

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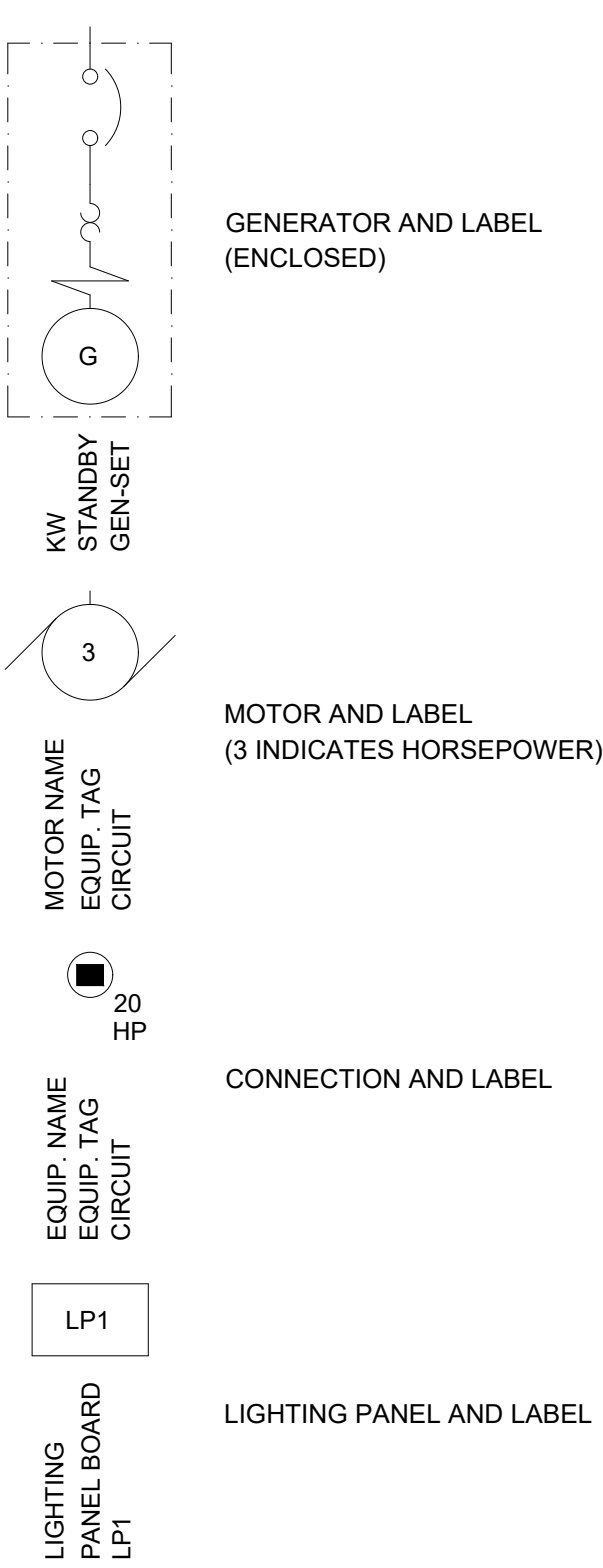
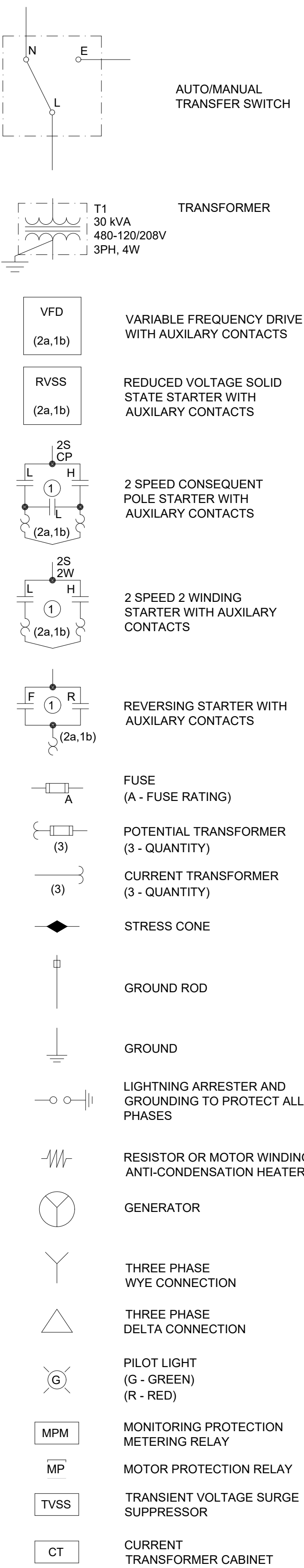
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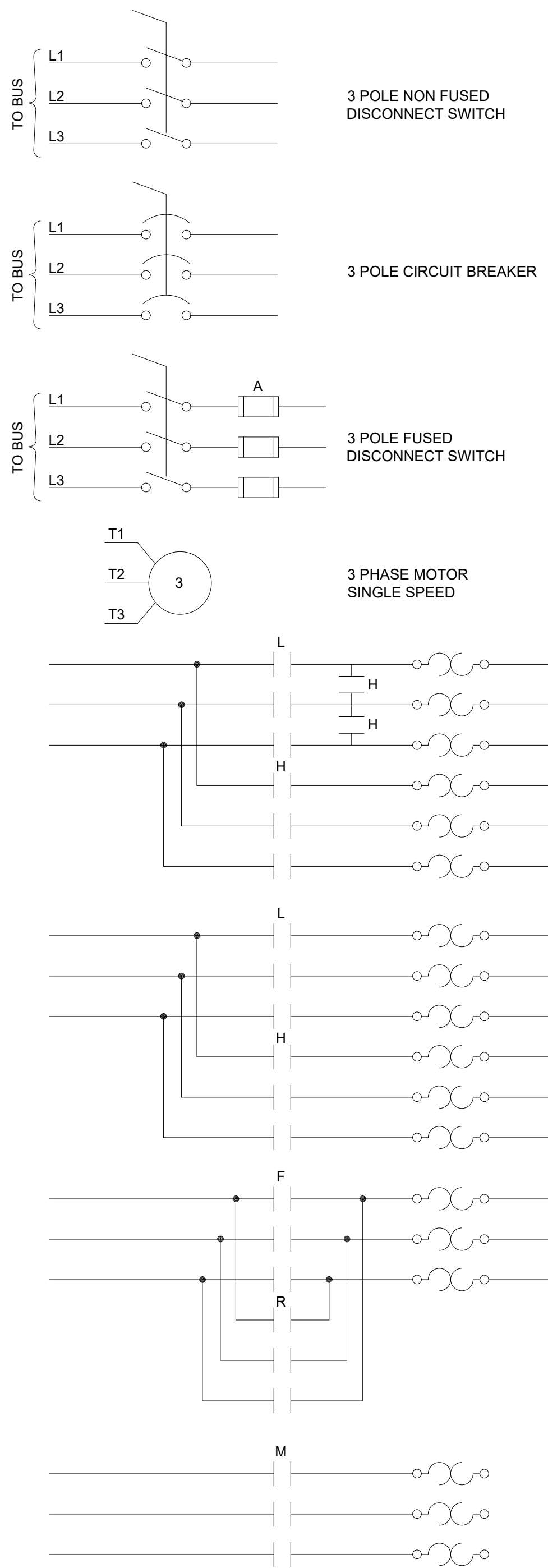


ONE-LINE SYMBOLS

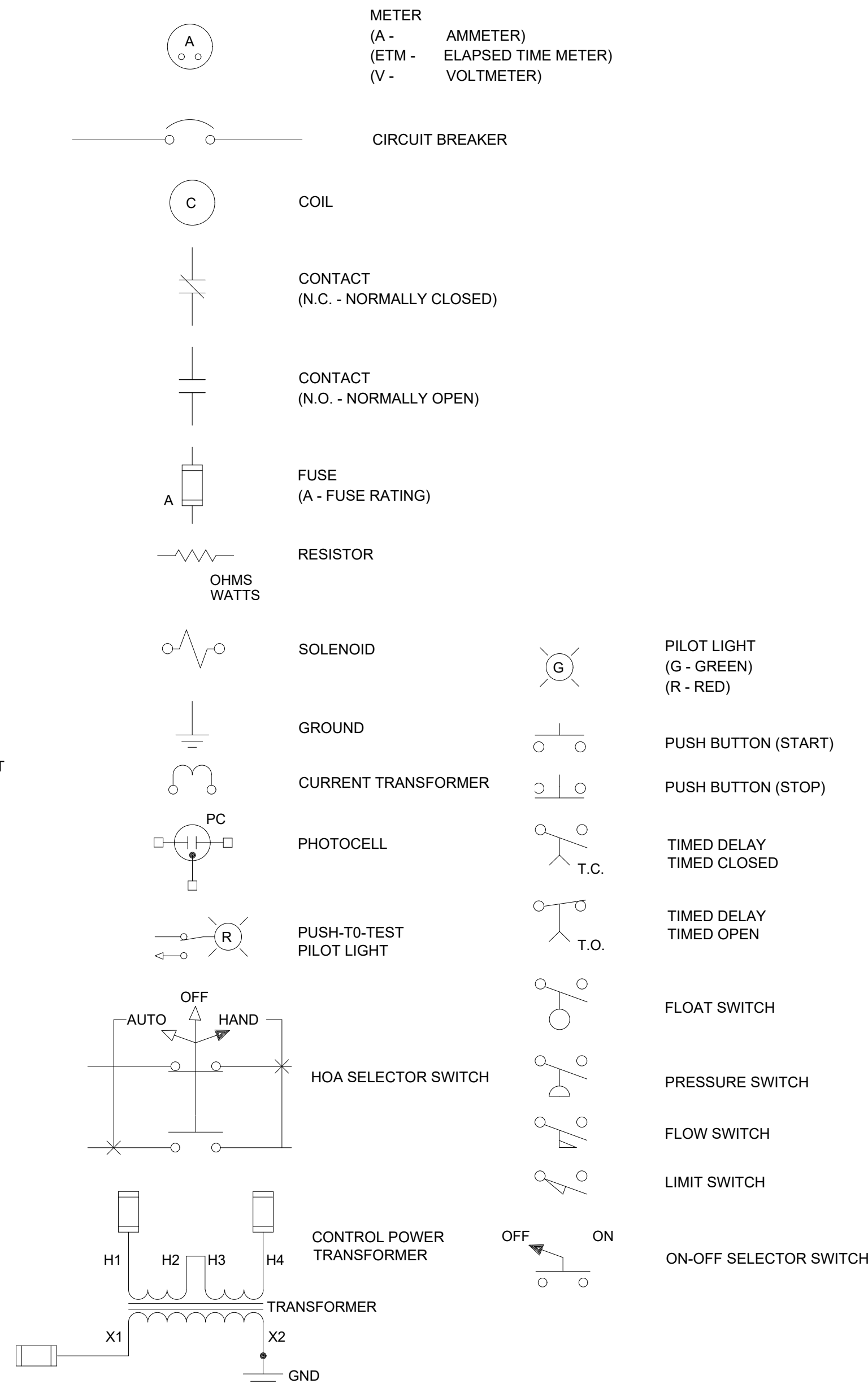


AMMETER
(AS - AMMETER PHASE SWITCH)
(CM - CUSTOMER METER)
(D - DEMAND METER)
(GD - GROUND DETECTOR)
(HZ - FREQUENCY METER)
(K - KEY INTERLOCK)
(MO - MOTOR OPERATOR)
(P - SYNCHROSCOPE)
(PF - POWER FACTOR METER)
(ST - SHUNT TRIP)
(TWM - TOTALIZING WATT HOUR METER)
(V - VOLTMMETER)
(VA - VOLT-AMMETER)
(VAR - VARMETER)
(VS - VOLTMMETER PHASE SWITCH)
(W - WATTMETER)
(WM - WATTMETER)

CONTROL STATION
(AM - AUTO-MANUAL)
(CAM - COMPUTER-AUTO-MANUAL)
(CM - COMPUTER-MANUAL)
(DCS - DISTRIBUTED CONTROL SYSTEM)
(DS - DOOR SWITCH)
(ETM - ELAPSED TIME METER)
(FR - FORWARD-REVERSE)
(HLO - HIGH-LOW-OFF SWITCH)
(HOA - HAND-OFF-AUTO)
(HOR - HAND-OFF-REMOTE)
(LOS - LOCK-OUT-STOP)
(LR - LOCAL-REMOTE)
(MA - MANUAL-REMOTE)
(OC - OPEN-CLOSED)
(OCA - OPEN-CLOSED-AUTO)
(OCS - OPEN-CLOSED-STOP)
(OO - ON-OFF MAINTAINED CONTACT)
(OOA - ON-OFF-AUTO)
(PB - PUSHBUTTON)
(SF - SLOWER-FASTER)
(SS - START-STOP MOMENTARY CONTACT)
(USG - ULTRA SONIC GENERATOR)
(ZS - LIMIT SWITCH)



SCHEMATIC SYMBOLS



NOTE:

1. THIS LIST OF ABBREVIATIONS AND SYMBOLS SHOWN IS A STANDARD LIST. NOT
ALL ABBREVIATIONS AND SYMBOLS ARE USED IN THESE CONTRACT DRAWINGS.

NOT FOR CONSTRUCTION

VILLAGE OF BUFFALO GROVE, ILLINOIS
DEPARTMENT OF PUBLIC WORKS

PROJECT NO: 60715566
CAD DWG FILE: e2
DESIGNED BY: CS
CHECKED BY: MM
APPROVED BY: CL

DATE: MARCH, 2024
SCALE: NOT TO SCALE

E2
SHEET 3 OF 10

AECOM TECHNICAL SERVICES, INC.
CHICAGO, ILLINOIS
PHONE (312) 938-0300

AECOM

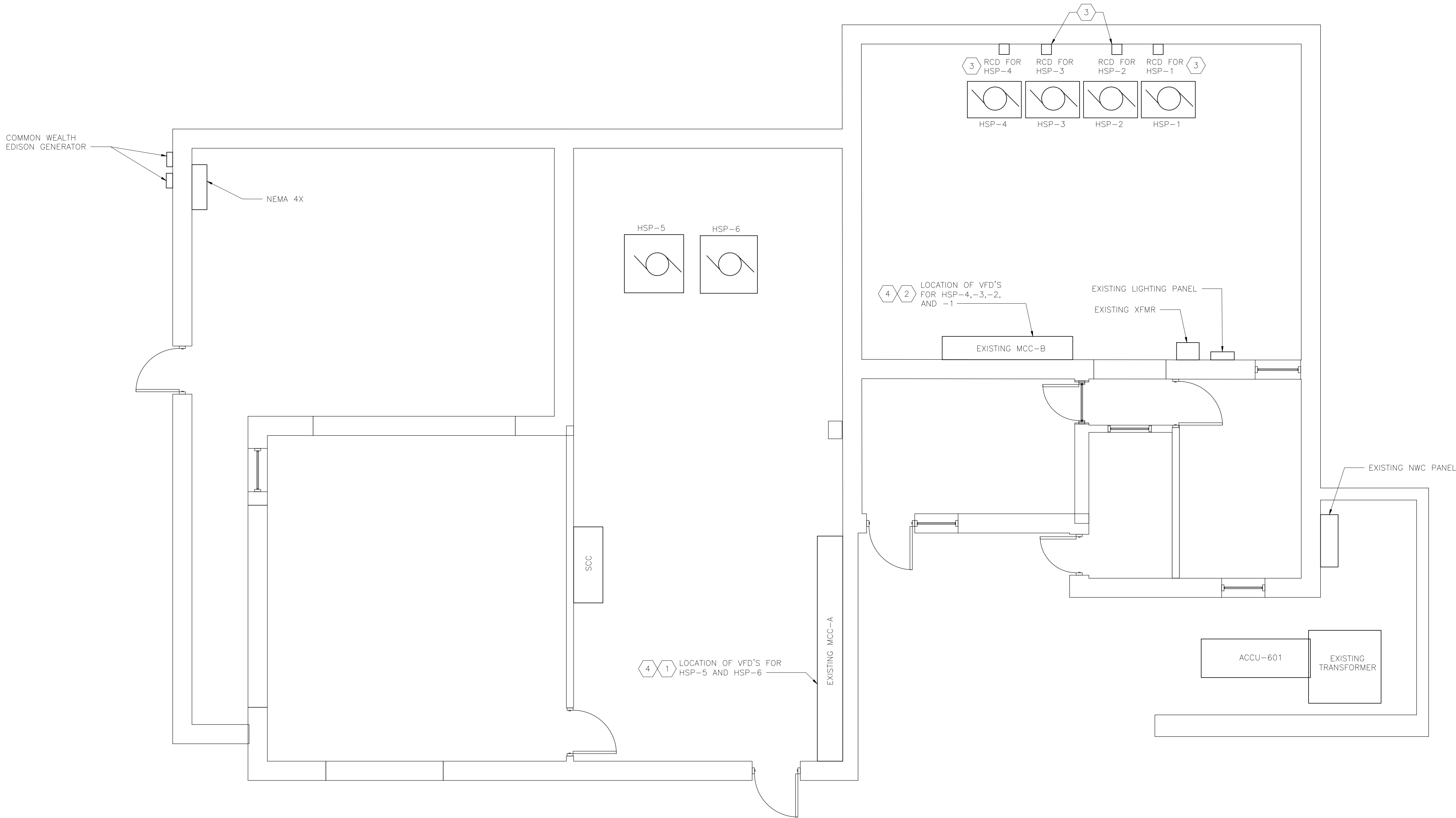
SYMBOLS
ELECTRICAL

PRE-FINAL SUBMITTAL

P:\V\FILENAME: Z:\CHICAGO\USCH\1\DCS\PROJECTS\WFR\60715566_PSG-PUMPSTATION_NO.6_VFD\300_CAD_GS\300_CAD_20-SHEETS\E3.DWG
LAST UPDATE: Tuesday, March 19, 2024 2:56:08 PM
PLOT DATE: Tuesday, March 19, 2024 3:24:01 PM

ARCH D - 19-Mar-24

PUMPING STATION NO. 6 GROUND LEVEL



- PLAN NOTES**
1. PROVIDE (2) NEW 150 HP RATED OPEN STYLE VARIABLE FREQUENCY DRIVES INSIDE THE MCC-A COMPARTMENTS FOR CONTROL OF EACH HSP-5 AND HSP-6, RESPECTIVELY.
 2. PROVIDE (4) NEW 60 HP RATED OPEN STYLE VARIABLE FREQUENCY DRIVES INSIDE THE MCC-B COMPARTMENTS FOR CONTROL OF EACH HSP-1, HSP-2, HSP-3, AND HSP-4, RESPECTIVELY.
 3. PROVIDE (4) NEW EMERGENCY STOP PUSH/BUTTON STYLE SWITCHES FOR EACH OF HSP-1, HSP-2, HSP-3 AND HSP-4, RESPECTIVELY.
 4. PROVIDE NEW HUMAN MACHINE INTERFACE (HMI) TERMINAL.

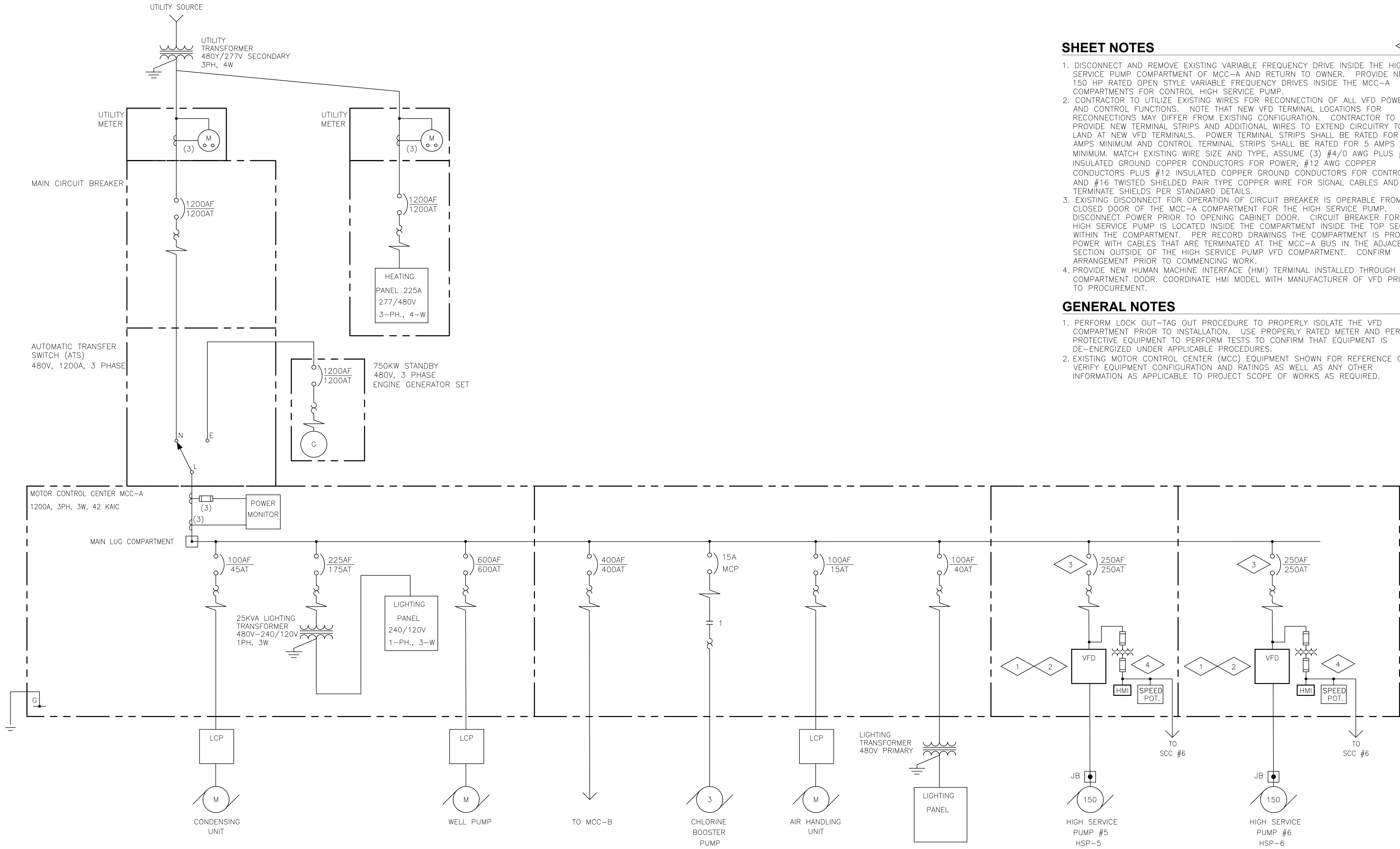
- GENERAL NOTES**
1. REFER TO SHEETS E4 AND E5 FOR INFORMATION ON MOTOR CONTROL CENTER MCC-A.
 2. REFER TO SHEETS E5 AND E6 FOR INFORMATION ON MOTOR CONTROL MCC-B.

NOT FOR CONSTRUCTION

PROJECT NO: 60715566		DATE: MARCH, 2024	
CAD DWG FILE: E3		SCALE: NOT TO SCALE	
DESIGNED BY: CS		APPROVED BY: CL	
CHECKED BY: MM		E3	
SHEET 4 OF 10		VILLAGE OF BUFFALO GROVE, ILLINOIS DEPARTMENT OF PUBLIC WORKS	
PUMPING STATION NO. 6 POWER PLAN		ELECTRICAL	
AECOM TECHNICAL SERVICES, INC. 1500 N. MICHIGAN AVE., SUITE 1000 CHICAGO, ILLINOIS 60610 PHONE (312) 938-0000		PRE-FINAL SUBMITTAL	
MARK		DATE	MADE BY
CHECKED		DESCRIPTION	
REVISIONS			

PATH/FILENAME: Z:\CHICAGO\USCHG\USCHG\PROJECTS\WFR\60715566_196--PUMPSTATION_NO.6_VFD_910_CAD_GS\910_CAD_20-SHEETS\E14.DWG
LAST UPDATE: Tuesday, March 19, 2024 3:01:59 PM
PLOT DATE: Tuesday, March 19, 2024 3:22:25 PM

ARCH D - 19-Mar-24



PUMPING STATION NO. 6 MOTOR CONTROL CENTER MCC-A ONE LINE DIAGRAM

SHEET NOTES

- DISCONNECT AND REMOVE EXISTING VARIABLE FREQUENCY DRIVE INSIDE THE HIGH SERVICE PUMP COMPARTMENT OF MCC-A AND RETURN TO OWNER. PROVIDE NEW 150 HP RATED OPEN STYLE VARIABLE FREQUENCY DRIVES INSIDE THE MCC-A COMPARTMENTS FOR CONTROL HIGH SERVICE PUMP.
- CONTRACTOR TO UTILIZE EXISTING WIRES FOR RECONNECTION OF ALL VFD POWER AND CONTROL FUNCTIONS. NOTE THAT NEW VFD TERMINAL LOCATIONS FOR RECONNECTIONS MAY DIFFER FROM EXISTING CONFIGURATION. CONTRACTOR TO PROVIDE NEW TERMINAL STRIPS AND ADDITIONAL WIRES TO EXTEND CIRCUITRY TO LAND AT NEW VFD TERMINALS. POWER TERMINAL STRIPS SHALL BE RATED FOR 250 AMPS MINIMUM AND CONTROL TERMINAL STRIPS SHALL BE RATED FOR 5 AMPS MINIMUM. MATCH EXISTING WIRE SIZE AND TYPE, ASSUME (3) #4/0 AWG PLUS #4 INSULATED GROUND COPPER CONDUCTORS FOR POWER, #12 AWG COPPER CONDUCTORS PLUS #12 INSULATED COPPER GROUND CONDUCTORS FOR CONTROL, AND #16 TWISTED SHIELDED PAIR TYPE COPPER WIRE FOR SIGNAL CABLES AND TERMINATE SHIELDS PER STANDARD DETAILS.
- EXISTING DISCONNECT FOR OPERATION OF CIRCUIT BREAKER IS OPERABLE FROM THE CLOSED DOOR OF THE MCC-A COMPARTMENT FOR THE HIGH SERVICE PUMP. DISCONNECT POWER PRIOR TO OPENING CABINET DOOR. CIRCUIT BREAKER FOR THE HIGH SERVICE PUMP IS LOCATED INSIDE THE COMPARTMENT INSIDE THE TOP SECTION WITHIN THE COMPARTMENT. PER RECORD DRAWINGS THE COMPARTMENT IS PROVIDED POWER WITH CABLES THAT ARE TERMINATED AT THE MCC-A BUS IN THE ADJACENT SECTION OUTSIDE OF THE HIGH SERVICE PUMP VFD COMPARTMENT. CONFIRM ARRANGEMENT PRIOR TO COMMENCING WORK.
- PROVIDE NEW HUMAN MACHINE INTERFACE (HMI) TERMINAL INSTALLED THROUGH VFD COMPARTMENT DOOR. COORDINATE HMI MODEL WITH MANUFACTURER OF VFD PRIOR TO PROCUREMENT.

GENERAL NOTES

- PERFORM LOCK OUT-TAG OUT PROCEDURE TO PROPERLY ISOLATE THE VFD COMPARTMENT PRIOR TO INSTALLATION. USE PROPERLY RATED METER AND PERSONAL PROTECTIVE EQUIPMENT TO PERFORM TESTS TO CONFIRM THAT EQUIPMENT IS DE-ENERGIZED UNDER APPLICABLE PROCEDURES.
- EXISTING MOTOR CONTROL CENTER (MCC) EQUIPMENT SHOWN FOR REFERENCE ONLY. VERIFY EQUIPMENT CONFIGURATION AND RATINGS AS WELL AS ANY OTHER INFORMATION AS APPLICABLE TO PROJECT SCOPE OF WORKS AS REQUIRED.

NOT FOR CONSTRUCTION

VILLAGE OF BUFFALO GROVE, ILLINOIS
DEPARTMENT OF PUBLIC WORKS

PUMPING STATION NO. 6 MCC-A ONE-LINE DIAGRAM

ELECTRICAL

PROJECT NO: 60715566
CAD DWG FILE: E4
DESIGNED BY: CS
CHECKED BY: MM
APPROVED BY: CL

DATE: MARCH, 2024
SCALE: NOT TO SCALE

E4

SHEET 5 OF 10

AECOM TECHNICAL SERVICES, INC.
200 N. LAKE STREET, SUITE 200
CHICAGO, ILLINOIS 60601
PHONE (312) 938-0300

AECOM

PRE-FINAL SUBMITTAL

ELECTRICAL

PATH/FILENAME: Z:\CHICAGO\USCHG\USCHG\PROJECTS\WTR\60715566_196--PUMPSTATION_NO.6_VFD\910_CAD_GS\910_CAD_20-SHEETS\ELEV.DWG
LAST UPDATE: Tuesday, March 19, 2024 3:05:07 PM
PLOT DATE: Tuesday, March 19, 2024 3:20:27 PM

ARCH 0 - 19-Mar-24

A								
B	1A 1200 AMP MAIN CIRCUIT BREAKER	2A 1200 AMP AUTOMATIC TRANSFER SWITCH	3A HEATING PANEL	4A 1200 AMP MAIN INCOMING LUGS	5A 600 AMP WELL PUMP DISCONNECT	6A 400 AMP MCC-B DISCONNECT	7A HIGH SERVICE PUMP NO. 5 VFD	8A HIGH SERVICE PUMP NO. 6 VFD
C								
D				4C CONDENSING UNIT DISCONNECT				
E								
F				4E POWER MONITOR	5E 240/120V ELECTRIC PANEL	4E CHLORINE BOOSTER PUMP		
G								
H				4F 480V ELECTRIC PANEL DISCONNECT		4G AIR HANDLING UNIT DISCONNECT		
I								
J				4H 480V-240/120V 25KVA ELECTRIC PANEL TRANSFORMER		4I 480V ELECTRIC PANEL TRANSFORMER		
K						4L SPACE		
L					5L SPACE			

EXISTING MOTOR CONTROL CENTER MCC-A
FRONT ELEVATION

A					
B	1A INCOMING LUGS	2A HIGH SERVICE PUMP NO. 1 VFD	3A HIGH SERVICE PUMP NO. 2 VFD	4A HIGH SERVICE PUMP NO. 3 VFD	5A HIGH SERVICE PUMP NO. 4 VFD
C					
D					
E	1D HIGH SERVICE PUMP NO. 1 DISCONNECT				
F					
G	1F HIGH SERVICE PUMP NO. 2 DISCONNECT				
H					
I	1H SPACE				
J	1I HIGH SERVICE PUMP NO. 3 DISCONNECT				
K					
L	1K HIGH SERVICE PUMP NO. 4 DISCONNECT				

EXISTING MOTOR CONTROL CENTER MCC-B
FRONT ELEVATION

NOT FOR CONSTRUCTION

VILLAGE OF BUFFALO GROVE, ILLINOIS
DEPARTMENT OF PUBLIC WORKS

PUMPING STATION NO. 6 MCC-A AND MCC-B
FRONT ELEVATIONS
ELECTRICAL

PROJECT NO: 60715566
CAD DWG FILE: es
DESIGNED BY: CS
CHECKED BY: MM
APPROVED BY: CL

DATE: MARCH, 2024
SCALE: NOT TO SCALE

E5
SHEET 6 OF 10

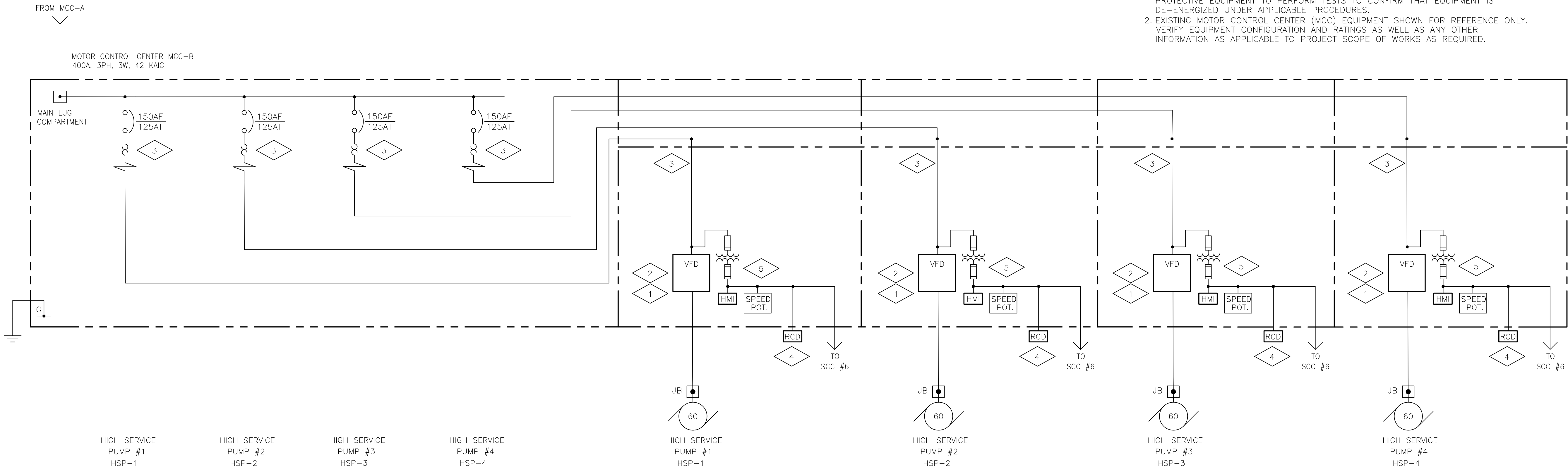
AECOM
AECOM TECHNICAL SERVICES, INC.
1000 N. LAKE DRIVE
CHICAGO, ILLINOIS 60607
PHONE (312) 938-0300

PRE-FINAL SUBMITTAL

Attachment: VFD Replacement PS6-PS7-Contract (O-2024-49 : Award of Bid Pump House Improvements)

P:\PROJECTS\24-CHICAGO-USEC\1\DCS\PROJECTS\WPR\60715566-REG-PUMPSTATION NO. 6 VFD\300_040_05\10_040\30-SHEETS\LEVELING
LAST UPDATE: Tuesday, March 19, 2024 3:04:52 PM
FLOT DATE: Tuesday, March 19, 2024 3:32:07 PM
ARCH D - 19-Mar-24

PUMPING STATION NO. 6 MOTOR CONTROL CENTER MCC-B ONE LINE DIAGRAM



SHEET NOTES

1. DISCONNECT AND REMOVE EXISTING VARIABLE FREQUENCY DRIVE INSIDE THE HIGH SERVICE PUMP COMPARTMENT OF MCC-B AND RETURN TO OWNER. PROVIDE NEW 60 HP RATED OPEN STYLE VARIABLE FREQUENCY DRIVES INSIDE THE MCC-A COMPARTMENTS FOR CONTROL HIGH SERVICE PUMP.
2. CONTRACTOR TO UTILIZE EXISTING WIRES FOR RECONNECTION OF ALL VFD POWER AND CONTROL FUNCTIONS. NOTE THAT NEW VFD TERMINAL LOCATIONS FOR RECONNECTIONS MAY DIFFER FROM EXISTING CONFIGURATION. CONTRACTOR TO PROVIDE NEW TERMINAL STRIPS AND ADDITIONAL WIRES TO EXTEND CIRCUITRY TO LAND AT NEW VFD TERMINALS. POWER TERMINAL STRIPS SHALL BE RATED FOR 125 AMPS MINIMUM AND CONTROL TERMINAL STRIPS SHALL BE RATED FOR 5 AMPS MINIMUM. MATCH EXISTING WIRE SIZE AND TYPE, ASSUME (3) #3 AWG PLUS #3 INSULATED GROUND COPPER CONDUCTORS FOR POWER, #12 AWG COPPER CONDUCTORS PLUS #12 INSULATED COPPER GROUND CONDUCTORS FOR CONTROL, AND #16 TWISTED SHIELDED PAIR TYPE COPPER WIRE FOR SIGNAL CABLES AND TERMINATE SHIELDS PER STANDARD DETAILS.
3. EXISTING DISCONNECT FOR OPERATION OF CIRCUIT BREAKER IS OPERABLE FROM THE CLOSED DOOR OF THE MCC-B COMPARTMENT FOR THE CIRCUIT BREAKER FEEDING THE VFD COMPARTMENT. THE CIRCUIT BREAKER AND VFD OCCUPY SEPARATE COMPARTMENTS OF THE VFD LINEUP. DISCONNECT POWER USING CIRCUIT BREAKER FOR VFD PRIOR TO OPENING CABINET DOOR FOR VFD CONTROLLING THE HIGH SERVICE PUMP. PER RECORD DRAWINGS THE VFD COMPARTMENT IS PROVIDED POWER WITH CABLES THAT ARE TERMINATED AT THE MCC-B BUS IN THE ADJACENT SECTION OUTSIDE OF THE HIGH SERVICE PUMP VFD COMPARTMENT. CONFIRM ARRANGEMENT PRIOR TO COMMENCING WORK.
4. PROVIDE NEW EMERGENCY STOP PUSHBUTTON STYLE SWITCHES FOR THE HIGH SERVICE PUMP. PROVIDE PUSHBUTTON STYLE TWO POSITION SWITCH WITH RED MUSHROOM HEAD PUSH TO STOP/PULL OUT TO ENABLE START FUNCTIONALITY. PROVIDE NAMEPLATE WITH "STOP" PRINTED ON IT. CONFIRM STYLE OF SWITCH AND NAMEPLATE TEXT WITH OWNER PRIOR TO PROCUREMENT AND INSTALLATION. THIS PUSHBUTTON WILL FUNCTION AS THE REMOTE CONTROL DISABLE (RCD) FOR THE RESPECTIVE VFD IT CONTROLS, AND IT WILL DISABLE THE VFD FROM RUNNING POWER TO MOTOR WHILE IN THE STOP POSITION.
5. PROVIDE NEW HUMAN MACHINE INTERFACE (HMI) TERMINAL INSTALLED THROUGH VFD COMPARTMENT DOOR. COORDINATE HMI MODEL WITH MANUFACTURER OF VFD PRIOR TO PROCUREMENT.

GENERAL NOTES

1. PERFORM LOCK OUT-TAG OUT PROCEDURE TO PROPERLY ISOLATE THE VFD COMPARTMENT PRIOR TO INSTALLATION. USE PROPERLY RATED METER AND PERSONAL PROTECTIVE EQUIPMENT TO PERFORM TESTS TO CONFIRM THAT EQUIPMENT IS DE-ENERGIZED UNDER APPLICABLE PROCEDURES.
2. EXISTING MOTOR CONTROL CENTER (MCC) EQUIPMENT SHOWN FOR REFERENCE ONLY. VERIFY EQUIPMENT CONFIGURATION AND RATINGS AS WELL AS ANY OTHER INFORMATION AS APPLICABLE TO PROJECT SCOPE OF WORKS AS REQUIRED.

NOT FOR CONSTRUCTION

VILLAGE OF BUFFALO GROVE, ILLINOIS
DEPARTMENT OF PUBLIC WORKS
PUMPING STATION NO. 6
MCC-B ONE-LINE DIAGRAM
ELECTRICAL

PROJECT NO: 60715566
CAD DWG FILE: E6
DESIGNED BY: CS
CHECKED BY: MM
APPROVED BY: CL

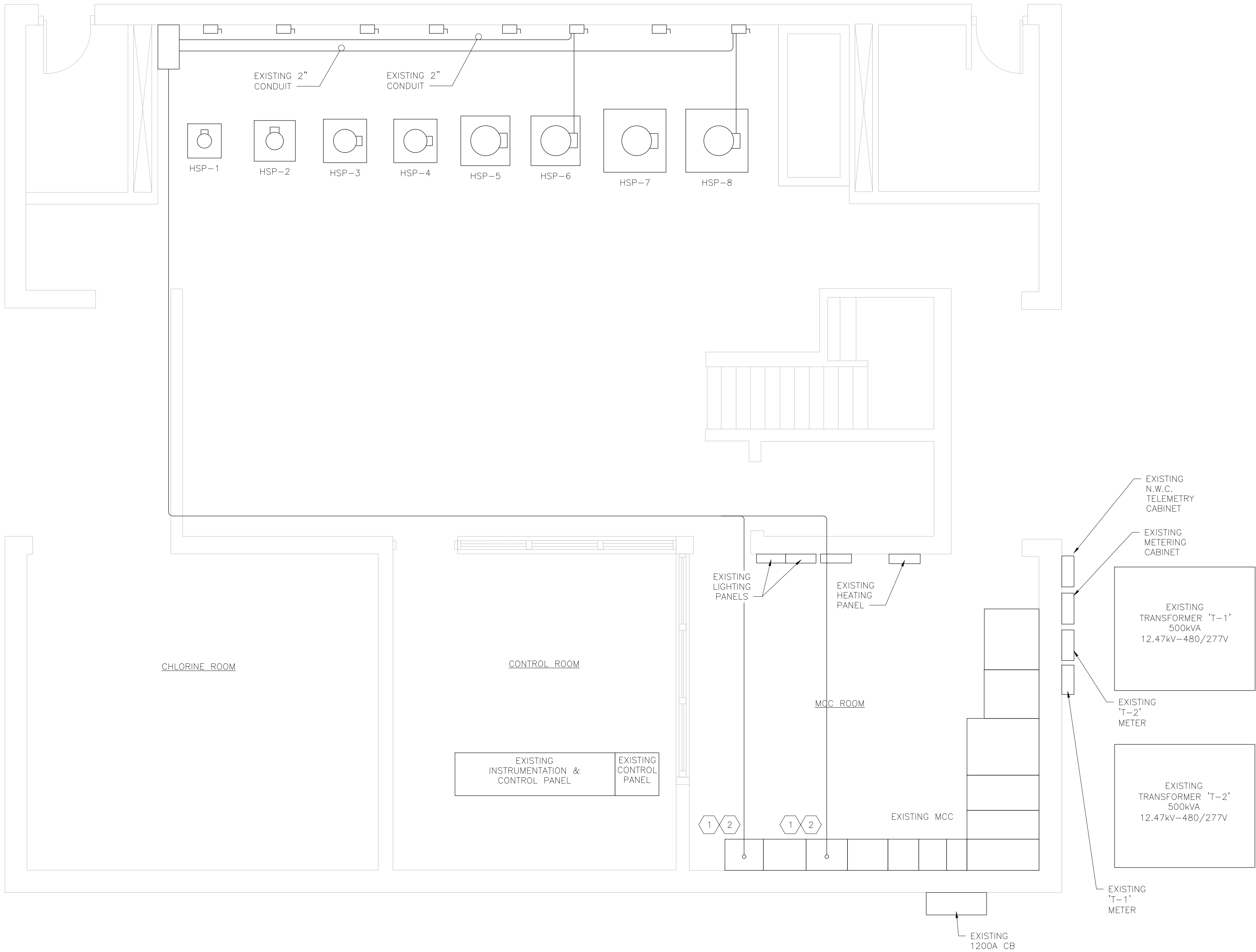
DATE: MARCH, 2024
SCALE: NOT TO SCALE

E6
SHEET 7 OF 10

AECOM
AECOM TECHNICAL SERVICES, INC.
200 EAST WACKER DRIVE
CHICAGO, ILLINOIS 60601
PHONE (312) 938-0300

PRE-FINAL SUBMITTAL

P:\V\FILENAME: 7A\CHICAGO-USECH\USCH\PROJECTS\WFR\60715566_PSG-PUMPSTATION_NO_6_VFD\300_CAD_CS\010_CAD_20-SHEETS\E7.DWG
LAST UPDATE: Friday, April 5, 2024 3:25:28 PM
PLOT DATE: Monday, April 8, 2024 9:16:52 AM
ARCH D - 5-Apr-24



- PLAN NOTES**
1. PROVIDE (2) NEW 125 HP RATED OPEN STYLE VARIABLE FREQUENCY DRIVES INSIDE THE MCC COMPARTMENTS FOR CONTROL OF EACH HSP-6 AN HSP-8, RESPECTIVELY.
 2. PROVIDE NEW HUMAN MACHINE INTERFACE (HMI) TERMINAL.

- GENERAL NOTES**
1. REFER TO SHEET E8 ON THE MOTOR CONTROL CENTER (MCC).

VILLAGE OF BUFFALO GROVE, ILLINOIS
DEPARTMENT OF PUBLIC WORKS

PUMPING STATION NO. 7 POWER PLAN

ELECTRICAL

PROJECT NO: 60715566
CAD DWG FILE: E7
DESIGNED BY: CS
CHECKED BY: MM
APPROVED BY: CL

DATE: MARCH, 2024
SCALE: NOT TO SCALE

E7

SHEET 8 OF 10

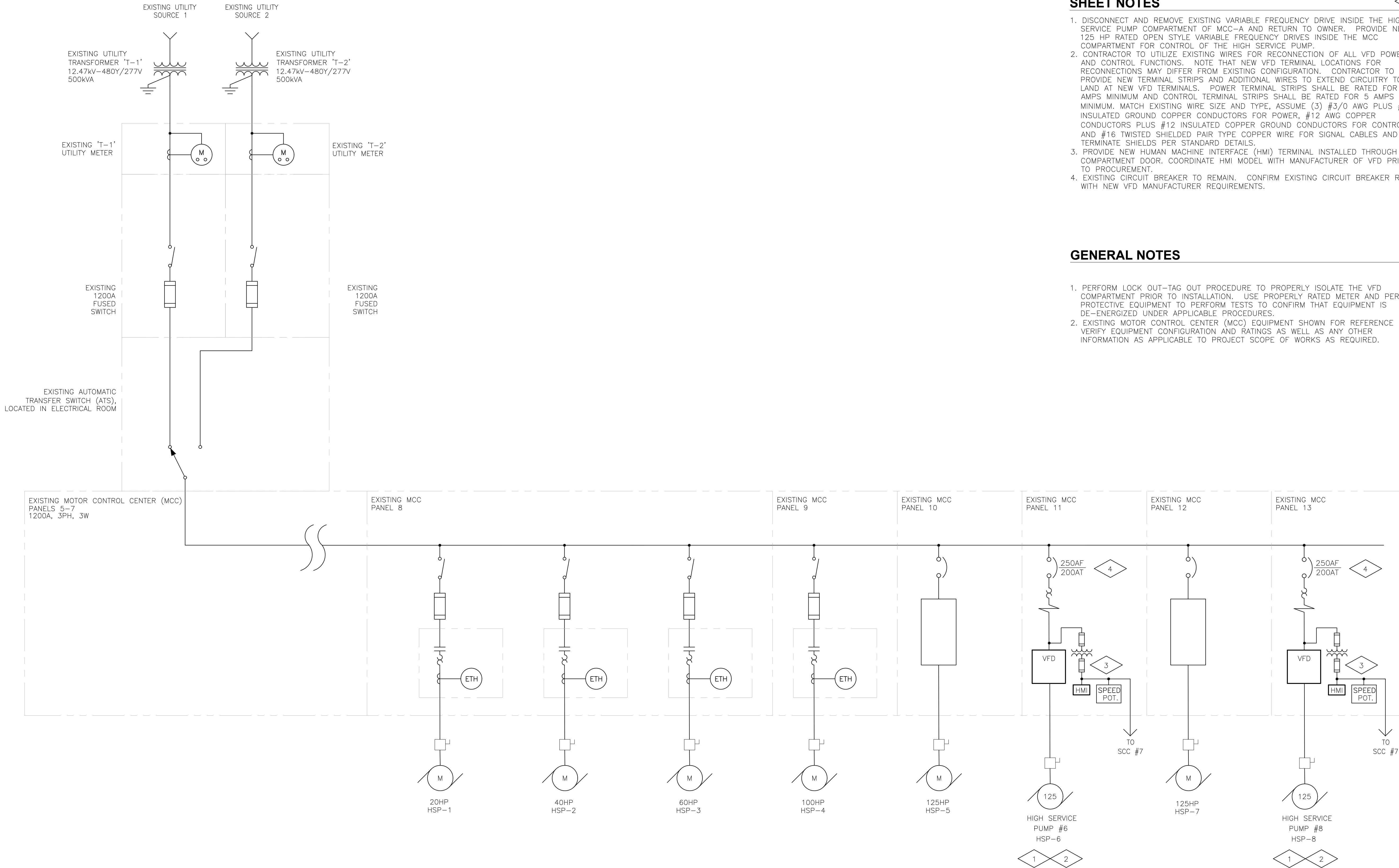
AECOM
AECOM TECHNICAL SERVICES, INC.
100 N. LAKE DRIVE
CHICAGO, ILLINOIS 60660
PHONE (312) 938-0000

PRE-FINAL SUBMITTAL

REVISIONS		DESCRIPTION	
MARK	DATE	MADE BY	CHECKED

PATH/FILENAME: Z:\CHICAGO\USCHCA\USCHCA\PROJECTS\WFR\60715566_196--PUMPSTATION_NO. 6_VFD\910_CAD_CS\910_CAD_20-SHEETS\E18.DWG
LAST UPDATE: Monday, April 8, 2024 11:34:44 AM
PLOT DATE: Monday, April 8, 2024 11:48:05 AM
ARCH D - 8-Apr-24

PUMPING STATION NO. 7 EXISTING MOTOR CONTROL CENTER ONE LINE DIAGRAM



SHEET NOTES

1. DISCONNECT AND REMOVE EXISTING VARIABLE FREQUENCY DRIVE INSIDE THE HIGH SERVICE PUMP COMPARTMENT OF MCC-A AND RETURN TO OWNER. PROVIDE NEW 125 HP RATED OPEN STYLE VARIABLE FREQUENCY DRIVES INSIDE THE MCC COMPARTMENT FOR CONTROL OF THE HIGH SERVICE PUMP.
2. CONTRACTOR TO UTILIZE EXISTING WIRES FOR RECONNECTION OF ALL VFD POWER AND CONTROL FUNCTIONS. NOTE THAT NEW VFD TERMINAL LOCATIONS FOR RECONNECTIONS MAY DIFFER FROM EXISTING CONFIGURATION. CONTRACTOR TO PROVIDE NEW TERMINAL STRIPS AND ADDITIONAL WIRES TO EXTEND CIRCUITRY TO LAND AT NEW VFD TERMINALS. POWER TERMINAL STRIPS SHALL BE RATED FOR 250 AMPS MINIMUM AND CONTROL TERMINAL STRIPS SHALL BE RATED FOR 5 AMPS MINIMUM. MATCH EXISTING WIRE SIZE AND TYPE, ASSUME (3) #3/0 AWG PLUS #4 INSULATED GROUND COPPER CONDUCTORS FOR POWER, #12 AWG COPPER CONDUCTORS PLUS #12 INSULATED COPPER GROUND CONDUCTORS FOR CONTROL, AND #16 TWISTED SHIELDED PAIR TYPE COPPER WIRE FOR SIGNAL CABLES AND TERMINATE SHIELDS PER STANDARD DETAILS.
3. PROVIDE NEW HUMAN MACHINE INTERFACE (HMI) TERMINAL INSTALLED THROUGH VFD COMPARTMENT DOOR. COORDINATE HMI MODEL WITH MANUFACTURER OF VFD PRIOR TO PROCUREMENT.
4. EXISTING CIRCUIT BREAKER TO REMAIN. CONFIRM EXISTING CIRCUIT BREAKER RATING WITH NEW VFD MANUFACTURER REQUIREMENTS.

GENERAL NOTES

1. PERFORM LOCK OUT-TAG OUT PROCEDURE TO PROPERLY ISOLATE THE VFD COMPARTMENT PRIOR TO INSTALLATION. USE PROPERLY RATED METER AND PERSONAL PROTECTIVE EQUIPMENT TO PERFORM TESTS TO CONFIRM THAT EQUIPMENT IS DE-ENERGIZED UNDER APPLICABLE PROCEDURES.
2. EXISTING MOTOR CONTROL CENTER (MCC) EQUIPMENT SHOWN FOR REFERENCE ONLY. VERIFY EQUIPMENT CONFIGURATION AND RATINGS AS WELL AS ANY OTHER INFORMATION AS APPLICABLE TO PROJECT SCOPE OF WORKS AS REQUIRED.

VILLAGE OF BUFFALO GROVE, ILLINOIS
DEPARTMENT OF PUBLIC WORKS
PUMPING STATION NO. 7 EXISTING MCC
ONE-LINE DIAGRAM
ELECTRICAL

PROJECT NO: 60715566
CAD DWG FILE: E8
DESIGNED BY: CS
CHECKED BY: MM
APPROVED BY: CL

DATE: MARCH, 2024
SCALE: NOT TO SCALE

E8
SHEET 9 OF 10

AECOM
AECOM TECHNICAL SERVICES, INC.
100 N. LAKE STREET, SUITE 200
CHICAGO, ILLINOIS 60601
PHONE (312) 938-0300

PRE-FINAL SUBMITTAL

Attachment: VFD Replacement PS6-PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

NOT FOR CONSTRUCTION



VoBG-2024-11

Finance Department
 Fifty Raupp Blvd.
 Buffalo Grove, IL 60089-2198
 Phone 847-459-2500
 Fax 847-459-7906

VFD Replacements Pumping Stations No. 6 and 7 Addendum #1

TO: Prospective Respondents and Other Interested Parties

FROM: The Village of Buffalo Grove Finance Department

ISSUE DATE: April 25, 2024

SUBJECT: ADDENDUM #1

Note: This Addendum is hereby declared a part of the original Bid documents and in case of conflict, the provisions in the following Addendum shall govern.

The following clarifications shall be made to the bid documents for the VFD Replacements Pumping Stations No. 6 and 7 (VoBG-2024-11)

Q1. Change to the contact for **Questions on the Work**.

A1. QUESTIONS ON THE WORK

All comments, concerns and questions regarding the Work and these documents shall be addressed to **Guissel Davila**, AECOM via email at guissel.davila@aecom.com with the subject line "VFD Replacements Pumping Stations No. 6 and 7". All comments, concerns and questions regarding the Work must be received by 9:00 AM local time on the Question Due Date Friday, May 3, 2024.

Q2. When will the project be awarded?

A1. The Village intends to award this project May 20th.

PROSPECTIVE RESPONDENTS ARE TO ACKNOWLEDGE RECEIPT OF
 ADDENDUM #1. PLEASE INCLUDE AND NOTE THIS ADDENDUM IN YOUR
 RESPONSE.

RESPONDENT: William T. Connelly, Inc. dba Connelly Electric Co.

SIGNED:  DATE: 5/9/24

TITLE : Dan Divane, Vice President Aviation, Transportation & Public Works

ADDENDUM NO. 2
VILLAGE OF BUFFALO GROVE, IL
VARIABLE FREQUENCY DRIVE (VFD) REPLACEMENTS
PUMPING STATIONS NO. 6 AND 7

May 6, 2024

TO ALL BIDDERS:

Attention of all Bidders is called to the following revisions to the Bid Package for the following project: **Variable Frequency Drive (VFD) Replacements Pumping Stations No. 6 and 7.**

The information given in this Addendum shall be taken into account by each prospective Bidder in the preparation of its Bidder's Proposal.

Receipt of this Addendum shall be immediately acknowledged by e-mail (guissel.davila@aecom.com). Additionally, receipt of this Addendum shall be acknowledged in Bid Form and a copy of this Addendum shall be attached to the Bidder's Proposal.

BID QUESTIONS

1. 1.3.J. Submit statement of compliance. NO Seismic Requirements are specified. Should this be removed from the requirements. PE stamp is additional cost.

RESPONSE: Seismic requirements removed. Mount new open style drives in existing cabinets similar to existing. Modify as necessary for new drives.

2. 1.3.N. Submit Pump, Motor and VFD Statement of Compliance Coordinate Certificate. Since this is a retro fit of existing drives with existing pumps and motors, the VFD supplier cannot be responsible for coordination with the existing equipment. However, it is evident that the motors and pump work with VFD's since they have already been using a VFD?

RESPONSE: Compliance Coordinate Certificate requirements are removed. Existing motors are inverter duty rated, suitable for use with variable frequency drives.

3. 2.2.C "with integral disconnecting means". is this required since the VFD's are going to be put into an existing MCC bucket and reuse the existing disconnects?

RESPONSE: Existing drive cabinets each have installed disconnecting means. New open style drives provided by Bidders under this project do not require integral disconnecting means. Requirement will be removed.

4. 2.2O. Integral Input Disconnecting Means and OCPD: UL 489, instantaneous-trip circuit breaker with pad-lockable, door-mounted handle mechanism.

1. Disconnect Rating: Not less than 115 percent of VFD input current rating.
2. NO alarm contact that operates only when circuit breaker has tripped.

Is this required since the VFD's are going to be put into an existing MCC bucket and reuse the existing disconnects?

RESPONSE: No, this is not required. This requirement will be removed. The existing variable frequency drive cabinets have disconnecting means and overcurrent protective device (OCPD) provided in each drive. Assume that no modification is required to disconnecting means/OCPD. Reference notes on plans to confirm ratings in field prior to installation.

5. 2.3 same question as 1.3.J, No Seismic forces specified.

RESPONSE: Seismic requirements removed. Mount new open style drives in existing cabinets similar to existing. Modify as necessary for new drives.

6. 2.6.B to D Shop Testing This is an expensive shop test. All ABB drives are tested to the attached specifications. Please confirm this is acceptable in lieu of special costly testing.

RESPONSE: Testing requirements for Section 16292 Subsections 2.6.B., 2.6.C. and 2.6.D. will be removed.

7. 3.3.C.1.c&d Harmonic testing and reporting is an expensive adder. Is this required on a retrofit of existing drives? The existing and replacement drives are 6 Pulse units that are not low harmonic designs.

RESPONSE: No. Harmonic testing requirements for Section 16292 Subsections 3.3.C.1.c. and 3.3.C.1.d. will be removed.

8. 3.3.C.6 "harmonic analysis design calculated values for each drive" Is a harmonic analysis design required or is this provided by the owner/engineer?

RESPONSE: No. Harmonic analysis requirements for Section 16292 Subsections 3.3.C.6. will be removed.

9. General Question. Is the existing control I/O 24 VDC or 120 VAC? Are there any drawings or documentation on the existing MCC's?

Existing I/O is primarily 120 VAC. SCC 6 for Pump Station 6 has some digital input and outputs that interface with dry contacts at 24 VDC. Provide all contacts rated for at least 120 VAC. Confirm with existing shop drawings prior to installation. Existing shop drawings will be provided in subsequent bid addendum.

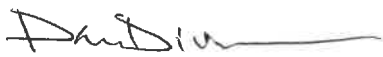
AECOM Technical Services, Inc.

By: Michael Morris, P.E./*Michael Morris* 5/6/2024

END OF ADDENDUM NO. 2

Also attached to this addendum are copies of: N/A

Addendum #2 Acknowledged

Signed: 

Title: VP Aviation, Transportation & Public Works

Date: 5/8/24

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

CONTRACT EXHIBIT B – SCHEDULE OF PRICES

[Schedule of Prices]

EXHIBIT B - SCHEDULE OF PRICES

Name of Bidder:

William T. Connelly, Inc. dba Connelly Electric Co.

Address of Bidder:

40 S. Addison Rd., Suite 100City Addison State IL Zip 60101 Telephone
630.543.9059Email Address: dan.divane@connelyelectric.com

The Bidder attests, having carefully examined the Drawings, Specifications, Commercial Terms and Conditions and all Addenda thereto and other Contract Documents and having familiarized themselves with all existing conditions affecting this proposed Project. Also, having familiarized themselves with material availability, Federal, State and Local Laws, Ordinances, rules and regulations affecting performance of the work, does hereby propose to furnish all labor, mechanics, supervision, tools, material, equipment, transportation, services and all incidentals necessary to complete said work.

Bidder further declares that if their Bid Proposal is accepted, that Bidder will enter into the Contract in the same form as set forth in the Bid and Contract Documents. However, Bidder may request changes to the Contract by submitting with this Schedule of Price a list of requested changes to the Contract.

If this bid is accepted, and the undersigned fails to (i) contract as aforesaid, (ii) provide the Performance Bond required by the Contract, and (iii) provide all insurance required under the Contract within ten (10) calendar days after the date of the award of the Contract then the Village, at its option, may determine that the bidder has abandoned this Bid, and thereupon this Bid and the acceptance thereof shall be null and void, and such security accompanying this Bid shall be forfeited and shall be the property of the Village of Buffalo Grove not as penalty, but as liquidated damages.

BID SECURITY

Accompanying this Bid is a copy of Bid Bond
in the amount of 10% of Base Bid Dollars
(\$ 10% of Base Bid).

Note: (a) Insert the words "Bank Draft", "Cashier's Check", "Certified Check" or "Bid Bond", as the case may be.

(b) Amount must be equal to at least **ten percent (10%)** of the Total Base Bid.

EXHIBIT B - SCHEDULE OF PRICES (cont.)**BID PRICES**LUMP SUM BID ITEM NO. 1

The furnishing of all necessary labor, material and equipment necessary for a complete replacement of six (6) Variable Frequency Drives (VFD) for the existing **Pump Station No. 6** detailed within these Contract Documents.

Seventy Nine Thousand _____ Dollars

(use words)

and _____ Zero _____ Cents

(use words)

\$ 79,000.00

Total (figures)

LUMP SUM BID ITEM NO. 2

The furnishing of all necessary labor, material and equipment necessary for a complete replacement of two (2) Variable Frequency Drives (VFD) for the existing **Pump Station No. 7** detailed within these Contract Documents.

Thirty Five Thousand _____ Dollars

(use words)

and _____ Zero _____ Cents

(use words)

\$ 35,000.00

Total (figures)

EXHIBIT B - SCHEDULE OF PRICES (cont.)

TOTAL BASE BID AMOUNT

The sum of all the foregoing Item No. 1 and Item No. 2, inclusive, is

One Hundred Fourteen Thousand Dollars

(use words)

and Zero Cents

(use words)

TOTAL BASE BID \$ 114,000.00

(figures)

Attachment: VFD Replacement PS6 -PS7- Contract (O-2024-49 : Award of Bid Pump House Improvements)

EXHIBIT B - SCHEDULE OF PRICES (cont.)SUBCONTRACTOR LISTING

Bidder, to employ the following listed subcontractors for the following enumerated classes of work and is not to alter or add to such list without the written consent of the Village.

	<u>SUBCONTRACTOR</u>	<u>CLASS OF WORK</u>
1.	N/A	
2.		
3.		
4.		

ACKNOWLEDGEMENT OF ADDENDA

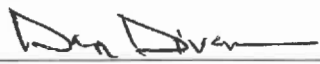
Acknowledgement of receipt of Addenda(s) #1 , #2 (list each addendum number)

Attach each signed addendum, if any, to the bid packet as part of your submittal.

CONTRACTOR SIGNATURE and CONTACT INFORMATION

5/9/24 630.543.9059
Date Phone

William T. Connelly, Inc. dba Connelly Electric Co. dan.divane@connellyelectric.com
Legal Entity E-mail


(Sign here)

Dan Divane - Vice President Aviation, Transportation & Public Works
(Print Name)

EXHIBIT C – REFERENCE LIST

Contact Name: Bill Thomas - Division Chief
Municipality/Business: City of Evanston
Dates Employed: 4/2021 to 7/2022
Phone Number or E-mail address: 847.421.2428 wthomas@cityofevanston.org

Contact Name: Sheldon Kirschner - Sr. Electrical Engineer, P.E.
Municipality/Business: Chines Railroad Corporation / AAA Engineering
Dates Employed: 6/2016 to 12/2017
Phone Number or E-mail address: 773.575.7139 skirshner2000@yahoo.com

Contact Name: Jeff Grandgeorge - Director, Facilities & Engineering
Municipality/Business: Edward Hospital
Dates Employed: ongoing to
Phone Number or E-mail address: 630.527.5840 jeff.grandgeorge@EEHealth.org

Contact Name: Catherine O'Connor
Municipality/Business: Metropolitan Water Reclamation District of Greater Chicago
Dates Employed: 9/2022 to ongoing
Phone Number or E-mail address: 312.751.7905 oconnorc@mwr.org



Ordinance No. O-2024-50 : Ordinance Authorizing License Agreement with Buffalo Grove Park District

Recommendation of Action

Staff Recommends Approval of Agreement

Summary: The Buffalo Grove Police Department requests approval of License Agreement with the Buffalo Grove Park District to allow for the placement of Flock ALPR Cameras on Park District Property.

ATTACHMENTS:

- ALPR 2024 License Agreement Memo (DOCX)
- Ordinance Authorizing execution of a license agreement with BG Park District copy (DOCX)
- Village License Plate Reader Agreement (Final Unexecuted) (PDF)

Trustee Liaison

Stein

Staff Contact

Brian Budds, Police

Monday, May 20, 2024

VILLAGE OF BUFFALO GROVE



DATE: May 15, 2024

TO: Dane Bragg, Village Manager

FROM: Brian Budds, Chief of Police

RE: License Agreement with Buffalo Grove Park District

Staff Recommendation

Staff requests the Village Manager be authorized to execute a License Agreement with the Buffalo Grove Park District to allow for the placement of Flock ALPR Cameras on Park District property. The monetary consideration for the agreement is in the amount of \$1.00 per location, not to exceed \$2.00 pending final review and approval of the agreement by the Village Attorney.

Project Overview

Staff negotiated an agreement with the Buffalo Grove Park District to allow the Flock Group Inc. to place automated license plate reading (ALPR) device poles on Park District property at two Park District parks. Cambridge Park on Buffalo Grove Road one block south of Dundee Road and Mill Creek Park on Arlington Heights Road at Mill Creek Drive are both ideally situated to allow ALPR devices to capture images of vehicles entering the Village on two major thoroughfares. The Cook County Department of Transportation has authority over both rights-of-way and does not issue permits for ALPR devices. The placement of ALPR devices on Park District property negates the need for permitting.

Project Timeline

Staff expects the site assessment process to begin during the second quarter of this year, and installation of the new devices to be completed during the same quarter.

Background Information

ALPR cameras have proven to be a valuable law enforcement tool and this agreement facilitates an expedient solution to the impediments Cook County has placed on municipalities.

ORDINANCE 2024-_____

**AN ORDINANCE AUTHORIZING EXECUTION OF A LICENSE
AGREEMENT WITH THE BUFFALO GROVE PARK DISTRICT**

WHEREAS, the Village of Buffalo Grove ("Village") is a home rule unit pursuant to the Illinois Constitution of 1970; and

WHEREAS, the Village sought permission from the Buffalo Grove Park District to install license plate reader cameras on Buffalo Grove Park District property ; and

WHEREAS, the Village and Buffalo Grove Park District have reached agreement as to the installation of the license plate reader cameras and said agreement is attached hereto as Exhibit A.

NOW THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS, as follows:

SECTION 1. The foregoing recitals are hereby adopted and incorporated and made a part of this Ordinance as if fully set forth herein.

SECTION 2. The Village Manager is authorized to execute a License Agreement with the Buffalo Grove Park District as set forth on the attached Exhibit A, subject to the review and approval of the Village Attorney.

SECTION 3. If any section, paragraph, clause or provision of this Ordinance shall be held invalid, the invalidity thereof shall not affect any other provision of this Ordinance.

SECTION 4. This Ordinance shall be in full force and effect from and after its passage and approval.

AYES: _____

NAYES: _____

ABSENT: _____

PASSED: _____, 2024

APPROVED: _____, 2024

APPROVED:

Erik N. Smith, Village President

ATTEST:

Janet Sirabian, Village Clerk

Attachment: Ordinance Authorizing execution of a license agreement with BG Park District copy (O-2024-50 : License Agreement with Buffalo

LICENSE AGREEMENT

This License Agreement (“Agreement”) is between the Village of Buffalo Grove, an Illinois municipal corporation (“Licensee”), and Buffalo Grove Park District, an Illinois Park District (“Licensor”).

Licensor is the titleholder of two portions of real property located at: (i) 1350 Radcliff Road, Buffalo Grove, Illinois 60089 (P.I.N. 03083010040000) (“Mill Creek Park”); and, (ii) 951 S. Buffalo Grove Road, Buffalo Grove, Illinois 60089 (P.I.N. 03091010290000) (“Cambridge Park”) (collectively, the “Property”).

Licensee desires to use a portion of the Property for the placement of license plate reader cameras (“Cameras”) as shown in **Exhibit B**, and Licensor desires to grant a license to Licensee for that sole purpose.

In consideration of the foregoing recitals, the mutual promises contained in this Agreement, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. **Grant and Scope of License.** Licensor grants to Licensee a non-exclusive license to use a portion of the Property, depicted on Exhibit A (“Licensed Area”). Licensor hereby allows Licensee access to and from the Licensed Area, will prevent obstruction of and/or interference with that access. Licensor, for one dollar and other good and valuable consideration, will permit Licensee’s use of the Licensed Area.
2. **Effective Date.** This Agreement will be in effect beginning on the date on which this Agreement is signed by Licensee (“Effective Date”). If a party signs this Agreement but fails to date its signature, the date that the other party receives the signing party’s signature on this Agreement will be deemed to be the date that the signing party signed this Agreement.
3. **Term and Termination.** This Agreement will remain in effect for an initial term of two years following the Effective Date and will thereafter continue in full force and effect unless terminated by either party upon a minimum of 60 days’ advance written notice to the other party.
4. **Camera Installation.** Licensee shall commence installation of the Cameras facing the respective roadways identified in Exhibit A at a date and time mutually agreed upon by the Parties.
5. **Repair and Maintenance.** Licensee will be responsible for the reasonable costs of repairing any damage to the Property caused by Licensee’s use thereof, ordinary wear and tear excluded, including any maintenance or removal costs of the Cameras. Except for maintenance or removal of the Cameras, such costs must be agreed upon by the parties prior to the commencement of the repair work.
6. **Redesignation of Licensed Area.** Licensor shall provide Licensee with a minimum of 60 days’ advance written notice of any maintenance or repair work or other circumstances that will obstruct or interfere with Licensee’s use of the Licensed Area. In the event of that notice, Licensor shall, in cooperation with Licensee, redesignate the Licensed Area (“Redesignated Licensed

Area”).

7. **Indemnification.** Licensor shall indemnify and defend Licensee, and their respective directors, officers, employees, and agents from and against any and all liability, losses, damages, claims, suits, payments, settlements, judgments, demands, awards, expenses, and costs, including attorneys’ fees, for personal injury, loss of life, or property damage resulting from Licensor’s intentional or negligent acts or omissions concerning Property repair and maintenance, including snow removal and deicing. Licensee shall indemnify and defend Licensor and Licensor’s directors, officers, employees, and agents from and against any and all liability, losses, damages, claims, suits, payments, settlements, judgments, demands, awards, expenses, and costs, including attorneys’ fees, for personal injury, loss of life, or property damage resulting from Licensee’s intentional or negligent acts or omissions concerning Licensee’s use of the Licensed Area, ordinary wear and tear excluded.
8. **Binding Effect.** This Agreement will be binding on the parties and their respective directors, officers, employees, agents, representatives, successors, and approved assigns. This paragraph, however, will not operate to permit any transfer, assignment, mortgage, encumbrance, lien, charge, or subletting by Licensee of the Licensed Area, which Licensee acknowledges it has no such right or power to do so except as permitted under paragraph 19.
9. **Compliance with Laws.** The parties shall comply with all local, state, and federal laws, statutes, ordinances, rules, and regulations applicable to this Agreement.
10. **Headings.** The headings in this Agreement are for reference and convenience only and will not affect the meaning or interpretation of this Agreement.
11. **Waiver.** Failure of a party to exercise any right or pursue any remedy under this Agreement will not constitute a waiver of that right or remedy.
12. **Entire Agreement.** This Agreement, including the introductory recitals and any attached exhibits, which are hereby incorporated into and made a part of this Agreement, constitutes the entire agreement between the parties and supersedes any prior written or oral understandings, agreements, or representations between the parties that may have related in any way to the subject matter of this Agreement, and no other written or oral warranties, inducements, considerations, promises, representations, or interpretations, which are not expressly addressed in this Agreement, will be implied or impressed upon this Agreement.
13. **Conflict.** In the event of a conflict or ambiguity between the terms and conditions of this Agreement and any exhibit to this Agreement, the terms and conditions of this Agreement will control.
14. **Survival.** Any provision of this Agreement that imposes an obligation after expiration or termination of this Agreement will be deemed to survive expiration or termination of this Agreement.
15. **Severability.** If any provision of this Agreement is held invalid or unenforceable by an Illinois court of competent jurisdiction, that provision will be deemed severed from this

Agreement and the remaining provisions of this Agreement will remain in full force and effect.

16. **Assignment.** No party may assign, delegate, or otherwise transfer all or part of its rights and obligations under this Agreement without the prior written consent of the other party.
17. **Amendment.** No changes, amendments, or modifications to this Agreement will be valid unless they are in writing and signed by the duly authorized signatory of each party.
18. **Notice.** Any notice under this Agreement must be in writing and must be given in the following manner:
 - (a) by personal delivery (deemed effective as of the date and time of delivery);
 - (b) by commercial overnight delivery (deemed effective on the next business day following deposit of the notice with a commercial overnight delivery company); or
 - (c) by registered or certified mail, return receipt requested, with proper postage prepaid (deemed effective as of the third business day following deposit of the notice in the U.S. mail).

Business days are defined as Monday through Friday, excluding federal holidays. Business hours are defined as 8:00 a.m. to 5:00 p.m. Central Time on Monday through Friday, excluding federal holidays. The notice must be addressed as follows or addressed to such other address as either party may specify in writing:

If to Licensee:

Village of Buffalo Grove
50 Raupp Blvd.
Buffalo Grove, IL 60089
Attention: Village Manager

If to Licensee:

Buffalo Grove Park District

19. **Governing Law, Jurisdiction, and Venue.** This Agreement will be governed by and construed in accordance with the laws of the State of Illinois without regard to principles of conflicts of law, and the parties shall submit to the exclusive jurisdiction and venue of the state courts of Cook County, Illinois for any dispute arising out of or related to this Agreement.
20. **Force Majeure.** A party will not be held liable to the other party for damages or be deemed to have breached this Agreement for failure or delay in performing any obligation under this Agreement if the failure or delay is caused by or results from causes beyond the reasonable control of and without the fault or negligence of the affected party, including war, fire, flood, other acts of God, civil disturbance, a terrorist act, pandemic, epidemic, or a labor strike or lockout. The affected party shall promptly notify the other party of such force majeure circumstances, specifying the cause and the expected duration of the delay,

and shall promptly undertake all reasonable steps necessary to cure the force majeure circumstances. If a condition of force majeure continues for more than 30 consecutive days, Licensee may immediately terminate this Agreement for convenience after written notice to Licensor. Where an event of force majeure occurs after a party's failure or delay in performance, the breaching party will not be released from liability.

21. **Counterparts.** This Agreement may be executed in counterparts, each of which when so executed and delivered will be deemed to be an original and all of which when taken together will constitute one and the same agreement.
22. **Electronic Signatures.** This Agreement may be executed using electronic signatures. The typed name of a signatory to this Agreement constitutes that signatory's electronic signature on this Agreement. Electronic signatures will be deemed original signatures for purposes of this Agreement.
23. **Authorization.** The signatories to this Agreement represent and warrant that they have full authority to sign this Agreement on behalf of the party for whom they sign.
24. **Immunity Waiver.** Nothing contained in this Agreement shall constitute a waiver by either party of any right, privilege or defense available to either party under statutory or common law, including, but not limited to, the Illinois Local Governmental and Governmental Employees Tort Immunity Act, 745 ILCS 10/1-101 et seq., as amended.

**[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.
SIGNATURE BLOCK ON FOLLOWING PAGE.]**

The parties have caused this Agreement to be executed by their respective duly authorized signatory on the dates below.

LICENSOR:

LICENSEE:

By: _____
Signature

By: _____
Signature

Print Name: _____

Print Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

EXHIBIT A



Flock Safety Tech Specs



EXHIBIT B

8.G.c

License plate reading cameras that capture more evidence for your city.

Dual Solar Panels

- Voltage: 18-20V
- Weight: 25.73 lbs (with hardware)
- Length: 21.25"
- Width: 28"
- Mount: Pole top or side of existing pole

Pole

- DOT Breakaway Pole - 12' installed height
- Diameter: 2.875" OD, 2.125" ID
- Material: 6061 Aluminum with black coating
- Alloy: 6061
- Weight: 32 lbs

Camera

- Length: 8.75"
- Height: 5"
- Width: 2.875"
- Mounting: Adjustable band clamps
- Weight: 3lbs
- Footage: Uploads via integrated LTE
- Field of View: 15' wide, 65' distance
- Assembly: Flock Safety in Atlanta, GA



Install Anywhere



Solar &
Existing Pole



Solar &
Flock Pole



Electric &
Existing

Packet Pg. 293



**Ordinance No. O-2024-51 : Ordinance Amending Chapter 5.20
Liquor Controls**

Recommendation of Action

Staff recommends approval.

SUMMARY: Three liquor licenses are being removed from the list of authorized licenses. They include K1 Speed, Inc at 301 Hastings Lane, Roundy's Illinois, LLC d/b/a Mariano's is hereby removed, as the business now holds a Class C license and WJ Sports Entertainment, LLC at 1380 Busch Parkway is hereby removed.

ATTACHMENTS:

- Ordinance Amending Chapter 5.20 Liquor Controls to Remove Authorized Licenses due to Non-renewal (DOCX)

Trustee Liaison
Smith

Staff Contact
Jessie Brown, Community Development

Monday, May 20, 2024

Underlined = addition
~~Strikethroughs~~ = deletion
 05/15/2024

ORDINANCE NO. 2024 - ____

AN ORDINANCE AMENDING CHAPTER 5.20 LIQUOR CONTROLS

WHEREAS, the Village of Buffalo Grove is a Home Rule Unit pursuant to the Illinois Constitution of 1970.

NOW THEREFORE BE IT ORDAINED by the President and Board of Trustees of the Village of Buffalo Grove, Cook and Lake Counties, Illinois, as follows:

SECTION 1. Section 5.20.130 of the Village of Buffalo Grove Municipal Code is hereby amended to read as follows:

5.20.130 Licenses authorized.

Subsection A. of Section 5.20.130 of the Village of Buffalo Grove Municipal Code is hereby amended with deletions in ~~strikethrough~~ and additions in underline text so that Subsection A. of Section 5.20.130 shall provide as follows.

Licensee and d/b/a	Address
<i>Class A.</i>	
1. Midas Banquets, Inc. d/b/a Astoria Banquets	1375 W. Dundee Road
2. Leiserv, LLC d/b/a Bowlero—Buffalo Grove	350 McHenry Road
3. Donato Restaurant Group, Inc. d/b/a Buffalo Restaurant	1180 Lake Cook Road
4. Continental Restaurant, Inc.	782 S. Buffalo Grove Road
5. Eva's Mexican Restaurant, Inc.	205 Dundee Road
6. AAA Restaurant, Inc. d/b/a Flambe India	1155 McHenry Road #102B
7. Lake County Hospitality, LLC Franchisee of Wyndham Garden Inn	900 Lake Cook Road
8. Chanprung, LLC d/b/a Full Thai	1000 Weiland Road
9. Themis's Pizza, LLC d/b/a Giordano's of Buffalo Grove	270 McHenry Road
10. Golden Durebak Restaurant, Inc.	718 Buffalo Grove Road
11. The Golf Lobby, LLC	312 Half Day Road
12. Grande Jakes Fresh Mexican Grill in BG, Inc.	799 Buffalo Grove Road
13. Guzman Y Gomez Restaurants, LLC	120 McHenry Road

14. K1 Speed, Inc.	301 Hastings Lane
15 <u>14.</u> Ineozone Inc. d/b/a Kum Kang San Korean BBQ	1333 Dundee Road
16 <u>15.</u> La Presa Restaurant, Inc.	86 W. Dundee Road
17 <u>16.</u> Luma, LLC d/b/a Lou Malnati's	85 South Buffalo Grove Road
18 <u>17.</u> La Minita, Inc. d/b/a Mi Mexico Mexican Restaurant	220 N. Milwaukee Avenue
19 <u>18.</u> Telugu Ruchulu of BG, LLC d/b/a Newabi Hyderabad House Biryani Place	228 McHenry Road
20 <u>19.</u> Nino's Pizzeria, Inc.	960 Buffalo Grove Road
21 <u>20.</u> Paddock Lounge, LLC	301 Hastings Drive
22 <u>21.</u> TK Tavern, Inc. d/b/a Prairie House Tavern	2710 Main Street
23 <u>22.</u> BRI Incorporated d/b/a Sal & Tony's	48 Raupp Boulevard
24 <u>23.</u> The Schwaben Center	301 Weiland Road
25 <u>24.</u> Sky Fitness Café, Inc. d/b/a Sky Spa & Sauna	1501 Busch Parkway
26 <u>25.</u> Yang Group, Inc. d/b/a Sushi Grove	154 McHenry Road
27 <u>26.</u> WJN Gold, LLC d/b/a WJ Golf	401 Half Day Road
28 <u>27.</u> Booming, Inc. d/b/a Yan Yan Chinese Cuisine	360 Half Day Road

SECTION 2. Section 5.20.130 of the Village of Buffalo Grove Municipal Code is hereby amended to read as follows:

5.20.130 Licenses authorized.

Subsection A-1. of Section 5.20.130 of the Village of Buffalo Grove Municipal Code is hereby amended with deletions in ~~striketrough~~ and additions in underline text so that Subsection A-1. of Section 5.20.130 shall provide as follows.

Licensee and d/b/a	Address
<i>Class A-1.</i>	
1. Chicago Galbi House Inc	340 Half Day Road
2. Hakuya Sushi, Inc	161 Dundee Road
3. Roundy's Illinois, LLC d/b/a Mariano's	450 Half Day Road
4 <u>3.</u> MOD Super Fast Pizza, LLC d/b/a MOD Pizza	1555 Deerfield Parkway
5 <u>4.</u> Niki's Gyros, Inc.	1038 Weiland Road
6 <u>5.</u> Abba, Inc. d/b/a Original Bagel & Bialy	105 McHenry Road
7 <u>6.</u> Black Pepper, Inc. d/b/a Rivaj Indian Cuisine	1034 Weiland Road
8 <u>7.</u> RR Buffalo Grove LLC d/b/a Ricky Rockets—Buffalo Grove	700 E Lake Cook Road 101

98. Taste of Tokyo, Inc.	159 McHenry Road
109. PYX Brands LLC d/b/a Yeero Revolution	700 E Lake Cook Road 105

SECTION 3. Section 5.20.130 of the Village of Buffalo Grove Municipal Code is hereby amended to read as follows:

5.20.130 Licenses authorized.

Subsection F. of Section 5.20.130 of the Village of Buffalo Grove Municipal Code is hereby amended with deletions in ~~striketrough~~ and additions in underline text so that Subsection F. of Section 5.20.130 shall provide as follows.

Licensee and d/b/a	Address
Class F.	
1. WJ Sports Entertainment, LLC	1380 Busch Parkway

SECTION 4.

- A. The Class A liquor license for K1 Speed, Inc at 301 Hastings Lane is hereby removed from the list of authorized licenses due to non-renewal.
- B. The Class A-1 liquor license for Roundy's Illinois, LLC d/b/a Mariano's is hereby removed from the list of licenses authorized, as the business now holds a Class C license.
- C. The Class F liquor license for WJ Sports Entertainment, LLC is hereby removed from the list of authorized licenses due to non-renewal.
- D. This Section 4 shall not be codified.

SECTION 5. This ordinance shall be in full force and in effect from and after its passage and approval.

AYES: _____
 NAYES: _____
 ABSENT: _____
 PASSED: _____, 2024
 APPROVED: _____, 2024
 PUBLISHED: _____, 2024

ATTEST:

APPROVED:

Janet M. Sirabian, Village Clerk

Eric N. Smith, Village President



**Ordinance No. O-2024-52 : Ordinance Amending Chapter 5.20
Liquor Controls**

Recommendation of Action

Staff recommends approval.

SUMMARY: Themis Pizza d/b/a Giordano's of Buffalo Grove at 270 McHenry Road, Nino's Pizzeria, Inc. at 960 Buffalo Grove Road and Black Pepper, Inc. d/b/a Rivaj Indian Cuisine at 1024 Weiland Road have all requested a change in liquor license from a Class A-1 to a Class A.

ATTACHMENTS:

- Ordinance Amending Chapter 5.20 to change liquor license classes for Giordanos, Ninos & Rivaj (DOCX)

Trustee Liaison
Smith

Staff Contact
Jessie Brown, Community Development

Monday, May 20, 2024

Underlined = addition
 Strikethroughs = deletion
 05/15/2024

ORDINANCE NO. 2024 - ____

AN ORDINANCE AMENDING CHAPTER 5.20 LIQUOR CONTROLS

WHEREAS, the Village of Buffalo Grove is a Home Rule Unit pursuant to the Illinois Constitution of 1970.

NOW THEREFORE BE IT ORDAINED by the President and Board of Trustees of the Village of Buffalo Grove, Cook and Lake Counties, Illinois, as follows:

SECTION 1. Section 5.20.130 of the Village of Buffalo Grove Municipal Code is hereby amended to read as follows:

5.20.130 Licenses authorized.

Subsection A. of Section 5.20.130 of the Village of Buffalo Grove Municipal Code is hereby amended with deletions in ~~strikethrough~~ and additions in underline text so that Subsection A. of Section 5.20.130 shall provide as follows.

Licensee and d/b/a	Address
Class A.	
1. Midas Banquets, Inc. d/b/a Astoria Banquets	1375 W. Dundee Road
2. Leiserv, LLC d/b/a Bowlero—Buffalo Grove	350 McHenry Road
3. Donato Restaurant Group, Inc. d/b/a Buffalo Restaurant	1180 Lake Cook Road
4. Continental Restaurant, Inc.	782 S. Buffalo Grove Road
5. Eva's Mexican Restaurant, Inc.	205 Dundee Road
6. AAA Restaurant, Inc. d/b/a Flambe India	1155 McHenry Road #102B
7. Lake County Hospitality, LLC Franchisee of Wyndham Garden Inn	900 Lake Cook Road
8. Chanprung, LLC d/b/a Full Thai	1000 Weiland Road
9. Themi's Pizza, LLC d/b/a Giordano's of Buffalo Grove	270 McHenry Road
109. Golden Durebak Restaurant, Inc.	718 Buffalo Grove Road
110. The Golf Lobby, LLC	312 Half Day Road
121. Grande Jakes Fresh Mexican Grill in BG, Inc.	799 Buffalo Grove Road
1312. Guzman Y Gomez Restaurants, LLC	120 McHenry Road

14 <u>13</u> . Ineozone Inc. d/b/a Kum Kang San Korean BBQ	1333 Dundee Road
15 <u>14</u> . La Presa Restaurant, Inc.	86 W. Dundee Road
16 <u>15</u> . Luma, LLC d/b/a Lou Malnati's	85 South Buffalo Grove Road
17 <u>16</u> . La Minita, Inc. d/b/a Mi Mexico Mexican Restaurant	220 N. Milwaukee Avenue
18 <u>17</u> . Telugu Ruchulu of BG, LLC d/b/a Newabi Hyderabad House Biryani Place	228 McHenry Road
19 . Nino's Pizzeria, Inc.	960 Buffalo Grove Road
20 <u>18</u> . Paddock Lounge, LLC	301 Hastings Drive
21 <u>19</u> . TK Tavern, Inc. d/b/a Prairie House Tavern	2710 Main Street
22 <u>20</u> . BRI Incorporated d/b/a Sal & Tony's	48 Raupp Boulevard
23 <u>21</u> . The Schwaben Center	301 Weiland Road
24 <u>22</u> . Sky Fitness Café, Inc. d/b/a Sky Spa & Sauna	1501 Busch Parkway
25 <u>23</u> . Yang Group, Inc. d/b/a Sushi Grove	154 McHenry Road
26 <u>24</u> . WJN Gold, LLC d/b/a WJ Golf	401 Half Day Road
27 <u>25</u> . Booming, Inc. d/b/a Yan Yan Chinese Cuisine	360 Half Day Road
<u>26</u> . Black Pepper, Inc. d/b/a Rivaj Indian Cuisine	<u>1034 Weiland Road</u>

SECTION 2. Section 5.20.130 of the Village of Buffalo Grove Municipal Code is hereby amended to read as follows:

5.20.130 Licenses authorized.

Subsection A-1. of Section 5.20.130 of the Village of Buffalo Grove Municipal Code is hereby amended with deletions in ~~striketrough~~ and additions in underline text so that Subsection A-1. of Section 5.20.130 shall provide as follows.

Class A-1.	
1. Chicago Galbi House Inc	340 Half Day Road
2. Hakuya Sushi, Inc	161 Dundee Road
3. MOD Super Fast Pizza, LLC d/b/a MOD Pizza	1555 Deerfield Parkway
4. Niki's Gyros, Inc.	1038 Weiland Road
5. Abba, Inc. d/b/a Original Bagel & Bialy	105 McHenry Road
6. Black Pepper, Inc. d/b/a Rivaj Indian Cuisine	1034 Weiland Road
7 <u>6</u> . RR Buffalo Grove LLC d/b/a Ricky Rockets—Buffalo Grove	700 E Lake Cook Road 101
8 <u>7</u> . Taste of Tokyo, Inc.	159 McHenry Road
<u>9</u> 8 . PYX Brands LLC d/b/a Yeero Revolution	700 E Lake Cook Road 105

9. Themis Pizza, LLC d/b/a Giordano's of Buffalo Grove	270 McHenry Road
10. Nino's Pizzeria, Inc.	960 Buffalo Grove Road

SECTION 3.

- A. The Class A liquor license for Themis Pizza, LLC d/b/a Giordano's of Buffalo Grove at 270 McHenry Road is hereby withdrawn by request of the business.
- B. A Class A-1 liquor license is hereby issued to Themis Pizza, LLC d/b/a Giordano's of Buffalo Grove at 270 McHenry Road.
- C. The Class A liquor license for Nino's Pizzeria, Inc. at 960 Buffalo Grove Road is hereby withdrawn by request of the business.
- D. A Class A-1 liquor license is hereby issued to Nino's Pizzeria, Inc. at 960 Buffalo Grove Road.
- E. The Class A-1 liquor license for Black Pepper, Inc. d/b/a Rivaj Indian Cuisine at 1024 Weiland Road is hereby withdrawn by request of the business.
- F. A Class A liquor license is hereby issued to Black Pepper, Inc. d/b/a Rivaj Indian Cuisine at 1024 Weiland Road.
- G. This Section 3 shall not be codified.

SECTION 4. This ordinance shall be in full force and in effect from and after its passage and approval.

AYES: _____
 NAYES: _____
 ABSENT: _____
 PASSED: _____, 2024
 APPROVED: _____, 2024
 PUBLISHED: _____, 2024

ATTEST:

APPROVED:

Janet M. Sirabian, Village Clerk

Eric N. Smith, Village President



Ordinance No. O-2024-53 : An Ordinance Authorizing Execution of an Agreement with FQC Construction Management for Pre-Construction Management Services

Recommendation of Action

Staff recommends approval, subject to eh final review by the Village Attorney.

Summary: Staff recommends entering into an agreement with Fredrick Quinn Construction (FQC) for pre-construction services for Station 25 project in an amount not to exceed \$18,750.00, pending Village Attorney approval.

ATTACHMENTS:

- 4-29-24 St. 25 Pre Construction Service Update (DOCX)
- 5-20-24 CM Ordinance St. 25 Design (DOCX)
- 4-8-24 Quinn Design Contract St. 25 (PDF)

Trustee Liaison
Cesario

Staff Contact
Larry Kane, Fire

Monday, May 20, 2024

VILLAGE OF BUFFALO GROVE**MEMORANDUM**

DATE: April 29, 2024

TO: Dane Bragg, Village Manager

FROM: Chris Stilling, Deputy Village Manager
Michael Baker, Fire Chief
Lawrence Kane, Deputy Fire Chief

SUBJECT: Pre-Construction Services for Station 25 Update (Design Development Phase)

Pre-Construction Service Update

The design phase of the Station 25 building process requires the services of a construction manager to assist in such areas as evaluations of materials, costs, availability, etc. allowing for seeking out value in the final station build process as well as the efficient coordination of contractors and deliveries. In consideration of this contract, staff sought bids from two construction management companies who specialize in municipal work. In addition, we sought out area fire departments that have used these services in order to evaluate their experiences.

Based upon our findings, staff recommends entering into an agreement with Fredrick Quinn Construction Management (FQC) as we enter this process of the Station 25 project. Some of the benefits from both their proposal as well as the feedback we received is that they are proactive in the build process as it relates to value of design, they are physically present and prepared for all construction meetings and they are prepared with various options. In addition, staff believes that the crossover from the current PW project to the temporary Station 25 project will lead to more efficient coordination resulting in better overall value in the end. The FQC contracted amount for design work is \$18,750.00 and is a fixed fee.

Site Work and Topography Update

The Village of Buffalo Grove currently has a professional agreement with Gewalt Hamilton Engineers for site work, surveying, and engineering services. Gewalt Hamilton is currently performing a considerable amount of work in the Village allowing us to receive value-based pricing by having crews centrally located in our work area. Gewalt Hamilton has provided pricing for engineering design and construction administration services in the total amount of \$130,595.00 including reimbursables. In addition, Gewalt Hamilton will provide land surveying services and a topography survey at the Station 25 site for an amount of \$15,500.00.

Future Planning

With your approval, Staff respectfully requests that we move forward in seeking approval at the May 20th Village Board Meeting with agreements for construction management services for the design of Station 25 as well as the survey and site work agreements to keep the Station 25 project on schedule.

It should be noted that these costs were accounted for in the 2024 capital budget for the Station 25 project.

An overview of the requests is below along with the associated FGM timeline:

Task	Contractor	Cost	Estimated Completion
Site / Topo Work	Gewalt Hamilton	\$146,095.00	May – July 2024
CM Design	Fredrick Quinn Construction (FQC)	\$18,750.00	May – July 2024

Per the overall timeline presented below, we are operating in the design development stage (in bold) and we are on schedule.

Task	Estimated Completion
Schematic Design	April 2024
Design Development	May – July 2024
Construction Documentation	August – December 2024
Issue for Construction Management Scopes	December 2024
Issue for bid and permits	January 2025
Bids Due and Bid Review	February 2025
Anticipated Board Authorization of Bids	February / March 2025
Begin Construction	March / April 2025
Substantial Completion	February / March 2026
Final Completion	March / April 2026

Attachments

4-8-24 Quinn Design Contract St. 25
4-30-24 GWH Site Work Final

ORDINANCE 2024-_____

AN ORDINANCE AUTHORIZING EXECUTION OF AN AGREEMENT WITH FQC CONSTRUCTION MANAGEMENT FOR PRECONSTRUCTION MANAGEMENT SERVICES

WHEREAS, the Village of Buffalo Grove is a home rule unit pursuant to the Illinois Constitution of 1970; and

WHEREAS, the Village sought out companies qualified to provide the requested services and materials; and

WHEREAS, the Village engaged in a competitive procurement process to obtain the best value for money.

NOW THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS, as follows:

SECTION 1. The foregoing recitals are hereby adopted and incorporated and made a part of this Ordinance as if fully set forth herein.

SECTION 2. The Village Manager is authorized to execute an agreement with FQC Construction Management for Preconstruction Management Services, in an amount not to exceed \$18,750.00 pending review and approval by the Village Attorney.

SECTION 3. If any section, paragraph, clause or provision of this Ordinance shall be held invalid, the invalidity thereof shall not affect any other provision of this Ordinance.

SECTION 4. This Ordinance shall be in full force and effect from and after its passage and approval and not be codified.

AYES: _____

NAYES: _____

ABSENT: _____

PASSED: _____, 2024

APPROVED: _____, 2024

APPROVED:

Eric Smith, Village President

ATTEST:

Janet Sirabian, Village Clerk

Attachment: 5-20-24 CM Ordinance St. 25 Design (O-2024-53 : FQC Design Contract Station 25)



April 5, 2024

Mr. James Warnstedt
Deputy Public Works Director
Village of Buffalo Grove
51 Raupp Blvd.
Buffalo Grove, IL 60089

PRECONSTRUCTION CONSTRUCTION MANAGEMENT SERVICES

Dear Mr. Warnstedt:

This letter proposal is sent in response to your request for FQC to provide Preconstruction Construction Management Services associated with the planned redevelopment of Station No. 25 for the Village of Buffalo Grove.

FQC appreciates the opportunity to continue our working relationship with the Village of Buffalo Grove. The redevelopment of Station No. 25 is consistent with the experience and capabilities of our firm. We are currently working with FGM Architects on the design and construction of a new satellite station for the Itasca Fire Protection District. Additionally, we are actively in construction on the redevelopment of a station for the Town of Beloit, WI, and recently completed the redevelopment of the Ravinia Station in Highland Park, IL. This recent, relevant experience on similar projects offers the Village of Buffalo Grove current, market specific expertise for this project.

Frederick Quinn Corporation (FQC) proposes to provide preconstruction construction management services to assist the Village through the process of planning, design, cost estimating, scheduling and logistics for the preconstruction redevelopment planning of Station No. 25. FQC will work in conjunction with the Village and your selected architecture/engineering partner (FGM Architects) to help plan and implement a solution that responds to the anticipated scope of work, the preliminary planning work done to date, and as directed by Village Administration and Board. This proposal is presented in four parts: Project Understanding, Scope of Services, Schedule and Compensation.

Project Understanding:

FQC understands that the Village is pursuing the complete redevelopment of Station No. 25 in its current location. The planning may include the evaluation of the existing facility to determine what, if any, portions of the existing structure may be reused. Regardless, the intent is to plan for what will in essence be a completely new facility. To accommodate the construction, FQC understands the project will include some renovations of the existing Public Works facility, once the move into the new Public Works facility is complete. The renovated existing Public Works facility will house the current fire operations on an interim basis while Station No. 25 is constructed. Preconstruction services shall include this eventuality for purposes of planning and cost estimating.

Attachment: 4-8-24 Quinn Design Contract St. 25 (O-2024-53 : FQC Design Contract Station 25)

Mr. James Warnstedt
 Village of Buffalo Grove – Station No. 25
 April 5, 2024
 Page 2

Scope of Services:

Preconstruction Services – These services, provided during the planning and design phase of the project, shall assist the Village and the architect/engineer team to plan for and develop a Best Value solution in terms of quality, cost and schedule. Throughout design we meet on a regular basis to review decisions in terms of durability, cost, phasing/logistics, sustainability and maintainability. These meetings will be attended by Mr. Fred Marano, Executive VP of Estimating, Mr. Mark Winger, Director of Preconstruction Services and Mr. Jack Hayes, President. The specific services we provide include Value Engineering, Cost Estimating, Logistics of Construction, Scheduling and Document Review. As design progresses, we will then work with the architect/engineer and the Village to develop a bid strategy in terms of bid packaging and trade contractor qualification.

Bidding – This proposal does not include the preparation of construction management bidding documents (e.g., scopes of work, front end bidding documents). FQC is available to provide these services, if the decision is made to proceed with delivery of the project through a construction management contract, similar to the Public Works facility project.

Schedule:

FQC understands that the Village desires to move forward with the planning and design phase immediately. Our team is available to assist and would anticipate that design would occur through the fall of 2024 with bidding and construction to follow. As part of our standard scope of preconstruction services, FQC will develop a comprehensive project schedule. FQC will work throughout the preconstruction phase in developing a project schedule including each phase of work, bidding and construction sequencing.

Compensation:

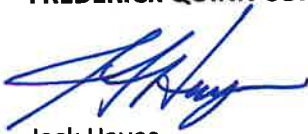
Preconstruction Services – These services include the work required to help finalize the project plan and develop, evaluate and confirm the project scope, budget and schedule. Throughout this phase of work, FQC will work extensively with the Village and your architect/engineer to provide value engineering, constructability review, cost estimating, logistics, schedule development and phasing input. Formal cost estimates will be provided at the completion of each discreet design phase, provided relevant documents are provided by the design team for assembly of an updated cost estimate at those milestones. FQC proposes to provide preconstruction services for a fixed fee of \$18,750.00. The preconstruction services would be billed in 25% increments following completion of SD cost estimate, DD cost estimate, 50% construction documents cost estimate and then at completion of construction documents.

Mr. James Warnstedt
Village of Buffalo Grove – Station No. 25
April 5, 2024
Page 3

FQC appreciates the opportunity to be of continued service to the Village of Buffalo Grove and your community. If the terms of this proposal are acceptable, please sign the Acceptance section below. Upon acceptance of this proposal, FQC will coordinate a kick-off meeting with the Village and FGM Architects. If you have any questions, please let me know.

Respectfully submitted,

FREDERICK QUINN CORPORATION



Jack Hayes
President

Accepted By:

Signature

Name

Date

Attachment: 4-8-24 Quinn Design Contract St. 25 (O-2024-53 : FQC Design Contract Station 25)



Ordinance No. O-2024-54 : An Ordinance Authorizing Execution of an Agreement with Gewalt Hamilton Associates, Inc. for Professional Surveying and Engineering Services

Recommendation of Action

Staff recommends approval, pending final review by the Village Attorney.

Summary: Staff is recommends entering into a contract with GeWalt Hamilton Associates for site work, surveying and engineering services for the station 25 project in the total amount of \$146,095.00.

ATTACHMENTS:

- BOT memo (DOCX)
- 5-20-24 GWH Ordinance St. 25 Design (DOCX)
- Professional Service Contract 2024 GHA (PDF)

Trustee Liaison
Cesario

Staff Contact
Larry Kane, Fire

Monday, May 20, 2024

VILLAGE OF BUFFALO GROVE**MEMORANDUM**

DATE: May 15, 2024

TO: Dane Bragg, Village Manager

FROM: Chris Stilling, Deputy Village Manager
Michael Baker, Fire Chief
Lawrence Kane, Deputy Fire Chief

SUBJECT: Pre-Construction Services for Station 25 Update (Design Development Phase)

Pre-Construction Service Update

The design phase of the Station 25 building process requires the services of a construction manager to assist in such areas as evaluations of materials, costs, availability, etc. allowing for seeking out value in the final station build process as well as the efficient coordination of contractors and deliveries. In consideration of this contract, staff sought bids from two construction management companies who specialize in municipal work. In addition, we sought out area fire departments that have used these services in order to evaluate their experiences.

Based upon our findings, staff recommends entering into an agreement with Fredrick Quinn Construction Management (FQC) as we enter this process of the Station 25 project. Some of the benefits from both their proposal as well as the feedback we received is that they are proactive in the build process as it relates to value of design, they are physically present and prepared for all construction meetings and they are prepared with various options. In addition, staff believes that the crossover from the current PW project to the temporary Station 25 project will lead to more efficient coordination resulting in better overall value in the end. The FQC contracted amount for design work is \$18,750.00 and is a fixed fee.

Site Work and Topography Update

The Village of Buffalo Grove currently has a professional agreement with Gewalt Hamilton Engineers for site work, surveying, and engineering services. Gewalt Hamilton is currently performing a considerable amount of work in the Village allowing us to receive value-based pricing by having crews centrally located in our work area. Gewalt Hamilton has provided pricing for engineering design and construction administration services in the total amount of \$130,595.00 including reimbursables. In addition, Gewalt Hamilton will provide land surveying services and a topography survey at the Station 25 site for an amount of \$15,500.00.

Attachment: BOT memo (O-2024-54 : GWH Design Contract Station 25)

Future Planning

With your approval, Staff respectfully requests that we move forward in seeking approval at the May 20th Village Board Meeting with agreements for construction management services for the design of Station 25 as well as the survey and site work agreements to keep the Station 25 project on schedule.

It should be noted that these costs were accounted for in the 2024 capital budget for the Station 25 project.

An overview of the requests is below along with the associated FGM timeline:

Task	Contractor	Cost	Estimated Completion
Site / Topo Work	Gewalt Hamilton	\$146,095.00	May – July 2024
CM Design	Fredrick Quinn Construction (FQC)	\$18,750.00	May – July 2024

Per the overall timeline presented below, we are operating in the design development stage (in bold) and we are on schedule.

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Begin Construction	March / April 2025
Substantial Completion	February / March 2026
Final Completion	March / April 2026

Attachments

4-8-24 Quinn Design Contract St. 25
4-30-24 GWH Site Work Final

ORDINANCE 2024-_____

AN ORDINANCE AUTHORIZING EXECUTION OF AN AGREEMENT WITH GEWALT HAMILTON ASSOCIATES, INC. FOR PROFESSIONAL SURVEYING AND ENGINEERING SERVICES

WHEREAS, the Village of Buffalo Grove is a home rule unit pursuant to the Illinois Constitution of 1970; and

WHEREAS, the Village sought out companies qualified to provide the requested services and materials; and

WHEREAS, the Village engaged in a competitive procurement process to obtain the best value for money.

NOW THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS, as follows:

SECTION 1. The foregoing recitals are hereby adopted and incorporated and made a part of this Ordinance as if fully set forth herein.

SECTION 2. The Village Manager is authorized to execute an agreement with GeWalt Hamilton Associates, Inc. for Professional Surveying and Engineering Services, in an amount not to exceed \$146,095.00 pending review and approval by the Village Attorney.

SECTION 3. If any section, paragraph, clause or provision of this Ordinance shall be held invalid, the invalidity thereof shall not affect any other provision of this Ordinance.

SECTION 4. This Ordinance shall be in full force and effect from and after its passage and approval and not be codified.

AYES: _____

NAYES: _____

ABSENT: _____

PASSED: _____, 2024

APPROVED: _____, 2024

APPROVED:

Eric Smith, Village President

ATTEST:

Janet Sirabian, Village Clerk

Attachment: 5-20-24 GWH Ordinance St. 25 Design (O-2024-54 : GWH Design Contract Station 25)

VILLAGE OF BUFFALO GROVE PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT is dated as of the 20th day of May 2024 ("**Agreement**") and is by and between the **VILLAGE OF BUFFALO GROVE**, an Illinois home rule municipal corporation ("**Village**") and the Firm identified in Subsection 1A below.

IN CONSIDERATION OF the recitals and the mutual covenants and agreements set forth in this Agreement, and pursuant to the Village's statutory and home rule powers, the parties agree as follows:

SECTION 1. FIRM.

A. Engagement of Firm. The Village desires to engage the Firm Identified below to provide all necessary professional consulting services and to perform the work in connection with the project identified below:

Gewalt Hamilton Associates, Inc.
625 Forest Edge Drive, Vernon Hills, Illinois, 60061
Brian Wesolowski
847-478-9700
BWesolowski@gha-engineers.com

B. Project Description. The Firm shall provide Engineering Services for the Village of Buffalo Grove as detailed in the attached Scope of Service Exhibit A.

C. Representations of Firm. The Firm has submitted to the Village a description of the services to be provided by the Firm, a copy of which is attached as Exhibit A to this Agreement ("Services"). The Firm represents that it is financially solvent, has the necessary financial resources, and is sufficiently experienced and competent to perform and complete the professional services set forth in Exhibit A.

SECTION 2. SCOPE OF SERVICES.

- A. **Retention of the Firm.** The Village retains the Firm to perform, and the Firm agrees to perform, the Services.
- B. **Services.** The Firm shall provide the Services pursuant to the terms and conditions of this Agreement.
- C. **Commencement.** Time of Performance. The Firm shall commence the Services immediately upon receipt of written notice from the Village that this Agreement has been fully executed by the Parties (the "Commencement Date"). The Firm shall diligently and continuously prosecute the Services until the completion of the Work.
- D. **Reporting.** The Firm shall regularly report to the Village Manager ("Manager"), or his/her designee, regarding the progress of the Services during the term of this Agreement.

SECTION 3. COMPENSATION AND METHOD OF PAYMENT.

- A. **Agreement Amount.** The total amount billed for the Services during the term of this Agreement shall not exceed the amount identified in the Schedule of Prices section in Exhibit B, unless amended pursuant to Subsection 8A of this Agreement.
- B. **Invoices and Payment.** The Firm shall submit invoices to the Village for all Services and subcontractor services monthly. The Invoices shall be in a Village approved and itemized format for those portions of the Services performed and completed by the Firm. The amount billed in any such invoice shall be based on the method of payment set forth in Exhibit B. The Village shall pay to the Firm the amount billed pursuant to the Illinois Local Government Prompt Payment Act (50 ILCS 505/1 et seq.)
- C. **Records.** The Firm shall maintain records showing actual time devoted and costs incurred, and shall permit the authorized representative of the Village to inspect and audit all data and records of the Firm for work done under the Agreement. The records shall be made available to the Village at reasonable times during the Agreement period, and for three years after the termination of the Agreement.
- D. **Claim In Addition To Agreement Amount.** If the Firm wishes to make a claim for additional compensation as a result of action taken by the Village, the Firm shall provide written notice to the Village of such claim within 7 calendar days after occurrence of such action as provided by Subsection 8.D. of this Agreement, and no claim for additional compensation shall be valid unless made in accordance with this Subsection. Any changes in this Agreement Amount shall be valid only upon written amendment pursuant to Subsection 8.A. of this Agreement. Regardless of the decision of the Village relative to a claim submitted by the Firm, the Firm shall proceed with all of the Services required to complete the project under this Agreement as determined by the Village without interruption.

SECTION 3. COMPENSATION AND METHOD OF PAYMENT (cont.)

- E. **Taxes, Benefits and Royalties.** The Agreement Amount includes all applicable federal, state, and local taxes of every kind and nature applicable to the Services as well as all taxes, contributions, and premiums for unemployment insurance, old age or retirement benefits, pensions, annuities, or similar benefits and all costs, royalties and fees arising from the use on, or the incorporation into, the Services, of patented or copyrighted equipment, materials, supplies, tools, appliances, devices, processes, or inventions. All claim or right to claim additional compensation by reason of the payment of any such tax, contribution, premium, costs, royalties, or fees is hereby waived and released by Firm.

F. **Escalation**

Written requests for price revisions after the first year period shall be submitted at least sixty (60) calendar days in advance of the annual agreement period or Term. Requests must be based upon and include documentation of the actual change in the cost of the components involved in the contract and shall not include overhead, or profit. In any case the price revisions for any Term shall not exceed the most recent 12 month Consumers Price Index (CPI-All Urban Consumers, Chicago) or 2% whichever is greater.

The Village reserves the right to reject a proposed price increase and terminate the Agreement.

For any year beyond the initial year, this Agreement is contingent upon the appropriation of sufficient funds by the Village Board; no charges shall be assessed for failure of the Village to appropriate funds in future contract years.

SECTION 4. PERSONNEL, SUBCONTRACTORS.

- A. **Key Project Personnel.** The Key Project Personnel identified in Exhibit A shall be primarily responsible for carrying out the Services on behalf of the Firm. The Key Project Personnel shall not be changed without the Village's prior written approval, which shall not be unreasonably withheld.
- B. **Availability of Personnel.** The Firm shall provide all personnel necessary to complete the Services including, without limitation, any Key Project Personnel identified in this Agreement. The Firm shall notify the Village as soon as practicable prior to terminating the employment of, reassigning, or receiving notice of the resignation of, any Key Project Personnel. The Firm shall have no claim for damages and shall not bill the Village for additional time and materials charges as the result of any portion of the Services which must be duplicated or redone due to such termination or for any delay or extension of the Time of Performance as a result of any such termination, reassigning, or resignation.

SECTION 4. PERSONNEL, SUBCONTRACTORS (cont.)

- C. **Approval and Use of Subcontractors.** The Firm shall perform the Services with its own personnel and under the management, supervision, and control of its own organization unless otherwise approved by the Village Manager in writing. All subcontractors and subcontracts used by the Firm shall be acceptable to, and approved in advance by, the Village Manager. The Village Manager's approval of any subcontractor or subcontract shall not relieve the Firm of full responsibility and liability for the provision, performance, and completion of the Services as required by the Agreement. All Services performed under any subcontract shall be subject to all of the provisions of this Agreement in the same manner as if performed by employees of the Firm. For purposes of this Agreement, the term "Firm" shall be deemed also to refer to all subcontractors of the Firm, and every subcontract shall include a provision binding the subcontractor to all provisions of this Agreement.
- D. **Removal of Personnel and Subcontractors.** If any personnel or subcontractor fails to perform the Services in a manner satisfactory to the Village, the Firm shall immediately upon notice from the Village Manager remove and replace such personnel or subcontractor. The Firm shall have no claim for damages, for compensation in excess of the amount contained in this Agreement for a delay or extension of the Time of Performance as a result of any such removal or replacement. The Firm shall employ competent staff and shall discharge, at the request of the Village Manager, any incompetent, unfaithful, abusive or disorderly staff or subcontractor in its employ.

SECTION 5. CONFIDENTIAL INFORMATION.

- A. **Confidential Information.** The term "Confidential Information" shall mean information in the possession or under the control of the Village relating to the technical, business or corporate affairs of the Village; Village property; user information, including, without limitation, any information pertaining to usage of the Village's computer system, including and without limitation, any information obtained from server logs or other records of electronic or machine readable form; and the existence of, and terms and conditions of, this Agreement. Village Confidential Information shall not include information that can be demonstrated: (i) to have been rightfully in the possession of the Firm from a source other than the Village prior to the time of disclosure of said information to the Firm under this Agreement ("Time of Disclosure"); (ii) to have been in the public domain prior to the Time of Disclosure; (iii) to have become part of the public domain after the Time of Disclosure by a publication or by any other means except an unauthorized act or omission or breach of this Agreement on the part of the Firm or the Village; or (iv) to have been supplied to the Firm after the Time of Disclosure without restriction by a third party who is under no obligation to the Village to maintain such information in confidence.

SECTION 5. CONFIDENTIAL INFORMATION. (cont.)

- B. **No Disclosure of Confidential Information by the Firm.** The Firm acknowledges that it shall, in performing the Services for the Village under this Agreement, have access to or be directly or indirectly exposed to Confidential Information. The Firm shall hold confidential all Confidential Information and shall not disclose or use such Confidential Information without express prior written consent of the Village Manager. The Firm shall use reasonable measures at least as strict as those the Firm uses to protect its own confidential information. Such measures shall include, without limitation, requiring employees and subcontractors of the Firm to execute a non-disclosure agreement before obtaining access to Confidential Information.

SECTION 6. WARRANTY AND INSURANCE

- A. **Standard of Care.** In providing services under this Agreement, the Firm will endeavor to perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances. The Firm makes no warranty, either express or implied, as to the professional services rendered under this Agreement. The Firm shall exercise the same standard of care to comply with applicable laws, codes and regulations in effect as of the date of the execution of this Agreement.
- B. **Insurance.** Firm shall maintain throughout the term of this Agreement insurance, evidencing at least the minimum insurance coverages and limits as set forth in Exhibit C to this Agreement.
- C. **No Personal Liability.** No elected or appointed official, agent, or employee of the Village shall be personally liable, in law or in contract, to the Firm as the result of the execution of this Agreement.
- D. **Indemnity/Hold Harmless Provision** To the fullest extent permitted by law, the Firm hereby agrees to indemnify and hold harmless the Village, its officials, agents and employees against all injuries, deaths, loss, damages, claims, patent claims, suits, liabilities, judgments, cost and expenses, including reasonable attorney's fees, which may in anywise accrue against the Village, its officials, agents and employees arising in whole or in part or in consequence of the negligent performance of this work by the Firm, its employees, or subcontractors, except those due to the negligent acts or omissions of the Village, its agents or employees. Firm expressly understands and agrees that any performance bond or insurance policies required by this contract, or otherwise provided by the Firm, shall in no way limit the responsibility to indemnify, keep and save harmless the Village, its officials, agents and employees as herein provided.
- E. **Kotecki Waiver.** In addition to the requirements set forth above, the Firm (and any subcontractor into whose subcontract this clause is incorporated) agrees to assume the entire liability for all personal injury claims suffered by its own employees and waives any limitation of liability defense based upon the Worker's Compensation Act and cases decided there under. Firm agrees to indemnify the Village from and against all such loss, expense, damage or injury, including reasonable attorneys' fees, which the Village may sustain as a result of personal injury claims by Firm's employees, except to the extent those claims arise as a result of the Village's own negligence.

SECTION 7. CONSULTANT AGREEMENT GENERAL PROVISIONS

- A. **Relationship of the Parties.** The Firm shall act as an independent contractor in providing and performing the Services. Nothing in, nor done pursuant to, this Agreement shall be construed (i) to create the relationship of principal and agent, employer and employee, partners, or joint ventures between the Village and Firm; or (ii) to create any relationship between the Village and any subcontractor of the Firm.
- B. **Conflict of Interest.** The Firm represents and shall at all times abide by professional ethical requirements and other applicable law regarding conflicts of interest.
- C. **No Collusion.** The Firm represents and certifies that the Firm is not barred from contracting with a unit of state or local government as a result of (i) a delinquency in the payment of any tax administered by the Illinois Department of Revenue unless the Firm is contesting, in accordance with the procedures established by the appropriate revenue act, its liability for the tax or the amount of the tax, as set forth in Section 11-42.1-1 et seq. of the Illinois Municipal Code, 65 ILCS 5/11-42.1-1 et seq.; or (ii) a violation of either Section 33E-3 or Section 33E-4 of Article 33E of the Criminal Code of 1961, 720 ILCS 5/33E-1 et seq. The Firm represents that the only persons, firms, or corporations interested in this Agreement as principals are those disclosed to the Village prior to the execution of this Agreement, and that this Agreement is made without collusion with any other person, firm, or corporation. If at any time it shall be found that the Firm has, in procuring this Agreement, colluded with any other person, firm, or corporation, then the Firm shall be liable to the Village for all loss or damage that the Village may suffer, and this Agreement shall, at the Village's option, be null and void.
- D. **Sexual Harassment Policy.** The Firm certifies that it has a written sexual harassment policy in full compliance with Section 2-105(A)(4) of the Illinois Human Rights Act, 775 ILCS 512-105(A)(4).
- E. **Termination.** Notwithstanding any other provision hereof, the Village Manager may terminate this Agreement, without cause, at any time upon 15 calendar days prior written notice to the Firm. In the event that this Agreement is so terminated, the Firm shall be paid for Services actually performed and reimbursable expenses actually incurred, if any, prior to termination, not exceeding the value of the Services completed as determined as provided in Exhibit B.
- F. **Term.** The Time of Performance of this Agreement, unless terminated pursuant to the terms of this Agreement, shall be for 12 months. The Agreement may be renewed upon mutual agreement by both parties for additional 12 month periods. At the end of any term the Village of Buffalo Grove reserves the right to extend this agreement for a period of up to ninety (90) calendar days for the purpose of securing a new agreement.

SECTION 7. CONSULTANT AGREEMENT GENERAL PROVISIONS (cont.)

- G. **Compliance with Laws and Grants.** Firm shall give all notices, pay all fees, and take all other action that may be necessary to ensure that the Services are provided, performed, and completed in accordance with all required governmental licenses, or other approvals and authorizations that may be required in connection with providing, performing, and completing the Services, and shall endeavor to comply with all applicable statutes, ordinances, rules, and regulations, including without limitation the Fair Labor Standards Act; any statutes regarding qualification to do business; any statutes prohibiting discrimination because of, or requiring affirmative action based on, race, creed, color, national origin, age, sex, or other prohibited classification, including, without limitation, the Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12101 et seq., and the Illinois Human Rights Act, 775 ILCS 5/1-101 et seq. Firm shall also comply with all conditions of any federal, state, or local grant received by Owner or Firm with respect to this Agreement or the Services.

Firm shall be solely liable for any fines or civil penalties that are imposed by any governmental or quasi-governmental agency or body that may arise, or be alleged to have arisen, out of or in connection with Firm's, or its subcontractors', performance of, or failure to perform, the Services or any part thereof.

Every provision of law required by law to be inserted into this Agreement shall be deemed to be inserted herein.

- H. **Default.** If the Firm has failed or refused to prosecute, or has delayed in the prosecution of, the Services with diligence at a rate that assures completion of the Services in full compliance with the requirements of this Agreement, or has otherwise failed, refused, or delayed to perform or satisfy the Services or any other requirement of this Agreement ("Event of Default"), and fails to cure any such Event of Default within fourteen (14) calendar days after the Firm's receipt of written notice of such Event of Default from the Village, then the Village shall have the right, without prejudice to any other remedies provided by law or equity, to pursue any one or more of the following remedies:

1. **Cure by Firm.** The Village may require the Firm, within a reasonable time, to complete or correct all or any part of the Services that are the subject of the Event of Default; and to take any or all other action necessary to bring the Firm and the Services into compliance with this Agreement.
2. **Termination of Agreement by Village.** The Village may terminate this Agreement without liability for further payment of amounts due or to become due under this Agreement.
3. **Withholding of Payment by Village.** The Village may withhold from any payment, whether or not previously approved, or may recover from the Firm, any and all costs, including attorneys' fees and administrative expenses, incurred by the Village as the result of any Event of Default by the Firm or as a result of actions taken by the Village in response to any Event of Default by the Firm.

SECTION 7. CONSULTANT AGREEMENT GENERAL PROVISIONS (cont.)

- I. **No Additional Obligation.** The Parties acknowledge and agree that the Village is under no obligation under this Agreement or otherwise to negotiate or enter into any other or additional contracts or agreements with the Firm or with any vendor solicited or recommended by the Firm.
- J. **Village Manager Authority.** Notwithstanding any provision of this Agreement, any negotiations or agreements with, or representations by the Firm to vendors shall be subject to the approval of the Village Manager. The Village shall not be liable to any vendor or other third party for any agreements made by the Firm, purportedly on behalf of the Village, without the knowledge of and express approval by the Village Manager.
- K. **Mutual Cooperation.** The Village agrees to cooperate with the Firm in the performance of the Services, including meeting with the Firm and providing the Firm with such confidential and non-confidential information that the Village may have that may be relevant and helpful to the Firm's performance of the Services. The Firm agrees to cooperate with the Village in the performance of the Services to complete the Work and with any other Firms engaged by the Village.
- L. **News Releases.** The Firm shall not issue any news releases or other public statements regarding the Services without prior approval from the Village Manager. Nothing Herein shall limit the Firm's right to identify the Village as a client of the Firm or from disclosing matters arising from the relationship between the Village and the Firm that are subject to disclosure under the Illinois Freedom of Information Act, (5 ILCS 140, et seq)
- M. **Ownership.** Designs, drawings, plans, specifications, photos, reports, information, observations, records, opinions, communications, digital files, calculations, notes, and any other documents, data, or information, in any form, prepared, collected, or received by the Firm in connection with any or all of the Services to be performed under this Agreement ("Documents") shall be and remain the exclusive property of the Village. At the Village's request, or upon termination of this Agreement, the Firm shall cause the Documents to be promptly delivered to the Village, in original format or a suitable facsimile acceptable to the Village.

SECTION 8. GENERAL PROVISIONS.

- A. **Amendment.** No amendment or modification to this Agreement shall be effective unless and until such amendment or modification is in writing, properly approved in accordance with applicable procedures, and executed.
- B. **Assignment.** This Agreement may not be assigned by the Village or by the Firm without the prior written consent of the other party.
- C. **Binding Effect.** The terms of this Agreement shall bind and inure to the benefit of the Parties hereto and their agents, successors, and assigns.
- D. **Notice.** Any notice or communication required or permitted to be given under this Agreement shall be in writing and shall be delivered (i) personally, (ii) by a reputable overnight courier, (iii) by certified mail and deposited in the U.S. Mail, postage prepaid, (iv) by facsimile, or (v) by electronic Internet mail ("e-mail"). Facsimile notices shall be deemed valid only to the extent that they are (a) actually received by the individual to whom addressed and (b) followed by delivery of actual notice in the manner described in either (i), (ii), or (iii) above within three business days thereafter at the appropriate address set forth below. E-mail notices shall be deemed valid and received by the addressee thereof when delivered by e-mail and (a) opened by the recipient on a business day at the address set forth below, and (b) followed by delivery of actual notice in the manner described in either (i), (ii) or (iii) above within three business days thereafter at the appropriate address set forth below. Unless otherwise expressly provided in this Agreement, notices shall be deemed received upon the earlier of (a) actual receipt; (b) one business day after deposit with an overnight courier as evidenced by a receipt of deposit; or (c) three business days following deposit in the U.S. mail. By notice complying with the requirements of this Subsection, each Party shall have the right to change the address or the addressee, or both, for all future notices and communications to such party, but no notice of a change of addressee or address shall be effective until actually received. The provisions of this Section 8 D shall not control with respect to the manner of communications utilized by the Firm in rendering the Services.

Notices and communications to the Village shall be addressed to, and delivered at, the following address:

Village of Buffalo Grove ("Village")

50 Raupp Blvd.

Buffalo Grove, IL 60089

Attn: Dane Bragg

Email: dbragg@vbg.org

cc: kjohnson@vbg.org

Notices and communications to the Firm shall be addressed to, and delivered at, the following address:

Gewalt Hamilton Associates, Inc. 625 Forest

Edge Drive

Vernon Hills, IL 60061

Attn: Brian Wesolowski

Email: BWesoloski@gha-engineers.com

SECTION 8. GENERAL PROVISIONS (cont.)

- E. **Third Party Beneficiary.** No claim as a third party beneficiary under this Agreement by any person, firm, or corporation other than the Firm shall be made or be valid against the Village.
- F. **Provisions Severable.** If any term, covenant, condition, or provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remainder of the provisions shall remain in full force and effect and shall in no way be affected, impaired or invalidated.
- G. **Time.** Time is of the essence in the performance of this Agreement.
- H. **Governing Laws.** This Agreement shall be interpreted according to the internal laws, but not the conflict of laws rules, of the State of Illinois. Venue shall be in Cook County, Illinois
- I. **Entire Agreement.** This Agreement constitutes the entire agreement between the parties and supersedes any and all previous or contemporaneous oral or written agreements and negotiations between the Village and the Firm with respect to the Request for Proposal.
- J. **Waiver.** No waiver of any provision of this Agreement shall be deemed to or constitute a waiver of any other provision of this Agreement (whether or not similar) nor shall any such waiver be deemed to or constitute a continuing waiver unless otherwise expressly provided in this Agreement.
- K. **Exhibit.** Exhibit, A and Exhibit B are attached hereto, and by this reference incorporated in and made a part of this Agreement. In the event of a conflict between the Exhibit and the text of this Agreement, the text of this Agreement shall control.
- L. **Rights Cumulative.** Unless expressly provided to the contrary in this Agreement, each and every one of the rights, remedies, and benefits provided by this Agreement shall be cumulative and shall not be exclusive of any other such rights, remedies, and benefits allowed by law.
- M. **Calendar Days and Time.** Unless otherwise provided in this Contract, any reference in this Contract to “day” or “days” shall mean calendar days and not business days. If the date for giving of any notice required to be given, or the performance of any obligation, under this Contract falls on a Saturday, Sunday or federal holiday, then the notice or obligation may be given or performed on the next business day after that Saturday, Sunday or federal holiday.
- N. **No Waiver of Tort Immunity.** Nothing contained in this Agreement shall constitute a waiver by the Village of any right, privilege or defense available to the Village under statutory or common law, including, but not limited to, the Illinois Governmental and Governmental Employees Tort Immunity Act, 745 ILCS 10/1-101 et seq., as amended.

SECTION 8. GENERAL PROVISIONS (cont.)

- O. **Freedom of Information.** The Firm agrees to furnish all documentation related to the Contract, the Work and any documentation related to the Village required under an Illinois Freedom of Information Act (ILCS 140/1 et. seq.) ("FOIA") request within five (5) calendar days after the Village issues Notice of such request to the Firm.
- P. **Counterpart Execution.** This Agreement may be executed in several counterparts, each of which, when executed, shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

ACKNOWLEDGEMENT.

The undersigned hereby represent and acknowledge that they have read the foregoing Agreement, that they know its contents, and that in executing this Agreement they have received legal advice regarding the legal rights of the party on whose behalf they are executing this Agreement, and that they are executing this Agreement as a free and voluntary act and on behalf of the named parties.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the dates set forth below.

VILLAGE OF BUFFALO GROVE

By: _____
Dane Bragg, Village Manager

Date: _____

Firm

By: _____
Brian Wesolowski

Title: Director of Site Design

Date: _____

**Exhibit A.
("Services")**

Proposal documents

April 29, 2024

625 Forest Edge Drive ■ Vernon Hills, IL 60061

847.478.9700 ■ GHA-Engineers.com

Dane Bragg

Village Manager

Village of Buffalo Grove

51 Raupp Blvd.

Buffalo Grove, IL 60089

Re: **Professional Surveying and Engineering Services (DRAFT)**

Buffalo Grove Fire Station 25

505 West Dundee Road, Buffalo Grove, IL 60089

GHA Proposal No. 2024.SD060

Dear Mr. Bragg:

Thank you for considering Gewalt Hamilton Associates, Inc. (GHA) to provide engineering design and construction administration services for the Buffalo Grove Fire Station 25. Our firm is well qualified to perform this work and is eager to continue serving the Village of Buffalo Grove (Client). We anticipate modifications will be made to the concepts as the design is further developed but the scope outlined below generally follows implementing the improvements as currently conceptualized.

We are pleased to have the opportunity to make our service available to you and look forward to assisting you on this project.

Sincerely,

Gewalt Hamilton Associates, Inc.



Brian Wesolowski, P.E., CFM

Director of Site Design Services

Direct: 847.821.6235

BWesolowski@GHA-Engineers.com

Encl.: GHA Proposal No. 2024.SD060

Attachment: Professional Service Contract 2024 GHA (O-2024-54 : GWH Design Contract Station 25)

Buffalo Grove Fire Station 25
505 West Dundee Road
Buffalo Grove, IL
GHA Proposal No. 2024.SD060

625 Forest Edge Drive, Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

www.gha-engineers.com

Village of Buffalo Grove (Client), 51 Raupp Blvd., Buffalo Grove, IL 60089, and Gewalt Hamilton Associates, Inc. (GHA), 625 Forest Edge Drive, Vernon Hills, IL 60061, agree and contract as follows:

I. Project Understanding

The Client is requesting a proposed development for site and stormwater improvements required for a new fire station building at 505 West Dundee Road, Buffalo Grove, IL.

GHA, as the engineer of record, will be responsible for creating comprehensive construction documents. The documents will include site plan geometrics, demolition, grading, utilities, storm water management, soil erosion and sediment control, landscaping, and specifications for the proposed improvements. GHA will obtain the required permits to construct site improvements with the associated governing jurisdictions. GHA will offer construction phase assistance to help the Client monitor the contractor's work and facilitate the permit closure.

Throughout the process our office will work with both the Village and the Villages selected architectural consultant, fgma, to facilitate a complete construction document package. We anticipate the design work moving forward in an expedited manner in order to submit the project to the MWRD and to IDOT to facilitate construction work starting in late 2024 or early 2025. Based on our current experience with IDOT we anticipate a 6 to 9 month turnaround for that permit.

Although we do not believe it will be necessary, we are assuming the existing signal within the Dundee right of way will not need to be modified except for modification of the detecting system. Any updates to the signal are not included.

Below is a detailed list of the scope of services proposed for this project.

II. Scope of Services

GHA will provide the following services:

A. ALTA | NSPS Land Title Survey

GHA will mobilize a survey crew led by an Illinois Professional Land Surveyor to perform and prepare an ALTA | NSPS Land Title Survey in accordance with the "Minimum Standard Detail Requirements and Accuracy Standards for ALTA/NSPS Land Title Surveys" jointly established and adopted by ALTA and NSPS, effective February 23, 2021. The survey will include *Table*

A items 1, 2, 3, 4, 5, 7(a), 8, 9, and 11(a). We are including a copy of *Table A* for a more in-depth explanation of the tasks to be performed.

B. Existing Conditions Topographic Survey

The survey will meet or exceed the Minimum Standards of Practice as set forth by the Illinois Administrative Code for a Topographic Survey. Accordingly, we will provide the following services:

1. Obtain benchmark information (NAVD88) from the Village of Buffalo Grove Control Benchmark System.
2. Horizontal coordinates shall be referenced to the State Plane Coordinate System, Illinois East Zone, NAD83 adjustment. Vertical elevations shall be referenced to the North American Vertical Datum of 1988 (NAVD88). All units shall be U.S. Survey feet and decimal parts thereof.
3. Establish two (2) permanent site benchmarks (i.e., crosses or boxes cut on concrete, flange bolts on fire hydrants, etc.) on site.
4. Contours will be provided at 1'-0" maximum vertical intervals; error shall not exceed one-half the contour interval.
5. The limits of the topography will be as shown outlined in RED on the attached Survey Limits Exhibit.
6. Spot elevations will be provided on a maximum 50-foot grid covering the entire property. Paved areas will have a grid density of approximately 30'. High points and low points will be shown. Overflow routes will also be shown.
7. The survey will show the location of the visible, physical improvements on the site (e.g., structures, fencing, site furniture, walks, curbing, etc.).
8. The location of underground utilities, both observed and from available record information (to be supplied by VBG), will be provided, including location and size of water mains, fire hydrants and valves. The survey will show depth, size, and direction of flow for all sanitary, storm drains, and culverts serving the property. The location of all manholes, catch basins and all pipe inverts that are accessible will be depicted. The cost for marking of private utilities is not included in this proposal, but GHA will include this information if the Client arranges to have private utilities marked in the field.
9. Location of "dry" utilities such as telephone, electric, gas and cable T.V. lines, etc. will be depicted based on visual surface evidence and available utility atlas information from the respective utility companies. The cost for marking private utilities is not included in this proposal, but GHA will include this information if the Client arranges to have private utilities marked in the field prior to our field visit.

10. Individual free-standing trees 6" caliper or greater will be shown as deciduous or coniferous. Tagging and species/condition report is not included. Groupings of trees or landscaped areas will be shown in mass.

C. Schematic Design Phase

1. Prepare preliminary site plan for Architect and Client review.
2. Review all applicable code issues. Address the issues and advise the Architect and Client, as necessary.
3. Review GHA's respective systems with the Architect and Client concerning costs and quality implications.
4. Provide sufficient civil descriptions as required to complete a schematic design.
5. Participate in meetings with Client to review preliminary civil engineering design. Our scope provides for attendance of up to two (2) meetings with the Architect and the Client in this phase.

D. Site Improvement Construction Documents

1. Final Site Plan with geometrics facilitated from schematic design phase for Client's approval prior to commencement of Construction Documents.
2. Existing Conditions/Demolition Plan showing the existing site conditions from topographic survey and any site items requiring removal and/or abandonment.
3. Proposed Grading Plan including new contours and spot elevations for the site improvements that meet ADA requirements. This plan shall show existing contours and spot elevations.
4. Proposed Utility Plan showing any required new or relocated storm sewers, storm water management system, sanitary sewers, and water lines due to proposed improvements along with the existing identifiable utilities.
5. Soil Erosion and Sediment Control (SE/SC) Plan with applicable notes and SE/SC details and planting schedules.
6. Standard Detail Sheets and General Notes incorporating regulatory agency standards and those of the Client, which do not conflict with the regulatory agencies. Specifications are provided on GHA's plan drawings.
7. Landscape Plan and Details, as prepared by licensed landscape architect, depicting required foundation planting, trees, and shrubs.
8. The plans will be prepared in a 22" x 34" format as required by most review agencies for civil engineering improvements.
9. Consultation with the Client as required via telephone, e-mail, and documentation.

10. Progress plans will be provided to the Client for review. Exchange of drawings will be in electronic format unless otherwise requested.
11. Provide final construction documents in PDF and print format.

E. Stormwater Management and Permitting

1. Comprehensive review of the existing stormwater management system and current stormwater codes.
2. Stormwater management analysis to define new requirements in conjunction with existing detention system.
3. Stormwater calculations required for new storm sewer and stormwater management system as required to accommodate the proposed site improvement. The proposed stormwater management system will be designed in accordance with the requirements of the Village of Buffalo Grove and the Cook County Watershed Management Ordinance, as administered by the Metropolitan Water Reclamation District of Greater Chicago (MWRD). The calculations and a summary of our findings will be included in a storm water management report.
4. Preparation of stormwater calculations and exhibit required to complete IDOT's drainage connection checklist. The calculations and other supporting documents will be included in a stormwater management report submitted to IDOT.
5. Consult with officials and Owner to obtain permits associated with civil engineering site improvements. Permits are anticipated to include the following:
 - a. Village of Buffalo Grove
 - b. Metropolitan Water Reclamation District of Chicago (MWRD)
 - c. Illinois Department of Transportation (IDOT) – stormwater drainage
 - d. IEPA – Watermain Construction
 - e. IEPA – Notice of Intent (NOI), NPDES and Notice of Termination (NOT)

F. Bidding and Value Engineering Negotiation Phase

1. Provide addendums and clarifications as needed during bid process.
2. Review contractors' bids and provide comments as needed.
3. Participate in a post-bid review meeting with Architect and Client to propose and review value engineering items associated with potential cost overruns.
4. Participate at a pre-bid meeting.

G. Construction Review and Administration/Project Closeout

1. Review shop drawings, manuals, and other submittals as necessary.
2. Assist with field orders, change orders, requests for information and clarifications as necessary.
3. Perform two (2) punch list inspections and one (1) 11-month warranty review of the Project Components related to work our office designed.
4. Attendance of fifteen (15) weekly Owner, Architect and Contractor (OAC) meeting engagement, as requested. Anticipate semi active 3-month construction period for site and utility work construction.
5. Review and comment on contractor provided Closeout Documents including warranties, manuals, and as-built drawings. Per MWRD requirements our office will perform as-builts of MWRD permitted facilities for proper closure of the MWRD RFI.

H. Full Time Construction Inspection Services

1. We anticipate a period of 6 weeks when full time construction inspections will be required for the work. Our work during this period may not be concurrent but will generally follow the overall construction schedule of the project at times when no inspections are necessary.
2. GHA will provide full-time construction observation of the necessary construction operations and processes to ensure all materials and procedures are in conformance with the contract documents. We will utilize GHA's standards documentation procedures which align with IDOT's Documentation of Contract Quantities guide. We will provide Daily Observation Reports, Weekly Reports, Daily Quantities, Quantity Book, Pay Estimates, Authorizations, and other reports, as required. We will measure, record, and provide source documentation daily for all quantities for which payment will be made, and we will adhere to general IDOT requirements regarding inspection rates, including, but not limited to, depth checks, yield requirements, and material weight ticket collection. GHA will keep a project box on site, including all necessary up-to-date documentation in accordance with standard procedures and IDOT's Documentation of Contract Quantities guide.
3. If a field change or Authorization is required, whether force account or agreed unit price, GHA will notify and advise the Client prior to making any decisions that may affect the budget. In addition, our documentation of the Contractor's daily activities will help provide sufficient information to permit verification of the nature and costs of any changes in plans or authorized extra work.
4. GHA will coordinate with Client's prequalified geotechnical and material testing subconsultant who will administer the quality assurance testing for the field and laboratory requirements regarding hot-mix asphalt, concrete, soils, and aggregate quality. We will confirm and document that all the materials used on

the project meet or exceed the quality requirements of the contract. An allowance for this work has been provided in our fee table.

5. GHA will make observations of the utility marks provided by the JULIE system and proactively address potential conflicts with the Contractor. We will coordinate with utility companies as necessary throughout the duration of the project.
6. GHA will perform daily traffic control inspections in addition to those required weekly and bi-monthly during night hours, and respectively submit deficient remarks to the Contractor with appropriate corrections requested.
7. GHA will review associated documentation and prepare monthly pay requests for the Clients review and recommend payment.
8. GHA will keep current red-marked as-built drawings as the work is performed. We will annotate by hand all revisions, substitutions, variations, and omissions made or discovered during construction. Upon project completion, GHA will provide the Client with electronic copies of the hand-annotated, red-marked plan set.
9. As a representative or liaison of the Village, GHA staff understands the importance of our interface with the public, and will conduct all dealings with public officials, business owners, residents, and the traveling public with professionalism and courtesy.

I. NPDES Construction Compliance Inspection Monitoring

The scope of services is based upon GHA familiar with the project, local permitting requirements, and our experience in performing NPDES compliance monitoring. GHA currently anticipates a 6-month construction period for NPDES inspections with an anticipated total of forty (40) visits.

GHA's NPDES compliance monitoring will be performed in accordance with the following services:

1. Soil erosion and sediment control site inspection every seven (7) calendar days and within 24 hours of storm events with greater than or equal to 0.5-inch of rainfall events in compliance with the NPDES permit for the project.
2. GHA will provide an NPDES inspection form report with photos following each site visit. This document will be submitted to Client, contractor, and local enforcement officer, if required.
3. Propose corrective measures and recommend additional soil and erosion and sediment control prevention measures, as necessary, to Client.
4. Maintain and update the on-site Stormwater Pollution Prevention Plan (SWPPP) document throughout construction.

5. Prepare and submit any Incidence of Non-Compliance to the IEPA.
6. Prepare and submit NDPES close-out documents (Notice of Termination) with the IEPA upon permanent stabilization of the site covered under the permit.

III. Services Not Included

Any service not enumerated in Section II. Scope of Services, including, but not limited to the following, is not included in this proposal/agreement. These services may be provided at the request of the Client as an additional service. GHA will provide the Client with an estimate of the additional work scope and request authorization to proceed prior to commencing additional services.

1. Plat of Survey, Construction Staking, As-built Survey, or other surveying services not specified in Section II. Scope of Services.
2. Structural engineering.
3. Architectural permitting services.
4. Furniture selection/specifications.
5. Delineation, environmental testing, or environmental engineering services.
6. Engineering services required by revisions to the approved site plan.
7. Additional meetings with public officials, agencies, or architects, above previous number of meetings stated above.
8. Additional attendance at or preparation for public hearings or testimony at Village Board, Plan Commission, or County Engineering meetings above the one included in final engineering scope.
9. Permit fees or review fees.
10. Construction material testing.
11. Geotechnical investigation and report.
12. Preparation and submission of an environmental investigation or tree identification.
13. Photometric plan
14. Coordination with IDOT and County for road improvements.
15. Traffic signal design

IV. Compensation for Services

Based upon the scope of services, GHA proposes a fee breakdown as shown below.

GHA proposes to invoice the Village of Buffalo Grove on a time and material not-to-exceed (NTE) fee as follows:

Phase	Cost
Survey Phase	
ALTA Land Title Survey with Existing Conditions Topography	\$14,500
Wheatland Title Company Commitment for Title	\$1,000
<u>Total Survey Phase</u>	<u>\$15,500</u>
Design Phase	
Schematic Design Phase	\$8,700
Design Development & Construction Documents	\$18,900
Metropolitan Water Reclamation District (MWRD) Permitting	\$13,900
IDOT Permitting	\$9,375
IEPA NPDES Permitting	\$3,920
Bidding Negotiation and Value Engineering Phase	\$3,700
<u>Total Design Phase</u>	<u>\$58,495</u>
Construction Phase	
Construction Review and Administration/Project Closeout	\$10,300
Full Time Construction Observation (6 weeks)	\$49,800
NPDES Construction Inspections (30 total)	\$9,000
<u>Total Construction Phase</u>	<u>\$69,100</u>
Subtotal	\$143,095
Estimated Reimbursable Expenses	\$3,000
Total + Reimbursables	\$146,095

Reimbursable expenses, including items such as printing, mileage, messenger service, record documents and other non-technical project related expenses, will be billed to the Client at cost.

Additional services requested and authorized by the Client, beyond those outlined in Section I: Scope of Services, will be billed on a time-and-materials (T&M) basis in accordance with the attached GHA Hourly Rates.

Invoices will be submitted on a monthly basis and will detail charges made against the project and services performed. This allows the Client to review the status of the work in progress and the charges made.

V. General Conditions

The delineated services provided by Gewalt Hamilton Associates, Inc., (GHA) under this Agreement will be performed as reasonably required in accordance with the generally accepted standards for civil engineering and surveying services as reflected in the contract for this project at the time when and the place where the services are performed.

Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the Client or GHA. GHA's services under this Agreement are being performed solely for the Client's benefit, and no other party or entity shall have any claim against GHA because of this Agreement or the performance or nonperformance of services hereunder. In no event shall GHA be liable for any loss of profit or any consequential damages.

The Client and GHA agree that all disputes between them arising out of or relating to this Agreement, or the Project shall be submitted to nonbinding mediation in Chicago, Illinois unless the parties mutually agree otherwise.

GHA, Inc. shall not have control of and shall not be responsible for construction means, methods, techniques, sequences, or procedures, or for job site safety measures. Such control is the sole responsibility of the Client's contractor.

This Agreement, including all subparts, which is attached hereto and incorporated herein as the General Provisions of this Agreement, constitute the entire integrated agreement between the parties which may not be modified without all parties consenting thereto in writing.

Gewalt Hamilton Associates, Inc.



Brian J. Weslowski, P.E., CFM
Director of Site Design Services

Encl.: GHA Hourly Rates
Conceptual Design Exhibit

Attachment: Professional Service Contract 2024 GHA (O-2024-54 : GWH Design Contract Station 25)

TABLE A**OPTIONAL SURVEY RESPONSIBILITIES AND SPECIFICATIONS**

NOTE: Whether any of the nineteen (19) items of Table A are to be selected, and the exact wording of and fee for any selected item, may be negotiated between the surveyor and client. Any additional items negotiated between the surveyor and client must be identified as 20(a), 20(b), etc. Any additional items negotiated between the surveyor and client, and any negotiated changes to the wording of a Table A item, must be explained pursuant to Section 6.D.ii.(g). Notwithstanding Table A Items 5 and 11, if an engineering design survey is desired as part of an ALTA/NSPS Land Title Survey, such services should be negotiated under Table A, Item 20.

If checked, the following optional items are to be included in the ALTA/NSPS LAND TITLE SURVEY, except as otherwise qualified (see note above):

1. ☒ Monuments placed (or a reference monument or witness to the corner) at all major corners of the boundary of the surveyed property, unless already marked or referenced by existing monuments or witnesses in close proximity to the corner.
2. ☒ Address(es) of the surveyed property if disclosed in documents provided to or obtained by the surveyor, or observed while conducting the fieldwork.
3. ☒ Flood zone classification (with proper annotation based on federal Flood Insurance Rate Maps or the state or local equivalent) depicted by scaled map location and graphic plotting only.
4. ☒ Gross land area (and other areas if specified by the client).
5. ☒ Vertical relief with the source of information (e.g., ground survey, aerial map), contour interval, datum, with originating benchmark, when appropriate.
6. ☐ (a) If the current zoning classification, setback requirements, the height and floor space area restrictions, and parking requirements specific to the surveyed property are set forth in a zoning report or letter provided to the surveyor by the client or the client's designated representative, list the above items on the plat or map and identify the date and source of the report or letter.
- ☐ (b) If the zoning setback requirements specific to the surveyed property are set forth in a zoning report or letter provided to the surveyor by the client or the client's designated representative, and if those requirements do not require an interpretation by the surveyor, graphically depict those requirements on the plat or map and identify the date and source of the report or letter.
7. ☒ (a) Exterior dimensions of all buildings at ground level.
- ☐ (b) Square footage of:
 - ☐ (1) exterior footprint of all buildings at ground level.
 - ☐ (2) other areas as specified by the client.

- ☐ (c) Measured height of all buildings above grade at a location specified by the client. If no location is specified, the point of measurement shall be identified.
8. ☒ Substantial features observed in the process of conducting the fieldwork (in addition to the improvements and features required pursuant to Section 5 above) (e.g., parking lots, billboards, signs, swimming pools, landscaped areas, substantial areas of refuse).
9. ☒ Number and type (e.g., disabled, motorcycle, regular, and other marked specialized types) of clearly identifiable parking spaces on surface parking areas, lots, and in parking structures. Striping of clearly identifiable parking spaces on surface parking areas and lots.
10. ☐ As designated by the client, a determination of the relationship and location of certain division or party walls with respect to adjoining properties.
11. Evidence of underground utilities existing on or serving the surveyed property (in addition to the observed evidence of utilities required pursuant to Section 5.E.iv.) as determined by:
- ☒ (a) plans and/or reports provided by client (with reference as to the sources of information)
- ☐ (b) markings coordinated by the surveyor pursuant to a private utility locate request.
- Note to the client, insurer, and lender – With regard to Table A, item 11, information from the sources checked above will be combined with observed evidence of utilities pursuant to Section 5.E.iv. to develop a view of the underground utilities. However, lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. In addition, in some jurisdictions, 811 or other similar utility locate requests from surveyors may be ignored or result in an incomplete response, in which case the surveyor shall note on the plat or map how this affected the surveyor's assessment of the location of the utilities. Where additional or more detailed information is required, the client is advised that excavation may be necessary.*
12. ☐ As specified by the client, Governmental Agency survey-related requirements (e.g., HUD surveys, surveys for leases on Bureau of Land Management managed lands). The relevant survey requirements are to be provided by the client or client's designated representative.
13. ☐ Names of adjoining owners according to current tax records. If more than one owner, identify the first owner's name listed in the tax records followed by "et al."
14. ☐ As specified by the client, distance to the nearest intersecting street.

15. ☐ *Rectified orthophotography, photogrammetric mapping, remote sensing, airborne/mobile laser scanning and other similar products, tools or technologies as the basis for showing the location of certain features (excluding boundaries) where ground measurements are not otherwise necessary to locate those features to an appropriate and acceptable accuracy relative to a nearby boundary. The surveyor must (a) discuss the ramifications of such methodologies (e.g., the potential precision and completeness of the data gathered thereby) with the insurer, lender, and client prior to the performance of the survey, and (b) place a note on the face of the survey explaining the source, date, precision, and other relevant qualifications of any such data.*
16. ☐ *Evidence of recent earth moving work, building construction, or building additions observed in the process of conducting the fieldwork.*
17. ☐ *Proposed changes in street right of way lines, if such information is made available to the surveyor by the controlling jurisdiction. Evidence of recent street or sidewalk construction or repairs observed in the process of conducting the fieldwork.*
18. ☐ *Pursuant to Sections 5 and 6 (and applicable selected Table A items, excluding Table A item 1), include as part of the survey any plottable offsite (i.e., appurtenant) easements disclosed in documents provided to or obtained by the surveyor.*
19. ☐ *Professional liability insurance policy obtained by the surveyor in the minimum amount of \$_____ to be in effect throughout the contract term. Certificate of insurance to be furnished upon request, but this item shall not be addressed on the face of the plat or map.*
20. ☐ _____

Adopted by the American Land Title Association on October 1, 2020. More at: www.alta.org.
Adopted by the National Society of Professional Surveyors on October 30, 2020. More at: www.nsps.us.com.



GHA GEWALT HAMILTON
ASSOCIATES, INC.
www.gha-engineers.com



1 in = 130 ft

Survey Limits Exhibit

Gewalt Hamilton Associates, Inc.

Exhibit B.
Agreed Upon Pricing Structure

Included with the Proposal documents of Exhibit A.

GHA PROFESSIONAL SERVICES HOURLY RATE GUIDE: 2024

The following rates will remain in effect until December 31, 2024, at which time they are subject to an annual increase:

PRINCIPAL	\$ 264.00	ENGINEER TECHNICIAN V	\$ 200.00
SENIOR PROJECT MANAGER II	\$ 240.00	ENGINEER TECHNICIAN IV	\$ 166.00
SENIOR PROJECT MANAGER I	\$ 220.00	ENGINEER TECHNICIAN III	\$ 150.00
PROJECT MANAGER II	\$ 202.00	ENGINEER TECHNICIAN II	\$ 126.00
PROJECT MANAGER I	\$ 178.00	ENGINEER TECHNICIAN I	\$ 92.00
ENGINEER VI	\$ 212.00	LANDSCAPE ARCHITECT	\$ 180.00
ENGINEER V	\$ 192.00	DATA MANAGER	\$ 160.00
ENGINEER IV	\$ 182.00	DATA TECHNICIAN III	\$ 148.00
ENGINEER III	\$ 170.00	DATA TECHNICIAN II	\$ 132.00
ENGINEER II	\$ 152.00	DATA TECHNICIAN I	\$ 100.00
ENGINEER I	\$ 142.00	CAD MANAGER	\$ 220.00
LAND SURVEYOR IV	\$ 214.00	CAD TECHNICIAN III	\$ 154.00
LAND SURVEYOR III	\$ 176.00	CAD TECHNICIAN II	\$ 128.00
LAND SURVEYOR II	\$ 154.00	CAD TECHNICIAN I	\$ 100.00
LAND SURVEYOR I	\$ 136.00	ADMINISTRATIVE II	\$ 114.00
GIS TECHNICIAN IV	\$ 186.00	ADMINISTRATIVE I	\$ 92.00
GIS TECHNICIAN III	\$ 160.00	ACCOUNTING MANAGER	\$ 194.00
GIS TECHNICIAN II	\$ 130.00	ACCOUNTING II	\$ 144.00
GIS TECHNICIAN I	\$ 110.00	ACCOUNTING I	\$ 130.00
ENVIRONMENTAL CONSULTANT II	\$ 150.00		
ENVIRONMENTAL CONSULTANT I	\$ 138.00		

Services provided under this Agreement will be billed according to the rates in effect at the time services are rendered.

Exhibit C. Insurance

1. Firm's Insurance

Firm shall procure and maintain, for the duration of the Contract and any maintenance period, insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by the Firm, his agents, representatives, employees or subcontractors.

A. Minimum Scope of Insurance: Coverage shall be at least as broad as:

Insurance Services Office Commercial General Liability occurrence form CG 0001 with the Village of Buffalo Grove named as additional insured on a primary and non-contributory basis. This primary, non-contributory additional insured coverage shall be confirmed through the following required policy endorsements: ISO Additional Insured Endorsement CG 20 10 or CG 20 26 and CG 20 01 04 13.

- 1) Insurance Services Office Commercial General Liability occurrence form CG 0001 with the Village named as additional insured, on a form at least as broad as the ISO Additional Insured Endorsement CG 2010 and CG 2026
- 2) Insurance Service Office Business Auto Liability coverage form number CA 0001, Symbol 01 "Any Auto."
- 3) Workers' Compensation as required by the Labor Code of the State of Illinois and Employers' Liability insurance.

B. Minimum Limits of Insurance: Firm shall maintain limits no less than:

- 1) Commercial General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. The general aggregate shall be twice the required occurrence limit. Minimum General Aggregate shall be no less than \$2,000,000 or a project/contract specific aggregate of \$1,000,000.
- 2) Business Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage.
- 3) Workers' Compensation and Employers' Liability: Workers' Compensation coverage with statutory limits and Employers' Liability limits of \$500,000 per accident.

C. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the Village. At the option of the Village, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as it respects the Village, its officials, agents, employees and volunteers; or the Firm shall procure a bond guaranteeing payment of losses and related investigation, claim administration and defense expenses.

D. Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

1) General Liability and Automobile Liability Coverages:

The Village, its officials, agents, employees and volunteers are to be covered as insureds as respects: liability arising out of activities performed by or on behalf of the Firm; products and completed operations of the Firm; premises owned, leased or used by the Firm; or automobiles owned, leased, hired or borrowed by the Firm. The coverage shall contain no special limitations on the scope of protection afforded to the Village, its officials, agents, employees and volunteers.

- 2) The Firm's insurance coverage shall be primary and non-contributory as respects the Village, its officials, agents, employees and volunteers. Any insurance or self-insurance maintained by the Village, its officials, agents, employees and volunteers shall be excess of Firm's insurance and shall not contribute with it.
- 3) Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Village, its officials, agents, employees and volunteers.
- 4) The Firm's insurance shall contain a Severability of Interests/Cross Liability clause or language stating that Firm's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- 5) If any commercial general liability insurance is being provided under an excess or umbrella liability policy that does not "follow form," then the Firm shall be required to name the Village, its officials, employees, agents and volunteers as additional insureds
- 6) All general liability coverages shall be provided on an occurrence policy form. Claims-made general liability policies will not be accepted.
- 7) The Firm and all subcontractors hereby agree to waive any limitation as to the amount of contribution recoverable against them by the Village. This specifically includes any limitation imposed by any state statute, regulation, or case law including any Workers' Compensation Act provision that applies a limitation to the amount recoverable in contribution such as Kotecki v. Cyclops Welding

E. All Coverages:

- 1) No Waiver. Under no circumstances shall the Village be deemed to have waived any of the insurance requirements of this Contract by any act or omission, including, but not limited to:
 - a. Allowing work by Firm or any subcontractor to start before receipt of Certificates of Insurance and Additional Insured Endorsements.
 - b. Failure to examine, or to demand correction of any deficiency, of any Certificate of Insurance and Additional Insured Endorsement received.
- 2) Each insurance policy required shall have the Village expressly endorsed onto the policy as a Cancellation Notice Recipient. Should any of the policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

F. Acceptability of Insurers

Insurance is to be placed with insurers with a Best's rating of no less than A-, VII and licensed to do business in the State of Illinois.

G. Verification of Coverage

Firm shall furnish the Village with certificates of insurance naming the Village, its officials, agents, employees, and volunteers as additional insured's and with original endorsements, affecting coverage required herein. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be received and approved by the Village before any work commences. The Village reserves the right to request full certified copies of the insurance policies and endorsements.

H. Subcontractors

Firm shall include all subcontractors as insured's under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage's for subcontractors shall be subject to all of the requirements stated herein.

J. Workers' Compensation and Employers' Liability Coverage

The insurer shall agree to waive all rights of subrogation against the Village of Buffalo Grove, its officials, employees, agents and volunteers for losses arising from work performed by Firm for the municipality.

- 1) NCCI Alternate Employer Endorsement (WC 000301) in place to insure that workers' compensation coverage applies under Firm's coverage rather than the Village of Buffalo Grove's, if the Village of Buffalo Grove is borrowing, leasing or in day to day control of Firm's employee.

K. Failure to Comply

In the event the Firm fails to obtain or maintain any insurance coverage's required under this agreement, The Village may purchase such insurance coverage's and charge the expense thereof to the Firm.

L. Professional Liability

- 1) Professional liability insurance with limits not less than \$1,000,00 each claim with respect to negligent acts, errors and omissions in connection with professional services to be provided under the contract, with a deductible not-to-exceed \$50,000 without prior written approval.
- 2) If the policy is written on a claims-made form, the retroactive date must be equal to or preceding the effective date of the contract. In the event the policy is cancelled, non-renewed or switched to an occurrence form, the Firm shall be required to purchase supplemental extending reporting period coverage for a period of not less than three (3) years.
- 3) Provide a certified copy of actual policy for review.
- 4) Recommended Required Coverage (architect, engineer, surveyor, consultant): Professional liability insurance that provides indemnification for injury or damage arising out of acts, errors, or omissions in providing the following professional services, but not limited to the following:
 - a. Preparing, approving or failure to prepare or approve maps, drawings, opinions, report, surveys, change orders, designs or specifications;
 - b. Providing direction, instruction, supervision, inspection, engineering services or failing to provide them, if that is the primary cause of injury or damage.



Ordinance No. O-2024-55 : An Ordinance Authorizing Execution of an Agreement with True North Consultants for Hazardous Materials Survey and Soil Assessment Services

Recommendation of Action

Staff recommends approval.

Summary: Staff recommends entering into a contract with True North Consultants for the hazardous materials survey and soil assessment on the Station 25 project in an amount not to exceed \$8,167.00.

ATTACHMENTS:

- 5-15-24 St. 25 Environmental Work (DOCX)
- 5-20-24 True North Ordinance St. 25 Design (DOCX)
- 5-7-24 True North Haz Assessment (PDF)

Trustee Liaison

Cesario

Staff Contact

Larry Kane, Fire

Monday, May 20, 2024

VILLAGE OF BUFFALO GROVE



MEMORANDUM

DATE: May 15, 2024

TO: Dane Bragg, Village Manager

FROM: Chris Stilling, Deputy Village Manager
Michael Baker, Fire Chief
Lawrence Kane, Deputy Fire Chief

SUBJECT: Environmental Services for Station 25 (Design Development Phase)

Pre-Construction Service Update

A portion of the pre-build and design work associated with the Station 25 project requires environmental work to evaluate the soil quality as well as investigate the potential for any environmental issues both underground and in the building. This includes hazardous conditions like asbestos, lead based paint, underground storage tanks, etc.

Site Testing and Survey

Staff have sought the services of True North Consultants for the hazardous materials survey and soil assessment on the Station 25 project. True North Consultants provided an estimate for the survey at a cost of \$8,167.00. True North has performed work with the Village and Staff has evaluated the cost for services and finds the cost presented to be representative of current market costs for similar work.

Recommendation

Staff respectfully requests the Village Board grant Village Manager approval to engage in a contract with True North in an amount not to exceed \$8,167.00 for the environmental survey for the Fire Station 25 project, pending Village Attorney approval.

It should be noted that these costs were accounted for in the 2024 capital budget for the Station 25 project.

Project Timeline Review

Per the overall timeline presented below, we are operating in the design development stage (in bold) and the Station 25 project is currently on schedule.

Task	Estimated Completion
Schematic Design	April 2024
Design Development	May – July 2024
Construction Documentation	August – December 2024
Issue for Construction Management Scopes	December 2024
Issue for bid and permits	January 2025
Bids Due and Bid Review	February 2025
Anticipated Board Authorization of Bids	February / March 2025
Begin Construction	March / April 2025
Substantial Completion	February / March 2026
Final Completion	March / April 2026

Attachment:

5-7-24 True North Haz Assessment

ORDINANCE 2024-_____

AN ORDINANCE AUTHORIZING EXECUTION OF AN AGREEMENT WITH TRUE NORTH CONSULTANTS FOR HAZARDOUS MATERIALS SURVEY AND SOIL ASSESSMENT SERVICES

WHEREAS, the Village of Buffalo Grove is a home rule unit pursuant to the Illinois Constitution of 1970; and

WHEREAS, the Village sought out companies qualified to provide the requested services and materials; and

WHEREAS, the Village engaged in a competitive procurement process to obtain the best value for money.

NOW THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS, as follows:

SECTION 1. The foregoing recitals are hereby adopted and incorporated and made a part of this Ordinance as if fully set forth herein.

SECTION 2. The Village Manager is authorized to execute an agreement with True North Consultants for the Hazardous Materials Survey and Soil Assessment Services for Station 25 in an amount not to exceed \$8,167.00, pending review and approval by the Village Attorney.

SECTION 3. If any section, paragraph, clause or provision of this Ordinance shall be held invalid, the invalidity thereof shall not affect any other provision of this Ordinance.

SECTION 4. This Ordinance shall be in full force and effect from and after its passage and approval and not be codified.

AYES: _____

NAYES: _____

ABSENT: _____

PASSED: _____, 2024

APPROVED: _____, 2024

APPROVED:

Eric Smith, Village President

ATTEST:

Janet Sirabian, Village Clerk

Attachment: 5-20-24 True North Ordinance St. 25 Design (O-2024-55 : True North Hazard Assessment Contract)



1000 East Warrenville Road, Ste. 140
Naperville, IL 60563

O: 630.717.2880
F: 630.689.5881

ConsultTrueNorth.com

May 7, 2024

Mr. Kyle Johnson, P.E.
Village of Buffalo Grove
51 Raupp Blvd
Buffalo Grove, IL 60089

**RE: Proposal for Hazardous Materials Survey & Soil Assessment Services
Fire Station 25
505 West Dundee Road
Buffalo Grove, Illinois 60089
True North Proposal No. P124-539**

Dear Mr. Johnson:

True North Consultants, Inc. (True North) is pleased to present the Village of Buffalo Grove (Client) with the following proposal to provide Hazardous Materials Survey & Soil Assessment Services for Fire Station 25 located at 505 West Dundee Road in Buffalo Grove, Illinois (Site). True North is committed to serving the Client by adhering to applicable regulations, policies, and guidelines; providing timely response to Client inquiries, and working with the Client to achieve a common goal. The following sections of this proposal present information regarding the scope of services, estimated costs, schedule, and limitations.

PROJECT UNDERSTANDING

The Site is currently improved the Fire Station 25 building. The Client is intending to demolish the current building to construct a new fire station on the property. Prior to demolition activities, a hazardous materials survey will be required to assess the presence of asbestos, lead-based paint, and hazardous building components. The Client is also constructing a new building that will require the assessment of soils to determine an appropriate management strategy for excess soils generated during the construction process. The following scope of services has been requested by the Client to evaluate the environmental conditions at the Site in accordance with applicable regulatory requirements and the scope of work as identified below.

SCOPE OF WORK

Task 1: Asbestos-Containing Material (ACM) Survey

True North shall provide an Illinois Department of Public Health (IDPH) licensed Asbestos Building Inspector to conduct an ACM Survey of the aforementioned structures at the Site in substantial accordance with the requirements of the Occupational Safety and Health Administration (OSHA) Asbestos Standard for the Construction Industry (29 CFR 1926.1101), the United States Environmental Protection Agency (USEPA) National Emission Standards for Hazardous Air Pollutants (NESHAPS), Asbestos Hazard Emergency Response Act (AHERA) regulations and applicable State and Local regulations. True North shall furnish all materials, equipment and supplies necessary to accomplish project objectives. The ACM Survey shall include the following scope of work in accordance with the applicable regulatory requirements:

Attachment: 5-7-24 True North Haz Assessment (O-2024-55 : True North Hazard Assessment Contract)



- *Inventory of Suspect ACMs* – Identify the presence, approximate locations, and estimated quantities of suspect asbestos-containing materials present. For each homogeneous material, information shall be recorded including the location, material description, quantity and material classification.
- *Bulk Sample Collection* – Collect bulk samples of each identified suspect ACM at representative locations in accordance with the USEPA Asbestos Hazard Emergency Response Act (AHERA) sampling protocol. True North has included within our lump sum cost the collection and analysis of up to sixty (60) samples. Should the total number of projected samples described above not be sufficient to meet project objectives, additional bulk sample analysis may be performed for a unit cost of \$20.00 per sample.
- *Bulk Sample Analysis* – Submit collected bulk samples under chain-of-custody to a National Voluntary Laboratory Accreditation Program (NVLAP) National Institute of Standards and Technology (NIST) accredited laboratory for analysis. Samples shall be analyzed for the presence of asbestos by Polarized Light Microscope (PLM) with dispersion staining in accordance with USEPA Method 600/M4-82-020 or equivalent. The samples will be submitted for analysis based upon a standard five-day turnaround time.
- *Report* – Provide a written report including information regarding the presence, location and quantity of identified materials within the Site structure(s).

True North assumes that the Client will assist in arranging unrestricted access for site inspection.

Task 2: Lead-Based Paint (LBP) Survey

True North shall provide an EPA accredited Lead Risk Assessor and/or Lead Inspector to conduct representative testing of painted surfaces on the interior and exterior of the on-site structure(s). The scope of services will be performed to assess the presence of lead-containing paints and coatings identified on structural components and/or other finish materials as described in the US Department of Housing and Urban Development (HUD) *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*. True North shall furnish all materials, equipment and supplies necessary to accomplish project objectives. The LBP Survey shall include the following scope of work in accordance with the applicable regulatory requirements:

- *Visual Assessment* – Identify the presence and approximate locations of suspect lead-based paint for various testing combinations present. For each identified paint combination, information shall be recorded including the location, color, substrate material, and type of painted or coated building component.
- *Paint Sample Collection* – Collect bulk paint chip samples of suspect LBP and/or coatings at representative locations on the interior and exterior surfaces of the site structure(s). The scope of work shall include the collection of up to fifteen (15) paint chip samples. Should the number of projected samples described above not be sufficient to meet project objectives, additional bulk sample analysis may be performed for a unit cost of \$20 per sample.
- *Paint Sample Analysis* – Submit collected bulk samples under chain-of-custody to an American Industrial Hygiene Association (AIHA) Environmental Lead Laboratory Accreditation Program (ELLAP) accredited laboratory for analysis. Samples shall be analyzed for the presence of lead by Atomic



Absorption Spectrometry (AAS) in accordance with Method SW 846. The samples will be submitted for analysis based upon five to seven day turnaround time.

- **Report** – Provide a written report including information regarding the locations of lead-containing paints and coatings (if any), comparisons of results to federal guidelines, and any recommendations for management of lead-painted or coated structural components.

Task 3: Hazardous and Other Regulated Materials (HAZMAT) Survey

True North shall provide a qualified environmental professional to conduct a Hazardous and Other Regulated Materials (HAZMAT) Survey of the aforementioned structure(s) at the Site to identify potential hazardous materials, universal waste materials and other regulated materials that may be present within Site structures as defined in Illinois Administrative Code (IAC) Part 721: *Identification and Listing of Hazardous Waste*, and hazardous wastes as defined in the EPA *Resource Conservation and Recovery Act* (RCRA). True North shall furnish all materials, equipment and supplies necessary to accomplish project objectives. The HAZMAT Survey shall include the following scope of work in accordance with the applicable regulatory requirements:

- **Interviews and Document Review** – Conduct interviews with knowledgeable personnel as specified by the Client and review documentation as provided by the Client concerning the location and approximate quantities/volume of hazardous and other regulated substances at the Site including petroleum products, containerized chemicals, mercury and polychlorinated bi-phenyl (PCB) containing equipment, refrigerants, universal wastes, white goods and other materials that may require special handling and disposal.
- **Visual Assessment** – Conduct a visual inspection of the on-site structures to identify potentially hazardous materials, universal waste materials, and other regulated materials present. For each identified material, the approximate quantity/volume of materials will be estimated. The scope of the investigation shall be limited to visual identification and will not include “intrusive” investigation activities, sampling or laboratory analysis. Intrusive investigation includes the removal of energized electrical components and equipment, hydraulic cylinder and tank evaluation, and deconstruction of electrical/light components.
- **Report** – Provide a written report including information regarding the presence, location and quantity of identified materials within the Site structure(s) and recommendations for the management of identified materials.

Task 4: Soil Management Assessment

True North will complete a PIP Evaluation on the Site consistent with the requirements in 35 Illinois Administrative Code 1100. The purpose of a PIP Evaluation is to determine the presence of potentially impacted properties on the Site or in the immediate vicinity of the Site. The PIP Evaluation shall include the following:

- **Environmental Regulatory Records Review:** A computer search of Federal, State, Tribal, and local government agency records will be performed to determine if the Site or adjacent properties are included within the selected regulatory databases. Based on the results of this query, the Site and its surrounding properties shall be evaluated for recognized environmental concerns. Queries shall be performed, but not be limited to, the following regulatory databases:



- National Priority List (NPL) of Hazardous Waste Sites;
 - Hazardous Waste Treatment, Storage, Disposal Facilities (TSDF);
 - Underground Storage Tank or Leaking Underground Storage Tank Locations (UST/LUST);
 - Sanitary Landfill and Solid Waste Sites (SL/SWS);
 - State Hazardous Waste Sites (SHWS);
 - CERCLIS sites; and
 - Small and Large Quantity Hazardous Waste Generators (RCRIS-SQG/LGG).
- Report Preparation: Prepare a PIP Evaluation letter report containing documentation to support the Evaluation findings and opinions and the recommended analytical date required for an appropriate soil management determination. A final PDF copy of the report will be provided to the Client upon incorporation of any revisions.

Please note that the scope of services for the PIP Evaluation does not include a review, evaluation, or survey for asbestos, radon, lead-based paint, lead in drinking water, cultural and historic resources, industrial hygiene, health & safety, ecological studies, endangered species, indoor air quality, biological pollutants, or high voltage power lines. In addition, surveys for potential jurisdictional wetlands, oil/gas well records, mineral rights records, or mining areas are also considered beyond the scope of this assessment. No sampling of soil, water, air, or building materials for laboratory analysis shall be performed during the evaluation. The scope of services for the evaluation does not include a physical inspection of the Site.

True North will perform focused soil sampling in conformance with standards set forth by the Illinois EPA in 35 Illinois Administrative Code (IAC) 742, "Tiered Approach to Corrective Action Objectives (742)," United States Environmental Protection Agency (USEPA) SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," ASTM E1903-19 standard, "Standard for Environmental Site Assessments: Phase II Environmental Site Assessment Process," and Occupational Health & Safety Administration 1910 Standards. The following soil sampling scope of work is based on limited information identified in the PIP evaluation process.

True North shall coordinate with the geotechnical engineer, contracted by the Client, to gain access to subsurface soils for sample collection. Samples will be collected from a maximum depth of 20 feet below grade for assessment at locations designated by True North.

Representative soil samples will be screened with a calibrated photoionization detector (PID) with a 10.6eV lamp to determine the presence of photoionizable vapors that are potentially indicative of the presence of volatile organic compounds (VOCs) in the soil. Soil samples for laboratory analysis shall be collected from shallow soils to provide a representative assessment of fill materials on the Site.

True North anticipates sampling from up to five (5) locations. During the investigation, one soil sample will be collected from each sampling location. Soil samples registering the highest PID concentration will be retained for laboratory analysis. If elevated PID readings and/or varying conditions/fill material are not encountered at a sampling point, one representative soil sample will be collected and submitted for laboratory analysis. All soil samples selected for laboratory analysis will be placed in laboratory provided containers, labeled, placed in a cooler with ice, and logged on a chain of custody form. All samples will be transported under chain-of-custody to a National Environmental Laboratory Accreditation Conference (NELAC) accredited laboratory.



The samples will be analyzed within the standard turnaround time following Level II Quality Assurance/Quality Control (QA/QC) protocols. The following presents the maximum number of soil samples to be analyzed for each parameter at the Primary Site:

- Three (3) samples for Benzene, Ethylbenzene, Toluene, and Total Xylenes (BETX), USEPA Method 8260B. Soil samples will be preserved in the field following USEPA Method 5035 protocols.
- Three (3) samples for Polynuclear Aromatic Hydrocarbons (PNAs), USEPA Method 8270B
- Three (3) samples for RCRA Metals, USEPA Method 6010B/7471.
- Up to three (3) samples for Toxicity Characteristic Leachate Procedure (TCLP) RCRA Metals, USEPA Method 1311/6010/6020. TCLP analyses shall be performed as necessary and applicable based on the analytical results for total concentrations.
- Five (5) samples for pH, USEPA Method 9045C.

True North shall compile all field screening data and laboratory results in summary report format to document the investigation findings. The summary report shall include a summary of findings, field sampling locations, analytical tables compared to TACO Tier I ROs and/or CCDD limits, laboratory data, field testing data, boring logs, and any pertinent historical and regulatory information used to formulate and support the investigation findings. True North will also include recommendations for management of soil based on the collected data as necessary.

SCHEDULE

True North estimates that the work can commence within two weeks upon receiving a signed copy of this agreement or a purchase order incorporating the terms of this agreement. The final Hazardous Material Survey and Soil Management reports will be submitted within six (6) weeks of written authorization to proceed.

LIMITATIONS AND QUALIFICATIONS

The proposed estimate has been provided as a good faith estimate of costs based upon the described scope of work. Should the scope of work be modified from that initially proposed, total cost of services will be adjusted accordingly.

- It is assumed for purposes of this estimate that access to the Site, inclusive of building interiors, is available during normal working hours and that records relating to the properties are reasonably ascertainable. In addition, there are no encumbrances on the Site that may limit observations or sampling activities.
- True North understands the scope of work to include generation of ACM Survey, Lead Survey, and Hazardous Materials Survey reports for the property collectively identified as the Site. This proposal does not include additional reporting, evaluations or sampling of other material testing beyond the scope of work specifically identified herein.
- The results reported and any opinions reached by True North are for the benefit of the Client and the party of which the Client represents and, unless agreed to by True North in writing, are not to be disclosed to or relied upon by any other party.
- The Client shall provide True North, upon contract authorization, any requirements for additional insurance coverage, waivers of subrogation, and/or additional party reliance beyond that provided



within this proposal or currently maintained by True North. Any additional cost to True North associated with these requirements shall be added to the total cost as proposed above unless these costs have been previously negotiated with the Client.

- The proposed scope of work is based on information and data provided by the Client and existing conditions relayed to True North during the proposal process. True North may be required to rely upon data and reports provided by others. True North cannot take responsibility for information provided by others and shall assume all provided information to be true and accurate.
- True North assumes that the Client shall return all requested documentation within the timeframe provided within the proposed schedule. True North will not be responsible for not meeting the proposed schedule due to a delayed response time by the Client or regulatory agency.
- If the site conditions are significantly different than as outlined in the introduction to this proposal (e.g., order of magnitude difference in site size, significant environmental conditions of concern that require in depth review of documentation), additional fees may be requested subsequent to the site inspection.
- True North's findings are based solely on the information obtained during completion of the approved scope of work.
- True North reserves the right to subcontract certain environmental support services with our supporting partners and/or other consulting professionals, to ensure that acceptable guidelines, regulations, and project schedules are met. All work will be performed by appropriate certified/licensed professionals.
- This proposal does not include special reports or design drawings for construction purposes.
- This proposal does not include any permitting or application fees, review or closure fees, meetings with the zoning/planning board or other authorities or other fees that may be assessed by local, State, or Federal government agencies during the performance of the above referenced scope of work on-Site.
- This proposal is based on field work performed in Level D personal protection (i.e., steel-toed boots, hard hats, safety glasses, and gloves). True North will postpone field work and notify Client immediately if field conditions warrant an increase in personal protection.
- If roofing material sampling is requested by the Client, True North is not responsible for any leaks or damage incurred as a result of sampling or the voiding of any service or product warranties that may exist for the roofing system installation. In addition, True North shall require authorization from the Property Owner and/or Client to collect samples from materials that may sustain significant damage (i.e. ceramic tile, roofing components, terrazzo, etc.) when sampled.
- USEPA recommends non-friable organically bound (NOB) materials be submitted for confirmatory analysis using Transmission Electron Microscopy (TEM). Non-friable organically bound (NOB) materials include any materials in a flexible to rigid vinyl or asphalt matrix, including floor tiles, mastics,



and roofing materials. If confirmatory analysis is requested, additional costs shall apply. The Client will be responsible for authorization of any further material testing or laboratory analysis.

- True North is not responsible for damage to building materials incurred as the result of investigation and/or sampling activities. Repair and/or replacement of interior systems and finishes are the responsibility of the Property Owner and/or the Client.
- The scope of the study is limited to visible and accessible materials that may be accessed with an 8' step ladder. In the event suspect materials are identified or suspected to be present at inaccessible locations, such materials will be presumed to contain asbestos until access is available and the materials can be appropriately sampled.
- True North assumes that Site conditions shall allow the on-site collection of the proposed samples in accordance with industry and regulatory sampling protocols. This includes, but is not limited to, soil and groundwater depths, subsurface geology, overhead interferences, surface conditions, weather conditions, and utility locations.
- All turn-around times do not include the day of sample collection. The Client shall only be billed for samples analyzed by the environmental laboratory. Additional asbestos samples shall be charged at a rate of \$20/sample and lead-in-paint samples at a rate of \$20/sample above the quoted number of samples.
- The Consultant shall have no responsibility for the discovery, presence, physical sampling tests or surveys, handling, removal, disposal or Project Management and air monitoring of or exposure of persons to hazardous materials or toxic substances in any form at the project site.
- Samples that have been placed on hold at the laboratory shall be held for a maximum of eight calendar days after collection.

Additional services requested by the Client beyond those described in the scope of work section of this proposal will be completed on a Time & Materials basis in accordance with True North Standard Unit Rates.

INVOICING AND PAYMENTS

Invoicing will be submitted upon completion of the project. Invoices will be payable within 30 calendar days after the invoice date. The client shall pay any additional charges for past due payments in accordance with the attached *General Terms & Conditions*.

PROJECT COSTS AND TERMS

True North proposes to complete the stated scope of work in accordance with the attached *General Terms & Conditions*. Project Costs are included in **Attachment A**. The estimated cost includes all professional labor, travel, materials, supplies, equipment, laboratory analytical fees and expenses as specified above.



AUTHORIZATION AND CLOSING

If this proposal meets your approval, please execute **Attachment A** and return this agreement to our office via mail, fax or e-mail. This agreement for professional services represents a contract between True North Consultants, Inc. and the Client.

True North shall initiate the above scope of services upon receipt of the authorization to proceed. Should the Client request a change in the scope of work, or should circumstances render the current estimate invalid, a new estimate will be prepared and mutually agreed to in writing before further work proceeds. A copy of True North's *General Terms & Conditions* is provided for your review. Written authorization to proceed will form a binding contract and indicates your acceptance of this proposal and our *General Terms & Conditions*. Any changes to the scope of work or the *General Terms & Conditions*, if so requested, must be agreed to in writing by both parties prior to the Client's authorization to proceed.

True North appreciates the opportunity to offer this proposal for environmental consulting services. If you have any questions, please contact me at 224.387.6063 or rladieu@consulttruenorth.com.

Regards,

TRUE NORTH CONSULTANTS, INC.

Ryan LaDieu, P.E.
President

Attachments: Project Costs and Authorization (Attachment A)
 General Terms and Conditions

Attachment: 5-7-24 True North Haz Assessment (O-2024-55 : True North Hazard Assessment Contract)



Trusted Partner. Leading Environmental Solutions.

True North Consultants, Inc.
1000 East Warrenville Road, Suite 140
Naperville IL 60563
(630) 717-2880
rladieu@consulttruenorth.com

QUOTATION

Proposal Date: 5/7/2024

Proposal #: P124-539

Client

Village of Buffalo Grove
51 Raupp Blvd.
Buffalo Grove, Illinois 60089

Project

Hazardous Material Assessment
Fire Station 25
505 West Dundee Road
Buffalo Grove, Illinois 60089

Description	Quantity	Units	Rate	Amount
Asbestos-Containing Material Survey				\$2,585.00
Lead Paint Survey				\$1,250.00
Hazardous and Regulated Materials Assessment				\$585.00
CCDD Soil Assessment				
Potentially Impacted Property (PIP) Review	1	Project	\$500.00	\$500.00
Associate Consultant - Field Work	8	Hour(s)	\$95.00	\$760.00
Equipment, Materials and Vehicle	1	Unit(s)	\$300.00	\$300.00
Soil Sample Analysis - Polynuclear Aromatic Hydrocarbons (PNAs)	3	Sample(s)	\$125.00	\$375.00
Soil Sample Analysis - RCRA Metals	3	Sample(s)	\$85.00	\$255.00
Soil Sample Analysis - pH	5	Sample(s)	\$15.00	\$75.00
Soil Sample Analysis - BETX	3	Sample(s)	\$65.00	\$195.00
Soil Sample Analysis - TCLP Metal Extraction (if necessary)	3	Sample(s)	\$65.00	\$195.00
Soil Sample Analysis - TCLP One Metal (if necessary)	3	Sample(s)	\$14.00	\$42.00
Principal Consultant - Report Review and QC	2	Hour(s)	\$150.00	\$300.00
LPC 663 Consulting & Documentation	1	Project	\$750.00	\$750.00

Subtotal \$8,167.00

Total **\$8,167.00**

Authorization to Proceed

1. The hereby agree to the proposed scope, schedule and fees set forth within.
2. The attached terms and conditions are an integral part of this agreement.
3. Upon execution, this document represents a binding authorization to proceed.

Client Acceptance (sign below):

Print Name

Signature:

Date:

Thank You For Your Business!

GENERAL TERMS & CONDITIONS OF SERVICES

1.0 PROPOSAL ACCEPTANCE

The following terms and conditions ("Terms") shall apply to and are the only terms that govern the attached Master Service Agreement, Proposal or Quotation (collectively, "Agreement") between True North Consultants, Inc. ("True North") and the Client named in the Agreement ("Client"). Client's acceptance of the Agreement includes acceptance of these Terms and any terms and conditions proposed by the Client will be deemed to materially alter the Terms and are hereby objected to and rejected by True North. Acceptance of the Agreement, including acceptance of the Terms, shall occur upon the notification of True North by Client, in writing, electronically or orally, to commence performance in accordance with the requested Consulting Services (as defined in the Agreement) and the Terms. In the event of a conflict between these Terms and the Agreement, the terms of the Agreement will prevail unless otherwise agreed to by the parties in writing.

2.0 LIMITED WARRANTY

- 2.1 Professional Standard of Care: True North warrants that it will perform the Consulting Services consistent with the level of care and skill ordinarily exercised by other professional consultants in the same locale and under similar circumstances at the same time the Consulting Services are performed.
- 2.2 Exclusive Remedy: True North's sole and exclusive liability and Client's sole and exclusive remedy for breach of this warranty shall be as follows:
 - 2.2.1 True North will use reasonable commercial efforts to promptly cure any breach; provided, that if True North cannot cure such breach within a reasonable time (but no more than thirty (30) days) after Client's notice of such breach, Client may, at its option, terminate the Agreement by service of written notice of termination.
 - 2.2.2 In the event the Agreement is terminated pursuant to Section 2.2.1 above, True North will within thirty (30) days after the effective date of termination refund to Client any fees paid by Client as of the date of termination for the Consulting Services, less a deduction equal to the fees for receipt or use of such Consulting Services up to and including the date of termination on a pro-rated basis.
 - 2.2.3 The foregoing remedy shall not be available unless Client provides written notice of such breach within thirty (30) days after acceptance of such Consulting Services to True North.
- 2.3 Disclaimer of Implied Warranties: EXCEPT FOR THE LIMITED WARRANTY SET FORTH IN THIS SECTION 2, TRUE NORTH MAKES NO WARRANTY WHATSOEVER WITH RESPECT TO THE CONSULTING SERVICES UNDER THE AGREEMENT, INCLUDING ANY (A) WARRANTY OF MERCHANTABILITY; OR (B) WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE; OR (C) WARRANTY OF TITLE; WHETHER EXPRESS OR IMPLIED BY LAW, COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OR TRADE OR OTHERWISE.

3.0 SUBCONTRACTED AND OTHER SERVICES

- 3.1 True North will select reputable subcontractors for test borings and/or other explorations or services based on oral or written competitive prices. The subcontractors' invoices shall be billed in accordance with the Agreement. Nothing in this Section 3 shall require that services or equipment be obtained through competitive bidding or be available from multiple sources. True North shall not be responsible for the means and methods utilized by its subcontractors.
- 3.2 On occasion, True North engages the specialized services of individual consultants or other companies to participate in a project. When considered necessary, the cost of such services will be billed in addition to True North's fee schedules set forth in the Agreement.

4.0 SITE ACCESS AND SITE CONDITIONS

- 4.1 Client shall grant or obtain free access to the site for all equipment and personnel for True North to perform the Consulting Services for the Project (as defined in the Agreement) set forth in the Agreement. Client shall notify any and all possessors of the Project site that Client has granted True North free access to the site. True North will take reasonable precautions to limit damage to the site, but it is understood by Client that, in the normal course of work, some damage may occur and the correction of such damage is not part of the Agreement unless so specified in True North's proposal. Client is responsible for the accuracy of locations for all subterranean structures and utilities. True North will take reasonable precautions to avoid known subterranean structures, and Client waives any claim against True North, and agrees to defend, indemnify, and hold True North harmless from any claim or liability for injury or loss, including costs of defense, arising from damage done to subterranean structures and utilities not identified or accurately located. In addition, Client agrees to compensate True North for any time spent or expenses incurred by True North in defense of any such claim with compensation to be based upon True North's prevailing fee schedule/expense reimbursement policy set forth in the Agreement.
- 4.2 Client recognizes that subsurface conditions may vary from those observed at locations where borings, surveys or explorations are made, and that site conditions may change with time. Data, interpretation, and recommendations by True North will be based solely on information available to True North. True North is responsible for its data,



interpretations, and recommendations, but will not be responsible for other parties' interpretations or use of the information developed by True North or any other party. To the extent True North must rely upon data provided by another party, True North will not be liable for any claim of injury or loss arising from such data. Client acknowledges that whenever a project involves hazardous or toxic materials and/or investigations of chemicals in the environment, there are inherent uncertainties involved (such as limitations on laboratory analytical methods, variations in subsurface conditions and the like) that may adversely affect the results of the Project, even though the Consulting Services are performed with skill and care.

5.0 BILLING AND PAYMENT

Invoices shall generally be submitted every four (4) weeks for Consulting Services performed during the previous four (4) weeks. Payment shall be due within thirty (30) days of invoice date. If Client objects to all or any portion of any invoice, Client shall so notify True North in writing within fourteen (14) calendar days of invoice receipt, identify the cause of disagreement, and pay within thirty (30) days that portion of the invoice, if any, not in dispute. The parties will immediately make every effort to settle the disputed portion of the invoice. In the absence of written notification described above, Client shall pay the balance as stated on the invoice. Invoices are delinquent if payment has not been received within thirty (30) days from date of invoice. Client will pay an additional charge of one and one-half percent (1.5%) per month (or the maximum percentage allowed by law, whichever is lower) on any delinquent amount, excepting any portion of the invoiced amount in dispute and resolved in favor of Client. Payment thereafter will first be applied to accrued interest and then to the principal unpaid amount. All time spent and expenses incurred (including any attorneys' fees) in connection with collection of any delinquent amount shall be paid by Client to True North per True North's current fee schedules. In the event Client fails to pay True North within thirty (30) days after invoices are rendered, Client agrees that True North has the right to suspend Consulting Services under the Agreement, without incurring liability to Client, after giving seven (7) days' written notice to Client. Client acknowledges that True North's fee schedules are subject to change on an annual basis without prior notice.

6.0 DOCUMENTS AND ELECTRONIC FILES

- 6.1 Written Documents: Any letters, reports, or documents prepared by True North for Client are the instruments of True North's Consulting Services. The Consulting Services provided by True North are solely for Client's use for the Project and site described in the Agreement. Any documents prepared by True North for the client shall not, in whole or in part, be disseminated or conveyed to another party, nor used by another party in whole or in part, without prior written consent from True North. Client shall, to the fullest extent permitted by law, waive any claim against True North, and indemnify, defend, and hold True North harmless for any claim or liability for injury or loss allegedly arising from any third-party reliance on True North's instruments of Consulting Services without True North's specific authorization to do so.
- 6.2 Electronic Files: Client hereby grants permission for True North to use information and data provided by Client, including electronic records produced or provided by Client in the completion of the Project. Client also grants permission to True North to release True North documents electronically to consultants, contractors, and vendors as required in the execution of the Project.
- 6.3 Retention Period: True North shall not be obligated to maintain written documents and electronic files relating to its Consulting Services performed for Client under the Agreement for more than five (5) years following completion of the relevant Consulting Services.

7.0 INSURANCE

True North maintains Workmen's Compensation Insurance as required by applicable law and General Liability Insurance for bodily injury and property damage with an aggregate limit of \$1,000,000 per occurrence. True North will furnish certificates of such insurance upon request. In the event Client desires additional insurance coverage of this type, True North will, upon the Client's written request made prior to the performance of Consulting Services, obtain additional insurance (if possible) at Client's expense.

8.0 ALLOCATION OF RISK

- 8.1 Limitation of Liability: IN NO EVENT SHALL TRUE NORTH BE LIABLE TO CLIENT OR TO ANY THIRD PARTY FOR ANY LOSS OF USE, REVENUE, OR PROFIT, OR FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, EXEMPLARY, SPECIAL OR PUNITIVE DAMAGES WHETHER ARISING OUT OF BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE, REGARDLESS OF WHETHER SUCH DAMAGE WAS FORESEEABLE AND WHETHER OR NOT TRUE NORTH HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND NOTWITHSTANDING THE FAILURE OF ANY AGREED OR OTHER REMEDY OF ITS ESSENTIAL PURPOSE. IN NO EVENT SHALL TRUE NORTH'S AGGREGATE LIABILITY ARISING OUT OF OR RELATED TO THE AGREEMENT, WHETHER ARISING OUT OF OR RELATED TO BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE, EXCEED THE AGGREGATE AMOUNTS PAID OR PAYABLE TO TRUE NORTH PURSUANT TO THE AGREEMENT. If Client prefers not to limit True North's professional liability to this sum, True North will waive this limitation upon Client's written request, provided that Client agrees to pay for this waiver at a negotiated fee. Client's request for this option must be made at the time Client enters into the Agreement. In the event Client makes a claim against True North for any act arising out of the performance of True North's Consulting Services, and



fails to prove such claim, then Client agrees to pay all attorneys' fees and other costs incurred by True North in defense of such claim.

- 8.2 Indemnification: Client shall indemnify, defend and hold harmless True North and its officers, directors, agents, employees, affiliates, successors and permitted assigns against any and all suits, actions, legal or administrative proceedings, claims, debts, demands, damages, liabilities, interest, attorney's fees, costs and expenses arising from or related to the performance of Consulting Services under the Agreement and attributable to either a breach by Client of its obligations hereunder or the act or omission or willful misconduct of Client or anyone acting under Client's direction or control.

9.0 CHANGES

- 9.1 Unforeseen Site Conditions: True North reserves the right to make reasonable changes in the Consulting Services to be performed after acceptance of the Agreement. Client understands that unforeseen site conditions may require changes in the scope of Consulting Services to be performed.
- 9.2 Unauthorized Changes: If changes are made to True North's work products for Consulting Services by Client or persons other than True North, and these changes affect True North's Consulting Services, any and all liability against True North arising out of such changes is waived and Client shall assume full responsibility for such changes unless Client has given True North prior notice and has received from True North written consent for such changes.
- 9.3 Client-Requested Changes: Upon receipt of a change requested by Client, True North will obtain price quotations from its subcontractors and will provide Client with a quotation of the cost of having the change performed, and any increase in contract time caused by the change. True North shall authorize the requested change by amending the contract price and contract time in the Agreement.

10.0 NOTIFICATION OF HAZARDS

Client shall notify True North of any information Client has with respect to the existence or suspected existence of biological pollutants, hazardous materials, oil, or asbestos in the environment, including, but not limited to the air, soil, and water at the site. Client shall advise True North immediately of any information which Client receives regarding the existence of any such hazardous materials or conditions at the site which might present a threat to human health and safety or the environment or impact True North's work products.

11.0 BIOLOGICAL POLLUTANTS

True North's scope of Consulting Services, unless specifically outlined in its written scope of Consulting Services, does not include the investigation or detection of the presence of any biological pollutants in or around any structure. Client agrees that True North will have no liability for any claim regarding bodily injury or property damage alleged to arise from or be caused by the presence of or exposure to any biological pollutants, in or around any structure. In addition, Client shall defend, indemnify, and hold harmless True North from any third-party claim for damages alleged to arise from or be caused by the presence of or exposure to biological pollutants in or around any structure.

12.0 SITE CONTROL, CONFIDENTIALITY AND DISCLOSURE

True North shall not assume, by virtue of performing Consulting Services on or near the site, the responsibility or liability for any aspect or condition of the site that may now or later exist to be discovered. In particular, True North shall not assume the responsibility to report to any governmental or regulatory agency the existence of any conditions of the site that may present a threat to human health, safety or the environment. True North will not intentionally divulge information regarding any Agreement, True North's Consulting Services or any report, and which is not in the public domain, except to Client or those whom Client designates. Notwithstanding the foregoing, Client understands that True North will comply with judicial orders and applicable laws and regulations regarding the reporting to the appropriate public agencies of potential dangers to the public health, safety or the environment.

13.0 RCRA COMPLIANCE

Nothing contained in these Terms or the Agreement shall be construed or interpreted as requiring True North to assume the status of a generator, storer, treater, transporter, or disposal facility within the meaning of the Resource Conservation and Recovery Act of 1976, as amended, or within the meaning of any similar Federal, State, or local regulation or law.

14.0 DELAYS

Delays not the fault of True North or its subcontractors shall result in an extension of the schedule equivalent to the length of delay. If such delays result in additional costs to True North, the total Project cost shall be equitably adjusted by the amount of such additional costs.

15.0 DISPUTE RESOLUTION; CHOICE OF FORUM

Any claims or disputes between Client and True North arising out of or related to the Consulting Services provided by True North or out of or related to the Agreement shall be submitted to non-binding mediation as a condition precedent to the institution of legal or equitable proceedings by either party. Any claims arising out of or relating to the sale of Consulting Services provided by



True North and/or the relationship between True North and Client shall be asserted only in the state or federal courts located in Cook County or DuPage County, Illinois. Client hereby unconditionally consents to the jurisdiction and venue of said courts.

16.0 MISCELLANEOUS

- 16.1 **Governing Law:** These Terms and all matters arising out of, or related to, the sale of Consulting Services by True North to Client and/or the relationship between True North and Client shall be deemed to have been made and governed by the substantive laws of the State of Illinois, without regard to its choice-of-law or conflict-of-laws provisions.
- 16.2 **Severability:** If any term or provision of these Terms is found to be invalid or unenforceable, the remaining portion of these Terms shall remain in effect, provided that if such invalid or unenforceable portion is an essential part of these Terms, the parties will immediately begin negotiations for a replacement provision consistent with the intent and purpose of these Terms.
- 16.3 **Entire Agreement:** The terms contained in the Agreement and these Terms comprise the entire agreement between True North and Client concerning the subject matter hereof, and supersede all prior and contemporaneous understandings, agreements, representations and warranties, both written and oral, regarding such subject matter. No modification, amendment, rescission, waiver or other change of these Terms or the Agreement or any part thereof shall be binding on True North unless agreed in writing by an authorized officer of True North.
- 16.4 **All Rights Reserved:** All rights and remedies of True North provided in these Terms are cumulative and not exclusive, and the exercise by True North of any right or remedy does not preclude the exercise of any other rights or remedies that may now or subsequently be available at law, in equity, by statute, or in any other agreement between the parties.
- 16.5 **No Assignment:** The rights and responsibilities of Client hereunder may not be assigned to any third-party without the written consent of True North.
- 16.6 **Waste Manifests:** If during remedial construction activities waste manifests are required, Client shall provide an authorized person to sign manifests or agrees to provide True North with a written limited power of attorney to sign manifests.

END OF TERMS AND CONDITIONS

REVISED: June 27, 2019



Ordinance No. O-2024-56 : Certificate of Initial Acceptance and Approval: Flex Parking Lot Development Improvements

Recommendation of Action

Staff recommends approval to begin the one year maintenance period for the completed parking lot development project.

SUMMARY: Attached is the Certificate of Initial Acceptance for the parking lot development located at 751 Corporate Grove Drive. Staff recommends approval to begin the one year maintenance period on May 20, 2024.

ATTACHMENTS:

- CIA Memo_Flex Parking Lot_5-16-2024 (DOCX)
- Certificate of Initial Acceptance_Flex (DOCX)
- ORD CIA_Flex Parking Lot_5-16-2024 (DOCX)

Trustee Liaison
Stein

Staff Contact
Kyle Johnson, Engineering

Monday, May 20, 2024	
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VILLAGE OF BUFFALO GROVE



MEMORANDUM

DATE: May 16, 2024
TO: Dane Bragg, Village Manager
FROM: Kyle Johnson, Deputy Public Works Director/Village Engineer
SUBJECT: Flex Parking Lot (751 Corporate Grove Drive) - Certificate of Initial Acceptance

Flextronics America, developer of the parking lot project located at 751 Corporate Grove Drive, has completed the required improvements, and is recommended to be moved to the one-year maintenance period beginning May 20, 2024.

Staff recommends approval of the Certificate of Initial Acceptance for this development.

MUNICIPAL INSPECTOR'S CERTIFICATION

I/we hereby certify that I/we have regularly inspected the above described unit(s) of the above described Subdivision during the progress of construction and to the best of my/our knowledge; the work has been completed in conformance with the approved plans and specifications.

Municipal Inspector

Date

VILLAGE ENGINEER'S CERTIFICATION

I hereby certify that the Division of Engineering Services has reviewed the above described unit(s) of the above described Subdivision and find them in conformance with the applicable Village ordinances, codes, and agreements.

Village Engineer

Date

PUBLIC WORK'S CERTIFICATION

I hereby certify that the Department of Public Works has inspected all public improvements described above and find them in proper condition for acceptance for maintenance by this Department.

Director of Public Works

Date

VILLAGE MANAGER'S CERTIFICATION

I hereby certify that all applicable Village ordinances, codes, and special agreements have been complied with by the Owner of the above described Subdivision.

Village Manager

Date

ACCEPTANCE OF PUBLIC IMPROVEMENTS

The Village of Buffalo Grove does hereby approve and accept for ownership the above described public improvements subject to the one-year Guarantee by the Developer covering all materials, workmanship, and maintenance.

Village Board of Trustees Action : _____

Date

Page No.

Village President

Date

ORDINANCE 2024-_____

**AN ORDINANCE AUTHORIZING EXECUTION OF THE CERTIFICATE OF INITIAL ACCEPTANCE FOR
THE FLEX 901 CORPORATE GROVE DRIVE PARKING LOT DEVELOPMENT
IN THE VILLAGE OF BUFFALO GROVE**

WHEREAS, the Village of Buffalo Grove is a home rule unit pursuant to the Illinois Constitution of 1970; and

WHEREAS, the Village seeks to execute a Certificate of Initial Acceptance with Flextronics America, LLC for the parking lot development located at 751 Corporate Grove Drive in the Village of Buffalo Grove,

WHEREAS, upon execution of this ordinance, Flextronics America, LLC will enter the required one-year maintenance guarantee,

NOW THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS, as follows:

SECTION 1. The foregoing recitals are hereby adopted and incorporated and made a part of this Ordinance as if fully set forth herein.

SECTION 2. The Village President is authorized to execute the Certificate of Initial Acceptance with Flextronics America, LLC for the parking lot development located at 751 Corporate Grove Drive in the Village of Buffalo Grove.

SECTION 3. If any section, paragraph, clause, or provision of this Ordinance shall be held invalid, the invalidity thereof shall not affect any other provision of this Ordinance.

SECTION 4. This Ordinance shall be in full force and effect from and after its passage and approval and shall not be codified.

AYES: _____
 NAYES: _____
 ABSENT: _____
 PASSED: _____, 2024
 APPROVED: _____, 2024

APPROVED:

 Eric N. Smith, Village President

ATTEST:

 Janet Sirabian, Village Clerk

Attachment: ORD CIA_Flex Parking Lot_5-16-2024 (O-2024-56 : Initial Acceptance of Flex Parking Lot Development Improvements)



Ordinance No. O-2024-57 : Ordinance Authorizing Purchase of Radio Equipment

Recommendation of Action

Staff recommends approval.

Summary: Staff recommends the Village Board authorize fire department staff to purchase replacement radio equipment at a total amount not to exceed \$69,570.08 from Motorola Solutions through a cooperative purchasing contract.

ATTACHMENTS:

- Board Memo - Capital Radio Purchase 2024 (DOCX)
- Motorola Joint Purchase Ordinance (DOCX)
- VHF Mobiles (PDF)
- consolettes (PDF)
- MCD (PDF)

Trustee Liaison

Cesario

Staff Contact

Mike Baker, Fire

Monday, May 20, 2024	
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VILLAGE OF BUFFALO GROVE

DATE: May 15, 2024

TO: Dane Bragg, Village Manager

FROM: Mike Baker, Fire Chief/EMA Director

RE: Authorization to Purchase Radio Equipment

BACKGROUND

Staff requests authorization to purchase 9 mobile radios, 2 base station consolettes, and 6 desk top handsets from Motorola Solutions. The mobile radios will replace end of life equipment in 5 fire apparatus and 4 end of life radios in the fire stations. The 2 new consolettes will move radios in the fire stations off the village network and into a standalone system that will not need to be supported by IT. The 6 additional handsets will add radio monitoring capability to offices in the administration wing that were not able to be funded when the system was originally put in place.

The proposed equipment purchase is listed in the quotations from Motorola Solutions, which is a cooperative purchase agreement through Northwest Central Dispatch System. This funding for this request was approved as part of the 2024 Village Capital Improvement Program and is assigned as Project #5013.

BACKGROUND

It is recommended that the Village Board authorize staff to purchase the above-mentioned replacement equipment at a total not to exceed amount of \$69,570.08 from Motorola Solutions.

ORDINANCE 2024-_____

AN ORDINANCE AUTHORIZING THE PURCHASE OF RADIO EQUIPMENT FROM MOTOROLA SOLUTIONS

WHEREAS, the Village of Buffalo Grove is a home rule unit pursuant to the Illinois Constitution of 1970; and

WHEREAS, the Village of Buffalo Grove Fire Department requires radio equipment for vehicles and facilities; and

WHEREAS, the Village will make purchases in accordance with the Illinois Governmental Joint Purchasing Act (30 ILCS 525/0.01 et seq.).

NOW THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS, as follows:

SECTION 1. The foregoing recitals are hereby adopted and incorporated and made a part of this Ordinance as if fully set forth herein.

SECTION 2. The Village Manager is authorized to purchase radio equipment including but not limited to mobile, consolette and deskset radio equipment from Motorola Solution Inc., through the Northwest Central Dispatch System, at a price not to exceed \$69,570.08.

SECTION 3. If any section, paragraph, clause or provision of this Ordinance shall be held invalid, the invalidity thereof shall not affect any other provision of this Ordinance.

SECTION 4. This Ordinance shall be in full force and effect from and after its passage and approval and not be codified.

AYES: _____

NAYES: _____

ABSENT: _____

PASSED: _____, 2024

APPROVED: _____, 2024

APPROVED:

Eric Smith, Village President

ATTEST:

Janet Sirabian, Village Clerk

Attachment: Motorola Joint Purchase Ordinance (O-2024-57 : Ordinance Authorizing Purchase of Radio Equipment)



QUOTE-259091

Billing Address:
 BUFFALO GROVE FIRE DEPT,
 VILLAGE OF
 1051 HIGHLAND GROVE DR
 BUFFALO GROVE, IL 60089
 US

Quote Date:04/07/2024
 Expiration Date:07/06/2024
 Quote Created By:
 Dominick Storelli
 Dominick.Storelli@
 motorolasolutions.com

End Customer:
 BUFFALO GROVE FIRE DEPT, VILLAG
 OF
 Contract: 35622 - Cook County IL

Line #	Item Number	Description	Qty	List Price	Sale Price	Ext. Sale Price
	APX™ 6500 / Enh Series	ENHANCEDAPX6500				
1	M25KSS9PW1BN	APX6500 ENHANCED VHF MOBILE	7	\$3,383.12	\$2,165.20	\$15,156.40
1a	B18CR	ADD: AUXILIARY SPKR 7.5 WATT APX	7	\$66.00	\$42.24	\$295.68
1b	G444AH	ADD: APX CONTROL HEAD SOFTWARE	7	\$0.00	\$0.00	\$0.00
1c	G48BD	ENH: CONVENTIONAL OPERATION APX6500	7	\$550.00	\$352.00	\$2,464.00
1d	G806BL	ENH: ASTRO DIGITAL CAI OP APX	7	\$567.00	\$362.88	\$2,540.16
1e	W22BA	ADD: STD PALM MICROPHONE APX	7	\$79.00	\$50.56	\$353.92
1f	QA09113AB	ADD: BASELINE RELEASE SW	7	\$0.00	\$0.00	\$0.00
1g	G193AK	ADD: ADP ONLY (NON-P25 CAP COMPLIANT) (US ONLY)	7	\$0.00	\$0.00	\$0.00
1h	GA01606AA	ADD: NO BLUETOOTH/ WIFI/GPS ANTENNA NEEDED	7	\$0.00	\$0.00	\$0.00
1i	G89AC	ADD: NO RF ANTENNA NEEDED	7	\$0.00	\$0.00	\$0.00
1j	G66BJ	ADD: DASH MOUNT E5 APXM	7	\$138.00	\$88.32	\$618.24
1k	GA01670AA	ADD: APX E5 CONTROL HEAD	7	\$717.00	\$458.88	\$3,212.16

Attachment: VHF Mobiles (O-2024-57 : Ordinance Authorizing Purchase of Radio Equipment)



Any sales transaction following Motorola's quote is based on and subject to the terms and conditions of the valid and executed written contract between Customer and Motorola (the "Underlying Agreement") that authorizes Customer to purchase equipment and/or services or license software (collectively "Products"). If no Underlying Agreement exists between Motorola and Customer, then Motorola's Standard Terms of Use and Motorola's Standard Terms and Conditions of Sales and Supply shall govern the purchase of the Products.

Motorola Solutions, Inc.: 500 West Monroe, United States - 60661 ~ #: 36-1115800

Line #	Item Number	Description	Qty	List Price	Sale Price	Ext. Sale Price
1l	GA05100AA	ADD: STD WARRANTY - NO ESSENTIAL	7	\$0.00	\$0.00	\$0.00
	APX™ 6500 / Enh Series	ENHANCEDAPX6500				
2	M25KSS9PW1BN	APX6500 ENHANCED VHF MOBILE	2	\$3,383.12	\$2,165.20	\$4,330.40
2a	GA01606AA	ADD: NO BLUETOOTH/ WIFI/GPS ANTENNA NEEDED	2	\$0.00	\$0.00	\$0.00
2b	B18CR	ADD: AUXILIARY SPKR 7.5 WATT APX	2	\$66.00	\$42.24	\$84.48
2c	G444AH	ADD: APX CONTROL HEAD SOFTWARE	2	\$0.00	\$0.00	\$0.00
2d	G806BL	ENH: ASTRO DIGITAL CAI OP APX	2	\$567.00	\$362.88	\$725.76
2e	W22BA	ADD: STD PALM MICROPHONE APX	2	\$79.00	\$50.56	\$101.12
2f	QA09113AB	ADD: BASELINE RELEASE SW	2	\$0.00	\$0.00	\$0.00
2g	G193AK	ADD: ADP ONLY (NON-P25 CAP COMPLIANT) (US ONLY)	2	\$0.00	\$0.00	\$0.00
2h	G48BD	ENH: CONVENTIONAL OPERATION APX6500	2	\$550.00	\$352.00	\$704.00
2i	G67DT	ADD: REMOTE MOUNT E5 APXM	2	\$327.00	\$209.28	\$418.56
2j	GA05100AA	ADD: STD WARRANTY - NO ESSENTIAL	2	\$0.00	\$0.00	\$0.00
2k	G89AC	ADD: NO RF ANTENNA NEEDED	2	\$0.00	\$0.00	\$0.00
2l	GA01670AA	ADD: APX E5 CONTROL HEAD	2	\$717.00	\$458.88	\$917.76
Grand Total				\$31,922.64(USD)		

Attachment: VHF Mobiles (O-2024-57 : Ordinance Authorizing Purchase of Radio Equipment)

Notes:

- Unless otherwise noted, this quote excludes sales tax or other applicable taxes (such as Goods and Services Tax, sales tax, Value Added Tax and other taxes of a similar nature). Any tax the customer is subject to will be added to invoices.



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Motorola Solutions, Inc.: 500 West Monroe, United States - 60661 ~ #: 36-1115800



QUOTE-259091

Billing Address:
 BUFFALO GROVE FIRE DEPT,
 VILLAGE OF
 1051 HIGHLAND GROVE DR
 BUFFALO GROVE, IL 60089
 US

Quote Date:04/07/2024
 Expiration Date:07/06/2024
 Quote Created By:
 Dominick Storelli
 Dominick.Storelli@
 motorolasolutions.com

End Customer:
 BUFFALO GROVE FIRE DEPT, VILLAG
 OF
 Contract: 35622 - Cook County IL

Line #	Item Number	Description	Qty	List Price	Sale Price	Ext. Sale Price
	APX™ Consolette					
1	L37TSS9PW1AN	ALL BAND CONSOLETTTE	2	\$9,933.04	\$6,357.15	\$12,714.30
1a	GA09001AC	ADD: WI-FI CAPABILITY CONSOLETTTE	2	\$385.00	\$246.40	\$492.80
1b	L998AB	ADD: LIMITED FRONT PANEL W/CLOCK/VU	2	\$528.00	\$337.92	\$675.84
1c	QA01648AA	ADD: HW KEY SUPPLEMENTAL DATA	2	\$6.00	\$3.84	\$7.68
1d	GA09008AA	ADD: GROUP SERVICES	2	\$165.00	\$105.60	\$211.20
1e	GA09007AA	ADD: OUT OF THE BOX WIFI PROVISIONING	2	\$0.00	\$0.00	\$0.00
1f	GA00580AA	ADD: TDMA OPERATION	2	\$495.00	\$316.80	\$633.60
1g	CA01598AB	ADD: AC LINE CORD US	2	\$0.00	\$0.00	\$0.00
1h	G51AT	ENH:SMARTZONE	2	\$1,650.00	\$1,056.00	\$2,112.00
1i	G298AS	ENH: ASTRO 25 OTAR W/ MULTIKEY	2	\$814.00	\$520.96	\$1,041.92
1j	G843AH	ADD: AES ENCRYPTION AND ADP	2	\$523.00	\$334.72	\$669.44
1k	G806BL	ENH: ASTRO DIGITAL CAI OP APX	2	\$567.00	\$362.88	\$725.76
1l	QA09113AB	ADD: BASELINE RELEASE SW	2	\$0.00	\$0.00	\$0.00

Attachment: consolettes (O-2024-57 : Ordinance Authorizing Purchase of Radio Equipment)



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Motorola Solutions, Inc.: 500 West Monroe, United States - 60661 ~ #: 36-1115800



QUOTE-259090

Line #	Item Number	Description	Qty	List Price	Sale Price	Ext. Sale Price
1m	G361AH	ENH: P25 TRUNKING SOFTWARE APX	2	\$330.00	\$211.20	\$422.40
1n	GA05100AA	ADD: STD WARRANTY - NO ESSENTIAL	2	\$0.00	\$0.00	\$0.00
2	HKN6233C	APX CONSOLETTES RACK MOUNT KIT	1	\$200.00	\$128.00	\$128.00
MCD 5000 Deskset System						
3	F7879B	SM, RADIO GATEWAY UNIT (RGU)	3	\$2,275.00	\$2,275.00	\$6,825.00
4	FHN7469A	ASSY,P/S,MCD 5000 DESKSET / RGU PWR SPLY W/ USA PWR CORD	3	\$100.00	\$100.00	\$300.00
Grand Total					\$26,959.94(USD)	

Notes:

- Unless otherwise noted, this quote excludes sales tax or other applicable taxes (such as Goods and Services Tax, sales tax, Value Added Tax and other taxes of a similar nature). Any tax the customer is subject to will be added to invoices.

Attachment: consolettes (O-2024-57 : Ordinance Authorizing Purchase of Radio Equipment)



Any sales transaction following Motorola's quote is based on and subject to the terms and conditions of the valid and executed written contract between Customer and Motorola (the "Underlying Agreement") that authorizes Customer to purchase equipment and/or services or license software (collectively "Products"). If no Underlying Agreement exists between Motorola and Customer, then Motorola's Standard Terms of Use and Motorola's Standard Terms and Conditions of Sales and Supply shall govern the purchase of the Products.

Motorola Solutions, Inc.: 500 West Monroe, United States - 60661 ~ #: 36-1115800



QUOTE-25909

Billing Address:
 BUFFALO GROVE FIRE DEPT,
 VILLAGE OF
 1051 HIGHLAND GROVE DR
 BUFFALO GROVE, IL 60089
 US

Quote Date:04/07/2024
 Expiration Date:07/06/2024
 Quote Created By:
 Dominick Storelli
 Dominick.Storelli@
 motorolasolutions.com

End Customer:
 BUFFALO GROVE FIRE DEPT, VILLAGE OF

Contract: 24302 - STARCOM21, IL
 CMT2023269

Line #	Item Number	Description	Qty	List Price	Sale Price	Ext. Sale Price
MCD 5000 Deskset System						
1	HKVN4865A	LICENSE,CD, MCD 5000 DOCUMENTATION	1	\$0.00	\$0.00	\$0.00
2	FHN7469A	ASSY,P/S,MCD 5000 DESKSET / RGU PWR SPLY W/ USA PWR CORD	6	\$100.00	\$75.00	\$450.00
3	F2380A	SM,MCD 5000 DESKSET	6	\$2,275.00	\$1,706.25	\$10,237.50
Grand Total				\$10,687.50(USD)		

Notes:

- Unless otherwise noted, this quote excludes sales tax or other applicable taxes (such as Goods and Services Tax, sales tax, Value Added Tax and other taxes of a similar nature). Any tax the customer is subject to will be added to invoices.

Attachment: MCD (O-2024-57 : Ordinance Authorizing Purchase of Radio Equipment)



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Motorola Solutions, Inc.: 500 West Monroe, United States - 60661 ~ #: 36-1115800



Resolution No. R-2024-15 : Bernard Drive IDOT Resolution for Phase II Engineering Design

Recommendation of Action

Staff recommends approval.

Summary: Staff recommends approval of the enclosed IDOT Resolution allowing the Village to utilize Motor Fuel Tax funds to pay for Phase II Design Engineering for the Bernard Road Reconstruction Project.

ATTACHMENTS:

- Memo Bragg_Bernard Phase II MFT Resolution_5-14-2024 (DOCX)
- BLR 09110 (PDF)
- Bernard Drive Location Map (PDF)

Trustee Liaison

Stein

Staff Contact

Kyle Johnson, Engineering

Monday, May 20, 2024	
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VILLAGE OF BUFFALO GROVE



MEMORANDUM

DATE: May 16, 2024
TO: Dane Bragg, Village Manager
FROM: Kyle Johnson, Deputy Public Works Director/Village Engineer
SUBJECT: Resolution to Utilize Motor Fuel Tax Funds for Bernard Drive Phase II Engineering Design Costs

Staff Recommendation

Staff recommends approval of the enclosed Resolution allowing the Village to utilize Motor Fuel Tax (MFT) funds to pay for the local share of the Phase II Design Engineering Services associated with the Bernard Drive reconstruction between Buffalo Grove Road and Arlington Heights Road. The full amount of the Village's local share for Phase II engineering is covered by this Resolution totaling \$753,169.00.

Overview

Staff has worked with IDOT, the Northwest Municipal Conference, and design engineering consultant to ensure these costs are MFT eligible. Approving this Resolution allows the Finance Department to perform a fund transfer utilizing MFT funds to pay for the completed Phase II design engineering services associated with the Bernard Drive Reconstruction project.



Resolution for Improvement
Under the Illinois Highway Code

Is this project a bondable capital improvement?

☐ Yes ☒ No

Resolution Type

Original

Resolution Number

Section Number

20-00108-00-RS

BE IT RESOLVED, by the President and Board of Trustees

Governing Body Type

of the Village

Local Public Agency Type

of Buffalo Grove

Name of Local Public Agency

Illinois that the following described street(s)/road(s)/structure be improved under

the Illinois Highway Code. Work shall be done by Contract

Contract or Day Labor

For Roadway/Street Improvements:

Name of Street(s)/Road(s)	Length (miles)	Route	From	To
Bernard Drive	1.43	MUN 4045	Arlington Heights Road	Buffalo Grove Road

For Structures:

Name of Street(s)/Road(s)	Existing Structure No.	Route	Location	Feature Crossed

BE IT FURTHER RESOLVED,

1. That the proposed improvement shall consist of

Design (Phase II) engineering services required for the reconstruction of Bernard Drive from Arlington Heights Road to Buffalo Grove Road.

2. That there is hereby appropriated the sum of Seven Hundred Fifty Three Thousand One Hundred Sixty Nine Dollars and Zero Cents

Dollars (\$753,169.00) for the improvement of

said section from the Local Public Agency's allotment of Motor Fuel Tax funds.

BE IT FURTHER RESOLVED, that the Clerk is hereby directed to transmit four (4) certified originals of this resolution to the district office of the Department of Transportation.

I, Janet Sirabian

Name of Clerk

Village

Local Public Agency Type

Clerk in and for said Village

Local Public Agency Type

of Buffalo Grove

Name of Local Public Agency

in the State aforesaid, and keeper of the records and files thereof, as provided by

statute, do hereby certify the foregoing to be a true, perfect and complete original of a resolution adopted by

President and Board of Trustees of Buffalo Grove

Governing Body Type

Name of Local Public Agency

at a meeting held on May 20, 2024

Date

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 20th day of May, 2024

Day

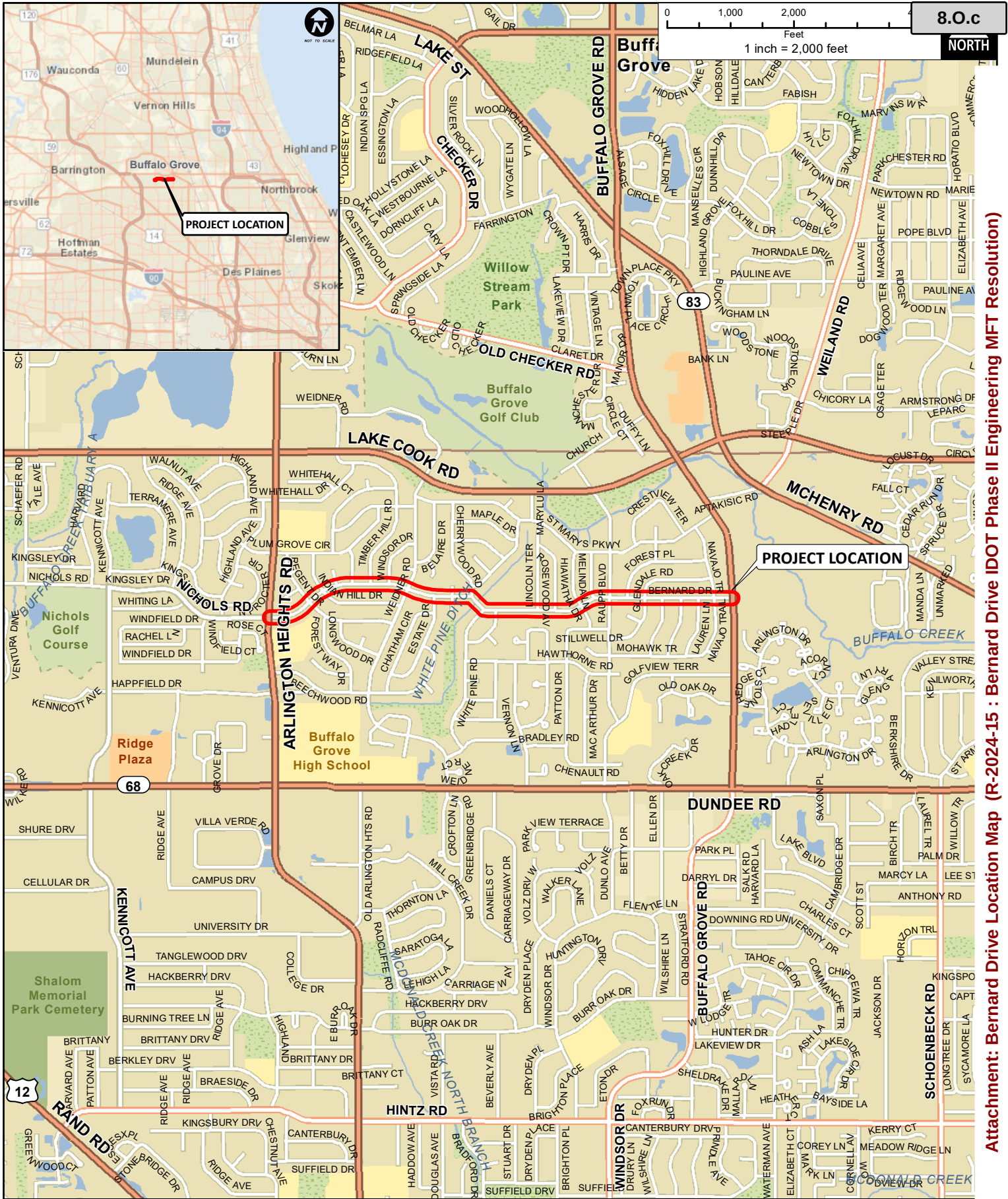
Month, Year

(SEAL, if required by the LPA)

Clerk Signature & Date

Approved

Regional Engineer Signature & Date
Department of Transportation



CLIENT:



**VILLAGE OF
BUFFALO GROVE**

TITLE:

PROJECT LOCATION MAP

PROJ. NO. 190474

DATE: 2/11/2020

SHEET 1 OF 1

DRAWING NO.



CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600 · Rosemont, Illinois 60018 · (847) 823-0500

DSGN.	DRW	SCALE:	1:24,000
CHKD.		AUTHOR:	DWALTERS
FILE:	Location Map	PLOT DATE:	2/11/2020

EXH 1

Packet Pg. 378



Ordinance No. O-2024-58 : Approve a Preliminary Plan, an Amendment to the Special Use, and Variations from the Fence Code for Improvements to Athletic Fields at Buffalo Grove High School at 1100 W Dundee Rd

Recommendation of Action

The Planning & Zoning Commission unanimously recommended approval, subject to the conditions in the attached Ordinance. Staff concurs with this recommendation.

Summary: Buffalo Grove High School is proposing improvements to the existing athletic fields, stormwater, and accessibility. The project will require a preliminary plan, an amendment to the Special Use, and Variations. The Planning & Zoning Commission unanimously recommended approval

ATTACHMENTS:

- BOT Memo (DOCX)
- Exhibit B. Plan Set (PDF)
- Ordinance (DOCX)
- Exhibit C. Minutes PZC April 17, 2024 (PDF)

Trustee Liaison
Weidenfeld

Staff Contact
Nicole Woods, Community Development

Monday, May 20, 2024

VILLAGE OF BUFFALO GROVE



MEMORANDUM

DATE: May 20, 2024

TO: Dane Bragg, Village Manager

FROM: Nicole Woods, Community Development Director
Kelly Purvis, Deputy Community Development Director

SUBJECT: 1100 W Dundee Road (Buffalo Grove High School) – The petitioner is seeking approval of a Preliminary Plan, an Amendment to the Special Use approved by Ordinance No. 2018-002, and Variations from the Fence Code to accommodate proposed site improvements and construction of accessory structures on the subject property.

BACKGROUND

School District 214 has petitioned the Village for approval of site improvement plans for Buffalo Grove High School (BGHS). The project will include substantial improvements to the functionality of the existing athletic fields, stormwater, and accessibility.

As proposed, the project will require approval of a preliminary plan, an amendment to the Special Use approved by Ordinance No. 2018-002, and Variations from the Fence Code requirements for residential districts related to fence heights.

PROPOSED PLAN

The campus is a little over 45-acres in area and zoned R-1. The project is expected to be completed in three phases. Phase 1 would include improvements to the existing athletic fields, stormwater, and accessibility. Phase 2 would include improvements to the existing athletic fields, stormwater, and accessibility. Phase 3 would include improvements to the existing athletic fields, stormwater, and accessibility.

Phase One:

Phase one will be limited to the 7.22-acre area currently occupied by the baseball and softball fields. In this phase, the existing baseball and softball fields will be removed, and in their place, a new varsity softball field with modest spectator seating; a new ticket booth and fencing for the concession area; a new welcoming plaza and restroom facilities; 10 new tennis courts; and a new sport field. The School District would like to have Phase One completed by the end of 2024.

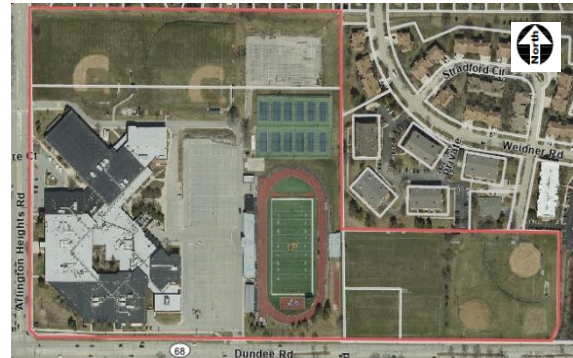


Figure 1. Site Aerial Buffalo Grove High School

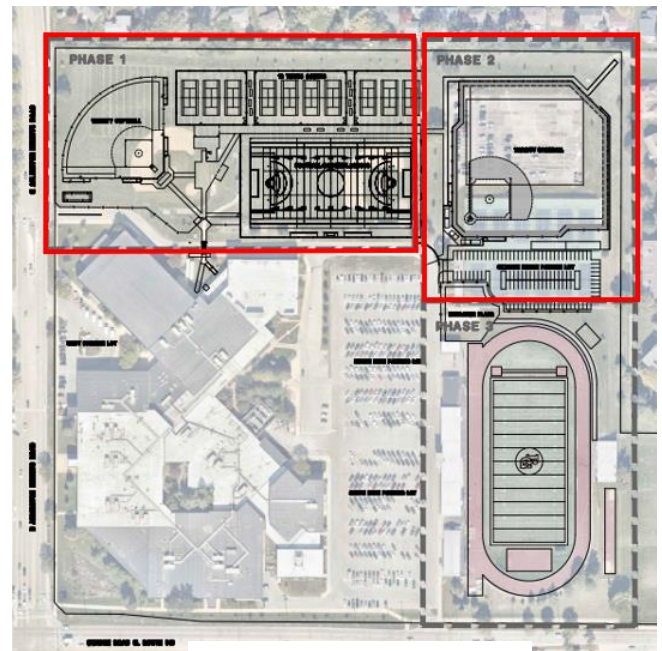


Figure 2. Project Phasing

Phase Two:

Phase Two of the project will include approximately 6-acres in area, east of the baseball fields and north of the stadium. The area is currently improved with a surface parking lot/retention basin and 12 tennis courts. A new varsity baseball field with safety netting, enclosed dugouts and dedicated spectator seating, and a new surface parking lot with 105 spaces are proposed. Phase Two is expected to be under construction in the summer/fall of 2025.



Figure 3. Rendering of Phase 1 and 2

PLANNING & ZONING ANALYSIS

Setbacks and bulk requirements:

All proposed accessory structures will be constructed within the buildable area of the site (outside of required building setbacks) and will be below the maximum height of 15-feet.

Fence Variations:

Village Code limits fence heights in residential districts to no taller than 6 feet. There are several locations on and adjacent to the athletic fields where various fences will exceed the height limitation including:

- Safety fencing behind the softball and baseball bases (40 feet and 30 feet respectively)
- Along Arlington Heights Road in the softball outfield (14 feet)
- The batting cages (20 feet)
- Surrounding the multi-purpose field (30 feet on the east and west ends, 10 feet along the south border of the field)
- Surrounding the tennis courts (10 feet around each section of courts)
- Along the perimeter of the athletic fields separating the school property from the surrounding residential properties there is an existing 7-foot chain link fence in need of repair/replacement

The Village Code does not provide any exceptions for safety fencing or fencing associated with recreational fields or courts, where taller fencing may be necessary. Staff is supportive of the fence variations as the fences are a safety feature and are typical for recreational facilities.

Parking:

A parking analysis was prepared by Gewalt Hamilton Associates, Inc. (GHA). The BGHS campus is served by 655 parking spaces in four parking lots, one of which is solely for school administration. Pursuant to the Village Code, BGHS is required to have 578 parking stalls on site, based upon 2023-2024 enrollment of 1,957 students and a total of 251 faculty and teachers. Phase Two of the project will include the removal of the northernmost parking lot (179 spaces) and the construction of a new surface parking lot with approximately 105 parking spaces (net loss 74 spaces). Following completion of Phase Two, the BGHS Campus will retain 581 parking stalls, which complies with the Village Code requirements. The parking analysis also concluded that at peak demand, approximately 525 parking stalls will be needed, leaving 10% of the parking supply unoccupied. Additional accommodation may be needed for large events.

Following the PZC meeting on April 17, 2024, GHA received comments from MWRD pertaining to the existing northeast parking lot/detention basin. MWRD is requiring that the parking lot be closed immediately due to the parking lot having a high-water level of greater than 12 inches during significant storms. As part of Phase One of the project, the petitioner is proposing to close the parking lot, and construct a temporary 117 stall parking lot on the south part of the existing tennis courts. The lot will serve faculty only and will be removed during Phase Two to allow for proper stormwater facilities to be installed below the permanent parking lot structure.

There will be no change to vehicular access or circulation proposed as part of Phase One or Two of the project.

Landscaping:

A preliminary landscape plan has been provided for Phase One and Two of the project. The plan includes the installation of a significant number of trees, shrubs, perennials, and ornamental grasses throughout the site. The Village Forester has reviewed and approved the landscape plans as presented.

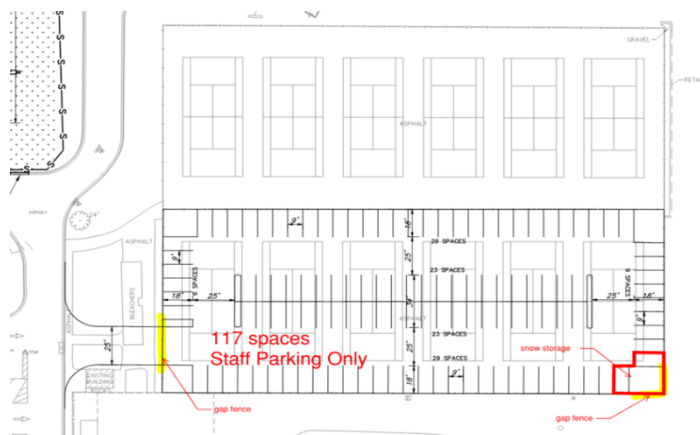


Figure 4. Phase One Temporary Parking Plan

Lighting and Noise:

New pole lighting and all lighting fixtures will be screened and will comply with the Village's illumination standards. It is anticipated that most practices and games will finish by 7:30pm; the field lighting will be turned off when the fields are not in use.

A noise analysis was conducted by Thunder Hearing & Sound to evaluate the impact of relocating the fields and the addition of new PA speakers. The study concluded that the worst-case scenario would result in a total source level of 2-5dB greater than the current ambient noise levels (mostly from traffic and planes overhead), which would result in no impact to a slight impact for nearby residents.

Stormwater & Engineering:

The project will include extensive site regarding and enhanced stormwater management systems. At this time, there are minimal concerns as it relates to stormwater provisions. The proposed project has accounted for the necessary stormwater provisions and is currently in the MWRD permitting process.

PUBLIC HEARING COMMENTS

There were no public comments received in advance of the public hearing, and no members of the public were present at the meeting to discuss this project.

PLANNING & ZONING COMMISSION (PZC) RECOMMENDATION

The PZC **unanimously recommended approval** of a preliminary plan, an amendment to the Special Use approved by Ordinance No. 2018-002, and Variations from the Fence Code requirements for residential districts related to fence heights on and adjacent to the athletic fields to accommodate the above-described improvements to Buffalo Grove High School at 1100 W Dundee Road, subject to the following conditions:

1. The proposed improvements shall be constructed in substantial conformance with the plans attached as part of the petition.
2. The Final Engineering plans shall be submitted in a manner acceptable to the Village.
3. Any directional or incidental signage added to the site shall be reviewed administratively by staff.
4. Landscaping of the property shall be maintained in accordance with the approved landscape plan in perpetuity.
5. All light fixtures shall be appropriately screened to avoid glare into surrounding residential properties and field lighting shall be turned off when not in use.

RECOMMENDATION

Staff recommends that the Village Board approve an Ordinance granting a preliminary plan, an amendment to the Special Use approved by Ordinance No. 2018-002, and Variations from the Fence Code requirements for residential districts related to fence heights on and adjacent to the athletic fields to accommodate the above-described improvements to Buffalo Grove High School at 1100 W Dundee Road, subject to the conditions in the attached Ordinance.



STR PARTNERS LLC
 350 West Ontario Street
 Suite 200
 Chicago IL 60654
 312.464.1444
 www.strpartners.com

Project Description and Narrative Statement

Buffalo Grove High School Athletic Field Renovations Phase 1 & 2

Township High School District 214 is embarking on a significant upgrade to the area of the existing baseball fields and stormwater retention basin on the north side of Buffalo Grove High School. This area, known as the "north shelf", was initially shaped by the disposal of excavation spoils from the school's original construction in 1972, and has seen little change since. Currently, after rainfall, the poor drainage system results in the fields remaining waterlogged for up to two weeks, leading to disruptions in the schedules of athletic teams and the mandatory physical education classes for the school's 2,000 students. Moreover, the site's compliance with the Americans with Disabilities Act (ADA) is compromised due to inadequate grading around the fields, which poses accessibility challenges for spectators. Addressing these issues through the proposed renovations will not only resolve the longstanding problems associated with drainage and accessibility but will also significantly enhance the functionality and inclusivity of the school's outdoor facilities.

The renovation project is designed to tackle the existing issues through comprehensive site regrading and the installation of advanced stormwater management systems. Beyond addressing these foundational concerns, the project ambitiously seeks to transform the area into an attractive hub for both athletes, students, and spectators. Key enhancements include the creation of premier varsity softball and baseball fields, equipped with brick backstops and modern safety netting, enclosed dugouts, and dedicated spectator seating. Enhancing visitor convenience and the overall experience, the plan incorporates a new ticket booth and strategic fencing for improved access control, alongside a concessions building with a welcoming plaza and restroom facilities—thereby introducing essential amenities to this segment of the campus. Additionally, the introduction of new tennis courts with areas specifically allocated for spectators and an artificial turf multi-sport field caters to the needs of the burgeoning athletics program and physical education classes, marking a significant step forward in fostering an inclusive and vibrant sports culture.

GREMLEY & BIEDERMANN, INC.

PROFESSIONAL ILLINOIS LAND SURVEYORS

4505 N. Elston Avenue Chicago, Illinois 60630
Telephone: (773) 685-5102 Fax: (773) 286-4184
Illinois Land Surveyor Corporation No. 16
License No. 184-002761

Plat of Survey

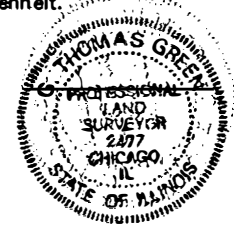
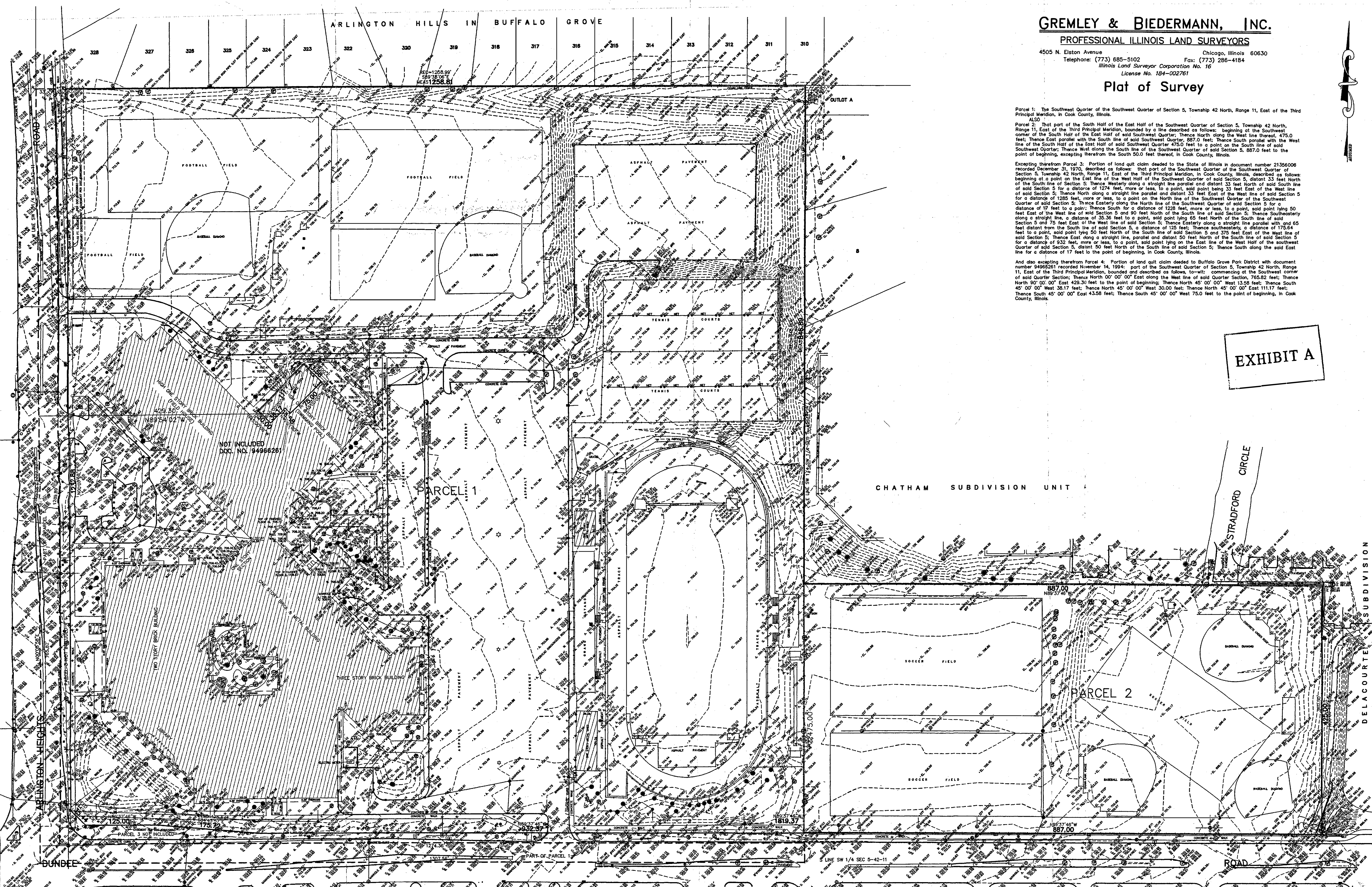
Parcel 1: The Southwest Quarter of the Southwest Quarter of Section 5, Township 42 North, Range 11, East of the Third Principal Meridian, in Cook County, Illinois.

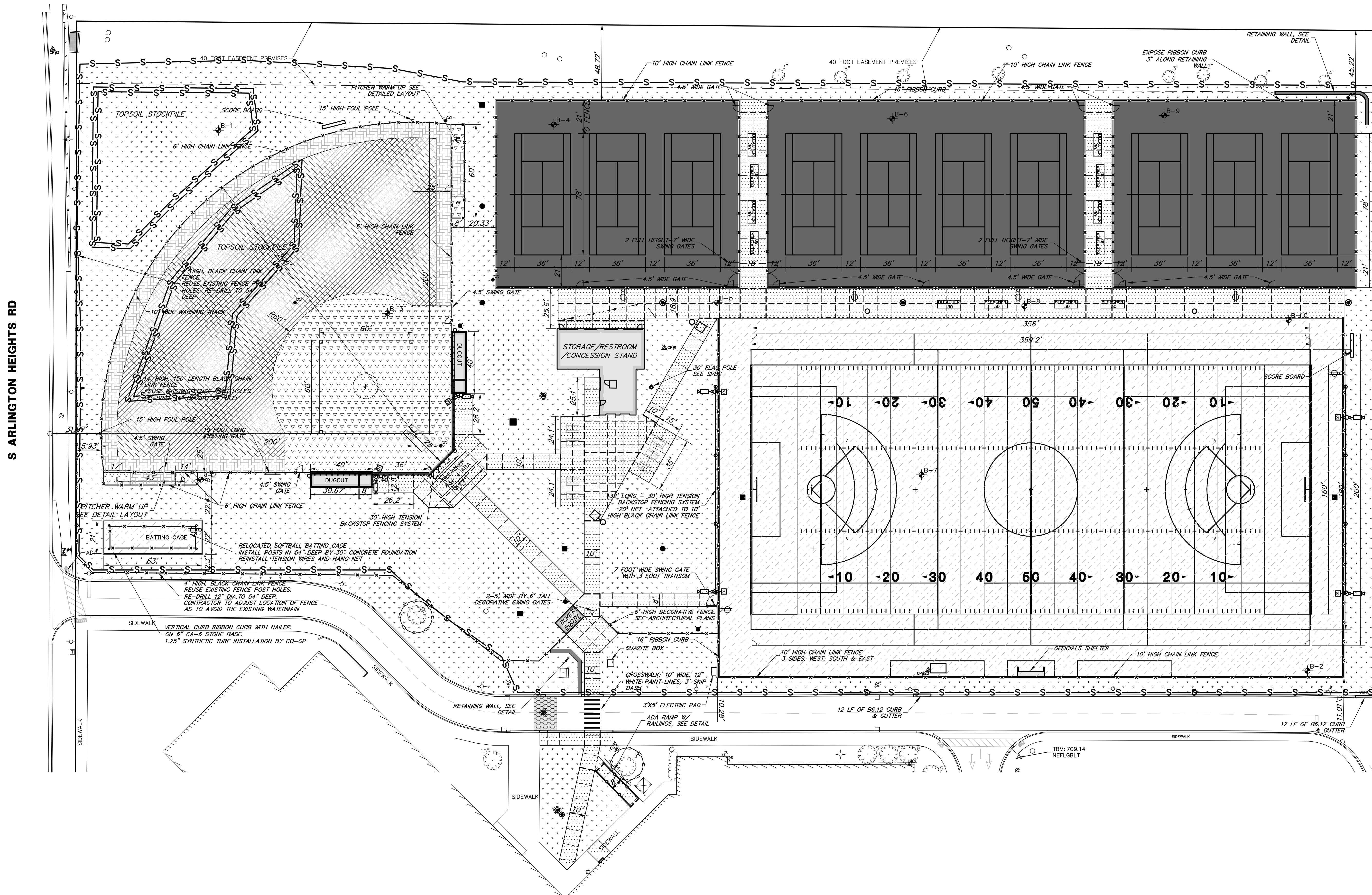
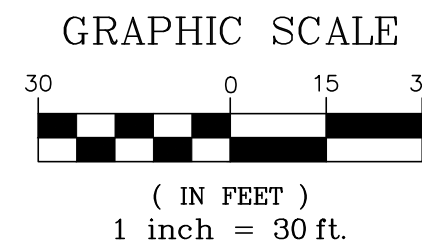
Parcel 2: That part of the South Half of the East Half of the Southwest Quarter of Section 5, Township 42 North, Range 11, East of the Third Principal Meridian, bounded by a line described as follows: beginning at the Southwest corner of the South Half of the East Half of said Southwest Quarter; thence North along the West line thereof, 475.0 feet; thence East parallel with the South line of said Southwest Quarter, 667.0 feet; thence South parallel with the West line of the South Half of the East Half of said Southwest Quarter, 475.0 feet to a point on the South line of said Southwest Quarter; thence West along the South line of the Southwest Quarter of said Section 5, 887.0 feet to the point of beginning, excepting herefrom the South 50.0 feet thereof, in Cook County, Illinois.

Excluding therefrom Parcel 3: Portion of land quit claim deed to the State of Illinois in document number 21356006 recorded December 31, 1970, described as follows: that part of the Southwest Quarter of the Southwest Quarter of Section 5, Township 42 North, Range 11, East of the Third Principal Meridian, in Cook County, Illinois, described as follows: beginning at a point on the East line of the West Half of the Southwest Quarter of said Section 5, distant 33 feet North of the South line of Section 5; thence West along a straight line parallel and distant 33 feet North of said South line of said Section 5 for a distance of 1274 feet, more or less, to a point, said point being 33 feet East of the West line of said Section 5; thence North along a straight line parallel and distant 33 feet East of the West line of said Section 5 for a distance of 1285 feet, more or less, to a point on the North line of the Southwest Quarter of the Southwest Quarter of said Section 5; thence East along the North line of the Southwest Quarter of said Section 5 for a distance of 17 feet to a point; thence South for a distance of 1228 feet, more or less, to a point, said point lying 50 feet East of the West line of said Section 5 and 80 feet North of the South line of said Section 5; thence Southeast along a straight line, a distance of 35.36 feet to a point, said point lying 65 feet North of the South line of said Section 5 and 75 feet East of the West line of said Section 5; thence East along a straight line parallel with and 65 feet distant from the South line of said Section 5, a distance of 125 feet; thence Southeast, a distance of 175.64 feet to a point, said point lying 50 feet North of the South line of said Section 5 and 375 feet East of the West line of said Section 5; thence East along a straight line, parallel and distant 50 feet North of the South line of said Section 5 for a distance of 932 feet, more or less, to a point, said point lying on the East line of the West Half of the Southwest Quarter of said Section 5, distant 50 feet North of the South line of said Section 5; thence South along the said East line for a distance of 17 feet to the point of beginning, in Cook County, Illinois.

And also excepting therefrom Parcel 4: Portion of land quit claim deed to Buffalo Grove Park District with document number 9496261 recorded November 14, 1994: part of the Southwest Quarter of Section 5, Township 42 North, Range 11, East of the Third Principal Meridian, bounded and described as follows, to-wit: commencing at the Southwest corner of said Quarter Section; thence North 00° 00' 00" East along the West line of said Quarter Section, 765.82 feet; thence North 90° 00' 00" East 429.30 feet to the point of beginning; thence North 45° 00' 00" West 13.58 feet; thence South 45° 00' 00" West 38.17 feet; thence North 45° 00' 00" West 30.00 feet; thence North 45° 00' 00" East 111.17 feet; thence South 45° 00' 00" East 43.58 feet; thence South 45° 00' 00" West 75.0 feet to the point of beginning, in Cook County, Illinois.

EXHIBIT A



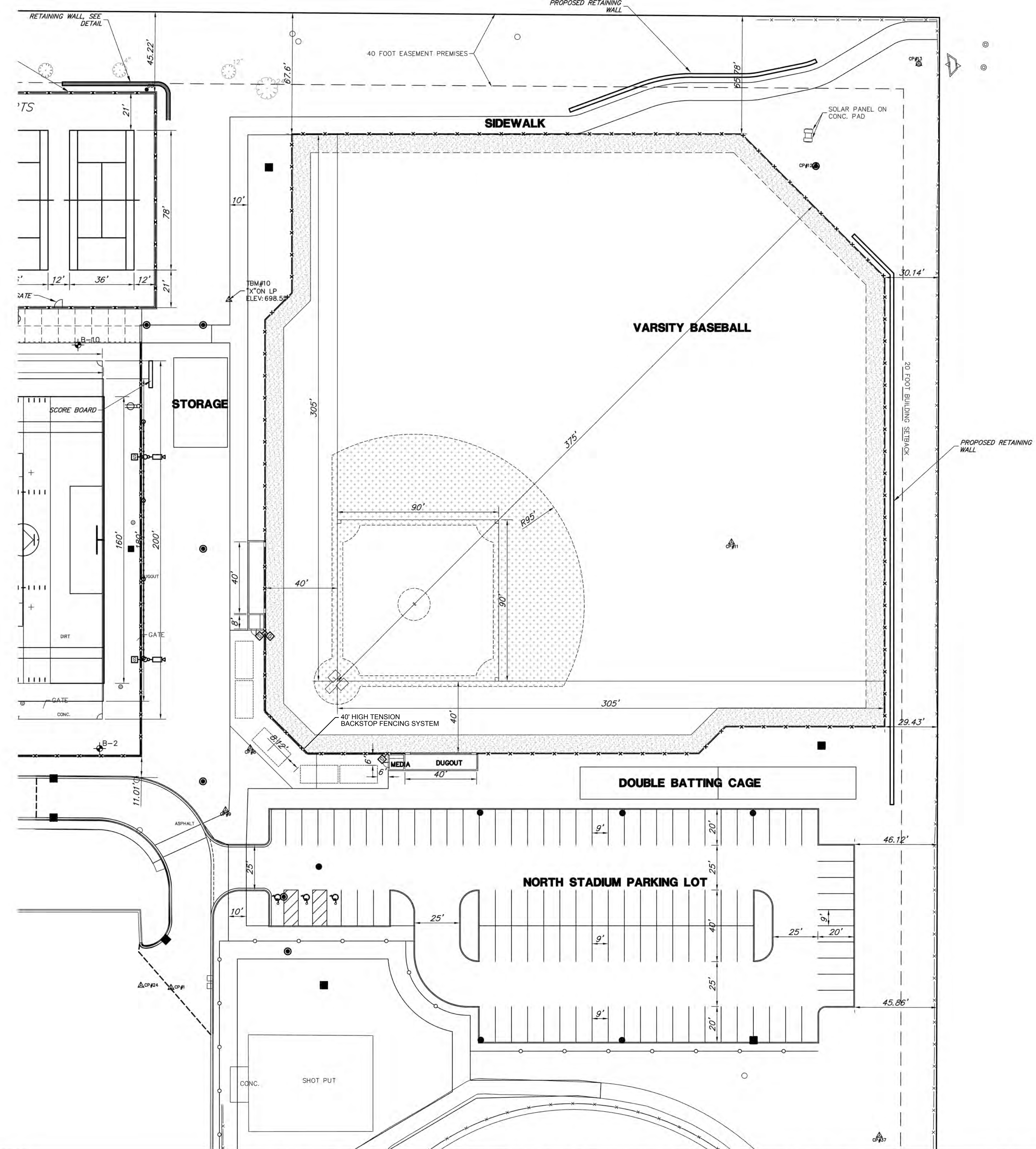
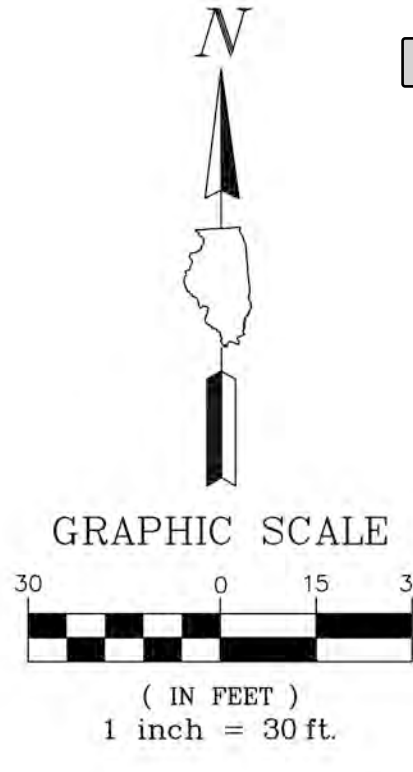


PROPOSED LEGEND

- | | |
|--|---------------------------------------|
| | CLASS "D" PAVEMENT PATCH, 5" |
| | TENNIS COURT PAVEMENT
SEE DETAIL |
| | PCC SIDEWALK, 5" |
| | PCC PAVEMENT, 8" |
| | SYNTHETIC TURF FIELD |
| | SOFTBALL IN FIELD MIX SEE DETAIL |
| | WARNING TRACK SEE DETAIL |
| | FINAL SEED & BLANKET |
| | SOFTBALL FIELD FINAL SOD |
| | STONE RIP RAP |
| | DETECTABLE WARNINGS |
| | B6.12 CURB & GUTTER
(REGULAR) |
| | B6.12 CURB & GUTTER
(DEPRESSED) |
| | INTEGRATED SIDEWALK/
CONCRETE CURB |
| | RETAINING WALL SEE DETAIL |

PROPOSED LEGEND

- - - - - PAVEMENT SAWCUT
 - - - - - EXPANSION JOINT

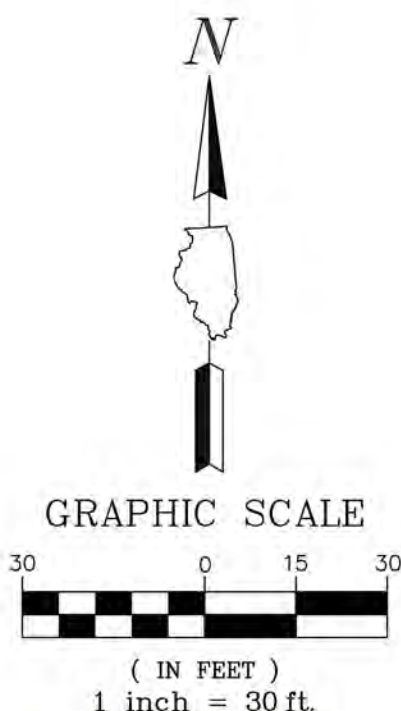


PHASE 2 FIELD RENOVATIONS PRELIMINARY GEOMETRIC PLAN

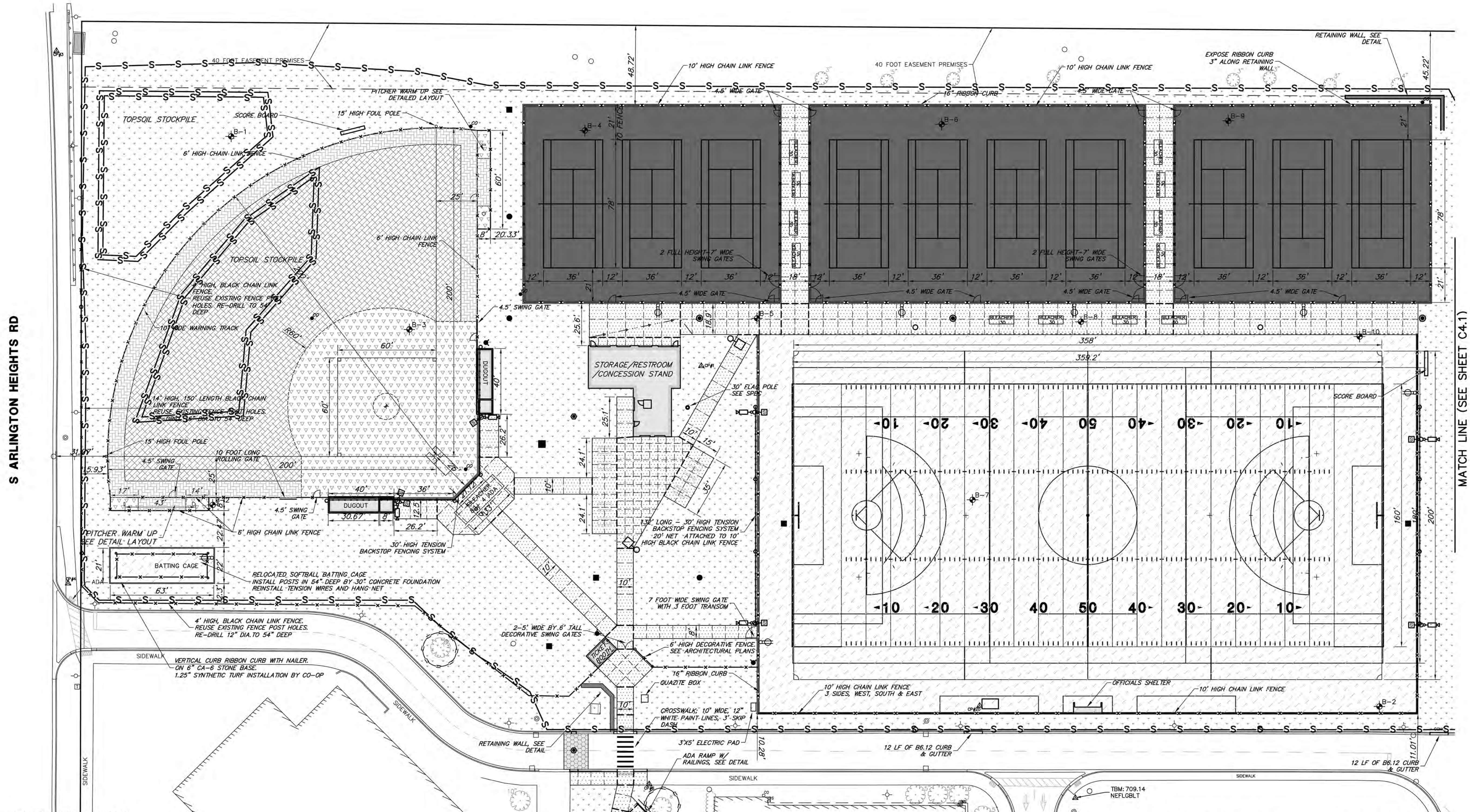
D214 BGHS ATHLETIC FIELD RENOVATIONS PHASING

1100 W Dundee Road, Buffalo Grove, IL 60089

Township High School District 214



Township High School District 214



GEOMETRIC AND PAVING PLAN

- All pavement dimensions are to edge of pavement, unless otherwise noted. E=edge of pavement, B=back of curb, F=face of curb. Radii dimensions are to back of curb. Tennis court dimensions are from edge of play lines to fence line.
- Install concession stand, back stop wall, dugouts, ticket booth, officials storage shelter, and storage building. Refer to Architectural and MEP plans for design and utilities.
- Install all curb and sidewalk as shown. Note some curbs require reverse pitch gutter. Dowel new sidewalk and curb to existing and proposed curbs per general notes. When constructing a carriage walk, the proposed sidewalk contraction and expansion joints shall align with existing curb joints. Note some sidewalks have thickened edges similar to carriage walks. This occurs along multi-sport field.
- Provide 1.90% cross slope and 4.5% maximum longitudinal slope on all sidewalks and pedestrian path ways unless otherwise indicated. Illinois accessibility code requires a maximum constructed cross slope of 2.00% and longitudinal slope of 5.00%.
- Install chain link fencing, fencing and netting, foul pole, football posts and soccer anchor collar. Note some fencing requires ribbon curbs. See specific fencing details for each respective sport or location for detailed height pole spacing and netting details. Refer to specifications for additional requirements. Note fence near the ticket booth area is a decorative fence, refer to architectural plans for pier design and civil plans for fence details.
- Install tennis court pavement as shown. Refer to detail sheet for specific pavement sections, fencing, net post and general note sheet for construction, testing and compaction requirements.
- Synthetic turf field and batting cage area. Prepare subgrade - noiler curb stone base, underdrains, stone void storage and rough grade. Co-op bid contractor will fine grade and install synthetic turf.
- Varsity softball. Install underdrains, salvaged skin infield, new warning track and bases. See details.
- All pavement markings shall be paint, color as noted, in accordance with Section 780 of the IDOT Standard Specifications. (Two single applications, 16 mils each required).

- Site pavement marking shall be coordinated with Site engineer. Contractor shall notify site engineer 48 hrs prior to installing pavement markings.
- Install retaining wall as shown. Refer to detail sheet for material and design requirements.
 - Installed salvaged softball batting cage net system within new batting cage area. Co-op bid contractor will fine grade and install synthetic turf.
 - Install flag pole. Refer to specifications for additional information.
 - Contractor to order, erect, install, and anchor bleachers 12 mobile units (Tennis/Multisports Field & one grandstand softball field bleacher). Refer to specifications for bleacher models, manufacturer, and installation requirements.
 - Install transformer pad as shown. Pad shall be set 6" above finished grade. Refer to MEP plans for final pad size and design requirements.
 - Contractor shall install temporary erosion control seed and blanket as necessary to meet soil erosion and sediment control requirements. Refer to notes and details throughout the plan set for specific material requirements.
 - For final restoration, the contractor shall be responsible for restoring all disturbed turf areas and proposed turf areas as follows:

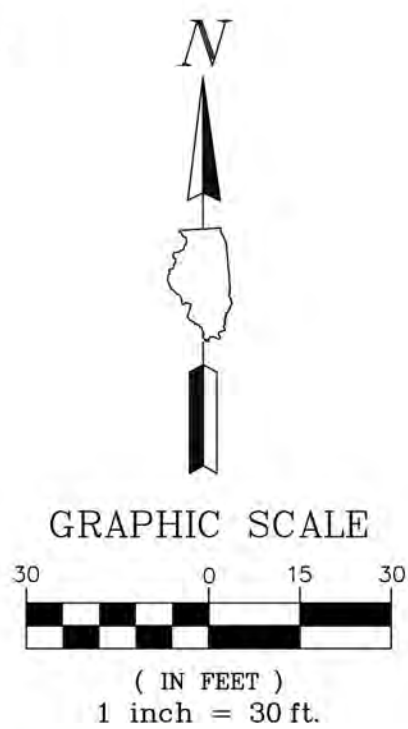
- Refer to Landscape plans for plant and tree material and installation requirements.
- Refer to civil plans and specifications for topsoil, seed and sod material and restoration requirements.
- Prior to placement of topsoil restoration area subgrade material shall be roto-tilled and re-compacted to a maximum of 80% standard proctor to a depth of 6".
- Spread a minimum of 6" of existing site salvaged screened topsoil or new pulverized topsoil on all disturbed areas. Compact to 80% standard proctor.
- Topsoil must be free of litter, brush, rocks and earth clods of greater than 3" inch in any dimension. Contain between 3%-8% organic matter, 25%-35% clay, and 30%-40% sand content. pH shall be between 6.5 and 7.5. Contractor shall test topsoil to be placed as well.
- Apply fertilizer per specifications.
- Roto-till fertilizer into the topsoil prior to final restoration vegetation to 6" depth. Refer to specifications for detailed fertilizer, seed and sod requirements.
- General open area restoration as follows:
 - Field of Dreams Gameday Mixture 70% Kentucky / 30% Perennial Rye. (Lawn mixture)
 - Erosion control blanket shall be North American Green S75 or approved equal installed following manufacturer guidelines.
 - All seeded areas shall be roped off from pedestrian access using metal stakes at 8 foot spacing and snow fence tied it two places per stake.
- Softball Field sod restoration areas as follows:
 - Sod shall be 2.5' by 30' long thick cut (1-1/2") of well rooted growth material.
 - Sod Mixture to consist of 100% Kentucky Bluegrass
 - Sod shall be rolled after installation.
- Watering
 - Contractor shall be responsible for watering the restored area per project specifications for a duration of 60 days prior to the Owner's final review and acceptance.
 - Contractor will be responsible to erect a temporary above ground water irrigation system to water both the seed and sod areas. Refer to specifications for more detailed requirements.
 - If restoration has not shown a 'catch' or uniform stand, the contractor shall repeat re-seeding or re-sodding until a uniform stand is achieved.
- Once restoration has been completed, the contractor shall remove erosion control devices. Silt fence trenches shall be backfilled and restored in kind. Storm structures shall be cleaned of debris.

PROPOSED LEGEND

	CLASS "D" PAVEMENT PATCH, 5'
	TENNIS COURT PAVEMENT SEE DETAIL
	PCC SIDEWALK, 5'
	PCC PAVEMENT, 8'
	SYNTHETIC TURF FIELD
	SOFTBALL IN FIELD MIX SEE DETAIL
	WARNING TRACK SEE DETAIL
	FINAL SEED & BLANKET
	SOFTBALL FIELD FINAL SOD
	STONE RIP RAP
	DETECTABLE WARNINGS
	B6.12 CURB & GUTTER (REGULAR)
	B6.12 CURB & GUTTER (DEPRESSED)
	INTEGRATED SIDEWALK/ CONCRETE CURB
	RETAINING WALL SEE DETAIL

PROPOSED LEGEND

	PAVEMENT SAWCUT
	EXPANSION JOINT



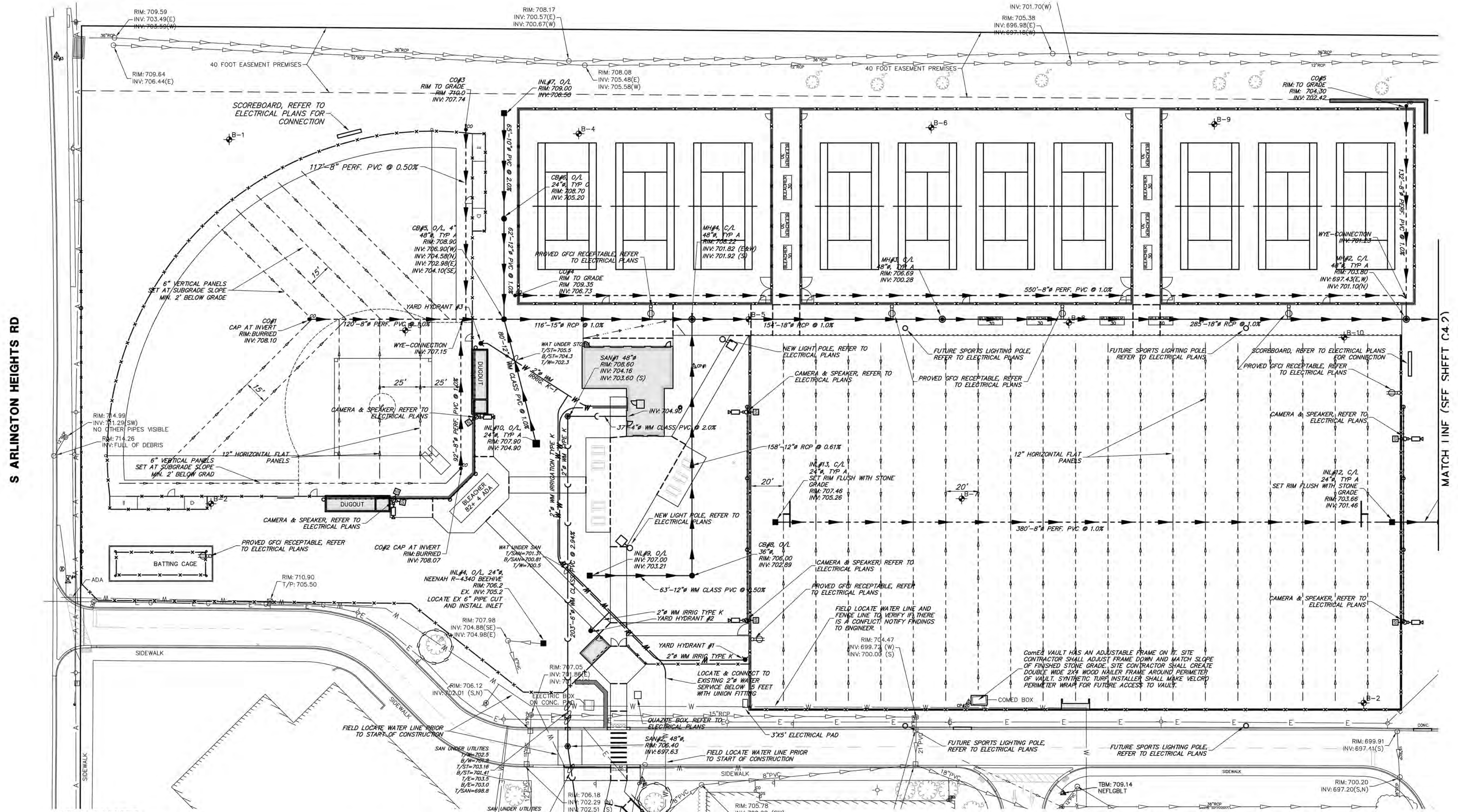
GEOMETRIC PLAN - PHASE 1

D214 BGHS ATHLETIC FIELD RENOVATIONS PHASING

1100 W Dundee Road, Buffalo Grove, IL 60089

Township High School District 214

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UTILITY PLAN NOTES

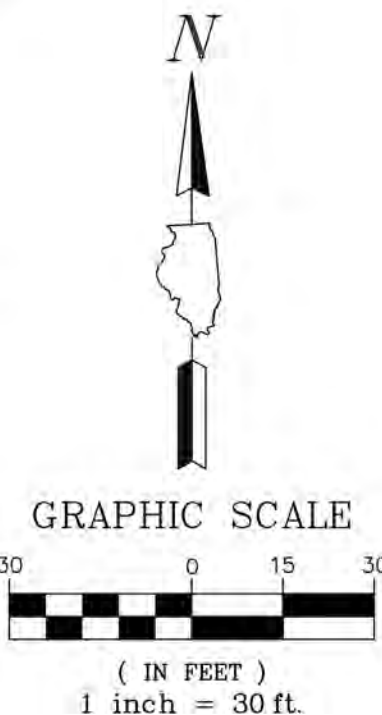
- The contractor shall verify the exact location and elevation of existing utilities prior to initiating work. Any discrepancies found between the information noted on the plans and actual field conditions, or any conflicts with proposed improvements shall be reported to the engineer immediately. The contractor shall not proceed any further until given written clarification on how to proceed.
- Install storm sewer as shown. Refer to Storm Sewer requirement table on General Notes Sheet for pipe material, joint, frame and grate, stone bedding and testing requirements.
- Install sanitary sewer as shown. Refer to Sanitary Sewer requirement table on General Notes Sheet for pipe material, joint, frame and grate, stone bedding and testing requirements.
- Install lift station as shown. Refer to lift station details and specifications. Coordinate electric service, alarm panel location, and forcemain connection to gravity sewer line in building.
- Install watermain as shown. Refer to Water Main requirement table on General Notes Sheet for pipe material, joint, valves, stone bedding and testing requirements. All watermain shall be 2" Type K copper. Each section of copper shall be connected using a three part copper union and copper flare. Provide reducer fitting at yard hydrant and at existing tie-in location. Yard hydrant shall be Woodford Iowa Model Y1 with a 5 foot deep bury depth. Set 26" above finished grade. Provide french drain around drain hole. French drain shall consist of 1 C.Y. of open graded CA-11 (no fines) wrapped in Light Duty non-woven geotextile fabric. Provide as-constructed locations of all bends and copper connection points.
- Refer to MEP and Architectural plans for site lighting, electric, security camera conduits, spare conduits and gas requirements and final routing.
- All connections to the combined sewer must be watertight in conformance with ASTM C-923.
- All connections to existing structures shall be machined cored holes.
- Contractor shall provide as-constructed utility documents in digital cad files and pdf files at the conclusion of the project. Refer to master list of as-constructed items provided on the plans.

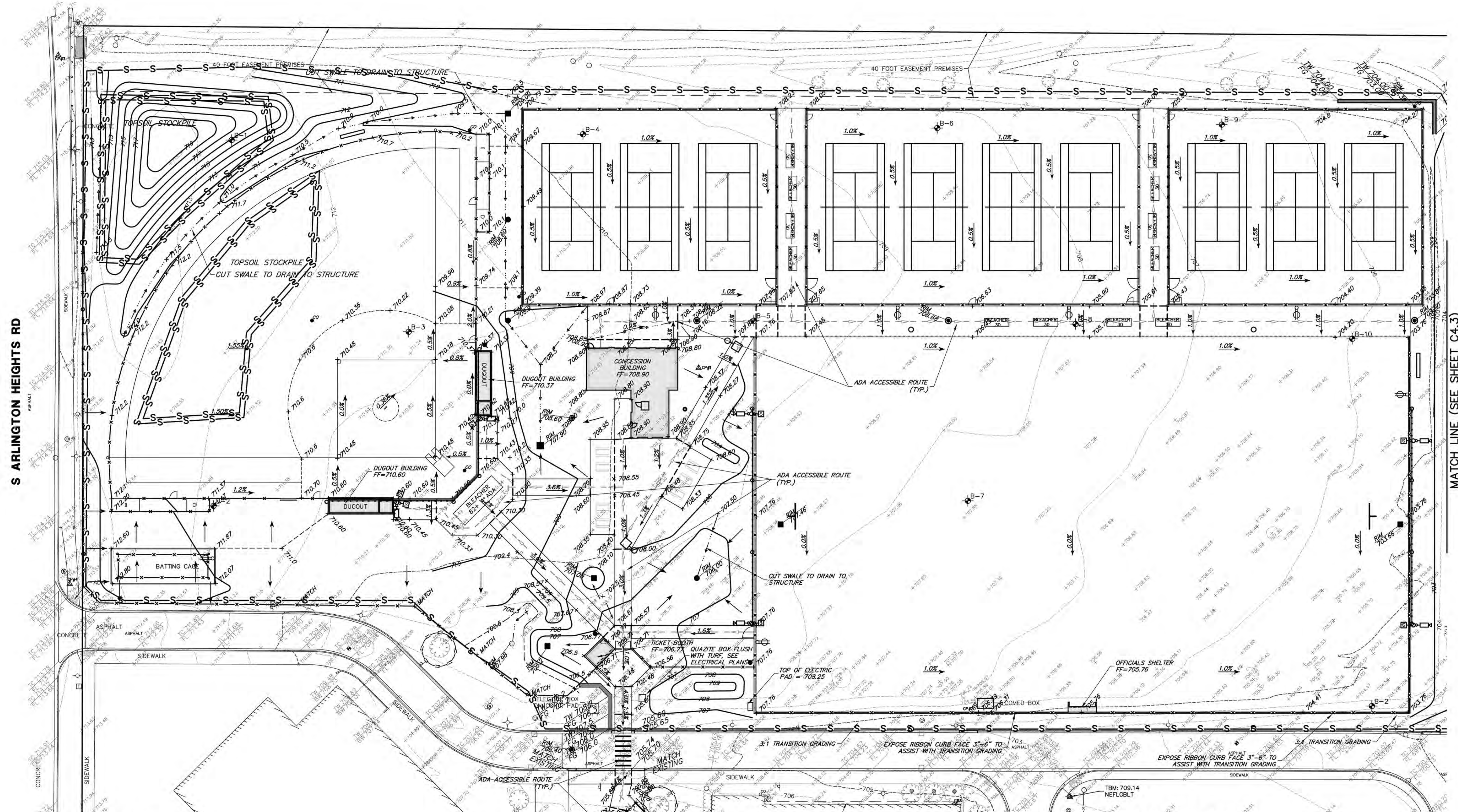
AS-CONSTRUCTED DOCUMENTATION DURING AND POST CONSTRUCTION

- The following as-constructed information shall be collected throughout the construction of the project and provided in one digital AutoCAD file at the conclusion of the project:
 - Grading
 - Stone void storage (under Multisport field)
 - Rim and inverts of underdrain lateral
 - Bottom elevation of subgrade at 25 foot grid prior to backfilling. **Submit before backfilling**
 - Top and bottom and corners of any buried stone volume control basins.
 - As-constructed volumes within respective basins up to overflow elevation.
 - Tennis Courts
 - 10 Spot Elevations at each tennis court
 - Fence line (2 each side)
 - Endline Corners (2 each side)
 - Center Net Corners (2 total)
 - Sanitary Sewer
 - As-constructed location of all bends, tees, valves, copper unions, etc. (measured dimension from two fixed above grade objects are required for buried objects)
 - Rim and top of pipe elevations for all structures
 - Provide all testing documentation.
 - Storm Sewer
 - As-constructed locations of structures, service connections, cleanouts.
 - Rim and invert elevations.
 - Color video with transcript required for new sewer lines installed.
 - Water Main
 - As-constructed locations of structures, service connections, cleanouts.
 - Rim and invert elevations.
 - Color video with transcript required for new sewer lines installed. Crawler camera required on pipes 8" and larger. Push type camera on 6" or less.

UTILITY PLAN LEGEND

	EXISTING STORM SEWER
	EXISTING SANITARY SEWER
	EXISTING WATERMAIN
	PROPOSED STORM SEWER
	PROPOSED SANITARY SEWER
	PROPOSED WATERMAIN
	EXISTING
	PROPOSED
	STORM MANHOLE
	STORM CATCHBASIN
	STORM INLET
	FLARED END SECTION
	SANITARY MANHOLE
	VALVE VAULT
	VALVE BOX
	FIRE HYDRANT
	BUFFALO BOX
	STREET LIGHT
	POWER POLE
	SIGN





GRADING PLAN NOTES

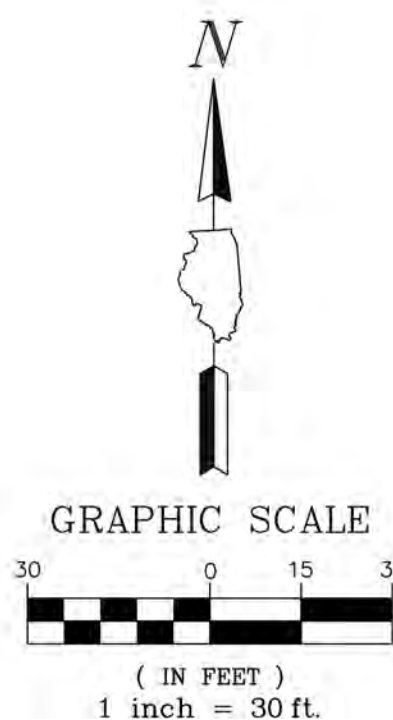
- Prior to starting any construction, provide soil erosion and sediment control devices as shown on the plans and as required per IEPA NPDES guidelines. Refer to notes and details throughout the entire plan set.
- Prior to starting any excavation work, provide tree protection, preservation and root pruning as shown on the plans and notes throughout the entire plan set.
- Contractor shall refer to subsurface soil exploration report.
- Refer to General Notes for grading, compaction and proof roll requirements.
- Crushed concrete meeting IDOT certifications for the design plan gradations for non-porous pavement and sidewalk stone base, structural fill, and trench backfill will be permitted.
- Crushed concrete may not be used for underdrain trench or porous fill conditions.
- The contractor shall import or export soil as necessary to construct the site to specified plan grades. Such work is considered incidental to the contract and no additional compensation shall be allowed for such work. Minor adjustments to grades can be accommodated with Project Engineer approval.
- The Contractor shall include all associated costs with the removal, transport, disposal, testing and certification of "Uncontaminated Soil" as defined under 415 ILCS 5/3.160 including any fees, taxes, or surcharges charged by or through the operator(s) of Clean Construction or Demolition Debris Fill Operations or Uncontaminated Soil Fill Operations for the acceptance of Uncontaminated Soil.
- All structures shall be adjusted to meet finished turf and pavement grades.
- Refer to soil erosion and sediment control notes and details for seed and blanket requirements for temporary stabilization.
- Refer to geometric plan and specifications for final restoration requirements.

- Contractor shall provide as-constructed grading documents in digital cad files and pdf files at the conclusion of the project. Refer to master list of as-constructed items provided on the plans.
- Refer to SWPPP Plan for sequence of construction. Note mass grading work zone areas shall be minimized to prevent erosion. Once a work zone has been rough graded, stabilize area with mulch and proceed to next work area until site is completed.
- Contractor shall ensure positive drainage to all inlets and catchbasins. Areas of surface ponding shall be corrected by the contractor at no additional expense to the Owner.
- All lawn areas disturbed as a result of construction shall be restored to preconstruction lawn condition following restoration requirements.

- In proposed synthetic turf area remove existing turf and excavate to proposed subgrade and compact to 95% Standard Proctor density (ASTM D-698). Prior to geotextile fabric placement, the finished subgrade shall be proof rolled. Undercut fill shall be clay. Subgrade shall be fine graded to meet the proposed subgrade elevations. Rough grading, with ruts or bird baths is not permitted. Upon completion of the subgrade, install geotextile fabric, with a minimum 18" overlap. Install horizontal panel drains as Vulcan 210 stone material is placed and compacted to 95% Standard Proctor density. Horizontal panel installation and stone placement to be coordinated so as not to crush the panel drain. No truck traffic will run directly on the geotextile fabric. Upon completion of the Vulcan 210 stone placement, stone shall be rough graded by site contractor. Nailer board to be installed by site contractor. Co-op synthetic turf installer shall provide final grading of the stone surface. Upon final stone surface completion, site Project Engineer and synthetic turf contractor shall stringline and walk site for acceptance. Upon acceptance by Project Engineer and synthetic turf contractor, turf to be installed.

GRADING LEGEND

- TOP OF CURB FLOW LINE
- PROPOSED SPOT ELEVATION
- CONTOUR
- STRUCTURE ADJUSTMENT
- SUMMITS
- SLOPES
- SWALES
- OVERLAND FLOW ROUTE
- DETECTABLE WARNINGS
- B6.12 CURB & GUTTER (REGULAR)
- B6.12 CURB & GUTTER (DEPRESSED)
- BARRIER CURB
- BARRIER CURB (DEPRESSED)
- ADA ACCESSIBLE ROUTE



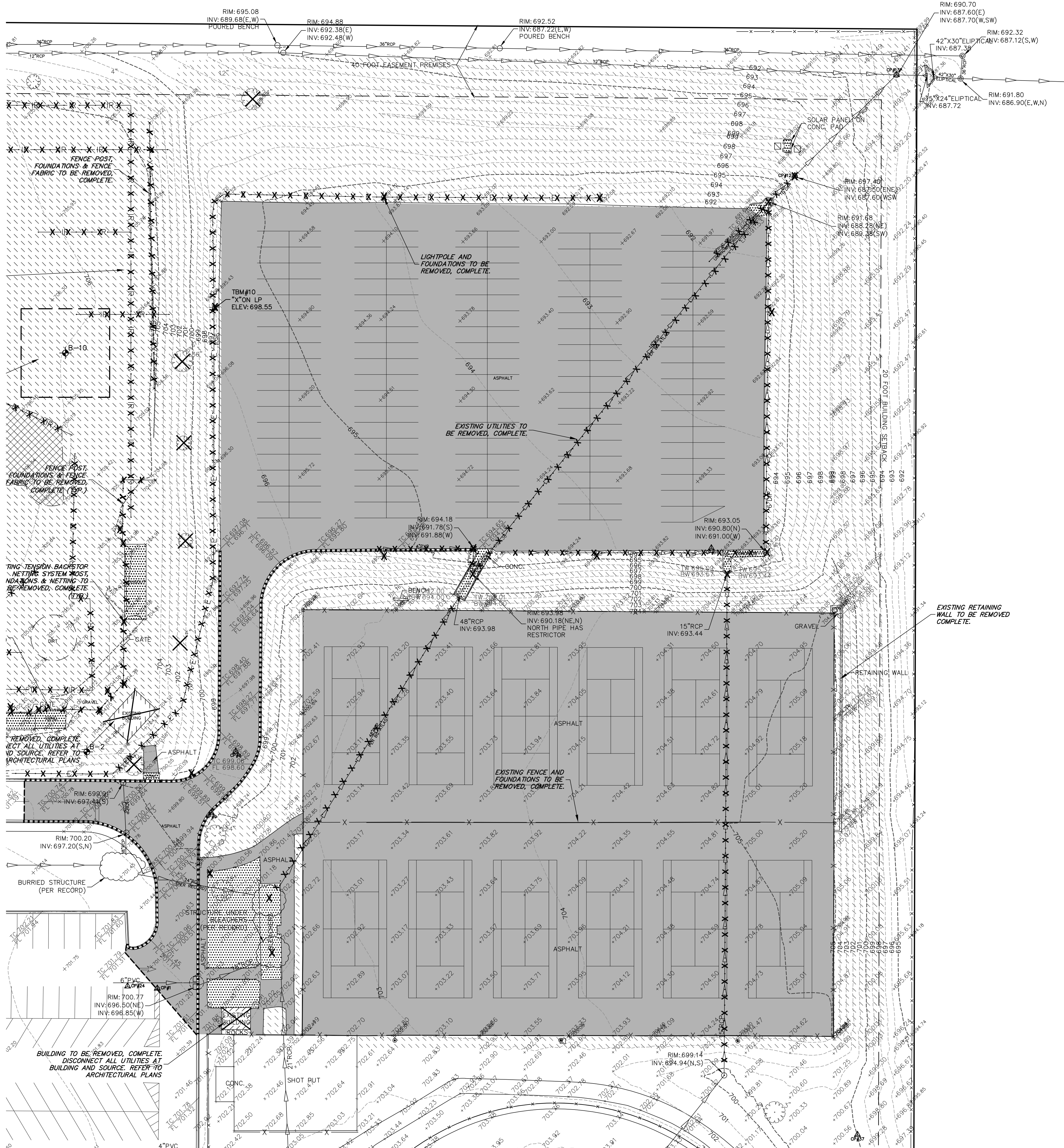
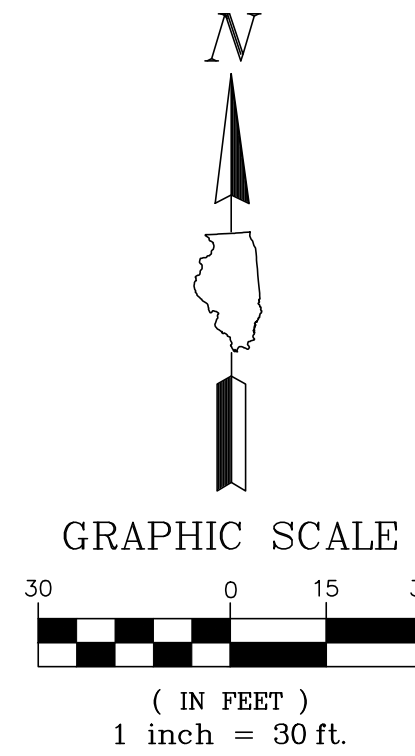
GRADING PLAN - PHASE 1

D214 BGHS ATHLETIC FIELD RENOVATIONS PHASING

1100 W Dundee Road, Buffalo Grove, IL 60089

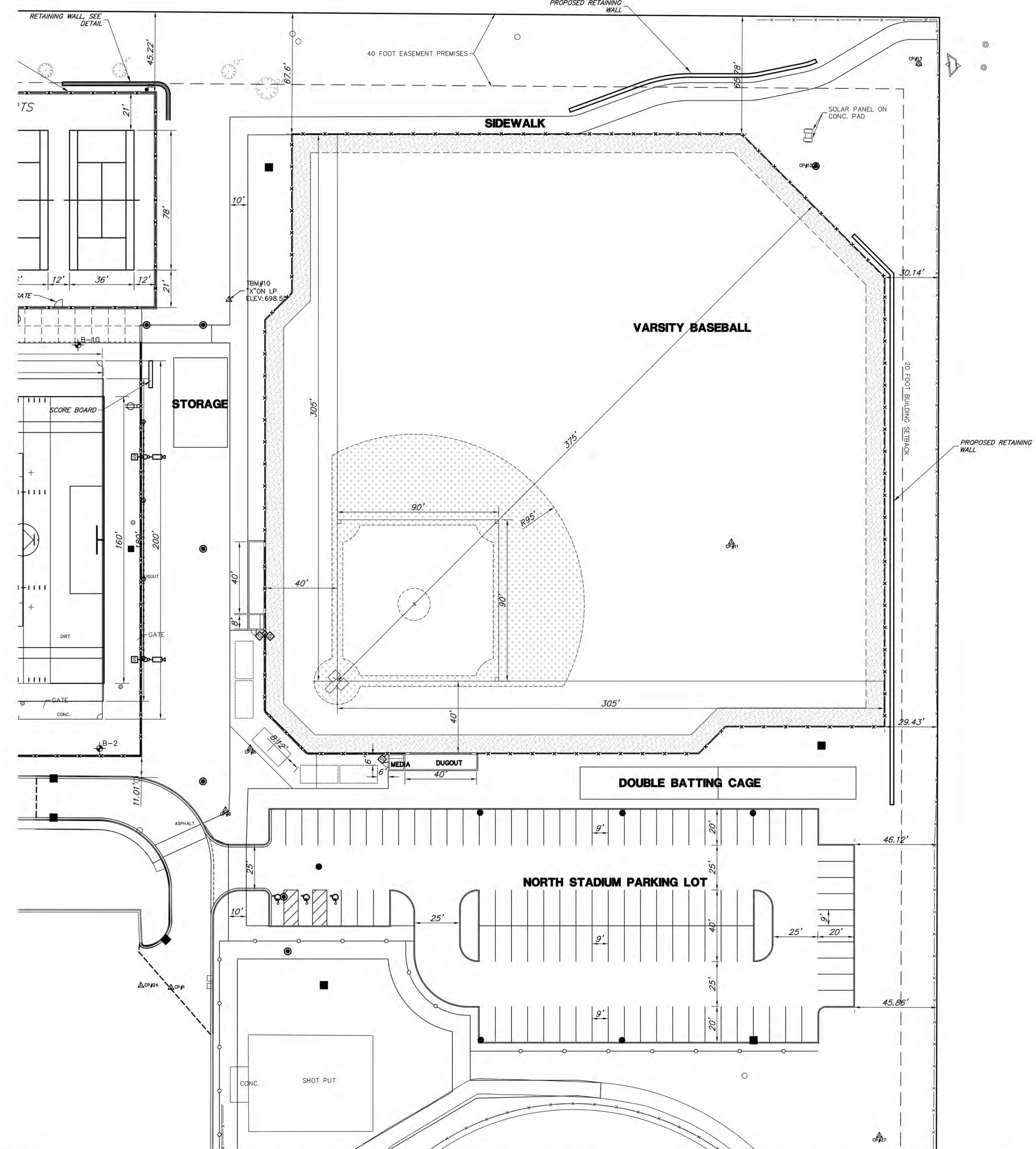
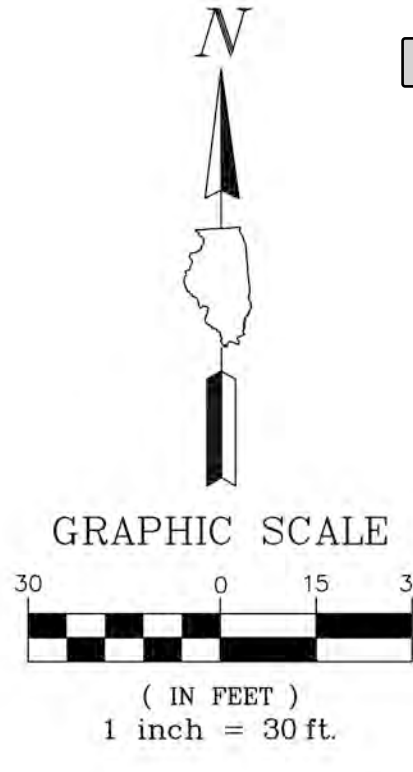
Township High School District 214

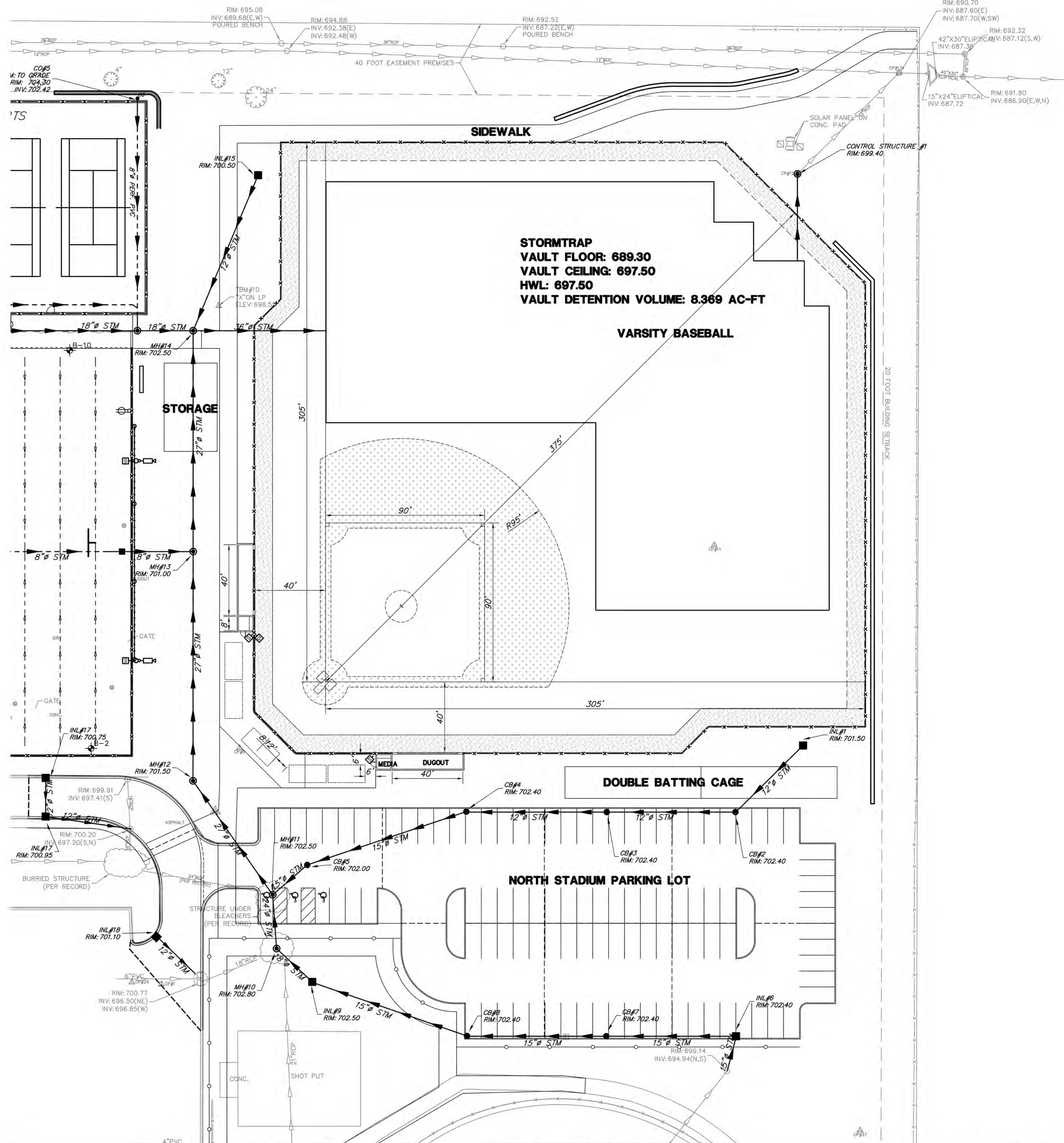
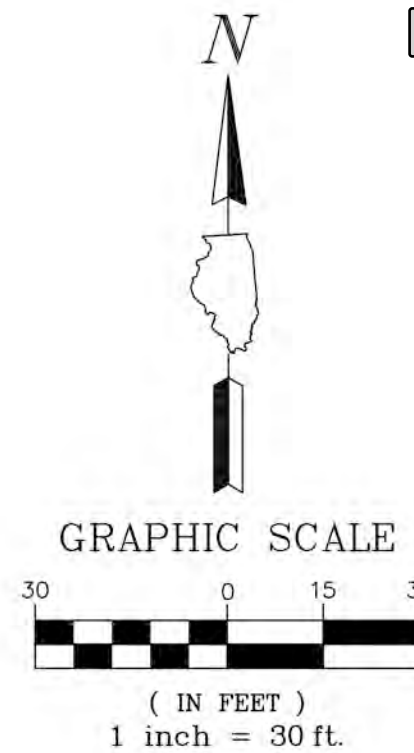
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REMOVAL LEGEND

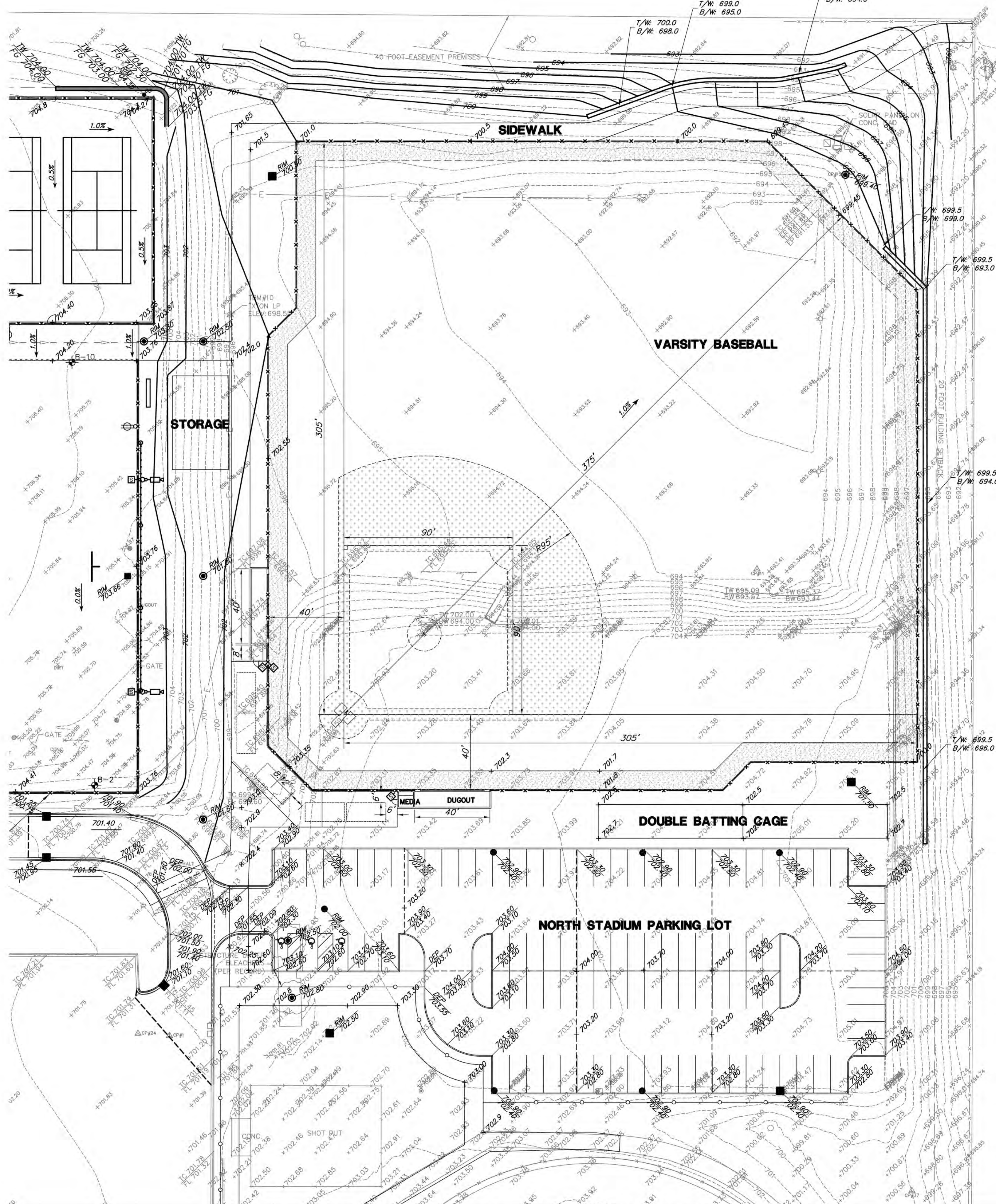
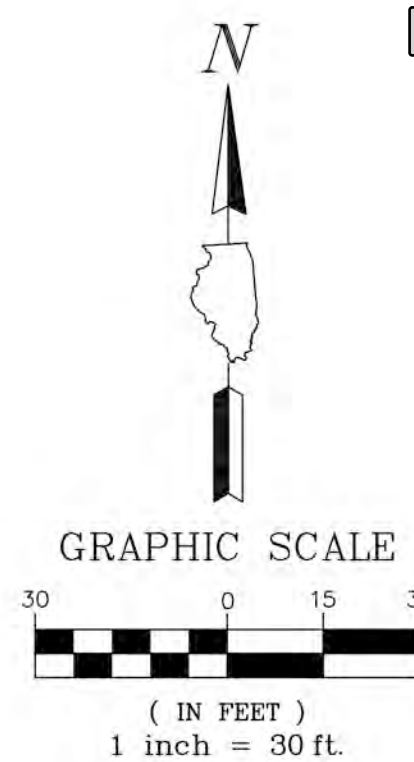
- INFIELD MIX SALVAGE
- PAVEMENT REMOVAL FULL DEPTH, MINIMUM 14"
- CLASS "D" PAVEMENT PATCH, HEAVY DUTY PAVEMENT
- EARTH/GRAVEL REMOVAL
- CONCRETE/SIDEWALK REMOVAL
- PATHWAY REMOVAL
- TREE/SHRUB REMOVAL (SEE LANDSCAPE PLANS FOR TREE REMOVAL AND TREE PROTECTION)
- PERIMETER EROSION BARRIER
- CURB/COMBINATION CURB AND GUTTER REMOVAL
- PAVEMENT SAWCUT
- UTILITY TO BE REMOVED
- STRUCTURE/UTILITY REMOVAL
- CONSTRUCTION FENCE
- SOIL BORING





UTILITY PLAN LEGEND

	EXISTING STORM SEWER
	EXISTING SANITARY SEWER
	EXISTING WATERMAIN
	PROPOSED STORM SEWER
	PROPOSED SANITARY SEWER
	PROPOSED WATERMAIN
	STORM MANHOLE
	STORM CATCHBASIN
	STORM INLET
	FLARED END SECTION
	SANITARY MANHOLE
	VALVE VAULT
	VALVE BOX
	FIRE HYDRANT
	BUFFALO BOX
	STREET LIGHT
	POWER POLE
	SIGN



- GRADING LEGEND**
- TOP OF CURB FLOW LINE
 - PROPOSED SPOT ELEVATION
 - CONTOUR
 - STRUCTURE ADJUSTMENT
 - SUMMITS
 - SLOPES
 - SWALES
 - OVERLAND FLOW ROUTE
 - DETECTABLE WARNINGS
 - B6.12 CURB & GUTTER (REGULAR)
 - B6.12 CURB & GUTTER (DEPRESSED)
 - BARRIER CURB
 - BARRIER CURB (DEPRESSED)



AERIAL VIEW OF PHASE 1 & 2



Attachment: Exhibit B, Plan Set (C-2024-58 : Approve a Prelim Plan, Amendment to SU, and Var. for Site Improvements at BGHS at 1100 W Dundee)

TICKET BOOTH, CONCESSION STAND AND PLAZA



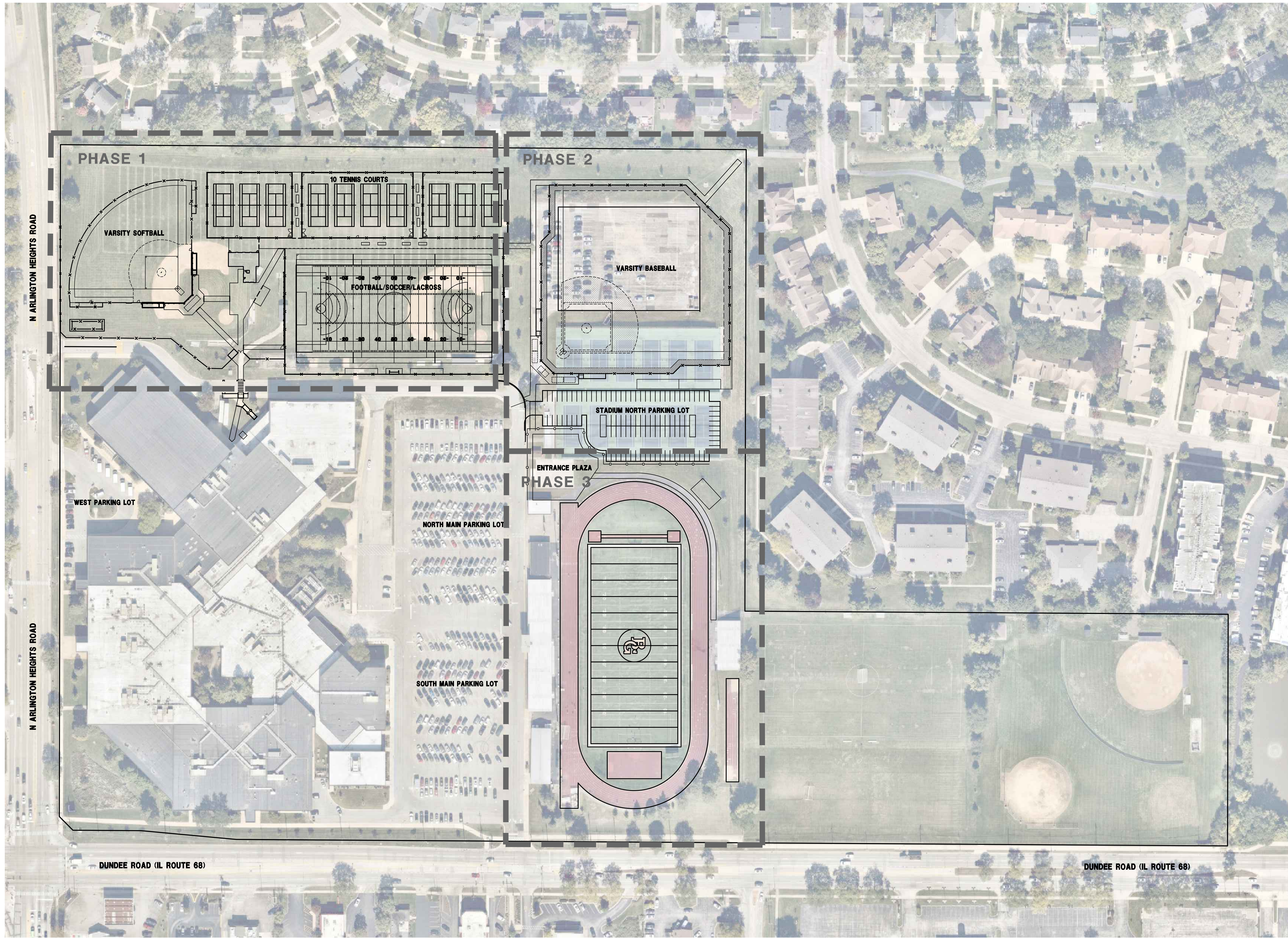
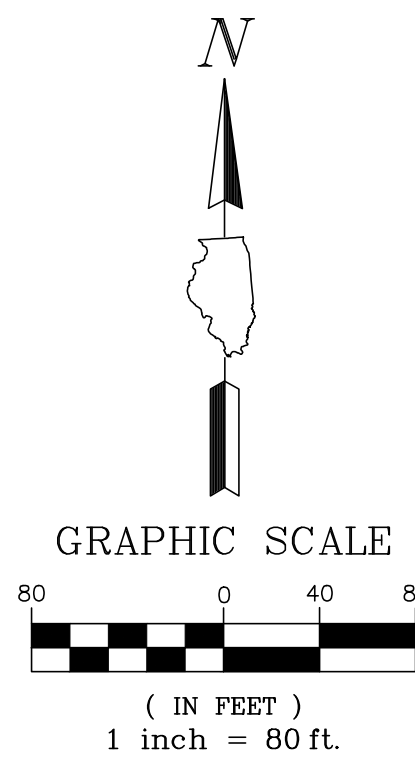
SOFTBALL FIELD, TENNIS COURTS AND MULTI-SPORT TURF FIELD

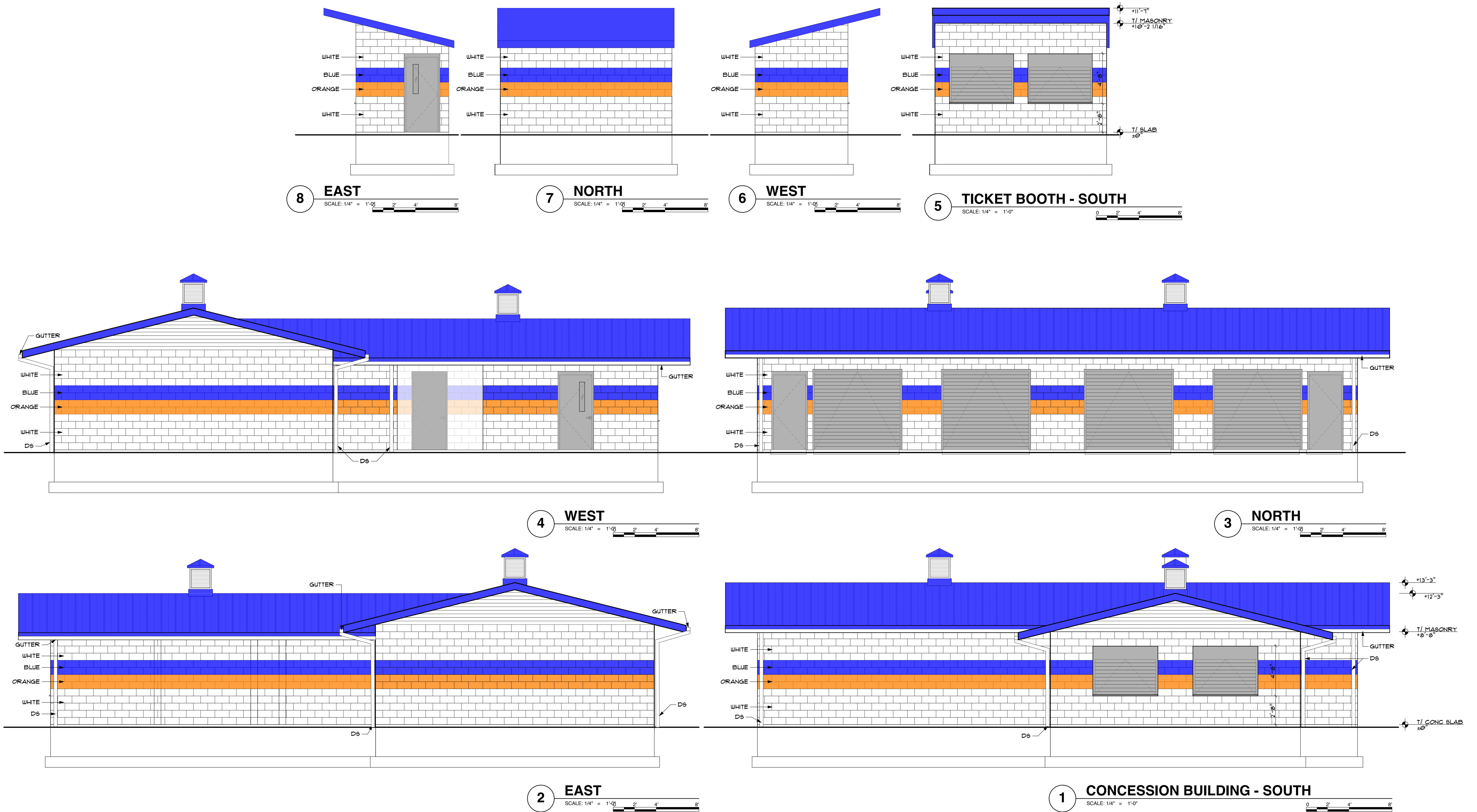
D214 BGHS ATHLETIC FIELD RENOVATIONS PHASING
 1100 W Dundee Road, Buffalo Grove, IL 60089

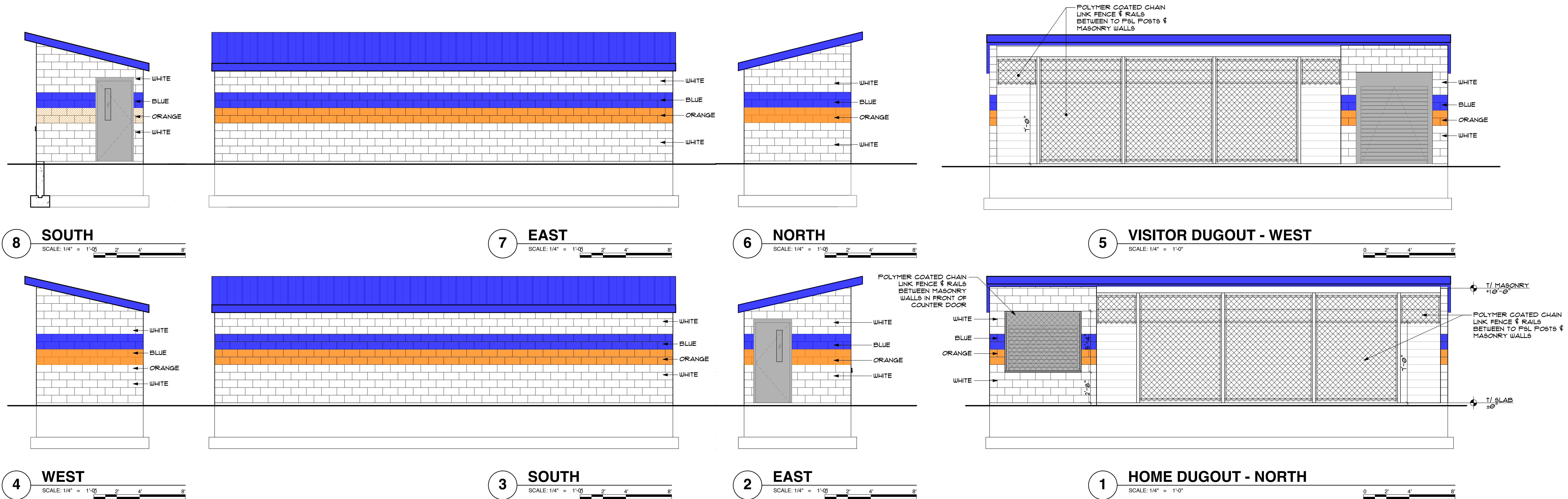
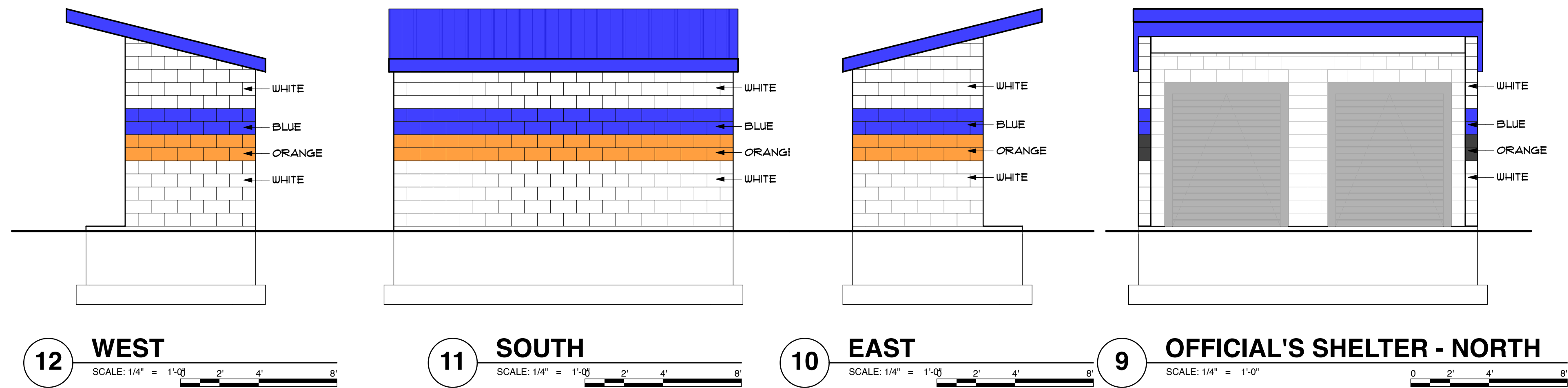
Township High School District 214

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2/13/2024







STR Partners, LLC
350 West Ontario Street | Suite 200
Chicago, IL 60654

GEWALT HAMILTON ASSOCIATES, INC
625 Forest Edge Drive
Vernon Hills, IL 60061
(847) 478-9700

	CMU WALL
	NEW DOOR
	EXISTING DOOR
FE	FIRE EXTINGUISHER, SEE G-SERIES SHEETS
EJ	EXPANSION JOINT, SEE FOR TYPE AND OTHER

1. SEE STRUCTURAL DRAWINGS AND SCHEDULES FOR MASONRY WALL REINFORCEMENT AND/OR GROUTING REQUIREMENTS.
2. SEE ENLARGED DETAILS AND ENLARGED PLANS FOR ADDITIONAL INFORMATION.

	FACE BRICK 1
	FACE BRICK 2
	METAL PANEL 1
	METAL PANEL 2
	CAST STONE
	DOWNSPOUT NOZZLE
	CONTROL JOINT
	SPEAKER, 12'-0" FROM T/SLAB, U.O.N.
	CARD READER, 3'-4" FROM T/SLAB, U.O.N.
	OUTLET, 1'-4" FROM T/SLAB, U.O.N.
	LIGHT FIXTURE, 12'-0" FROM T/SLAB, U.O.N.
	LIGHT FIXTURE, 12'-0" FROM T/SLAB, U.O.N.

1. PAINT EXPOSED STEEL LINTELS - COLOR
SELECTED BY ARCHITECT

This drawing is one drawing within a complete set of documents and shall not be considered separately from the Drawings as a whole. The Drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical, and electrical systems. As Scope Documents, the Drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Construction Documents. On the basis of the general scope indicated or described, the Contractor shall furnish all items required for the proper execution and completion of the Work.

PROJECT

**D214 BGHS ATHLETIC FIELD
RENOVATIONS PHASE 1**
1100 W Dundee Road
Buffalo Grove, IL 60089

CLIENT PROJECT NUMBER

23040

NUMBER	DATE	COMMENTS
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NUMBER	DATE	COMMENTS
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• 3	MAR 28, 2024	ADDENDUM #3
• 2	JAN 15, 2024	ISSUE FOR CONSTRUCTION
• 2	NOV 10, 2023	ADDENDUM #2
• 1	NOV 03, 2023	ADDENDUM #1
• 1	OCT 20, 2023	ISSUE FOR PERMIT AND BIDS

MULTISPORT FIELD OFFICIAL'S SHELTER

A5.0

STR Partners, LLC
350 West Ontario Street | Suite 200
Chicago, IL 60654

GEWALT HAMILTON ASSOCIATES, INC
625 Forest Edge Drive
Vernon Hills, IL 60061
(847) 478-9700

• **STRUCTURAL ENGINEERING:**
SHEFFEE LULKIN AND ASSOCIATES
 4211 Main St
 Skokie, IL 60076
 (847) 677-8600

• MEP/FP ENGINEERING:
CS2 DESIGN GROUP, LLC
837 Oakton St
Elk Grove Village, IL 60007
(847) 981-1880

• **CONSTRUCTION MANAGER:**
PEPPER CONSTRUCTION COMPANY
411 N Lake Zurich Rd
Barrington, IL 60010
(847) 381-2760

SCOPE DOCUMENT

This drawing is one drawing within a complete set of documents and shall not be considered separately from the Drawings as a whole. The Drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical, and electrical systems. As Scope Documents, the Drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Construction Documents. On the basis of the general scope indicated or described, the Contractor shall furnish all items required for the proper execution and completion of the Work.

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PROJECT

**D214 BGHS ATHLETIC FIELD
RENOVATIONS PHASE 1**
1100 W Dundee Road
Buffalo Grove, IL 60089

Township High School District 214
2121 South Goebbert Road
Arlington Heights, IL 60005

CLIENT PROJECT NUMBER

STR PROJECT NUMBER

23040

DRAWING DATES

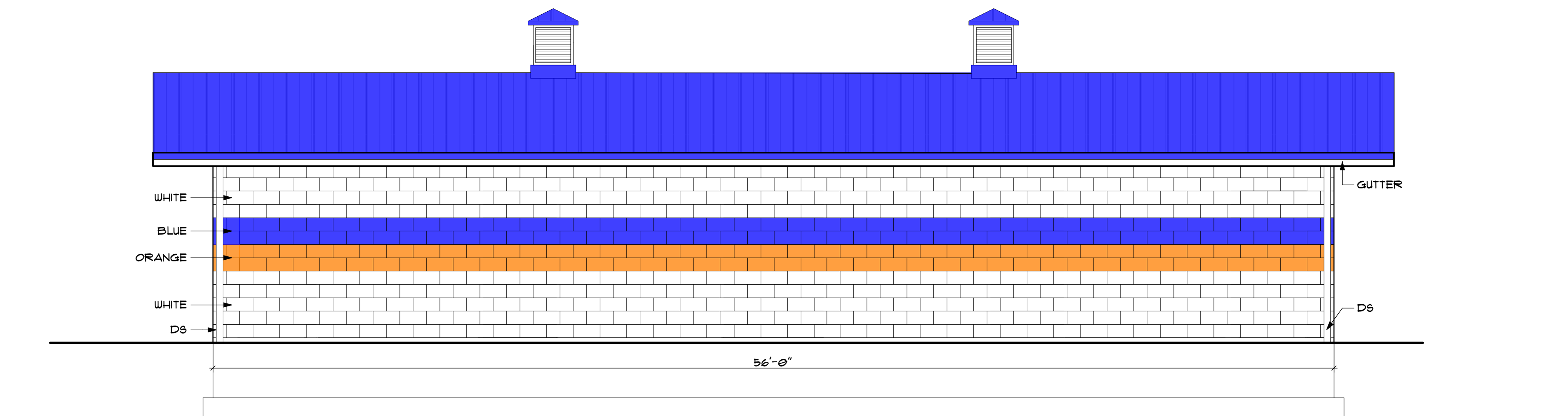
NUMBER	DATE	COMMENTS
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.		
3	MAR 28, 2024	ADDENDUM #3
2	JAN 15, 2024	ISSUE FOR CONSTRUCTION
2	NOV 10, 2023	ADDENDUM #2
1	NOV 03, 2023	ADDENDUM #1
1	OCT 20, 2023	ISSUE FOR PERMIT AND BIDS

DRAWING TITLE

CONCESSIONS BUILDING ELEVATIONS

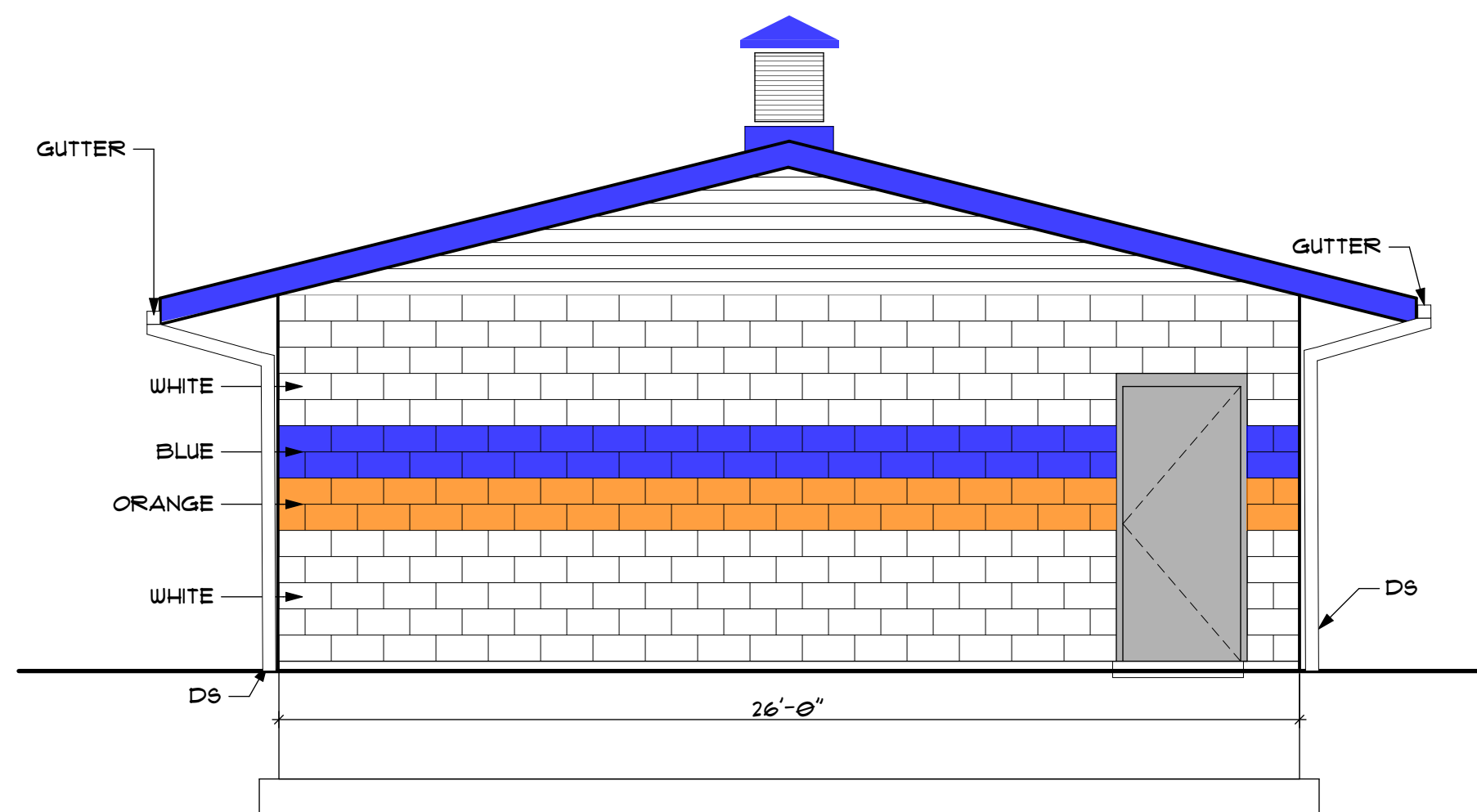
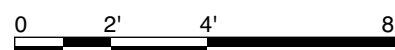
SHEET NUMBER

A6.1



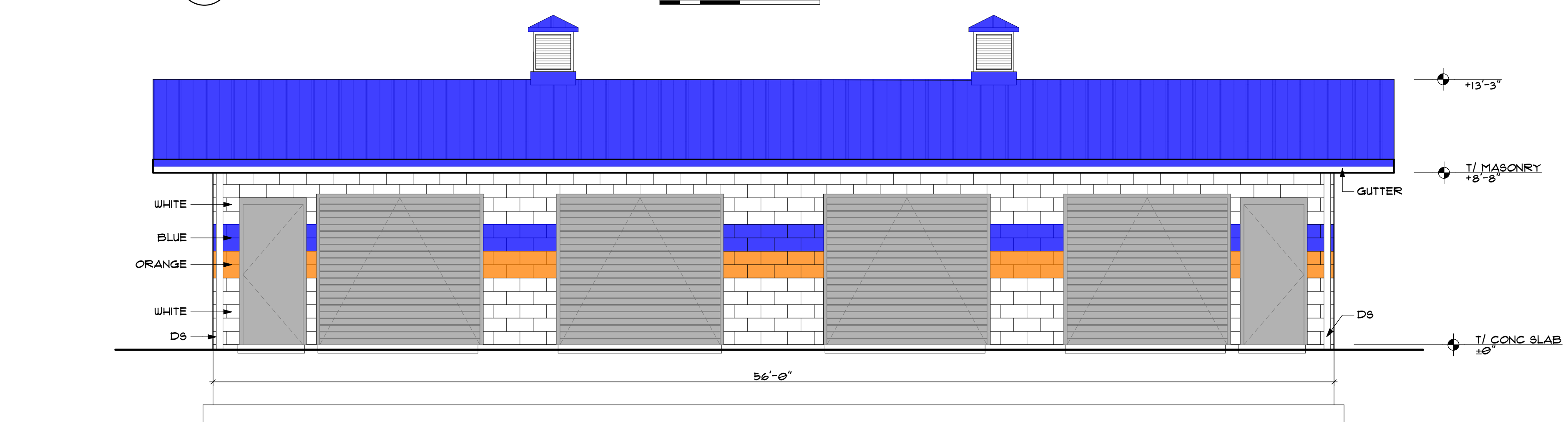
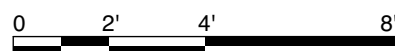
1 VARSITY BASEBALL STORAGE - WEST

SCALE: 1/4" = 1'-0"



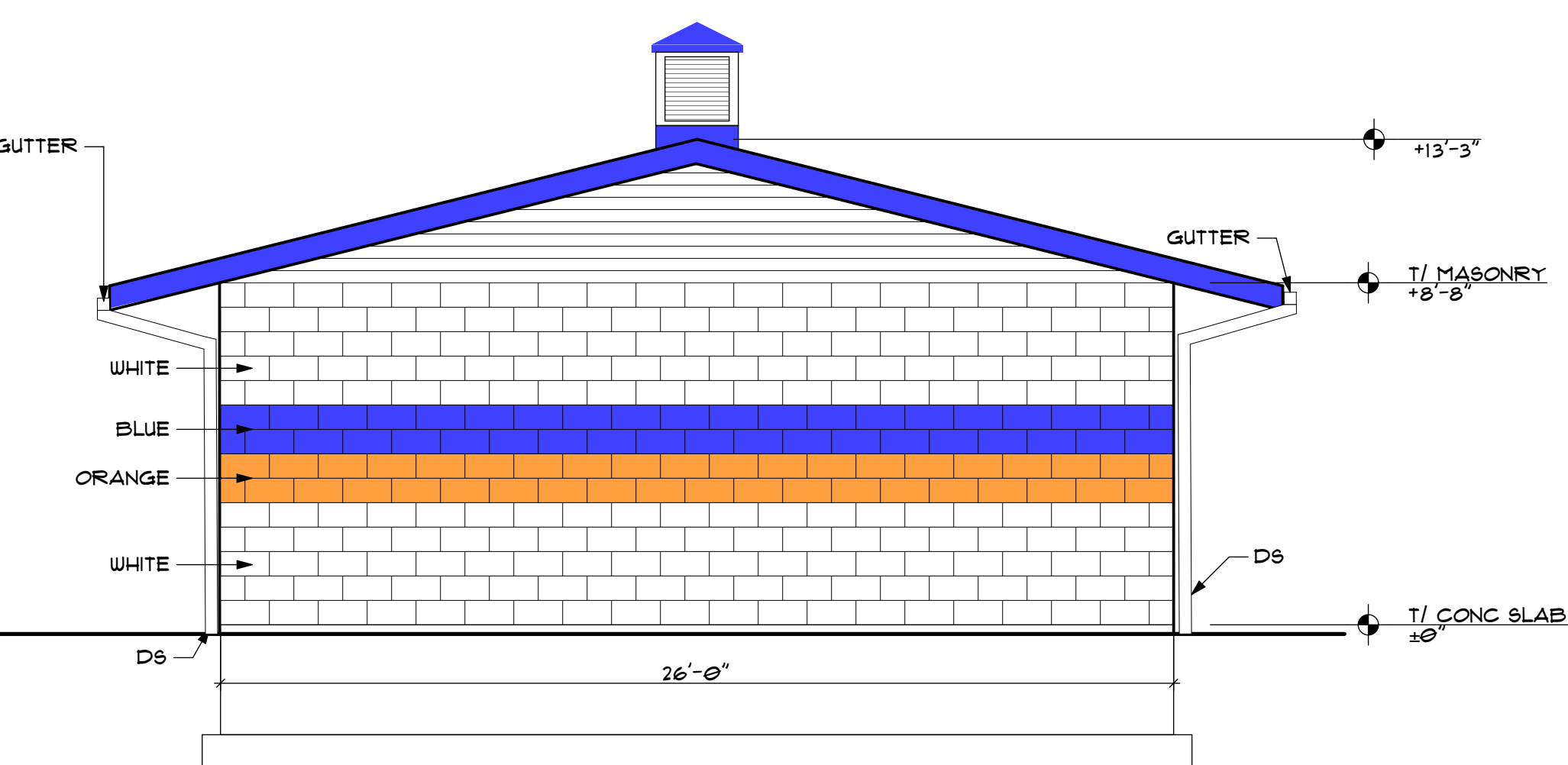
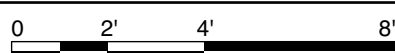
3 VARSITY BASEBALL STORAGE - NORTH

SCALE: 1/4" = 1'-0"



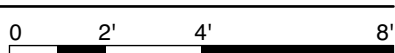
2 VARSITY BASEBALL STORAGE - EAST

SCALE: 1/4" = 1'-0"

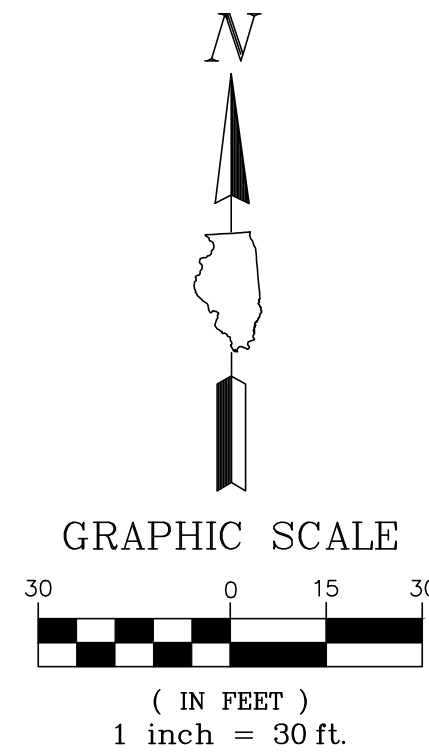


1 VARSITY BASEBALL STORAGE - SOUTH

SCALE: 1/4" = 1'-0"



Actual size to read at scale



S ARLINGTON HEIGHTS RD

CONCRETE

CONCRETE

ASPHALT

ASPHALT

SIDEWALK

PLANT KEY

ASP = ALLIUM SUMMER PEEK-A-BOO
BPC = BLUE POINT CEDAR
HJ = HUGHES JUNIPER
LH = LIMELIGHT HYDRANGEA
PPRR = PURPLE PAVEMENT RUGOSA ROSE
SOLB = STANDING OVATION LITTLE BLUESTEM
WFY = WALTHER FUNKE YARROW

TREES

Key	Common Name	Scientific Name	Qty.	Size
CS	Princeton Sentry Ginkgo	Ginkgo biloba 'Princeton Sentry'	3	4" BB
	Bloodgood London Plantree	Platanus x acerifolia 'Bloodgood'	4	4" BB
	Cypress Spruce	Picea abies 'Cupressina'	2	7-8' BB/ 4"
	Kentucky Coffeetree	Gymnocladus dioica	5	6" BB
	Homestead Horsechestnut	Aesculus glabra octandra 'Homestead'	2	4" BB
	Green Giant Western Cedar	Thuja plicata 'Green Giant'	3	7-8' BB/ 4"
	Ivory Silk Tree Lilac	Syringa reticulata 'Ivory Silk'	5	4" BB
	Northern Catalpa	Catalpa speciosa	3	6" BB
	Norway Spruce	Picea abies	8	7-8' BB/ 4"
	Red Oak	Quercus rubra	1	6" BB
	Swamp White Oak	Quercus bicolor	5	6" BB
	Triumph Elm	Ulmus x 'Morton Glossy'	3	4" BB
	White Pine	Pinus strobus	3	7-8' BB/ 4"
	White Pine	Pinus strobus	3	9' BB, 6"
	Total Trees		50	

SHRUBS

Key	Common Name	Scientific Name	Qty.	Size
	Crimson Pygmy Barberry	Berberis thunbergii 'Crimson Pygmy'	11	5 gal.
	Enci Mugo Pine	Pinus mugho 'Enci'	16	5 gal.
	Goldflame Spirea	Spiraea x bumalda 'Goldflame'	20	5 gal.
	Gro-Low Sumac	Rhus aromatica 'Gro Low'	36	5 gal.
HJ	Hughes Juniper	Juniper horizontalis 'Hughes'	75	5 gal.
LH	Limelight Hydrangea	Hydrangea paniculata 'Limelight'	28	24-30" ht.
	Nannyberry Viburnum	Viburnum lentago	2	36" BB
	Ninebark Ginger Wine	Physocarpus opulifol. 'Ginger Wine'	6	5 gal.
PPRR	Purple Pavement Rugosa Rose	Rosa rugosa 'Purple Pavement'	29	3 gal.
	Quick Fire Hydrangea	Hydrangea paniculata 'Quick Fire'	4	5 gal.
PERENNIALS/ORNAMENTAL GRASS			Total Shrubs	227
Key	Common Name	Scientific Name	Qty.	Size
WFY	Walter Funcke Yarrow	Achillea millefolium 'Walter Funcke'	173	1 gal.
SOLB	Standing Ovation Little Bluestem	Schizachyrium scoparium 'Standing Ovation'	143	1 gal.
ASP	Allium 'Summer Peek-A-Boo'	Allium 'MGssmmpkb 13'	30	1 gal.

PLANT SCHEDULE

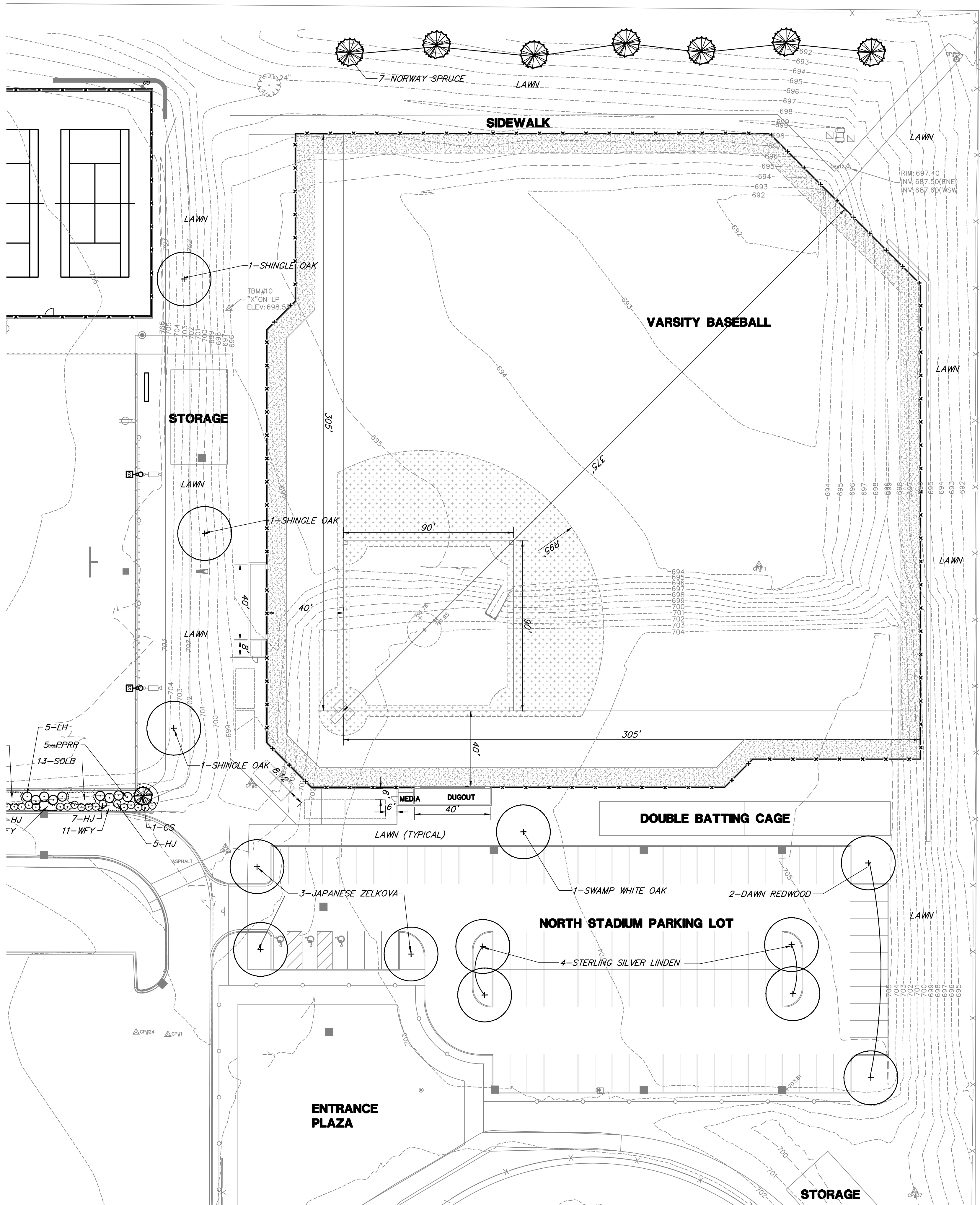
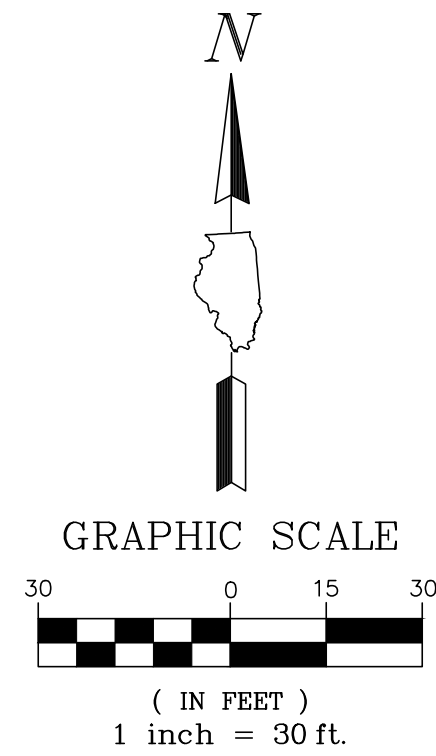
PHASE 1 FIELD RENOVATIONS LANDSCAPE PLAN

D214 BGHS ATHLETIC FIELD RENOVATIONS PHASING

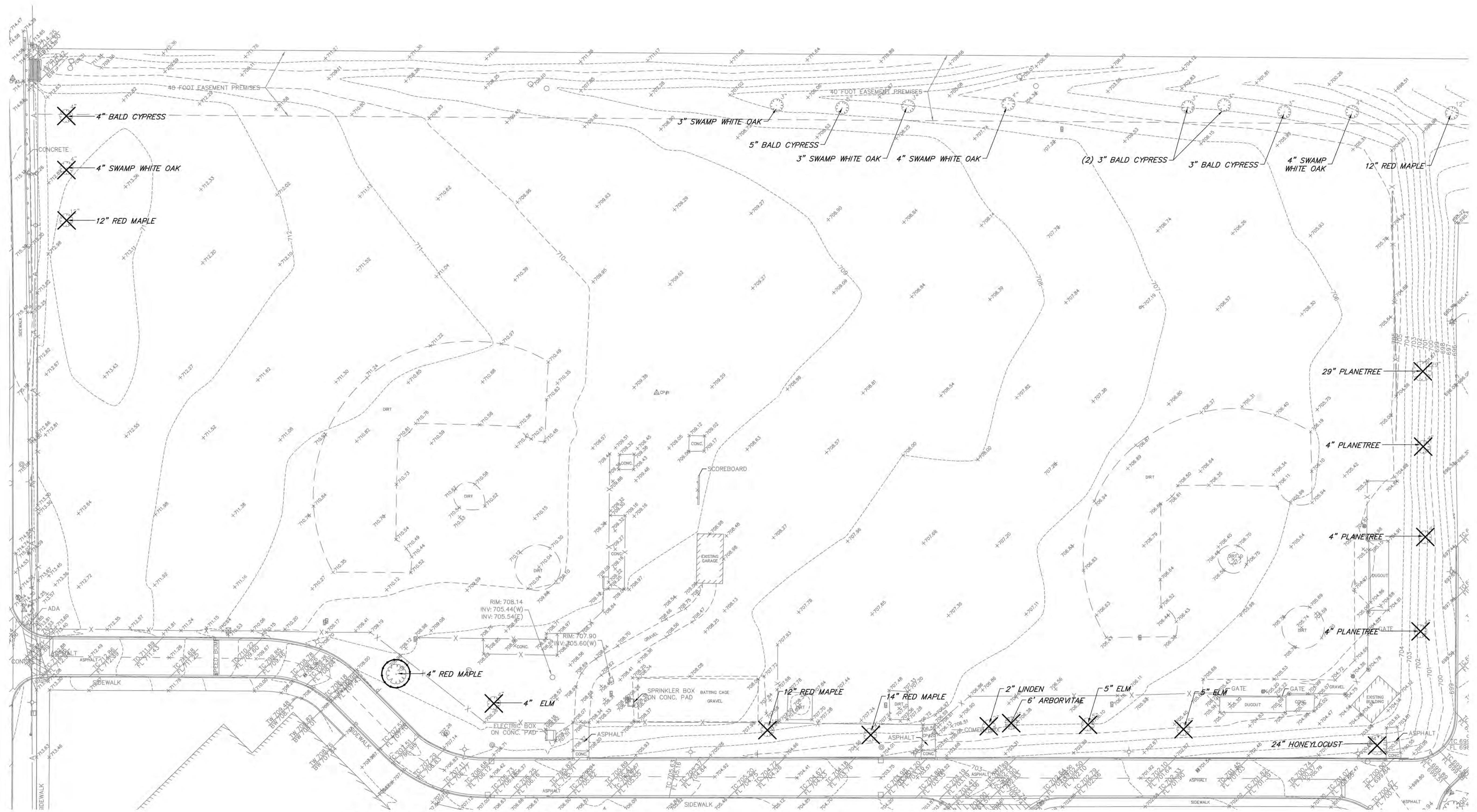
1100 W Dundee Road, Buffalo Grove, IL 60089

Township High School District 214

2/13/2024

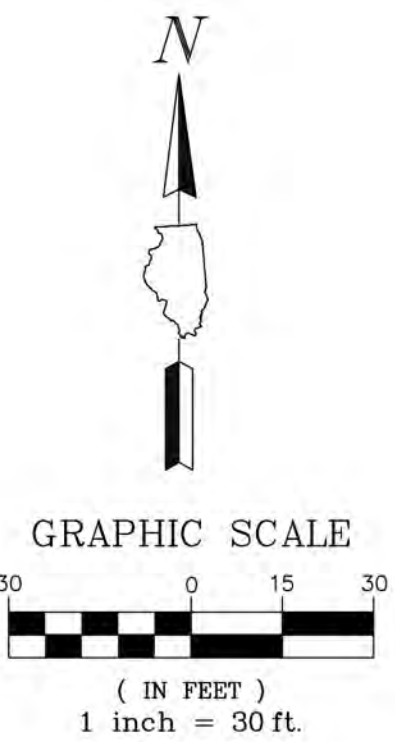


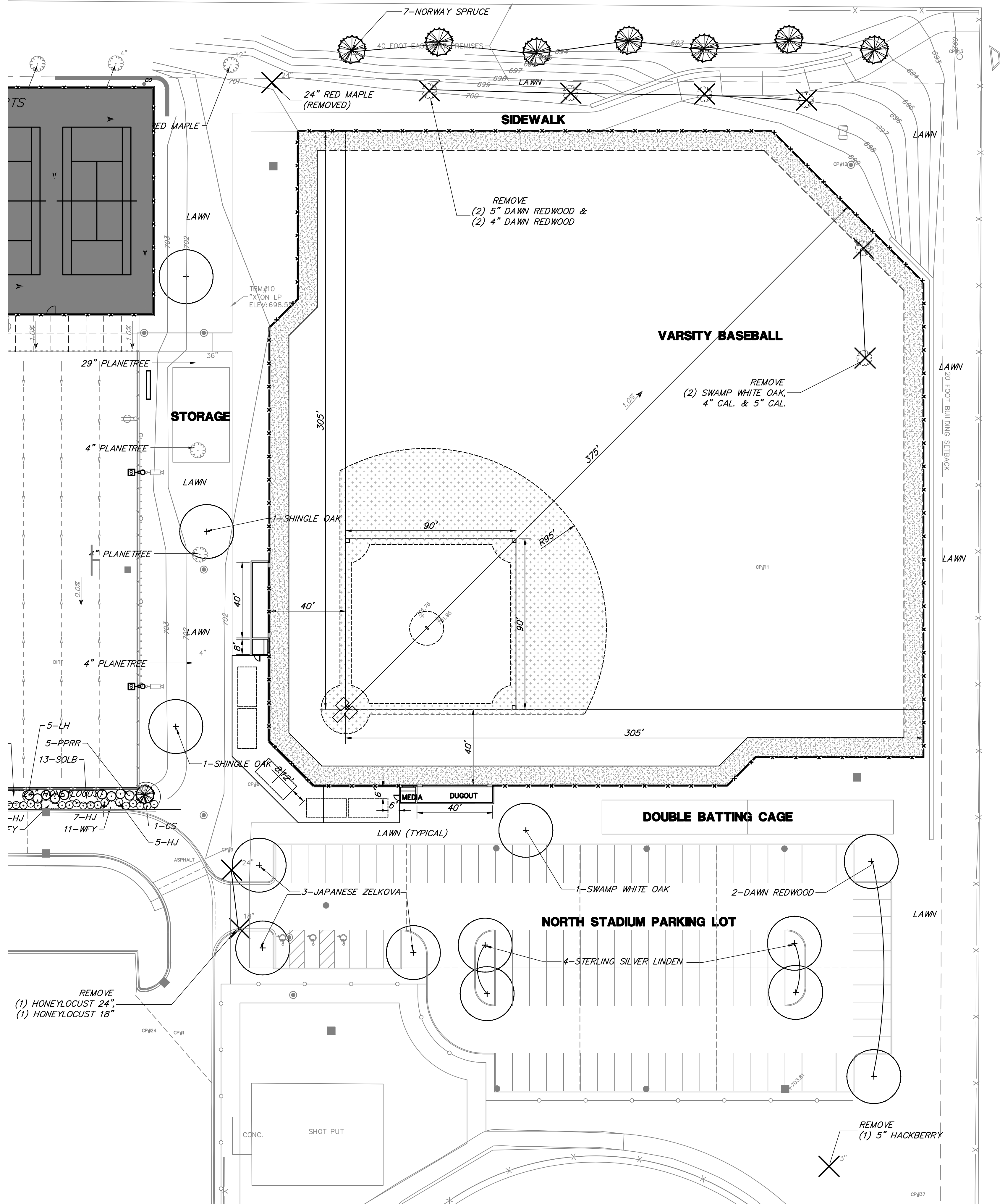
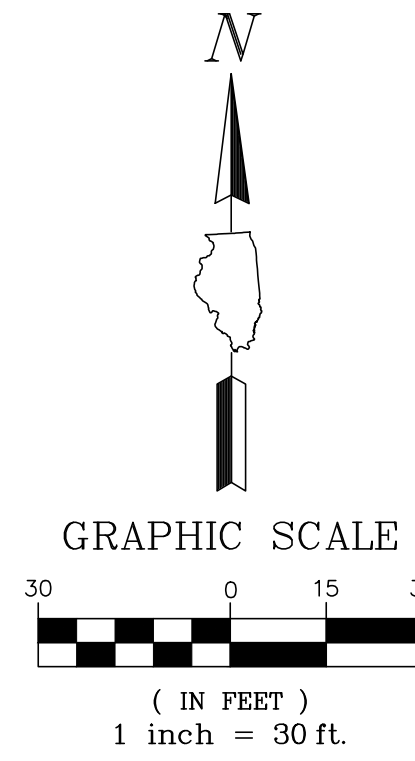
PLANT LIST		
QTY.	PLANT NAME	SIZE
3	SHINGLE OAK	3" BB
3	JAPANESE ZELKOVA	3" BB
1	SWAMP WHITE OAK	3" BB
2	DAWN REDWOOD	3" BB
4	STERLING SILVER LINDEN	3" BB
7	NORWAY SPRUCE	7" BB



TREE REMOVAL SCHEDULE

TREE REMOVALS					
Designation	Common Name	Scientific Name	Qty.	Size	Notes
Key Tree	Planetree	Platanoides x acerifolia 'Bloodgood'	1	29"	Good
Key Tree	Honeylocust	Gleditsia triacanthos	1	24"	Good
Sign. Tree	Red Maple	Acer rubrum	1	14"	Poor
Sign. Tree	Red Maple	Acer rubrum	2	12"	Fair
Sign. Tree	Red Maple	Acer rubrum	1	4"	Good
Sign. Tree	Bald Cypress	Taxodium distichum	1	4"	Good
Sign. Tree	Triumph Elm	Ulmus 'Morton Glossy'	2	5"	Good
Sign. Tree	Triumph Elm	Ulmus 'Morton Glossy'	1	4"	Good
Sign. Tree	Swamp White Oak	Quercus bicolor	1	4"	Good
Sign. Tree	Planetree	Platanoides x acerifolia 'Bloodgood'	3	4"	Good
	Linden	Tilia species	1	2"	Fair
	Arborvitae	Arborvitae	1	6'	Fair





PLANT LIST		
QTY.	PLANT NAME	SIZE
3	SHINGLE OAK	4" BB
3	JAPANESE ZELKOVA	4" BB
1	SWAMP WHITE OAK	4" BB
2	DAWN REDWOOD	4" BB
4	STERLING SILVER LINDEN	4" BB
7	NORWAY SPRUCE	8" BB

Lighting System

Pole/Fixture Summary						
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
F1-F4	70'	70'	7	TLC-LED-1500	9.87 kW	A
		16'	2	TLC-BT-575	1.15 kW	A
4			36		44.08 kW	

Circuit Summary			
Circuit	Description	Load	Fixture Qty
A	Football	44.08 kW	36

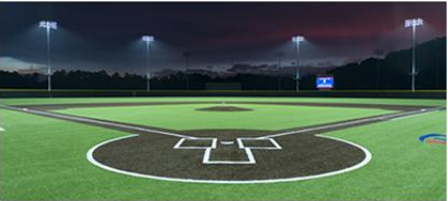
Fixture Type Summary							
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	8
TLC-LED-1500	LED 5700K - 75 CRI	1410W	181,000	>120,000	>120,000	>120,000	28

Single Luminaire Amperage Draw Chart							
Driver Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)						
	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
Single Phase Voltage							
TLC-BT-575	3.3	3.2	2.9	2.5	2.0	1.8	1.5
TLC-LED-1500	8.4	7.9	7.3	6.3	5.0	4.6	3.6

Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
150' Spill	Horizontal Illuminance	0.02	0	0.07	25.07		A	36
150' Spill Max Candela	Max Candela (by Fixture)	1602	167	5115	30.67	9.60	A	36
Blanket Grid	Horizontal Illuminance	12.3	0	59	0.00		A	36
Football	Horizontal Illuminance	51	44	56	1.28	1.16	A	36
Lacrosse	Horizontal Illuminance	51	44	56	1.28	1.16	A	36
Road/House Spill	Horizontal	0	0	0	0.00		A	36
Road/House Spill-Candela	Max Candela (by Fixture)	84.1	0	869	0.00		A	36
Soccer	Horizontal Illuminance	51.5	43	59	1.36	1.20	A	36

From Hometown to Professional



Equipment List For Areas Shown								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
4	F1-F4	70'	-	70.3'	TLC-LED-1500	7	7	0
				15.5'	TLC-BT-575	2	2	0
4	Totals					36	36	0

*Above Grade level relative to the field



Buffalo Grove, IL

Grid Summary		
Name	Road/House Spill	
Spacing	30.0' x 10.0'	
Height	3.0' above grade	

Illumination Summary	
	MAINTAINED HORIZONTAL FOOT CANDLE
	Entire Grid
Scan Average	0.00
Maximum	0
Minimum	0
Avg/Min	-
Max/Min	-
UG (adjacent pts)	0.00
CU	0.00
No. of Points	63
LUMINAIRE INFORMATION	
Applied Circuits	A
No. of Luminaires	36
Total Load	44.08 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

Equipment List For Areas Shown								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
4	F1-F4	70'	-	70.3'	TLC-LED-1500	7	7	0
				15.5'	TLC-BT-575	2	2	0
4				Totals		36	36	0

*Above Grade level relative to the field





SCALE IN FEET 1 : 120

0'

120'

240'

ENGINEERED DESIGN By: Mitchell Thys • File #202074C_1 • 07-Feb-24

Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ✕

Buffalo Grove Multipurpose Field 9.A.b

Buffalo Grove, IL

Grid Summary	
Name	Road/House Spill-Candela
Spacing	30.0' x 10.0'
Height	5.0' above grade

Illumination Summary	
MAINTAINED VERTICAL FOOTCANDLE	
Entire Grid	
Scan Average	84.09
Maximum	869
Minimum	0
Avg/Min	-
Max/Min	-
UG (adjacent pts)	0.00
CU	0.00
No. of Points	63
LUMINAIRE INFORMATION	
Applied Circuits	A
No. of Luminaires	36
Total Load	44.08 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



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Attachment: Exhibit B. Plan Set (O-2024-58 : Approve a Prelim Plan, Amendmt to SU, and Vari. for Site Improvements at BGHS at 1100 W

Equipment List For Areas Shown								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
4	F1-F4	70'	-	70.3'	TLC-LED-1500	7	7	0
				15.5'	TLC-BT-575	2	2	0
4	Totals					36	36	0

*Above Grade level relative to the field



Buffalo Grove, IL

Grid Summary	
Name	Football
Size	360' x 160'
Spacing	30.0' x 30.0'
Height	3.0' above grade

Illumination Summary	
	MAINTAINED HORIZONTAL FOOTCANDLES
	Entire Grid
Guaranteed Average	50
Scan Average	51.00
Maximum	56
Minimum	44
Avg/Min	1.17
Guaranteed Max/Min	2
Max/Min	1.28
UG (adjacent pts)	1.15
CU	0.59
No. of Points	72
LUMINAIRE INFORMATION	
Applied Circuits	A
No. of Luminaires	36
Total Load	44.08 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

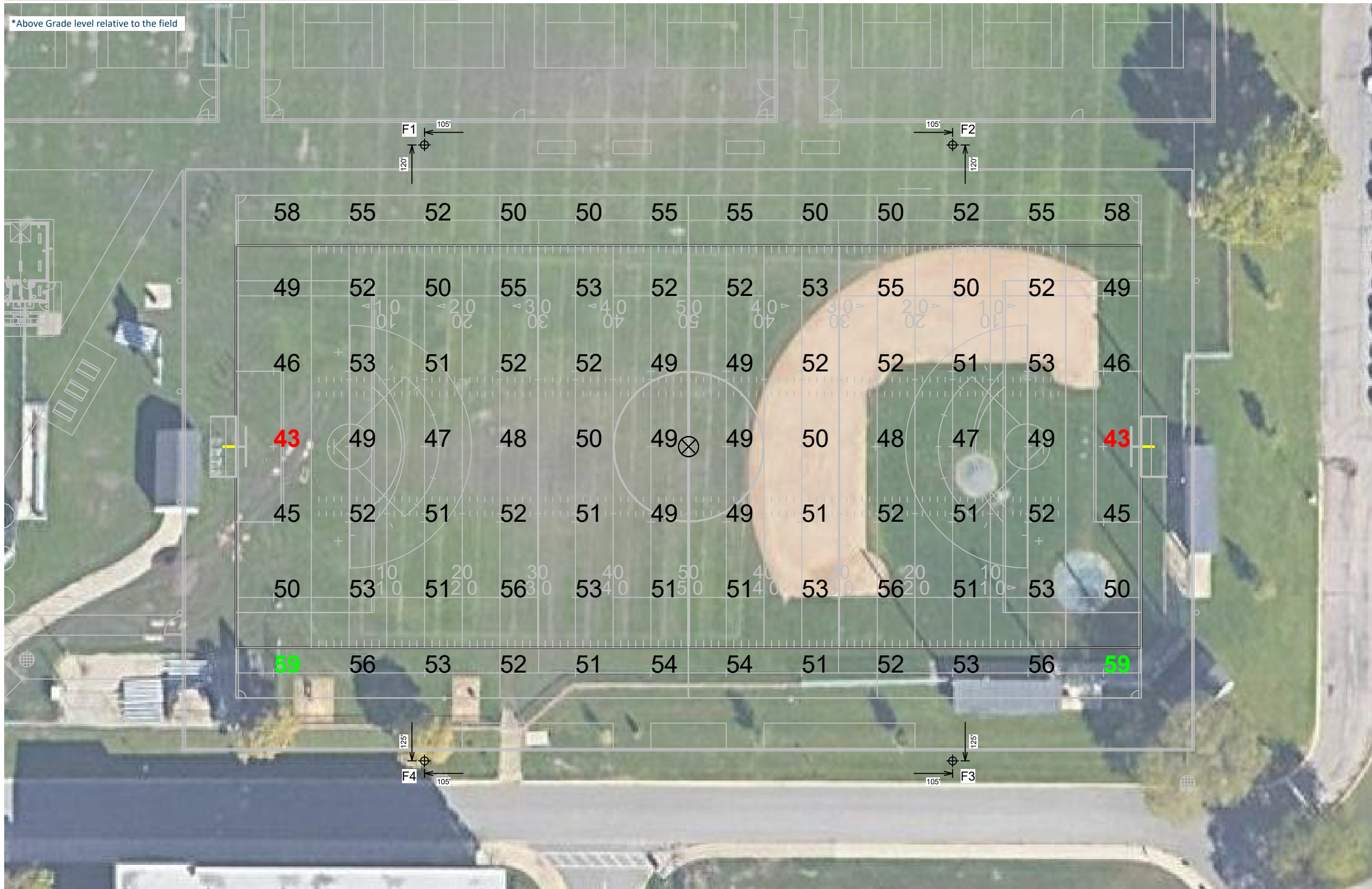
Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

Equipment List For Areas Shown								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
4	F1-F4	70'	-	70.3'	TLC-LED-1500	7	7	0
				15.5'	TLC-BT-575	2	2	0
4	Totals					36	36	0

*Above Grade level relative to the field



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

Buffalo Grove, IL

Grid Summary	
Name	Soccer
Size	360' x 200'
Spacing	30.0' x 30.0'
Height	3.0' above grade

Illumination Summary	
	MAINTAINED HORIZONTAL FOOTCANDLES
	Entire Grid
Guaranteed Average	50
Scan Average	51.46
Maximum	59
Minimum	43
Avg/Min	1.19
Guaranteed Max/Min	2
Max/Min	1.36
UG (adjacent pts)	1.19
CU	0.70
No. of Points	84
LUMINAIRE INFORMATION	
Applied Circuits	A
No. of Luminaires	36
Total Load	44.08 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



Attachment: Exhibit B. Plan Set (O-2024-58 : Approve a Prelim Plan, Amendmt to SU, and Vari. for Site Improvements at BGHS at 1100 W

Equipment List For Areas Shown								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
4	F1-F4	70'	-	70.3'	TLC-LED-1500	7	7	0
				15.5'	TLC-BT-575	2	2	0
4	Totals					36	36	0

*Above Grade level relative to the field



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

Buffalo Grove, IL

Grid Summary	
Name	Lacrosse
Size	360' x 180'
Spacing	30.0' x 30.0'
Height	3.0' above grade

Illumination Summary	
	MAINTAINED HORIZONTAL FOOTCANDLES
	Entire Grid
Guaranteed Average	50
Scan Average	51.00
Maximum	56
Minimum	44
Avg/Min	1.17
Guaranteed Max/Min	2
Max/Min	1.28
UG (adjacent pts)	1.15
CU	0.59
No. of Points	72
LUMINAIRE INFORMATION	
Applied Circuits	A
No. of Luminaires	36
Total Load	44.08 kW

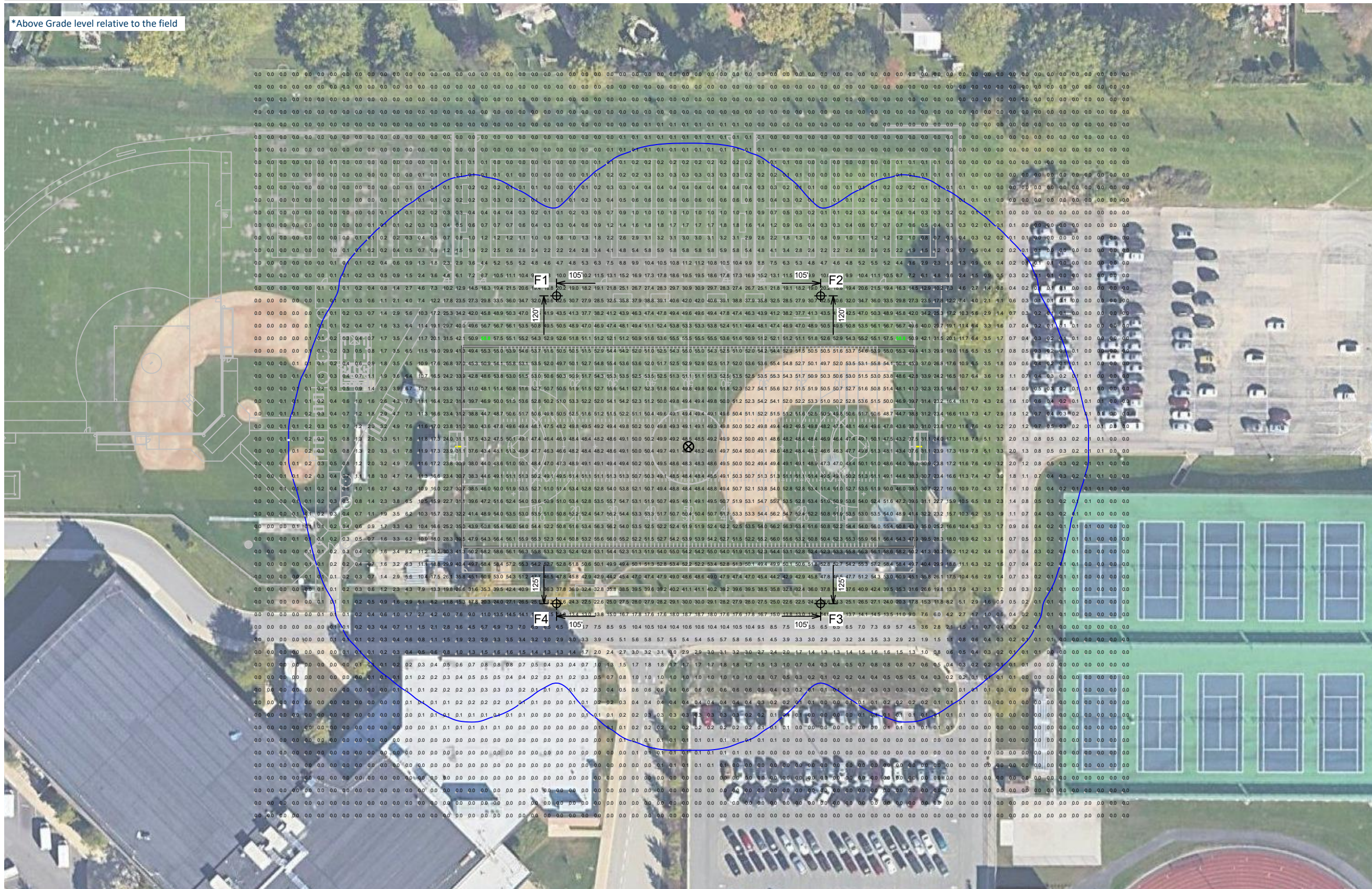
Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

Equipment List For Areas Shown							
Pole				Luminaires			
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID
4	F1-F4	70'	-	70.3' 15.5'	TLC-LED-1500 TLC-BT-575	7 2	7 2
4	Totals					36	36
						0	0



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ✕

Buffalo Grove Multipurpose Field 9.A.b

Buffalo Grove, IL

Grid Summary	
Name	Blanket Grid
Size	700' x 600'
Spacing	10.0' x 10.0'
Height	3.0' above grade

Illumination Summary	
MAINTAINED HORIZONTAL FOOT CANDLE	
Entire Grid	
Scan Average	12.33
Maximum	59
Minimum	0
Avg/Min	-
Max/Min	-
UG (adjacent pts)	20.90
CU	0.92
No. of Points	400
LUMINAIRE INFORMATION	
Applied Circuits	A
No. of Luminaires	36
Total Load	44.08 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

NOTES: Contour line shows light out to 0.1FC



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Buffalo Grove, IL

Grid Summary	
Name	150' Spill Max Candela
Spacing	30.0' x 30.0'
Height	5.0' above grade

Illumination Summary	
	MAINTAINED CANDELA (PER LUMINAIRE)
Scan Average	Entire Grid 1601.5840
Maximum	5115.35
Minimum	166.79
CU	0.00
No. of Points	69
LUMINAIRE INFORMATION	
Applied Circuits	A
No. of Luminaires	36
Total Load	44.08 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

Buffalo Grove, IL

Grid Summary	
Name	150' Spill
Spacing	30.0' x 30.0'
Height	3.0' above grade

Illumination Summary	
MAINTAINED HORIZONTAL FOOT CANDLE	
Entire Grid	
Scan Average	0.0223
Maximum	0.07
Minimum	0.00
CU	0.00
No. of Points	69
LUMINAIRE INFORMATION	
Applied Circuits	A
No. of Luminaires	36
Total Load	44.08 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.





Buffalo Grove Multipurpose Field 9.A.b

Buffalo Grove, IL

Equipment Layout

- INCLUDES:**
- Blanket Grid
 - Football
 - Lacrosse
 - Soccer

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume $\pm 3\%$ nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

Equipment List For Areas Shown

QTY	Pole			Luminaires		Q
	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	
4	F1-F4	70'	-	70.3' 15.5'	TLC-LED-1500 TLC-BT-575	
4	Totals					

Single Luminaire Amperage Draw Chart

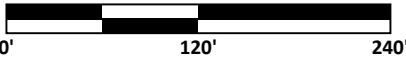
Driver Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)					
	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)
Single Phase Voltage						
TLC-BT-575	3.3	3.2	2.9	2.5	2.0	1.8
TLC-LED-1500	8.4	7.9	7.3	6.3	5.0	4.6



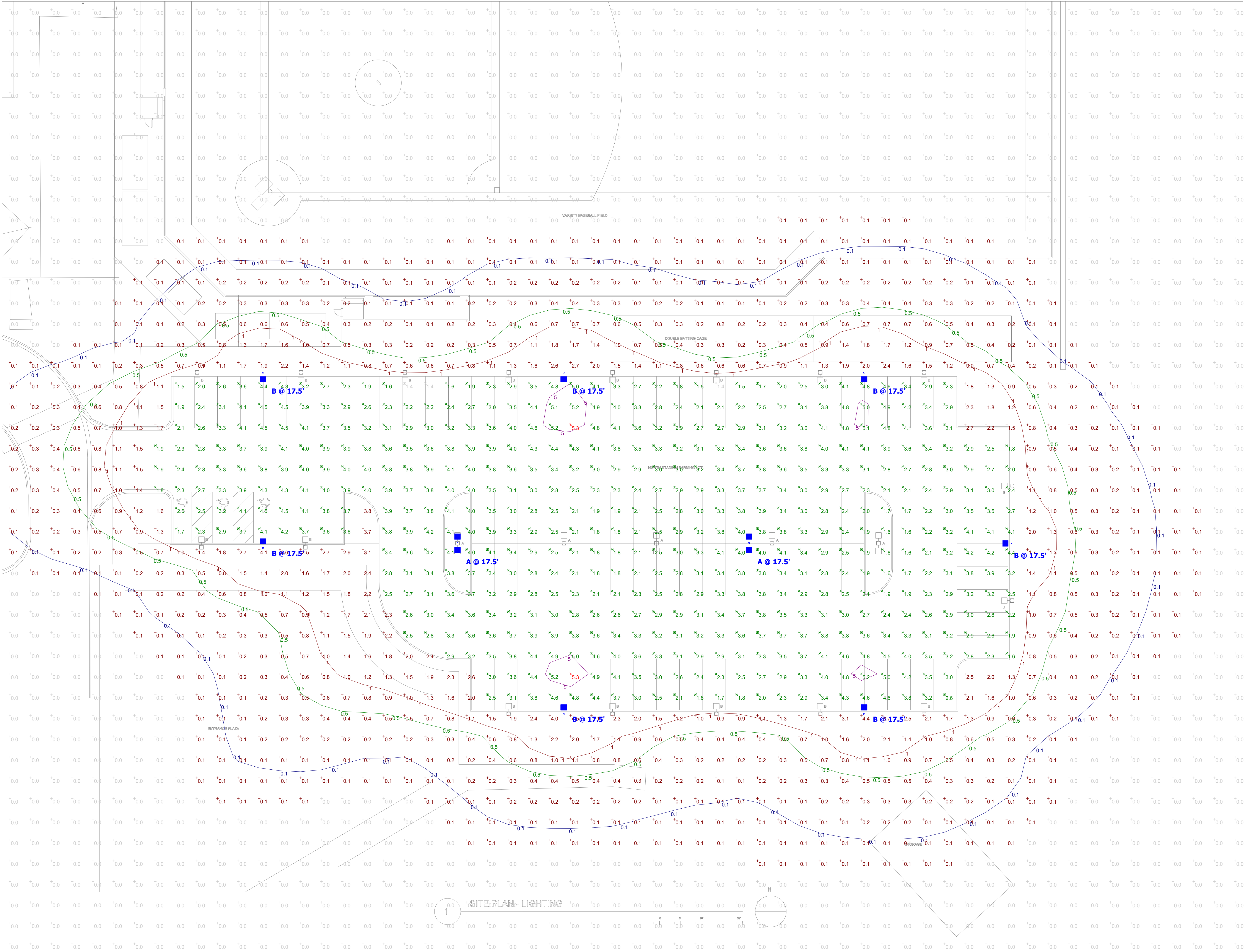
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SCALE IN FEET 1 : 120



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ✕

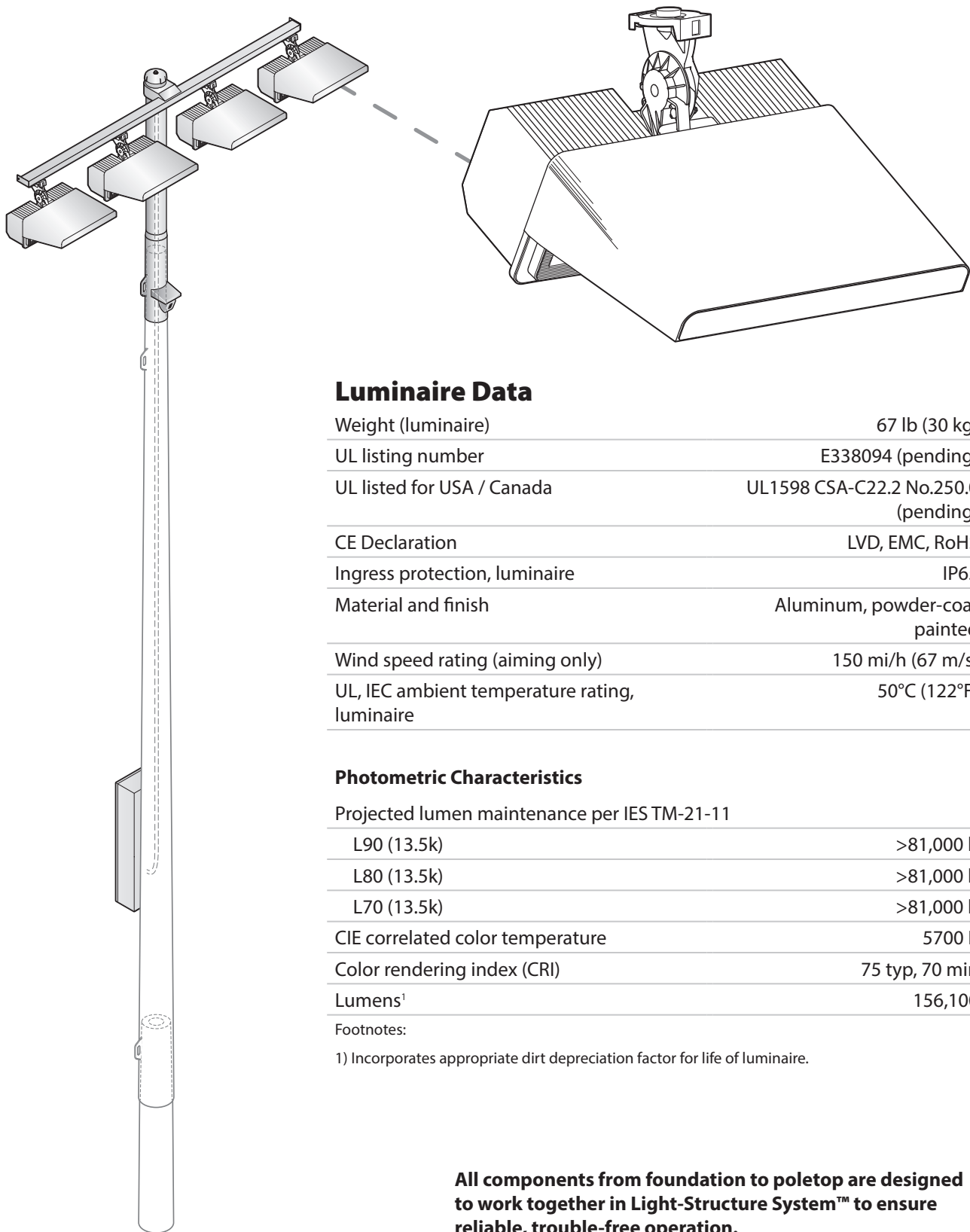


Plan View
Scale - 1/16" = 1ft

Schedule									
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
	A	2	Lithonia Lighting	DSX1 LED P3 50K 70CRI TSW	D-Series Size 1 Area Luminaire P3 Performance Package 5000K CCT 70 CRI Type 5 Wide	1	14889	0.93	204.34
	B	7	Lithonia Lighting	DSX1 LED P3 50K 70CRI T3M	D-Series Size 1 Area Luminaire P3 Performance Package 5000K CCT 70 CRI Type 3 Medium	1	14031	0.93	102.17

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PARKING LOT		3.2 fc	5.3 fc	1.4 fc	3.8:1	2.3:1
NOTES: 1. CALCULATION POINT WORK PLANE: GRADE LEVEL 2. FIXTURE MOUNTING HEIGHT: REFER TO FIXTURE LABELS NOTED ON PLAN 3. CALCULATIONS PROVIDED BY KSA ARE NOT A GUARANTEE OF PERFORMANCE. ACTUAL LIGHT LEVELS MAY VARY.**						

**This document contains confidential and proprietary information of KSA Lighting & Controls. This document may only be used by or for the benefit of KSA Lighting & Controls representatives and customers. This lighting layout is not a professional engineering drawing and is provided for informational purposes only, without warranty as to accuracy, completeness, reliability or otherwise. KSA Lighting & Controls is not responsible for specifying the light fixtures or illumination requirements for any specific project, nor is it responsible for meeting municipal or building code requirements. It is the obligation of the end-user to consult with a professional engineering advisor to determine whether this lighting layout meets the applicable project requirements for lighting system performance, safety, suitability and effectiveness for use in a particular application. Field verification is recommended when calculations are based on end-user or customer-provided information. End-user environment and application (including, but not limited to, voltage variation and dirt accumulation) can cause actual field performance to differ from the calculated photometric performance represented in this lighting layout. In no event will KSA Lighting & Controls be responsible for any loss resulting from any use of this drawing.

Luminaire and Driver – TLC-LED-1500**Luminaire Data**

Weight (luminaire)	67 lb (30 kg)
UL listing number	E338094 (pending)
UL listed for USA / Canada	UL1598 CSA-C22.2 No.250.0 (pending)
CE Declaration	LVD, EMC, RoHS
Ingress protection, luminaire	IP65
Material and finish	Aluminum, powder-coat painted
Wind speed rating (aiming only)	150 mi/h (67 m/s)
UL, IEC ambient temperature rating, luminaire	50°C (122°F)

Photometric Characteristics

Projected lumen maintenance per IES TM-21-11

L90 (13.5k)	>81,000 h
L80 (13.5k)	>81,000 h
L70 (13.5k)	>81,000 h
CIE correlated color temperature	5700 K
Color rendering index (CRI)	75 typ, 70 min
Lumens ¹	156,100

Footnotes:

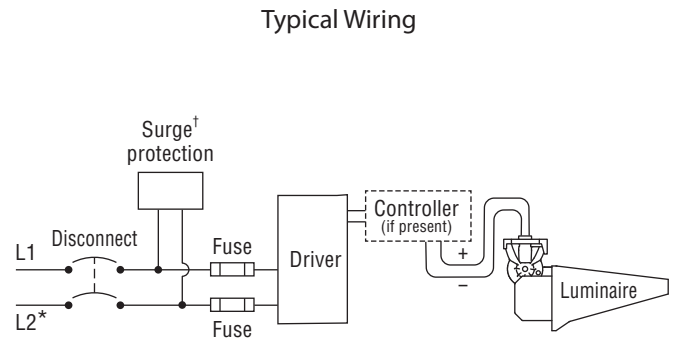
1) Incorporates appropriate dirt depreciation factor for life of luminaire.

All components from foundation to poletop are designed to work together in Light-Structure System™ to ensure reliable, trouble-free operation.

Attachment: Exhibit B. Plan Set (O-2024-58 : Approve a Prelim Plan, Amendmt to SU, and Vari. for Site Improvements at BGHS at 1100 W

Luminaire and Driver – TLC-LED-1500**Driver Data****Electrical Data**Rated wattage¹

Per driver	1500 W
Per luminaire	1500 W
Number of luminaires per driver	1
Starting (inrush) current	<40 A, 256 μ s
Fuse rating	15 A
UL, IEC ambient temperature rating, electrical components enclosure	45°C (113°F) - pending
Ingress protection, electrical components enclosure	IP54
Efficiency	95%
Dimming mode	optional
Range, energy consumption	11 – 100%
Range, light output	16 – 100%



* If L2 (com) is neutral then not switched or fused.

† Not present if indoor installation.

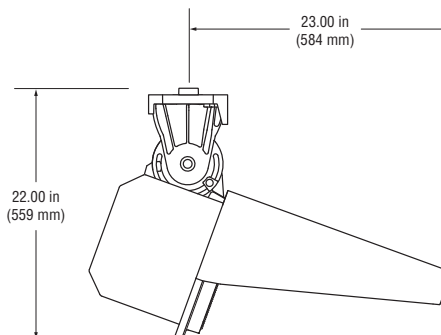
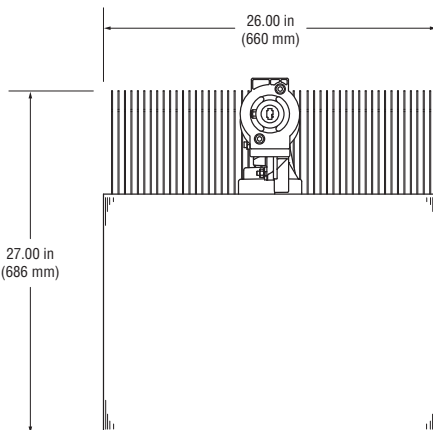
	200 Vac 50/60 Hz	208 Vac 60 Hz	220 Vac 50/60 Hz	230 Vac 50 Hz	240 Vac 50/60 Hz	277 Vac 60 Hz	347 Vac 60 Hz	380 Vac 50/60 Hz	400 Vac 50 Hz	415 Vac 50 Hz	480 Vac 60 Hz
Max operating current per luminaire ²	9.30 A	8.95 A	8.46 A	8.09 A	7.75 A	6.72 A	5.36 A	4.90 A	4.65 A	4.49 A	3.88 A

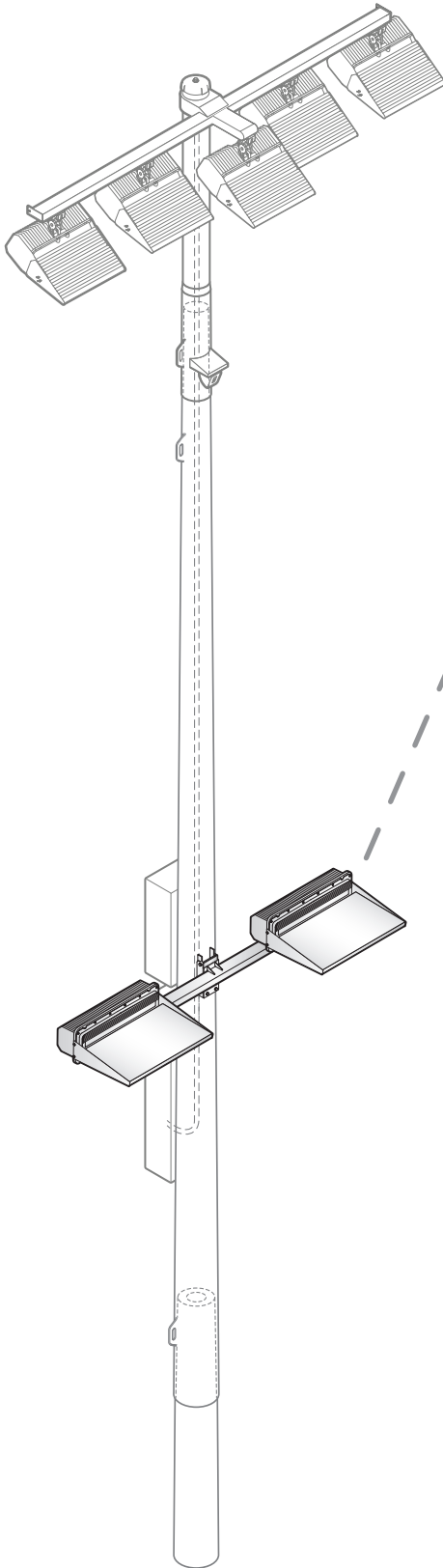
Footnotes:

- 1) Rated wattage is the power consumption, including driver efficiency losses, at stabilized operation in 25°C ambient temperature environment.
 2) Operating current includes allowance for 0.90 minimum power factor, operating temperature, and LED light source manufacturing tolerances.

Notes

1. Use thermal magnetic HID-rated or D-curve circuit breakers.
 2. See *Musco Control System Summary* for circuit information.



Luminaire and Driver Components – TLC-BT-575 (업라이트용)**Luminaire Data**

Weight (luminaire)	34 lb (15 kg)
UL listing number	E338094
UL Listed for USA / Canada	UL1598 CSA-C22.2 No.250.0
Ingress protection, luminaire (보호등급)	IP65
Material and finish	Aluminum, powder-coat painted
Wind speed rating (aiming only) (풍하중지지력)	150 mi/h (67 m/s)

Photometric Characteristics

Projected lumen maintenance per IES TM-21-11 (광속유지수 ¹)	
L90 (13.5k)	>81,000 h
L80 (13.5k)	>81,000 h
L70 (13.5k)	>81,000 h
CIE correlated color temperature (색온도)	5700 K
Color rendering index (CRI) (연색성)	75 typ, 70 min
Lumens ¹ (광속)	52,000
광효율	90lm/W

Footnotes:

1) Incorporates appropriate dirt depreciation factor for life of luminaire.

All components from foundation to poletop are designed to work together in Light-Structure System™ to ensure reliable, trouble-free operation.

Luminaire and Driver Components – TLC-BT-575**Driver Data****Electrical Data**Rated wattage¹

Per driver 575 W

Per luminaire 575 W

Number of luminaires per driver 1

Starting (inrush) current <40 A, 256 μ s

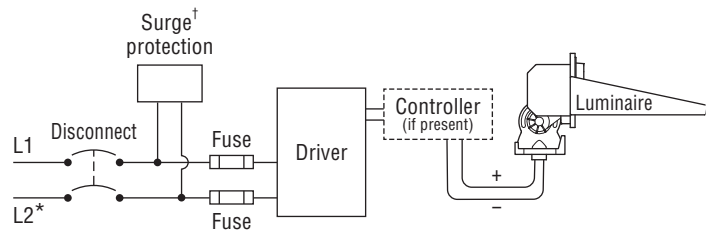
Fuse rating 15 A

UL, IEC ambient temperature rating, electrical components enclosure 50°C (122°F)

Ingress protection, ECE box (보호등급) IP45

Coverter mode (컨버터 방식) Constant current(CC)

Efficiency (컨버터 효율) 95%이상

Typical Wiring

* If L2 (com) is neutral then not switched or fused.

† Not present if indoor installation.

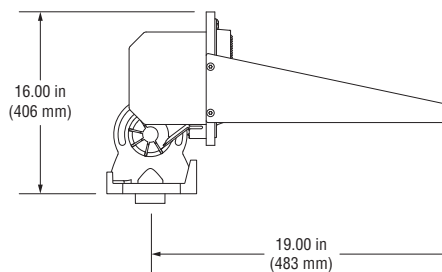
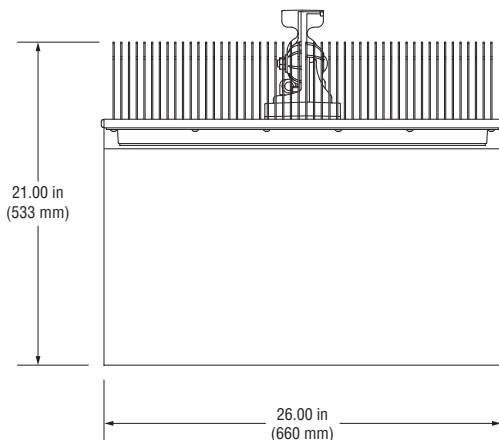
	200 Vac 50/60 Hz	208 Vac 60 Hz	220 Vac 50/60 Hz	230 Vac 50 Hz	240 Vac 50/60 Hz	277 Vac 60 Hz	347 Vac 60 Hz	380 Vac 50/60 Hz	400 Vac 50 Hz	415 Vac 50 Hz	480 Vac 60 Hz
Max operating current² per luminaire	3.48 A	3.35 A	3.16 A	3.03 A	2.90 A	2.51 A	2.01 A	1.83 A	1.74 A	1.68 A	1.45 A

Footnotes:

- 1) Rated wattage is the power consumption, including driver efficiency losses, at stabilized operation in 25°C ambient temperature environment.
- 2) Operating current includes allowance for 0.90 minimum power factor, operating temperature, and LED light source manufacturing tolerances.

Notes

1. Use thermal magnetic HID-rated or D-curve circuit breakers.
2. See *Musco Control System Summary* for circuit information.





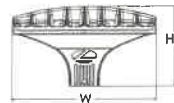
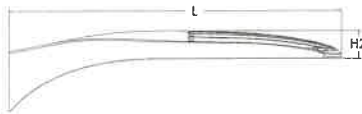
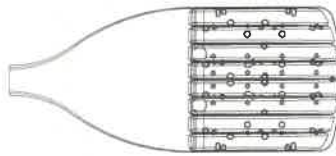
D-Series Size 1 LED Area Luminaire



d^{series}

Specifications

EPA:	0.69 ft ² (0.06 m ²)
Length:	32.71" (83.1 cm)
Width:	14.26" (36.2 cm)
Height H1:	7.88" (20.0 cm)
Height H2:	2.73" (6.9 cm)
Weight:	34 lbs (15.4 kg)



Catalog
Number

Notes

Type

Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX1 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

Series	LEDs	Color temperature ¹	Color Rendering Index ²	Distribution	Voltage	Mounting
DSX1 LED	Forward optics	(this section 70CRI only)		AFR Automotive front row	TSM Type V medium	MVOLT (120V-277V) ⁴
	P1 P6	30K 3000K	70CRI	T1S Type I short	TSLG Type V low glare -	HVOLT (347V-480V) ^{5,6}
	P2 P7	40K 4000K	70CRI	T2M Type II medium	T5W Type V wide	XVOLT (277V - 480V) ^{7,8}
	P3 P8	50K 5000K	70CRI	T3M Type III medium	BLC3 Type III backlight control ³	120 ^{16,26}
	P4 P9	(this section 80CRI only, extended lead times apply)		T3LG Type III low glare ³	BLC4 Type IV backlight control ³	208 ^{16,26}
	P5			T4M Type IV medium	LCCO Left corner cutoff ³	240 ^{16,26}
	Rotated optics			T4LG Type IV low glare ³	RCCO Right corner cutoff ³	277 ^{16,26}
	P10 ¹ P12 ¹	27K 2700K	80CRI	TFTM Forward throw medium		347 ^{16,26}
	P11 ¹ P13 ¹	30K 3000K	80CRI			480 ^{16,26}
		35K 3500K	80CRI			
		40K 4000K	80CRI			
		50K 5000K	80CRI			
						Shipped included
						SPA Square pole mounting (#8 drilling)
						RPA Round pole mounting (#8 drilling)
						SPA5 Square pole mounting #5 drilling ⁹
						RPAS Round pole mounting #5 drilling ⁹
						SPA8N Square narrow pole mounting #8 drilling
						WBA Wall bracket ¹⁰
						MA Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)

Control options	Other options	Finish (required)
Shipped installed	Shipped installed	Shipped installed
NLTAIR2 PIRHN nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc. ^{11,12,20,21}	SPD20KV 20KV surge protection	DDBXD Dark Bronze
PIR High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc. ^{13,20,21}	HS Houseside shield (black finish standard) ²²	DBLXD Black
PER NEMA twist-lock receptacle only (controls ordered separately) ¹⁴	L90 Left rotated optics ¹	DNAXD Natural Aluminum
PERS Five-pin receptacle only (controls ordered separately) ^{14,21}	R90 Right rotated optics ¹	DWHXD White
PER7 Seven-pin receptacle only (controls ordered separately) ^{14,21}	CCE Coastal Construction ²³	DDBTXD Textured dark bronze
FAO Field adjustable output ^{15,21}	HA 50°C ambient operation ²⁴	DBLTXD Textured black
BL30 Bi-level switched dimming, 30% ^{16,21}	BAA Buy America(n) Act Compliant	DNATXD Textured natural aluminum
BL50 Bi-level switched dimming, 50% ^{16,21}	SF Single fuse (120, 277, 347V) ²⁵	DWHGXD Textured white
DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) ¹⁷	DF Double fuse (208, 240, 480V) ²⁶	
DS Dual switching ^{18,19,21}	Shipped separately	
	EGSR External Glare Shield (reversible, field install required, matches housing finish)	
	BSDB Bird Spikes (field install required)	

Ordering Information

Accessories

Ordered and shipped separately:

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) ²⁵
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) ²⁵
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) ²⁵
DSHORT SBK	Shorting cap ²⁵
DSX1HS P#	House-side shield (enter package number 1-13 in place of #)
DSXRPA (FINISH)	Round pole adapter (#8 drilling, specify finish)
DSXSPAS (FINISH)	Square pole adapter #5 drilling (specify finish)
DSXRPAS (FINISH)	Round pole adapter #5 drilling (specify finish)
DSX1EGSR (FINISH)	External glare shield (specify finish)
DSX1BSDB (FINISH)	Bird spike deterrent bracket (specify finish)

NOTES

- 1 Rotated optics available with packages P10, P11, P12 and P13. Must be combined with option L90 or R90.
- 2 30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 35K only available with 80CRI. Contact Technical Support for other possible combinations.
- 3 T3LG, T4LG, BLC3, BLC4, LCCO, RCOO not available with option HS.
- 4 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- 5 HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
- 6 HVOLT not available with package P1 and P10 when combined with option NLTAIR2 PIRHN or option PIR.
- 7 XVOLT operates with any voltage between 277V and 480V (50/60 Hz).
- 8 XVOLT not available in packages P1 or P10. XVOLT not available with fusing (SF or DF).
- 9 SPAS and RPAS for use with #5 drilling only (Not for use with #8 drilling).
- 10 WBA cannot be combined with Type 5 distributions plus photocell (PER).
- 11 NLTAIR2 and PIRHN must be ordered together. For more information on nLight AIR2 visit this [link](#).
- 12 NLTAIR2 PIRHN not available with other controls including PIR, PER, PER5, PER7, FAO, BL30, BL50, DMG and DS. NLTAIR2 PIRHN not available with P1 and P10 using HVOLT. NLTAIR2 PIRHN not available with P1 and P10 using XVOLT.
- 13 PIR not available with NLTAIR2 PIRHN, PER, PER5, PER7, FAO BL30, BL50, DMG and DS. PIR not available with P1 and P10 using HVOLT. PIR not available with P1 and P10 using XVOLT.
- 14 PER/PER5/PER7 not available with NLTAIR2 PIRHN, PIR, BL30, BL50, FAO, DMG and DS. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
- 15 FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, DMG and DS.
- 16 BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO, DMG and DS. BL30 or BL50 must specify 120, 277 or 347V. Consult tech support for 208, 240 or 480V.
- 17 DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DS.
- 18 DS not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DMG.
- 19 DS requires (2) separately switched circuits. DS provides 50/50 fixture operation via (2) different sets of leads using (2) drivers. DS only available with packages P8, P9, P10, P11, P12 and P13.
- 20 Reference Motion Sensor Default Settings table on page 4 to see functionality.
- 21 Reference Controls Options table on page 4.
- 22 HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCOO distribution. Also available as a separate accessory; see Accessories information.
- 23 CCE option not available with option BS and EGRS. Contact Technical Support for availability.
- 24 Option HA not available with performance packages P4, P5, P7, P8, P9 and P13.
- 25 Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.
- 26 Single fuse (SF) requires 120V, 277V, or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).

Shield Accessories



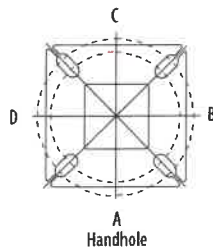
External Glare Shield (EGSR)



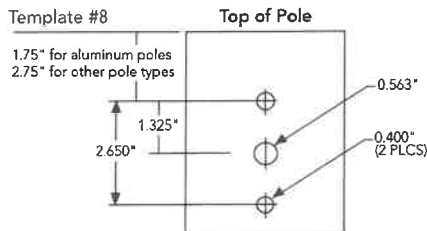
House Side Shield (HS)

Drilling

HANDHOLE ORIENTATION



A Handhole



Tenon Mounting Slipfitter

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
2-3/8"	RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 390	AS3-5 320	AS3-5 490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS
Minimum Acceptable Outside Pole Dimension							
SPA	#8	3.5"	3.5"	3.5"	3.5"		3.5"
RPA	#8	3"	3"	3"	3"	3"	3"
SPAS	#5	3"	3"	3"	3"		3"
RPAS	#5	3"	3"	3"	3"	3"	3"
SPA8N	#8	3"	3"	3"	3"		3"

DSX1 Area Luminaire - EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

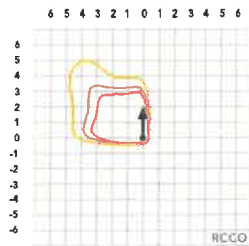
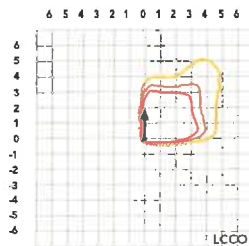
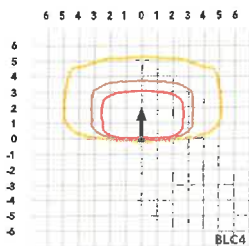
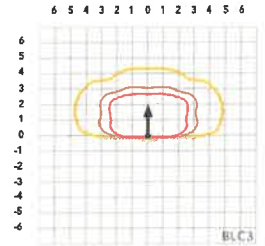
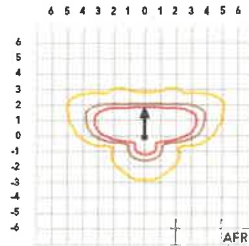
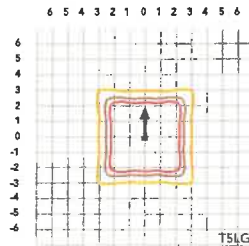
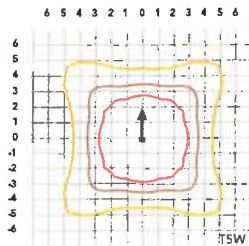
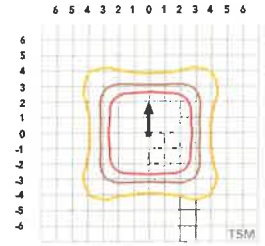
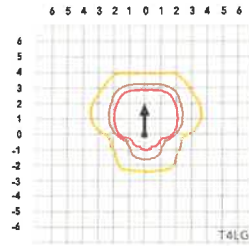
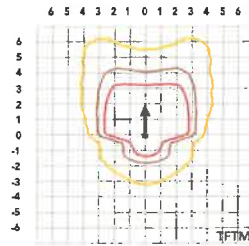
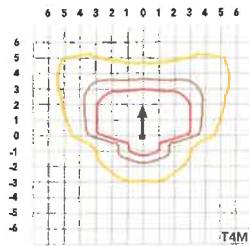
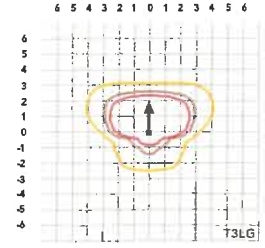
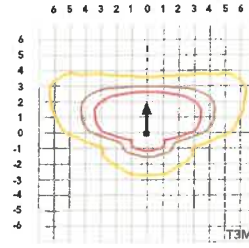
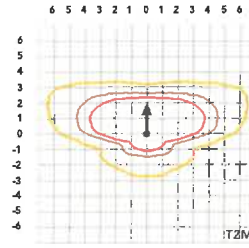
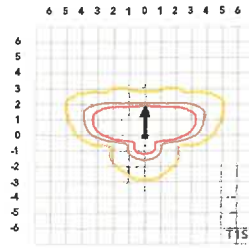
Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX1 with SPA	0.69	1.38	1.23	1.54	—	1.58
DSX1 with SPAS, SPA8N	0.70	1.40	1.30	1.66	—	1.68
DSX1 with RPA, RPAS	0.70	1.40	1.30	1.66	1.60	1.68
DSX1 with MA	0.83	1.66	1.50	2.09	2.09	2.09

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit [Lithonia Lighting's homepage](https://www.lithonia.com).

Isofootcandle plots for the DSX1 LED P9 40K 70CRI. Distances are in units of mounting height (25').

LEGEND



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.95
50,000	0.90
100,000	0.81

FAO Dimming Settings

FAO Position	% Wattage	% Lumen Output
8	100%	100%
7	93%	95%
6	80%	85%
5	66%	73%
4	54%	61%
3	41%	49%
2	29%	36%
1	15%	20%

*Note: Calculated values are based on original performance package data. When calculating new values for given FAO position, use maximum published values by package listed on specification sheet (input watts and lumens by optic type).

Electrical Load

	Performance Package	LED Count	Drive Current (mA)	Wattage	Current (A)					
					120V	208V	240V	277V	347V	480V
Forward Optics (Non-Rotated)	P1	30	530	51	0.42	0.24	0.21	0.18	0.15	0.11
	P2	30	700	68	0.56	0.33	0.28	0.24	0.20	0.14
	P3	30	1050	104	0.85	0.49	0.43	0.37	0.29	0.21
	P4	30	1250	125	1.03	0.60	0.52	0.45	0.36	0.26
	P5	30	1400	142	1.15	0.66	0.58	0.50	0.40	0.29
	P6	40	1250	167	1.38	0.79	0.69	0.60	0.48	0.34
	P7	40	1400	188	1.54	0.89	0.77	0.67	0.53	0.38
	P8	60	1100	216	1.80	1.04	0.90	0.78	0.62	0.45
	P9	60	1400	279	2.31	1.33	1.15	1.00	0.80	0.58
Rotated Optics (Requires L90 or R90)	P10	60	530	101	0.84	0.49	0.42	0.37	0.29	0.21
	P11	60	700	135	1.12	0.65	0.56	0.49	0.39	0.28
	P12	60	1050	206	1.72	0.99	0.86	0.74	0.59	0.43
	P13	60	1400	279	2.30	1.33	1.15	1.00	0.79	0.57

LED Color Temperature / Color Rendering Multipliers

	70 CRI		80 CRI		90 CRI	
	Lumen Multiplier	Availability	Lumen Multiplier	Availability	Lumen Multiplier	Availability
5000K	102%	Standard	92%	Extended lead-time	71%	(see note)
4000K	100%	Standard	92%	Extended lead-time	67%	(see note)
3500K	100%	(see note)	90%	Extended lead-time	63%	(see note)
3000K	96%	Standard	87%	Extended lead-time	61%	(see note)
2700K	94%	(see note)	85%	Extended lead-time	57%	(see note)

Note: Some LED types are available as per special request. Contact Technical Support for more information.

Motion Sensor Default Settings

Option	Unoccupied Dimmed Level	High Level (when occupied)	Photocell Operation	Dwell Time	Ramp-up Time	Dimming Fade Rate
PIR	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min
NLTAIR2 PIRHN	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min

Controls Options

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads.
DS (not available on DSX0)	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PERS or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire. Cannot be used with other controls options that need the 0-10V leads.
PIR	Motion sensor with integral photocell. Sensor suitable for 8' to 40' mounting height.	Luminaires dim when no occupancy is detected.	Acuity Controls rSBG	Cannot be used with other controls options that need the 0-10V leads.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Edypse.	nLight Air rSBG	nLight AIR sensors can be programmed and commissioned from the ground using the iAlRity Pro app. Cannot be used with other controls options that need the 0-10V leads.
BL30 or BL50	Integrated bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output	BLC device provides input to 0-10V dimming leads on all drivers providing either 100% or dimmed (30% or 50%) control by a secondary circuit	BLC UVOLT1	BLC device is powered off the 0-10V dimming leads, thus can be used with any input voltage from 120 to 480V

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Forward Optics																							
Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K					40K					50K								
					(3000K, 70 CRI)					(4000K, 70 CRI)					(5000K, 70 CRI)								
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW				
P1	51W	30	530	T1S	7,776	1	0	2	153	8,104	1	0	2	159	8,262	1	0	2	162				
				T2M	7,203	1	0	3	142	7,507	2	0	3	147	7,653	2	0	3	150				
				T3M	7,287	1	0	3	143	7,594	1	0	3	149	7,742	1	0	3	152				
				T3LG	6,509	1	0	1	128	6,783	1	0	1	133	6,916	1	0	1	136				
				T4M	7,395	1	0	3	145	7,707	1	0	3	151	7,857	1	0	3	154				
				T4LG	6,726	1	0	1	132	7,010	1	0	1	138	7,146	1	0	1	140				
				TFTM	7,446	1	0	3	146	7,760	1	0	3	152	7,912	1	0	3	155				
				T5M	7,609	3	0	2	149	7,930	3	0	2	156	8,084	3	0	2	159				
				TSW	7,732	3	0	2	152	8,058	4	0	2	158	8,215	4	0	2	161				
				TSLG	7,631	3	0	1	150	7,953	3	0	1	156	8,108	3	0	1	159				
				BLC3	5,300	0	0	2	104	5,524	0	0	2	109	5,631	0	0	2	111				
				BLC4	5,474	0	0	3	108	5,705	0	0	3	112	5,816	0	0	3	114				
				RCCO	5,348	0	0	2	105	5,573	0	0	2	109	5,682	0	0	2	112				
				LCCO	5,348	0	0	2	105	5,573	0	0	2	109	5,682	0	0	2	112				
				AFR	7,776	1	0	2	153	8,104	1	0	2	159	8,262	1	0	2	162				
				P2	68W	30	700	T1S	9,997	1	0	2	147	10,418	1	0	2	154	10,621	1	0	2	157
								T2M	9,260	2	0	3	137	9,651	2	0	3	142	9,839	2	0	3	145
T3M	9,368	2	0					3	138	9,763	2	0	3	144	9,953	2	0	3	147				
T3LG	8,368	1	0					2	123	8,721	1	0	2	129	8,891	1	0	2	131				
T4M	9,507	2	0					3	140	9,909	2	0	3	146	10,102	2	0	3	149				
T4LG	8,647	1	0					2	128	9,012	1	0	2	133	9,187	1	0	2	136				
TFTM	9,573	2	0					3	141	9,977	2	0	3	147	10,172	2	0	3	150				
T5M	9,782	4	0					2	144	10,195	4	0	2	150	10,393	4	0	2	153				
TSW	9,940	4	0					2	147	10,360	4	0	2	153	10,562	4	0	2	156				
TSLG	9,810	3	0					1	145	10,224	3	0	1	151	10,423	3	0	1	154				
BLC3	6,814	0	0					2	101	7,101	0	0	2	105	7,240	0	0	2	107				
BLC4	7,038	0	0					3	104	7,334	0	0	3	108	7,477	0	0	3	110				
RCCO	6,875	1	0					2	101	7,165	1	0	2	106	7,305	1	0	2	108				
LCCO	6,875	1	0					2	101	7,165	1	0	2	106	7,305	1	0	2	108				
AFR	9,997	1	0					2	147	10,418	1	0	2	154	10,621	1	0	2	157				
P3	102W	30	1050					T1S	14,093	2	0	2	138	14,687	2	0	2	144	14,973	2	0	2	147
								T2M	13,055	2	0	3	128	13,605	2	0	3	133	13,871	2	0	3	136
				T3M	13,206	2	0	4	129	13,763	2	0	4	135	14,031	2	0	4	137				
				T3LG	11,797	2	0	2	115	12,294	2	0	2	120	12,534	2	0	2	123				
				T4M	13,403	2	0	4	131	13,968	2	0	4	137	14,241	2	0	4	139				
				T4LG	12,190	2	0	2	119	12,704	2	0	2	124	12,952	2	0	2	127				
				TFTM	13,496	2	0	4	132	14,065	2	0	4	138	14,339	2	0	4	140				
				T5M	13,790	4	0	2	135	14,371	4	0	2	141	14,652	4	0	2	143				
				TSW	14,013	4	0	3	137	14,605	4	0	3	143	14,889	4	0	3	146				
				TSLG	13,830	3	0	2	135	14,413	3	0	2	141	14,694	3	0	2	144				
				BLC3	9,606	0	0	2	94	10,011	0	0	2	98	10,206	0	0	2	100				
				BLC4	9,921	0	0	3	97	10,340	0	0	3	101	10,541	0	0	3	103				
				RCCO	9,692	1	0	2	95	10,101	1	0	2	99	10,298	1	0	2	101				
				LCCO	9,692	1	0	2	95	10,101	1	0	2	99	10,298	1	0	2	101				
				AFR	14,093	2	0	2	138	14,687	2	0	2	144	14,973	2	0	2	147				

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Forward Optics																							
Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K					40K					50K								
					(3000K, 70 CRI)					(4000K, 70 CRI)					(5000K, 70 CRI)								
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW				
P4	124W	30	1250	T1S	16,416	2	0	3	132	17,109	2	0	3	138	17,442	2	0	3	141				
				T2M	15,207	3	0	4	123	15,849	3	0	4	128	16,158	3	0	4	130				
				T3M	15,383	2	0	4	124	16,032	2	0	4	129	16,345	2	0	4	132				
				T3LG	13,742	2	0	2	111	14,321	2	0	2	116	14,600	2	0	2	118				
				T4M	15,613	2	0	4	126	16,272	2	0	4	131	16,589	2	0	4	134				
				T4LG	14,200	2	0	2	115	14,799	2	0	2	119	15,087	2	0	2	122				
				TFTM	15,721	2	0	4	127	16,384	2	0	4	132	16,703	2	0	4	135				
				T5M	16,063	4	0	2	130	16,741	4	0	2	135	17,067	4	0	2	138				
				TSW	16,324	5	0	3	132	17,013	5	0	3	137	17,344	5	0	3	140				
				TSLG	16,110	3	0	2	130	16,790	4	0	2	135	17,117	4	0	2	138				
				BLC3	11,190	0	0	3	90	11,662	0	0	3	94	11,889	0	0	3	96				
				BLC4	11,557	0	0	3	93	12,044	0	0	3	97	12,279	0	0	4	99				
				RCCO	11,291	1	0	3	91	11,767	1	0	3	95	11,996	1	0	3	97				
				LCCO	11,291	1	0	3	91	11,767	1	0	3	95	11,996	1	0	3	97				
				AFR	16,416	2	0	3	132	17,109	2	0	3	138	17,442	2	0	3	141				
				P5	138W	30	1400	T1S	18,052	2	0	3	131	18,814	2	0	3	136	19,180	2	0	3	139
								T2M	16,723	3	0	4	121	17,428	3	0	4	126	17,768	3	0	4	129
T3M	16,917	3	0					4	122	17,630	3	0	4	128	17,974	3	0	4	130				
T3LG	15,111	2	0					2	109	15,749	2	0	2	114	16,055	2	0	2	116				
T4M	17,169	3	0					5	124	17,893	3	0	5	130	18,242	3	0	5	132				
T4LG	15,615	2	0					2	113	16,274	2	0	2	118	16,591	2	0	2	120				
TFTM	17,288	2	0					4	125	18,017	2	0	5	130	18,368	3	0	5	133				
T5M	17,664	5	0					3	128	18,410	5	0	3	133	18,768	5	0	3	136				
TSW	17,951	5	0					3	130	18,708	5	0	3	135	19,073	5	0	3	138				
TSLG	17,716	4	0					2	128	18,463	4	0	2	134	18,823	4	0	2	136				
BLC3	12,305	0	0					3	89	12,824	0	0	3	93	13,074	0	0	3	95				
BLC4	12,709	0	0					4	92	13,245	0	0	4	96	13,503	0	0	4	98				
RCCO	12,416	1	0					3	90	12,940	1	0	3	94	13,192	1	0	3	95				
LCCO	12,416	1	0					3	90	12,940	1	0	3	94	13,192	1	0	3	95				
AFR	18,052	2	0					3	131	18,814	2	0	3	136	19,180	2	0	3	139				
P6	165W	40	1250					T1S	21,031	2	0	3	127	21,918	2	0	3	133	22,345	2	0	3	135
								T2M	19,482	3	0	4	118	20,303	3	0	4	123	20,699	3	0	4	125
				T3M	19,708	3	0	5	119	20,539	3	0	5	124	20,939	3	0	5	127				
				T3LG	17,604	2	0	2	107	18,347	2	0	2	111	18,704	2	0	2	113				
				T4M	20,001	3	0	5	121	20,845	3	0	5	126	21,251	3	0	5	129				
				T4LG	18,191	2	0	2	110	18,959	2	0	2	115	19,328	2	0	2	117				
				TFTM	20,140	3	0	5	122	20,989	3	0	5	127	21,398	3	0	5	129				
				T5M	20,579	5	0	3	125	21,447	5	0	3	130	21,865	5	0	3	132				
				TSW	20,912	5	0	3	127	21,795	5	0	3	132	22,219	5	0	3	134				
				TSLG	20,638	4	0	2	125	21,509	4	0	2	130	21,928	4	0	2	133				
				BLC3	14,335	0	0	3	87	14,940	0	0	3	90	15,231	0	0	3	92				
				BLC4	14,805	0	0	4	90	15,430	0	0	4	93	15,731	0	0	4	95				
				RCCO	14,464	1	0	3	88	15,074	1	0	3	91	15,368	1	0	3	93				
				LCCO	14,464	1	0	3	88	15,074	1	0	3	91	15,368	1	0	3	93				
				AFR	21,031	2	0	3	127	21,918	2	0	3	133	22,345	2	0	3	135				



FEATURES & SPECIFICATIONS

INTENDED USE — These specifications are for USA standards only. Round Straight Steel is a general purpose light pole for up to 30-foot mounting heights. This pole provides a robust yet cost effective option for mounting area lights and floodlights.

CONSTRUCTION —

Pole Shaft: The pole shaft is of 0.120" uniform wall thickness and is made of a weldable-grade, hot-rolled, commercial-quality steel tubing with a minimum yield of 42,000 psi. Shaft is one-piece with a full-length longitudinal high-frequency electric resistance weld. Uniformly round in cross-section down length of shaft with no taper. Standard shaft diameters are 3", 4", 4.5" and 5". 6" diameter shaft available by quote. Shaft wall thickness of .180" is available with certain tube diameters.

Pole Top: Options include tenon top, drilled for side mount fixture, 4" tenon with drilling (includes extra handhole) and open top. Side drilled and open top poles include a removable press-fit, black, low density polyethylene top cap.

Handhole: A reinforced handhole with grounding provision is provided at 12" or 18" from the base end of the pole assembly on side A. Every handhole includes a cover and cover attachment hardware. 2.5" x 5" rectangular handhole is provided on pole.

Base Cover: A two-piece ABS round plastic full base cover is provided with each pole assembly. Additional base cover options are available upon factory request. Options include fabricated two-piece sheet steel. All base covers are finished to match pole.

Anchor Base/Bolts: Anchor base is fabricated from hot-rolled carbon steel plate that conforms with ASTM A36. Anchor bolts conform to ASTM F1554 Grade 55 and are provided with two hex nuts and two flat washers. Bolts have an "L" blend on one end. All anchor bolts are hot-dipped galvanized a minimum of 12" nominal on the threaded end. Anchor bolts are made of steel rod having a minimum yield strength of 55,000 psi and a yield strength of 75,000 psi to 95,000 psi.

HARDWARE — All structural fasteners are high-strength galvanized carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel or stainless steel.

FINISH — Extra durable standard powder-coat finishes include Dark Bronze, White, Black, Medium Bronze and Natural Aluminum colors. Classic finishes include Sandstone, Charcoal Gray, Tennis Green, Bright Red and Steel Blue colors. Architectural Colors and Special Finishes are available by quote and include, but are not limited to Hot-dipped Galvanized, Paint over Hot-dipped Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes. Factory-applied primer paint finish is available for customer field-paint applications.

BUY AMERICAN ACT — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY — 1-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

NOTE: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

Catalog Number
Notes
Type



Anchor Base Poles

RSS

ROUND STRAIGHT STEEL



RSS Round Straight Steel Pole

ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

Example: RSS 20 4-5B DM19 DDBXD

RSS					
Series	Nominal fixture mounting height	Nominal shaft base size/wall thickness ¹	Mounting ²	Options	Finish
RSS	8'-30' (for 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.) (See technical information table for complete ordering information.)	3B 3" 11ga (.120") 4B 4" 11ga (.120") 4-5B 4.5" 11ga (.120") 5B 5" 11ga (.120") (See technical information table for complete ordering information.)	<u>Tenon mounting</u> PT Open top T20 2-3/8" O.D. (2" NPS) T25 2-7/8" O.D. (2-1/2" NPS) T30 3-1/2" O.D. (3" NPS) T35 4" O.D. (3-1/2" NPS) <u>KAC/KAD/KSE/KSF/KVR/KVF Drill mounting³</u> DM19 1 at 90° DM28 2 at 180° DM28PL 2 at 180° with one side plugged DM29 2 at 90° DM32 3 at 120° DM49 4 at 90° <u>CSX/DSX/RSX/AERIS™/OMERO™/KAX Drill mounting³</u> DM19AS 1 at 90° DM28AS 2 at 180° DM29AS 2 at 90° DM32AS 3 at 120° DM39AS 3 at 90° DM49AS 4 at 90° <u>RAD drill mounting^{3,4}</u> DM19RAD 1 at 90° DM28RAD 2 at 180° DM29RAD 2 at 90° DM32RAD 3 at 120° DM39RAD 3 at 90° DM49RAD 4 at 90° <u>ESX Drill mounting³</u> DM19ESX 1 at 90° DM28ESX 2 at 180° DM29ESX 2 at 90° DM32ESX 3 at 120° DM39ESX 3 at 90° DM49ESX 4 at 90°	<u>Shipped installed</u> VD Vibration damper ⁵ HAXy Horizontal arm bracket (1 fixture) ^{6,7} FDLxy Festoon outlet less electrical ^{6,8} CPL12/xy 1/2" coupling ⁶ CPL34/xy 3/4" coupling ⁶ CPL1/xy 1" coupling ⁶ NPL12/xy 1/2" threaded nipple ⁶ NPL34/xy 3/4" threaded nipple ⁶ NPL1/xy 1" threaded nipple ⁶ EHHxy Extra handhole ^{6,9} STLHHC Steel handhole cover (standard is plastic, finish is smooth) ¹⁰ FBCSTL2PC 2 Piece steel base cover (standard is plastic) ¹⁰ IC Interior coating ¹¹ L/AB Less anchor bolts (Include when anchor bolts are not needed) TP Tamper resistant handhole cover fasteners NEC NEC 410.30 compliant gasketed handhole (Not UL Labeled) UL UL listed with label (Includes NEC compliant cover) BAA Buy America(n) Act Compliant ¹² VM/original order# Match pole to prior order or project ¹³	<u>Super durable paint colors</u> DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DGCXD Charcoal gray DTGXD Tennis green DBRXD Bright red DSBXD Steel blue DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white <u>Other finishes</u> GALV Galvanized finish <u>Architectural colors and special finishes¹⁴</u> [PAINT] GALV Paint over galvanizing VP30 3 year warranty extension VP53 5 year warranty extension RAL#### Use designated Lithonia Lighting nomenclature in brochure Custom color Nomenclature assigned through Customer Care "Custom Color Process"

NOTES:

- Wall thickness will be signified with a "B" (11 Gauge) or a "F" (7-Gauge) in nomenclature. "B" - .120" | "F" - .180"
- PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, specify as drilling option/tenon option. The combination includes a required extra handhole.
Example: DM28/T20.
- Refer to the fixture spec sheet for the correct drilling template pattern and orientation compatibility.
- DM19RAD, DM28RAD and DM32RAD require a minimum top O.D. of 4". DM29RAD, DM39RAD and DM49RAD require a minimum top O.D. of 4.25".
- VD not available with 3" pole. On 4" and 5" poles, VD cannot be installed if provisions (EHH, FDL, NPL, CPL) are located higher than 2/3 of the pole's total height.
Example: Pole height is 25ft. A provision cannot be placed above 16ft.
- Specify location and orientation when ordering option.
For "x": Specify the height above the base of pole in feet or feet and inches; separate feet and inches with a "-".
Example: 5ft = 5 and 20ft 3in = 20-3
For "y": Specify orientation from handhole (A,B,C,D) Refer to the Handhole Orientation diagram below.
Example: 1/2" coupling at 5' 8", orientation C = CPL12/5-8C
- Horizontal arm is 18" x 2-3/8" O.D. tenon standard, with radius curve providing 12" rise and 2-3/8" O.D. If ordering two horizontal arm at the same height, specify with HAXxy.
Example: HA20BD.

- FDL does not come with GFCL outlet or handhole cover. These must be supplied by contractor or electrician.
- Combination of tenon-top and drill mount includes extra handhole. EHH includes cover.
- Plastic hand hole cover and base covers come standard with all poles. Items ship separately. Additional parts can be ordered as replacements.
- Provides enhanced corrosion resistance. N/A with GALV.
- Use when mill certifications are required.
- Must add original order number. Not for replacement parts or post sales issues, contact tech support or post sales teams. VM is used to ensure poles match in appearance exactly from order to order, on a single project site. A common use case would be a multi-phase project with multiple orders.
Example: VM/D10-36784
- Must be quoted through AQD. Finishes do not require RFA. RAL colors available are shown in "Architectural Colors brochure". Lead times may be extended up to 2 weeks due to paint procurement.

Accessories: Order as separate catalog number.

PL DT20	Plugs for ESX drillings
PL DT8	Plugs for DMxxAS drillings
FVD xxFT	Field installed vibration damper (snake style)

RSS Round Straight Steel Pole

TECHNICAL INFORMATION — EPA (ft ²) with 1.3 gust										
Catalog number	Nominal shaft length (ft)*	Pole shaft size (in x ft)	Wall thickness (in)	80 mph	Max weight	90 mph	Max weight	100 mph	Max weight	Approximate ship weight (lbs.)
RSS 8 4-5B	8	4.5 x 8.0	0.120	24.7	630	19.7	495	16.0	430	55
RSS 10 3B	10	3.0 x 10.0	0.120	10.0	250	7.7	190	6.0	175	55
RSS 10 4B	10	4.0 x 10.0	0.120	19.1	480	15	375	12.2	305	70
RSS 10 4-5B	10	4.5 x 10.0	0.120	24.5	615	19.5	490	15.8	395	75
RSS 12 3B	12	3.0 x 12.0	0.120	7.7	195	5.8	145	4.4	130	60
RSS 12 4B	12	4.0 x 12.0	0.120	15.0	390	11.8	300	9.5	240	80
RSS 12 4-5B	12	4.5 x 12.0	0.120	19.8	495	15.7	395	12.7	320	85
RSS 14 3B	14	3.0 x 14.0	0.120	6.0	175	4.4	130	3.3	90	70
RSS 14 4B	14	4.0 x 14.0	0.120	12.2	305	9.4	250	7.6	195	90
RSS 14 4-5B	14	4.5 x 14.0	0.120	16.2	405	12.8	320	10.3	260	95
RSS 15 4-5B	15	4.5 x 15.0	0.120	12.0	300	9.5	250	7.5	200	96
RSS 16 3B	16	3.0 x 16.0	0.120	4.6	125	3.2	100	2.3	60	80
RSS 16 4B	16	4.0 x 16.0	0.120	9.6	250	7.4	185	5.9	150	100
RSS 16 4-5B	16	4.5 x 16.0	0.120	13.1	330	10.2	265	8.2	205	105
RSS 18 3B	18	3.0 x 18.0	0.120	3.4	90	2.3	60	1.4	70	90
RSS 18 4B	18	4.0 x 18.0	0.120	7.6	190	5.7	180	4.5	130	110
RSS 18 4-5B	18	4.5 x 18.0	0.120	10.5	265	8.2	210	6.5	165	115
RSS 20 3B	20	3.0 x 20.0	0.120	2.4	100	1.4	75	--	--	100
RSS 20 4B	20	4.0 x 20.0	0.120	6.0	150	4.45	150	3.45	125	120
RSS 20 4-5B	20	4.5 x 20.0	0.120	8.5	215	6.6	165	5.2	130	130
RSS 20 5B	20	5.0 x 20.0	0.120	11.75	300	9.1	230	7.25	180	145
RSS 22 4-5B	22	4.5 x 22.0	0.120	6.0	150	4.5	125	3.75	100	134
RSS 25 4B	25	4.0 x 25.0	0.120	2.85	100	1.95	75	1.35	75	145
RSS 25 4-5B	25	4.5 x 25.0	0.120	4.8	130	3.6	90	2.7	90	145
RSS 25 5B	25	5.0 x 25.0	0.120	7.25	180	5.5	150	4.25	150	180
RSS 30 4-5B	30	4.5 x 30.0	0.120	2.3	80	1.5	75	1.0	60	185
RSS 30 5B	30	5.0 x 30.0	0.120	4.2	150	3	125	2.25	100	210

NOTE: EPA values are based ASCE 7-93 wind map.

*For 1/2 ft increments, add .6 to the pole height. Ex: 20-6 equals 20ft 6in.

RSS Round Straight Steel Pole

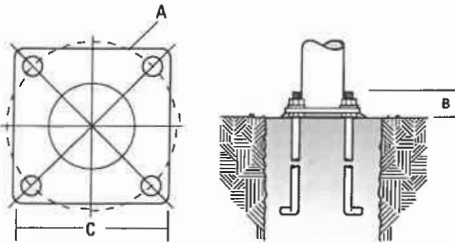
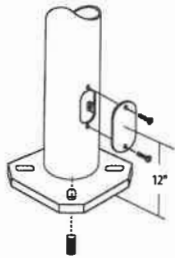
TECHNICAL INFORMATION — EPA (ft²) WITH 3-SECOND GUST PER AASHTO 2013

Series	Mounting Height (ft)*	Shaft Base Size	90 MPH	Max. weight	100 MPH	Max. weight	110 MPH	Max. weight	120 MPH	Max. weight	130 MPH	Max. weight	140 MPH	Max. weight	150 MPH	Max. weight	Approximate ship weight (lbs.)
RSS	8	4-5B	18.5	463	15	375	13	325	11	275	9.5	238	8	200	7	175	55
RSS	10	3B	6	150	5	125	4	100	3.5	88	2.5	63	2	50	2	50	55
RSS	10	4B	12	300	9.5	238	8	200	6.5	163	5.5	138	5	125	4.5	113	70
RSS	10	4-5B	15.5	388	12.5	313	10.5	263	9	225	7.5	188	6.5	163	6	150	75
RSS	12	3B	5	125	4	100	3	75	2.5	63	2	50	1.5	38	1	25	60
RSS	12	4B	10	250	8	200	6.5	163	5.5	138	4.5	113	4	100	3.5	88	80
RSS	12	4-5B	13	325	10.5	263	9	225	7.5	188	6.5	163	5.5	138	4.5	113	85
RSS	14	3B	4	100	3	75	2.5	63	2	50	1.5	38	1	25	0.5	13	70
RSS	14	4B	8.5	213	6.5	163	5.5	138	4	100	3.5	88	3	75	2.5	63	90
RSS	14	4-5B	11	275	9	225	7	175	6	150	5	125	4.5	113	4	100	95
RSS	15	4-5B	10	250	8	200	6.5	163	5.5	138	4.5	113	4	100	3.5	88	96
RSS	16	3B	3	75	2.5	63	1.5	38	1	25	0.5	13	0.5	13	-	-	80
RSS	16	4B	7	175	5.5	138	4	100	3	75	2.5	63	2	50	2	50	100
RSS	16	4-5B	9	225	7	175	6	150	5	125	4	100	3.5	88	3	75	105
RSS	18	3B	2.5	63	1.5	38	1	25	0.5	13	-	-	-	-	-	-	90
RSS	18	4B	5.5	138	4	100	3	75	2.5	63	2	50	1.5	38	1	25	110
RSS	18	4-5B	7.5	188	6	150	4.5	113	4	100	3	75	2.5	63	2	50	115
RSS	20	3B	2	50	1	25	0.5	13	-	-	-	-	-	-	-	-	100
RSS	20	4B	4.5	113	3	75	2	50	1.5	38	1	25	1	25	0.5	13	120
RSS	20	4-5B	6	150	4.5	113	3.5	88	3	75	2.5	63	2	50	1.5	38	130
RSS	20	5B	8	200	6.5	163	5.5	138	4.5	113	3.5	88	3	75	2.5	63	145
RSS	22	4-5B	5	125	3.5	88	2.5	63	2	50	1.5	38	1	25	1	25	134
RSS	25	4B	2.5	63	1	25	0.5	13	-	-	-	-	-	-	-	-	145
RSS	25	4-5B	3.5	88	2	50	1.5	38	1	25	0.5	13	-	-	-	-	145
RSS	25	5B	5	125	3.5	88	3	75	2	50	1.5	38	1.5	38	1	25	180
RSS	30	4-5B	1.5	38	-	-	-	-	-	-	-	-	-	-	-	-	185
RSS	30	5B	2.5	63	1.5	38	1	25	0.5	13	-	-	-	-	-	-	210

NOTE: AASHTO 2013 criteria is the most conservative existing EPA calculation. For poles not showing EPA values under AASHTO 2013, EPA values may exist under commercial criteria (see table above).

*For 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.

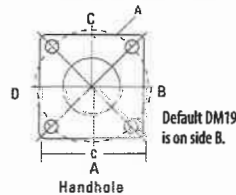
BASE DETAIL



ANCHORAGE AND TEMPLATE INFORMATION

Shaft base size	Bolt circle A	Bolt projection B	Base square C	Template description	Anchor bolt description	Bolt size (in. x in. x in.)
3"	7.5" - 8.5"	3.50"-3.75"	10.50"	ABTEMPLATE PJ50041	AB18-0	3/4 x 18 x 3
4"	7.5" - 8.5"	3.50"-3.75"	10.50"	ABTEMPLATE PJ50041	AB18-0	3/4 x 18 x 3
4.5"	7.5" - 8.5"	3.50"-3.75"	10.50"	ABTEMPLATE PJ50041	AB18-0	3/4 x 18 x 3
5"	7.5" - 8.5"	3.50"-3.75"	10.50"	ABTEMPLATE PJ50041	AB18-0	3/4 x 18 x 3

HANDHOLE ORIENTATION



IMPORTANT INSTALLATION NOTES:

- Do not erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use factory template.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.
- Lithonia Lighting is not responsible for the foundation design.

CAUTION: These specifications are intended for general purposes only. Lithonia Lighting reserves the right to change material or design, without prior notice, in a continuing effort to upgrade its products.



POLE-RSS

OUTDOOR: One Lithonia Way Conyers, GA 30012 Phone: 800-705-SERV (7378) www.lithonia.com

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D-Series Size 0 LED Area Luminaire

Catalog
Number

Notes

Type

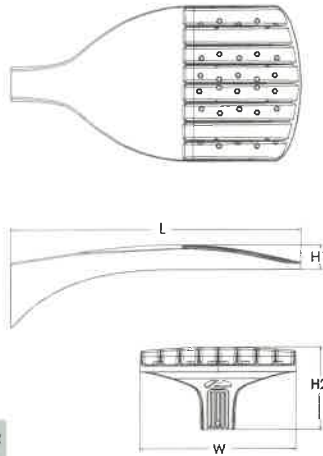
Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications, with typical energy savings of 70% and expected service life of over 100,000 hours.

Specifications

EPA:	0.44 ft ² (0.04 m ²)
Length:	26.18" (66.5 cm)
Width:	14.06" (35.7 cm)
Height H1:	2.26" (5.7 cm)
Height H2:	7.46" (18.9 cm)
Weight:	23 lbs (10.4 kg)



ds Design Select options indicated by this color background.

ds design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

Ordering Information

EXAMPLE: DSX0 LED P6 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX0 LED							
Series	LEDs	Color temperature ²	Color Rendering Index ²	Distribution		Voltage	Mounting
DSX0 LED	Forward optics	(this section 70CRI only)		AFR Automotive front row	T5M Type V medium	MVOLT (120V-277V) ⁴	Shipped included
	P1 P5	30K 3000K	70CRI	T1S Type I short	T5LG Type V low glare	HVOLT (347V-480V) ^{5,6}	
	P2 P6	40K 4000K	70CRI	T2M Type II medium	T5W Type V wide	XVOLT (277V-480V) ¹⁸	
	P3 P7	50K 5000K	70CRI	T3M Type III medium	BLC3 Type III backlight control ³	120 ^{16,24}	
	P4	(this section 80CRI only, extended lead times apply)		T3LG Type III low glare ³	BLC4 Type IV backlight control ³	208 ^{16,24}	
	P10 ¹ P12 ¹	27K 2700K	80CRI	T4M Type IV medium	LCCO Left corner cutoff ³	240 ^{16,24}	
	P11 ¹ P13 ¹	30K 3000K	80CRI	T4LG Type IV low glare ³	RCCO Right corner cutoff ³	277 ^{16,24}	
		35K 3500K	80CRI	TFTM Forward throw medium		347 ^{16,24}	
		40K 4000K	80CRI			480 ^{16,24}	
		50K 5000K	80CRI				
							SPA Square pole mounting (#8 drilling, 3" min. SQ pole)
							RPA Round pole mounting (#8 drilling, 3" min. RND pole)
							SPA5 Square pole mounting (#5 drilling, 3" min. SQ pole) ⁹
							RPA5 Round pole mounting (#5 drilling, 3" min. RND pole) ⁹
							SPA8N Square narrow pole mounting (#8 drilling, 3" min. SQ pole)
							WBA Wall bracket ²⁰
							MA Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)

Control options		Other options		Finish (required)
Shipped installed		Shipped installed		DDBXD Dark Bronze DBLXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured dark bronze DBLTXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white
NLTAIR2 PIRHN	nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc ^{11,12,19}	PER7 Seven-pin receptacle only (controls ordered separately) ^{14,19}	HS Houseside shield (black finish standard) ²²	
PIR	High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc ^{11,12,19}	FAO Field adjustable output ^{15,19}	L90 Left rotated optics ¹	
PER	NEMA twist-lock receptacle only (controls ordered separately) ¹⁴	BL30 Bi-level switched dimming, 30% ^{16,19}	R90 Right rotated optics ¹	
PERS	Five-pin receptacle only (controls ordered separately) ^{14,19}	BL50 Bi-level switched dimming, 50% ^{16,19}	CCE Coastal Construction ²¹	
		DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) ¹⁷	HA 50°C ambient operation ²²	
			BAA Buy America(n) Act Compliant	
			SF Single fuse (120, 277, 347V) ²⁴	
			DF Double fuse (208, 240, 480V) ²⁴	
			Shipped separately	
			EGSR External Glare Shield (reversible, field install required, matches housing finish)	
			BSDB Bird Spikes (field install required)	



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DSX0-LED
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Ordering Information

Accessories

Ordered and shipped separately.

DLL127F 1.5 IU	Photocell - SSL twist-lock (120-277V) ²¹
DLL347F 1.5 CULIU	Photocell - SSL twist-lock (347V) ²¹
DLL480F 1.5 CULIU	Photocell - SSL twist-lock (480V) ²¹
DSHORT SBK	Shorting cap ²¹
DSX0HS P#	House-side shield (enter package number P1-7, P10-13 in place of #)
DSXRPA (FINISH)	Round pole adapter (#8 drilling, specify finish)
DSXRPAS (FINISH)	Round pole adapter #5 drilling (specify finish)
DSXSPAS (FINISH)	Square pole adapter #5 drilling (specify finish)
DSX0EGSR (FINISH)	External glare shield (specify finish)
DSX0B5DB (FINISH)	Bird spike deterrent bracket (specify finish)

NOTES

- Rotated optics available with packages P10, P11, P12 and P13. Must be combined with option L90 or R90.
- 30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 35K only available with 80CRI. Contact Technical Support for other possible combinations.
- T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option HS.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
- HVOLT not available with package P1, P2 and P10 when combined with option NLTAIR2 PIRHN or option PIR.
- XVOLT operates with any voltage between 277V and 480V (50/60 Hz).
- XVOLT not available in packages P1, P2 or P10. XVOLT not available with fusing (SF or DF).
- SPAS and RPAS for use with #5 drilling only (Not for use with #8 drilling).
- WBA cannot be combined with Type 5 distributions plus photocell (PER).
- NLTAIR2 and PIRHN must be ordered together. For more information on nLight Air 2.
- NLTAIR2 PIRHN not available with other controls including PIR, PER, PER5, PER7, FAO, BL30, BL50 and DMG. NLTAIR2 PIRHN not available with P1, P2 and P10 using HVOLT. NLTAIR2 PIRHN not available with P1, P2 and P10 using XVOLT. NLTAIR2 PIRHN not available with P1 using MVOLT.
- PIR not available with NLTAIR2, PER, PER5, PER7, FAO, BL30, BL50 and DMG. PIR not available with P1, P2 and P10 using HVOLT. PIR not available with P1, P2 and P10 using XVOLT. PIR not available with P1 using MVOLT.
- PER/PER5/PER7 not available with NLTAIR2, PIR, BL30, BL50. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
- FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, or DMG.
- BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO and DMG. BL30 or BL50 must specify 120, 277 or 347V. Consult tech support for 208, 240 or 480V.
- DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50 and FAO.
- Reference Motion Sensor Default Settings table on page 4 to see functionality.
- Reference Controls Options table on page 4.
- Option HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
- CCE option not available with option BS and EGSR. Contact Technical Support for availability.
- Option HA not available with performance packages P6, P7, P12 and P13.
- Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.
- Single fuse (SF) requires 120V, 277V, or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).

Shield Accessories



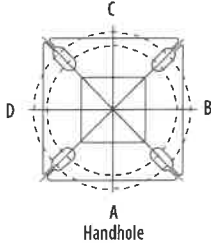
External Glare Shield (EGSR)



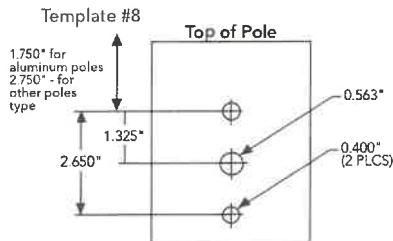
House Side Shield (HS)

Drilling

HANDHOLE ORIENTATION (from top of pole)



A Handhole



Tenon Mounting Slipfitter

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
2-3/8"	RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 390	AS3-5 320	AS3-5 490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS
Minimum Acceptable Outside Pole Dimension							
SPA	#8	3.5"	3.5"	3.5"	3.5"		3.5"
RPA	#8	3"	3"	3"	3"	3"	3"
SPAS	#5	3"	3"	3"	3"		3"
RPAS	#5	3"	3"	3"	3"	3"	3"
SPA8N	#8	3"	3"	3"	3"		3"

DSX0 Area Luminaire - EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX0 with SPA	0.44	0.88	0.96	1.18	—	1.16
DSX0 with SPAS, SPA8N	0.51	1.02	1.06	1.26	—	1.29
DSX0 with RPA, RPAS	0.51	1.02	1.06	1.26	1.24	1.29
DSX0 with MA	0.64	1.28	1.24	1.67	1.70	1.93

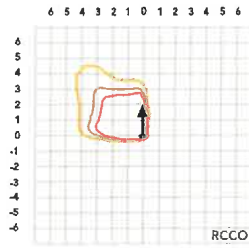
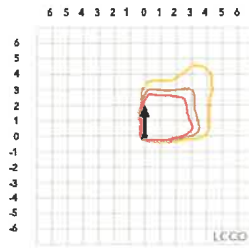
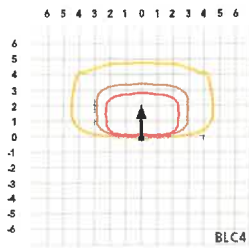
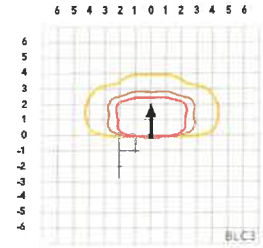
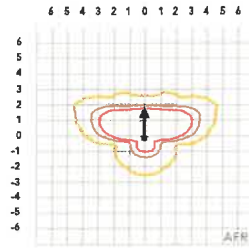
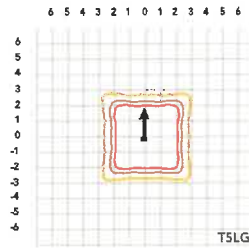
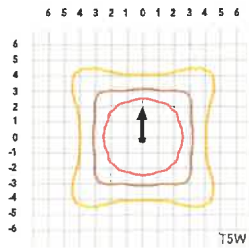
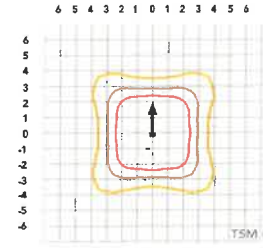
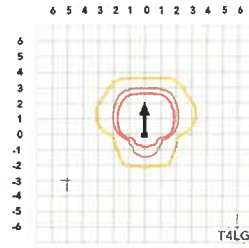
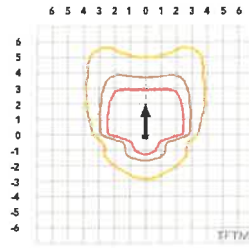
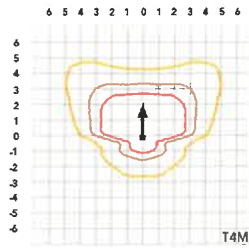
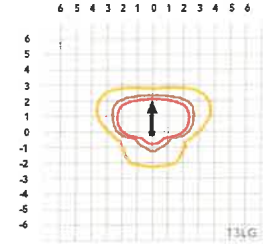
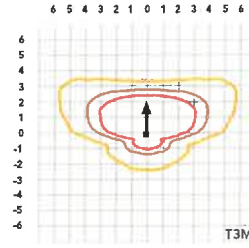
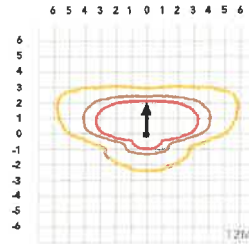
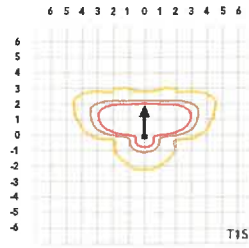
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit [Lithonia Lighting's homepage](#).

Isofootcandle plots for the DSX0 LED P7 40K 70CRI. Distances are in units of mounting height (20').

LEGEND

- 0.1 fc
- 0.5 fc
- 1.0 fc



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.94
50,000	0.89
100,000	0.80

FAO Dimming Settings

FAO Position	% Wattage	% Lumen Output
8	100%	100%
7	93%	95%
6	80%	85%
5	66%	73%
4	54%	61%
3	41%	49%
2	29%	36%
1	15%	20%

*Note: Calculated values are based on original performance package data. When calculating new values for given FAO position, use published values for each package based on input watts and lumens by optic type.

Motion Sensor Default Settings

Option	Unoccupied Dimmed Level	High Level (when occupied)	Photocell Operation	Dwell Time	Ramp-up Time	Dimming Fade Rate
PIR	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min
NLTAIR2 PIRHN	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min

Controls Options

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS (not available on DSX0)	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PERS or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire. Cannot be used with other controls options that need the 0-10V leads.
PIR	Motion sensor with integral photocell. Sensor suitable for 8' to 40' mounting height.	Luminaires dim when no occupancy is detected.	Acuity Controls rSBG	Cannot be used with other controls options that need the 0-10V leads.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclipse.	nLight Air rSBG	nLight AIR sensors can be programmed and commissioned from the ground using the CLAIRity Pro app. Cannot be used with other controls options that need the 0-10V leads.
BL30 or BL50	Integrated bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output	BLC device provides input to 0-10V dimming leads on all drivers providing either 100% or dimmed (30% or 50%) control by a secondary circuit	BLC UVOLT1	BLC device is powered off the 0-10V dimming leads, thus can be used with any input voltage from 120 to 480V

Electrical Load

					Current (A)					
	Performance Package	LED Count	Drive Current (mA)	Wattage	120V	208V	240V	277V	347V	480V
Forward Optics (Non-Rotated)	P1	20	530	34	0.28	0.16	0.14	0.12	0.10	0.07
	P2	20	700	45	0.38	0.22	0.19	0.16	0.13	0.09
	P3	20	1050	69	0.57	0.33	0.29	0.25	0.20	0.14
	P4	20	1400	94	0.78	0.45	0.39	0.34	0.27	0.19
	P5	40	700	89	0.75	0.43	0.38	0.33	0.26	0.19
	P6	40	1050	136	1.14	0.66	0.57	0.49	0.39	0.29
	P7	40	1300	170	1.42	0.82	0.71	0.62	0.49	0.36
Rotated Optics (Requires L90 or R90)	P10	30	530	51	0.42	0.24	0.21	0.18	0.15	0.11
	P11	30	700	67	0.57	0.33	0.28	0.25	0.20	0.14
	P12	30	1050	103	0.86	0.50	0.43	0.37	0.30	0.22
	P13	30	1300	129	1.07	0.62	0.54	0.46	0.37	0.27

LED Color Temperature / Color Rendering Multipliers

	70 CRI		80 CRI		90 CRI	
	Lumen Multiplier	Availability	Lumen Multiplier	Availability	Lumen Multiplier	Availability
5000K	102%	Standard	92%	Extended lead-time	71%	(see note)
4000K	100%	Standard	92%	Extended lead-time	67%	(see note)
3500K	100%	(see note)	90%	Extended lead-time	63%	(see note)
3000K	96%	Standard	87%	Extended lead-time	61%	(see note)
2700K	94%	(see note)	85%	Extended lead-time	57%	(see note)

Note: Some LED types are available as per special request. Contact Technical Support for more information.

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Forward Optics																			
Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K					40K					50K				
					(3000K, 70 CRI)					(4000K, 70 CRI)					(5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	33W	20	530	T1S	4,906	1	0	1	148	5,113	1	0	1	154	5,213	1	0	1	157
				T2M	4,545	1	0	2	137	4,736	1	0	2	143	4,829	1	0	2	145
				T3M	4,597	1	0	2	138	4,791	1	0	2	144	4,885	1	0	2	147
				T3LG	4,107	1	0	1	124	4,280	1	0	1	129	4,363	1	0	1	131
				T4M	4,666	1	0	2	141	4,863	1	0	2	146	4,957	1	0	2	149
				T4LG	4,244	1	0	1	128	4,423	1	0	1	133	4,509	1	0	1	136
				TFTM	4,698	1	0	2	141	4,896	1	0	2	147	4,992	1	0	2	150
				T5M	4,801	3	0	1	145	5,003	3	0	1	151	5,101	3	0	1	154
				T5W	4,878	3	0	1	147	5,084	3	0	2	153	5,183	3	0	2	156
				T5LG	4,814	2	0	1	145	5,018	2	0	1	151	5,115	2	0	1	154
				BLC3	3,344	0	0	1	101	3,485	0	0	1	105	3,553	0	0	1	107
				BLC4	3,454	0	0	2	104	3,599	0	0	2	108	3,670	0	0	2	111
				RCCO	3,374	0	0	1	102	3,517	0	0	1	106	3,585	0	0	1	108
P2	45W	20	700	LCCO	3,374	0	0	1	102	3,517	0	0	1	106	3,585	0	0	1	108
				AFR	4,906	1	0	1	148	5,113	1	0	1	154	5,213	1	0	1	157
				T1S	6,328	1	0	1	140	6,595	1	0	1	146	6,724	1	0	1	149
				T2M	5,862	1	0	2	130	6,109	1	0	2	135	6,228	1	0	2	138
				T3M	5,930	1	0	3	131	6,180	1	0	3	137	6,301	1	0	3	140
				T3LG	5,297	1	0	1	117	5,521	1	0	1	122	5,628	1	0	1	125
				T4M	6,018	1	0	3	133	6,272	1	0	3	139	6,395	1	0	3	142
				T4LG	5,474	1	0	1	121	5,705	1	0	1	126	5,816	1	0	1	129
				TFTM	6,060	1	0	3	134	6,316	1	0	3	140	6,439	1	0	3	143
				T5M	6,192	3	0	1	137	6,453	3	0	2	143	6,579	3	0	2	146
				T5W	6,293	3	0	2	139	6,558	3	0	2	145	6,686	3	0	2	148
				T5LG	6,210	2	0	1	138	6,472	3	0	1	143	6,598	3	0	1	146
				BLC3	4,313	0	0	2	96	4,495	0	0	2	100	4,583	0	0	2	102
P3	69W	20	1050	BLC4	4,455	0	0	2	99	4,643	0	0	2	103	4,733	0	0	2	105
				RCCO	4,352	0	0	2	96	4,536	0	0	2	100	4,624	0	0	2	102
				LCCO	4,352	0	0	2	96	4,536	0	0	2	100	4,624	0	0	2	102
				AFR	6,328	1	0	1	140	6,595	1	0	1	146	6,724	1	0	1	149
				T1S	9,006	1	0	2	131	9,386	1	0	2	136	9,569	1	0	2	139
				T2M	8,343	2	0	3	121	8,694	2	0	3	126	8,864	2	0	3	129
				T3M	8,439	2	0	3	122	8,795	2	0	3	128	8,967	2	0	3	130
				T3LG	7,539	1	0	2	109	7,857	1	0	2	114	8,010	1	0	2	116
				T4M	8,565	2	0	3	124	8,926	2	0	3	129	9,100	2	0	3	132
				T4LG	7,790	1	0	2	113	8,119	1	0	2	118	8,277	1	0	2	120
				TFTM	8,624	1	0	3	125	8,988	1	0	3	130	9,163	2	0	3	133
				T5M	8,812	3	0	2	128	9,184	4	0	2	133	9,363	4	0	2	136
				T5W	8,955	4	0	2	130	9,333	4	0	2	135	9,515	4	0	2	138
P4	93W	20	1400	T5LG	8,838	3	0	1	128	9,211	3	0	1	134	9,390	3	0	1	136
				BLC3	6,139	0	0	2	89	6,398	0	0	2	93	6,522	0	0	2	95
				BLC4	6,340	0	0	3	92	6,607	0	0	3	96	6,736	0	0	3	98
				RCCO	6,194	1	0	2	90	6,455	1	0	2	94	6,581	1	0	2	95
				LCCO	6,194	1	0	2	90	6,455	1	0	2	94	6,581	1	0	2	95
				AFR	9,006	1	0	2	131	9,386	1	0	2	136	9,569	1	0	2	139
				T1S	11,396	1	0	2	122	11,877	1	0	2	128	12,109	2	0	2	130
				T2M	10,557	2	0	3	113	11,003	2	0	3	118	11,217	2	0	3	121
				T3M	10,680	2	0	3	115	11,130	2	0	3	120	11,347	2	0	3	122
				T3LG	9,540	1	0	2	103	9,942	1	0	2	107	10,136	1	0	2	109
				T4M	10,839	2	0	3	117	11,296	2	0	3	121	11,516	2	0	4	124
				T4LG	9,858	1	0	2	106	10,274	1	0	2	110	10,474	1	0	2	113
				TFTM	10,914	2	0	3	117	11,374	2	0	3	122	11,596	2	0	3	125

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Forward Optics																			
Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K					40K					50K				
					(3000K, 70 CRI)					(4000K, 70 CRI)					(5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P5	90W	40	700	T1S	12,380	2	0	2	137	12,902	2	0	2	143	13,154	2	0	2	146
				T2M	11,468	2	0	3	127	11,952	2	0	3	133	12,185	2	0	3	135
				T3M	11,601	2	0	3	129	12,091	2	0	3	134	12,326	2	0	4	137
				T3LG	10,363	2	0	2	115	10,800	2	0	2	120	11,011	2	0	2	122
				T4M	11,774	2	0	4	131	12,271	2	0	4	136	12,510	2	0	4	139
				T4LG	10,709	1	0	2	119	11,160	2	0	2	124	11,378	2	0	2	126
				TFTM	11,856	2	0	3	132	12,356	2	0	4	137	12,596	2	0	4	140
				T5M	12,114	4	0	2	134	12,625	4	0	2	140	12,871	4	0	2	143
				TSW	12,310	4	0	3	137	12,830	4	0	3	142	13,080	4	0	3	145
				T5LG	12,149	3	0	2	135	12,662	3	0	2	141	12,908	3	0	2	143
				BLC3	8,438	0	0	2	94	8,794	0	0	2	98	8,966	0	0	2	99
				BLC4	8,715	0	0	3	97	9,083	0	0	3	101	9,260	0	0	3	103
				RCCO	8,515	1	0	2	94	8,874	1	0	2	98	9,047	1	0	2	100
				LCCO	8,515	1	0	2	94	8,874	1	0	2	98	9,047	1	0	2	100
				AFR	12,380	2	0	2	137	12,902	2	0	2	143	13,154	2	0	2	146
P6	137W	40	1050	T1S	17,545	2	0	3	128	18,285	2	0	3	133	18,642	2	0	3	136
				T2M	16,253	3	0	4	119	16,939	3	0	4	124	17,269	3	0	4	126
				T3M	16,442	2	0	4	120	17,135	3	0	4	125	17,469	3	0	4	128
				T3LG	14,687	2	0	2	107	15,306	2	0	2	112	15,605	2	0	2	114
				T4M	16,687	2	0	4	122	17,391	3	0	5	127	17,730	3	0	5	129
				T4LG	15,177	2	0	2	111	15,817	2	0	2	115	16,125	2	0	2	118
				TFTM	16,802	2	0	4	123	17,511	2	0	4	128	17,852	2	0	5	130
				T5M	17,168	4	0	2	125	17,893	5	0	3	131	18,241	5	0	3	133
				TSW	17,447	5	0	3	127	18,183	5	0	3	133	18,537	5	0	3	135
				T5LG	17,218	4	0	2	126	17,944	4	0	2	131	18,294	4	0	2	134
				BLC3	11,959	0	0	3	87	12,464	0	0	3	91	12,707	0	0	3	93
				BLC4	12,352	0	0	4	90	12,873	0	0	4	94	13,124	0	0	4	96
				RCCO	12,067	1	0	3	88	12,576	1	0	3	92	12,821	1	0	3	94
				LCCO	12,067	1	0	3	88	12,576	1	0	3	92	12,821	1	0	3	94
				AFR	17,545	2	0	3	128	18,285	2	0	3	133	18,642	2	0	3	136
P7	171W	40	1300	T1S	20,806	2	0	3	122	21,683	2	0	3	127	22,106	2	0	3	129
				T2M	19,273	3	0	4	113	20,086	3	0	4	118	20,478	3	0	4	120
				T3M	19,497	3	0	5	114	20,319	3	0	5	119	20,715	3	0	5	121
				T3LG	17,416	2	0	2	102	18,151	2	0	2	106	18,504	2	0	2	108
				T4M	19,787	3	0	5	116	20,622	3	0	5	121	21,024	3	0	5	123
				T4LG	17,997	2	0	2	105	18,756	2	0	2	110	19,121	2	0	2	112
				TFTM	19,924	3	0	5	117	20,765	3	0	5	122	21,170	3	0	5	124
				T5M	20,359	5	0	3	119	21,217	5	0	3	124	21,631	5	0	3	127
				TSW	20,689	5	0	3	121	21,561	5	0	3	126	21,982	5	0	3	129
				T5LG	20,418	4	0	2	120	21,279	4	0	2	125	21,694	4	0	2	127
				BLC3	14,182	0	0	3	83	14,780	0	0	3	87	15,068	0	0	3	88
				BLC4	14,647	0	0	4	86	15,265	0	0	4	89	15,562	0	0	4	91
				RCCO	14,309	1	0	3	84	14,913	1	0	3	87	15,204	1	0	3	89
				LCCO	14,309	1	0	3	84	14,913	1	0	3	87	15,204	1	0	3	89
				AFR	20,806	2	0	3	122	21,683	2	0	3	127	22,106	2	0	3	129

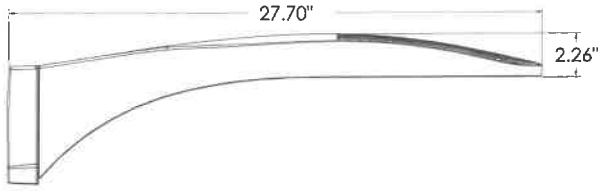
Performance Data

Lumen Output

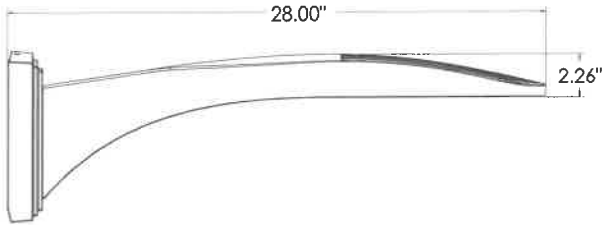
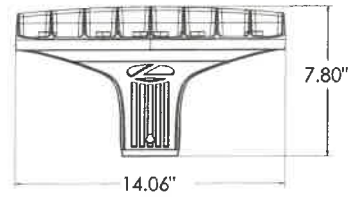
Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Rotated Optics																							
Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K					40K					50K								
					(3000K, 70 CRI)					(4000K, 70 CRI)					(5000K, 70 CRI)								
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW				
P10	51W	30	530	T1S	7,399	3	0	3	145	7,711	3	0	3	151	7,862	3	0	3	154				
				T2M	6,854	3	0	3	135	7,144	3	0	3	140	7,283	3	0	3	143				
				T3M	6,933	3	0	3	136	7,225	3	0	3	142	7,366	3	0	3	145				
				T3LG	6,194	2	0	2	122	6,455	2	0	2	127	6,581	2	0	2	129				
				T4M	7,036	3	0	3	138	7,333	3	0	3	144	7,476	3	0	3	147				
				T4LG	6,399	2	0	2	126	6,669	2	0	2	131	6,799	2	0	2	134				
				TFIM	7,086	3	0	3	139	7,385	3	0	3	145	7,529	3	0	3	148				
				T5M	7,239	3	0	2	142	7,545	3	0	2	148	7,692	3	0	2	151				
				TSW	7,357	3	0	2	145	7,667	3	0	2	151	7,816	4	0	2	154				
				TSLG	7,260	3	0	1	143	7,567	3	0	1	149	7,714	3	0	1	152				
				BLC3	5,043	3	0	3	99	5,256	3	0	3	103	5,358	3	0	3	105				
				BLC4	5,208	3	0	3	102	5,428	3	0	3	107	5,534	3	0	3	109				
				RCCO	5,089	0	0	2	100	5,303	0	0	2	104	5,407	0	0	2	106				
				LCCO	5,089	0	0	2	100	5,303	0	0	2	104	5,407	0	0	2	106				
				AFR	7,399	3	0	3	145	7,711	3	0	3	151	7,862	3	0	3	154				
				P11	68W	30	700	T1S	9,358	3	0	3	138	9,753	3	0	3	143	9,943	3	0	3	146
								T2M	8,669	3	0	3	127	9,034	3	0	3	133	9,211	3	0	3	135
T3M	8,768	3	0					3	129	9,138	3	0	3	134	9,316	3	0	3	137				
T3LG	7,833	3	0					3	115	8,164	3	0	3	120	8,323	3	0	3	122				
T4M	8,899	3	0					3	131	9,274	3	0	3	136	9,455	3	0	3	139				
T4LG	8,093	3	0					3	119	8,435	3	0	3	124	8,599	3	0	3	126				
TFIM	8,962	3	0					3	132	9,340	3	0	3	137	9,522	3	0	3	140				
T5M	9,156	4	0					2	135	9,542	4	0	2	140	9,728	4	0	2	143				
TSW	9,304	4	0					2	137	9,696	4	0	2	143	9,885	4	0	2	145				
TSLG	9,182	3	0					1	135	9,569	3	0	1	141	9,756	3	0	1	143				
BLC3	6,378	3	0					3	94	6,647	3	0	3	98	6,777	3	0	3	100				
BLC4	6,587	3	0					3	97	6,865	3	0	3	101	6,999	3	0	3	103				
RCCO	6,436	0	0					2	95	6,707	0	0	2	99	6,838	0	0	2	101				
LCCO	6,436	0	0					2	95	6,707	0	0	2	99	6,838	0	0	2	101				
AFR	9,358	3	0					3	138	9,753	3	0	3	143	9,943	3	0	3	146				
P12	103W	30	1050					T1S	13,247	3	0	3	128	13,806	3	0	3	134	14,075	3	0	3	136
								T2M	12,271	4	0	4	119	12,789	4	0	4	124	13,038	4	0	4	126
				T3M	12,412	4	0	4	120	12,935	4	0	4	125	13,187	4	0	4	128				
				T3LG	11,089	3	0	3	107	11,556	3	0	3	112	11,782	3	0	3	114				
				T4M	12,597	4	0	4	122	13,128	4	0	4	127	13,384	4	0	4	129				
				T4LG	11,457	3	0	3	111	11,940	3	0	3	116	12,173	3	0	3	118				
				TFIM	12,686	4	0	4	123	13,221	4	0	4	128	13,479	4	0	4	130				
				T5M	12,960	4	0	2	125	13,507	4	0	2	131	13,770	4	0	2	133				
				TSW	13,170	4	0	3	127	13,726	4	0	3	133	13,994	4	0	3	135				
				TSLG	12,998	3	0	2	126	13,546	3	0	2	131	13,810	3	0	2	134				
				BLC3	9,029	3	0	3	87	9,409	3	0	3	91	9,593	3	0	3	93				
				BLC4	9,324	4	0	4	90	9,718	4	0	4	94	9,907	4	0	4	96				
				RCCO	9,110	1	0	2	88	9,495	1	0	2	92	9,680	1	0	2	94				
				LCCO	9,110	1	0	2	88	9,494	1	0	2	92	9,680	1	0	2	94				
				AFR	13,247	3	0	3	128	13,806	3	0	3	134	14,075	3	0	3	136				
				P13	129W	30	1300	T1S	15,704	3	0	3	122	16,366	3	0	3	127	16,685	4	0	4	130
								T2M	14,547	4	0	4	113	15,161	4	0	4	118	15,457	4	0	4	120
T3M	14,714	4	0					4	114	15,335	4	0	4	119	15,634	4	0	4	121				
T3LG	13,145	3	0					3	102	13,700	3	0	3	106	13,967	3	0	3	108				
T4M	14,933	4	0					4	116	15,563	4	0	4	121	15,867	4	0	4	123				
T4LG	13,582	3	0					3	105	14,155	3	0	3	110	14,431	3	0	3	112				
TFIM	15,039	4	0					4	117	15,673	4	0	4	122	15,979	4	0	4	124				
T5M	15,364	4	0					2	119	16,013	4	0	2	124	16,325	4	0	2	127				
TSW	15,613	5	0					3	121	16,272	5	0	3	126	16,589	5	0	3	129				
TSLG	15,409	3	0					2	120	16,059	3	0	2	125	16,372	4	0	2	127				
BLC3	10,703	4	0					4	83	11,155	4	0	4	87	11,372	4	0	4	88				
BLC4	11,054	4	0					4	86	11,520	4	0	4	89	11,745	4	0	4	91				
RCCO	10,800	1	0					2	84	11,256	1	0	2	87	11,475	1	0	2	89				
LCCO	10,800	1	0					2	84	11,255	1	0	2	87	11,475	1	0	2	89				
AFR	15,704	3	0					3	122	16,366	3	0	3	127	16,685	4	0	4	130				

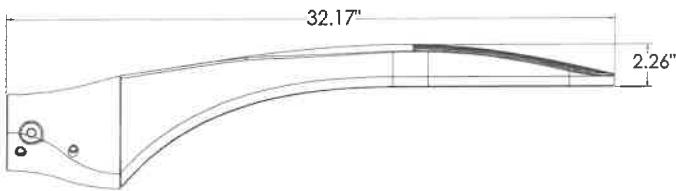
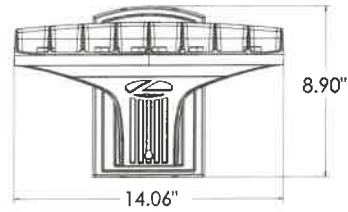
Dimensions



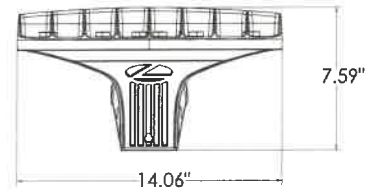
DSX0 with RPA, RPA5, SPA5, SPA8N mount
Weight: 25 lbs



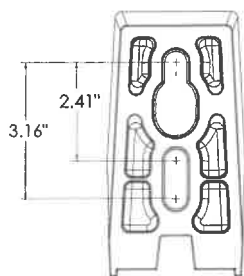
DSX0 with WBA mount
Weight: 27 lb



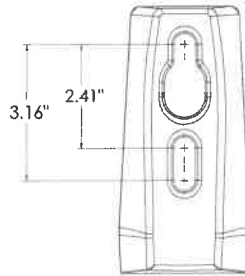
DSX0 with MA mount
Weight: 28 lbs



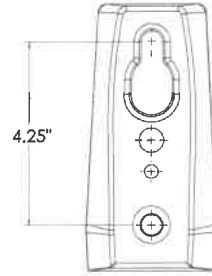
SPA (STANDARD ARM)



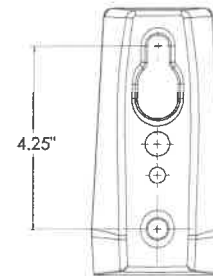
RPA



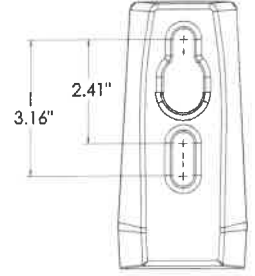
SPA5



RPA5



SPA8N



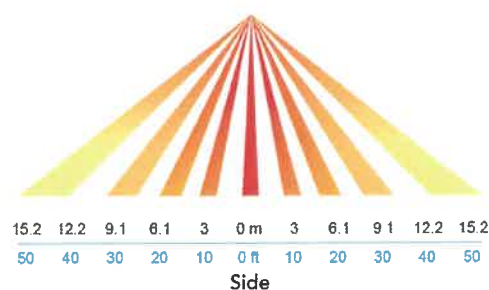
nLight Control - Sensor Coverage and Settings

nLight Sensor Coverage Pattern

NLTAIR2 PIRHN



Top



Side

FEATURES & SPECIFICATIONS

INTENDED USE

The sleek design of the D-Series Size 0 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and pedestrian areas.

CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. Housing driver compartment is completely sealed against moisture and environmental contaminants (IP66). Vibration rated per ANSI C136.31 for 3G. Low EPA (0.44 ft²) for optimized pole wind loading.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

COASTAL CONSTRUCTION (CCE)

Optional corrosion resistant construction is engineered with added corrosion protection in materials and/or pre-treatment of base material under super durable paint. Provides additional corrosion protection for applications near coastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with scribe rating of 10. Additional lead-times may apply.

OPTICS

Precision-molded proprietary silicone lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in 3000 K, 4000 K or 5000 K (70 CRI) configurations. 80CRI configurations are also available. The D-Series Size 0 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L80/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS

The DSX0 LED area luminaire has a number of control options. DSX Size 0, comes standard with 0-10V dimming driver. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. PIR integrated motion sensor with on-board photocell feature field-adjustable programming and are suitable for mounting heights up to 40 feet. Control option BL features a bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output.

nLIGHT AIR CONTROLS

The DSX0 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclipse. Additional information about nLight Air can be found [here](#).

INSTALLATION

Integral mounting arm allows for fast mounting using Lithonia standard #8 drilling and accommodates pole drilling's from 2.41 to 3.12" on center. The standard "SPA" option for square poles and the "RPA" option for round poles use the #8 drilling. For #5 pole drillings, use SPA5 or RPA5. Additional mountings are available including a wall bracket (WBA) and mast arm (MA) option that allows luminaire attachment to a 2 3/8" horizontal mast arm.

LISTINGS

UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP66 rated. Rated for -40°C minimum ambient.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

BUY AMERICAN ACT

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



COMMERCIAL OUTDOOR

One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com
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DSX0-LED
Rev. 03/19/24
Page 9 of 9

ADVANTAGE ONE SOURCE

SPSV Color Fencing System



SPSV



American Society for
Testing and Materials



GRAND RAPIDS, MICHIGAN 800-850-3433
GREENSBORO, NORTH CAROLINA 800-582-1533
MELBOURNE, FLORIDA 800-290-7473
HAYDEN, ALABAMA 800-521-3810
MOUNT STERLING, OHIO 800-742-3467
PORT ALLEN, LOUISIANA 866-219-4336
BLADENSBURG, MARYLAND 866-792-5295
MANCHESTER, CONNECTICUT 877-777-8721

National Headquarters **RUSSELL SPRINGS, KENTUCKY** 270-866-3331 or 800-451-2612

SPS **STEPHEN'S**
PIPE & STEEL

YOUR SUPPLIER FOR:

Largest Pipe and Tube Inventory in the US
 Chain Link Fabric, Framework, Gates and Accessories
 Galvanized | PVC-Coated | DuraLast™ Powder-Coat
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 High Security Mini Mesh
 WeatherShield Windscreen
 Generations™ PVC Fencing
 Modular and Boxed Kennel Systems
 OnGuard Security Fence Systems
 SiteGuard™ and Temporary Fencing
 Extended Lengths in 2-1/2", 3" and 4"

Attachment: Exhibit B. Plan Set (O-2024-58 : Approve a Prelim Plan, Amendmt to SU, and Vari. for Site Improvements at BGHS at 1100 W



Extruded Vinyl Chain Link Fabric

Vinyl chain link fabric from Stephens Pipe & Steel matches your security and enclosure requirements with the appeal that allows the finished fence to blend in or nearly disappear depending on the colors of vinyl chosen. The jacket, of extruded vinyl chain link fabric from Stephens Pipe & Steel, encompasses the steel core making the product suitable for most residential or light commercial applications.

Meets the tenets of ASTM F668, RR-F-191, AASHTO M 81

Vinyl Class 2A Extruded & Bonded Vinyl Chain Link Fabric

Greater life and protection from the environment is afforded for Class 2A by creating an adhesive bond between the vinyl coating and the core wire. This product offers excellent life for residential and commercial installations. Available in meshes from 3/8" to 2 3/8" and in heights up to 20'.

Meets the tenets of ASTM F668, RR-F-191, AASHTO M 81

Vinyl Class 2B Fused and Bonded Chain Link Fabric

Stephens Pipe & Steel offers this product as its premium vinyl solution. The vinyl coating is thermally fused to the galvanized steel core making it ideal for the most difficult of environmental conditions. Available in meshes from 3/8" to 2 3/8" and in heights up to 20'.

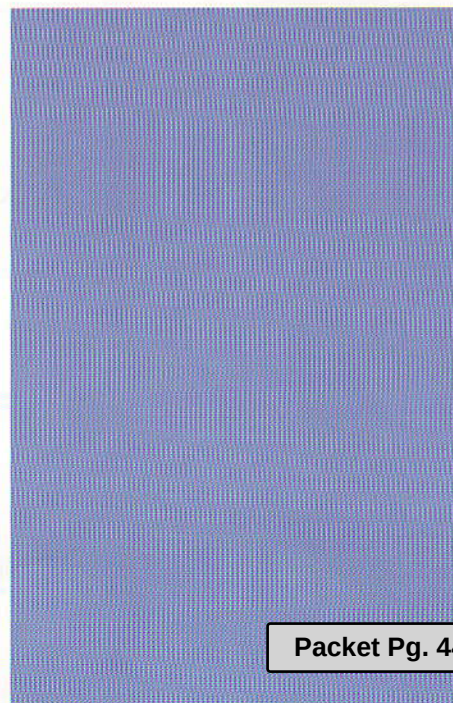
Meets the tenets of ASTM F668, RR-F-191, AASHTO M 81

SPSV Framework and Accessories

After thorough cleaning, the SPSV framework materials are primed and then PVC coated to meet the most rigid government and ASTM specifications. Our industrial-grade vinyl framework is available in Schedule 40, SS 40 and 20 type products and structural weight pipe. A wide variety of O.D.s and gauges can be coated to meet your needs. All of our hardware items are primed and then coated in accordance with ASTM 626. Available in Ensor Green, Woodland Green, Brown and Black. Other non-stock colors are available.

Framework meets the tenets of ASTM F1043

Fittings meet the tenets of ASTM F 626



COLOR CHART

Woodland Green



Ensor Green



Black



Brown



(Actual color may vary from samples above.)



P.O. Box 618
Russell Springs, KY 42642
800-451-2612
www.spsfence.com

Offer your customers the safety and security of chain link with the aesthetics of vinyl. Mesh sizes as small as 3/8" in Extruded, Extruded & Bonded (Class A) and Fused & Bonded (Class B).

Ideal for installations including:

RESIDENTIAL

RECREATIONAL FACILITIES

HIGHWAYS

INDUSTRIAL & MANUFACTURING FACILITIES

PRISONS

SCHOOLS & OTHER INSTITUTIONS

AIRPORTS

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PORTS

SPSV Color Fencing System is available through any of our offices nationwide.





Poly(Vinyl Chloride) (PVC)- Coated Steel Chain Link Fence Fabric

Class 2b - Fused and Adhered
ASTM F668, Federal Specification RR-F-191 Type IV, AASHTO M-181 Type IV

PRODUCT NAME

SPSV Fused and Bonded Poly (Vinyl Chloride)- PVC Coated Steel Chain Link Fence Fabric

MANUFACTURER

Stephens Pipe and Steel, LLC Manufacturing Locations:

Stephens Pipe and Steel, LLC
1413 Steve Warriner Drive
Russell Springs, Kentucky 42642

Stephens Pipe and Steel, LLC
4301 46th Street
Bladensburg, Maryland 20710

Stephens Pipe and Steel
2891 State Hwy 160
Warrior, Alabama 35180

PRODUCT DESCRIPTION

Basic Use:

Fused and adhered fabric is a bonded vinyl, high strength galvanized steel, chain link fence fabric for industrial, commercial and institutional application. Fused and adhered fabric is the highest quality available and is used in numerous federal, state, civil, and military specifications.

Composition and Materials:

The galvanized steel core wire for producing fused and adhered PVC coated steel chain link fence fabric is produced by cold-drawing good commercial grade steel rod into wire of the appropriate diameter. The steel rod from which the wire is drawn is produced by the open hearth, electric furnace or basic oxygen process. The galvanized coating is produced by passing the cleaned wire through a bath of molten zinc which conforms to ASTM B6.

The fused and adhered PVC coating is produced by first applying a thermoset bonding agent to the galvanized core wire to which the PVC is bonded. A coating of PVC up to 0.010 in. (0.25 mm) is then fused and bonded to the wire.

Standards:

ASTMB 6 Slab Zinc
ASTM F567 Installation of Chain Link Fence
ASTM F668 Poly(Vinyl Chloride) (PVC) and Other Organic Polymer-Coated Steel Chain Link Fence Fabric,
Class 2b
Federal Specification RR-F-191 K1 D
Fencing, Wire and Post Metal
(Chain-Link Fence Fabric), Type IV
American Association of State Highway Transportation Officials (AASHTO)
M-181 Chain Link Fence, Type IV,
Class A

TECHNICAL DATA

General:

The manufacturer, if requested, will supply samples and certification that all materials furnished fully comply with the appropriate specifications.

Chain Link Fence Fabric:

The base metal of the chain link fence fabric is composed of commercial quality, medium-carbon galvanized (zinc coated) steel wire. The vinyl coating is thermally bonded to a thermoset bonding layer over a galvanized steel wire. This process ensures a tightly bonded coating free of voids, as well as a smooth surface appearance. Vinyl coating thickness, galvanized coating weight, and wire tensile strength conform to Federal Specification RR-F-191, ASTM F668, Class 2a, and AASHTO M-181 Type IV, Class A, as shown in Table 1. The wire is PVC coated before weaving and is free and flexible at all joints. Unless otherwise specified, fabric woven in 2 in. (50 mm) mesh, under 72" (1,830 mm) in height, is knuckled at both selvages; fabric 72" (1,830mm) high and over is knuckled at one selvage and twisted at the other. All fabrics woven into meshes under 2 in. (50 mm) have both selvages knuckled.

Wire Coating:

Only plasticized poly(vinyl chloride) (PVC) with a low temperature (-20 °C; -4°F) plasticizer and no extenders or extraneous matter other than the necessary stabilizers and pigments, is used. The PVC coating resists attack from prolonged exposure to dilute solutions of most common mineral acids, seawater, and dilute solutions of most salts and alkali.

ASTM Color System:

Standard colors conform to ASTM F934 and include:

Ensor	Bro wn	B lack
Green	27.76	22.30
28.61	3.37	-0.09
-12.59	4.28	-0.85
1.95		

Other colors are available by special order.

Coating Adhesion: The PVC coated wire shall pass the test for adhesion contained in ASTM F668 for Class 2b chain link fabric.

INSTALLATION

Install fence in accordance with ASTM Practice 567. Handle all PVC coated material with care. If PVC coating is damaged during installation, contractor must replace or repair the material at own expense.

AVAILABILITY AND COST

Availability: PVC-coated steel chain link fence fabric is available for shipment throughout the United States and worldwide.

Cost: Material costs may vary depending on specific requirements. Costs may be obtained through all Stephens Pipe Service Centers.

WARRANTY

Fused and adhered PVC coated steel chain link fence fabric is warranted for 15 years against failure due to rust or corrosion.

MAINTENANCE

Periodic inspection is recommended but no routine maintenance is required.

TECHNICAL SERVICES

Technical services are available. Call your sales representative for assistance.

Memorandum

To: Aneta Mistak, District 214
Jeff Daurer, District 214
Andrew Phelps, STR Partners, LLC

From: David Westergreen, GHA

Copy: Don Matthews, GHA

Date: February 20th, 2024

Subject: Parking Analysis
Buffalo Grove High School
1000 W Dundee Road
Buffalo Grove, Illinois 60089

Part I. Introduction and Project Context

Gewalt Hamilton Associates, Inc. (GHA) has conducted a Parking Analysis for the existing Buffalo Grove High School campus. The school is located at 1000 W Dundee Road, at the northeast corner of Arlington Heights Road and W Dundee Road, in Buffalo Grove, IL. The student body of Buffalo Grove High School is reported at 1,957 students enrolled for the 2023-2024 school year. The staff count for Buffalo Grove High School is 251 teachers and faculty.

The school is served by a total of 655 parking spaces including 10 accessible spaces, 6 electric vehicle spaces, and 7 small bus and van spaces. The spaces are divided into four parking lots: the west administration lot, the main north lot, the main south lot, and the remote lot. There are three (3) full driveway accesses to the school. One access is a signalized intersection with W Dundee Road, and two are full unsignalized accesses along the east side of Arlington Heights Road. One of the access drives is exclusively for the administration lot and the other access is for the drop-off lane and access to the main and remote parking lots. Student parking is only available in the main parking lots and the remote lot.

The following provides a summary of existing conditions and the Parking Analysis conducted. *Exhibits* and *Appendices* referenced are located at the end of this document.

Part II. Background Information

Site Location Map and Roadway Inventory

Exhibit 1 provides a site location map as well as a map of the existing parking lots.

Roadway Network

Arlington Heights Road is a north-south, minor arterial roadway providing a five-lane cross-section (2 travel lanes in each direction with a paved median providing turn lanes) with a posted speed limit of 35 mph in the site vicinity. There is a signalized intersection southwest of the property at Arlington Heights Road and W Dundee Road. Arlington Heights Road is under the jurisdiction of Cook County in the vicinity of the site.

Buffalo Grove High School
1100 W Dundee Road
Buffalo Grove, Illinois

W Dundee Road (IL Route 68) is an east-west, other principal arterial roadway providing a 4-lane cross-section (two travel lanes in each direction) with a posted speed limit of 35 mph in the site vicinity. There is a signalized intersection southwest of the property at Arlington Heights Road and W Dundee Road. Arlington Heights Road is under the jurisdiction of Cook County in the vicinity of the site. W Dundee Road widens on approach to this signalized intersection to provide dual left-turn lanes in each direction onto Arlington Heights Road. W Dundee Road is under the jurisdiction of the Illinois Department of Transportation.

Pedestrian Facilities

Sidewalks are provided along both the west and south sides of the site adjacent to the roadways. Zebra-style striped crosswalks are maintained across all three of the site drives, and Continental-style striped crosswalks are maintained across W Dundee Road and Arlington Heights Road at the two signalized intersections in the site vicinity.

Part III. Parking Evaluation

Parking Requirements

Based on the parking requirements outlined in the Village of Buffalo Grove Municipal Code, 1 parking spot is required for every faculty member, as well as 1 parking spot is required for every 6 students for high schools. This total number of parking spaces required for Buffalo Grove High School with 2023-2024 enrollment is 578 spaces. The excerpt of the Village Code can be found in **Appendix A**.

Parking Supply and Occupancy Survey – Buffalo Grove High School

A parking supply and occupancy survey of the parking serving Buffalo Grove High School was conducted on Tuesday, February 12th, 2024, from 7:00 AM to 9:00 AM and 2:00 PM to 4:00 PM. The results of the parking survey are summarized on the exhibit contained in **Appendix B**. See **Exhibit 1** for a map of parking spaces.

The findings of the survey are summarized below:

- A total of 655 parking spaces were surveyed: 20 spaces to the west of the building (areas A to B on the map), 229 parking spaces in the north main parking lot (areas C to I on the map), 206 parking spaces in the south main parking lot (areas J to P on the Map), and 179 parking spaces in the remote lot (areas Q to U on the map), and the 23 spaces for bus, ADA, and electric vehicles.
- Approximately 80 percent (525 of 655) of the total parking spaces surveyed were occupied at the building's observed peak occupancy, which occurred between 8:00 and 9:00 AM.
- Our observations indicate that the occupancy of the parking lot slowly reduced during the day after the scheduled start of school at 8:00 AM, as students leave campus for various reasons before the school dismissal at 3:00 PM.
- Based on the maximum occupied parking spaces (525), and the total student count (1957) and faculty count of 251, the observed peak parking rate per student for the existing school is 1 parking space for every 7 students, which is less than the ratio required by the Village Municipal Code (1 space per 6 students). This measurement does assume that every member of the 251 faculty park on site daily.

GHA has been retained to design site updates to Buffalo Grove High School. For the latest proposed plan, see **Appendix C**. The updates include changing locations of the baseball and softball fields, changing location of the tennis courts, and removal of the remote lot in favor of a smaller new lot closer to the football stadium. With these changes, a parking total of 581 spaces is expected. With 578 parking spaces being required by 2023-2024 enrollment, Buffalo Grove High School still meets Village code parking requirements.

- A summary of the parking observations can be found in **Exhibit 2**.

Buffalo Grove High School
1100 W Dundee Road
Buffalo Grove, Illinois

- As a guideline, parking demand should not exceed 90% of the supply. This allows more efficient parking as motorists can more readily find open spaces. With 2023-2024 enrollment, the observed parking demand was 90% of the capacity of the future parking supply.

Part IV. Recommendations and Conclusions

A Parking Analysis was performed for Buffalo Grove High School. In summary, the existing parking spaces are sufficient to meet the observed parking demand as well as Village code.

Even after the site updates, which will reduce parking from 655 spaces in the existing condition to 581 spaces in the future condition, Village code is met based on the 2023-2024 school enrollment.

Should school enrollment increase or new hires to faculty be made, new parking spaces may need to be added to meet the Village Code. For non-school hours special events, such as heavily attended football games or other school functions, we recommend that off-site parking be made available. We understand that the school has an agreement with nearby Henry Wadsworth Longfellow School to utilize that school's parking if needed.

Part V. Technical Addendum

The following *Exhibits* and *Appendices* were previously referenced. They provide technical support for our observations, findings and recommendations discussed in the text.

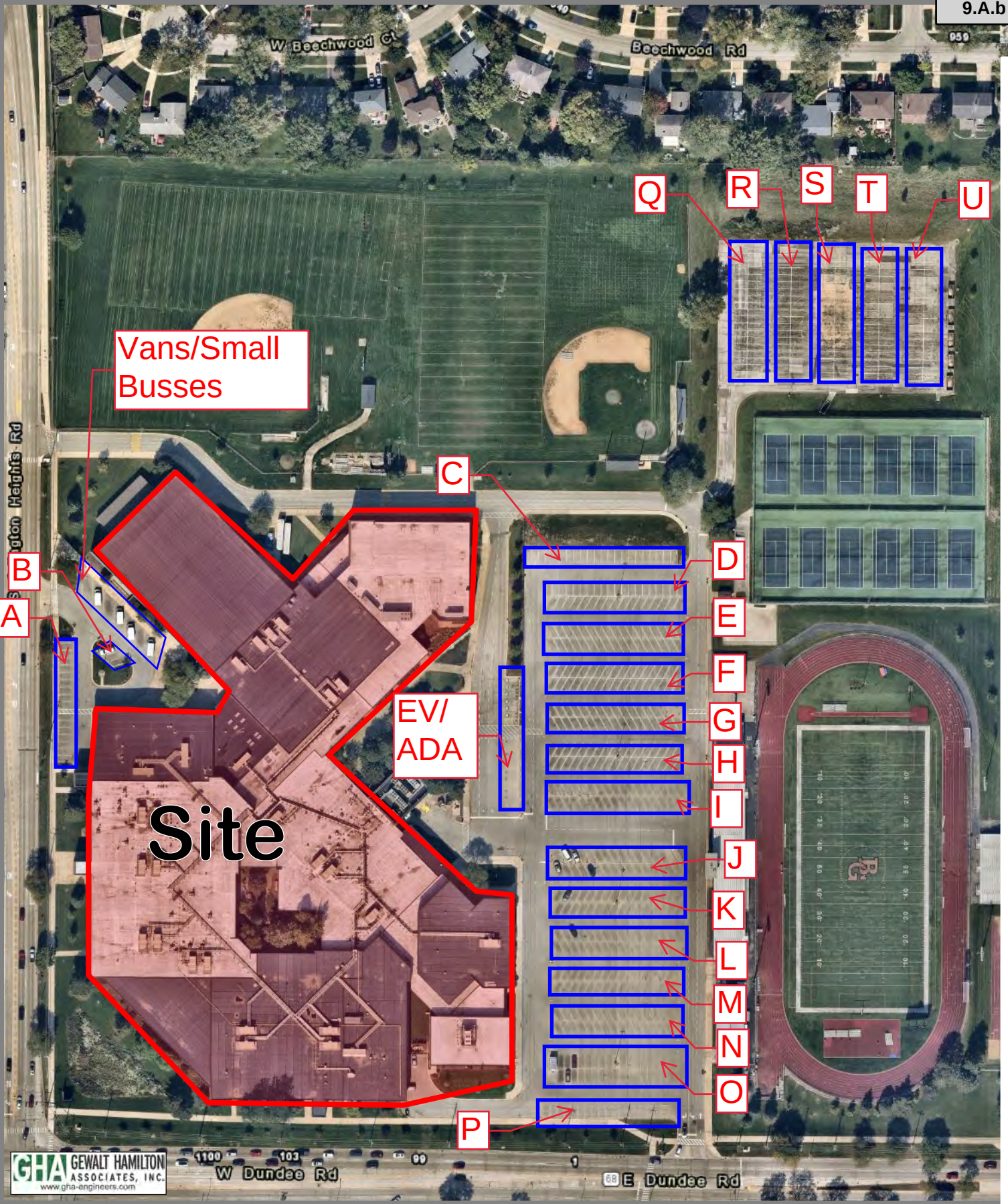
Exhibits

1. Location Map
2. Parking Calculations

Appendices

- A. Village of Buffalo Grove Municipal Code Excerpts
- B. Buffalo Grove High School – Parking Occupancy Survey
- C. Proposed Future Plan

5651.145 Buffalo Grove High School Parking Study.docx



GHA GEWALT HAMILTON ASSOCIATES, INC. www.gha-engineers.com

1100 103 00 W Dundee Rd

68 E Dundee Rd



1 inch = 225 Feet

Exhibit 1 - Location Map

Buffalo Grove High School
Buffalo Grove, Illinois

Exhibit 2
Weekday Peak Parking Calculations
Buffalo Grove High School

1. Current Demand

		7:00 - 8:00	8:00 - 9:00	2:00 - 3:00	3:00 - 4:00
		AM	AM	PM	PM
A. Weekday Parking	Total =	655	118	525	470
	% Occupied	18%	80%	72%	27%

2. Subtracted Parking Spaces

76
Spaces Lost

3. Future Demands

		8:00 AM	9:00 AM	2:00 PM	3:00 PM
A. Weekday Parking	Total =	581	118	525	470
	% Occupied	20%	90%	81%	31%

Parking Occupancy Key	≤ 60% occupied	
	≤85% but >60% occupied	
	>85% occupied	

Attachment: Exhibit B. Plan Set (O-2024-58 : Approve a Prelim Plan, Amendment to SU, and Vari. for Site

17.36.040 - Schedule of parking requirements.

- A. Schedule of Requirements. Requirements governing the number of off-street parking and off-street loading facilities in relation to the use of property are established hereinafter in sections of this Title, The parking and loading requirements for any use not specified herein shall be the same as for a similar specified use as determined by Sections 17.36.040 and 17.36.050.
- B. Floor Area. The term "floor area" as employed herein in the case of office, merchandising or service types of use shall mean the gross floor space of a building or structure.
- C. Residential Uses.
 - 1. Dwelling, detached: 2.0 spaces per dwelling unit.
 - 2. Dwelling, semi-detached and attached: 2.0 spaces per dwelling unit.
 - 3. Dwelling, two-family and multiple-family: 1.7 spaces per dwelling unit.
 - 4. Apartment for senior citizens (fifty-five years of age and older): 1.0 space per dwelling unit plus 1.0 space per employee.
 - 5. Dormitory: 5.0 spaces per one thousand square feet of floor area.
 - 6. Convent, rectory: 2.0 spaces per one thousand square feet of floor area.
 - 7. Convalescent home, nursing home: 1.0 parking space for every four beds, plus one for each vehicle used in the conduct of the enterprise.
- D. Manufacture and Industrial Uses. 2.0 spaces per every three employees.
- E. Transportation, Communication and Utilities.
 - 1. Airport, bus terminal, heliport, railroad passenger terminal: spaces as required after review by the Planning and Zoning Commission plus additional parking for retail service uses.
 - 2. Air freight terminal, newspaper distribution facility, railroad freight terminal: 2.0 spaces per every three employees.
 - 3. Microwave relay towers, radar installations and towers, radio and television stations and towers, parking garage, parking lot: 1.0 space per employee.
 - 4. Telegraph office, telephone operator and business office: 4.0 spaces per one thousand square feet of floor area.
 - 5. Public and private utilities installation: 2.0 spaces per every three employees.
 - 6. Auto graveyards, dumps, junk yards, sanitary landfill: 2.0 spaces per each employee.
 - 7. Cartage and express facilities, motor freight terminal: 2.0 spaces per each three employees.
- F. Retail and Wholesale Trade.
 - 1. General commercial/retail (individual businesses): 1.0 space per two hundred fifty square feet of floor area.
 - 2.

Shopping Centers: 1.0 space per two hundred twenty square feet of floor area. In a case where a major tenant is of a nature that would require a significant deviation from this standard, the parking requirement for that individual use shall be used.

3. Eating and drinking establishments: 1.0 space per one hundred square feet of floor area. Establishments with a drive-thru window shall provide a minimum of ten stacking spaces per window.
4. Household appliance stores, furniture stores, motor vehicle sales: 2.0 spaces per one thousand square feet of floor area.

G. Services and Institutions.

1. Business and professional offices: 1.0 space per every three hundred square feet of floor area.
2. Bank, savings and loans, and financial institutions: 1.0 space per every two hundred fifty square feet of floor area.

Drive-in establishments shall provide six stacking spaces per teller or customer service area.

3. Auto laundry: 1.0 space per employee.
4. Hotel, motel: 1.0 space per each dwelling unit plus one space per each employee plus additional parking spaces for the retail/service/entertainment areas.
5. Animal kennel and hospitals: 4.0 spaces per every one thousand square feet of floor area.
6. Health or medical institutions or sanitarium: 1.5 spaces per every one thousand square feet of floor area.
7. Dental and medical clinic or office: 5.0 spaces per every one thousand square feet of floor area.
8. Funeral parlor: 4.0 spaces per one thousand square feet of floor area.
9. Day care center, child care center, nursery school, pre-school: 2.0 spaces per every one thousand square feet of floor area.
10. Boarding school, elementary school, junior high school: 1.0 space per employee.
11. Senior high school: 1.0 space per employee plus 1.0 space per every six students based on rated design capacity.
12. College, junior college, university: 1.0 space per every two employees plus 1.0 space per each four students based on rated design capacity.
13. Business school, commercial school, trade school, vocational school: 1.0 space per employee plus 1.0 space per student based on rated design capacity.
14. Dance school, music school, vocal school: 1.0 space per employee plus 1.0 space per every three students based on rated design capacity.

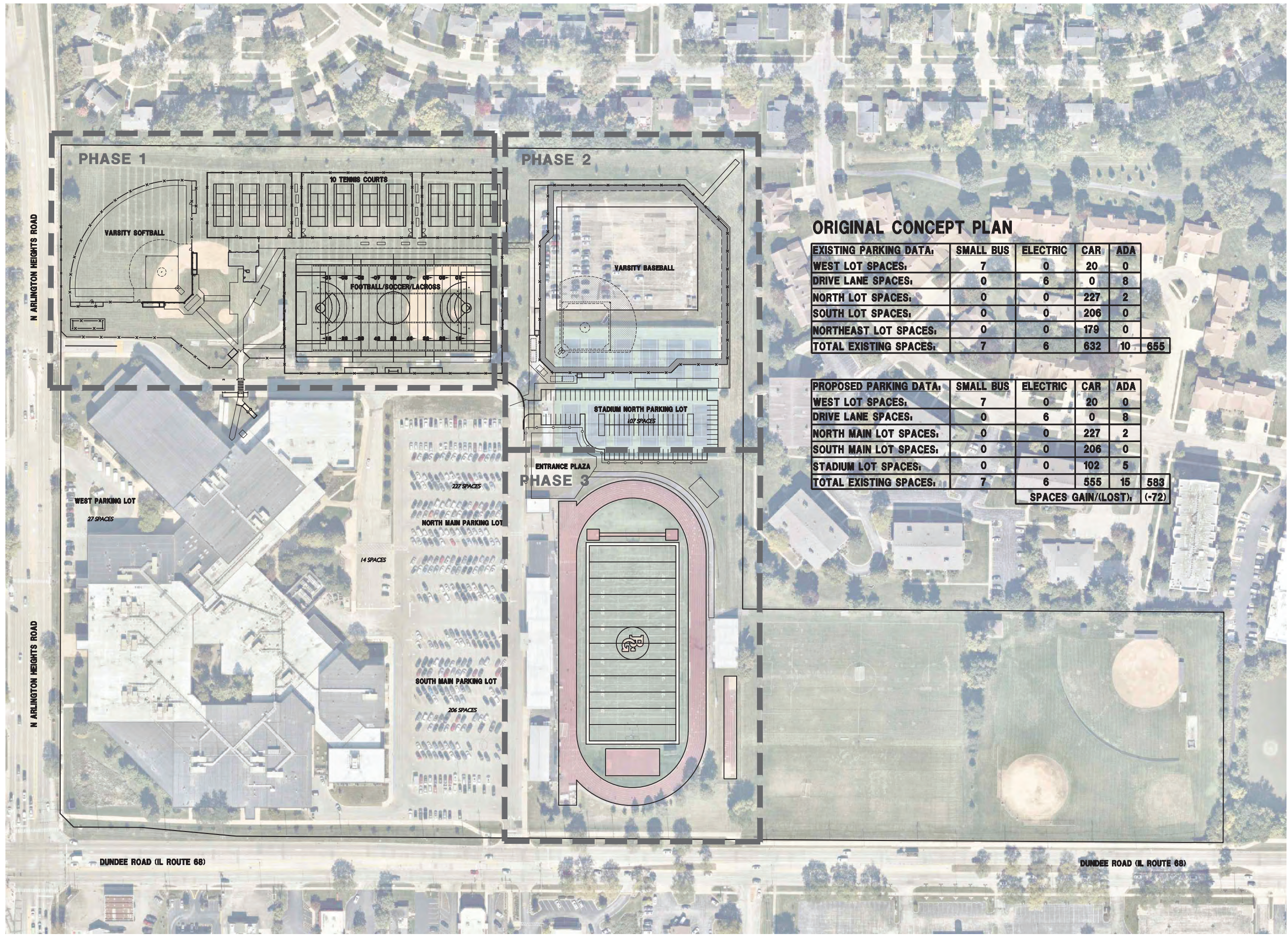
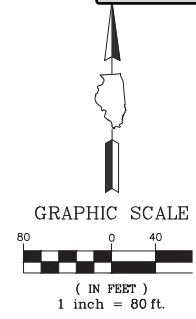
15. Governmental services: 4.0 spaces per one thousand square feet of floor area.
16. Chapel, church, synagogue, temple: 1.0 space per three seats based on rated design capacity.
17. Philanthropic and charitable institutions, religious retreat: 1.0 space per one thousand square feet of floor area.

H. Cultural Uses, Entertainment and Sports.

1. Art gallery, historic site, library, museum: 2.0 spaces per one thousand square feet of floor area.
2. Community center, convention hall, exhibition hall, meeting hall, recreation building: 1.0 space per one thousand square feet of floor area.
3. Amphitheater, auditorium fairgrounds, fieldhouse: 1.0 space per four seats.
4. Theater: 1.0 space per 2.5 seats.
5. Amusement park, miniature golf, kiddie park: 3.0 spaces per one thousand square feet of floor area plus 3.0 spaces per one thousand square feet of land area.
6. Billiard hall, bowling alley, pool hall, skating rink: 10.0 spaces per one thousand square feet of floor area.
7. Golf course, full size: 60.0 spaces per nine holes (regular golf).
8. Camping grounds, outdoor rifle, trap, skeet shooting range: 1.0 space per two thousand square feet of land area.
9. Athletic field, public parks and playgrounds, tennis courts club: 1.0 space per five thousand square feet of land area.
10. Public swimming pool: 1.0 space per five thousand square feet of land area plus 1.0 space per seventy-five square feet of water area.

(Ord. No. 2014-43, § 29, 6-16-2014)

Appendix B						
Buffalo Grove High School						
Location	Supply	Tuesday, February 13th 2024				
Parking Bay	Parking Bay Total	7:00 - 8:00 AM	8:00 - 9:00 AM	Midday Gap	2:00 - 3:00 PM	3:00 - 4:00 PM
A	17	12	14	-	12	8
B	3	3	3	-	3	2
C	22	1	22	-	21	10
D	37	2	37	-	33	16
E	34	2	34	-	28	15
F	34	14	34	-	28	11
G	34	14	34	-	29	10
H	34	15	34	-	34	10
I	34	6	34	-	32	15
J	30	9	27	-	29	11
K	32	8	30	-	26	8
L	31	5	26	-	25	5
M	30	4	25	-	23	9
N	30	5	29	-	29	5
O	32	6	31	-	24	10
P	19	5	16	-	12	7
Q	36	0	36	-	28	7
R	36	0	34	-	23	8
S	36	0	14	-	10	3
T	36	0	1	-	11	1
U	35	0	0	-	0	0
Van/Electric/ADA	23	7	10	-	10	7
Occupied Total:	655	118	525	-	470	178



ORIGINAL CONCEPT PLAN

EXISTING PARKING DATA:	SMALL BUS	ELECTRIC	CAR	ADA	
WEST LOT SPACES:	7	0	20	0	
DRIVE LANE SPACES:	0	6	0	8	
NORTH LOT SPACES:	0	0	227	2	
SOUTH LOT SPACES:	0	0	206	0	
NORTHEAST LOT SPACES:	0	0	179	0	
TOTAL EXISTING SPACES:	7	6	632	10	655

PROPOSED PARKING DATA:	SMALL BUS	ELECTRIC	CAR	ADA	
WEST LOT SPACES:	7	0	20	0	
DRIVE LANE SPACES:	0	6	0	8	
NORTH MAIN LOT SPACES:	0	0	227	2	
SOUTH MAIN LOT SPACES:	0	0	206	0	
STADIUM LOT SPACES:	0	0	102	5	
TOTAL EXISTING SPACES:	7	6	555	15	583
SPACES GAIN/(LOST):					(-72)



855-566-7488

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Clear Sound for All

Thunder Hearing & Sound, LLC

847 South Randall Road, #218 Elgin, IL 60123

9.A.b

Buffalo Grove High School Athletic Fields Noise Study

April 10, 2024

Prepared for:

STR Partners LLC - 350 West Ontario Street, Suite 200 Chicago, IL 60654

Thunder Hearing & Sound was asked to study the noise changes from relocating athletic fields/courts at Buffalo Grove High School in School District 214. Phase 1 of the plan includes a varsity softball field, 10 tennis courts, and a multi-use field (football/soccer/lacrosse). Phase 2 includes a varsity baseball field and a parking lot which will be graded to about the same elevation as the other fields. These fields/courts will have games and practices throughout the week, generally in the afternoon and early evening. There will be several lights included, but games/practices are expected to end by 7:30 pm (note there are also several security lights, but those are not considered to have a noise impact). Even though Buffalo Grove HS has operated similar activities in this area for years, we were asked to evaluate possible noise impacts on nearby residents compared to typical community noise for the area.

Ambient Noise Assessment

The impact of a noise source depends mostly on its audibility. To assess the degree of audibility, the existing ambient noise must be evaluated. We conducted this work by visiting the site on Thursday, March 7, 2024. During this visit, we inspected the topography of the site, examined the surrounding area, characterized the ambient noise, identified its sources, and set up professional-grade equipment to record the noise. The equipment was set up on the north side of the property, next to the backyard of 1039 Beechwood Rd, as shown in **FIGURE 1**.



Figure 1 - View of the digital audio equipment

The recording ran for about 1½ hours and was later analyzed to determine the sound levels at 1-second intervals. The result of this analysis can be seen in **FIGURE 2** (note there are larger

charts attached to the end of this report). In this graph, you can see a few of the noise sources called out. Included in these sources is the typical existing noise from baseball practice. The metric to measure noise is a logarithmic time-averaged value called the equivalent level or Leq. To better visualize the trend of the ambient noise, we computed the 1-minute Leq which varies between 48-61 dB(A). **The Leq of the entire sample was 52 dB(A).** The dominant noise at this site was from traffic on Dundee Road and airplanes overhead. Therefore, we can use hourly traffic counts on Dundee Road to estimate the ambient sound level at other times of the day. Using this information, we estimate that the ambient noise varies from **53 dBA in the 3:00 PM hour to 52 dBA in the 7:00 PM hour.**

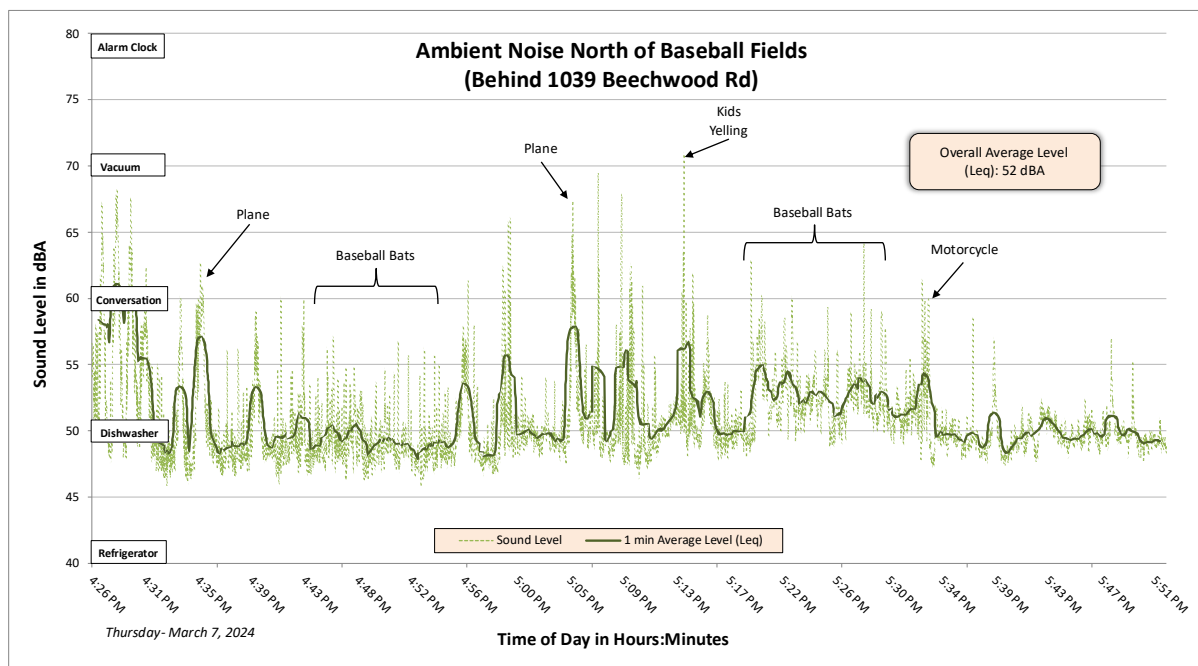


Figure 2 – Sound level trace of ambient noise at the site in the 4:00 and 5:00 PM hours

Source Sounds

Impact also depends on the sound levels from future sources. Therefore, we conducted source measurements of various sound sources to be able to calculate the future sound levels. We set up a second microphone near the existing tennis courts while a practice was conducted to record the sound. We then post-processed the recording in our lab the same as the ambient recording. From this, we were able to determine that the sound power level of a pair of tennis players was **79 dBA (SWL)**.

Sound Power Level (SWL) is a measure of the total energy emitted from a sound source. It differs from the more commonly used sound pressure level because sound power is independent of distance. It is the preferred unit when modeling sound sources because it represents the overall acoustic energy output without being influenced by distance.

Note that this is likely an overestimate due to high background noise during the sampling period. We repeated this same process for noise from the baseball practice and determined the sound power level for an entire baseball practice (with batting) was **103 dBA (SWL)**. This is also likely an overestimate.

Sound Modeling

To predict the sound levels radiated from the new athletic fields/courts, we used an Internationally accepted software program called SoundPlan™. This program calculates the sound level at millions of distant points based on the source sound levels, the topography of the site, reflections from buildings, absorption by the atmosphere and vegetation, and shielding from berms and structures. Based on these calculations, the program then generates color sound-level contours surrounding the site. The program calculates the time-average levels based on the input parameters.

We modeled five sound sources:

- Tennis – Using the collected data, we modeled a worst-case scenario of all 10 tennis courts in use with a doubles game. Note, that only 6 were in use for the data collection.
- Softball – We used the collected baseball data to estimate the noise from softball.
- Baseball - We used the collected baseball data.
- PA Speakers – We used existing data from our software for JBL AW266 speakers. There were 3 speakers for the softball field, 4 for the multi-use field, and 3 for the baseball field. Because PA speakers are inherently adjustable, we set these to levels that achieved good signal-to-noise ratios as an example of reasonable and typical levels.
- Crowd Noise – We used existing data from our software and placed crowds on each bleacher section.

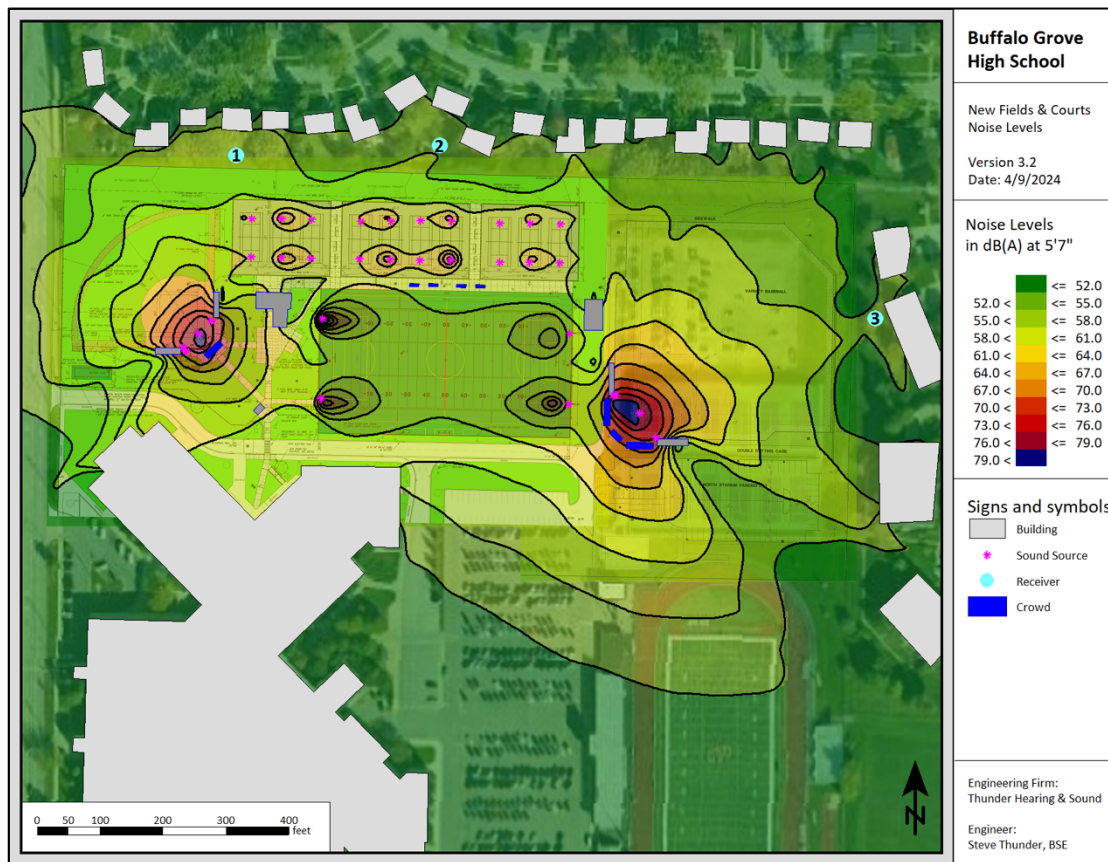


Figure 3 – Sound level contours around the proposed athletic fields/courts

FIGURE 3 shows the projected time-average contours with all practices fully active, PA speakers in use, and full crowds. For illustration, we set the green color on the legend to 52 dB(A), the ambient noise level from our measurements. The sound levels in three representative backyards were **57 dBA (blue dot 1)**, **55 dBA (blue dot 2)**, and **55 dBA (blue dot 3)**. When comparing this to the ambient noise of 53 to 52 dB(A) it is only a 2-5 dB difference which we rate as **no impact to a mild impact** (see **TABLE 1**). Keep in mind that many aspects of the details we modeled were worst-case; so real-world levels would be less; likely causing no impact to a slight impact.

This is not to say that all activity on the field/courts will be inaudible, but the long-term impact is assessed by using the time-averaging approach advocated by the US EPA and stipulated by the State of Illinois. In short, the LEQ is a dose effect in that it depends on the intensity of the sounds and the number of events in any one-hour period.

Table 1 – Perceptual Difference as a Function of the Decibel Increase

Decibel Increase	Perceptual Difference	Impact
1-2 dB	Negligible	None
3-4 dB	Just Noticeable	Slight
5-6 dB	Clearly Noticeable	Mild
7-8 dB	Strongly Noticeable	Moderate
9-10 dB	Doubling in Loudness	Substantial

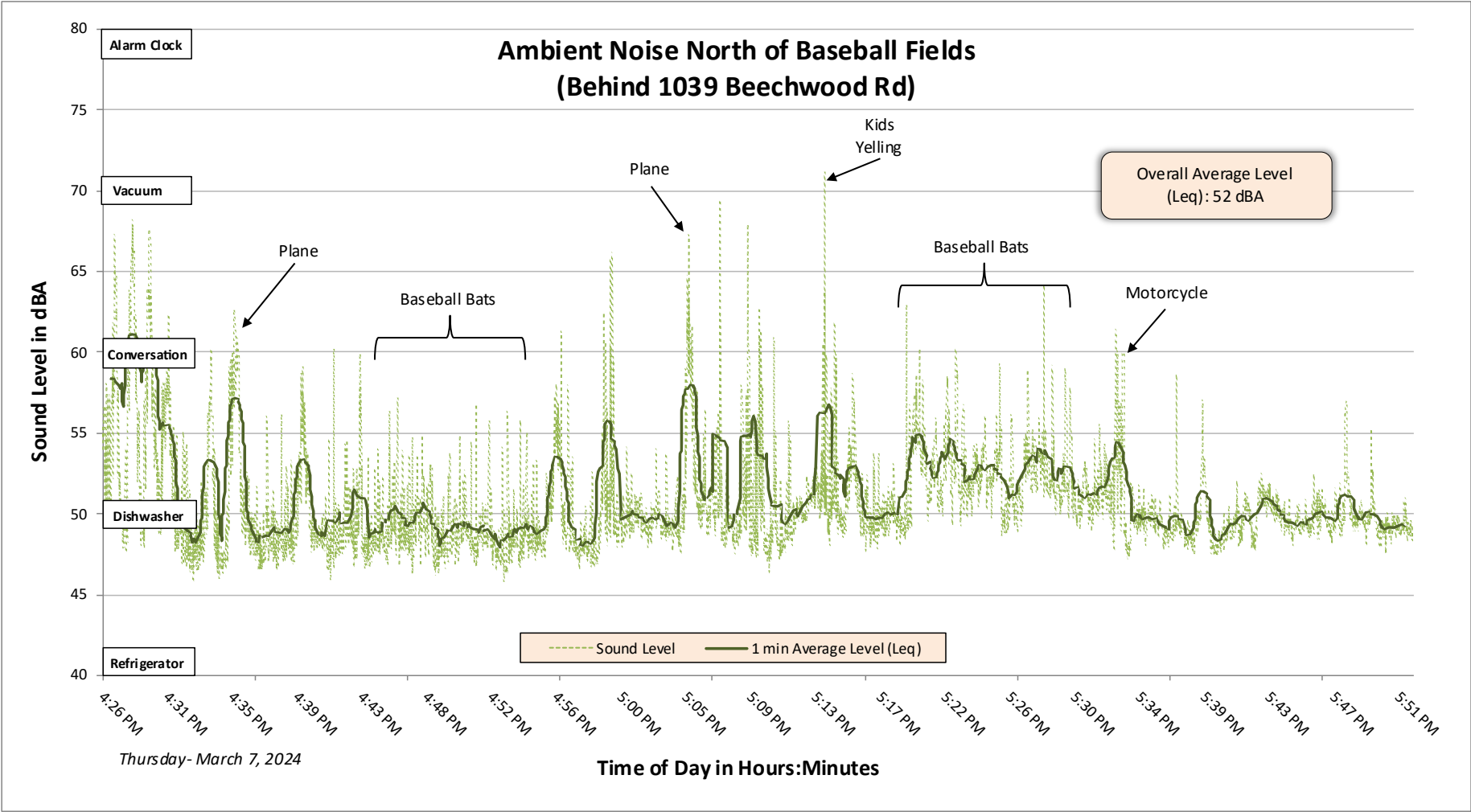
Conclusion

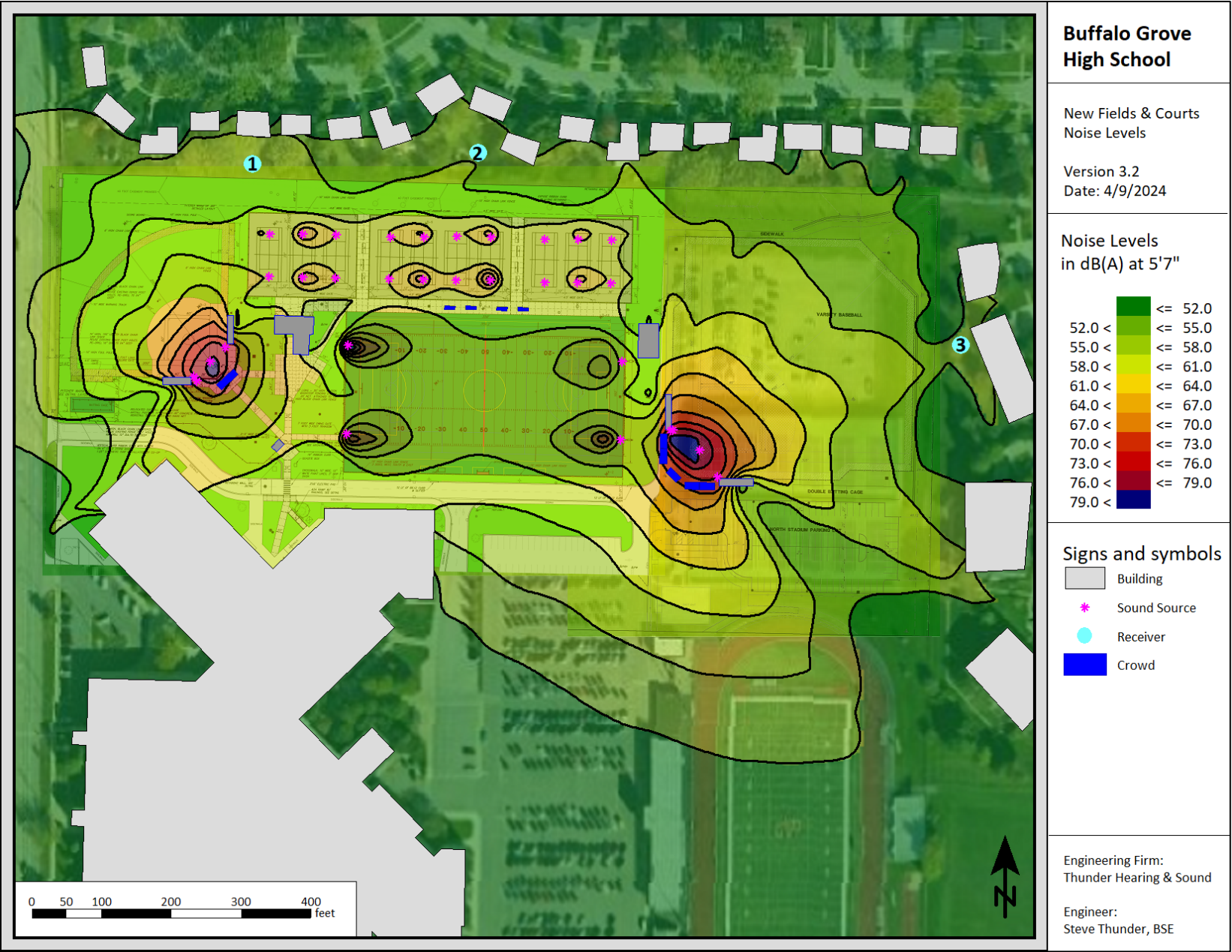
Thunder Hearing & Sound studied noise changes from relocating athletic fields at Buffalo Grove High School. Phases 1 & 2 include a softball field, a baseball field, 10 tennis courts, and a multi-use field. Activities will occur mainly in the afternoon and early evening up to about 7:30 pm. An ambient noise assessment found levels ranging from 48-61 dB(A), dominated by traffic and airplanes. Source measurements showed tennis players emit 79 dBA (SWL) and baseball practice 103 dBA (SWL). Sound modeling predicted a total source level of 2-5 dB greater than the ambient levels. Since our modeling is based on worse-case source data, we believe there will be a limited increase in noise levels, that would create no impact to a slight impact on nearby residents.

Submitted by:



Steve Thunder, BSE
Acoustical Engineer





Attachment: Exhibit B. Plan Set (O-2024-58 : Approve a Prelim Plan, Amendmt to SU, and Vari. for Site

VILLAGE OF BUFFALO GROVE



During your testimony at the Public Hearing, you need to testify and present your case for the Special Use being requested. In doing so, you need to address the six (6) Special Use Standards listed below:

SPECIAL USE STANDARDS

1. The special use will serve the public convenience at the location of the subject property; or the establishment, maintenance or operation of the special use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare;
Response: The revised special use will continue to serve the public convenience as the community High School.
2. The location and size of the special use, the nature and intensity of the operation involved in or conducted in connection with said special use, the size of the subject property in relation to such special use, and the location of the site with respect to streets giving access to it shall be such that it will be in harmony with the appropriate, orderly development of the district in which it is located;
Response: The location and size of the revised special use remains the same and will not inflict greater burden on the streets giving access to the site and will remain in harmony with the development of the district in which it is located.
3. The special use will not be injurious to the use and enjoyment of other property in the immediate vicinity of the subject property for the purposes already permitted in such zoning district, nor substantially diminish and impair other property valuations with the neighborhood;
Response: The revised special use will continue to not be injurious to the use and enjoyment of the other property in the immediate vicinity of the subject property and the improvements may lead to increased property valuations within the neighborhood.
4. The nature, location and size of the buildings or structures involved with the establishment of the special use will not impede, substantially hinder or discourage the development and use of adjacent land and buildings in accord with the zoning district within which they lie;
Response: The nature, location and size of the buildings and structures involved in the revised special use are set well away from the property boundaries and will not hinder or discourage the development and use of adjacent land.
5. Adequate utilities, access roads, drainage, and/or other necessary facilities have been or will be provided;
Response: Adequate utilities, access roads, drainage and other facilities have been provided for the revised to the special use.
6. Parking areas shall be of adequate size for the particular special use, which areas shall be properly located and suitably screened from adjoining residential uses, and the entrance and exit driveways to and from these parking areas shall be designed so as to prevent traffic hazards, eliminate nuisance and minimize traffic congestion in the public streets.
Response: Adequate parking is provided for the revised special use per the Village Zoning requirements. Agreements with area Elementary Schools are in place when additional parking capacity is necessary.

We are requesting an update to the site plan that accompanies the existing Special Use Ordinance 2018-02

During your testimony at the Public Hearing, you need to testify and present your case for the variance being requested. During your testimony, you need to address the Variation Standards listed below:

Criteria for Fence Variation.

- A. The regulations of this Title shall not be varied unless findings of fact are made based upon evidence presented at the hearing that:

1. The plight of the owner is due to unique circumstances;

Response:

The Owner is a High School seeking to renovate and modernize their athletic facilities.

2. The proposed variation will not alter the essential character of the neighborhood;

Response:

The proposed fencing and safety netting will be an upgrade to the existing fencing on the site and is similar to those currently in use at Buffalo Grove Park District facilities.

3. There are practical difficulties or particular hardships in carrying out the strict letter of this chapter which difficulties or hardships have not been created by any person presently having an interest in the property;

Response:

The installation of fencing and safety netting of various heights at the proposed softball field, tennis courts, multi-sport field and baseball field is required by IHSA and other regulatory bodies to protect the users, spectators, and public.

4. The proposed variation will not be detrimental to the public health, safety and welfare;

Response:

The proposed variation is for the express purpose of protecting the public health, safety, and welfare.

ORDINANCE NO. 2018 - 002**AN ORDINANCE APPROVING A SPECIAL USE AND VARIATION
IN THE R1 RESIDENTIAL DISTRICT
VILLAGE OF BUFFALO GROVE,
COOK AND LAKE COUNTIES, ILLINOIS****Buffalo Grove High School
1100 W Dundee Road
Special Use and Variation for a High School**

WHEREAS, the Village of Buffalo Grove is a Home Rule Unit by virtue of the Illinois Constitution of 1970; and,

WHEREAS, the property at 1100 W Dundee Road ("Property") legally described in EXHIBIT A attached hereto is zoned in the R1 Residential District; and,

WHEREAS, Township High School District 214 ("Petitioner"), has petitioned the Village for approval of a special use and variation to expand an existing elementary school at the Property; and,

WHEREAS, the Village Plan Commission conducted a public hearing on January 3, 2018 concerning the petition for the special use and variation; and,

WHEREAS, the Plan Commission determined that the petition meets the criteria of a special use and variation as set forth in the Buffalo Grove Zoning Ordinance; and,

WHEREAS, the Plan Commission voted 5 to 0 to recommend approval of the special use and variation; and,

WHEREAS, the President and Village Board of Trustees after due and careful consideration have concluded that the proposed expansion of the high school is a reasonable use of the Property and will serve the best interests of the Village.

WHEREAS, the proposed expansion of the Buffalo Grove High School shall be operated in accordance with and pursuant to the following exhibits:

- EXHIBIT A Legal Description
- EXHIBIT B Acceptance and Agreement concerning special uses
- EXHIBIT C Engineering Plans and Building Elevations

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS:

Section 1. This Ordinance is made pursuant to and in accordance with the Village's Zoning Ordinance and the Village's Home Rule powers. The preceding whereas clauses are hereby made a part of this Ordinance.

Section 2. The Corporate Authorities hereby grant a special use and variations to Township High School District 214 for an existing elementary school at the Property subject to the following conditions:

1. The proposed development shall substantially conform to the plans attached as part of this petition.
2. Final engineering shall be revised in a manner acceptable to the Village Engineer.
3. Approval from MWRD, IEPA and the Regional Office of Education shall be obtained for the proposed holding tank.
4. A final plat of subdivision consolidating all the lots shall be submitted in a manner acceptable to the Village.

Section 3. This Ordinance shall be in full force and effect upon the submittal of a signed Exhibit B (Acceptance and Agreement) hereto. This Ordinance shall not be codified.

AYES: 5 – Berman, Stein, Weidenfeld, Johnson, Smith

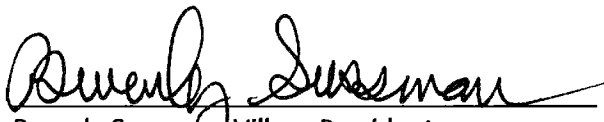
NAYS: 0 - None

ABSENT: 1 - Ottenheimer

PASSED: January 22, 2018.

APPROVED: January 22, 2018.

APPROVED:


Beverly Sussman Village President

ATTEST:


Janet M. Sirabian, Village Clerk

EXHIBIT A
LEGAL DESCRIPTION

Township High School District 214 – Buffalo Grove High School
1100 W Dundee Road
Special Use and Variation for a High School

SUBJECT PROPERTY LEGAL DESCRIPTION:

The Southwest Quarter of the Southwest Quarter of Section 5, Township 42 North, Range 11, East of the Third Principal Meridian, in Cook County, Illinois.

ALSO

That part of the South Half of the East Half of the Southwest Quarter of Section 5, Township 42 North, Range 11, East of the Third Principal Meridian, bounded by a line described as follows: beginning at the Southwest corner of the South Half of the East Half of said Southwest Quarter; Thence North along the West line thereof, 475.0 feet; Thence East parallel to the South line of said Southwest Quarter, 887.0 feet; Thence South parallel with the West line of the South Half of the East Half of said Southwest Quarter 475.0 feet to a point on the South line of said Southwest Quarter; Thence West along the Southwest Quarter of said Section 5, 887.0 feet to the point of beginning, excepting therefrom the South 50.0 feet thereof, in Cook County, Illinois.

EXCEPT

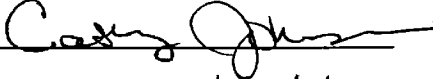
That part of the Southwest Quarter of Section 5, Township 42 North, Range 11, East of the Third Principal Meridian, described as follows: Beginning at the intersection of the present North line of Dundee Road, being a line 50.00 feet North of and parallel with the South line of said Southwest Quarter of Section 5, with a line that is 887.00 feet East of, as measured along the South line of said Southwest Quarter of Section 5, and parallel with the West line of the East half of said Southwest Quarter; Thence North 0° 00' 00" East, parallel with the West line of the East half of said Southwest Quarter of section 5, a distance of 64.50 feet; Thence South 90° 00' 00" West, a distance of 1.00 foot; Thence South 20° 13' 29" West, a distance of 40.50 feet; Thence South 31° 41' 11" West, a distance of 30.85 feet to the aforesaid North line of Dundee Road; Thence South 89° 46' 48" East along said North line, a distance of 31.00 feet to the place of beginning, in Cook County, Illinois.

SUBJECT PROPERTY COMMON DESCRIPTION: 1100 W Dundee Road, Buffalo Grove, IL
(PINS 03-05-302-003-0000, 03-05-302-002-0000,
03-05-303-029-0000, 03-05-303-003-0000)

EXHIBIT B**Acceptance and Agreement Concerning Special Use****Township High School District 214 – Buffalo Grove High School
1100 W Dundee Road
Special Use and Variation for a High School**

Township High School District 214 acknowledges that it has read and understands all of the terms and provisions of Buffalo Grove Ordinance No. 2018 - 002 pertaining to the special use and variation, and does hereby accept and agree to abide by and be bound by each of the terms, conditions and limitations of said Ordinance.

Township High School District 214

By: 

Name (print): Cathy Johnson

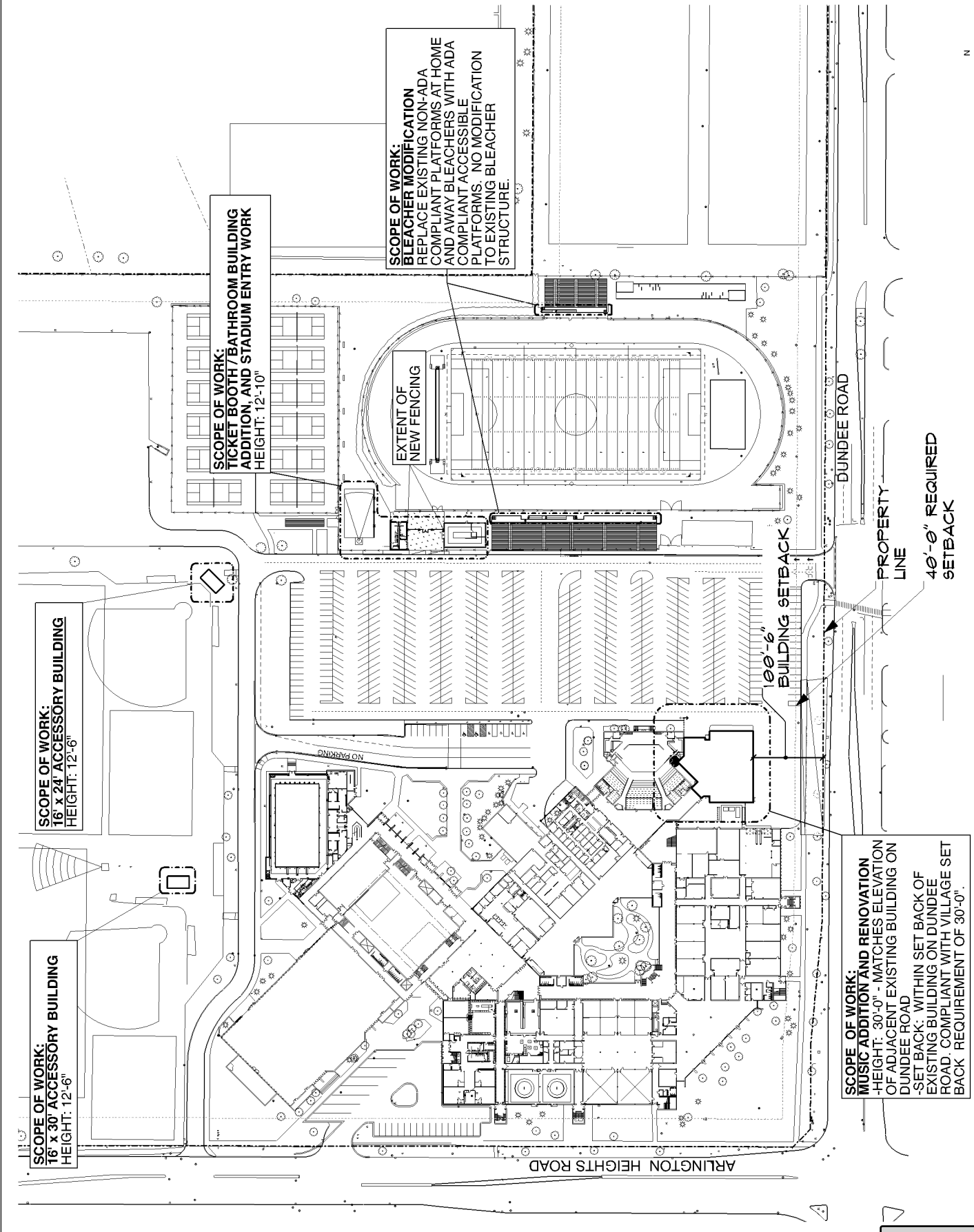
Title: Associate Supt. for Finance & Operations

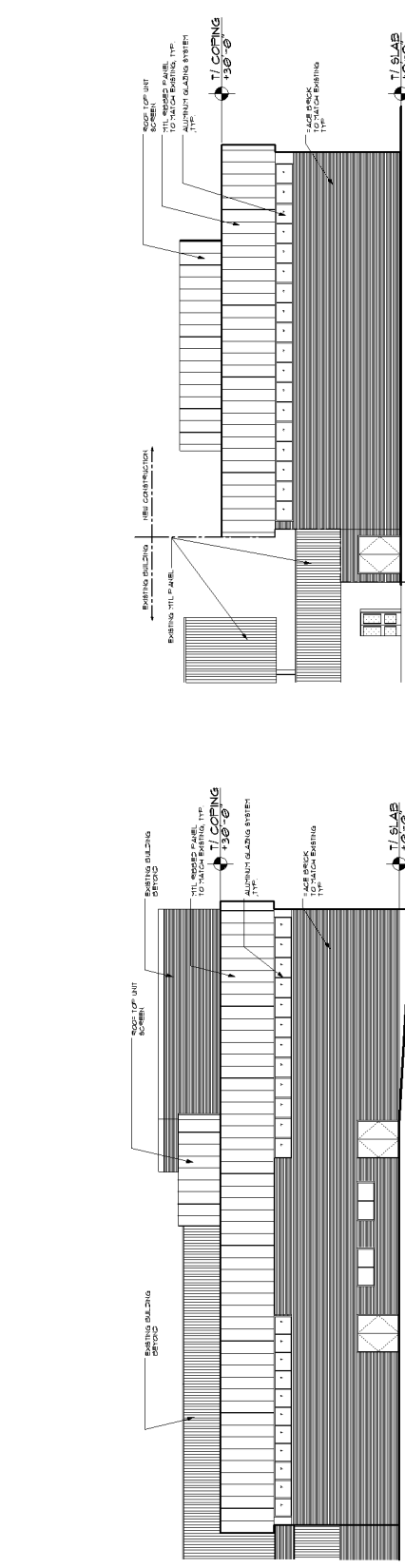
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EXHIBIT C
Engineering Plans and Building Elevations

Township High School District 214 – Buffalo Grove High School
1100 W Dundee Road
Special Use and Variation for a High School

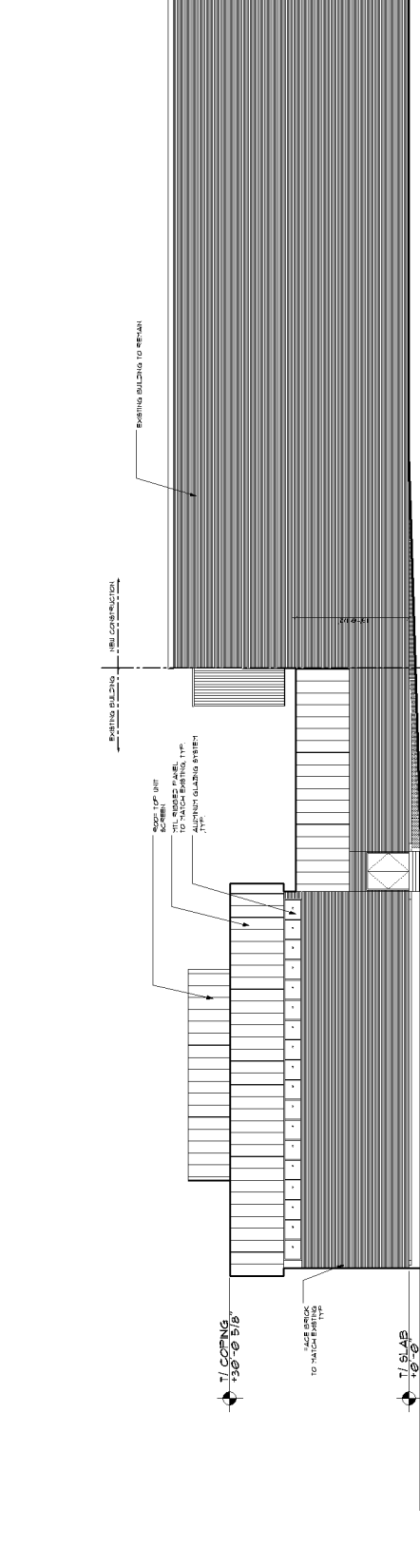
Attachment: Exhibit B. Plan Set (O-2024-58 : Approve a Prelim Plan, Amendmt to SU, and Vari. for Site Improvements at BGHS at 1100 W





ADDITION WEST ELEVATION
SCALE: 1/8" = 1'-0"

ADDITION SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



ADDITION EAST ELEVATION
SCALE: 1/8" = 1'-0"





ORDINANCE NO. 2024 - ____

**AN ORDINANCE APPROVING A PRELIMINARY PLAN,
AN AMENDMENT TO ORDINANCE NO. 2018-002,
AND VARIATIONS FROM THE FENCE CODE
FOR 1100 W DUNDEE ROAD
VILLAGE OF BUFFALO GROVE,
COOK AND LAKE COUNTIES, ILLINOIS**

**Buffalo Grove High School
School District #214
1100 W Dundee Road**

WHEREAS, the Village of Buffalo Grove is a Home Rule Unit by virtue of the Illinois Constitution of 1970; and,

WHEREAS, 1100 W Dundee Road, Buffalo Grove, IL is improved with a public high school, athletic fields, and surface parking lots located on approximately 45-acres in the R-1 and R-E One Family Dwelling Districts, and is hereinafter legally described in Exhibit A; and,

WHEREAS, in 2018, the Village Board approved by Ordinance No. 2018-002 granting a Special Use and a Zoning Variation to allow the expansion of the school; and,

WHEREAS, STR Partners, ("Petitioner") has filed a petition on behalf of the School District #214, to allow proposed site improvements and construction of accessory structures on the subject property, and is requesting the following approvals:

1. An amendment to the Special Use and Preliminary Plan approved by Ordinance No. 2018-002; and,
2. Variations from Section 15.20.040 of the Fence Code to allow fences on and adjacent to the athletic fields to exceed the 6-foot height maximum for residential districts; and

WHEREAS, notice of public hearing was given and the Village Planning & Zoning Commission conducted a public hearing on April 17, 2024 concerning the petition for approval of the Amendment to Special Use and Preliminary Plan approved by Ordinance No. 2018-002, and Fence Code Variations; and,

WHEREAS, the Planning & Zoning Commission made findings and determined that the petition meets the criteria for Special Uses and Fence Variations as set forth in the Buffalo Grove Zoning Ordinance and Building Code, as described in the minutes attached as Exhibit C; and,

WHEREAS, the Planning & Zoning Commission voted 6 - 0 to unanimously recommend approval of the Amendment to Special Use and Preliminary Plan approved by Ordinance No. 2018-002, and Fence Code Variations; and,

WHEREAS, the President and Village Board of Trustees after due and careful consideration have concluded that the proposed Amendment to Special Use and Preliminary Plan approved by Ordinance No.

2018-002, and Fence Code Variations requested are reasonable and will serve the best interests of the Village.

WHEREAS, the proposed development shall be operated in accordance with and pursuant to the following exhibits:

- EXHIBIT A Legal Description of the Property
- EXHIBIT B Plan Set
- EXHIBIT C Minutes from the April 17, 2024, Planning & Zoning Commission Meeting

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS:

Section 1. This Ordinance is made pursuant to and in accordance with the Village's Zoning Ordinance and the Village's Home Rule powers. The preceding whereas clauses are hereby made a part of this Ordinance.

Section 2. The Corporate Authorities hereby adopt a proper, valid, and binding ordinance approving the Amendment to Special Use and Preliminary Plan approved by Ordinance No. 2018-002, and Fence Code Variations for the Property located at 1100 W Dundee Road, Buffalo Grove, IL, subject to the following conditions:

- A. The proposed improvements shall be constructed in substantial conformance with the plans attached as part of the petition.
- B. The Final Engineering plans shall be submitted in a manner acceptable to the Village.
- C. Any directional or incidental signage added to the site shall be reviewed administratively by staff.
- D. Landscaping on the property shall be maintained in accordance with the approved landscape plan in perpetuity.
- E. All light fixtures shall be appropriately screened to avoid glare into surrounding residential properties and field lighting shall be turned off when not in use.

Section 3. This Ordinance shall be in full force and effect upon passage.

This Ordinance shall not be codified.

AYES: _____

NAYS: _____

ABSENT: _____

PASSED: _____
APPROVED: _____

ATTEST:

Village Clerk

APPROVED:

Eric Smith, Village President

EXHIBIT A**Legal Description****Buffalo Grove High School****School District #214****1100 W Dundee Road****SUBJECT PROPERTY COMMON ADDRESS: 1100 W Dundee Road**

LEGAL DESCRIPTION: PARCEL 1: THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 5, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

ALSO

PARCEL 2: THAT PART OF THE SOUTH HALF OF THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 5, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, BOUNDED BY A LINE DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHWEST CORNER OF THE SOUTH HALF OF THE EAST HALF OF SAID SOUTHWEST QUARTER; THENCE NORTH ALONG THE WEST LINE THEREOF, 476.0 FEET; THENCE: EAST PARALLEL WITH THE SOUTH LINE OF SAID SOUTHWEST QUARTER, 887.0 FEET; THENCE SOUTH PARALLEL WITH THE WEST LINE OF THE SOUTH HALF OF THE EAST HALF OF SAID SOUTHWEST QUARTER 475.0 FEET TO A POINT ON THE SOUTH LINE OF SAID SOUTHWEST QUARTER; THENCE WEST ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 5, 887.0 FEET TO THE POINT OF BEGINNING, EXCEPTING THEREFROM THE SOUTH 50.0 FEET THEREOF, IN COOK COUNTY, ILLINOIS .

EXCEPTING THEREFROM PARCEL 3: PORTION OF LAND QUIT CLAIM DEEDED TO THE STATE OF ILLINOIS IN DOCUMENT NUMBER 21356006 RECORDED DECEMBER 31, 1970, DESCRIBED AS FOLLOWS: THAT PART OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 5, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT ON THE EAST LINE OF THE WEST HALF OF THE SOUTHWEST QUARTER OF SAID SECTION 5, DISTANT 33 FEET NORTH OF THE SOUTH LINE OF SECTION 5; THENCE WESTERLY ALONG A STRAIGHT LINE PARALLEL AND DISTANT 33 FEET NORTH OF SAID SOUTH LINE OF SOLD SECTION 5 FOR A DISTANCE OF 1274 FEET, MORE OR LESS, TO A POINT, SAID POINT BEING 33 FEET EAST OF THE WEST LINE OF SAID SECTION 5; THENCE NORTH ALONG A STRAIGHT LINE PARALLEL AND DISTANT 33 FEET EAST OF THE WEST LINE OF SAID SECTION 5 FOR A DISTANCE OF 1285 FEET, MORE OR LESS, TO A POINT ON THE NORTH LINE OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 5; THENCE EASTERLY ALONG THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 5 FOR A DISTANCE OF 17 FEET TO A POINT; THENCE SOUTH FOR A DISTANCE OF 1228 FEET, MORE OR LESS, TO A POINT, SAID POINT LYING 50 FEET EAST OF THE WEST LINE OF SAID SECTION 5 AND 90 FEET NORTH OF THE SOUTH LINE OF SAID SECTION 5; THENCE SOUTHEASTERLY ALONG A STRAIGHT LINE, A DISTANCE OF 35.36 FEET TO A POINT, SAID POINT LYING 65 FEET NORTH OF THE SOUTH LINE OF SAID SECTION 5 AND 75 FEET EAST OF THE WEST LINE OF SAID SECTION 5; THENCE EASTERLY ALONG A STRAIGHT LINE PARALLEL WITH AND 65 FEET DISTANT FROM THE SOUTH LINE OF SAID SECTION 5, A DISTANCE OF 125

FEET; THENCE SOUTHEASTERLY, A DISTANCE OF 175.64 FEET TO A POINT, SAID POINT LYING 50 FEET NORTH OF THE SOUTH LINE OF SAID SECTION 5 AND 375 FEET EAST OF THE WEST LINE OF SAID SECTION 5; THENCE EAST ALONG A STRAIGHT LINE, PARALLEL AND DISTANT 50 FEET NORTH OF THE SOUTH LINE OF SAID SECTION 5 FOR A DISTANCE OF 932 FEET, MORE OR LESS, TO A POINT, SAID POINT LYING ON THE EAST LINE OF THE WEST HALF OF THE SOUTHWEST QUARTER OF SAID SECTION 5, DISTANT 50 FEET NORTH OF THE SOUTH LINE OF SAID SECTION 5; THENCE SOUTH ALONG THE SAID EAST LINE FOR A DISTANCE OF 17 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.

AND ALSO EXCEPTING THEREFROM PARCEL 4: PORTION OF LAND QUIT CLAIM DEEDED TO BUFFALO GROVE PARK DISTRICT WITH DOCUMENT NUMBER 94966261 RECORDED NOVEMBER 14, 1994: PART OF THE SOUTHWEST QUARTER OF SECTION 5 TOWNSHIP 42 NORTH RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, BOUNDED AND DESCRIBED AS FOLLOWS, TO-WIT: COMMENCING AT THE SOUTHWEST CORNER OF SAID OF QUARTER SECTION; THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST ALONG THE WEST LINE OF SAID QUARTER SECTIONS, 765.82 FEET; THENCE NORTH 90 DEGREES 00 MINUTES 00 SECONDS EAST 428.30 FEET TO THE POINT OF BEGINNING; THENCE NORTH 45 DEGREES 00 MINUTES 00 SECONDS WEST 13.58 FEET; THENCE SOUTH 45 DEGREES 00 MINUTES 00 SECONDS WEST 38.17 FEET; THENCE NORTH 45 DEGREES 00 MINUTES 00 SECONDS WEST 30.00 FEET; THENCE NORTH 45 DEGREES 00 MINUTES 00 SECONDS EAST 111.17 FEET; THENCE SOUTH 45 DEGREES 00 MINUTES 00 SECONDS EAST 43.58 FEET; THENCE SOUTH 45 DEGREES 00 MINUTES 00 SECONDS WEST 75.00 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.

PARCEL INDEX NUMBER: 03-05-302-002; 03-05-302-003; 03-05-303-029; 03-05-303-003

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EXHIBIT B

Plan Set

Buffalo Grove High School

School District #214

1100 W Dundee Road

Attachment: Ordinance (O-2024-58 : Approve a Prelim Plan, Amendmt to SU, and Vari. for Site Improvements at BGHS at 1100 W Dundee)

EXHIBIT C

Minutes from April 17, 2024, Planning & Zoning Commission Meeting
Buffalo Grove High School
School District #214
1100 W Dundee Road

04/17/2024

**MINUTES OF THE REGULAR MEETING OF THE PLANNING AND ZONING COMMISSION OF THE
VILLAGE OF BUFFALO GROVE HELD IN THE COUNCIL CHAMBERS, 50 RAUPP BOULEVARD,
BUFFALO GROVE, ILLINOIS ON WEDNESDAY, APRIL 17, 2024**

Call to Order

The meeting was called to order at 7:30 PM by Chair Mitchell Weinstein

Public Hearings/Items For Consideration

1. Consideration of a Petition for Approval of a Preliminary Plan, an Amendment to the Special Use Approved by Ordinance No. 2018-002, and Variations from the Fence Code to Allow Site Improvements and Construction of Accessory Structures on the Buffalo Grove High School Property Located at 1100 W Dundee Road (Trustee Weidenfeld) (Staff Contact: Kelly Purvis)

Deputy Director Purvis provided an overview of the project and the proposed requests.

The following representatives were sworn in on behalf of School District 214's petition:

Andrew Phelps, project architect with STR Partners; Thomas Grunert, project manager with Pepper Construction; Don Mathews and David Guerrero, project engineers with Gewalt Hamilton Associated, Inc.

Phelps stated that improvements to the site are drastically needed; drainage is failing, and after significant rain, the fields can't be used sometimes for weeks.

Com. Moodhe asked if ingress/egress has been provided for emergency vehicles.

Phelps indicated that the north side of the fields are not fenced in and that is the access route for emergency vehicles.

Com. Moodhe asked if there is a plan for special events parking?

Phelps responded that the school district has made arrangements with surrounding elementary schools for larger event parking.

Com. Moodhe asked about the changes to the retention basin, and whether the new baseball field would be natural grass?

Phelps indicated that it would, and also noted that a storm basin vault will be constructed beneath the outfield which will collect stormwater.

Com. Moodhe asked about extending the sidewalks along the north driveway access.

Guerrero walked through utility locations and indicated that the proposed fence can't be moved, preventing installation of a sidewalk along the north side. He indicated that they would take a look to see if there is any possibility of adding the sidewalk in this location.

Com. Richards asked if the petitioner could walk the Commission through the changes to the stormwater on site.

Guerrero indicated that the stormwater system will be designed to convey stormwater into storm drains. The tennis courts will drain north to south, away from the homes. He indicated there will be a network of underdrains.

Com. Richards asked for the petitioner to talk through the loss of parking, and indicated that it is difficult to park on the school campus now.

04/17/2024

Mathews indicated that they looked at the parking from two perspectives: what the code requires, and what the demand on a typical school day would be. The parking provided does meet the Village's requirements, and the field counts done for the school campus showed that about 10% of the parking would be unused at peak capacity, after the removal of approximately 74 parking spaces.

Com. Richards asked about the meetings held with the residents and if they expressed any concerns.

Phelps indicated that most wanted more synthetic fields and wanted to know if pickle ball would be allowed when the tennis courts were not in use.

Com. Worlikar asked about the height of the existing fences on the property.

Phelps indicated that the baseball field has protective fencing up to 40 feet, and the softball field is a little less than 30 feet now.

There was some discussion regarding the fencing along Arlington Heights Road, and why the 14-foot height is needed.

Phelps indicated the reason is largely to protect vehicles along Arlington Heights Road from home run balls.

Com. Worlikar asked if there are any major changes to traffic flow.

Phelps indicated that there are not.

Com. Worlikar asked if more EV chargers would be installed.

Phelps indicated that there are not additional EV chargers proposed in the new lot.

Com. Worlikar asked how the Village's emergency teams would know how to access the site.

Phelps indicated that the school district and Police/Fire Departments work closely on these plans to ensure proper response during an emergency.

Com. Worlikar asked how parents and students will know about overflow parking for special events.

Phelps indicated that it would be clearly communicated by the school administration.

Com. Spunt agreed with Com. Moodhe's statements regarding the sidewalk along the north drive access.

Com. Spunt also asked if the school district would be replacing the fence along the north lot line abutting the single-family residential homes.

Phelps reviewed the timeline for replacement of the fence, which is likely to be in phase two or three of the project.

Chairman Weinstein asked if the reality is going to be 70 less parking spaces for students on a daily basis.

Phelps responded yes, and indicated the parking is not being utilized at this point.

Chairman Weinstein asked if the 40-foot safety fencing is a standard height for recreational facilities.

Phelps responded that it is.

Chairman Weinstein asked for confirmation that the tennis courts would not be lit, and would be fenced off, and locked during off hours.

Phelps confirmed that is correct.

Com. Moodhe asked if the culvert between Arlington Heights Road and the site will be impacted by the changes to the drainage system.

04/17/2024

Guerrero reviewed the proposed changes to the site, and indicated the culvert would not be impacted.

Com. Moodhe asked if the drainage to the north would be impacted.

Guerrero indicated that it would not.

Com. Moodhe asked for the photometric plan to be displayed and asked where the zero footcandle line would be.

Phelps responded by showing the area on the plan.

Chairman Weinstein entered the revised Geometric Plan into the record as Exhibit 1 and the Staff Report as Exhibit 2.

The public hearing was closed at 8:18PM.

Com. Richards made a motion to recommend approval of a preliminary plan, an amendment to the Special Use approved by Ordinance No. 2018-002, and Variations from the Fence Code requirements for residential districts related to fence heights on and adjacent to the athletic fields, to accommodate the proposed improvements to the BGHS properties located at 1100 W Dundee Road, subject to the following conditions:

1. The proposed improvements shall be constructed in substantial conformance with the plans attached as part of the petition.
2. The Final Engineering plans shall be submitted in a manner acceptable to the Village.
3. Any directional or incidental signage added to the site shall be reviewed administratively by staff.
4. Landscaping on the property shall be maintained in accordance with the approved landscape plan in perpetuity.
5. All light fixtures shall be appropriately screened to avoid glare into surrounding residential properties and field lighting shall be turned off when not in use.

Com. Davis seconded the motion.

Com. Moodhe began deliberations by noting that the fence heights are pretty typical and indicated that he understands the need for the variations. He indicated that he was at first concerned about the reduction in parking, but visited the site and found that the lot that will be removed is underutilized.

Com. Richards indicated his support for the requests, noting that the special use amendment would allow for needed improvements to the facilities. He indicated that the variations for the fence make sense and that this is a positive proposal.

Com. Worlikar indicated that he was fine with the fence height but was a little concerned that the student enrollment might increase in the future with 90% of the parking supply occupied.

With no further comments from the Commission a vote was taken.

04/17/2024

RESULT:	RECOMMENDATION TO APPROVE [UNANIMOUS]
AYES:	Moodhe, Spunt, Weinstein, Richards, Worlikar, Davis
ABSENT:	Amy Au, Sujat Saxena

2. Consideration of a Request for a Special Use for a Home Daycare at 4 Brucewood Court - Consideration of This Item Will be Continued to the May 15, 2024 PZC Meeting. (Trustee Weidenfeld) (Staff Contact: Kelly Purvis)

The Public Hearing was opened.

Deputy Director Purvis indicated that additional information was being collected from the applicant and that the petition was not ready to be presented to the Commission tonight.

Com. Richards made a motion to continue the public hearing for this item until May 15, 2024.

Com. Davis seconded the motion.

RESULT:	TABLED [UNANIMOUS]
AYES:	Moodhe, Spunt, Weinstein, Richards, Worlikar, Davis
ABSENT:	Amy Au, Sujat Saxena

Regular Meeting

Other Matters for Discussion

Approval of Minutes

1. Planning and Zoning Commission - Regular Meeting - Mar 6, 2024 7:30 PM

Com. Richards made a motion to approve the March 6, 2024 Planning and Zoning Commission meeting minutes.

Com. Spunt seconded the motion.

RESULT:	ACCEPTED [UNANIMOUS]
AYES:	Moodhe, Spunt, Weinstein, Richards, Worlikar, Davis
ABSENT:	Amy Au, Sujat Saxena

Chairman's Report

None

Committee and Liaison Reports

Com. Richards indicated that there were no Planning and Zoning Commission items presented at the previous Village Board meeting.

Staff Report/Future Agenda Schedule

Deputy Director Purvis indicated that a fence variation request will come before the Commission on May 1, 2024 and that there are three items ready for the May 15, 2024 agenda.

04/17/2024

Purvis also reminded the Commission to complete their compliance filings and OMA training prior to May 1, 2024.

Public Comments and Questions

Adjournment

The meeting was adjourned at 8:26 PM

Action Items

Kelly Purvis

APPROVED BY ME THIS 17th DAY OF April, 2024

Mitchell Weinstein, Commissioner



Ordinance No. O-2024-59 : Ordinance Authorizing a Development Improvement Agreement with Township High School District 214

Recommendation of Action

Staff recommends approval subject to the review and approval by the Village Attorney.

SUMMARY: Staff recommends approval of the Development Improvement Agreement for Phase 1 improvements to Buffalo Grove High School's athletic fields subject to the receipt of the required fees and Village Attorney review.

ATTACHMENTS:

- Memo_BGHS Phase 1 Field Reno DIA_5-2-2024 (DOCX)
- DIA Ordinance_BGHS Phase 1 Field Reno_5-2-2024 (DOCX)
- DIA_BGHS Field Reno_5-9-2024 (DOCX)
- 06 D214 BGHS Phase 1 EOPC Awarded Bids (PDF)
- 04 5651.145 BGHS Phase 1 Civil MWRD Review #1 2024-05-06_r (PDF)

Trustee Liaison
Stein

Staff Contact
Kyle Johnson, Engineering

Monday, May 20, 2024	
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VILLAGE OF BUFFALO GROVE



MEMORANDUM

DATE: May 16, 2024

TO: Dane Bragg, Village Manager

FROM: Kyle Johnson, Deputy Director of Public Works/Village Engineer

SUBJECT: Buffalo Grove High School Phase 1 Athletic Field Renovations Development Improvement Agreement

The Township High School District 214 is proposing improvements to the Buffalo Grove High School Athletic Fields located at 1100 Dundee Road. Phase 1 of this project includes removal of the existing baseball and softball fields and in their place, the following improvements are proposed to be constructed: A new varsity softball field with modern safety netting, enclosed dugouts, and dedicated spectator seating; a new ticket booth and fencing for controlled access, alongside a concession building, a welcoming plaza and restroom facilities; 10 new tennis courts with spectator seating and an artificial turf multi-sport field.

The Development Improvement Agreement, or DIA, is an agreement between the Developer and the Village and identifies the items to be constructed by the developer on the project site. Typical items include stormwater management, parking lots, and all of the utilities such as water main and sanitary sewer. With this agreement, the developer agrees to provide security as required in the Village Code until the developer completes the required items. As this project is being performed by another governmental agency, a letter of credit will not be required. The School District and their contractors will be required to improve the site per approved plans/designs.

Engineering and legal staff at the Village are currently working with the School District and their consultants to finalize all documentation necessary to approve the DIA. Staff recommends Village Board approval of the DIA subject to review and approval by the Village Attorney once all information has been received.

ORDINANCE 2024-_____

**AN ORDINANCE AUTHORIZING A
DEVELOPMENT IMPROVEMENT AGREEMENT WITH THE
TOWNSHIP HIGH SCHOOL DISTRICT 214**

WHEREAS, the Village of Buffalo Grove is a home rule unit pursuant to the Illinois Constitution of 1970; and

WHEREAS, the Village seeks to enter into a Development Improvement Agreement (DIA) with the Township High School District 214 ("Developer") for site improvements associated with Phase 1 of the Buffalo Grove High School Athletic Field Renovations,

NOW THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS, as follows:

SECTION 1. The foregoing recitals are hereby adopted and incorporated and made a part of this Ordinance as if fully set forth herein.

SECTION 2. The Development Improvement Agreement is approved subject to review and approval by the Village Attorney.

SECTION 3. If any section, paragraph, clause or provision of this Ordinance shall be held invalid, the invalidity thereof shall not affect any other provision of this Ordinance.

SECTION 4. This Ordinance shall be in full force and effect from and after its passage and approval and shall not be codified.

AYES: _____
 NAYES: _____
 ABSENT: _____
 PASSED: _____, 2024
 APPROVED: _____, 2024

APPROVED:

 Eric N. Smith, Village President

ATTEST:

 Janet Sirabian, Village Clerk

Buffalo Grove High School Athletic Field Renovations Phase 1
Development Name

DEVELOPMENT IMPROVEMENT AGREEMENT

THIS AGREEMENT ("Agreement"), made and entered into as of this 18th day of March 2024 by and between the VILLAGE OF BUFFALO GROVE, an Illinois Municipal Corporation, and having its office at Village Hall, 50 Raupp Boulevard, Buffalo Grove, Illinois (hereinafter called "Village"), and the Board of Education of Township High School District 214, Cook County, Illinois (hereinafter called "Developer").

WITNESSETH:

WHEREAS, Developer desires to improve the real property described in Exhibit "A" attached hereto and made a part hereof (the "Property"), and in compliance with the Village's Development Ordinance, Developer has submitted to the Village certain (i) plans prepared by STR Partners, LLC, who have hired registered professional engineers (the "Site Plan"), which Preliminary Plans were approved by the Village pursuant to Ordinance No. _____ and described in more detail in Exhibit "C" attached hereto and made a part hereof (the "Site Improvement Plans" and together with the Site Plan, the "Plans"); and,

WHEREAS, the Village is willing to approve said Plans to the extent it has oversight authority under Illinois law, provided that this Agreement is executed to assure the Village as to the completion of certain site improvements.

NOW, THEREFORE, it is mutually agreed as follows:

1. The Developer is a governmental entity in the Village authorized under the Illinois School Code to improve facilities under its jurisdiction. The School District 214 shall furnish, or cause to be furnished, at their own cost and expense, all the necessary material, labor, and equipment to complete the improvements listed on Exhibit "B" attached hereto, and all other site improvements not specifically set forth, which are required by applicable ordinances or agreements (collectively, the "Improvements"), all in a good and workmanlike manner and in accordance with all pertinent ordinances and regulations of the Village and in accordance with the Plans (including any subsequent revisions requested by the Developer and approved in writing by the Village pursuant to the Village's Development Ordinance).

2. Attached hereto as Exhibit "D" is a complete cost estimate for the construction of the

improvement described in Exhibit "B" hereto.

3. All site work shall be subject to inspection by and the approval of the Village Engineer. It is agreed that the contractors who are engaged to construct the Improvements are to be approved by the Village Engineer and that such approval will not be unreasonably withheld.

4. The Developer has paid or will pay the Village a Review and Inspection Fee, as required by Ordinance. It is understood that said fee is based on the amount of the contracts or cost estimate for those items in Exhibit "B".

5. Prior to the time the Developer or any of its contractors begin any of the work provided for herein, the Developer, and/or its contractors shall furnish the Village with evidence of insurance covering their employees in such amounts and coverage as is acceptable to the Village. Nothing herein shall waive any immunities the Village May assert in response to or defense of any such claim.

In addition, by its execution of this Agreement, the Developer agrees, to the extent authorized under Village Code, to protect, indemnify, save and hold harmless, and defend the Village and its employees, officials, and agents, against any and all claims, costs, causes, actions, and expenses, including but not limited to reasonable attorney's fees incurred by reason of a lawsuit or claim for damages or compensation arising in favor of any person, corporation or other entity, including the employees or officers or independent contractors or sub-contractors of the Developer or the Village, on account of personal injuries or death, or damages to property occurring, growing out of, incident to, or resulting directly or indirectly, from the performance of the work of the Developer, independent contractors or sub-contractors or their officers, agents, or employees. The Developer shall have no liability or damages for the costs incident thereto to the extent caused by the sole negligence or intentional misconduct of the Village, its independent contractors or sub-contractors or their officers, agents, or employees.

6. Subject to Force Majeure (as defined herein), Developer shall cause the Improvements to be completed within twenty-four (24) months following the date of this Agreement (except any Improvements for which specified time limits are noted on the Plans, which shall be completed within the specified time limits shown on the Plans). "Force Majeure" as used herein shall mean a delay in Developer's performance

hereunder caused by a strike or labor problem, energy shortage, governmental pre-emption or prescription, national emergency, or any other cause of any kind beyond the reasonable control of Developer.

7. The Developer, for a period of one year beyond formal acceptance by the Village of any Improvement, described in Exhibit "B" hereof, shall be responsible for maintenance, repairs and corrections to such Improvements which may be required due to failures or on account of faulty construction or due to the Developer's negligence and/or its contractors' negligence.

8. N/A

9. The Developer acknowledges that they are responsible for the proper control of weeds, grass, refuse, and junk on all property which he owns within the Village in accordance with Chapter 8.32 of the Buffalo Grove Municipal Code.

If the Developer fails to perform its maintenance responsibilities established in either this paragraph or Chapter 8.32, the Village may provide a written notice to the Developer of the improper maintenance condition. If proper maintenance is not completed within ten (10) days after the Developer is provided this notice, the Village may perform the maintenance and may issue a Stop Work Order or also may revoke all permits which the Developer has been granted.

10. The Developer agrees that no Improvements constructed in conjunction with this project are sized or located in such a way as to warrant any recapture payment to the Developer pursuant to any applicable previous agreements.

11. This Agreement shall automatically terminate and be of no further force and effect with respect to Developer or the Property upon the expiration of the one-year maintenance period, and upon such termination the parties hereto shall have no further obligations to the other. The period commencing on the date set forth in the preamble to this Agreement and expiring on the expiration of the one-year maintenance period is referred to herein as the "Term".

12. This Agreement and the obligations contained herein are in addition to, and not in limitation of, all other agreements between the Parties hereto including, without limitation, the Preliminary Plan dated _____, and the obligations contained therein.

13. Neither party shall cause this Agreement (or any memorandum hereof) to be recorded against the Property.

15. Neither party shall assign this Agreement or any of its terms without the prior, express and written consent of the other party. Furthermore, no assignment of the Developer's obligations shall be effective unless and until the Village approves the language of any proposed assignment and substitute security in the amounts required by this Agreement.

IN WITNESS WHEREOF, the Village has caused this Agreement to be executed, as has the Developer, all as of the date first above written.

VILLAGE OF BUFFALO GROVE, an Illinois Municipal Corporation

By _____
Village President

DEVELOPER:

**Board of Education of Township High School District 214
Cook County
2121 South Goebbert Road
Arlington Heights, IL 60005**

By: _____
Name: _____
Title: _____

Buffalo Grove High School Athletic Field Renovations Phase 1
(Development Name)

DEVELOPMENT IMPROVEMENT AGREEMENT

EXHIBIT A

LEGAL DESCRIPTION

N/A

KNOWN AS: **1100 DUNDEE RD, BUFFALO GROVE, ILLINOIS**

PERMANENT INDEX NUMBER: 03-05-302-003 & 03-05-302-002

AREA = ____ SQ. FT. OR ____ ACRES

Buffalo Grove High School Athletic Field Renovations Phase 1
(Development Name)

DEVELOPMENT IMPROVEMENT AGREEMENT

EXHIBIT B

All improvements set forth and depicted in the Plans, both public and private, including (to the extent applicable) earthwork, grading, roads or streets, parking lots, areas and/or parking facilities, sidewalks, sanitary and storm sewers, water main, drainage and storm water detention facilities, site grading, street lighting, landscaping, survey monuments and benchmarks.

Buffalo Grove High School Athletic Field Renovations Phase 1
(Development Name)

DEVELOPMENT IMPROVEMENT AGREEMENT

EXHIBIT C

Final Engineering and Landscaping Plans prepared by: STR Partner Partners, LLC

Entitled: D214 BGHS Athletic Field Renovations Phase 1

Consisting of: 30 sheet(s), last revised 1/25/2024

(see following pages)

Buffalo Grove High School Athletic Field Renovations Phase 1
(Development Name)

DEVELOPMENT IMPROVEMENT AGREEMENT

EXHIBIT D

Engineers Opinion of Probable Costs

(see following pages)

ENGINEER'S OPINION OF PROBABLE COST

D214 Buffalo Grove High School Athletic Fields - Phase 1

Township High School District 214
GHA Project #5651.145

Prepared by: David Guerrero, Jr
Checked by: Don Matthews
Date: February 20, 2024

GHA

GEWALT HAMILTON ASSOCIATES, INC

CONSULTING ENGINEER

625 Forest Edge Drive, Vernon Hills, IL 60069
TEL 847.478.9700 ■ FAX 847.478.9700
www.gha-engineers.com

9.B.d

Village of Buffalo Grove Engineering Department EOPC
Buffalo Grove High School Athletic Fields - Phase 1

SP*	Pay Item	Description	Quantity	Unit	Value
	Evans and Son Blacktop				
		Earthwork and Demolition	1.0	LS	\$1,006,350.00
	Berger				
		Site Utilities	1.0	LS	\$1,015,000.00
	Abbey Paving				
		Asphalt and Concrete Paving	1.0	LS	\$772,435.00
	Breezy Hill				
		Landscaping	1.0	LS	\$176,800.00
					\$2,970,585.00
					\$2,970,585.00

Detailed Description:
Construction value determined by Construction Manager based on awarded bids

Attachment: 06 D214 BGHS Phase 1 EOPC Awarded Bids (O-2024-59 : D214 BGHS Athletic Field Renovations Phase 1 Development



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MEPP ENGINEERING:
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Eli Grove Village, IL 60007
(847) 981-1880

CONSTRUCTION MANAGER:
PEPPER CONSTRUCTION COMPANY
411 N Lake Zurich Rd
Barrington, IL 60010
(847) 381-2760

KEY PLAN

SCOPE DOCUMENT

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PROJECT

D214 BGHS ATHLETIC FIELD RENOVATIONS PHASE 1
1100 W Dundee Road
Buffalo Grove, IL 60089

Township High School District 214
2121 South Goebbert Road
Arlington Heights, IL 60005

CLIENT PROJECT NUMBER

STR PROJECT NUMBER

23040

DRAWING DATES

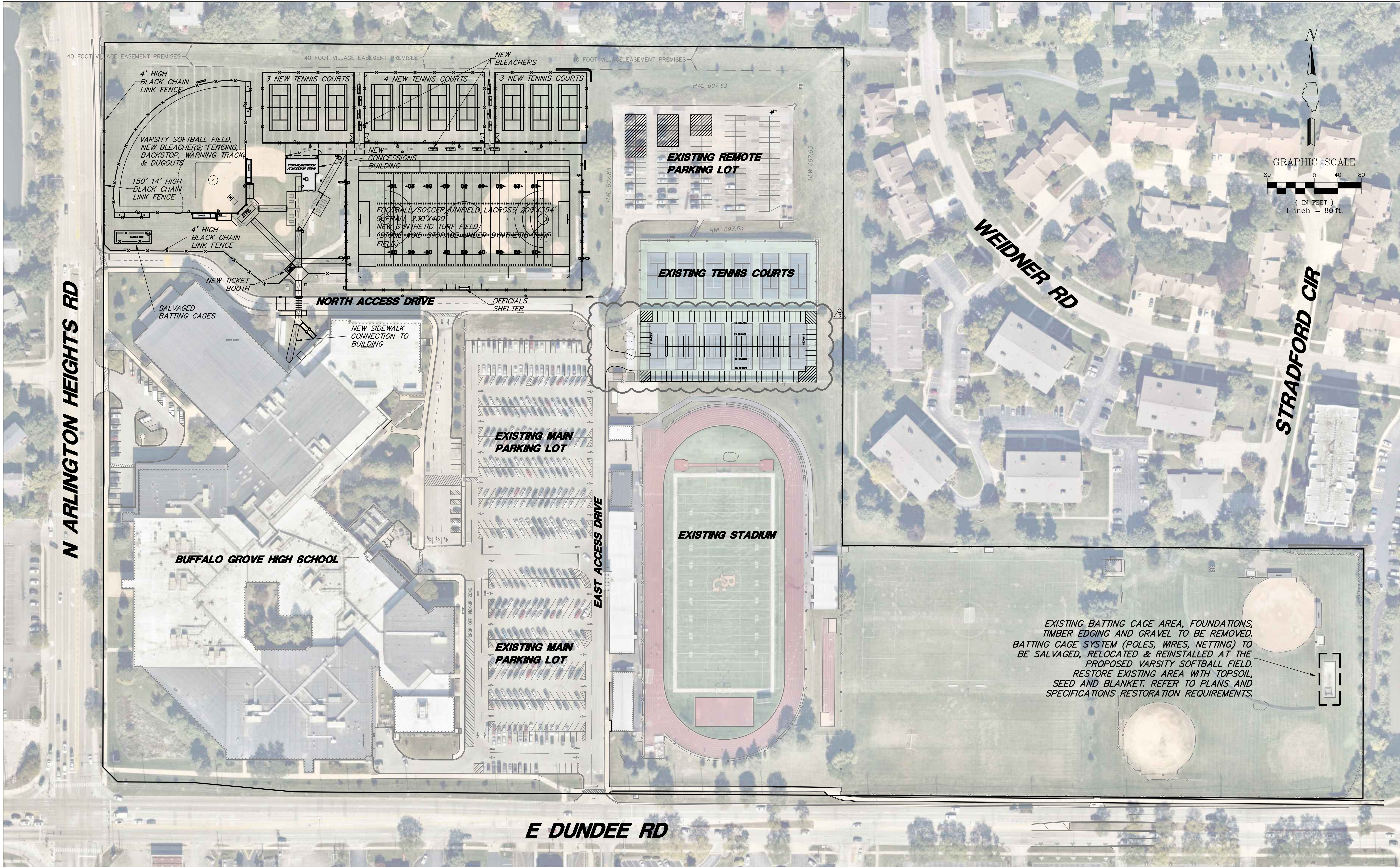
NUMBER	DATE	COMMENTS
•		
•		
•		
•	3 MAY 06, 2024	MWRD REVIEW COMMENTS #1
•	61 FEB 27, 2024	VILLAGE REVIEW COMMENTS #1
•	2 JAN 15, 2024	ISSUE FOR CONSTRUCTION
•	2 NOV 10, 2023	ADDENDUM #2
•	1 NOV 03, 2023	ADDENDUM #1
•	1 OCT 20, 2023	ISSUE FOR PERMIT AND BIDS

DRAWING TITLE

OVERALL SHEET

SHEET NUMBER

C2.0



ALTERNATES

- ALTERNATE #1 – INSTALL PETROMAT FABRIC WITHIN THE TENNIS COURT PAVEMENT SECTION.
- ALTERNATE #2 – INSTALL GLASGRID MODEL #8511 WITHIN THE TENNIS COURT PAVEMENT SECTION.
- ALTERNATE #3 – INSTALL 3” RED TREAD WARNING TRACK AGGREGATE IN-LIEU OF BROWN GRANITE WARNING TRACK STONE.
- ALTERNATE #4 – INSTALL 6” SURE-HOP RED INFIELD MIX IN-LIEU OF SALVAGED SKINNED INFIELD MIX.
- ALTERNATE #5 – INSTALL 6” QUICKPITCH RED LIMESTONE INFIELD MIX IN-LIEU OF SALVAGED SKINNED INFIELD MIX.

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- 2 JAN 15, 2024 ISSUE FOR

•  NOV 10, 2023 ADDENDUM

• NOV 03, 2023 ADDENDUM

- 1 OCT 20, 2023 ISSUE FOR

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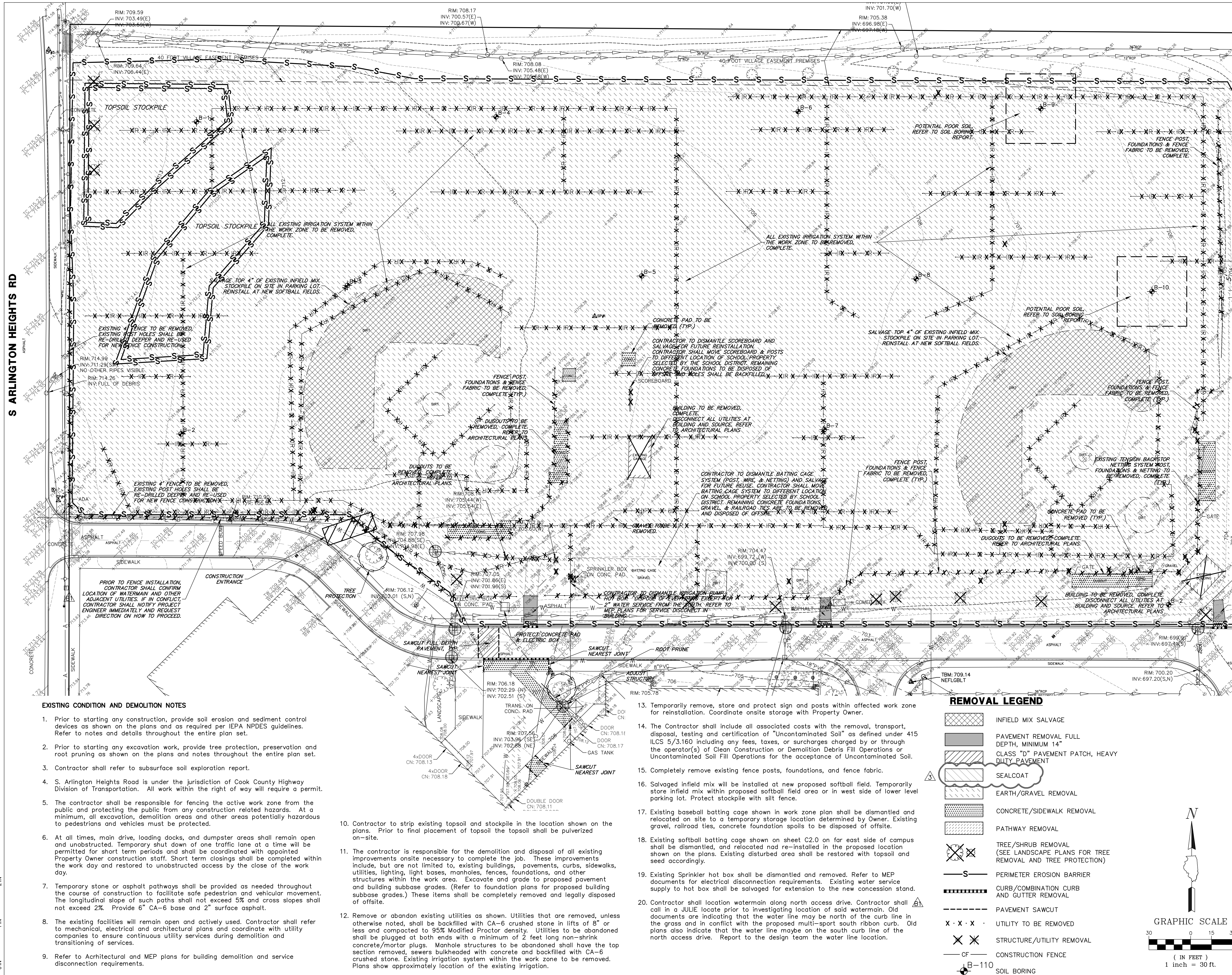
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EXISTING CONDITIONS DEMOLITION PLAN (1)

SHEET NUMBER

C3.0

Packet Pg. 502



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DRAWING TITLE

GEOMETRIC PLAN (1)

SHEET NUMBER

C3.1

S ARLINGTON HEIGHTS RD

GEOMETRIC AND PAVING PLAN

- All pavement dimensions are to edge of pavement, unless otherwise noted. E=edge of pavement, B=back of curb, F=face of curb. Radii dimensions are to back of curb. Tennis court dimensions are from edge of play lines to fence line.
- Install concession stand, back stop wall, dugouts, ticket booth, officials storage shelter, and storage building. Refer to Architectural and MEP plans for design and utilities.
- Install all curb and sidewalk as shown. Note some curbs require reverse pitch gutter. Dowel new sidewalk and curb to existing and proposed curbs per general notes. When constructing a carriage walk, the proposed sidewalk contraction and expansion joints shall align with existing curb joints. Note some sidewalks have thickened edges similar to carriage walks. This occurs along multi-sport field.
- Provide 1.90% cross slope and 4.5% maximum longitudinal slope on all sidewalks and pedestrian path ways unless otherwise indicated. Illinois accessibility code requires a maximum constructed cross slope of 2.00% and longitudinal slope of 5.00%.
- Install chain link fencing, fencing and netting, foul pole, football posts and soccer anchor collar. Note some fencing requires ribbon curbs. See specific fencing details for each respective sport or location for detailed height pole spacing and netting details. Refer to specifications for additional requirements. Note fence near the ticket booth area is a decorative fence, refer to architectural plans for pier design and civil plans for fence details.
- Install tennis court pavement as shown. Refer to detail sheet for specific pavement sections, fencing, net post and general note sheet for construction, testing and compaction requirements.
- Synthetic turf field and batting cage area. Prepare subgrade - nailer curb stone base, underdrains, stone void storage and rough grade. Co-op bid contractor will fine grade and install synthetic turf.
- Varsity softball. Install underdrains, salvaged skin infield, new warning track and bases. See details.
- All pavement markings shall be paint, color as noted, in accordance with Section 780 of the IDOT Standard Specifications. (Two single applications, 16 mils each required).

Site pavement marking shall be coordinated with Site engineer. Contractor shall notify site engineer 48 hrs prior to installing pavement markings.

- Install retaining wall as shown. Refer to detail sheet for material and design requirements.
- Installed salvaged softball batting cage net system within new batting cage area. Co-op bid contractor will fine grade and install synthetic turf.
- Install flag pole. Refer to specifications for additional information.
- Contractor to order, erect, install, and anchor bleachers 12 mobile units (Tennis/Multisports Field & one grandstand softball field bleacher). Refer to specifications for bleacher models, manufacturer, and installation requirements.
- Install transformer pad as shown. Pad shall be set 6" above finished grade. Refer to MEP plans for final pad size and design requirements.
- Contractor shall install temporary erosion control seed and blanket as necessary to meet soil erosion and sediment control requirements. Refer to notes and details throughout the plan set for specific material requirements.
- For final restoration, the contractor shall be responsible for restoring all disturbed turf areas and proposed turf areas as follows:

- Refer to Landscape plans for plant and tree material and installation requirements.
- Refer to civil plans and specifications for topsoil, seed and sod material and restoration requirements.
- Prior to placement of topsoil restoration area subgrade material shall be roto-tilled and re-compacted to a maximum of 80% standard proctor to a depth of 6".
- Spread a minimum of 6" of existing site salvaged screened topsoil or new pulverized topsoil on all disturbed areas. Compact to 80% standard proctor.
- Topsoil must be free of litter, brush, rocks and earth clods of greater than $\frac{1}{2}$ " inch in any dimension. Contain between 3%-8% organic matter, 25%-35% clay, and 30%-40% sand content. pH shall be between 6.5 and 7.5. Contractor shall test topsoil to be placed as well.
- Apply fertilizer per specifications.
- Roto-till fertilizer into the topsoil prior to final restoration vegetation to 6" depth. Refer to specifications for detailed fertilizer, seed and sod requirements.
- General open area restoration as follows:
 - Field of Dreams Gameday Mixture 70% Kentucky / 30% Perennial Rye. (Lawn mixture)
 - Erosion control blanket shall be North American Green S75 or approved equal installed following manufacturer guidelines.
 - All seeded areas shall be roped off from pedestrian access using metal stakes at 8 foot spacing and snow fence tied tie two places per stake.
- Softball Field sod restoration areas as follows:
 - Sod shall be 2.5' by 30' long thick cut (1-1/2") of well rooted growth material.
 - Sod Mixture to consist of 100% Kentucky Bluegrass
 - Sod shall be rolled after installation.
- Watering
 - Contractor shall be responsible for watering the restored area per project specifications for a duration of 60 days prior to the Owner's final review and acceptance.
 - Contractor will be responsible to erect a temporary above ground water irrigation system to water both the seed and sod areas. Refer to specifications for more detailed requirements.
 - If restoration has not shown a "catch" or uniform stand, the contractor shall repeat re-seeding or re-sodding until a uniform stand is achieved.
- Once restoration has been completed, the contractor shall remove erosion control devices. Silt fence trenches shall be backfilled and restored in kind. Storm structures shall be cleaned of debris.

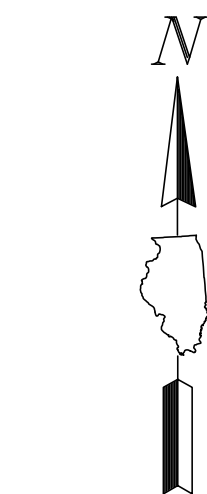
PROPOSED LEGEND

	CLASS "D" PAVEMENT PATCH, 5"
	TENNIS COURT PAVEMENT SEE DETAIL
	PCC SIDEWALK, 5"
	PCC PAVEMENT, 8"
	SYNTHETIC TURF FIELD
	SOFTBALL IN FIELD MIX SEE DETAIL
	WARNING TRACK SEE DETAIL
	TEMPORARY PAVEMENT, SEE DETAIL
	FINAL SEED & BLANKET
	SOFTBALL FIELD FINAL SOD
	STONE RIP RAP

	DETECTABLE WARNINGS
	B6.12 CURB & GUTTER (REGULAR)
	B6.12 CURB & GUTTER (DEPRESSED)
	INTEGRATED SIDEWALK/ CONCRETE CURB
	RETAINING WALL SEE DETAIL

PROPOSED LEGEND

--- PAVEMENT SAWCUT
 --- EXPANSION JOINT



GRAPHIC SCALE

30 0 15 30
 (IN FEET)
 1 inch = 30 ft.

MATCH LINE (SEE SHEET C4.1)



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KEY PLAN

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CLIENT PROJECT NUMBER

STR PROJECT NUMBER

23040

DRAWING DATES

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DRAWING TITLE

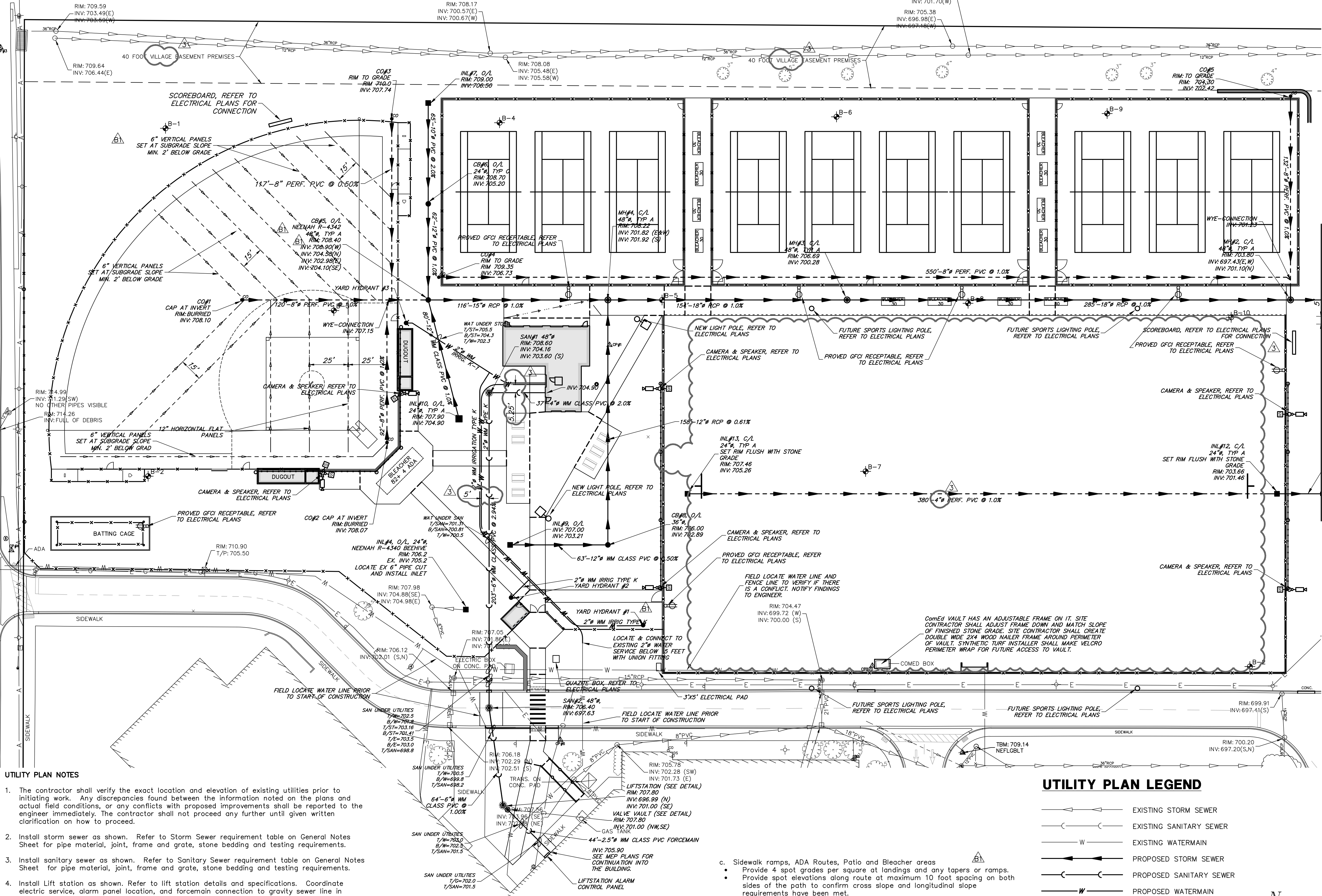
UTILITY PLAN (1)

SHEET NUMBER

C3.2

S ARLINGTON HEIGHTS RD

Actual size to read at scale
0 IN 1 IN 2 IN



UTILITY PLAN NOTES

- The contractor shall verify the exact location and elevation of existing utilities prior to initiating work. Any discrepancies found between the information noted on the plans and actual field conditions, or any conflicts with proposed improvements shall be reported to the engineer immediately. The contractor shall not proceed any further until given written clarification on how to proceed.
- Install storm sewer as shown. Refer to Storm Sewer requirement table on General Notes Sheet for pipe material, joint, frame and grate, stone bedding and testing requirements.
- Install sanitary sewer as shown. Refer to Sanitary Sewer requirement table on General Notes Sheet for pipe material, joint, frame and grate, stone bedding and testing requirements.
- Install Lift station as shown. Refer to lift station details and specifications. Coordinate electric service, alarm panel location, and forcemain connection to gravity sewer line in building.
- Install watermain as shown. Refer to Water Main requirement table on General Notes Sheet for pipe material, joint, valves, stone bedding and testing requirements. All watermain shall be 2" Type K copper. Each section of copper shall be connected using a three part copper union and copper flare. Provide reducer fitting at yard hydrant and at existing tie-in location. Yard hydrant shall be Woodford Iowa Model Y1 with a 5 foot deep bury depth. Set 26" above finished grade. Provide french drain around drain hole. French drain shall consist of 1 C.Y. of open graded CA-11 (no fines) wrapped in Light Duty non-woven geotextile fabric. Provide as-constructed locations of all bends and copper connection points.
- Refer to MEP and Architectural plans for site lighting, electric, security camera conduits, spare conduits and gas requirements and final routing.
- All connections to the combined sewer must be watertight in conformance with ASTM C-923.
- All connections to existing structures shall be machined cored holes.
- Contractor shall provide as-constructed utility documents in digital cad files and pdf files at the conclusion of the project. Refer to master list of as-constructed items provided on the plans.

AS-CONSTRUCTED DOCUMENTATION DURING AND POST CONSTRUCTION

- The following as-constructed information shall be collected throughout the construction of the project and provided in one digital AutoCAD file at the conclusion of the project:

GRADING

- Stone void storage (under Multisport field)
 - Rim and inverts of underdrain lateral
 - Bottom elevation of subgrade at 25 foot grid prior to backfilling. **Submit before backfilling**
 - Top and bottom and corners of any buried stone volume control basins.
 - As-constructed volumes within respective basins up to overflow elevation.
- Tennis Courts
 - 10 Spot Elevations at each tennis court
 - Fence line (2 each side)
 - Endline Corners (2 each side)
 - Center Net Corners (2 total)

UTILITY

- Water Main
 - As-constructed location of all bends, tees, valves, copper unions, etc. (measured dimension from two fixed above grade objects are required for buried objects)
 - Rim and top of pipe elevations for all structures
 - Provide all testing documentation.
- Sanitary Sewer
 - As-constructed locations of structures, service connections, cleanouts.
 - Rim and invert elevations.
 - Color video with transcript required for new sewer lines installed.
- Storm Sewer
 - As-constructed locations of structures, service connections, cleanouts.
 - Rim and invert elevations.
 - Color video with transcript required for new sewer lines installed. Crawler camera required on pipes 8" and larger. Push type camera on 6" or less.

UTILITY PLAN LEGEND

	EXISTING STORM SEWER
	EXISTING SANITARY SEWER
	EXISTING WATERMAIN
	PROPOSED STORM SEWER
	PROPOSED SANITARY SEWER
	PROPOSED WATERMAIN
	STORM MANHOLE
	STORM CATCHBASIN
	STORM INLET
	FLARED END SECTION
	SANITARY MANHOLE
	VALVE VAULT
	VALVE BOX
	FIRE HYDRANT
	BUFFALO BOX
	STREET LIGHT
	POWER POLE
	SIGN



GRAPHIC SCALE
30 0 15 30
(IN FEET)
1 inch = 30 ft.



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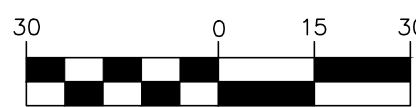
EXISTING CONDITIONS DEMOLITION PLAN (2)

SHEET NUMBER

C4.0



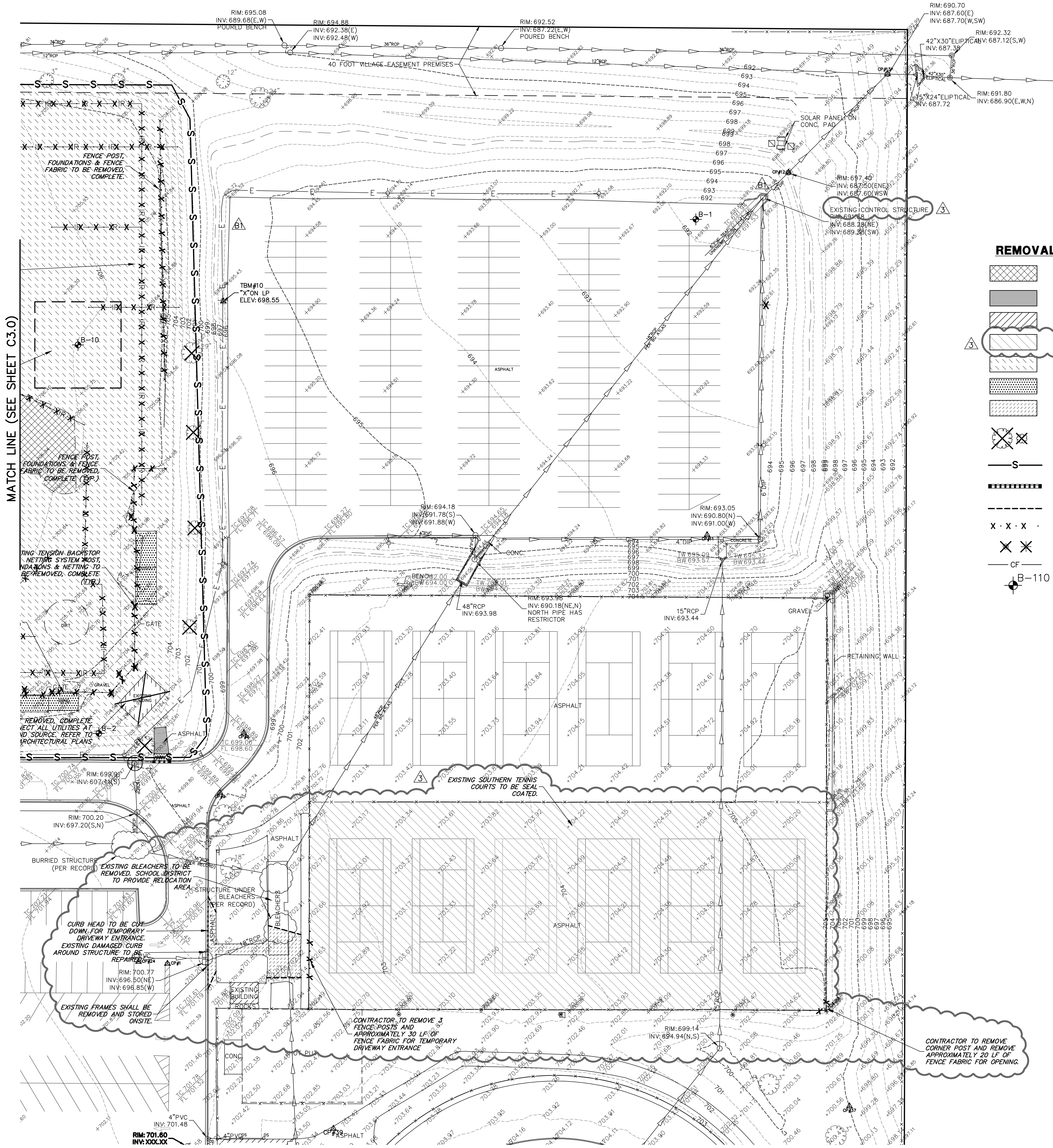
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REMOVAL LEGEND

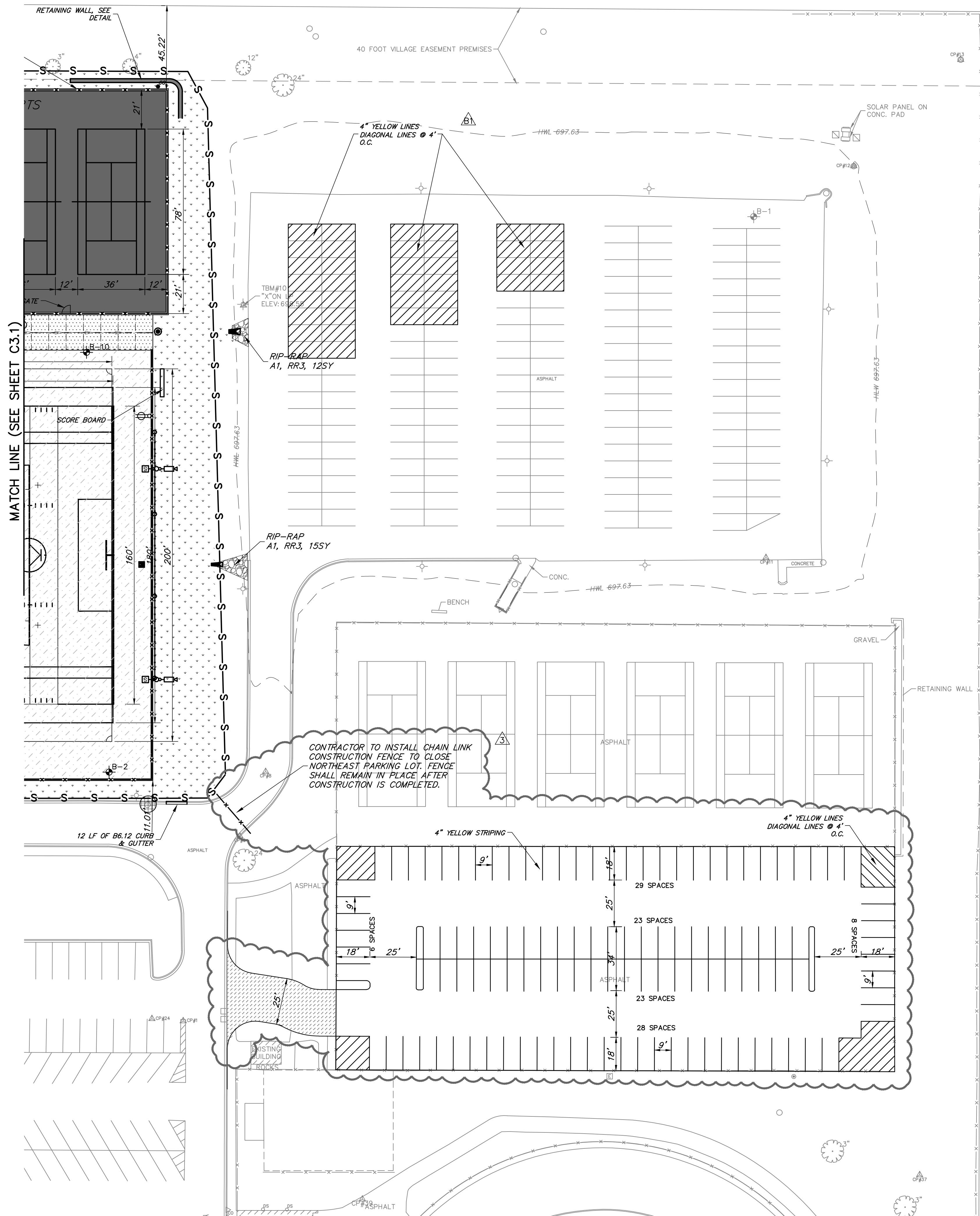
- INFIELD MIX SALVAGE
- PAVEMENT REMOVAL FULL DEPTH, MINIMUM 14"
- CLASS "D" PAVEMENT PATCH, HEAVY DUTY PAVEMENT
- SEALCOAT
- EARTH/GRAVEL REMOVAL
- CONCRETE/SIDEWALK REMOVAL
- PATHWAY REMOVAL
- TREE/SHRUB REMOVAL (SEE LANDSCAPE PLANS FOR TREE REMOVAL AND TREE PROTECTION)
- PERIMETER EROSION BARRIER
- CURB/COMBINATION CURB AND GUTTER REMOVAL
- PAVEMENT SAWCUT
- UTILITY TO BE REMOVED
- STRUCTURE/UTILITY REMOVAL
- CONSTRUCTION FENCE
- SOIL BORING



MATCH LINE (SEE SHEET C3.0)

C4.1

- - - - - PAVEMENT SAWCUT
 - - - - - EXPANSION JOINT





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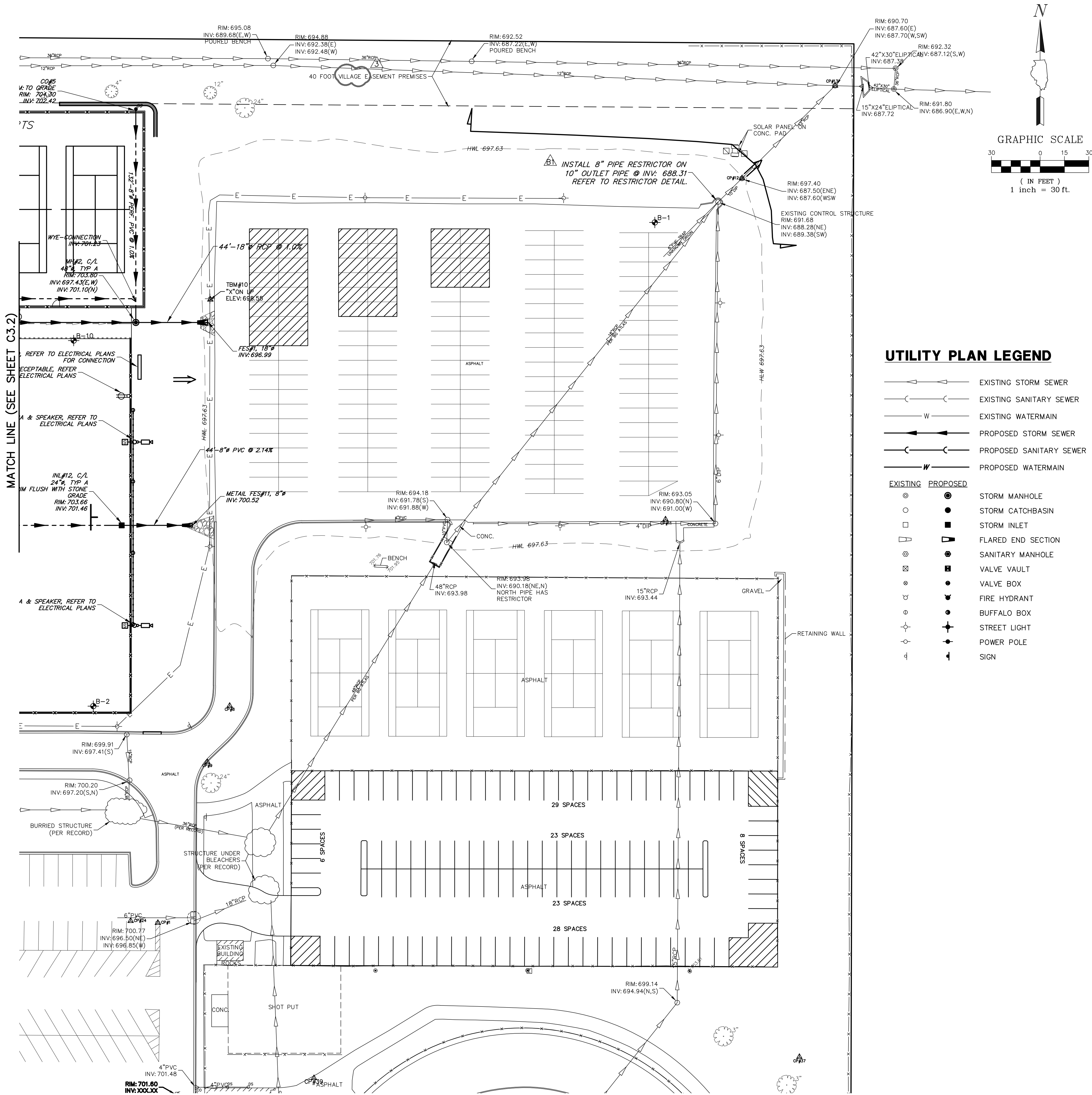
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UTILITY PLAN (2)

SHEET NUMBER

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(847) 981-1880

CONSTRUCTION MANAGER:
PEPPER CONSTRUCTION COMPANY
411 N Lake Zurich Rd
Barrington, IL 60010
(847) 381-2760

KEY PLAN

SCOPE DOCUMENT

This drawing is one drawing within a complete set of documents and shall not be considered separately from the Drawings as a whole. The Drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical, and electrical systems. As Scope Documents, the Drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Construction Documents. On the basis of the general scope indicated or described, the Contractor shall furnish all items required for the proper execution and completion of the Work.

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PROJECT

D214 BGHS ATHLETIC FIELD RENOVATIONS PHASE 1
1100 W Dundee Road
Buffalo Grove, IL 60089

Township High School District 214
2121 South Goebbert Road
Arlington Heights, IL 60005

CLIENT PROJECT NUMBER

STR PROJECT NUMBER

23040

DRAWING DATES

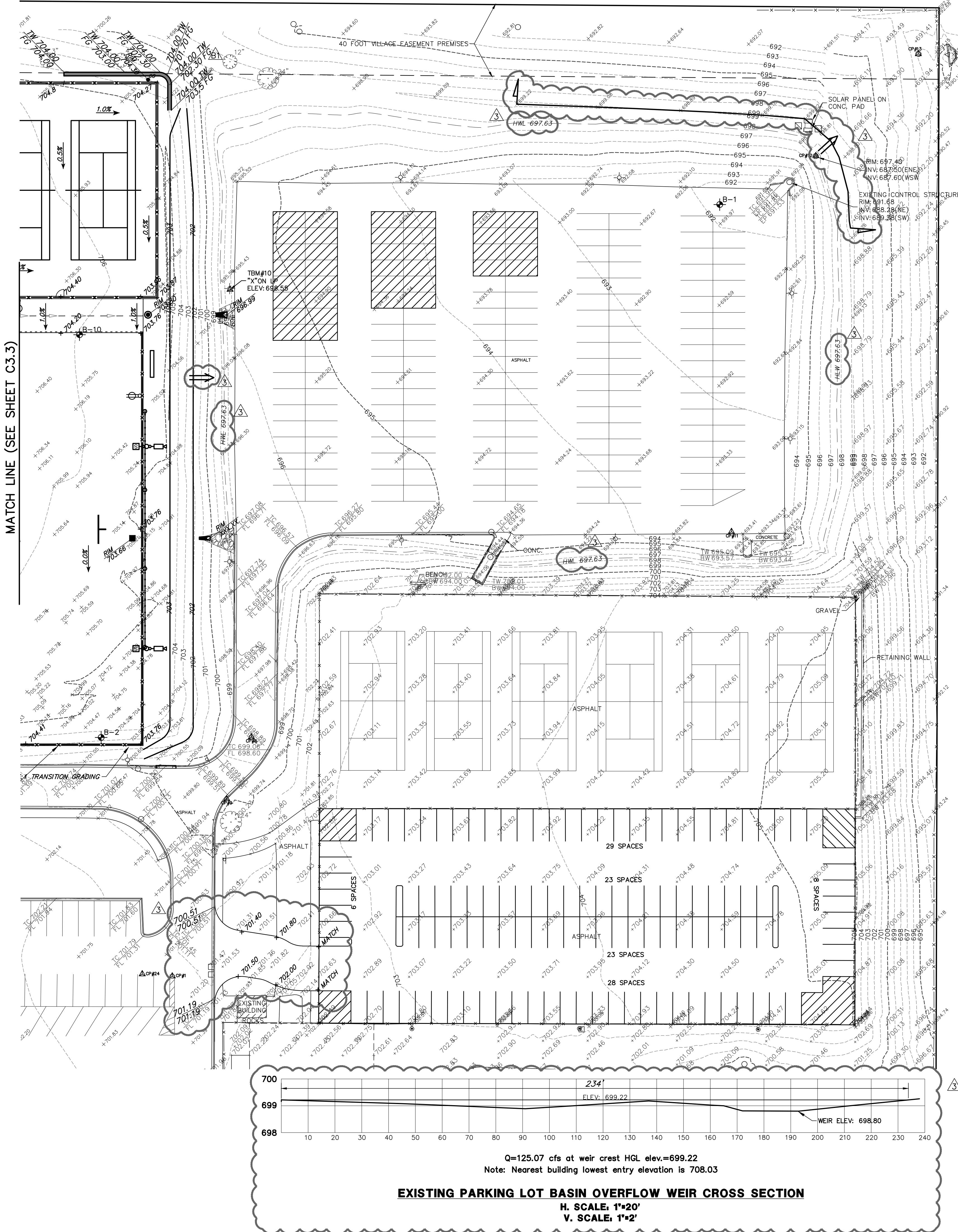
NUMBER	DATE	COMMENTS
•		
•		
•		
•	3 MAY 06, 2024	MWRD REVIEW COMMENTS #1
•	6 FEB 27, 2024	VILLAGE REVIEW COMMENTS #1
•	2 JAN 15, 2024	ISSUE FOR CONSTRUCTION
•	2 NOV 10, 2023	ADDENDUM #2
•	1 NOV 03, 2023	ADDENDUM #1
•	1 OCT 20, 2023	ISSUE FOR PERMIT AND BIDS

DRAWING TITLE

GRADING PLAN (2)

SHEET NUMBER

C4.3



A stabilized pad of aggregate underlain with filter fabric shall be located at any point where traffic will be entering or leaving the construction site to or from a public right-of-way, street, alley, sidewalk, or parking area to help reduce vehicle tracking of sediments. Roads shall be swept as needed to reduce excess sediment, dirt or stone tracked from the site. Accumulated sediment and stone shall be removed from the stabilized construction entrance as needed. Water runoff from such washing area shall be periodically inspected and repaired as necessary throughout the life of the project. Vehicles hauling erodible material to and from the construction site should be covered with a tarp. The stabilized construction entrance shall be installed prior to any soil disturbance (including demolition) and removed prior to any paving.

A stabilized pad of aggregate underlain with filter fabric shall be located at any point where traffic will be entering or leaving the construction site to or from a paved roadway. The stabilized pad shall be constructed to help reduce vehicle tracking of sediments. Roads shall be swept as needed to reduce excess sediment, dirt or stone tracked from the site. Accumulated sediment and stone shall be removed from the stabilized pad. The construction shall be maintained throughout the life of the project. Vehicles hauling erodible material to and from the project shall be covered. A sediment control structure, such as a silt fence, entrance shall be installed prior to any soil disturbance (including demolition) and removed prior to any paving.

A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included in this SWPPP.

After all sediment-producing areas have been permanently stabilized, remove the structure and all unstable sediment. Smooth the area to blend with the adjoining areas and stabilize properly.

For any stormwater discharges from construction activities within 50 feet of a Waters of the United States, except for activities for water-dependent structures authorized by a Section 404 permit, the permittee shall:

- (i) Provide a 50-foot undisturbed natural buffer between the construction activity and the Waters of the United States; or
- (ii) Provide additional erosion and sediment controls within that area.

TABLE 1	
ACTION	RESPONSIBLE PARTY
Provide qualified personnel for weekly and 0.5 inch rain event inspections	Contractor ☐ Permittee/Owner ☒
Install and maintain erosion control practices and address Corrective Actions	Contractor ☒

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Arlington Heights, IL 60005

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Packet Pg. 513

Packet Pg. 514



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DRAWING TITLE

GENERAL NOTES

SHEET NUMBER

C7.0

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE PERFORMED ACCORDING TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION, THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" LATEST EDITION, THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" LATEST EDITION, THE ILLINOIS PLUMBING CODE, THE DETAILS IN THESE PLANS, THE CONTRACT DOCUMENTS, ALL APPLICABLE REQUIREMENTS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION, THE IEPA AND ORDINANCES OF AUTHORITIES HAVING JURISDICTION AND ALL ADDENDA THERE TO.
- EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THE LOOSE MATERIAL WILL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE CONTRACT. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE PRIOR TO ORDERING MATERIALS. IN ADDITION, THE CONTRACTOR MUST VERIFY THE LINE AND GRADES. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSION OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS/HER OWN RISK AND EXPENSE AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR ANY COSTS INCURRED..
- ALL PAVEMENT DIMENSIONS ARE SHOWN TO EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE THE MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 72 HOURS PRIOR TO BEGINNING WORK.
- IF DURING CONSTRUCTION THE CONTRACTOR ENCOUNTERS OR OTHERWISE BECOMES AWARE OF ANY SEWERS OR UNDERDRAINS OTHER THAN THOSE SHOWN ON THE PLANS, HE/SHE SHALL INFORM THE ENGINEER, WHO SHALL DIRECT THE WORK NECESSARY TO MAINTAIN OR REPLACE THE FACILITIES IN SERVICE AND TO PROTECT THEM FROM DAMAGE DURING CONSTRUCTION IF MAINTAINED. EXISTING FACILITIES TO BE MAINTAINED THAT ARE DAMAGED BECAUSE OF NON-COMPLIANCE WITH THIS PROVISION SHALL BE REPLACED AT THE CONTRACTOR'S OWN EXPENSE.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY TOILET FACILITIES AND HAND SANITIZING STATIONS FOR THE USE OF ALL THE CONTRACTORS PERSONNEL EMPLOYED ON THE WORK SITE. THE FACILITIES SHALL BE MAINTAINED IN PROPER SANITARY CONDITION THROUGHOUT THE PROJECT. THE LOCATION OF THE TEMPORARY FACILITIES SHALL BE APPROVED BY THE ENGINEER.
- THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE NPDES PERMIT AND SWPPP MANUAL. IF NO NPDES PERMIT OR SWPPP MANUAL IS NEEDED FOR THE PROJECT, THE CONTRACTOR SHALL PERFORM SOIL EROSION/SEDIMENT CONTROL BEST PRACTICES OR AS DIRECTED BY THE OWNER TO PREVENT ILICIT DISCHARGES FROM THE SITE.

UTILITY NOTES

- UNDERGROUND WORK SHALL INCLUDE TRENCHING, DISPOSAL OF EXCESS MATERIAL, DEWATERING, INSTALLATION OF PIPE, CASTINGS, STRUCTURES, BACKFILLING OF TRENCHES AND COMPACTION, AND TESTING AS SHOWN ON THE CONSTRUCTION PLANS. FITTINGS AND ACCESSORIES NECESSARY TO COMPLETE THE WORK MAY NOT BE SPECIFIED BUT SHALL BE CONSIDERED AS INCLUDED TO THE COST OF THE CONTRACT. ALL SEWER SHALL BE INSTALLED USING A LASER AND BEGIN AT THE DOWNSTREAM END.
- MACHINE CORE ALL CONNECTIONS TO EXISTING STRUCTURES USING A CORE DRILL. HAMMERING OR SAWING OF STRUCTURES WILL NOT BE ALLOWED.
- SANITARY SERVICE CONNECTIONS TO NEW SEWERS SHALL BE MADE WITH WYE BRANCHES. WYE BRANCHES SHALL BE FACTORY MANUFACTURED PERMANENTLY AFFIXED TO THE MAIN SEWER. TEE BRANCHES ARE NOT ALLOWED.
- ALL CONNECTIONS TO EXISTING SANITARY MANHOLES SHALL BE INSTALLED WITH A NEOPRENE BOOT SECURED WITH DOUBLE STAINLESS STEEL STRAPS MEETING THE REQUIREMENTS OF ASTM C-923.
- ALL CONNECTIONS TO EXISTING OR DISSIMILAR STORM/SANITARY LINES SHALL BE DONE WITH STAINLESS STEEL NON-SHEAR COUPLINGS.
- STONE BEDDING AND BACKFILL SHALL BE OMITTED FOR A DISTANCE OF 15 FEET UP AND DOWNSTREAM OF SEWERS DRAINING TO OR FROM PONDS OR STREAMS. THE REPLACED BEDDING SHALL BE SILTY CLAY SOIL MECHANICALLY COMPACTED TO 90% MODIFIED PROCTOR DENSITY. THE USE OF PERMEABLE SOILS WILL NOT BE PERMITTED.
- ALL WATER MAIN SHALL HAVE MECHANICAL RESTRAINED TYPE JOINTS AT ALL CONNECTIONS AND FITTINGS. IN ADDITION, ALL HARDWARE SHALL BE STAINLESS STEEL.
- THRUST BLOCKING SHALL BE PROVIDED ON WATER MAIN AT ALL BENDS, TEES, ELBOWS, ETC. INDIVIDUAL INSPECTION FOR ALL THRUST BLOCKING IS REQUIRED. THRUST BLOCKING SHALL BE POURED IN PLACE CONCRETE. PRECAST BLOCKS MAY BE USED AS APPROVED BY THE ENGINEER IN THE FIELD.
- ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER. ALL DOWNSPOUTS, SIDE YARD DRAINS, AND OUTSIDE DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM. FOOTING DRAINS SHALL FIRST DRAIN TO A SUMP PIT.

PROJECT SPECIFIC NOTES

- THE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS THAT INCLUDE; CRITICAL SPOT GRADES SUCH AS OVERFLOW ELEVATIONS, SPOT ELEVATIONS NEAR ENTRANCES, SPOT ELEVATIONS ALONG THE DESIGNATED ADA ROUTE, SUFFICIENT INFORMATION SUCH THAT THE ENGINEER MAY VERIFY DETENTION VOLUMES, RIM AND INVERT ELEVATIONS OF ALL SEWERS, RIM AND TOP OF PIPE ELEVATIONS OF ALL WATER MAIN, LOCATIONS OF ALL INSTALLED UNDERGROUND UTILITIES, LOCATIONS OF ALL BURIED BENDS AND FITTINGS AND ALL FIELD CHANGES FROM THE APPROVED DRAWINGS.
- ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE GUARANTEED BY THE CONTRACTOR AND HIS SURETY FOR A PERIOD OF 12 MONTHS FROM THE DATE OF INITIAL ACCEPTANCE OF THE WORK BY THE OWNER AGAINST ALL DEFECTS IN MATERIALS AND WORKMANSHIP OF WHATEVER NATURE.
- ALL CONSTRUCTION WILL BE INSPECTED BY THE OWNER'S REPRESENTATIVE. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE MUNICIPALITY AS WELL AS THE STANDARD SPECIFICATIONS.
- ALL PUBLIC WATER MAINS AND SANITARY SEWER MAINS MUST BE ACCEPTED BY THE VILLAGE OF BUFFALO GROVE.
- THE SEWER AND WATER CONTRACTOR SHALL BE REQUIRED TO BE LICENSED AND BONDED WITH THE VILLAGE OF BUFFALO GROVE BEFORE WORK IS STARTED.
- CONTRACTOR SHALL NOTIFY THE **VILLAGE OF BUFFALO GROVE (847-459-2500), METROPOLITAN WATER RECLAMATION DISTRICT (MWRD) (312-751-5600), AND THE PROJECT ENGINEER (847-478-9700)** AT LEAST 72 HOURS PRIOR TO BEGINNING ANY WORK ON THIS PROJECT.
- THE CONTRACTOR SHALL INDEMNIFY THE OWNER, ENGINEER, THE MUNICIPALITY AND THEIR AGENTS, FROM ALL LIABILITY INVOLVED IN CONSTRUCTION, INSTALLATION AND TESTING OF THE WORK ON THIS PROJECT.
- THE CONTRACTOR MUST CARRY INSURANCE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. ALL OFFICIALS, EMPLOYEES AND AGENTS OF GEWALT HAMILTON ASSOCIATES MUST BE LISTED AS ADDITIONAL INSURED.
- ALL ELEVATIONS ARE ON NAVD 88 VERTICAL DATUM.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL TRAFFIC CONTROL TO ADEQUATELY INFORM AND PROTECT THE PUBLIC OF ALL CONSTRUCTION OPERATIONS.
- STOCKPILING MATERIAL WITHIN THE 100 YEAR FLOOD PLAIN AND OR THE FLOODWAY IS STRICTLY PROHIBITED
- PRIOR TO PLACEMENT OF FABRIC AND STONE, THE SUBGRADE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER. PROOF-ROLLING SHALL BE DONE USING A THREE AXLE DUMP TRUCK TOGETHER WITH LOAD WEIGHING AT LEAST TWENTY-FIVE (25) TONS. THE LOAD SHALL BE UNIFORMLY PLACED IN THE DUMP BODY. ALL DEFICIENCIES SHALL BE REPAIRED AND RE-PROOF-ROLLED UNTIL FOUND ACCEPTABLE TO THE ENGINEER.
- CRUSHED CONCRETE IS NOT PERMITTED FOR USE ON THE PROJECT UNLESS PRIOR WRITTEN NOTICE IS GIVEN BY THE ENGINEER.
- ALL STONE USED ON THE PROJECT SHALL BE CRUSHED UNLESS SPECIFICALLY NOTED OTHERWISE.
- ALL CONNECTIONS TO EXISTING STORM MANHOLES SHALL BE INSTALLED WITH A NEOPRENE BOOT SECURED WITH DOUBLE STAINLESS STEEL STRAPS MEETING THE REQUIREMENTS OF ASTM C-923.
- ALL CONCRETE SHALL HAVE A LIGHT BROOM FINISH APPLIED WITHIN 1 HOUR OF FINAL STRIKING.
- ALL CONCRETE SHALL CONSIST OF PORTLAND CEMENT CONCRETE MEETING REQUIREMENTS OF SECTION 1020. ALL SIDEWALKS, CURBS AND POST FOUNDATIONS SHALL BE CLASS SI 3,500 PSI @ 14 DAYS. ALL PAVEMENT SHALL BE CLASS PV 3,500 PSI @ 14 DAYS. WHERE NOTED ON THE PLANS HIGH EARLY CONCRETE SHALL BE CLASS PV TYPE III 3,500 PSI CONCRETE @ 3 DAYS. ALL CONCRETE REQUIRING A CURE TIME FASTER THAN 3 DAYS SHALL HAVE A MIX DESIGN SUBMITTED TO THE ENGINEER FOR APPROVAL. WHEN REQUIRED BY THE MUNICIPALITY, FLY ASH SHALL NOT BE USED IN THE MIX DESIGN. SLUMP SHALL BE 2-4" AND AIR CONTENT SHALL BE BETWEEN 5-8% UNLESS MODIFIED BY ARTICLE 1020.04.
- ALL CONCRETE SHALL HAVE A WHITE, IDOT TYPE 3 CURING COMPOUND APPLIED TO THE SURFACE WITHIN 1 HOUR OF FINAL STRIKING AT THE MANUFACTURER RECOMMENDED APPLICATION RATE.
- 3/4" THICK PRE-MOLDED FIBER EXPANSION JOINTS WITH 2 , 3/4" x 18" PLAIN ROUND, STEEL DOWEL BARS SHALL BE INSTALLED IN ALL CURBS AT (45') FORTY-FIVE FOOT INTERVALS AND AT ALL P.C.'S, P.T.'S AND CURB RETURNS. ALTERNATE ENDS OF THE DOWEL BARS SHALL BE GREASED AND FITTED WITH METAL EXPANSION TUBES. ALL EXPANSION JOINTS MUST BE FREE OF CONCRETE FOR FULL DEPTH. CONTRACTION JOINTS SHALL BE TOOLED AT 15' INTERVALS.
- UNLESS OTHERWISE NOTED ON THE PLANS WHENEVER NEW CONCRETE ABUTS EXISTING/ OR NEW CONCRETE SET A 1/2" THICK PRE-MOLDED FIBER EXPANSION JOINT AND DOWEL WITH SMOOTH 12" #4 BARS @ 24" O.C. THIS INCLUDES CONCRETE POURED ADJACENT TO EXISTING SIDEWALKS, CURBS AND BUILDING. THE DOWEL BARS SHOULD BE 4" INTO EXISTING CONCRETE WITH 8" EXTENDING INTO NEW CONCRETE.
- ALL DOWEL BARS AND TIE BARS SHALL BE EPOXY COATED UNLESS NOTED OTHERWISE.
- ALL PAVEMENT AND BUILDING SUBGRADE SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY (ASTM D-1557). ALL SUBGRADE IN LAWN AREAS SHALL BE COMPACTED TO 90% MODIFIED PROCTOR DENSITY (ASTM D-1557). ALL TOPSOIL AND SUBGRADE 6" BELOW TOPSOIL SHALL BE COMPACTED TO 80% STANDARD PROCTOR DENSITY (ASTM D-698)
- SPREAD SCREENED TOPSOIL ON ALL DISTURBED AREAS AND PROPOSED GREEN AREAS. TOPSOIL SHALL COMPLY WITH REQUIREMENTS OF ARTICLE 1081.05.
- ALL SIGNAGE SHALL BE INSTALLED IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND ILLINOIS SUPPLEMENT OR ILLINOIS DEPARTMENT OF TRANSPORTATION DETAILS.
- ALL SIGNAGE NOT ATTACHED TO SIGNAL OR LIGHTING POLES SHALL BE MOUNTED ON TELESCOPING STEEL SIGN SUPPORTS WITH BREAKAWAY BASES IN ACCORDANCE WITH SECTION 728.
- ALL SIGNAGE SHALL HAVE TYPE ZZ SHEETING.
- STONE BEDDING AND STONE TRENCH BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY (ASTM D-698) USING MECHANICAL COMPACTION METHODS. IN NON-STRUCTURAL BACKFILL AREAS, PIPE BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 90% STANDARD PROCTOR DENSITY (ASTM D-698).

STORM SEWERS	MODEL/SPECIFICATION	STANDARDS/REQUIREMENTS
REFER TO VILLAGE MATERIALS LIST (EX 109) FOR STORM SEWER STANDARDS. ADDITIONAL ITEMS ARE LISTED BELOW.		
WATER MAIN CLASS UNDERDRAINS	PVC SDR 26	PIPE:ASTM D-3034 JOINT:ASTM D-3212
	RCP CL IV	PIPE:ASTM C-76 JOINT:ASTM C-443
	PVC C900 DR18	PIPE:AWWA C900 JOINT:ASTM D-3139 GASKET:ASTM F-477
	PVC SDR 26	PIPE:ASTM D-3034 JOINT:ASTM D-3212
FRAME & GRATE/LID	PERFORATIONS	HOLE PATTERN:ASTM D-2729
	PAVED AREAS	OPEN LID: NEENAH R-1713 TYPE 'D' GRATE CLOSED LID: NEENAH R-1713 EMBOSSED 'STORM' & 'VILLAGE OF BUFFALO GROVE'
	CURB STRUCTURES	B6.12 CURB - NEENAH 3281-A OR NEENAH 3170 (REQUIRES CURB FLARE) DEPRESSED CURB - NEENAH R-4340-B (REQUIRES CUBR FLARE)
ADJUSTMENT RINGS	GRASS AREAS	OPEN LID: NEENAH R-2437 TYPE 'D' GRATE OR NEENAH R-4340 BEEHIVE CLOSED LID: NEENAH R-2437 EMBOSSED 'STORM' & 'VILLAGE OF BUFFALO GROVE' (SEE PLANS)
	SEE EXHIBIT 109	2" MINIMUM, 6" MAXIMUM, LESS THAN 2" SHALL BE PLASTIC
	PIPE BEDDING MATERIAL	CA-11
TRENCH BACKFILL	CA-11	
TRENCH BACKFILL UNDERDRAIN	CA-11	CRUSHED CONCRETE NOT ALLOWED. ALL STONE MUST BE WASHED

WATER MAIN	MODEL/SPECIFICATION	STANDARDS/REQUIREMENTS
PIPE BEDDING MATERIAL	CA-11	
TRENCH BACKFILL	CA-11	
CURB STOP	NO LEAD BRASS	MUELLER H-15154
CURB BOX		MUELLER H-10302
WATER SERVICE PIPE	TYPE K COPPER	PIPE:ASTM B-88
SERVICE COPPER FITTINGS	MUELLER BRAND	COPPER TO COPPER FLARE FITTINGS. NO SWEAT OR COMPRESSION FITTINGS ALLOWED

SANITARY SEWERS	MODEL/SPECIFICATION	STANDARDS/REQUIREMENTS
REFER TO VILLAGE MATERIALS LIST (EX 109) FOR SANITARY SEWER STANDARDS. ADDITIONAL ITEMS ARE LISTED BELOW.		
WATER MAIN CLASS FRAME & GRATE/LID	PVC SDR 21	PIPE:ASTM D-2241 JOINT:ASTM D-3139 GASKET:ASTM F-477
	PAVED AREAS	CLOSED LID: NEENAH R-1713 EMBOSSED 'SANITARY' & 'VILLAGE OF BUFFALO GROVE' - SELF SEALING
	GRASS AREAS	CLOSED LID: NEENAH R-1713 EMBOSSED 'SANITARY' & 'VILLAGE OF BUFFALO GROVE' - SELF SEALING
ADJUSTMENT RINGS	SEE EXHIBIT 109	2" MINIMUM, 6" MAXIMUM, LESS THAN 2" SHALL BE PLASTIC
PIPE BEDDING MATERIAL	CA-11	
TRENCH BACKFILL	CA-11	
CHIMNEY SEAL	CRETEX CLASSIC	ASTM: C-923
MANHOLE CONNECTIONS		ASTM: C-923
JOINT WRAP	MAC WRAP	ASTM: C-877 TYPE II

TESTING REQUIREMENTS	
WATER MAIN	ALL WATER MAIN SHALL HAVE A PRESSURE AND LEAKAGE TEST PERFORMED IN ACCORDANCE WITH SECTION 41-2.14 OF STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS ACCEPT THE PRESSURE DURING THE TESTS SHALL BE EQUAL TO 150PSI.
SANITARY SEWER	ALL SANITARY SEWER SHALL BE TESTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS. ALL RIGID SANITARY SEWER PIPE SHALL BE TESTED BY EITHER METHOD A B OR C AS OUTLINED IN SECTION 31-1.12. ALL FLEXIBLE SANITARY SEWER PIPE SHALL BE TESTED BY METHOD D AND EITHER METHOD A B OR C. ALL SANITARY SEWER MUST BE TESTED BY METHOD E. THE CONTRACTOR SHALL PROVIDE THE ENGINEER A COPY OF THE VIDEO ON A DIGITAL VIDEO DISC. THE VIDEO MUST BE IN COLOR AND PROCEED NO FASTER THAN 1 FOOT PER SECOND.
SEWER WATER MAIN CROSSINGS	ALL SEWERS THAT CROSS OR RUN PARALLEL TO WATER MAINS SUBJECT TO IEPA REQUIREMENTS FOR WATER MAIN QUALITY PIPE MUST BE PRESSURE TESTED ACCORDING TO 41-2.14 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS
SANITARY MANHOLES	ALL SANITARY MANHOLES SHALL BE TESTED BY EITHER ASTM C-969 OR ASTM C-1244

NON-WOVEN	STYLE DESCRIPTION	STANDARDS/REQUIREMENTS
LIGHT DUTY	UNDERDRAIN FABRIC	3.5 oz
		MINIMUM GRAD TENSILE ASTM D4632 = 90 LBS
		MINIMUM TRAPEZOID TEAR ASTM D4533 = 40 LBS
		MINIMUM FLOW RATE ASTM D4491 = 150 GAL/MIN/SQFT
MEDIUM DUTY	UNDERDRAIN FABRIC	6 oz
		MINIMUM GRAD TENSILE ASTM D4632 = 160 LBS
		MINIMUM TRAPEZOID TEAR ASTM D4533 = 60 LBS
		MINIMUM FLOW RATE ASTM D4491 = 110 GAL/MIN/SQFT
HEAVY DUTY	SUBGRADE/SUBBASE SEPARATION	10 oz
		MINIMUM GRAD TENSILE ASTM D4632 = 250 LBS
		MINIMUM TRAPEZOID TEAR ASTM D4533 = 100 LBS
		MINIMUM FLOW RATE ASTM D4491 = 75 GAL/MIN/SQFT
WOVEN	STYLE DESCRIPTION	STANDARDS/REQUIREMENTS
HEAVY DUTY	SUBGRADE/SUBBASE SEPARATION	6 oz
		MINIMUM GRAD TENSILE ASTM D4632 = 315 LBS
		MINIMUM TRAPEZOID TEAR ASTM D4533 = 113 LBS
		MINIMUM FLOW RATE ASTM D4491 = 4 GAL/MIN/SQFT

VILLAGE OF BUFFALO GROVE NOTES

- FRAMES, LIDS, GRATES, VALVES, FIRE HYDRANTS, ETC. WHICH ARE ABANDONED OR REPLACED IN THIS PROJECT SHALL BE SALVAGED AND REMAIN PROPERTY OF THE VILLAGE OF BUFFALO GROVE. THE CONTRACTOR SHALL COORDINATE DELIVERY TO THE VILLAGE'S SELECTED SITE. ANY DAMAGE TO THE SALVAGED ITEMS DUE TO THE CONTRACTORS NEGLIGENCE SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
- THE CONTRACTOR SHALL GIVE NOTICES AND COMPLY WITH APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ALL PUBLIC AUTHORITIES BEARING ON SAFETY OF PERSONS OR PROPERTY OR THEIR PROTECTION FROM DAMAGE, INJURY OR LOSS.
- ANY STREET LIGHT POLE BRACING REQUIRED SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT.
- NO SIGNAGE IS TO BE REMOVED. IF SIGNS ARE TAKEN DOWN FOR CONSTRUCTION PURPOSES, THEY MUST BE RE-ERECTED ON THE SAME DAY TO THE SATISFACTION OF THE ENGINEER.
- ANY BRANCHES THAT REQUIRE TRIMMING FOR EQUIPMENT CLEARANCE/CONSTRUCTION OPERATIONS SHALL BE DONE IN ACCORDANCE WITH THE IDOT DISTRICT ONE DETAIL "PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE" AND SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT. ALL ADDITIONAL TREE TRIMMING MUST BE APPROVED BY THE ENGINEER.
- ALL HOOKS AND LIFTING RINGS SHALL BE REMOVED AND CUT FLUSH ONCE THE STRUCTURE IS IN ITS FINAL LOCATION AND HAVE MORTAR INSTALLED TO COVER THE REBAR.

VILLAGE OF BUFFALO GROVE WATER MAIN NOTES

- SIZES OF EXISTING MAINS WERE DETERMINED FROM THE VILLAGE OF BUFFALO GROVE UTILITY ATLAS'S AND MAY NOT REPRESENT ACTUAL WATER MAIN SIZES. THE CONTRACTOR SHALL HAVE AN ADEQUATE NUMBER OF FITTINGS, SLEEVES, ETC TO COMPLETE THE WORK WITHOUT DELAYS DUE TO DIFFERING WATER MAIN PIPE SIZES.
- COVER ALL NEW FIRE HYDRANTS AND ABANDONED FIRE HYDRANTS WITH BLACK PLASTIC BAGS AFTER INSTALLATION OR UNTIL REMOVAL AND UNTIL NEW WATER MAIN IS IN SERVICE. THE PLASTIC BAG SHALL BE SECURELY TAPED TO THE HYDRANT.
- ADJUSTMENT OF VALVE VAULT RIM ELEVATIONS TO FINAL GRADE AT THE TIME OF PAVING OR LANDSCAPING SHALL BE INCLUDED PER THE COST OF THE VALVE VAULT. VALVE VAULTS SHALL HAVE RUBBER BOOTS MEETING THE REQUIREMENTS OF ASTM C-923 FOR ALL WATER MAIN CONNECTIONS. ALL VALVE VAULTS SHALL BE WATER TIGHT PER ASTM C-1244.
- ALL MAIN INSTALLED NOT SUBJECT TO PRESSURE TEST AND CHLORINATION TESTING REQUIREMENTS SHALL BE INSTALLED PER THE SPECIFICATIONS AND BROUGHT UP TO SYSTEM PRESSURE UNDER WITNESS OF THE ENGINEER. THE PIPE SHALL NOT BE BACKFILLED UNTIL DIRECTED BY THE ENGINEER. THE SECTION OF PIPE WILL BE INSPECTED FOR A PERIOD OF TIME DETERMINED BY THE ENGINEER TO VERIFY THERE ARE NO LEAKS IN THE LINE. ALL COSTS ASSOCIATED WITH COMPLYING WITH THIS REQUIREMENT ARE INCLUDED IN THE COST OF THE CONTRACT.
- ALL MISHANDLED OR DAMAGED MATERIALS AS INSPECTED BY THE ENGINEER WILL BE MARKED WITH SPRAY PAINT. THE MARKED MATERIALS REMAIN THE PROPERTY OF THE CONTRACTOR. ALL MATERIALS MARKED ARE DEEMED UNSUITABLE FOR CONSTRUCTION BY THE ENGINEER AND MUST BE REMOVED FROM THE PROJECT SITE ON A WEEKLY BASIS AT NO COST TO THE VILLAGE.
- BACKFILL IN TURF AREAS MAY UTILIZE THE EXISTING SUBGRADE. ANY SETTLEMENT WITHIN THE WARRANTY PERIOD AS DESCRIBED IN THE SPECIFICATIONS SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. AT THE CONTRACTORS OPTION SAND MAY BE UTILIZED AS BACKFILL IN TURF AREAS TO PREVENT SETTLEMENT. THE SAND MUST BE KEPT 6" BELOW FINISHED GRADE FOR ACCEPTANCE OF TOPSOIL. ALL SAND UTILIZED FOR BACKFILLING IN THE PARKWAY AND ADDITIONAL TOPSOIL NEEDED SHALL NOT BE PAID FOR SEPARATELY BUT INCLUDED IN THE CONTRACT.

EXHIBIT NO. 109

Sanitary Sewer Material Specifications:	
Sewer and Service Connection Pipe	Reinforced concrete pipe—circular reinforcement, minimum Class 3, ASTM C76, with epoxy lining. PVC solid wall (SDR-26H) pipe—ASTM D-3034 for six to fifteen inches in diameter.
Sewer and Service Connection Pipe Joints	Reinforced concrete pipe—ASTM C443, PVC solid wall (SDR-26H) pipe—ASTM D-3212 for six to eighteen inches in diameter.
Sewer and Service Connection Pipe Fittings	PVC solid wall (SDR-26H) pipe—ASTM D3034 for six to fifteen inches in diameter.
Casing Pipes	Steel pipe—ASTM A120, three-eighths inch minimum thickness.
Manholes	Size: For sewer eighteen inch diameter or less, manhole shall have a forty-eight inch inside diameter. For sewer twenty-one inch to thirty-six inch diameter, manhole shall have a sixty inch inside diameter. For sewer greater than thirty-six inch diameter, manhole shall have an offset riser pipe of forty-eight inch inside diameter. All structures shall be monolithically precast including bases and invert flow lines.
Castings	East Jordan Iron Works Frame 1022 or Neenah R-1713, with self-sealing lid and recessed pick hole, embossed per Exhibit No. 301 of Buffalo Grove Numerical Code Title 16.

Storm Sewer System Material Specifications:	
Structures	All structures shall be precast with designed openings or mechanically cored in the field.
Castings	Closed Lid, East Jordan Iron Works 1022 or Neenah R-1713, embossed per Exhibit No. 201, Open Lid, East Jordan Iron Works 1022 or Neenah R-1713, Standard B4.12 or any other barrier curb, Type 11—East Jordan Iron Works 7210 or Neenah 3281-A or Neenah 3170 on existing structures where required. Box height must be 6" minimum with 5' tapers to match curb height., Depressed barrier curb, Type M3 Grate, Yard inlet, Type 8—East Jordan Iron Works 6517 or Neenah R-4340-B
Sewer Pipe Joints	Reinforced concrete pipe—ASTM C443 or C361, PVC solid wall (SDR-26H) pipe—ASTM D-3212 for six to eighteen inches in diameter.
Sump pump service connection pipe/sub surface drain pipe.	4" PVC solid wall sewer pipe SDR-35. Blind connections must be cored in storm sewer and pipe connection shall be made with a rubber boot and stainless steel band. Sump pump per Exhibit No. 202 of Buffalo Grove Numerical Code Title 16 and underdrain per Exhibit No. 203.

Material Specifications For All Utilities:	
Bedding	CA-11, Class B or better. All stone shall be crushed; rounded aggregate will not be permitted. The stone shall be compacted to 90% modified proctor density as required by ASTM D1557 or AASHTO T-180. Recycled materials permitted from IDOT approved sources meeting the correct gradations.
Trench Backfill	CA-11, Class B or better. This item shall meet the requirements of Class B CA-11, per the IDOT Standard Specifications for Road and Bridge Construction. All stone shall be crushed; rounded aggregate will not be permitted. The stone shall be compacted to 95% modified proctor density as required by ASTM D1557 or AASHTO T-180. Jetting of trenches is not permitted. Recycled materials permitted from IDOT approved sources meeting the correct gradations.
Adjustments	No more than two precast concrete adjusting rings with six inch maximum height adjustment shall be allowed, minimum one 2" ring installed on new structures. All adjustment rings less than 2" shall be HDPE rings. Only one HDPE may be used within the precast tolerances. Only precast concrete on

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CS2 DESIGN GROUP, LLC
 837 Oakton St
 Elk Grove Village, IL 60007
 (847) 981-1880
 CONSTRUCTION MANAGER:
PEPPER CONSTRUCTION COMPANY
 411 N Lake Zurich Rd
 Barrington, IL 60010
 (847) 381-2760

KEY PLAN
SCOPE DOCUMENT

This drawing is one drawing within a complete set of documents and shall not be considered separately from the Drawings as a whole. The Drawing indicates the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical, and electrical systems. As Scope Documents, the Drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Construction Documents. On the basis of the general scope indicated or described, the Contractor shall furnish all items required for the proper execution and completion of the Work.

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PROJECT
D214 BGHS ATHLETIC FIELD RENOVATIONS PHASE 1
 1100 W Dundee Road
 Buffalo Grove, IL 60089

Township High School District 214
 2121 South Goebbert Road
 Arlington Heights, IL 60005

CLIENT PROJECT NUMBER

STR PROJECT NUMBER

23040

DRAWING DATES

NUMBER	DATE	COMMENTS
3	MAY 06, 2024	MWRD REVIEW COMMENTS #1
3A	FEB 27, 2024	VILLAGE REVIEW COMMENTS #1
2	JAN 15, 2024	ISSUE FOR CONSTRUCTION
2A	NOV 10, 2023	ADDENDUM #2
2B	NOV 03, 2023	ADDENDUM #1
1	OCT 20, 2023	ISSUE FOR PERMIT AND BIDS

DRAWING TITLE

STORM SEWER DETAIL

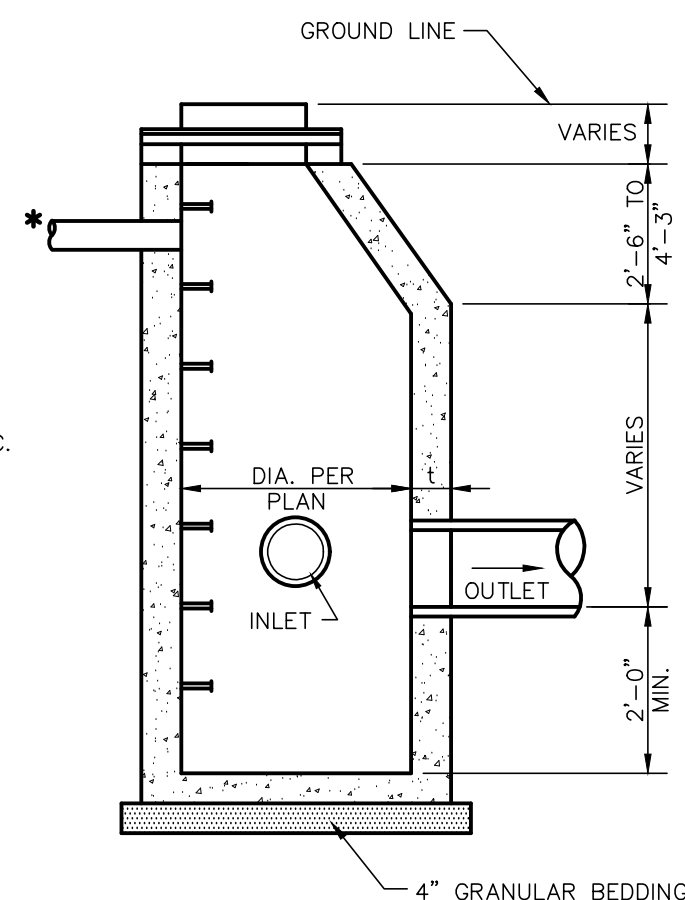
SHEET NUMBER

C9.0
NOTES:

- SEE STORM TABLE FOR FURTHER REQUIREMENTS.
- PRECAST REINFORCED CONCRETE SECTIONS PER ASTM C-478 AND PREFORMED BITUMINOUS JOINTS WITH INTEGRAL PRECAST BOTTOMS.
- PIPE OPENINGS SHALL BE PRECAST INTO WALLS. CAST IN RESILIENT WATERTIGHT SLEEVE WITH STAINLESS STEEL TRIM PER ASTM C-923.
- I.D.O.T #602601 FOR FLAT TOPS.
- PRECAST PCC BENCH SHALL EXTEND TO CROWN AND SLOPE TO OUTSIDE WALL, SMOOTH FINISH.
- STEPS TO BE STEEL REINFORCED PLASTIC.
 - IMBEDDED 3" INTO STRUCTURE WALL.
 - SPACED AT 16" CENTER TO CENTER.
 - FIRST STEP LOCATED 8"-12" BELOW FRAME.
- FINAL ADJUSTMENT TO FRAMES TO BE DONE WITH STEEL SHIMS SET IN MORTAR.

*8. SEE FINGERDRAIN DETAIL FOR FINGERDRAIN REQUIREMENTS.

DIA	MIN. THICKNESS (t)
48"	5"
60"	6"
72"	7"

***FOR STRUCTURES IN PAVEMENT**


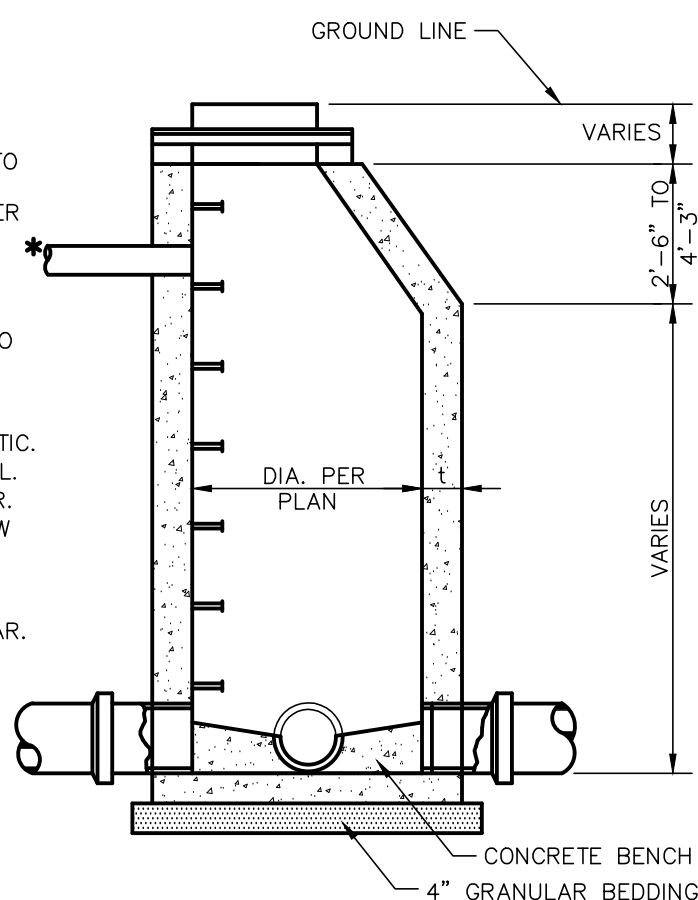
03.15.2022

GHA GEWALT HAMILTON ASSOCIATES, INC.
CATCH BASIN TYPE A COMBINED SEWER WITH FINGER DRAINS
NOTES:

- SEE STORM TABLE FOR FURTHER REQUIREMENTS.
- PRECAST REINFORCED CONCRETE SECTIONS PER ASTM C-478 AND PREFORMED BITUMINOUS JOINTS WITH INTEGRAL PRECAST BOTTOMS.
- PIPE OPENINGS SHALL BE PRECAST INTO WALLS. CAST IN RESILIENT WATERTIGHT SLEEVE WITH STAINLESS STEEL TRIM PER ASTM C-923.
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- STEPS TO BE STEEL REINFORCED PLASTIC.
 - IMBEDDED 3" INTO STRUCTURE WALL.
 - SPACED AT 16" CENTER TO CENTER.
 - FIRST STEP LOCATED 8"-12" BELOW FRAME.
- FINAL ADJUSTMENT TO FRAMES TO BE DONE WITH STEEL SHIMS SET IN MORTAR.

*8. SEE FINGERDRAIN DETAIL FOR FINGERDRAIN REQUIREMENTS.

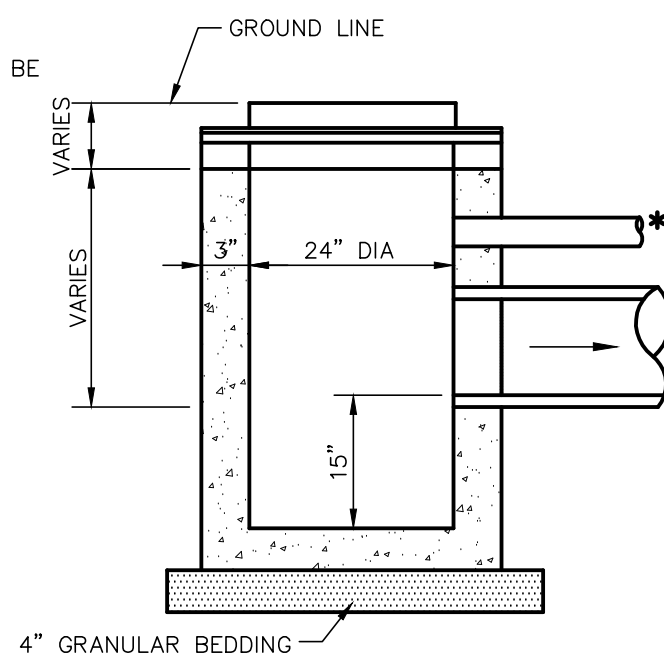
DIA	MIN. THICKNESS (t)
48"	5"
60"	6"
72"	7"

***FOR STRUCTURES IN PAVEMENT**


03.15.2022

GHA GEWALT HAMILTON ASSOCIATES, INC.
STORM MANHOLE TYPE A COMBINED SEWER WITH FINGER DRAINS
NOTES:

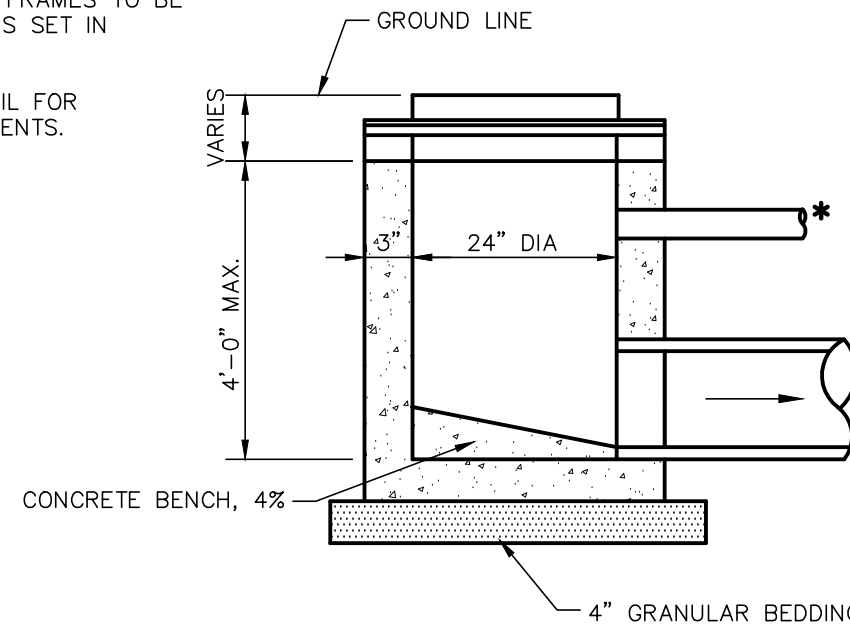
- SEE STORM TABLE FOR FURTHER REQUIREMENTS.
- PRECAST REINFORCED CONCRETE SECTIONS PER ASTM C-478 AND PREFORMED BITUMINOUS JOINTS WITH INTEGRAL PRECAST BOTTOMS.
- PIPE OPENINGS SHALL BE PRECAST INTO WALLS. CAST IN RESILIENT WATERTIGHT SLEEVE WITH STAINLESS STEEL TRIM PER ASTM C-923.
- FINAL ADJUSTMENT TO FRAMES TO BE DONE WITH STEEL SHIMS SET IN MORTAR.
- SEE FINGERDRAIN DETAIL FOR FINGERDRAIN REQUIREMENTS.



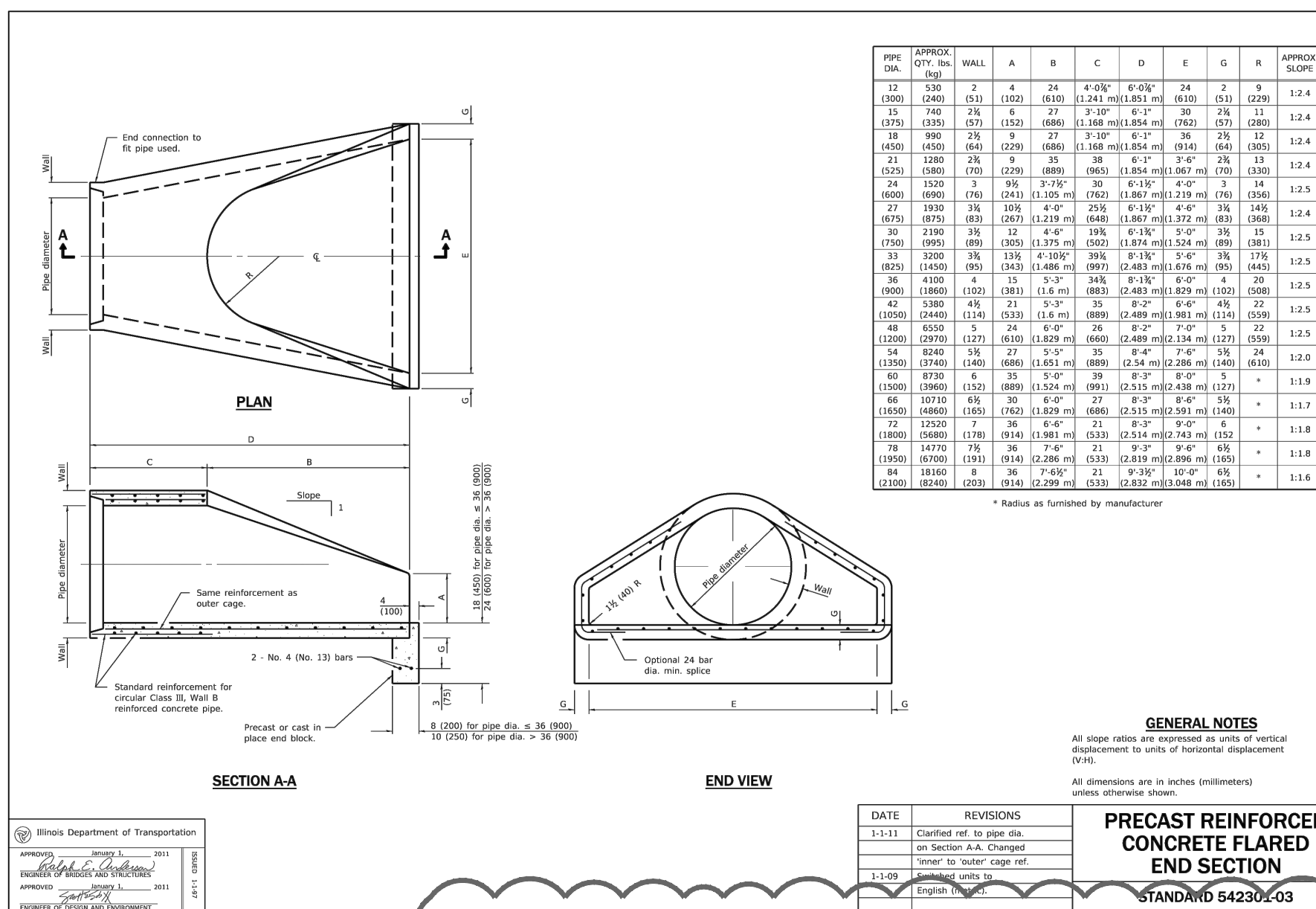
03.15.2016

GHA GEWALT HAMILTON ASSOCIATES, INC.
CATCH BASIN TYPE C COMBINED SEWER WITH FINGER DRAINS
NOTES:

- SEE STORM TABLE FOR FURTHER REQUIREMENTS.
- PRECAST REINFORCED CONCRETE SECTIONS PER ASTM C-478 AND PREFORMED BITUMINOUS JOINTS WITH INTEGRAL PRECAST BOTTOMS.
- PIPE OPENINGS SHALL BE PRECAST INTO WALLS. CAST IN RESILIENT WATERTIGHT SLEEVE WITH STAINLESS STEEL TRIM PER ASTM C-923.
- FINAL ADJUSTMENT TO FRAMES TO BE DONE WITH STEEL SHIMS SET IN MORTAR.
- SEE FINGERDRAIN DETAIL FOR FINGERDRAIN REQUIREMENTS.



03.15.2016

GHA GEWALT HAMILTON ASSOCIATES, INC.
INLET TYPE A STORM SEWER WITH FINGER DRAINS


PIPE DIA.	APPROX. DEPTH (ft)	APPROX. SLOPE
12	4.50	3.0
15	4.50	3.0
18	4.50	3.0
24	4.50	3.0
30	4.50	3.0
36	4.50	3.0
42	4.50	3.0
48	4.50	3.0
54	4.50	3.0
60	4.50	3.0
66	4.50	3.0
72	4.50	3.0
78	4.50	3.0
84	4.50	3.0
90	4.50	3.0
96	4.50	3.0
102	4.50	3.0
108	4.50	3.0
114	4.50	3.0
120	4.50	3.0
126	4.50	3.0
132	4.50	3.0
138	4.50	3.0
144	4.50	3.0
150	4.50	3.0
156	4.50	3.0
162	4.50	3.0
168	4.50	3.0
174	4.50	3.0
180	4.50	3.0
186	4.50	3.0
192	4.50	3.0
198	4.50	3.0
204	4.50	3.0
210	4.50	3.0
216	4.50	3.0
222	4.50	3.0
228	4.50	3.0
234	4.50	3.0
240	4.50	3.0
246	4.50	3.0
252	4.50	3.0
258	4.50	3.0
264	4.50	3.0
270	4.50	3.0
276	4.50	3.0
282	4.50	3.0
288	4.50	3.0
294	4.50	3.0
300	4.50	3.0
306	4.50	3.0
312	4.50	3.0
318	4.50	3.0
324	4.50	3.0
330	4.50	3.0
336	4.50	3.0
342	4.50	3.0
348	4.50	3.0
354	4.50	3.0
360	4.50	3.0
366	4.50	3.0
372	4.50	3.0
378	4.50	3.0
384	4.50	3.0
390	4.50	3.0
396	4.50	3.0
402	4.50	3.0
408	4.50	3.0
414	4.50	3.0
420	4.50	3.0
426	4.50	3.0
432	4.50	3.0
438	4.50	3.0
444	4.50	3.0
450	4.50	3.0
456	4.50	3.0
462	4.50	3.0
468	4.50	3.0
474	4.50	3.0
480	4.50	3.0
486	4.50	3.0
492	4.50	3.0
498	4.50	3.0
504	4.50	3.0
510	4.50	3.0
516	4.50	3.0
522	4.50	3.0
528	4.50	3.0
534	4.50	3.0
540	4.50	3.0
546	4.50	3.0
552	4.50	3.0
558	4.50	3.0
564	4.50	3.0
570	4.50	3.0
576	4.50	3.0
582	4.50	3.0
588	4.50	3.0
594	4.50	3.0
600	4.50	3.0
606	4.50	3.0
612	4.50	3.0
618	4.50	3.0
624	4.50	3.0
630	4.50	3.0
636	4.50	3.0
642	4.50	3.0
648	4.50	3.0
654	4.50	3.0
660	4.50	3.0
666	4.50	3.0
672	4.50	3.0
678	4.50	3.0
684	4.50	3.0
690	4.50	3.0
696	4.50	3.0
702	4.50	3.0
708	4.50	3.0
714	4.50	3.0
720	4.50	3.0
726	4.50	3.0
732	4.50	3.0
738	4.50	3.0
744	4.50	3.0
750	4.50	3.0
756	4.50	3.0
762	4.50	3.0
768	4.50	3.0
774	4.50	3.0
780	4.50	3.0
786	4.50	3.0
792	4.50	3.0
798	4.50	3.0
804	4.50	3.0
810	4.50	3.0
816	4.50	3.0
822	4.50	3.0
828	4.50	3.0
834	4.50	3.0
840	4.50	3.0
846	4.50	3.0
852	4.50	3.0
858	4.50	3.0
864	4.50	3.0
870	4.50	3.0
876	4.50	3.0
882	4.50	3.0
888	4.50	3.0
894	4.50	3.0
900	4.50	3.0
906	4.50	3.0
912	4.50	3.0
918	4.50	3.0
924	4.50	3.0
930	4.50	3.0
936	4.50	3.0
942	4.50	3.0
948	4.50	3.0
954	4.50	3.0
960	4.50	3.0
966	4.50	3.0
972	4.50	3.0
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996	4.50	3.0
1000	4.50	3.0

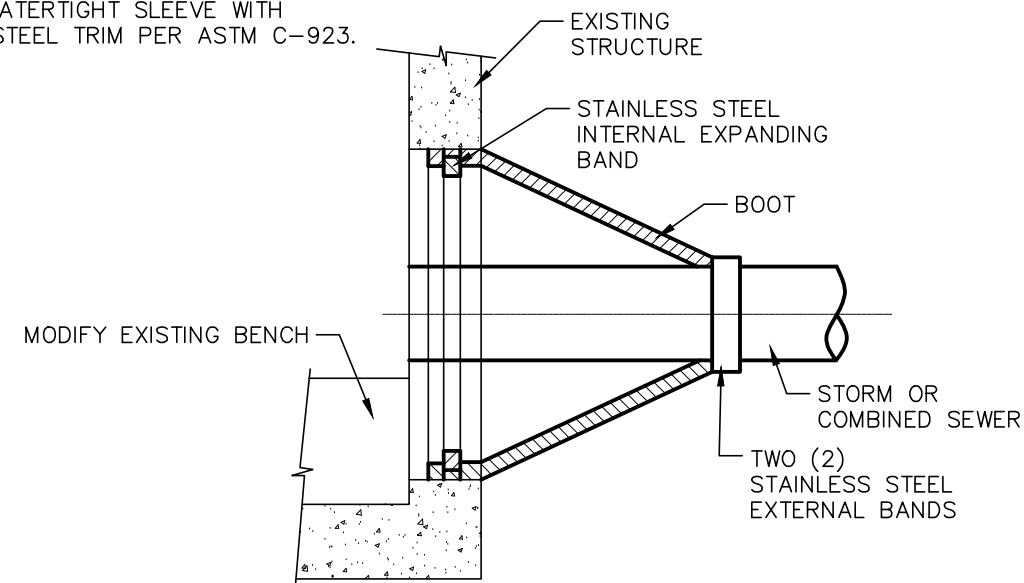
 GENERAL NOTES
 All slope ratios are expressed in units of vertical displacement in units of horizontal displacement (V:H).
 All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-11	Clarified and re-drawn per I.D.
1-1-11	on Section A.A. Changed
1-1-11	to be used as a guide
1-1-11	English Units

PRECAST REINFORCED CONCRETE FLARED END SECTION
 STANDARD 542302-03

NOTES:

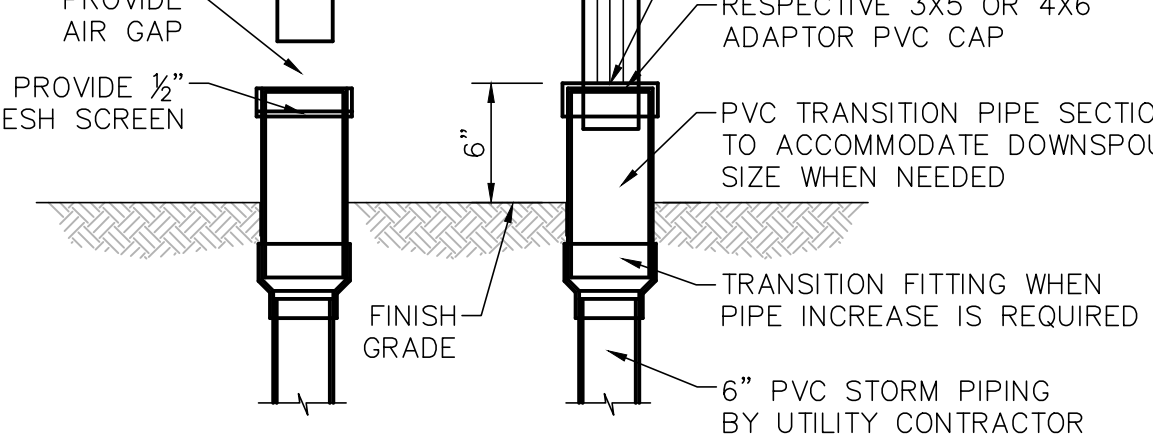
- MACHINE CORE CIRCULAR OPENING IN STRUCTURE WALL OF DIAMETER TO FIT THE REQUIRED BOOT SIZE PER MANUFACTURERS RECOMMENDATION.
- CUT SHAPE AND SLOPE NEW INVERT CHANNEL IN THE EXISTING CONCRETE BENCH FOR SMOOTH FLOW FROM/TO NEW CONNECTION.
- CLEAN EXISTING STRUCTURE AND SEWER PIPE OF ANY DIRT CONCRETE OR DEBRIS WHICH MAY ACCUMULATE DURING THE CONSTRUCTION PROCESS.
- RESILIENT WATERTIGHT SLEEVE WITH STAINLESS STEEL TRIM PER ASTM C-923.



03.08.2023

GHA GEWALT HAMILTON ASSOCIATES, INC.
STORM OR COMBINED SEWER PIPE CONNECTION TO EXISTING STRUCTURE DETAIL
NOTES:

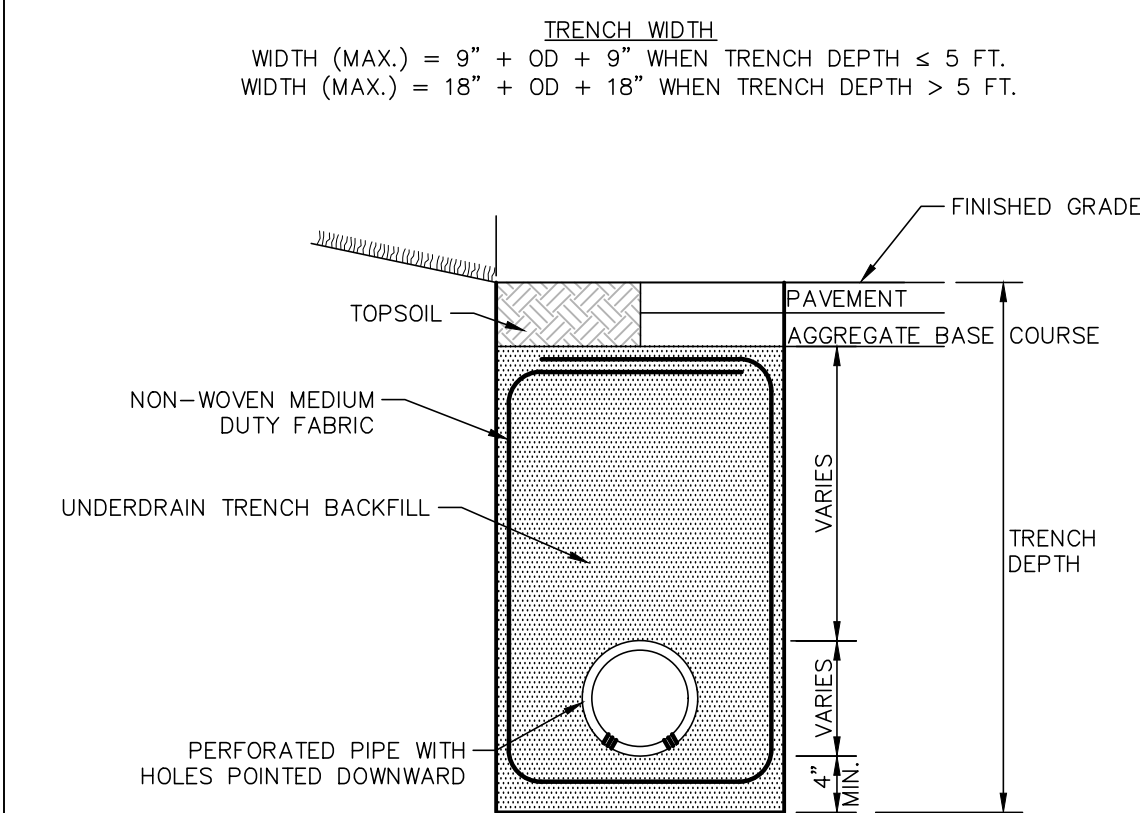
- SEE STORM TABLE FOR MATERIAL REQUIREMENTS.
- SEE PLANS FOR FURTHER REQUIREMENTS.



11.05.2021

GHA GEWALT HAMILTON ASSOCIATES, INC.
DOWNSPOUT OR STORM SUMP PUMP CONNECTION
NOTES:

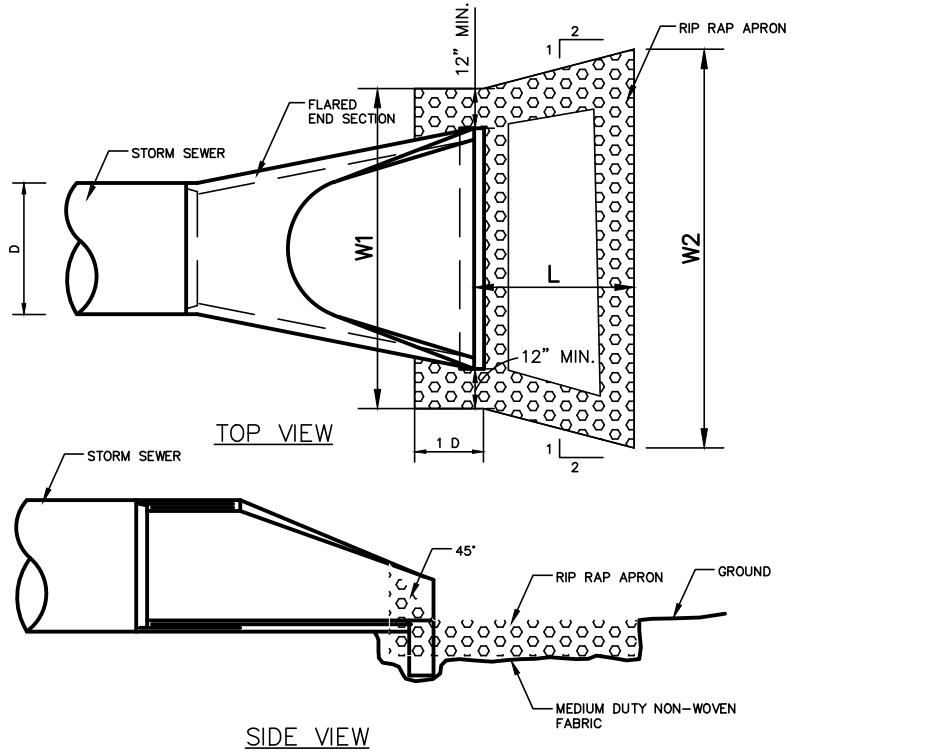
- SEE STORM TABLE FOR MATERIAL REQUIREMENTS.



04.02.2021

GHA GEWALT HAMILTON ASSOCIATES, INC.
STORM UNDERDRAIN DETAIL

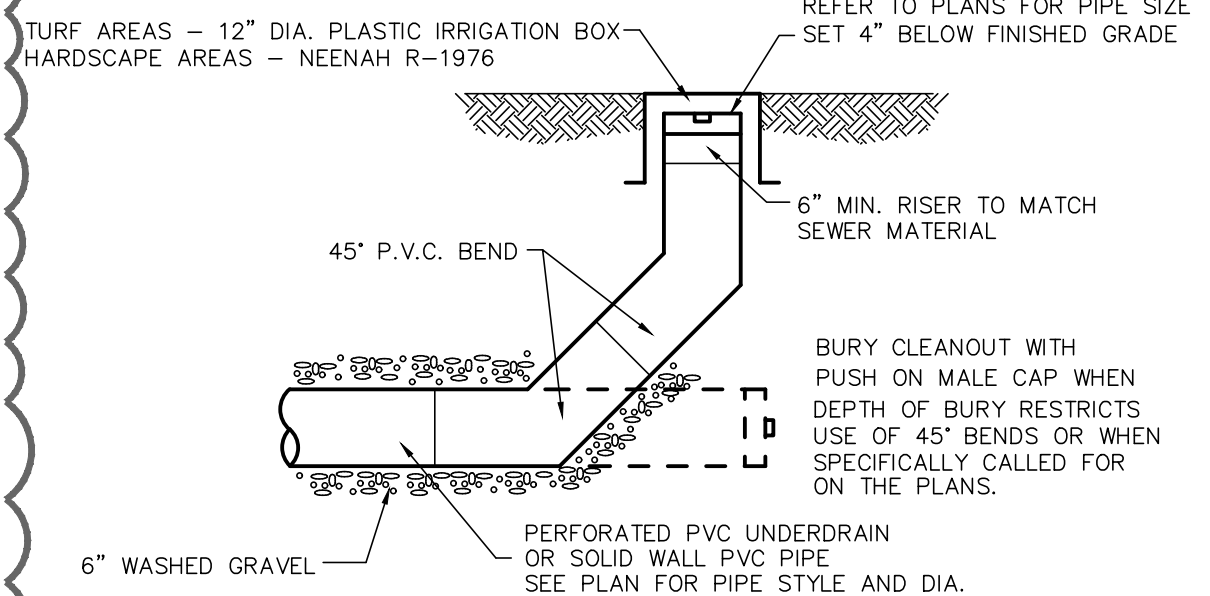
- SEE STORM TABLE FOR MATERIAL REQUIREMENTS.



- SEE PLANS FOR RIP-RAP REQUIREMENTS. IF NO QUANTITIES ARE PROVIDED ON THE PLANS, THEN PROVIDE 5 SQUARE YARDS (MIN.) OF IDOT CLASS 3 STONE.
- PROVIDE 15" BLANKET THICKNESS FOR RR3, & 20" BLANKET THICKNESS FOR RR4.

GHA GEWALT HAMILTON ASSOCIATES, INC.
RIP RAP DETAIL
NOTES:

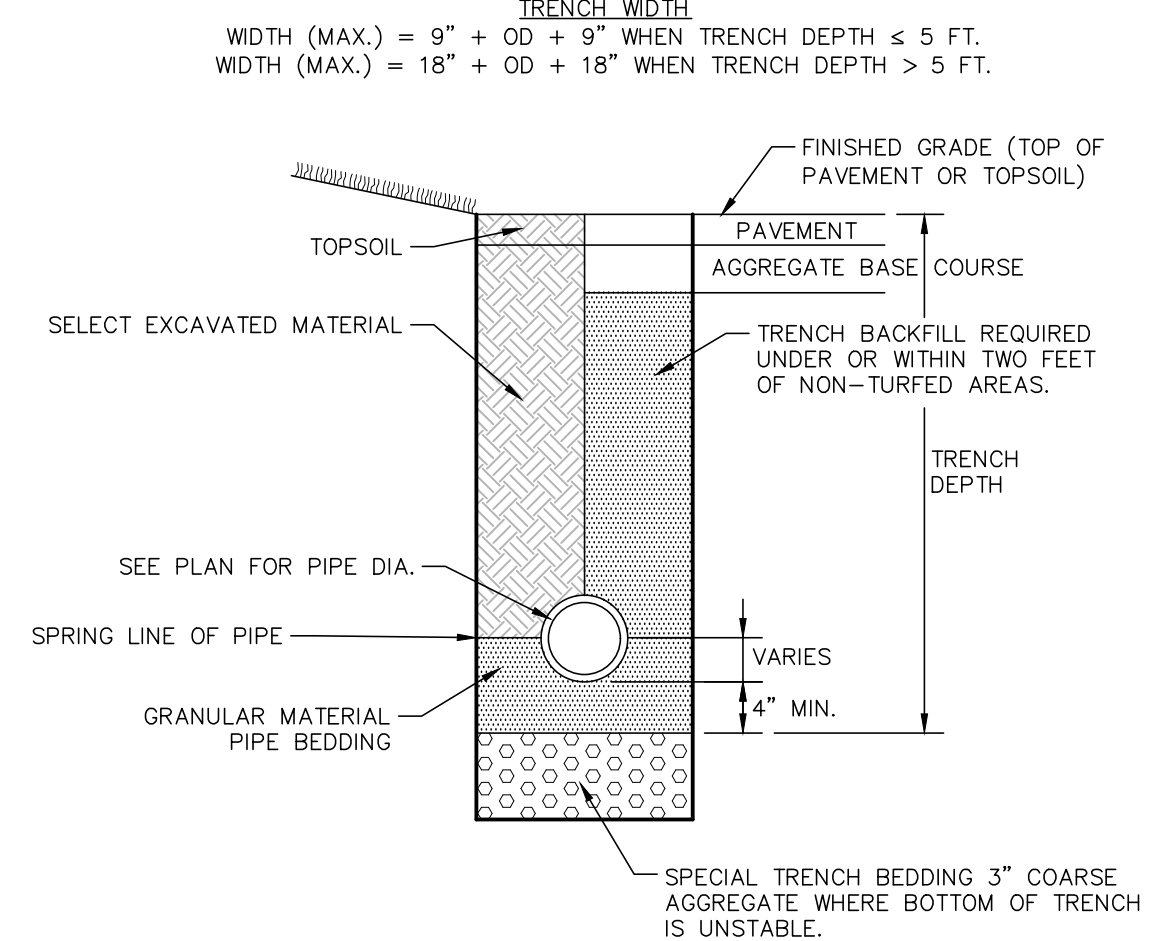
- SEE STORM TABLE FOR MATERIAL REQUIREMENTS.
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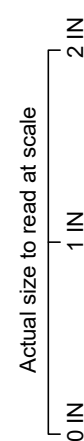
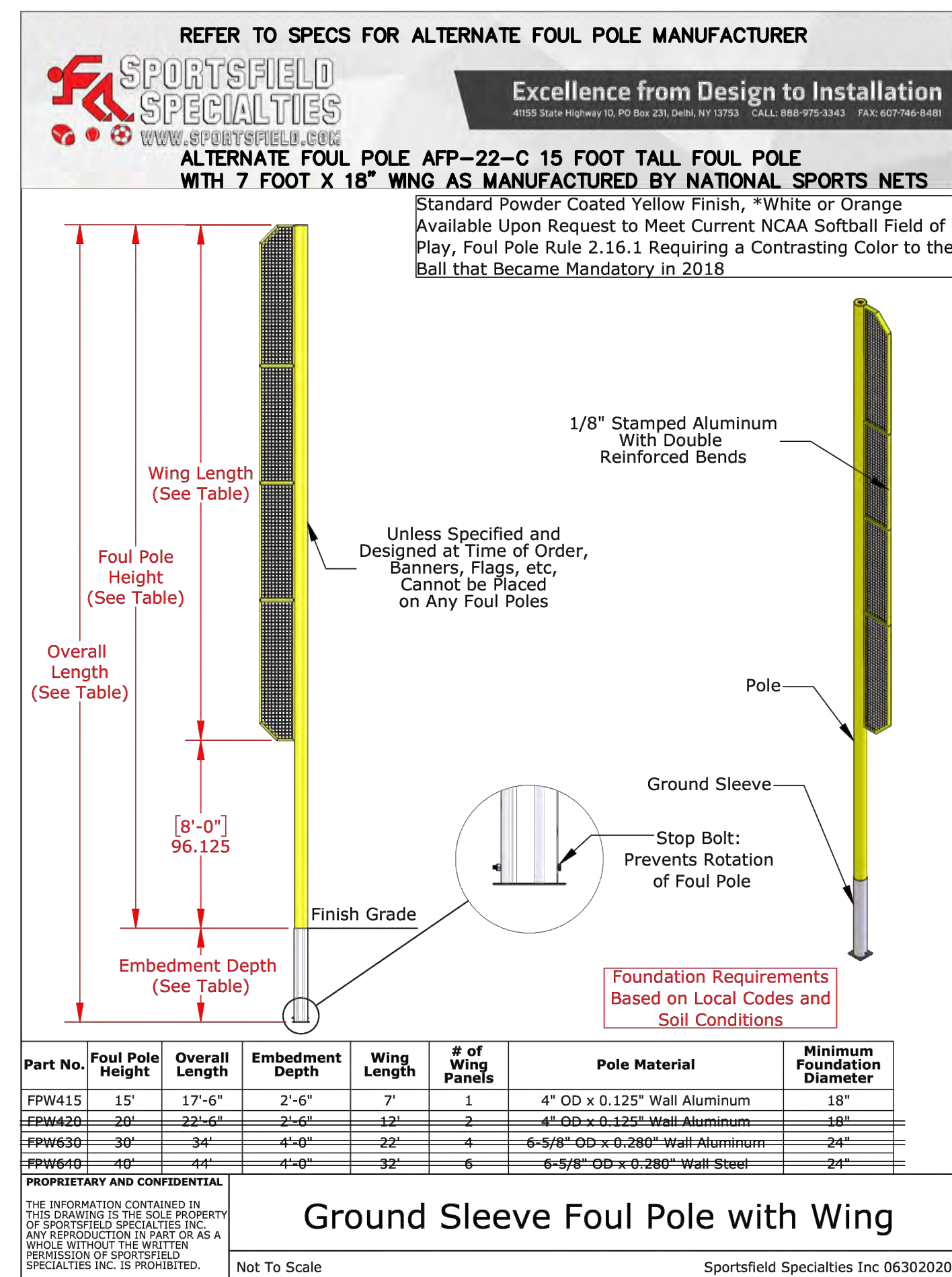
03.15.2016

GHA GEWALT HAMILTON ASSOCIATES, INC.
STORM SEWER CLEAN-OUT
NOTES:

- SEE STORM TABLE FOR MATERIAL REQUIREMENTS.



C11.0



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CONSTRUCTION MANAGER:
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KEY PLAN
SCOPE DOCUMENT

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PROJECT

D214 BGHS ATHLETIC FIELD RENOVATIONS PHASE 1
1100 W Dundee Road
Buffalo Grove, IL 60089

Township High School District 214
2121 South Goebbert Road
Arlington Heights, IL 60005

CLIENT PROJECT NUMBER
STR PROJECT NUMBER

23040

DRAWING DATES

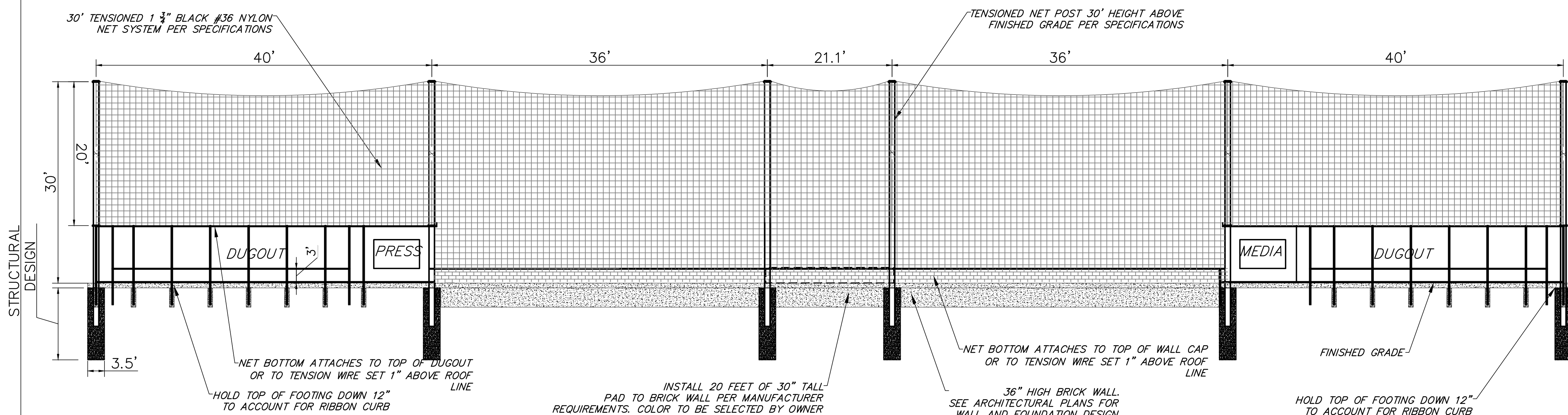
NUMBER	DATE	COMMENTS
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1	NOV 03, 2023	ADDENDUM #1
1	OCT 20, 2023	ISSUE FOR PERMIT AND BIDS

DRAWING TITLE

SOFTBALL DETAILS

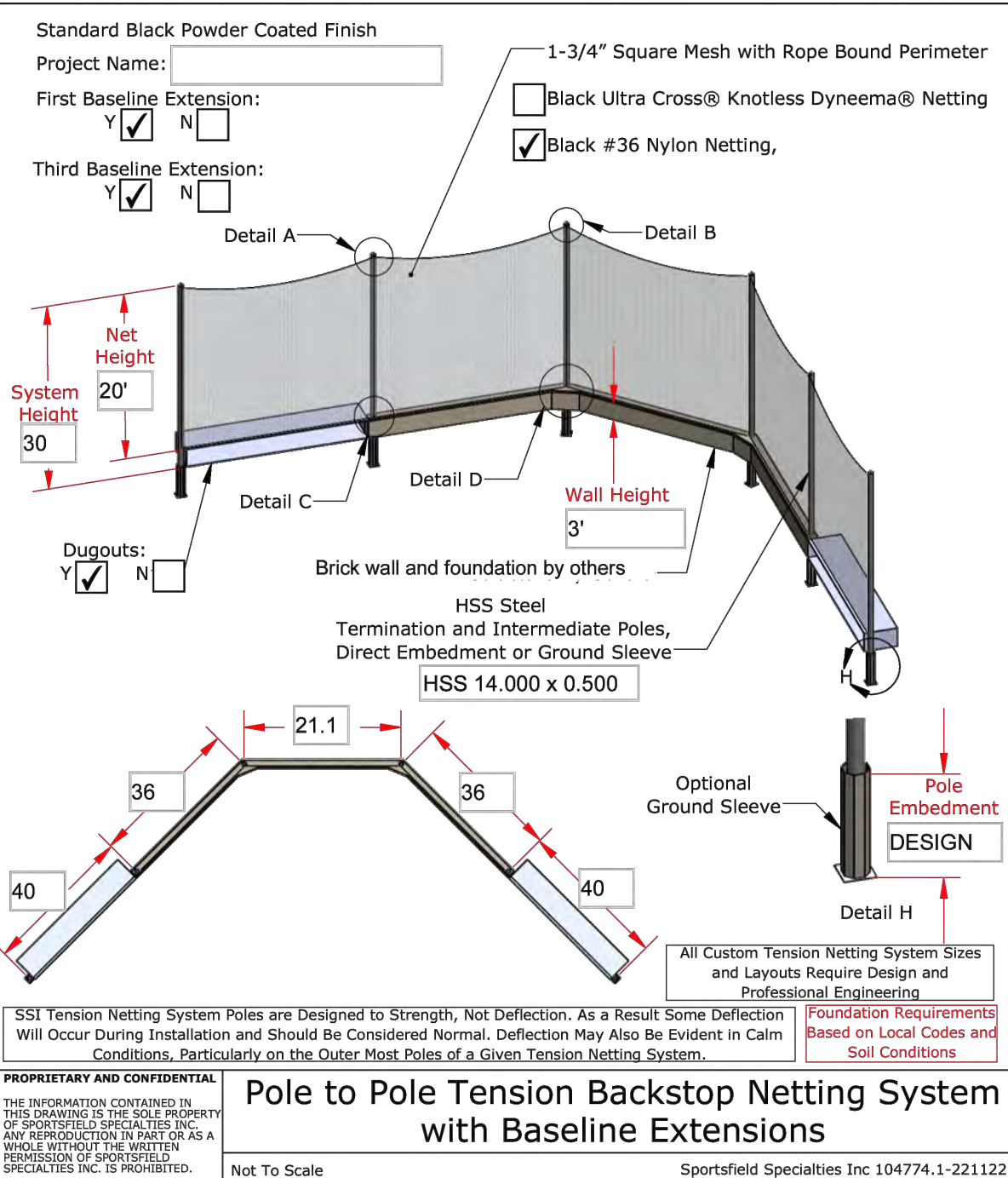
SHEET NUMBER

C11.1



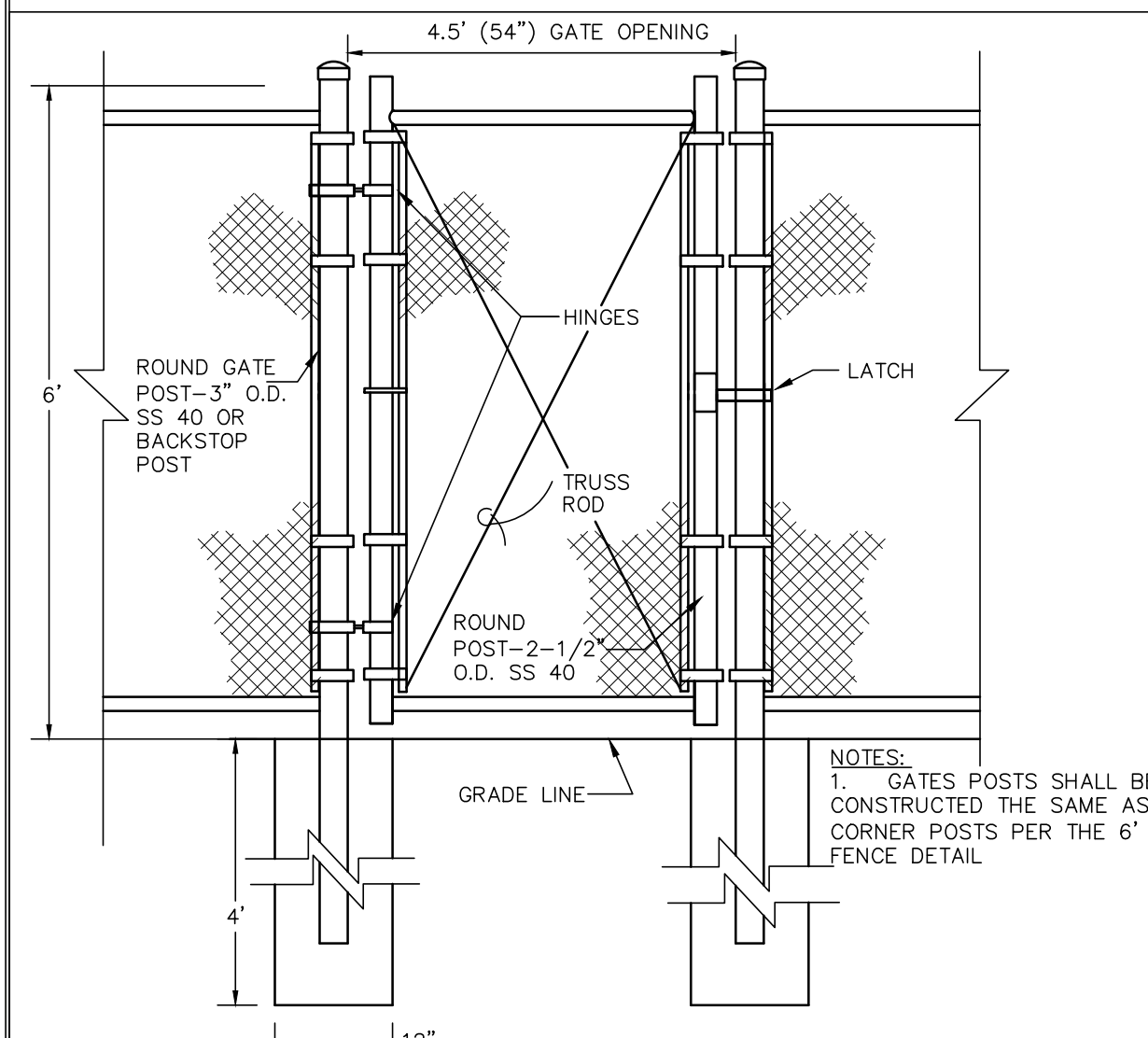
BACKSTOP NETTING AND FENCING LAYOUT

TENSION NETTING DETAILS SHOWN ARE FROM ONE SUPPLIER. REFER TO SPECIFICATIONS FOR ADDITIONAL APPROVED SUPPLIERS. SINCE TENSION POLE AND NETTING SYSTEMS ARE DELEGATED DESIGNS VARIATIONS TO POLE DIAMETERS AND FITTINGS ARE PERMITTED. CONTRACTOR TO INCLUDE ILLINOIS STRUCTURAL ENGINEER STAMPED PLANS AND CALCULATIONS FOR POLE SIZE, FOOTING DEPTH TO HANDLE RESPECTIVE WIND LOADS AND OTHER REQUIRED FACTORS PRIOR TO ORDERING

REFER TO SPECS FOR ALTERNATE TENSION NET SYSTEM MANUFACTURER


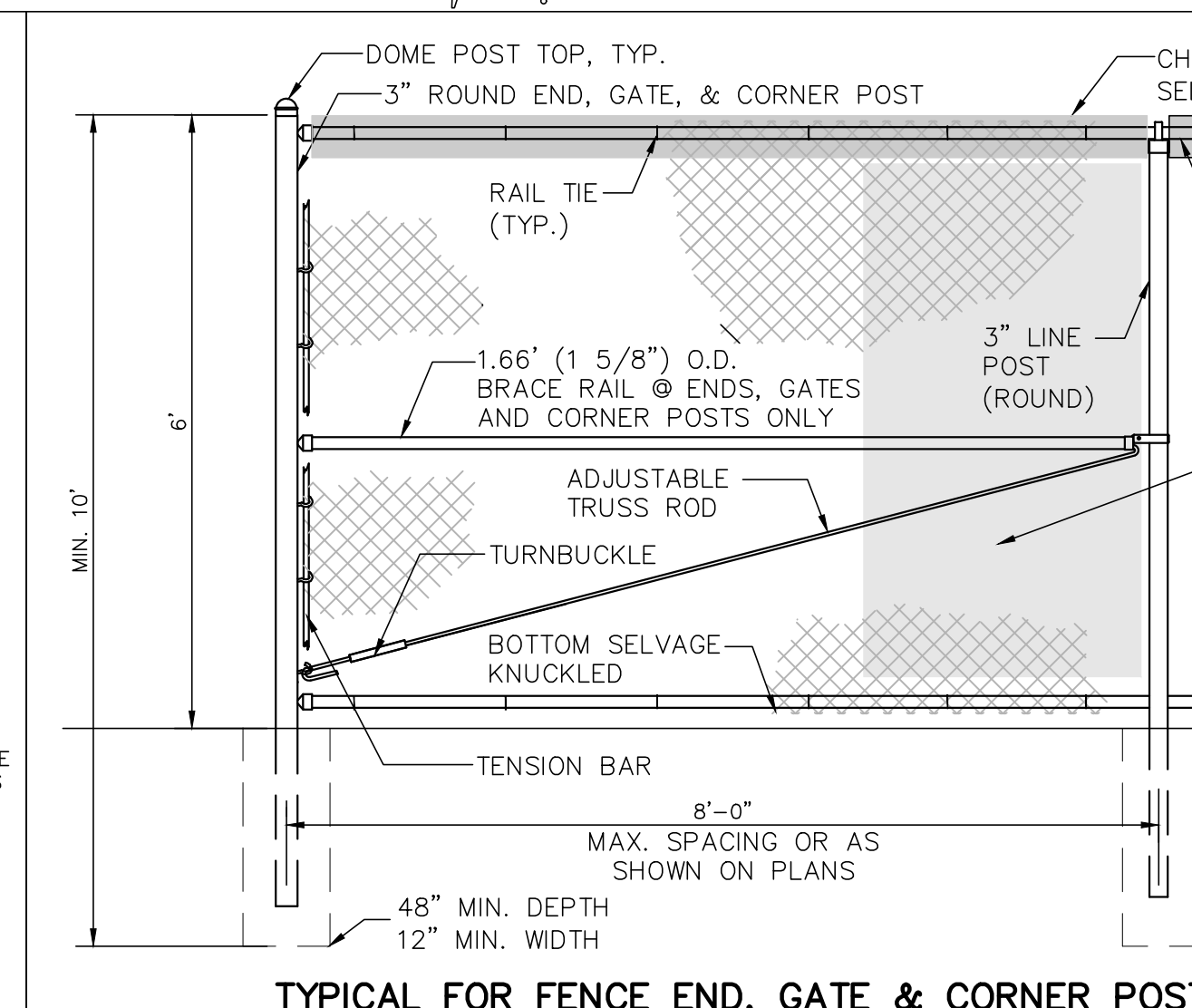
Pole to Pole Tension Backstop Netting System with Baseline Extensions

Not To Scale Sportsfield Specialties Inc 104774-1-221122



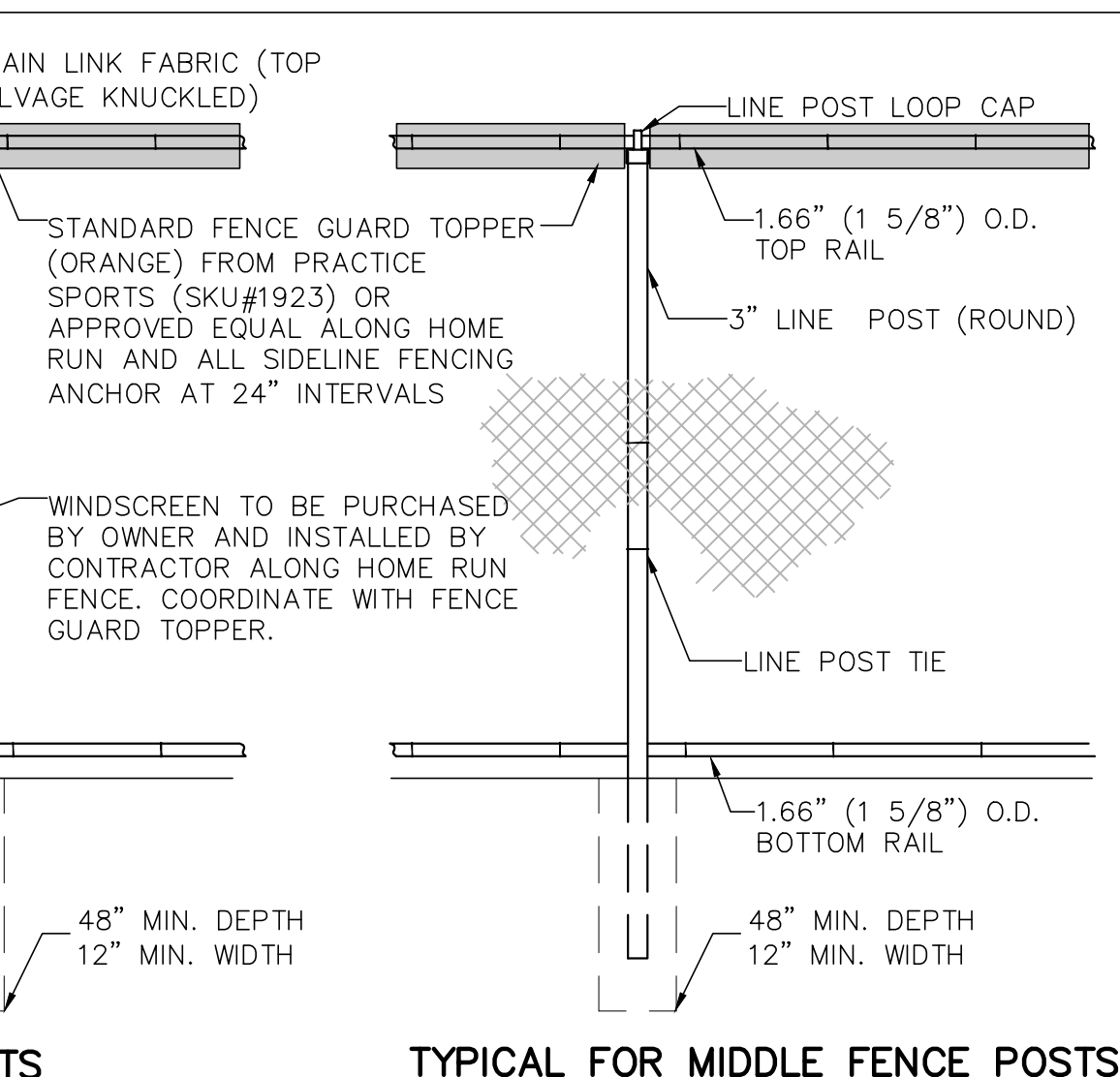
6' HIGH 54" WIDE SWING GATE

GEWALT HAMILTON ASSOCIATES, INC.



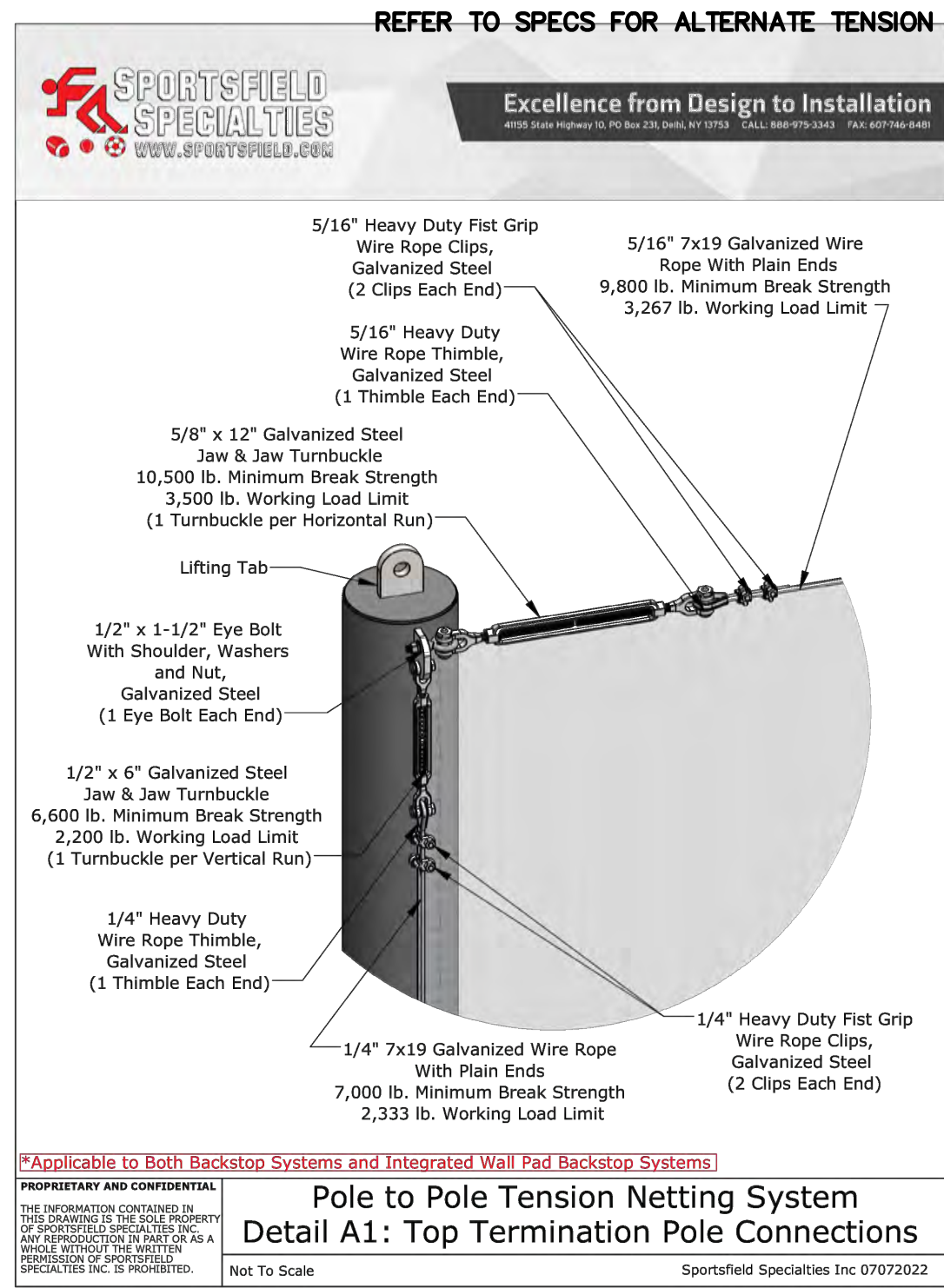
TYPICAL FOR FENCE END, GATE & CORNER POSTS

GEWALT HAMILTON ASSOCIATES, INC.



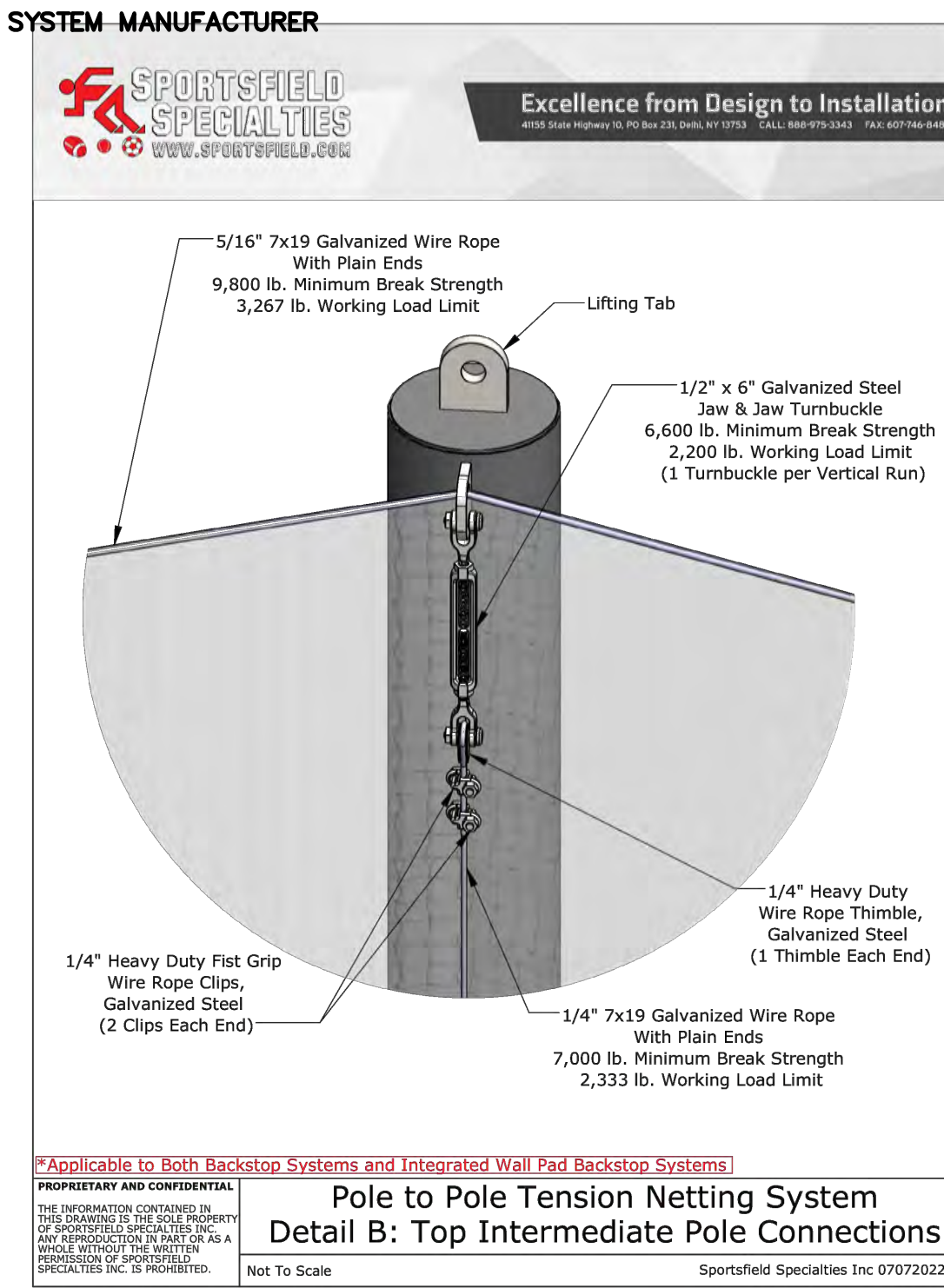
6' FENCE DETAIL

GEWALT HAMILTON ASSOCIATES, INC.



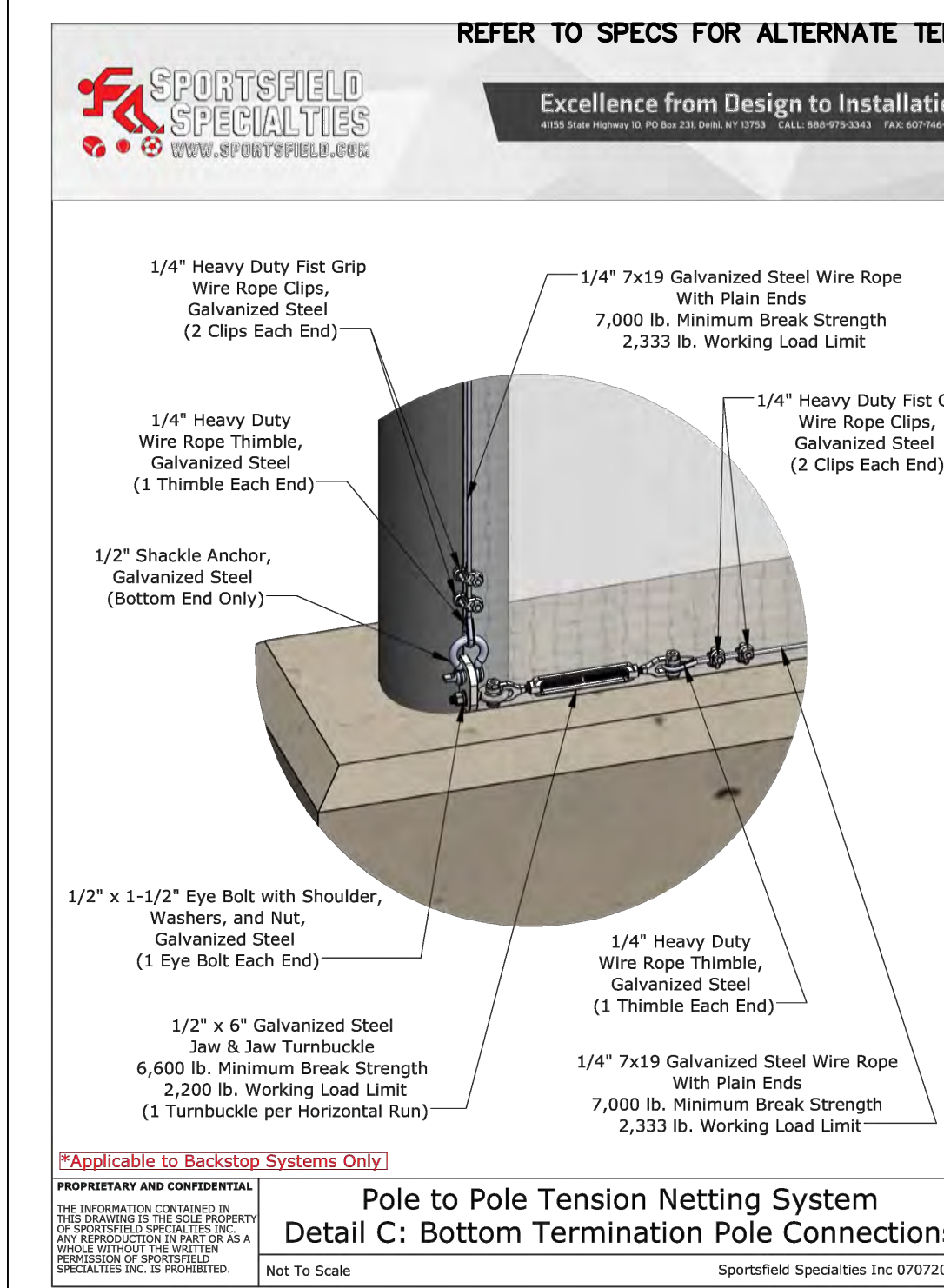
Pole to Pole Tension Netting System Detail A1: Top Termination Pole Connections

Not To Scale Sportsfield Specialties Inc 07072022



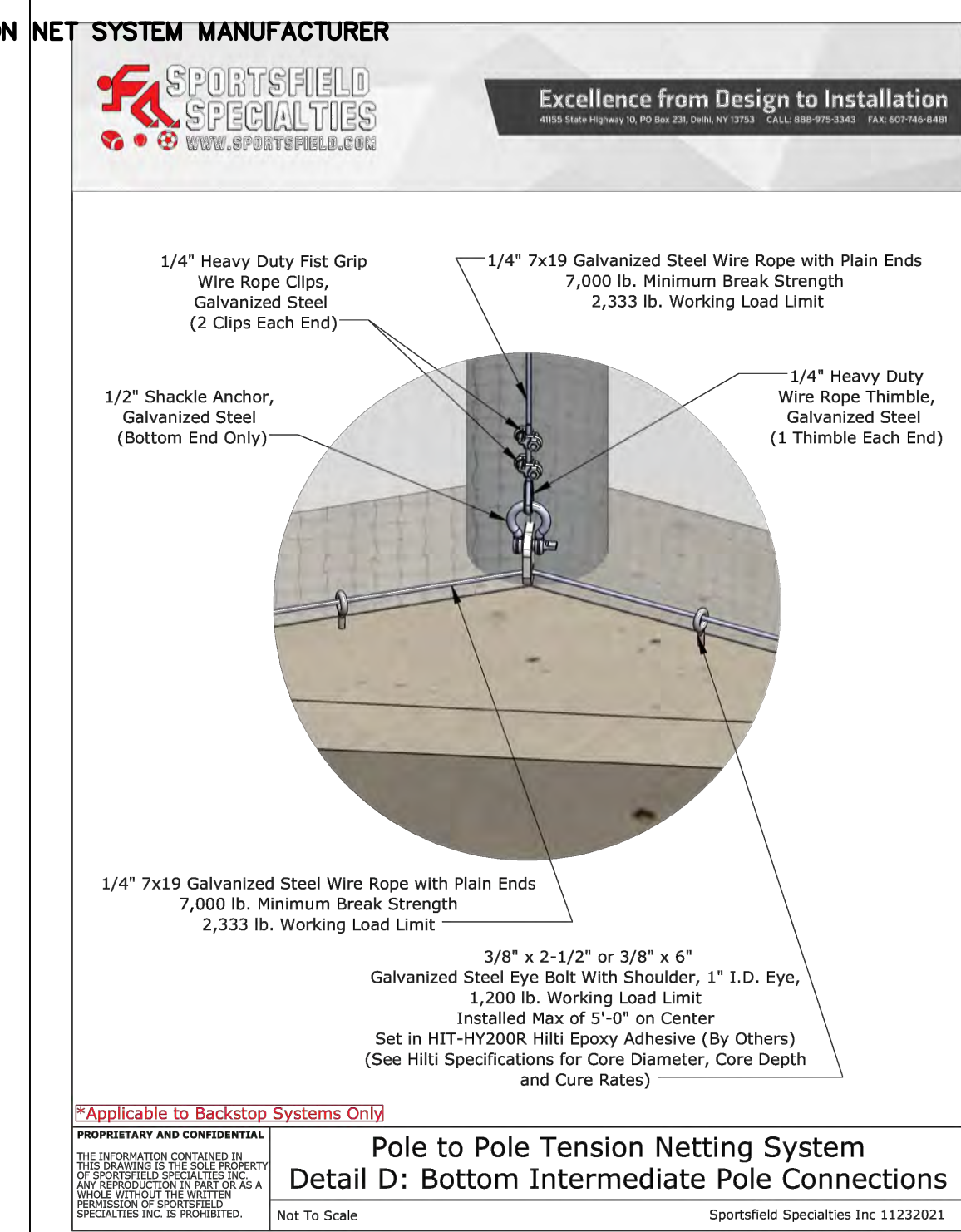
Pole to Pole Tension Netting System Detail B: Top Intermediate Pole Connections

Not To Scale Sportsfield Specialties Inc 07072022



Pole to Pole Tension Netting System Detail C: Bottom Termination Pole Connections

Not To Scale Sportsfield Specialties Inc 07072022



Pole to Pole Tension Netting System Detail D: Bottom Intermediate Pole Connections

Not To Scale Sportsfield Specialties Inc 11232021



T: 312.464.1444
www.strpartners.com

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625 Forest Edge Drive
Vernon Hills, IL 60061
(847) 478-9700

- **STRUCTURAL ENGINEERING:**
SHEFFEE LULKIN AND ASSOCIATES
4211 Main St
Skokie, IL 60076
(847) 677-8600
- **ME/PF ENGINEERING:**
CS2 DESIGN GROUP, LLC
837 Oakton St
Elk Grove Village, IL 60007
(847) 981-1880

CONSTRUCTION MANAGER:
PEPPER CONSTRUCTION COMPANY
411 N Lake Zurich Rd
Barrington, IL 60010
(847) 381-2760

KEY PLAN

SCOPE DOCUMENT

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PROJECT

D214 BGHS ATHLETIC FIELD RENOVATIONS PHASE 1

1100 W Dundee Road
Buffalo Grove, IL 60089

Township High School District 214

2121 South Goebbert Road
Arlington Heights, IL 60005

CLIENT PROJECT NUMBER

STR PROJECT NUMBER

DRAWING DATES:

NUMBER	DATE	COMMENTS
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•		MAY 06, 2024	MWRD REVIEW COMMENTS #1
•		FEB 27, 2024	VILLAGE REVIEW COMMENTS #1
•	2	JAN 15, 2024	ISSUE FOR CONSTRUCTION
•		NOV 10, 2023	ADDENDUM #2
•		NOV 03, 2023	ADDENDUM #1
•	1	OCT 20, 2023	ISSUE FOR PERMIT AND BIDS

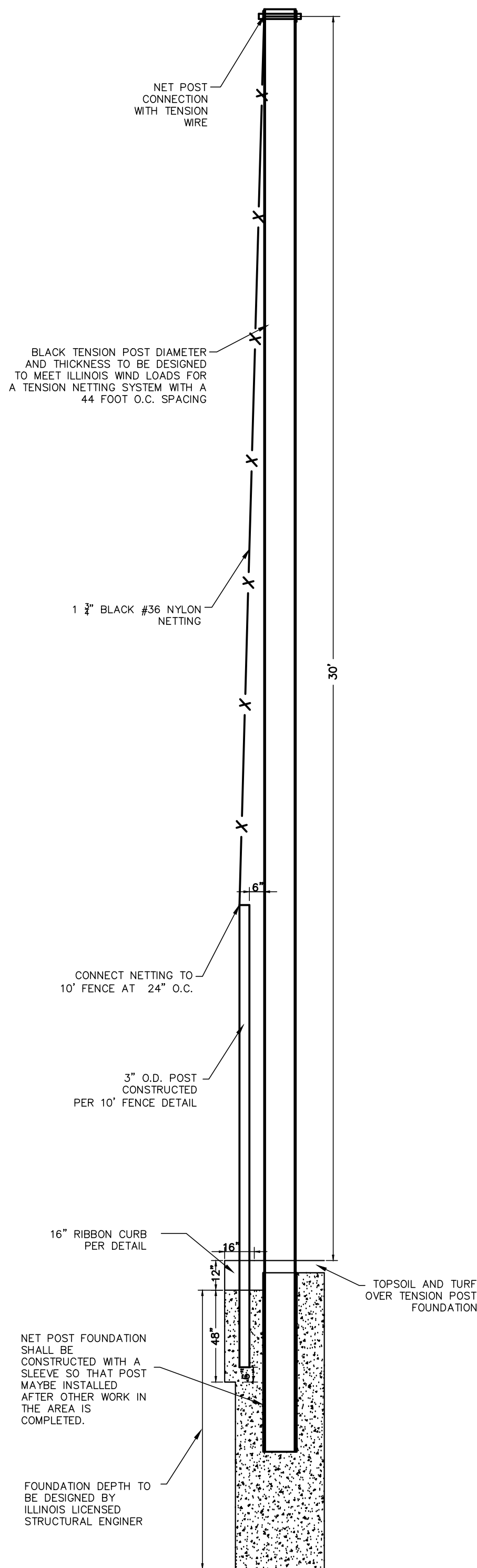
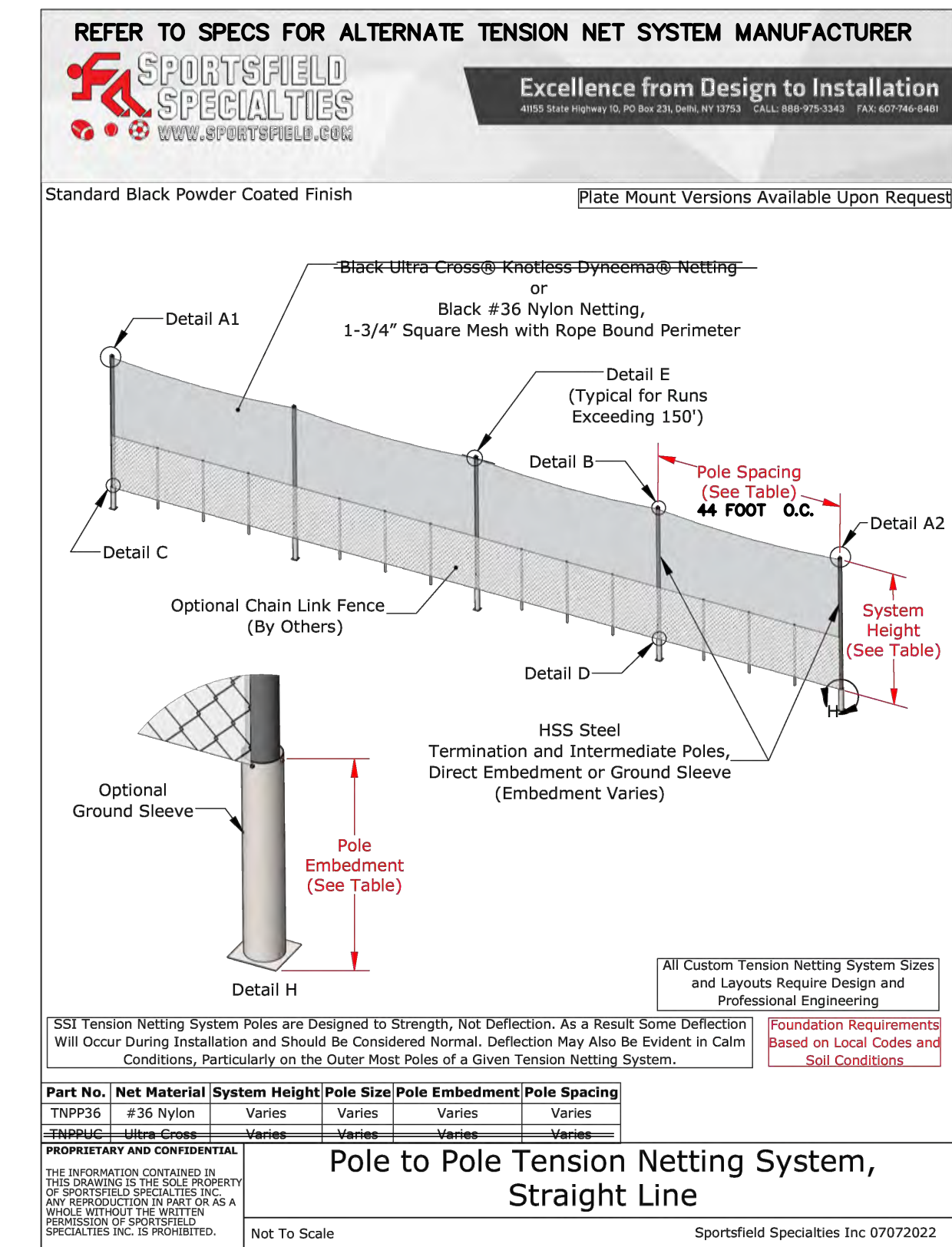
DRAWING TITLE

MULTISPORT FIELD DETAILS

SHEET NUMBER

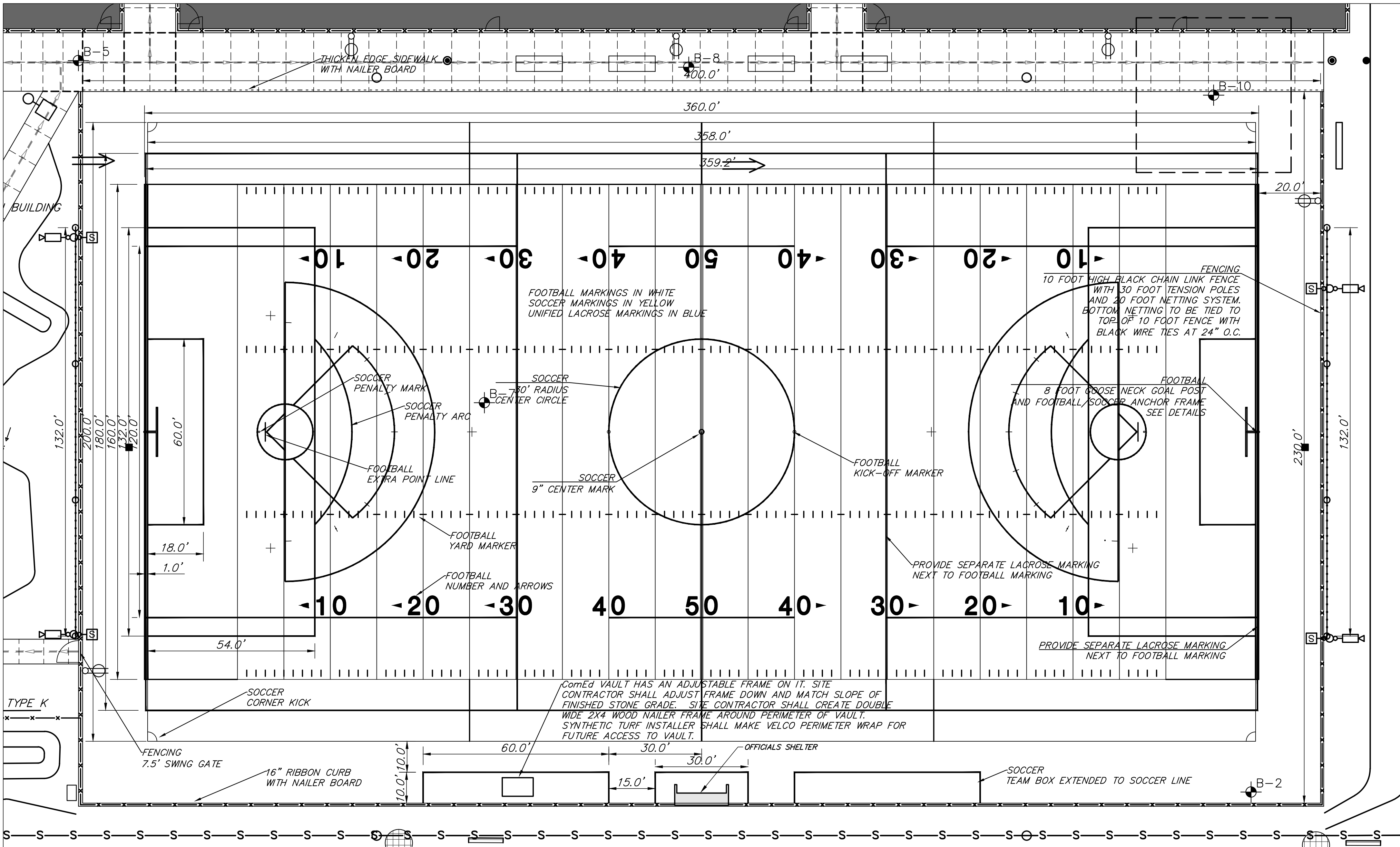
C12.1

Packet Pg. 522



**MULTISPORT 132 FOOT LONG TENSION NETTING
OVER 10 FOOT HIGH FENCE SECTION DETAIL**

NOTE: CONTRACTOR SHALL PROVIDE NETTING POLE FOUNDATION DRAWINGS SIGNED AND SEALED BY AN ILLINOIS LICENSED STRUCTURAL ENGINEER. NETTING POLE FOUNDATION TO CONFORM TO PROVIDED SIGNED AND SEALED STRUCTURAL DRAWINGS.





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Chicago, IL 60654

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MEPP ENGINEERING:
CS2 DESIGN GROUP, LLC
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Eik Grove Village, IL 60007
(847) 981-1880

CONSTRUCTION MANAGER:
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KEY PLAN

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PROJECT

D214 BGHS ATHLETIC FIELD
RENOVATIONS PHASE 1
1100 W Dundee Road
Buffalo Grove, IL 60089

Township High School District 214
2121 South Goebbert Road
Arlington Heights, IL 60005

CLIENT PROJECT NUMBER

STR PROJECT NUMBER

23040

DRAWING DATES

NUMBER	DATE	COMMENTS
•		
•		
•		
•	3 MAY 06, 2024	MWRD REVIEW COMMENTS #1
•	6 FEB 27, 2024	VILLAGE REVIEW COMMENTS #1
•	2 JAN 15, 2024	ISSUE FOR CONSTRUCTION
•	2 NOV 10, 2023	ADDENDUM #2
•	1 NOV 03, 2023	ADDENDUM #1
•	1 OCT 20, 2023	ISSUE FOR PERMIT AND BIDS

DRAWING TITLE

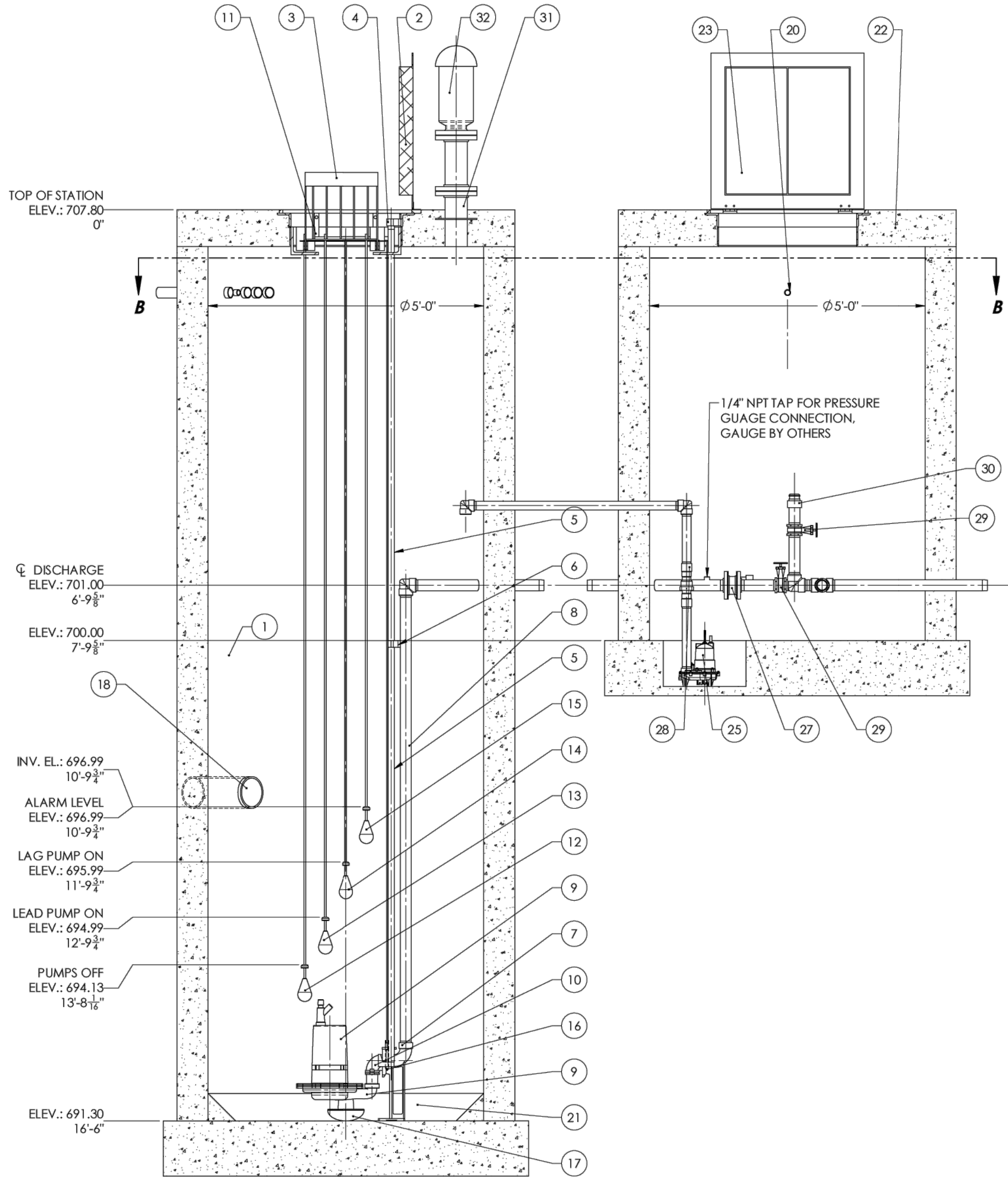
SANITARY LIFT
STATION DETAIL

SHEET NUMBER

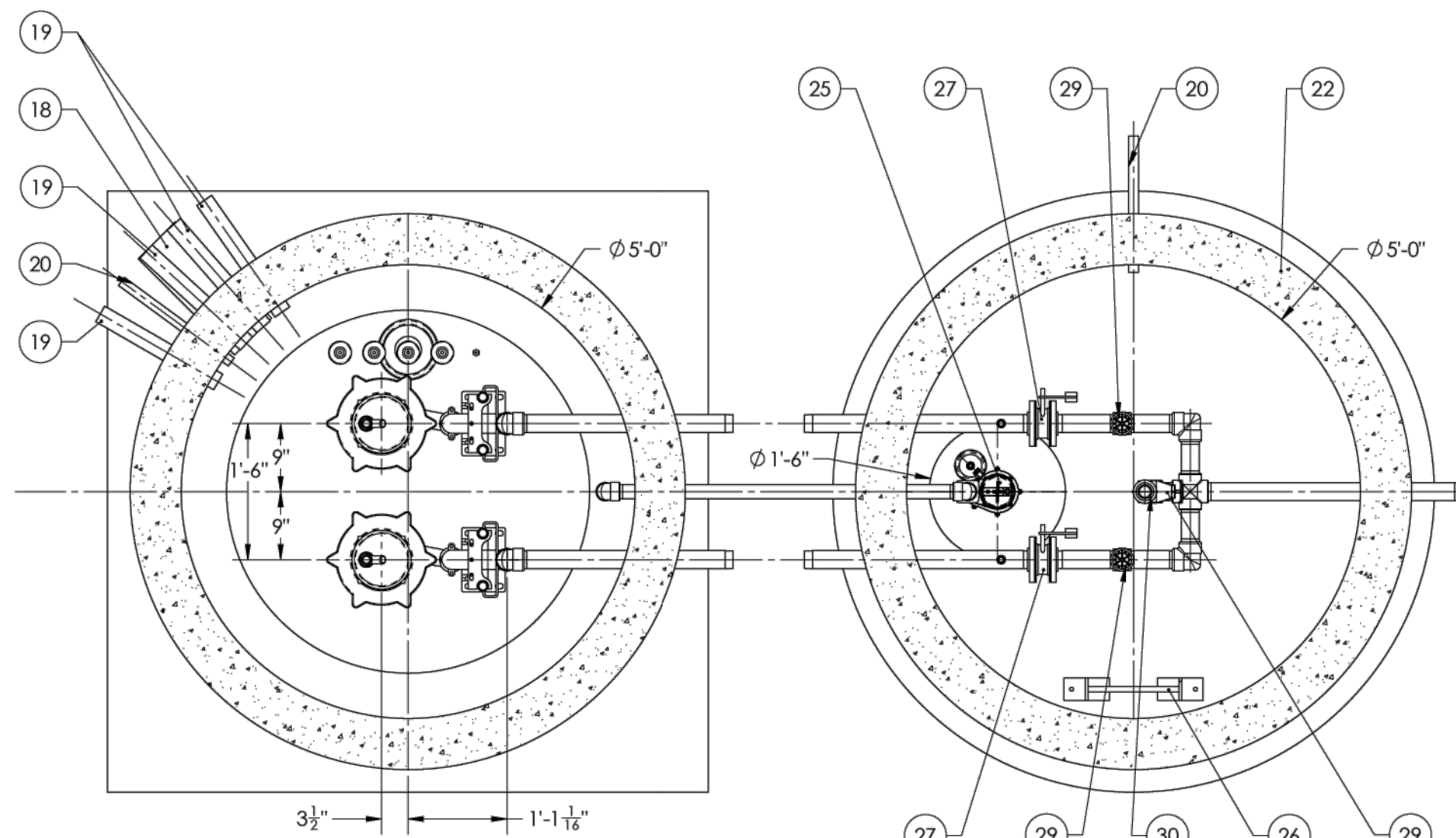
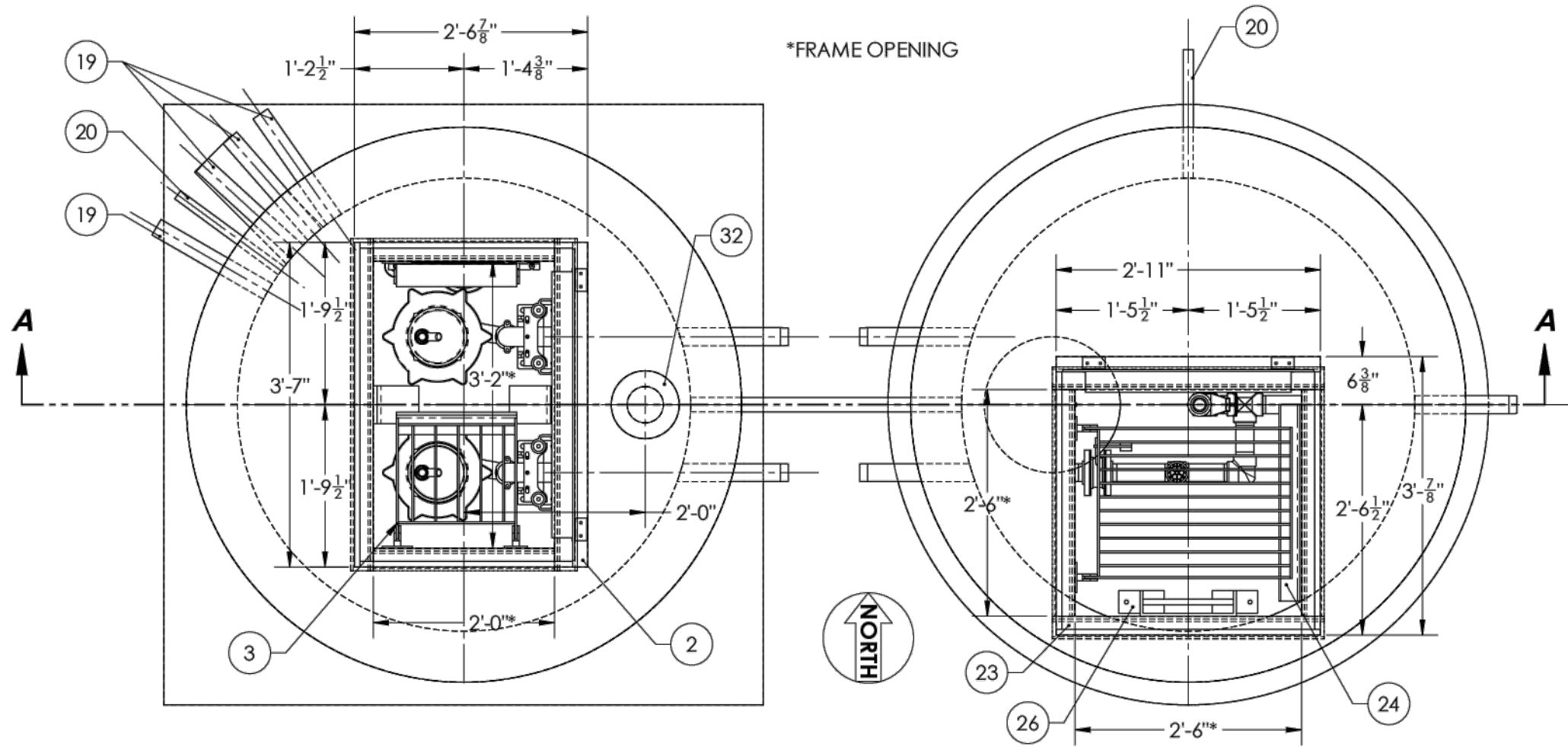
C13.0

NOTE:

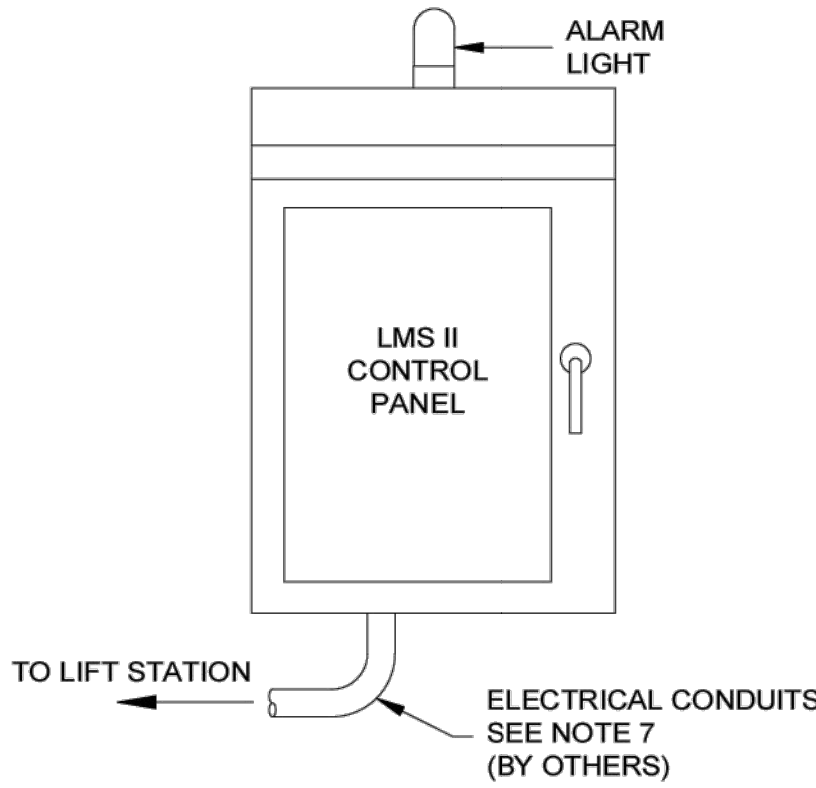
- THIS DRAWING IS PRELIMINARY LAYOUT ONLY. NOT FOR CONSTRUCTION. CONSTRUCTION DRAWINGS WILL BE FORWARDED UPON RECEIPT OF APPROVED SUBMITTALS.
- SOME ITEMS NOT SHOWN FOR CLARITY.
- LIFT STATION TO BE INSTALLED BY AN EXPERIENCED AND QUALIFIED CONTRACTOR.
- ALL CONCRETE WORK IS THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR AND OR ENGINEER TO VERIFY ALL DIMENSIONS, ELEVATIONS, PIPING LAYOUT, AND ORIENTATION OF INLET (S), DISCHARGE AND CONDUIT (S).
- ALL PIPING & VALVES ARE TO BE PROVIDED BY CONTRACTOR, UNLESS NOTED OTHERWISE.
- CONDUITS ARE AS FOLLOWS: (1) 2" FOR LEVEL CONTROLS, (1) 2" FOR EACH PUMP POWER CORD, (1) 2" FOR EACH PUMP SENSOR CABLES (1) 1" FOR TRANSDUCER & (1) 1" FOR VALVE VAULT SUMP PUMP POWER.
- CONTRACTOR TO ORDER CONTROL AND POWER CORDS OF SUFFICIENT LENGTH TO REACH CONTROL PANEL FROM POINT OF ORIGIN ON PUMPS WITHOUT SPLICING.
- ELECTRICAL COMPONENTS IN THE WET WELL SHALL BE RATED FOR CLASS I, DIV. I, GROUP C & D LOCATIONS.
- METROPOLITAN PUMP TO PROVIDE ONLY THE ITEMS SHOWN IN BOLD.



SECTION A-A

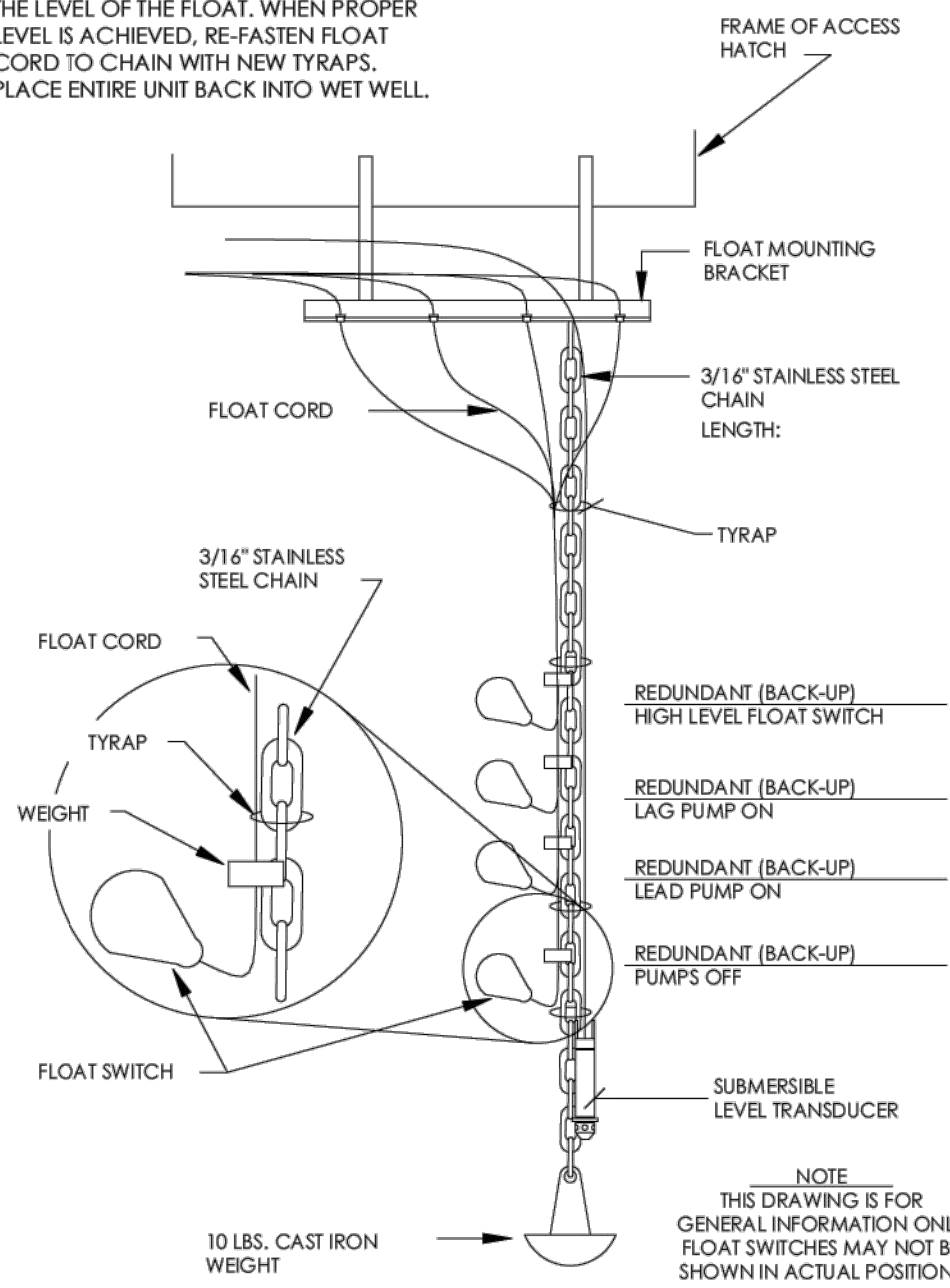


SECTION B-B



NEMA 3R STAINLESS STEEL WALL/POLE MOUNT
CONTROL ENCLOSURE
(POLE BY CONTRACTOR)

WHEN CHANGING FLOAT LEVELS, PULL CHAIN, ANCHOR, AND FLOATS OUT OF WET WELL. CUT NECESSARY TYRAPS AND READJUST THE LEVEL OF THE FLOAT. WHEN PROPER LEVEL IS ACHIEVED, RE-FASTEN FLOAT CORD TO CHAIN WITH NEW TYRAPS. PLACE ENTIRE UNIT BACK INTO WET WELL.

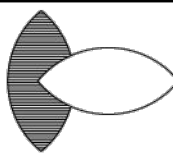


Metropolitan Industries, Inc. 2023

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF METROPOLITAN INDUSTRIES, INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF METROPOLITAN INDUSTRIES, INC. IS PROHIBITED.

DATE	BY	REVISION	DATE	BY	REVISION

SCALE: 1:16
DRN. BY: F.U.
DATE: 10/17/2023
APP. BY:



METROPOLITAN INDUSTRIES, INC.
37 FORESTWOOD DR. ROMEOVILLE, ILLINOIS 60446
(815)886-9200 FAX (815)886-4573
PUMPS - CONTROLS - SYSTEMS

TITLE:

DUPLEX METRO-RAIL COMPONENT
GRINDER LIFT STATION

PROJECT:

DUPLEX SANITARY LIFT STATION
BUFFALO GROVE H.S. CONCESSION STAND BATH ROOM LIFT STATION
BUFFALO GROVE, ILLINOIS

SHEET 1 OF 1
49997.1.4
88670 INDEX / JOB NO.
23SW192C210-23N



ARCHITECTS:

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KEY PLAN

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PROJECT

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CLIENT PROJECT NUMBER

STR PROJECT NUMBER

23040

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•		
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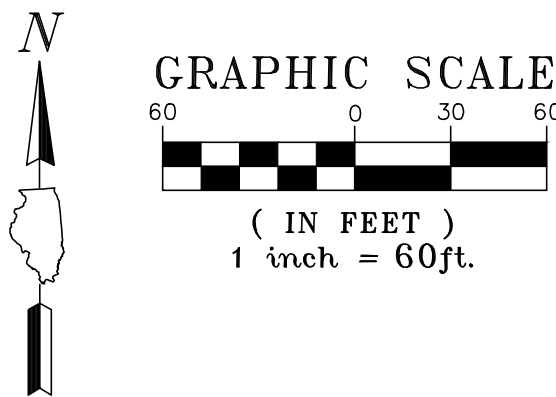
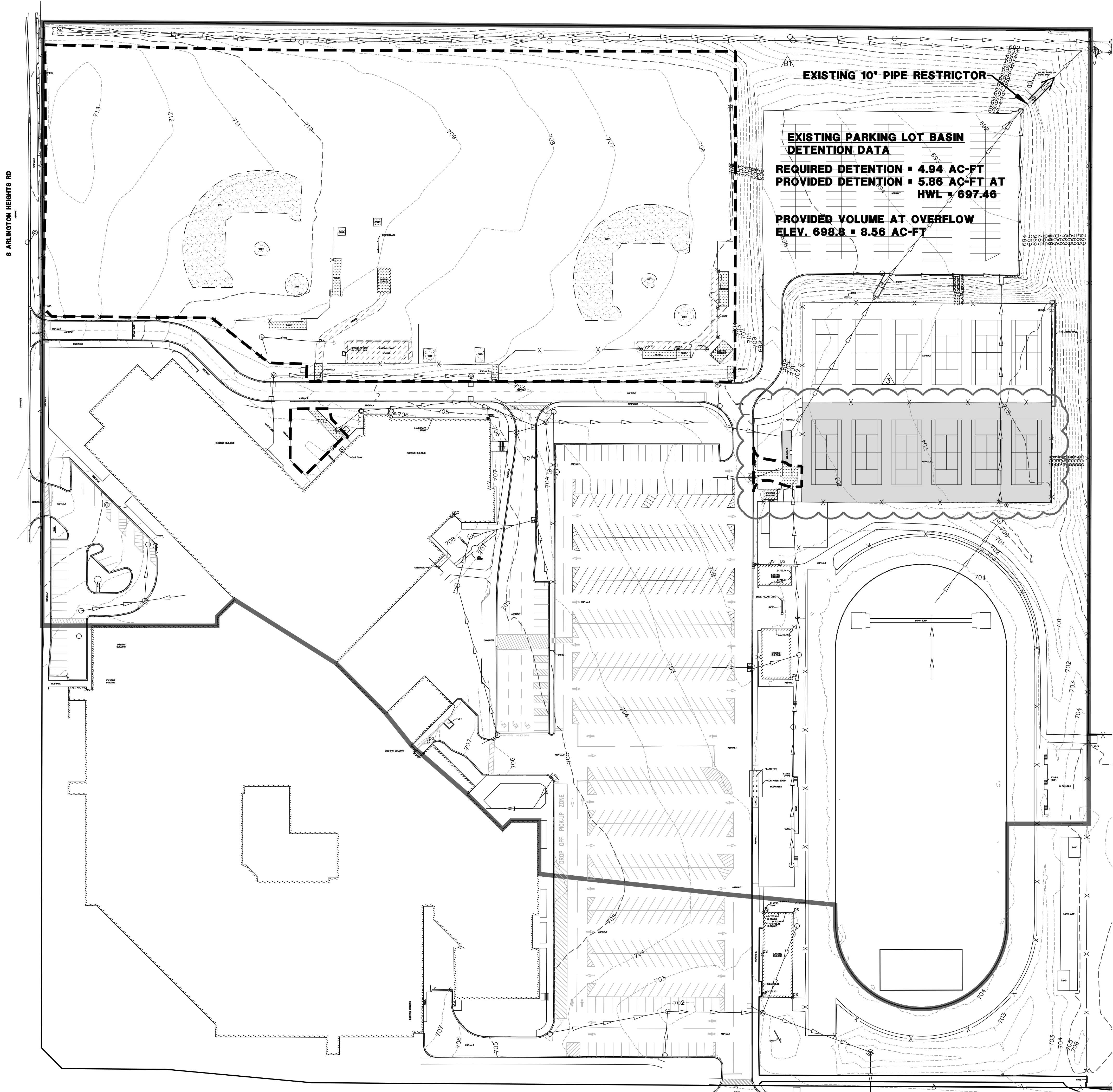
DRAWING TITLE

EXISTING DRAINAGE EXHIBIT

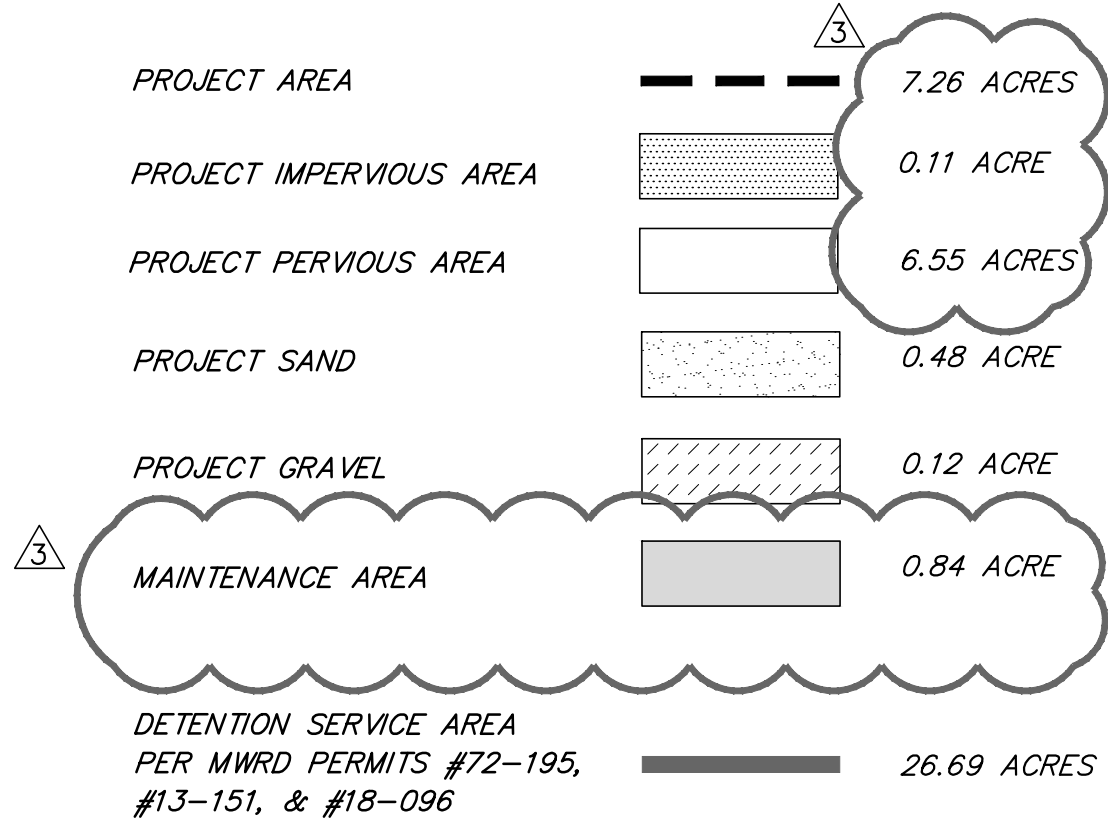
SHEET NUMBER

C14.1

Actual size to read at scale
0 IN 1 IN 2 IN



PHASE 1 EXISTING LEGEND





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Chicago, IL 60654

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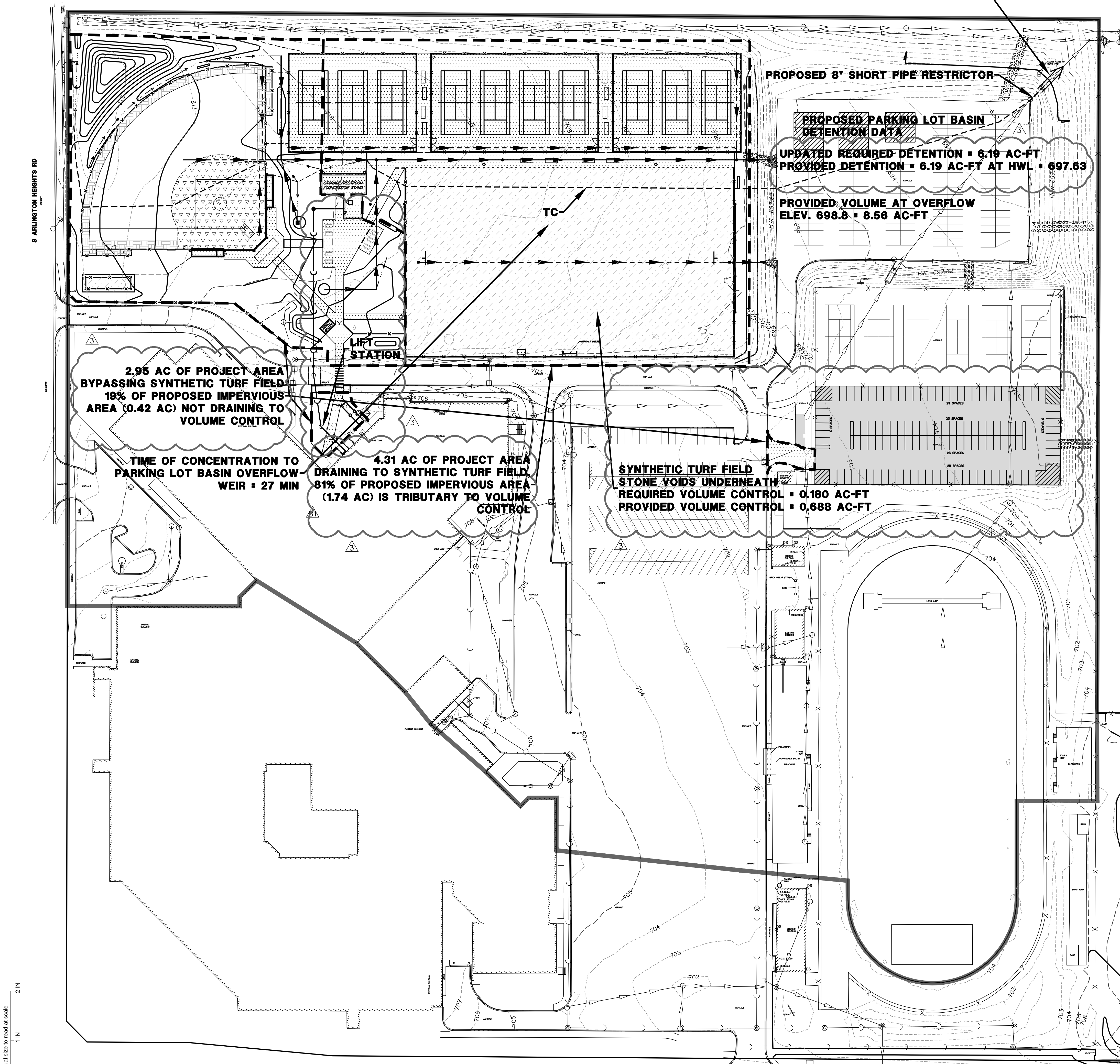
DRAWING TITLE

PROPOSED DRAINAGE EXHIBIT

SHEET NUMBER

C14.2

Packet Pg. 525





Ordinance No. O-2024-60 : Ordinance Authorizing an Engineering Services Agreement with Christopher B. Burke Engineering, Ltd.

Recommendation of Action

Staff recommends approval.

Staff recommends approval of the Christopher B. Burke time & material contract for engineering services for an initial limit not to exceed \$156,000.

ATTACHMENTS:

- CBBEL Memo (DOCX)
- CBBEL Ordinance (DOCX)
- Professional Service Contract 2024 with CBBEL Final for Sig (PDF)

Trustee Liaison
Stein

Staff Contact
Kyle Johnson, Engineering

Monday, May 20, 2024

VILLAGE OF BUFFALO GROVE



MEMORANDUM

DATE: May 16, 2024
TO: Dane Bragg, Village Manager
FROM: Kyle Johnson, Deputy Public Works Director/Village Engineer
SUBJECT: General Engineering Services

Staff Recommendation

Staff recommends approval of the time and material contract for Christopher B. Burke Engineering, Ltd. (CBBEL) at an initial amount not to exceed \$156,000.00, subject to review and approval by Village Attorney.

Overview

Staff recommends CBBEL for these services based upon their positive response to the 2022 Engineering Request for Qualifications (RFQ) and their high level of industry knowledge in Engineering and Public Works. Additionally, Christopher B. Burke Engineering, Ltd. is staffed with numerous former Public Works Directors and Village Engineers from surrounding communities that understand the processes and procedures of development, permitting and infrastructure improvements. Those will be the members supporting our staff at a high level.

The Village's engineering staff has been comprised of a Village Engineer, Assistant Village Engineer and three other engineers or technicians of varying levels of skill. Over the last six months staff worked to hire a Civil Engineer II to round out our staffing need, with that individual starting in late April 2024. Our Assistant Village Engineer recently announced his resignation, which took effect on May 17th, 2024. With the Engineering Division supporting fifteen active developments, a nearly \$40 million Capital Improvement Program and a wide variety of other required engineering functions additional support is needed at this time. Staff will bring forward a long-term staffing plan to mediate these costs, but do expect that plan development, hiring process and transition will take approximately six months to complete.

An initial purchase order value will be established at not to exceed \$156,000.00 from 100.60.580.10 – Engineering All Other Expense Consultant Fees. These costs will be offset by the reduced salary level of the Engineering Section due to the absence of the Assistant Village Engineer and late 2024 hire of a Civil Engineer II.

Attachment: CBBEL Memo (O-2024-60 : Christopher Burke Engineering Services)

Due to the level of demand for Engineers in this job market, this purchase order may need to be extended beyond \$156,000.00 and six-month timeframe to continue to support our engineering functions in a timely manner. In the event this contract needs to be extended, staff will bring a contract amendment back to the Village Board for consideration. As with all time and material engineering contracts, monies are only due for services rendered. If CBBEL's services are reduced below 40 hours a week or six months in total duration, the Village will not be responsible for those costs.

ORDINANCE 2024-_____

AN ORDINANCE AUTHORIZING AN ENGINEERING SERVICES AGREEMENT WITH CHRISTOPHER B. BURKE ENGINEERING, LTD.

WHEREAS, the Village of Buffalo Grove is a home rule unit pursuant to the Illinois Constitution of 1970; and

WHEREAS, the Village seeks to enter into an Engineering Services Agreement with Christopher B. Buke Engineering, Ltd. for general engineering services,

NOW THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS, as follows:

SECTION 1. The foregoing recitals are hereby adopted and incorporated and made a part of this Ordinance as if fully set forth herein.

SECTION 2. The Village Manager is authorized to enter into an Engineering Services Agreement with Christopher B. Buke Engineering, Ltd. for general engineering services at an initial price not to exceed \$156,000.00, subject to review by the Village Attorney.

SECTION 3. If any section, paragraph, clause or provision of this Ordinance shall be held invalid, the invalidity thereof shall not affect any other provision of this Ordinance.

SECTION 4. This Ordinance shall be in full force and effect from and after its passage and approval and shall not be codified.

AYES: _____
 NAYES: _____
 ABSENT: _____
 PASSED: _____, 2024
 APPROVED: _____, 2024

APPROVED:

 Eric N. Smith, Village President

ATTEST:

 Janet Sirabian, Village Clerk

Attachment: CBBEL Ordinance (O-2024-60 : Christopher Burke Engineering Services)

VILLAGE OF BUFFALO GROVE PROFESSIONAL SERVICES AGREEMENT ENGINEERING SERVICES

THIS AGREEMENT is dated as of the 20th day of May 2024 ("**Agreement**") and is by and between the **VILLAGE OF BUFFALO GROVE**, an Illinois home rule municipal corporation ("**Village**") and the Firm identified in Subsection 1A below.

IN CONSIDERATION OF the recitals and the mutual covenants and agreements set forth in this Agreement, and pursuant to the Village's statutory and home rule powers, the parties agree as follows:

SECTION 1. FIRM.

A. Engagement of Firm. The Village desires to engage the Firm Identified below to provide all necessary professional engineering services and to perform the work in connection with the project identified below:

Christopher B. Burke Engineering, Ltd. (CBBEL)
9575 W. Higgins Road, Suite 600, Rosemont, IL 60018
Attn: Michael Kerr
Phone: 847-823-0500
Email: mkerr@cbbel.com

B. Project Description. The Firm shall provide Engineering Services for the Village of Buffalo Grove as detailed in the attached Scope of Service Exhibit A.

C. Representations of Firm. The Firm has submitted to the Village a description of the services to be provided by the Firm, a copy of which is attached as Exhibit A to this Agreement ("Services"). The Firm represents that it is financially solvent, has the necessary financial resources, and is sufficiently experienced and competent to perform and complete the professional services set forth in Exhibit A.

SECTION 2. SCOPE OF SERVICES.

- A. **Retention of the Firm.** The Village retains the Firm to perform, and the Firm agrees to perform, the Services.
- B. **Services.** The Firm shall provide the Services pursuant to the terms and conditions of this Agreement.
- C. **Commencement.** Time of Performance. The Firm shall commence the Services immediately upon receipt of written notice from the Village that this Agreement has been fully executed by the Parties (the "Commencement Date"). The Firm shall diligently and continuously prosecute the Services until the completion of the Work.
- D. **Reporting.** The Firm shall regularly report to the Village Manager ("Manager"), or his/her designee, regarding the progress of the Services during the term of this Agreement.

SECTION 3. COMPENSATION AND METHOD OF PAYMENT.

- A. **Agreement Amount.** The total amount billed for the Services during the term of this Agreement shall not exceed the amount identified in the Schedule of Prices section in Exhibit B, unless amended pursuant to Subsection 8A of this Agreement.
- B. **Invoices and Payment.** The Firm shall submit invoices to the Village for all Services and subcontractor services monthly. The Invoices shall be in a Village approved and itemized format for those portions of the Services performed and completed by the Firm. The amount billed in any such invoice shall be based on the method of payment set forth in Exhibit B. The Village shall pay to the Firm the amount billed pursuant to the Illinois Local Government Prompt Payment Act (50 ILCS 505/1 et seq.)
- C. **Records.** The Firm shall maintain records showing actual time devoted and costs incurred, and shall permit the authorized representative of the Village to inspect and audit all data and records of the Firm for work done under the Agreement. The records shall be made available to the Village at reasonable times during the Agreement period, and for three years after the termination of the Agreement.
- D. **Claim In Addition To Agreement Amount.** If the Firm wishes to make a claim for additional compensation as a result of action taken by the Village, the Firm shall provide written notice to the Village of such claim within 7 calendar days after occurrence of such action as provided by Subsection 8.D. of this Agreement, and no claim for additional compensation shall be valid unless made in accordance with this Subsection. Any changes in this Agreement Amount shall be valid only upon written amendment pursuant to Subsection 8.A. of this Agreement. Regardless of the decision of the Village relative to a claim submitted by the Firm, the Firm shall proceed with all of the Services required to complete the project under this Agreement as determined by the Village without interruption.

SECTION 3. COMPENSATION AND METHOD OF PAYMENT (cont.)

- E. **Taxes, Benefits and Royalties.** The Agreement Amount includes all applicable federal, state, and local taxes of every kind and nature applicable to the Services as well as all taxes, contributions, and premiums for unemployment insurance, old age or retirement benefits, pensions, annuities, or similar benefits and all costs, royalties and fees arising from the use on, or the incorporation into, the Services, of patented or copyrighted equipment, materials, supplies, tools, appliances, devices, processes, or inventions. All claim or right to claim additional compensation by reason of the payment of any such tax, contribution, premium, costs, royalties, or fees is hereby waived and released by Firm.

F. **Escalation**

Written requests for price revisions after the first year period shall be submitted at least sixty (60) calendar days in advance of the annual agreement period or Term. Requests must be based upon and include documentation of the actual change in the cost of the components involved in the contract and shall not include overhead, or profit. In any case the price revisions for any Term shall not exceed the most recent 12 month Consumers Price Index (CPI-All Urban Consumers, Chicago) or 2% whichever is less.

The Village reserves the right to reject a proposed price increase and terminate the Agreement.

For any year beyond the initial year, this Agreement is contingent upon the appropriation of sufficient funds by the Village Board; no charges shall be assessed for failure of the Village to appropriate funds in future contract years.

SECTION 4. PERSONNEL, SUBCONTRACTORS.

- A. **Key Project Personnel.** The Key Project Personnel identified in Exhibit A shall be primarily responsible for carrying out the Services on behalf of the Firm. The Key Project Personnel shall not be changed without the Village's prior written approval, which shall not be unreasonably withheld.
- B. **Availability of Personnel.** The Firm shall provide all personnel necessary to complete the Services including, without limitation, any Key Project Personnel identified in this Agreement. The Firm shall notify the Village as soon as practicable prior to terminating the employment of, reassigning, or receiving notice of the resignation of, any Key Project Personnel. The Firm shall have no claim for damages and shall not bill the Village for additional time and materials charges as the result of any portion of the Services which must be duplicated or redone due to such termination or for any delay or extension of the Time of Performance as a result of any such termination, reassigning, or resignation.

SECTION 4. PERSONNEL, SUBCONTRACTORS (cont.)

- C. **Approval and Use of Subcontractors.** The Firm shall perform the Services with its own personnel and under the management, supervision, and control of its own organization unless otherwise approved by the Village Manager in writing. All subcontractors and subcontracts used by the Firm shall be acceptable to, and approved in advance by, the Village Manager. The Village Manager's approval of any subcontractor or subcontract shall not relieve the Firm of full responsibility and liability for the provision, performance, and completion of the Services as required by the Agreement. All Services performed under any subcontract shall be subject to all of the provisions of this Agreement in the same manner as if performed by employees of the Firm. For purposes of this Agreement, the term "Firm" shall be deemed also to refer to all subcontractors of the Firm, and every subcontract shall include a provision binding the subcontractor to all provisions of this Agreement.
- D. **Removal of Personnel and Subcontractors.** If any personnel or subcontractor fails to perform the Services in a manner satisfactory to the Village, the Firm shall immediately upon notice from the Village Manager remove and replace such personnel or subcontractor. The Firm shall have no claim for damages, for compensation in excess of the amount contained in this Agreement for a delay or extension of the Time of Performance as a result of any such removal or replacement. The Firm shall employ competent staff and shall discharge, at the request of the Village Manager, any incompetent, unfaithful, abusive or disorderly staff or subcontractor in its employ.

SECTION 5. CONFIDENTIAL INFORMATION.

- A. **Confidential Information.** The term "Confidential Information" shall mean information in the possession or under the control of the Village relating to the technical, business or corporate affairs of the Village; Village property; user information, including, without limitation, any information pertaining to usage of the Village's computer system, including and without limitation, any information obtained from server logs or other records of electronic or machine readable form; and the existence of, and terms and conditions of, this Agreement. Village Confidential Information shall not include information that can be demonstrated: (i) to have been rightfully in the possession of the Firm from a source other than the Village prior to the time of disclosure of said information to the Firm under this Agreement ("Time of Disclosure"); (ii) to have been in the public domain prior to the Time of Disclosure; (iii) to have become part of the public domain after the Time of Disclosure by a publication or by any other means except an unauthorized act or omission or breach of this Agreement on the part of the Firm or the Village; or (iv) to have been supplied to the Firm after the Time of Disclosure without restriction by a third party who is under no obligation to the Village to maintain such information in confidence.

SECTION 5. CONFIDENTIAL INFORMATION. (cont.)

- B. **No Disclosure of Confidential Information by the Firm.** The Firm acknowledges that it shall, in performing the Services for the Village under this Agreement, have access to or be directly or indirectly exposed to Confidential Information. The Firm shall hold confidential all Confidential Information and shall not disclose or use such Confidential Information without express prior written consent of the Village Manager. The Firm shall use reasonable measures at least as strict as those the Firm uses to protect its own confidential information. Such measures shall include, without limitation, requiring employees and subcontractors of the Firm to execute a non-disclosure agreement before obtaining access to Confidential Information.

SECTION 6. WARRANTY AND INSURANCE

- A. **Warranty of Services.** The Firm warrants that the Services shall be performed in accordance with the highest standards of professional practice, care, and diligence practiced by recognized firms in performing services of a similar nature in existence at the Time of Performance, the warranty expressed shall be in addition to any other warranties expressed in this Agreement, or expressed or implied by law, which are hereby reserved unto the Village.
- B. **Insurance.** Firm shall maintain throughout the term of this Agreement insurance, evidencing at least the minimum insurance coverages and limits as set forth in Exhibit C to this Agreement.
- C. **No Personal Liability.** No elected or appointed official, agent, or employee of the Village shall be personally liable, in law or in contract, to the Firm as the result of the execution of this Agreement.
- D. **Indemnity/Hold Harmless Provision** To the fullest extent permitted by law, the Firm hereby agrees to, indemnify and hold harmless the Village, its officials, agents and employees against all injuries, deaths, loss, damages, claims, patent claims, suits, liabilities, judgments, cost and expenses, which may in anywise accrue against the Village, its officials, agents and employees to the extent arising in whole out of the negligent performance of this work by the Firm, its employees, or subcontractors, or which may in anywise result therefore, except that arising out of the sole legal cause of the Village, its agents or employees,. Firm expressly understands and agrees that any performance bond or insurance policies required by this contract, or otherwise provided by the Firm, shall in no way limit the responsibility to indemnify, keep and save harmless and the Village, its officials, agents and employees as herein provided.
- E. **Kotecki Waiver.** In addition to the requirements set forth above, the Firm (and any subcontractor into whose subcontract this clause is incorporated) agrees to assume the entire liability for all personal injury claims suffered by its own employees and waives any limitation of liability defense based upon the Worker's Compensation Act and cases decided there under. Firm agrees to indemnify and defend the Village from and against all such loss, expense, damage or injury, including reasonable attorneys' fees, which the Village may sustain as a result of personal injury claims by Firm's employees, except to the extent those claims arise as a result of the Village's own negligence.

SECTION 7. CONSULTANT AGREEMENT GENERAL PROVISIONS

- A. **Relationship of the Parties.** The Firm shall act as an independent contractor in providing and performing the Services. Nothing in, nor done pursuant to, this Agreement shall be construed (i) to create the relationship of principal and agent, employer and employee, partners, or joint ventures between the Village and Firm; or (ii) to create any relationship between the Village and any subcontractor of the Firm.
- B. **Conflict of Interest.** The Firm represents and shall at all times abide by professional ethical requirements and other applicable law regarding conflicts of interest.
- C. **No Collusion.** The Firm represents and certifies that the Firm is not barred from contracting with a unit of state or local government as a result of (i) a delinquency in the payment of any tax administered by the Illinois Department of Revenue unless the Firm is contesting, in accordance with the procedures established by the appropriate revenue act, its liability for the tax or the amount of the tax, as set forth in Section 11-42.1-1 et seq. of the Illinois Municipal Code, 65 ILCS 5/11-42.1-1 et seq.; or (ii) a violation of either Section 33E-3 or Section 33E-4 of Article 33E of the Criminal Code of 1961, 720 ILCS 5/33E-1 et seq. The Firm represents that the only persons, firms, or corporations interested in this Agreement as principals are those disclosed to the Village prior to the execution of this Agreement, and that this Agreement is made without collusion with any other person, firm, or corporation. If at any time it shall be found that the Firm has, in procuring this Agreement, colluded with any other person, firm, or corporation, then the Firm shall be liable to the Village for all loss or damage that the Village may suffer, and this Agreement shall, at the Village's option, be null and void.
- D. **Sexual Harassment Policy.** The Firm certifies that it has a written sexual harassment policy in full compliance with Section 2-105(A)(4) of the Illinois Human Rights Act, 775 ILCS 512-105(A)(4).
- E. **Termination.** Notwithstanding any other provision hereof, the Village Manager may terminate this Agreement, without cause, at any time upon 15 calendar days prior written notice to the Firm. In the event that this Agreement is so terminated, the Firm shall be paid for Services actually performed and reimbursable expenses actually incurred, if any, prior to termination, not exceeding the value of the Services completed as determined as provided in Exhibit B.
- F. **Term.** The Time of Performance of this Agreement, unless terminated pursuant to the terms of this Agreement, shall be for 12 months. The Agreement may be renewed upon mutual agreement by both parties for additional 12 month periods. At the end of any term the Village of Buffalo Grove reserves the right to extend this agreement for a period of up to ninety (90) calendar days for the purpose of securing a new agreement.

SECTION 7. CONSULTANT AGREEMENT GENERAL PROVISIONS (cont.)

- G. **Compliance with Laws and Grants.** Firm shall give all notices, pay all fees, and take all other action that may be necessary to ensure that the Services are provided, performed, and completed in accordance with all required governmental permits, licenses, or other approvals and authorizations that may be required in connection with providing, performing, and completing the Services, and with all applicable statutes, ordinances, rules, and regulations, including without limitation the Fair Labor Standards Act; any statutes regarding qualification to do business; any statutes prohibiting discrimination because of, or requiring affirmative action based on, race, creed, color, national origin, age, sex, or other prohibited classification, including, without limitation, the Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12101 et seq., and the Illinois Human Rights Act, 775 ILCS 5/1-101 et seq. Firm shall also comply with all conditions of any federal, state, or local grant received by Owner or Firm with respect to this Agreement or the Services.

Firm shall be solely liable for any fines or civil penalties that are imposed by any governmental or quasi-governmental agency or body that may arise, or be alleged to have arisen, out of or in connection with Firm's, or its subcontractors', performance of, or failure to perform, the Services or any part thereof.

Every provision of law required by law to be inserted into this Agreement shall be deemed to be inserted herein.

- H. **Default.** If the Firm has failed or refused to prosecute, or has delayed in the prosecution of, the Services with diligence at a rate that assures completion of the Services in full compliance with the requirements of this Agreement, or has otherwise failed, refused, or delayed to perform or satisfy the Services or any other requirement of this Agreement ("Event of Default"), and fails to cure any such Event of Default within fourteen (14) calendar days after the Firm's receipt of written notice of such Event of Default from the Village, then the Village shall have the right, without prejudice to any other remedies provided by law or equity, to pursue any one or more of the following remedies:

1. **Cure by Firm.** The Village may require the Firm, within a reasonable time, to complete or correct all or any part of the Services that are the subject of the Event of Default; and to take any or all other action necessary to bring the Firm and the Services into compliance with this Agreement.
2. **Termination of Agreement by Village.** The Village may terminate this Agreement without liability for further payment of amounts due or to become due under this Agreement.
3. **Withholding of Payment by Village.** The Village may withhold from any payment, whether or not previously approved, or may recover from the Firm, any and all costs, including attorneys' fees and administrative expenses, incurred by the Village as the result of any Event of Default by the Firm or as a result of actions taken by the Village in response to any Event of Default by the Firm.

SECTION 7. CONSULTANT AGREEMENT GENERAL PROVISIONS (cont.)

- I. **No Additional Obligation.** The Parties acknowledge and agree that the Village is under no obligation under this Agreement or otherwise to negotiate or enter into any other or additional contracts or agreements with the Firm or with any vendor solicited or recommended by the Firm.
- J. **Village Manager Authority.** Notwithstanding any provision of this Agreement, any negotiations or agreements with, or representations by the Firm to vendors shall be subject to the approval of the Village Manager. The Village shall not be liable to any vendor or other third party for any agreements made by the Firm, purportedly on behalf of the Village, without the knowledge of and express approval by the Village Manager.
- K. **Mutual Cooperation.** The Village agrees to cooperate with the Firm in the performance of the Services, including meeting with the Firm and providing the Firm with such confidential and non-confidential information that the Village may have that may be relevant and helpful to the Firm's performance of the Services. The Firm agrees to cooperate with the Village in the performance of the Services to complete the Work and with any other Firms engaged by the Village.
- L. **News Releases.** The Firm shall not issue any news releases or other public statements regarding the Services without prior approval from the Village Manager. Nothing Herein shall limit the Firm's right to identify the Village as a client of the Firm or from disclosing matters arising from the relationship between the Village and the Firm that are subject to disclosure under the Illinois Freedom of Information Act, (5 ILCS 140, et seq)
- M. **Ownership.** Designs, drawings, plans, specifications, photos, reports, information, observations, records, opinions, communications, digital files, calculations, notes, and any other documents, data, or information, in any form, prepared, collected, or received by the Firm in connection with any or all of the Services to be performed under this Agreement ("Documents") shall be and remain the exclusive property of the Village. At the Village's request, or upon termination of this Agreement, the Firm shall cause the Documents to be promptly delivered to the Village, in original format or a suitable facsimile acceptable to the Village.
- N. **Favorable Terms**

Firm represents that all of the benefits and terms granted by Firm herein are at least as favorable as the benefits and terms granted by Firm to Illinois Home Rule Municipalities

Should Firm enter into any subsequent agreement with any Illinois Home Rule Municipalities, during the term of this Agreement, which provides for benefits or terms more favorable than those contained in this Agreement, including all exhibits to this Agreement, then this Agreement shall be deemed to be modified to provide the Village with those more favorable benefits and terms.

Firm shall notify the Village, in writing, promptly of the existence of such more favorable benefits and terms and the Village shall have the right to receive the more favorable benefits and terms immediately. If requested in writing by the Village, Firm shall amend this Agreement to contain the more favorable terms and conditions.

SECTION 8. GENERAL PROVISIONS.

- A. **Amendment.** No amendment or modification to this Agreement shall be effective unless and until such amendment or modification is in writing, properly approved in accordance with applicable procedures, and executed.
- B. **Assignment.** This Agreement may not be assigned by the Village or by the Firm without the prior written consent of the other party.
- C. **Binding Effect.** The terms of this Agreement shall bind and inure to the benefit of the Parties hereto and their agents, successors, and assigns.
- D. **Notice.** Any notice or communication required or permitted to be given under this Agreement shall be in writing and shall be delivered (i) personally, (ii) by a reputable overnight courier, (iii) by certified mail and deposited in the U.S. Mail, postage prepaid, (iv) by facsimile, or (v) by electronic Internet mail ("e- mail"). Facsimile notices shall be deemed valid only to the extent that they are (a) actually received by the individual to whom addressed and (b) followed by delivery of actual notice in the manner described in either (i), (ii), or (iii) above within three business days thereafter at the appropriate address set forth below. E-mail notices shall be deemed valid and received by the addressee thereof when delivered by e-mail and (a) opened by the recipient on a business day at the address set forth below, and (b) followed by delivery of actual notice in the manner described in either (i), (ii) or (iii) above within three business days thereafter at the appropriate address set forth below. Unless otherwise expressly provided in this Agreement, notices shall be deemed received upon the earlier of (a) actual receipt; (b) one business day after deposit with an overnight courier as evidenced by a receipt of deposit; or (c) three business days following deposit in the U.S. mail. By notice complying with the requirements of this Subsection, each Party shall have the right to change the address or the addressee, or both, for all future notices and communications to such party, but no notice of a change of addressee or address shall be effective until actually received. The provisions of this Section 8 D shall not control with respect to the manner of communications utilized by the Firm in rendering the Services.

Notices and communications to the Village shall be addressed to, and delivered at, the following address:

Village of Buffalo Grove ("Village")
 50 Raupp Blvd.
 Buffalo Grove, IL 60089
 Attn: Dane Bragg
 Email: dbragg@vbg.org
 cc: kjohnson@vbg.org

Notices and communications to the Firm shall be addressed to, and delivered at, the following address:

Christopher B. Burke Engineering, Ltd. (CBBEL)
 9575 W. Higgins Road, Suite 600, Rosemont, IL 60018
 Attn: Michael Kerr
 Phone: 847-823-0500
 Email: mkerr@cbbel.com

SECTION 8. GENERAL PROVISIONS (cont.)

- E. **Third Party Beneficiary.** No claim as a third party beneficiary under this Agreement by any person, firm, or corporation other than the Firm shall be made or be valid against the Village.
- F. **Provisions Severable.** If any term, covenant, condition, or provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remainder of the provisions shall remain in full force and effect and shall in no way be affected, impaired or invalidated.
- G. **Time.** Time is of the essence in the performance of this Agreement.
- H. **Governing Laws.** This Agreement shall be interpreted according to the internal laws, but not the conflict of laws rules, of the State of Illinois. Venue shall be in Cook County, Illinois
- I. **Entire Agreement.** This Agreement constitutes the entire agreement between the parties and supersedes any and all previous or contemporaneous oral or written agreements and negotiations between the Village and the Firm with respect to the Request for Proposal.
- J. **Waiver.** No waiver of any provision of this Agreement shall be deemed to or constitute a waiver of any other provision of this Agreement (whether or not similar) nor shall any such waiver be deemed to or constitute a continuing waiver unless otherwise expressly provided in this Agreement.
- K. **Exhibit.** Exhibit, A and Exhibit B are attached hereto, and by this reference incorporated in and made a part of this Agreement. In the event of a conflict between the Exhibit and the text of this Agreement, the text of this Agreement shall control.
- L. **Rights Cumulative.** Unless expressly provided to the contrary in this Agreement, each and every one of the rights, remedies, and benefits provided by this Agreement shall be cumulative and shall not be exclusive of any other such rights, remedies, and benefits allowed by law.
- M. **Calendar Days and Time.** Unless otherwise provided in this Contract, any reference in this Contract to “day” or “days” shall mean calendar days and not business days. If the date for giving of any notice required to be given, or the performance of any obligation, under this Contract falls on a Saturday, Sunday or federal holiday, then the notice or obligation may be given or performed on the next business day after that Saturday, Sunday or federal holiday.
- N. **No Waiver of Tort Immunity.** Nothing contained in this Agreement shall constitute a waiver by the Village of any right, privilege or defense available to the Village under statutory or common law, including, but not limited to, the Illinois Governmental and Governmental Employees Tort Immunity Act, 745 ILCS 10/1-101 et seq., as amended.

SECTION 8. GENERAL PROVISIONS (cont.)

- O. **Freedom of Information.** The Firm agrees to furnish all documentation related to the Contract, the Work and any documentation related to the Village required under an Illinois Freedom of Information Act (ILCS 140/1 et. seq.) ("FOIA") request within five (5) calendar days after the Village issues Notice of such request to the Firm. The Firm agrees to defend, indemnify and hold harmless the Village, and agrees to pay all reasonable costs connected therewith (including, but not limited to attorney's and witness fees, filing fees and any other expenses) for the Village to defend any and all causes, actions, causes of action, disputes, prosecutions, or conflicts arising from Firm's actual or alleged violation of FOIA or the Firm's failure to furnish all documentation related to a FOIA request within five (5) calendar days after Notice from the Village for the same. Furthermore, should the Firm request that the Village utilize a lawful exemption under FOIA in relation to any FOIA request thereby denying that request, Firm agrees to pay all costs connected therewith (such as attorneys' and witness fees, filing fees and any other expenses) to defend the denial of the request. This defense shall include, but not be limited to, any challenged or appealed denials of FOIA requests to either the Illinois Attorney General or a court of competent jurisdiction.
- P. **Counterpart Execution.** This Agreement may be executed in several counterparts, each of which, when executed, shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

ACKNOWLEDGEMENT.

The undersigned hereby represent and acknowledge that they have read the foregoing Agreement, that they know its contents, and that in executing this Agreement they have received legal advice regarding the legal rights of the party on whose behalf they are executing this Agreement, and that they are executing this Agreement as a free and voluntary act and on behalf of the named parties.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the dates set forth below.

VILLAGE OF BUFFALO GROVE

By: _____
Dane Bragg, Village Manager

Date: _____

Firm

By: _____

Title: _____

Date: _____

**Exhibit A.
("Services")**

Attach RFP Response documents



Exhibit A

CHRISTOPHER B. BURKE ENGINEERING, LTD.

9575 West Higgins Road Suite 600 Rosemont, Illinois 60018 TEL (847) 823-0500 FAX (847) 823-0520

May 9, 2024

Village of Buffalo Grove
50 Raupp Boulevard
Buffalo Grove, IL 60089

Attention: Mr. Kyle Johnson, Deputy Public Works Director, Village Engineer

Subject: Village Engineer Services

Dear Mr. Johnson:

Christopher B. Burke Engineering, Ltd. (CBBEL) is pleased to submit this proposal to provide professional engineering services as the Staff Engineer for the Village of Buffalo Grove (Village) from approximately June 3, 2024, through December 1, 2024. CBBEL understands that we will be providing general engineering services, coordinating development reviews and other duties as assigned.

GENERAL ENGINEERING

CBBEL will provide a veteran of Municipal Engineering with 35 years of experience leading a municipal team. He will provide the following services as requested and needed by the Village:

- Provide technical support related to municipal engineering needs and challenges.
- Utilize municipal engineering experience to assist Village Engineering and Public Works staff as needed and directed.
- Address and respond to engineering related inquiries by residents and businesses that arise from time to time and as directed by the Village.
- Coordinate and provide engineering plan review for development proposals as they are filed with the Village for consideration.
- Coordinate and provide review of engineering projects, reports and plans provided by other consulting engineers.
- Coordinate Public Utility Permit Applications as they are filed with the Village.
- Coordinate with public agencies, such as IDOT, LCDOT, SMC and other municipalities as needed related to projects and initiatives.
- Utilize skills related to drainage, traffic and for municipal engineering endeavors and studies.
- Utilize CBBEL staff as needed to enhance evaluation of a variety of engineering challenges.
- Attend weekly staff meetings with Village Staff as directed, and bimonthly status meetings with Community Development Department and Public Works Department Staff.

Exhibit A Cont.

CBBEL will attend Plan Commission Meetings, Village Board Meetings, and Committee of the Whole Meetings as requested by Village Staff.

CBBEL Engineer will be under the direction of the Deputy Director of Public Works/Village Engineer and will be assigned to a 40-hour work week, unless otherwise directed. This effort will initially be in place for 6 months. This position is projected for a cost not to exceed \$156,000 and will be billed as hourly services worked/provided. (\$150/hour for 1040 hours/6 months)

This agreement may be extended or terminated by either party upon 30 days written notice.

Please sign both copies of the agreement and return one to us as an indication of acceptance and notice to proceed.

Sincerely,



Michael Kerr, PE
President

Encl: General Terms & Conditions

THIS PROPOSAL AND GENERAL TERMS AND CONDITIONS ACCEPTED FOR THE VILLAGE OF BUFFALO GROVE.

BY: _____

TITLE: _____

DATE: _____

**Exhibit B.
Agreed Upon Pricing
Structure**

See pricing within Exhibit A.

Exhibit C. Insurance

1. Firm's Insurance

Firm shall procure and maintain, for the duration of the Contract and any maintenance period, insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by the Firm, his agents, representatives, employees or subcontractors.

A. Minimum Scope of Insurance: Coverage shall be at least as broad as:

Insurance Services Office Commercial General Liability occurrence form CG 0001 with the Village of Buffalo Grove named as additional insured on a primary and non-contributory basis. This primary, non-contributory additional insured coverage shall be confirmed through the following required policy endorsements: ISO Additional Insured Endorsement CG 20 10 or CG 20 26 and CG 20 01 04 13. CG 20 37 - Completed Operations.

- 1) Insurance Services Office Commercial General Liability occurrence form CG 0001 with the Village named as additional insured, on a form at least as broad as the ISO Additional Insured Endorsement CG 2010 and CG 2026
- 2) Insurance Service Office Business Auto Liability coverage form number CA 0001, Symbol 01 "Any Auto."
- 3) Workers' Compensation as required by the Labor Code of the State of Illinois and Employers' Liability insurance.
- 4) Owners and Contractors Protective Liability (OCP) policy with the Village of Buffalo Grove as insured.
- 5) Builder Risk Property Coverage with Village as loss payee
- 6) Environmental Impairment/Pollution Liability Coverage for pollution incidents as a result of a claim for bodily injury, property damage or remediation costs from an incident at, on or migrating beyond the contracted work site. Coverage shall be extended to Non-Owned Disposal sites resulting from a pollution incident at, on or mitigating beyond the site; and also provide coverage for incidents occurring during transportation of pollutants.

B. Minimum Limits of Insurance: Firm shall maintain limits no less than:

- 1) Commercial General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. The general aggregate shall be twice the required occurrence limit. Minimum General Aggregate shall be no less than \$2,000,000 or a project/contract specific aggregate of \$1,000,000.
- 2) Business Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage.
- 3) Workers' Compensation and Employers' Liability: Workers' Compensation coverage with statutory limits and Employers' Liability limits of \$500,000 per accident.
- 4) Owners and Contractors Protective Liability (OCP): \$1,000,000 combined single limit per occurrence for bodily injury and property damage.

- 5) Builder's Risk: Shall insure against "All Risk" of physical damage, including water damage (flood and hydrostatic pressure not excluded), on a completed replacement cost basis.
- 6) Environmental Impairment/Pollution Liability: \$1,000,000 combined single limit per occurrence for bodily injury, property damage and remediation costs

C. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the Village. At the option of the Village, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as it respects the Village, its officials, agents, employees and volunteers; or the Firm shall procure a bond guaranteeing payment of losses and related investigation, claim administration and defense expenses.

D. Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

1) General Liability and Automobile Liability Coverages:

The Village, its officials, agents, employees and volunteers are to be covered as insureds as respects: liability arising out of activities performed by or on behalf of the Firm; products and completed operations of the Firm; premises owned, leased or used by the Firm; or automobiles owned, leased, hired or borrowed by the Firm. The coverage shall contain no special limitations on the scope of protection afforded to the Village, its officials, agents, employees and volunteers.

- 2) The Firm's insurance coverage shall be primary and non-contributory as respects the Village, its officials, agents, employees and volunteers. Any insurance or self-insurance maintained by the Village, its officials, agents, employees and volunteers shall be excess of Firm's insurance and shall not contribute with it.
- 3) Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Village, its officials, agents, employees and volunteers.
- 4) The Firm's insurance shall contain a Severability of Interests/Cross Liability clause or language stating that Firm's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- 5) If any commercial general liability insurance is being provided under an excess or umbrella liability policy that does not "follow form," then the Firm shall be required to name the Village, its officials, employees, agents and volunteers as additional insureds
- 6) All general liability coverages shall be provided on an occurrence policy form. Claims-made general liability policies will not be accepted.
- 7) The Firm and all subcontractors hereby agree to waive any limitation as to the amount of contribution recoverable against them by the Village. This specifically includes any limitation imposed by any state statute, regulation, or case law including any Workers' Compensation Act provision that applies a limitation to the amount recoverable in contribution such as Kotecki v. Cyclops Welding

E. All Coverages:

- 1) No Waiver. Under no circumstances shall the Village be deemed to have waived any of the insurance requirements of this Contract by any act or omission, including, but not limited to:
 - a. Allowing work by Firm or any subcontractor to start before receipt of Certificates of Insurance and Additional Insured Endorsements.
 - b. Failure to examine, or to demand correction of any deficiency, of any Certificate of Insurance and Additional Insured Endorsement received.
- 2) Each insurance policy required shall have the Village expressly endorsed onto the policy as a Cancellation Notice Recipient. Should any of the policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

F. Acceptability of Insurers

Insurance is to be placed with insurers with a Best's rating of no less than A-, VII and licensed to do business in the State of Illinois.

G. Verification of Coverage

Firm shall furnish the Village with certificates of insurance naming the Village, its officials, agents, employees, and volunteers as additional insured's and with original endorsements, affecting coverage required herein. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be received and approved by the Village before any work commences. The Village reserves the right to request full certified copies of the insurance policies and endorsements.

H. Subcontractors

Firm shall include all subcontractors as insured's under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage's for subcontractors shall be subject to all of the requirements stated herein.

J. Workers' Compensation and Employers' Liability Coverage

The insurer shall agree to waive all rights of subrogation against the Village of Buffalo Grove, its officials, employees, agents and volunteers for losses arising from work performed by Firm for the municipality.

- 1) NCCI Alternate Employer Endorsement (WC 000301) in place to insure that workers' compensation coverage applies under Firm's coverage rather than the Village of Buffalo Grove's, if the Village of Buffalo Grove is borrowing, leasing or in day to day control of Firm's employee.

K. Failure to Comply

In the event the Firm fails to obtain or maintain any insurance coverage's required under this agreement, The Village may purchase such insurance coverage's and charge the expense thereof to the Firm.

L. Professional Liability

- 1) Professional liability insurance with limits not less than \$1,000,00 each claim with respect to negligent acts, errors and omissions in connection with professional services to be provided under the contract, with a deductible not-to-exceed \$50,000 without prior written approval.
- 2) If the policy is written on a claims-made form, the retroactive date must be equal to or preceding the effective date of the contract. In the event the policy is cancelled, non-renewed or switched to an occurrence form, the Firm shall be required to purchase supplemental extending reporting period coverage for a period of not less than three (3) years.
- 3) Provide a certified copy of actual policy for review.
- 4) Recommended Required Coverage (architect, engineer, surveyor, consultant): Professional liability insurance that provides indemnification and defense for injury or damage arising out of acts, errors, or omissions in providing the following professional services, but not limited to the following:
 - a. Preparing, approving or failure to prepare or approve maps, drawings, opinions, report, surveys, change orders, designs or specifications;
 - b. Providing direction, instruction, supervision, inspection, engineering services or failing to provide them, if that is the primary cause of injury or damage.



Ordinance No. O-2024-61 : Ordinance Authorizing Execution of a Contract with Morton Salt Inc for Road Salt (Lake County Joint Bid)

Recommendation of Action

Staff recommends approval.

Staff requests authorization for the Village Manager to purchase no less than 1,400 tons and no more than 2,100 tons of bulk rock salt from Morton Salt Inc at a price not to exceed \$177,387.00 in accordance with the Illinois Governmental Joint Purchasing Act (30 ILCS 525/0.01 et seq.) pending review and approval by the Village Attorney.

ATTACHMENTS:

- Road Salt 2024-2025 - LC Morton Memo (DOCX)
- Road Salt Ordinance LC 24 (DOCX)
- Bid Tabulation - 2025 Patrol I Maintenance - Rock Salt (PDF)

Trustee Liaison

Bocek

Staff Contact

Tom C. Wisniewski, Village Board

Monday, May 20, 2024

VILLAGE OF BUFFALO GROVE



MEMORANDUM

DATE: May 16, 2024

TO: Dane Bragg, Village Manager

FROM: Tom Wisniewski, Purchasing Manager

SUBJECT: Road Salt 2024-2025

Recommendation

Staff requests authorization for the Village Manager to purchase no less than 1,400 tons and no more than 2,100 tons of bulk rock salt from Morton Salt Inc at a price not to exceed \$177,387.00 in accordance with the Illinois Governmental Joint Purchasing Act (30 ILCS 525/0.01 et seq.) pending review and approval by the Village attorney.

Background

Lake County led a joint bid for road salt for the 2024-2025 snow season. Staff requested an order quantity of a minimum of 1400 tons and maximum of 2,100 tons for the 2024-2025 snow season. The salt contract was awarded to Morton Salt Inc and is priced at \$84.47 per ton, up from \$82.81 per ton last season, which reflects a 2% increase. This contract may be extended one year for the 2025-2026 snow season.

The Bid Tabulation is summarized below.

Bidder	Cost Per Ton	1400 Tons	2100 Tons
Compass Minerals America, Inc.	\$84.78	\$118,692.00	\$178,038.00
Morton Salt Inc	\$84.47	\$118,258.00	\$177,387.00
Salt Xchange Inc	NO BID		

The Village is awaiting the results of the State of Illinois joint bid process for road salt and will bring those results before the Village Board for approval when they are received. Multi-sourcing rock salt is important as this reduces the risk in the event of a supply chain interruption.

ORDINANCE 2024-_____

**AN ORDINANCE AUTHORIZING EXECUTION OF A CONTRACT WITH MORTON SALT INC
FOR ROAD SALT**

WHEREAS, the Village of Buffalo Grove is a home rule unit pursuant to the Illinois Constitution of 1970; and

WHEREAS, the Village sought out companies qualified to provide the requested services and materials; and

WHEREAS, the Village engaged in a competitive procurement process to obtain the best value for money.

NOW THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS, as follows:

SECTION 1. The foregoing recitals are hereby adopted and incorporated and made a part of this Ordinance as if fully set forth herein.

SECTION 2. The Village Manager is authorized to purchase no more than 2100 tons of road salt from Morton Salt Inc at a price not to exceed \$177,387.00 in accordance with the Illinois Governmental Joint Purchasing Act (30 ILCS 525/0.01 et seq.) pending review and approval by the Village attorney.

SECTION 3. If any section, paragraph, clause or provision of this Ordinance shall be held invalid, the invalidity thereof shall not affect any other provision of this Ordinance.

SECTION 4. This Ordinance shall be in full force and effect from and after its passage and approval and not be codified.

AYES: _____

NAYES: _____

ABSENT: _____

PASSED: _____, 2024

APPROVED: _____, 2024

APPROVED:

Eric N. Smith, Village President

ATTEST:

Janet Sirabian, Village Clerk

Attachment: Road Salt Ordinance LC 24 (O-2024-61 : Authorization to Purchase Road Salt 2024-2025)



Project: 2025 PATROL I MAINTENANCE - ROCK SALT

Section: 25-00000-05-GM

Description: FURNISH AND DELIVER ROCK SALT

CPMS Pin: B-01604

Let Date: 4/16/2024

Summary of Bids Received

Bidder	Address	City, State, Zip	Bond/Check
Salt Xchange Inc.	P.O. Box 95	Eola, IL 60519	Bid Bond
Compass Minerals America, Inc.	9900 W. 109th Street, Suite 100	Overland Park, KS 66210	Bid Bond
Morton Salt, Inc.	444 w. Lake Street, Suite 2900	Chicago, IL 60606	Bid Bond

THE LOW BIDS FOR EACH AGENCY, (80%-120%, 120% - 150% & EARLY DELIVERY) ARE HIGHLIGHTED Early Delivery unit price is for delivery between July 15, 2024 and November 1, 2024; 80% - 120% unit price & 120% - 150% unit price are for delivery after November 1, 2024.							
	UNIT OF GOVERNMENT	UNITS	QUANTITY		Salt Xchange Inc.	Compass Minerals America, Inc.	Morton Salt, Inc.
Lake County							
1	Lake County Division of Transportation	TONS	14,000	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 85.21 \$ 95.21 \$ 85.21	\$ 84.90 \$ 94.90 \$ 84.90
2	Lake County Forest Preserve District	TONS	250	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 84.55 \$ 94.55 \$ 84.55	\$ 84.23 \$ 94.23 \$ 84.23
Lake County Townships							
3	Antioch Township	TONS	2,000	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 83.56 \$ 93.56 \$ 83.56	\$ 83.25 \$ 93.25 \$ 83.25
4	Avon Township	TONS	400	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 85.51 \$ 95.51 \$ 85.51	\$ 85.19 \$ 95.19 \$ 85.19
5	Ela Township	TONS	750	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 85.61 \$ 95.61 \$ 85.61	\$ 85.29 \$ 95.29 \$ 85.29

	UNIT OF GOVERNMENT	UNITS	QUANTITY		Salt Xchange Inc.	Compass Minerals America, Inc.	Morton Salt, Inc.
Lake County Townships (continued)							
6	Fremont Township	TONS	400	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 85.58 \$ 95.58 \$ 85.58	\$ 85.26 \$ 95.26 \$ 85.26
7	Grant Township	TONS	1,300	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 85.51 \$ 95.51 \$ 85.51	\$ 85.19 \$ 95.19 \$ 85.19
8	Lake Villa Township	TONS	1,200	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 84.55 \$ 94.55 \$ 84.55	\$ 84.23 \$ 94.23 \$ 84.23
9	Libertyville Township Road District	TONS	700	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 85.21 \$ 95.21 \$ 85.21	\$ 84.90 \$ 94.90 \$ 84.90
10	Newport Township	TONS	200	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 88.77 \$ 98.77 \$ 88.77	\$ 86.71 \$ 96.71 \$ 86.71
11	Vernon Township	TONS	200	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 91.23 \$ 101.23 \$ 91.23	\$ 90.00 \$ 100.00 \$ 90.00

	UNIT OF GOVERNMENT	UNITS	QUANTITY		Salt Xchange Inc.	Compass Minerals America, Inc.	Morton Salt, Inc.
Lake County Communities							
12	Warren Township	TONS	3,000	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 84.36 \$ 94.36 \$ 84.36	\$ 84.05 \$ 94.05 \$ 84.05
13	Wauconda Township	TONS	700	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 86.38 \$ 96.38 \$ 86.38	\$ 86.05 \$ 96.05 \$ 86.05
14	Village of Antioch	TONS	900	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 83.56 \$ 93.56 \$ 83.56	\$ 83.25 \$ 93.25 \$ 83.25
15	Village of Barrington	TONS	500	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 92.95 \$ 102.95 \$ 92.95	\$ 90.79 \$ 100.79 \$ 90.79
16	Village of Beach Park	TONS	450	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 83.42 \$ 93.42 \$ 83.42	\$ 83.11 \$ 93.11 \$ 83.11
17	Village of Buffalo Grove	TONS	1,750	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 84.78 \$ 94.78 \$ 84.78	\$ 84.47 \$ 94.47 \$ 84.47

	UNIT OF GOVERNMENT	UNITS	QUANTITY		Salt Xchange Inc.	Compass Minerals America, Inc.	Morton Salt, Inc.
Lake County Communities (continued)							
18	Village of Deerfield	TONS	500	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 84.42 \$ 94.42 \$ 84.42	\$ 84.11 \$ 94.11 \$ 84.11
19	Village of Grayslake	TONS	2,000	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 85.30 \$ 95.30 \$ 85.30	\$ 84.98 \$ 94.98 \$ 84.98
20	Village of Gurnee	TONS	2,500	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 84.36 \$ 94.36 \$ 84.36	\$ 84.05 \$ 94.05 \$ 84.05
21	Village of Hainesville	TONS	150	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 89.99 \$ 99.99 \$ 89.99	\$ 87.90 \$ 97.90 \$ 87.90
22	City of Highland Park	TONS	1,500	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 84.42 \$ 94.42 \$ 84.42	\$ 84.11 \$ 94.11 \$ 84.11
23	City of Highwood	TONS	1,000	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 84.42 \$ 94.42 \$ 84.42	\$ 84.11 \$ 94.11 \$ 84.11

	UNIT OF GOVERNMENT	UNITS	QUANTITY		Salt Xchange Inc.	Compass Minerals America, Inc.	Morton Salt, Inc.
Lake County Communities (continued)							
24	Village of Island Lake	TONS	600	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 86.80 \$ 96.80 \$ 86.80	\$ 86.47 \$ 96.47 \$ 86.47
25	Village of Kildeer	TONS	500	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 85.62 \$ 95.62 \$ 85.62	\$ 85.31 \$ 95.31 \$ 85.31
26	City of Lake Forest	TONS	1,600	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 84.78 \$ 94.78 \$ 84.78	\$ 84.47 \$ 94.47 \$ 84.47
27	Village of Lake Villa	TONS	550	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 84.55 \$ 94.55 \$ 84.55	\$ 84.23 \$ 94.23 \$ 84.23
28	Village of Libertyville	TONS	2,000	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 85.21 \$ 95.21 \$ 85.21	\$ 84.90 \$ 94.90 \$ 84.90
29	Village of Lincolnshire	TONS	500	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 84.78 \$ 94.78 \$ 84.78	\$ 84.47 \$ 94.47 \$ 84.47

	UNIT OF GOVERNMENT	UNITS	QUANTITY		Salt Xchange Inc.	Compass Minerals America, Inc.	Morton Salt, Inc.
Lake County Communities (continued)							
30	Village of Lindenhurst	TONS	650	80% - 120% UNIT PRICE	No Bid	\$ 84.55	\$ 84.23
				120% - 150% UNIT PRICE		\$ 94.55	\$ 94.23
				EARLY DELIVERY UNIT PRICE		\$ 84.55	\$ 84.23
31	Village of Long Grove	TONS	1,400	80% - 120% UNIT PRICE	No Bid	\$ 86.38	\$ 86.05
				120% - 150% UNIT PRICE		\$ 96.38	\$ 96.05
				EARLY DELIVERY UNIT PRICE		\$ 86.38	\$ 86.05
32	Village of Mettawa	TONS	150	80% - 120% UNIT PRICE	No Bid	\$ 84.78	\$ 82.81
				120% - 150% UNIT PRICE		\$ 94.78	\$ 92.81
				EARLY DELIVERY UNIT PRICE		\$ 84.78	\$ 82.81
33	Village of Mundelein	TONS	800	80% - 120% UNIT PRICE	No Bid	\$ 85.58	\$ 85.26
				120% - 150% UNIT PRICE		\$ 95.58	\$ 95.26
				EARLY DELIVERY UNIT PRICE		\$ 85.58	\$ 85.26
34	City of North Chicago	TONS	1,000	80% - 120% UNIT PRICE	No Bid	\$ 85.21	\$ 83.23
				120% - 150% UNIT PRICE		\$ 95.21	\$ 93.23
				EARLY DELIVERY UNIT PRICE		\$ 85.21	\$ 83.23
35	City of Park City	TONS	150	80% - 120% UNIT PRICE	No Bid	\$ 85.29	\$ 84.97
				120% - 150% UNIT PRICE		\$ 95.29	\$ 94.97
				EARLY DELIVERY UNIT PRICE		\$ 85.29	\$ 84.97

	UNIT OF GOVERNMENT	UNITS	QUANTITY		Salt Xchange Inc.	Compass Minerals America, Inc.	Morton Salt, Inc.
Lake County Communities (continued)							
36	Village of Round Lake	TONS	1,100	80% - 120% UNIT PRICE	No Bid	\$ 85.51	\$ 85.19
				120% - 150% UNIT PRICE		\$ 95.51	\$ 95.19
				EARLY DELIVERY UNIT PRICE		\$ 85.51	\$ 85.19
37	Village of Round Lake Beach	TONS	700	80% - 120% UNIT PRICE	No Bid	\$ 85.51	\$ 85.19
				120% - 150% UNIT PRICE		\$ 95.51	\$ 95.19
				EARLY DELIVERY UNIT PRICE		\$ 85.51	\$ 85.19
38	Village of Round Lake Heights	TONS	200	80% - 120% UNIT PRICE	No Bid	\$ 89.99	\$ 87.90
				120% - 150% UNIT PRICE		\$ 99.99	\$ 97.90
				EARLY DELIVERY UNIT PRICE		\$ 89.99	\$ 87.90
39	Village of Vernon Hills	TONS	1,400	80% - 120% UNIT PRICE	No Bid	\$ 85.21	\$ 84.90
				120% - 150% UNIT PRICE		\$ 95.21	\$ 94.90
				EARLY DELIVERY UNIT PRICE		\$ 85.21	\$ 84.90
40	Village of Wadsworth	TONS	300	80% - 120% UNIT PRICE	No Bid	\$ 83.03	\$ 82.72
				120% - 150% UNIT PRICE		\$ 93.03	\$ 92.72
				EARLY DELIVERY UNIT PRICE		\$ 83.03	\$ 82.72
41	Village of Wauconda	TONS	500	80% - 120% UNIT PRICE	No Bid	\$ 86.38	\$ 86.05
				120% - 150% UNIT PRICE		\$ 96.38	\$ 96.05
				EARLY DELIVERY UNIT PRICE		\$ 86.38	\$ 86.05

	UNIT OF GOVERNMENT	UNITS	QUANTITY		Salt Xchange Inc.	Compass Minerals America, Inc.	Morton Salt, Inc.
Cook County Communities							
42	City of Des Plaines	TONS	1,000	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 89.82 \$ 99.82 \$ 89.82	\$ 89.48 \$ 99.48 \$ 89.48
43	Village of Glencoe	TONS	700	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 85.51 \$ 95.51 \$ 85.51	\$ 85.19 \$ 95.19 \$ 85.19
44	Village of Glenview	TONS	2,000	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 83.71 \$ 93.71 \$ 83.71	\$ 83.40 \$ 93.40 \$ 83.40
45	Village of Kenilworth	TONS	300	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 85.47 \$ 95.47 \$ 85.47	\$ 85.14 \$ 95.14 \$ 85.14
46	Village of Winnetka	TONS	500	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 85.51 \$ 95.51 \$ 85.51	\$ 85.19 \$ 95.19 \$ 85.19
McHenry County Townships							
47	Algonquin Township	TONS	1,200	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 94.41 \$ 104.41 \$ 94.41	\$ 92.22 \$ 102.22 \$ 92.22

	UNIT OF GOVERNMENT	UNITS	QUANTITY		Salt Xchange Inc.	Compass Minerals America, Inc.	Morton Salt, Inc.
McHenry County Townships (continued)							
48	Grafton Township Road District	TONS	500	80% - 120% UNIT PRICE	No Bid	\$ 85.28	\$ 84.97
				120% - 150% UNIT PRICE		\$ 95.28	\$ 94.97
				EARLY DELIVERY UNIT PRICE		\$ 85.28	\$ 84.97
49	McHenry Township Road District	TONS	2,000	80% - 120% UNIT PRICE	No Bid	\$ 93.26	\$ 91.09
				120% - 150% UNIT PRICE		\$ 93.26	\$ 101.09
				EARLY DELIVERY UNIT PRICE		\$ 93.26	\$ 91.09
McHenry County Communities							
50	Village of Algonquin	TONS	2,200	80% - 120% UNIT PRICE	No Bid	\$ 92.05	\$ 90.81
				120% - 150% UNIT PRICE		\$ 102.05	\$ 100.81
				EARLY DELIVERY UNIT PRICE		\$ 92.05	\$ 90.81
51	Village of Cary	TONS	1,500	80% - 120% UNIT PRICE	No Bid	\$ 86.81	\$ 86.48
				120% - 150% UNIT PRICE		\$ 96.81	\$ 96.48
				EARLY DELIVERY UNIT PRICE		\$ 86.81	\$ 86.48
52	City of Crystal Lake	TONS	4,900	80% - 120% UNIT PRICE	No Bid	\$ 93.48	\$ 91.31
				120% - 150% UNIT PRICE		\$ 103.48	\$ 101.31
				EARLY DELIVERY UNIT PRICE		\$ 93.48	\$ 91.31
53	Village of Fox River Grove	TONS	500	80% - 120% UNIT PRICE	No Bid	\$ 86.39	\$ 86.07
				120% - 150% UNIT PRICE		\$ 96.39	\$ 96.07
				EARLY DELIVERY UNIT PRICE		\$ 86.39	\$ 86.07

	UNIT OF GOVERNMENT	UNITS	QUANTITY		Salt Xchange Inc.	Compass Minerals America, Inc.	Morton Salt, Inc.
McHenry County Communities (continued)							
54	Village of Hebron	TONS	300	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 84.45 \$ 94.45 \$ 84.45	\$ 84.03 \$ 94.03 \$ 84.03
55	Village of Johnsburg	TONS	1,350	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 93.26 \$ 103.26 \$ 93.26	\$ 91.09 \$ 101.09 \$ 91.09
56	City of McHenry	TONS	1,000	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 94.48 \$ 104.48 \$ 94.48	\$ 92.28 \$ 102.28 \$ 92.28
57	Village of Richmond	TONS	150	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 92.74 \$ 102.74 \$ 92.74	\$ 90.58 \$ 100.58 \$ 90.58
58	Village of Spring Grove	TONS	450	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 90.79 \$ 100.79 \$ 90.79	\$ 89.57 \$ 99.57 \$ 89.57
59	Village of Wonder Lake	TONS	500	80% - 120% UNIT PRICE 120% - 150% UNIT PRICE EARLY DELIVERY UNIT PRICE	No Bid	\$ 94.98 \$ 104.98 \$ 94.98	\$ 92.77 \$ 102.77 \$ 92.77

	UNIT OF GOVERNMENT	UNITS	QUANTITY		Salt Xchange Inc.	Compass Minerals America, Inc.	Morton Salt, Inc.
McHenry County Communities (continued)							
60	City of Woodstock	TONS	1,800	80% - 120% UNIT PRICE	No Bid	\$ 88.93	\$ 87.72
				120% - 150% UNIT PRICE		\$ 98.93	\$ 97.72
				EARLY DELIVERY UNIT PRICE		\$ 88.93	\$ 87.72
61	Village of Lakewood	TONS	950	80% - 120% UNIT PRICE	No Bid	\$ 86.45	\$ 86.13
				120% - 150% UNIT PRICE		\$ 96.45	\$ 96.13
				EARLY DELIVERY UNIT PRICE		\$ 86.45	\$ 86.13
62	Cary Park District	TONS	22	80% - 120% UNIT PRICE	No Bid	\$ 92.45	\$ 91.20
				120% - 150% UNIT PRICE		\$ 102.45	\$ 101.20
				EARLY DELIVERY UNIT PRICE		\$ 92.45	\$ 91.20
McHenry County DOT							
ENHANCED SALT							
63	McHenry County DOT	TONS	5,000	80% - 120% UNIT PRICE	\$ 104.25	\$ 115.05	\$ 115.16
				120% - 150% UNIT PRICE	\$ 114.25	\$ 125.05	\$ 125.16
				EARLY DELIVERY UNIT PRICE	\$ 104.25	\$ 115.05	\$ 115.16



**Ordinance No. O-2024-62 : Ordinance Amending Fiscal Year 2023
Budget for the Village of Buffalo Grove**

Recommendation of Action

Staff recommends approval.

Attached is an Ordinance formally adopting the Village's FY 2023 Budget Amendments. The Budget amendments proposed modify the budget document approved by the Village Board. All budget amendments proposed do not affect the integrity of the budget as it is still balanced.

ATTACHMENTS:

- BOT 05.20.24_Memo Bud Amend (DOCX)
- BOT 05.20.24_Ord Bud Amend (DOCX)
- BOT_052024_23 budget amendment_Exb. A (PDF)

Trustee Liaison

Bocek

Staff Contact

Chris Black, Finance

Monday, May 20, 2024

**VILLAGE OF
BUFFALO GROVE**

TO: Dane C. Bragg, Village Manager

FROM: Chris Black, Director of Finance

DATE: May 10, 2024

RE: 2023 Budget Amendment

Staff recommends approval of an amendment to the FY 2023 Adopted Budget to reflect post-audit recommendations based on financial activity and reclassifications made during the audit process. The Budget was presented to the President and Board of Trustees on November 14, 2022. Notice of public hearing was published on October 13th, 2022 in the Daily Herald. The Village President and Board of Trustees unanimously approved the 2023 Budget on December 5, 2022.

The Budget amendments proposed modify the budget document approved by the Village Board. The original revenue and expenditure amounts are amended at the fund level most often to related to unanticipated expenses. In the water and sewer fund, revenue and expenses are amended to reflect sewer permit fees for the Clove Development and corresponding payments to Lake County. With the formation of the Dundee Tax Increment Financing District during the year, the amendment includes expenses in the new fund and a corresponding offsetting revenue from the general fund. Finally, expenses related to the new public works facility, including annual association dues and one-time expenses for property taxes as part of the 1650 Leider Lane purchase are included in the amendment.

Please contact me if you have any questions or need additional information.

Attachment: BOT 05.20.24_Memo Bud Amend (O-2024-62 : 2023 Budget Amendment)

ORDINANCE NO. 2024 - _____

**AN ORDINANCE AMENDING FISCAL 2023 (JANUARY 1-DECEMBER 31, 2023) BUDGET FOR THE VILLAGE OF
BUFFALO GROVE**

WHEREAS, in accordance with Section 8-2-9.1 *et. Seq.* of the Illinois Municipal Code, 65 ILCS 5/8-2-9.1 *et seq.*, and Section 2.08.043 of the Village of Buffalo Grove Municipal Code, the President and Board of Trustees of the Village of Buffalo Grove have adopted the budget officer system; and

WHEREAS, pursuant to Section 8-2-9.4 of the Illinois Municipal Code, 65 ILCS 5/8-2-9.4 and Section 2.08.43 of the Village of Buffalo Grove Municipal Code, the Village adopted an annual budget for fiscal year 2023, by Village ordinance number 2022-138, on December 5, 2022 in the amount of \$126,164,748; and

WHEREAS, the President and Board of Trustees of the Village of Buffalo Grove find that an amendment to the annual budget ordinance is necessary at this time to more accurately reflect the experience of the 2023 fiscal year.

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS that:

SECTION 1. That in order to more accurately reflect the experience of fiscal year 2023, certain budget amendments are necessary per the attached.

SECTION 2. That these amendments should reflect actual revenues and expenditures for fiscal year 2023 and will increase the total amount of the budgeted revenue by \$1,794,105 and budgeted expenditures by \$2,318,573.

SECTION 3. That the following amendments be made to the various department and line item accounts as specified. (Exhibit A)

SECTION 4. Additional funds are available to effectuate this revision.

SECTION 5. That this ordinance shall be in full force and effect after the passage and publication pursuant to the laws of the State of Illinois and the Village of Buffalo Grove.

AYES: _____

NAYES: _____

ABSENT: _____

PASSED: _____, 2024.

APPROVED: _____, 2024.

PUBLISHED: _____, 2024.

Village President

ATTEST:

Village Clerk

Attachment: BOT 05.20.24_Ord Bud Amend (O-2024-62 : 2023 Budget Amendment)

EXHIBIT A

2023 Budget Amendment

Revenue

Fund	2023 Original Budget	Change	2023 Revised Budget	Description
Dundee Rd TIF Fund				
Operating Transfers In	0	84,372	84,372	Transfer from General Fund for 2023 TIF Activity
Water Fund				
Building Revenue & Fees Lake County Sewer Tap On Fees	100,000	1,709,733	1,809,733	Record 250 McHenry Road Sewer Tap On Permit Fee

Expenditures

Fund	2023 Original Budget	Change	2023 Revised Budget	Description
Metra Parking Lot Fund				
Operating Expenses Credit Card Fees	5,000	6,000	11,000	Higher credit card processing fees
All Other Expense	0	10,000	10,000	Internal Service Fund and lease expense charges
Dundee Rd TIF Fund				
All Other Expenses Consultant Fees	0	84,372	84,372	TIF Consulting Fees
MFT Fund				
Operating Transfers Corporate Fund	0	133,676	133,676	Increased 2023 MFT Funding
Operating Transfers Capital Projects Streets	1,075,000	67,950	1,142,950	Increased 2023 MFT Funding
Debt Service Fund				
Operating Transfers Capital Projects Streets	0	25,359	25,359	Final 2020 Bond Money Transfer
Water Fund				
Commodities Lake County Tap-on Fees	100,000	1,709,733	1,809,733	250 McHenry Road Tap on Fees
Building Maintenance Fund				
Operating Expenses Maintenance Contracts	259,400	104,170	363,570	Leider Lane Property Association Dues
All Other Expenses	0	177,313	177,313	Leider Lane 2022 Property Taxes