Meeting of the Village of Buffalo Grove Village Board

Regular Meeting
February 16, 2021 at 7:30 PM

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

1. Call to Order

A. Open Meetings Act Compliance

Pursuant to Public Act 101-0640 as well as the Disaster Proclamation and Executive Orders issued by Governor Pritzker, this meeting will be held electronically by utilizing the Zoom link below.

Zoom Link: www.vbg.org/february16meeting

Phone Number: 312-626-6799

Meeting ID: 816 3638 2707

Instructions for how the public can see, listen and/or participate in meetings are listed immediately below this statement.

In accordance with the Open Meetings Act, any person shall be permitted an opportunity to address public officials under the rules established and recorded in the Buffalo Grove Municipal Code. The Village President reserves the right to alter the order of the appearance of speakers to maintain decorum during the meeting.

B. Pledge of Allegiance

2. Approval of Minutes

A. Village Board - Regular Meeting - Jan 4, 2021 7:30 PM

B. Village Board - Regular Meeting - Jan 19, 2021 7:30 PM

3. Approval of Warrant

A. Approval of Warrant #1325 (Trustee Weidenfeld) (Staff Contact: Chris Black)

4. Village President's Report

A. R-2021-5 Resolution Extending Executive Order 2021-2 (President Sussman) (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 for 2021 National Engineers Week (Trustee Stein) (Staff Contact: Darren Monico)

SUMMARY: A Proclamation recognizing National Engineers Week, February 21-27, 2021.

B. Certificate of Initial Acceptance and Approval: Woodman's Unattended Fuel Station Improvements (Trustee Stein) (Staff Contact: Darren Monico)

SUMMARY: Attached is the Certificate of Initial Acceptance for the Woodman's unattended fuel station development located at 1515 Deerfield Parkway. Staff recommends approval to begin the one year maintenance period on February 16th, 2021.

C. R-2021-6 A Resolution Reallocating the 2021 Volume Cap to the Village of Buffalo Grove (Trustee Smith) (Staff Contact: Nicole Woods)

SUMMARY: The Village is the host of the Private Activity Bond Clearinghouse for Lake County. This is the annual Resolution that transfers the Village's Volume Cap to the Clearinghouse.

9. Ordinances and Resolutions

A. O-2021-7 Ordinance Approving a Joint Purchase of Turn Out Gear and SCBA Equipment for the Fire Department (Trustee Smith) (Staff Contact: Brett Robinson)

B. O-2021-8 Ordinance Authorizing the Purchase of Replacement Police, Fire and Public Works Vehicles through the Suburban Purchasing Cooperative (Trustee Smith) (Staff Contact: Brett Robinson)

C. R-2021-7 Resolution Waiving Fifty Percent of Certain Liquor License Renewal Fees for 2021-22 (President Sussman) (Staff Contact: Chris Stilling)

10. Unfinished Business

11. New Business

A. Link Crossing Phase 2 Development Improvement Agreement (Trustee Stein) (Staff Contact: Darren Monico)

12. Questions From the Audience

Questions from the audience are 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 10 minutes and should be limited to concerns or comments regarding issues that are relevant to Village 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. 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 BOARD OF THE VILLAGE OF BUFFALO GROVE HELD IN THE VILLAGE HALL, 50 RAUPP BOULEVARD, BUFFALO GROVE, ILLINOIS, AND VIA AUDIO/VIDEO CONFERENCING MONDAY, JANUARY 4, 2021

CALL TO ORDER

President Sussman called the meeting to order at 7:30 P.M. This meeting is being conducted in person and via audio and video conferencing.

ROLL CALL

Roll call indicated the following present in person and via audio/video conference: President Sussman; Trustees Ottenheimer, Weidenfeld, Johnson, Smith and Pike. Trustee Stein was present at Village Hall.

Also present via audio/video conference were: Dane Bragg, Village Manager, Patrick Brankin, Village Attorney; Jenny Maltas, Deputy Village Manager; Chris Stilling, Deputy Village Manager; Chris Black, Director of Finance; Evan Michel, Management Analyst; Mike Skibbe, Director of Public Works; Nicole Woods, Deputy Community Development Director; Brett Robinson, Director of Purchasing; Police Chief Casstevens; and Deputy Fire Chief Wagner.

APPROVAL OF MINUTES

Moved by Ottenheimer, seconded by Johnson, to approve the minutes of the December 7, 2020 Rescheduled Regular Meeting. Upon roll call, Trustees voted as follows:

AYES: 6 – Stein, Ottenheimer, Weidenfeld, Johnson, Smith, Pike
NAYS: 0 – None
Motion declared carried.

WARRANT #1323

Mr. Black read Warrant #1323. Moved by Smith, seconded by Stein, to approve Warrant #1323 in the amount of $5,111,801.52 authorizing payment of bills listed. Upon roll call, Trustees voted as follows:

AYES: 6 – Stein, Ottenheimer, Weidenfeld, Johnson, Smith, Pike
NAYS: 0 – None
Motion declared carried.

VILLAGE PRESIDENT'S REPORT

President Sussman introduced Resolution No. 2021-1 extending Executive Order 2020-12.

Mr. Bragg reviewed the proposed resolution.

Moved by Weidenfeld, seconded by Ottenheimer, to pass Resolution No. 2021-1, extending Executive Order 2020-12. Upon roll call, Trustees voted as follows:

AYES: 6 – Stein, Ottenheimer, Weidenfeld, Johnson, Smith, Pike
NAYS: 0 – None
Motion declared carried.

VILLAGE MANAGER'S REPORT

Mr. Bragg has no report this evening other than to wish everyone a healthy and Happy New Year.

REPORTS FROM TRUSTEES

There were no reports from Trustees.

CONSENT AGENDA

President Sussman 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.

Ordinance No. 2021-01 – Liquor Controls

Motion to pass Ordinance No. 2021-01, amending Chapter 5.20 – Liquor Controls. The Class A liquor license issued to Dvash, Inc. d/b/a Bait Café at 706 Buffalo Grove Road is hereby rescinded. The business has been sold.

Ordinance No. 2021-02 – Liquor Controls

Motion to pass Ordinance No. 2021-02, amending Chapter 5.20 - Liquor Controls. The Class B liquor license issued to Chanprung, LLC d/b/a/ Fuji Thai at 1000 Weiland Road is hereby rescinded. The business has opted not to renew their license.

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

AYES: 6 – Stein, Ottenheimer, Weidenfeld, Johnson, Smith, Pike
NAYS: 0 – None
Motion declared carried.

ORDINANCE NO. 2021-3 – SPOERLEIN COMMONS

Moved by Johnson, seconded by Smith, to pass Ordinance No. 2021-3, amending Ordinance No. 83-8 for a new outbuilding, Special Use for a drive-through facility, and a Preliminary Plan approval with variations to the Zoning Ordinance and Sign Code at Spoerlein Commons Planned Development at 1131-1271 McHenry Road, in accordance with materials contained in Board packets.

Mr. Stilling reviewed the proposed ordinance, details of which are contained in his memo to Mr. Bragg of December 31, 2020, after which he answered questions from the Board.

Upon roll call, Trustees voted as follows:

AYES: 6 – Stein, Ottenheimer, Weidenfeld, Johnson, Smith, Pike
NAYS: 0 – None
Motion declared carried.

ORDINANCE NO. 2021-4 – SOFTWARE

Moved by Weidenfeld, seconded by Johnson, to pass Ordinance No. 2021-4, authorizing the Village Manager to execute a contract with BSnA for Community Development software, in accordance with materials contained in Board packets.

Mr. Stilling reviewed the proposed ordinance, details of which are contained in his memo to Mr. Bragg of December 21, 2020, after which he answered questions from the Board.

Board members thanked Mr. Robinson and the team for their efforts and hard work that they put into getting this contract. This upgrade is long overdue and will make the process more professional and convenient for developers and residents as well.

Upon roll call, Trustees voted as follows:

AYES: 6 – Stein, Ottenheimer, Weidenfeld, Johnson, Smith, Pike
NAYS: 0 – None
Motion declared carried.
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BUSINESS ASSISTANCE PROGRAM

Mrs. Woods led the continued discussion as to whether or not the Board wishes to provide **Business Assistance Program**, summarizing the four options proposed and the feedback that staff is looking for from the Board, details of which are contained in the memo that she and Mr. Stilling sent to Mr. Bragg of December 31, 2020.

- Program 1: Waive Business License Fees - $130,000
- Program 2: Reduce Liquor License Fees for On-Premise Users - $45,000
- Program 3: Discount Restaurant's Local Food and Beverage Tax Payments - $150,000-$180,000
- Program 4: Restaurant Grant - $125,000

Lengthy Board discussion followed, with Trustees noting the following pros and cons of each Program:

- It was noted that the business license fee waiver would be of little help to a business, but would have a significant impact on the Village budget
- It was suggested that we should do something substantial or do nothing at all
- Any relief funds would significantly impact the Village budget, which has already been reduced by $1.9 million dollars through cost-saving measures
- There is a fiscal responsibility to residents, many of whom are also severely impacted by the pandemic
- Discounting food and beverage tax payment would also be of little help to a business, but would have a significant impact on the Village budget
- Efficiency in administering a relief program by Village staff, which has already been reduced
- Even though a grant would be of help, it is still not enough to save a business from failing, yet would have a significant impact on the Village budget
- Neighboring municipalities are not offering assistance
- None of these proposals are significant enough to make a difference in whether or not a business fails or succeeds
- Since restaurants are closed and cannot sell liquor, there is some merit in discounted liquor licenses
- Local municipalities are not in the business of rescuing businesses – relief should come from state or federal government
- Discounted liquor licenses would be in order, especially since Buffalo Grove is enforcing the Governor's order of no indoor-dining, while many surrounding municipalities are not
- Video gaming licenses should also be considered, since the facilities that use them are closed
- The Board wants to help all businesses that are struggling, but also needs to consider the impact on all residents

Mr. Bragg summarized the discussion, noting that it appears that there is only consensus for relief on liquor and video gaming licenses, and he would propose to bring this back to the Board at a February or March Committee of the Whole meeting.

QUESTIONS FROM THE AUDIENCE

President Sussman 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 Johnson, seconded by Weidenfeld, to adjourn the meeting. Upon roll call, Trustees voted as follows:

AYES: 6 – Stein, Ottenheimer, Weidenfeld, Johnson, Smith, Pike
NAYS: 0 – None
Motion declared carried.

The meeting was adjourned at 8:39 P.M.

_____
Janet M. Sirabian, Village Clerk

APPROVED BY ME THIS ___19th___DAY OF ___January___ 2021

_____
Village President

MINUTES OF THE REGULAR MEETING OF THE VILLAGE BOARD OF THE VILLAGE OF BUFFALO GROVE HELD IN THE VILLAGE HALL, 50 RAUPP BOULEVARD, BUFFALO GROVE, ILLINOIS, AND VIA AUDIO/VIDEO CONFERENCING TUESDAY, JANUARY 19, 2021

CALL TO ORDER

President Sussman called the meeting to order at 7:30 P.M. This meeting is being conducted in person and via audio and video conferencing.

ROLL CALL

Roll call indicated the following present in person and via audio/video conference: President Sussman; Trustees Ottenheimer, Weidenfeld, Smith and Pike. Trustee Stein was present at Village Hall. Trustee Johnson was absent.

Also present via audio/video conference were: Dane Bragg, Village Manager, Patrick Brankin, Village Attorney; Jenny Maltas, Deputy Village Manager; Chris Stilling, Deputy Village Manager; Chris Black, Director of Finance; Evan Michel, Management Analyst; Mike Skibbe, Director of Public Works; Darren Monico, Village Engineer; Brett Robinson, Director of Purchasing; Police Chief Casstevens; and Fire Chief Baker.

APPROVAL OF MINUTES

Moved by Weidenfeld, seconded by Ottenheimer, to approve the minutes of the January 4, 2020 Regular Meeting. Upon roll call, Trustees voted as follows:

AYES: 5 – Stein, Ottenheimer, Weidenfeld, Smith, Pike
NAYS: 0 – None
ABSENT: 1 – Johnson
Motion declared carried.

WARRANT #1324

Mr. Black read Warrant #1324. Moved by Stein, seconded by Smith, to approve Warrant #1324 in the amount of $2,520,625.32 authorizing payment of bills listed. Upon roll call, Trustees voted as follows:

AYES: 5 – Stein, Ottenheimer, Weidenfeld, Smith, Pike
NAYS: 0 – None
ABSENT: 1 – Johnson
Motion declared carried.

VILLAGE PRESIDENT'S REPORT

President Sussman introduced **Resolution No. 2021-2** extending Executive Order 2021-01.

Mr. Bragg reviewed the proposed resolution.

Moved by Weidenfeld, seconded by Ottenheimer, to pass Resolution No. 2021-2, extending Executive Order 2021-01. Upon roll call, Trustees voted as follows:

AYES: 5 – Stein, Ottenheimer, Weidenfeld, Smith, Pike
NAYS: 0 – None
ABSENT: 1 – Johnson
Motion declared carried.

President Sussman congratulated former Buffalo Grove resident, Matthew Hill, on being named **Senior Associate Communications Director in the White House**.

VILLAGE MANAGER'S REPORT

Mr. Bragg has no report this evening.

REPORTS FROM TRUSTEES

Trustee Stein congratulated Police Chief Casstevens who was recently honored by the Illinois Security Professionals Association with the **2020 Law Enforcement Official of the Year Award**.

CONSENT AGENDA

President Sussman 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.

Resolution No. 2021-03 – Closed Session Minutes

Motion to pass Resolution No. 2021-03, relating to the semi-annual review of Closed Session Minutes.

Replacement Bed Purchase

Motion to authorize bid waiver and purchase of replacement beds at a price not to exceed $31,106.08, the full cost of which is to be funded through the Foreign Fire Tax Board.

600 McHenry Road

Motion to approve 600 McHenry Road Development Improvement Agreement.

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

AYES: 5 – Stein, Ottenheimer, Weidenfeld, Smith, Pike
NAYS: 0 – None
ABSENT: 1 – Johnson
Motion declared carried.

ORDINANCE NO. 2021-6 – BEET HEET

Moved by Pike, seconded by Smith, to pass Ordinance No. 2021-6, authorizing waiver of bid and authorization to purchase Liquid De-Icing "Beet Heet" from K-Tech Specialty Products at a price not to exceed $52,000.00 for the 2021-2022 snow season, in accordance with materials contained in Board packets.

Mr. Robinson reviewed the proposed ordinance, details of which are contained in Mr. Beitzel's memo to Mr. Bragg of January 14, 2021, after which he answered questions from the Board.

Upon roll call, Trustees voted as follows:

AYES: 5 – Stein, Ottenheimer, Weidenfeld, Smith, Pike
NAYS: 0 – None
ABSENT: 1 – Johnson
Motion declared carried.

RESOLUTION NO. 2021-4 – CAD/RMS PROJECT

Moved by Smith, seconded by Weidenfeld, to pass Resolution No. 2021-4, authorizing the Village Manager to execute an Intergovernmental Agreement with Northwest Central Dispatch System for Federal Funds to support the CAD/RMS Project.

Mr. Bragg reviewed the proposed resolution, details of which are contained in the Village Board Meeting Agenda Item Overview that he prepared.

Upon roll call, Trustees voted as follows:

AYES: 5 – Stein, Ottenheimer, Weidenfeld, Smith, Pike
NAYS: 0 – None
ABSENT: 1 – Johnson
Motion declared carried.

QUESTIONS FROM THE AUDIENCE

President Sussman 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.

Carolyn Pinta, resident, made a request that the Village issue a Proclamation for Pride Month in June, and also to fly the Pride flag under the American Flag at government offices during the month of June.

ADJOURNMENT

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

AYES: 5 – Stein, Ottenheimer, Weidenfeld, Smith, Pike
NAYS: 0 – None
ABSENT: 1 – Johnson
Motion declared carried.

The meeting was adjourned at 7:48 P.M.

_____
Janet M. Sirabian, Village Clerk

APPROVED BY ME THIS 16th DAY OF February 2021

_____
Village President

Action Item : Approval of Warrant #1325

Recommendation of Action

Staff recommends approval.

TOTAL WARRANT #1325 $4,546,774.98

ATTACHMENTS:

- W #1325 SUMMARY (PDF)

Trustee Liaison	**Staff Contact**
Weidenfeld	Chris Black, Finance

Tuesday, February 16, 2021	

VILLAGE OF BUFFALO GROVE WARRANT #1325
16-Feb-21 #

General Fund:	**805,455.48**
Parking Lot Fund:	**6,280.08**
Motor Fuel Tax Fund:	**0.00**
Debt Service Fund:	**0.00**
School & Park Donations	**0.00**
Capital Projects-Facilities:	**0.00**
Capital Projects-Vehicles/Equipment:	**37,814.33**
Capital Projects-Streets:	**331,644.00**
Health Insurance Fund:	**0.00**
Facilities Development Debt Service Fund:	**0.00**
Retiree Health Savings (RHS):	**0.00**
Water Fund:	**992,504.29**
Buffalo Grove Golf Fund:	**27,333.55**
Arboretum Golf Fund:	**27,288.55**
Refuse Service Fund:	**70,615.08**
Information Technology Internal Service Fund:	**197,945.40**
Central Garage Internal Service Fund:	**102,054.83**
Building Maintenance Internal Service Fund:	**53,598.26**
	2,652,533.85
PAYROLL PERIOD ENDING 01/21/2021	**927,031.00**
PAYROLL PERIOD ENDING 02/04/2021	**967,210.13**
	1,894,241.13
TOTAL WARRANT #1325	**4,546,774.98**

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

Village Clerk

Village President

Attachment: W #1325 SUMMARY (Approval of Warrant #1325)

Resolution No. R-2021-5 : Resolution Extending Executive Order 2021-2

Recommendation of Action

Staff recommends approval.

This resolution extends Village President, Beverly Sussman's Executive Order 2020-12. Illinois Governor J.B. Pritzker declared all counties in the State of Illinois as a disaster area on March 9, 2020 and has subsequently extended.

ATTACHMENTS:

- Resolution Extending the Local Disaster Emergency Proclamation 2021.02 (DOCX)
- EO 2021-2 (PDF)

Trustee Liaison
Sussman

Staff Contact
Dane Bragg, Office of the Village Manager

Tuesday, February 16, 2021	

RESOLUTION EXTENDING EXECUTIVE ORDER 2021-02

WHEREAS, on February 8, 2021, Village President, Beverly Sussman, issued Executive Order 2021-02 based upon the COVID-19 pandemic;

WHEREAS, the diagnosed cases of COVID-19 in the local area and the State of Illinois continue to increase;

WHEREAS, Illinois Governor J.B. Pritzker declared all counties in the State of Illinois as a disaster area on March 9, 2020 and further extended that declaration until March 6, 2021; and;

WHEREAS, it is necessary and appropriate for the Village of Buffalo Grove to continue to take measures to protect the public's health in response to the COVID-19 outbreak;

WHEREAS, the Village Board finds that the present situation requires the extension of the Village President's Executive Order 2021-02;

NOW, THEREFORE, be it resolved as follows:

Executive Order 2021-02 dated February 8, 2021 issued by Village President Beverly Sussman is hereby extended. Said extension shall be coterminous with the COVID-19 disaster proclamation issued by Governor J.B. Pritzker unless further amended or modified.

This Resolution shall be filed with the Village Clerk as soon as is practical and spread of record to all appropriate agencies.

AYES: _____
NAYES: _____
ABSENT: _____

Passed _____, 2021
Approved _____, 2021

Approved:

_____
Beverly Sussman, Village President

Attest:

_____
Janet Sirabian, Village Clerk

February 5, 2021

EXECUTIVE ORDER 2021-02

AMENDMENT TO EXECUTIVE ORDERS 2020-01, 2020-03, 2020-04, 2020-05, 2020-06, 2020-07, 2020-08, 2020-09, 2020-10, 2020-11, 2020-12, and 2021-01

WHEREAS, on March 17, 2020, I issued Executive Order 2020-01 in response to the COVID-19 Pandemic; and

WHEREAS, on April 23, 2020, I issued Executive Order 2020-03 in response to the COVID-19 Pandemic; and

WHEREAS, on April 26, 2020, I issued Executive Order 2020-04 in response to the COVID-19 Pandemic; and

WHEREAS, on May 28, 2020, I issued Executive Order 2020-05 in response to the COVID-19 Pandemic; and

WHEREAS, on June 26, 2020, I issued Executive Order 2020-06 in response to the COVID-19 Pandemic; and

WHEREAS, on July 24, 2020, I issued Executive Order 2020-07 in response to the COVID-19 Pandemic; and

WHEREAS, on August 24, 2020, I issued Executive Order 2020-08 in response to the COVID-19 Pandemic; and

WHEREAS, on September 21, 2020, I issued Executive Order 2020-09 in response to the COVID-19 Pandemic; and

WHEREAS, on October 16, 2020, I issued Executive Order 2020-10 in response to the COVID-19 Pandemic; and

WHEREAS, on November 16, 2020 I issued Executive Order 2020-11 in response to the COVID-19 Pandemic; and

WHEREAS, on December 11, 2020 I issued Executive Order 2020-12 in response to the COVID-19 Pandemic; and

WHEREAS, on January 8, 2021, I issued Executive Order 2021-01 in response to the COVID-19 Pandemic; and

WHEREAS, on February 5, 2021, the State of Illinois issued a new executive order and new guidance regarding the orders issued by Governor JB Pritzker as well as guidance regarding face coverings and said order is numbered 2021-04; and

WHEREAS, I find that in order to maintain consistency and clarity as to the measures to be taken help reduce the spread of COVID-19 effectively and safely there should be consistency with the Governor's Order 2021-04 and my previous Orders;

THEREFORE, by the powers vested in me as the President of Buffalo Grove, and pursuant to

Section 2.56 of the Village Code, I hereby order the following:

Section 1. Executive Orders 2020-01, 2020-03, 2020-04, 2020-05, 2020-06, 2020-07, 2020-08, 2020-09, 2020-10, 2020-1, 2020-12, and 2021-01 are hereby amended to adopt and incorporate Governor Pritzker's Order 2021-04, a copy of which is attached hereto as Exhibit A and adopted herein by this reference.

Section 2. All provisions of the prior Executive Orders 2020-01 and 2020-03, 2020-04, 2020-05, 2020-06,2020-07, 2020-08, 2020-09, 2020-10, 2020-11, 2020-12, and 2021-01 I have issued are repealed except as specifically set forth below.

Section 3. The Village of Buffalo Grove Village Hall and all Village public lobbies, offices and meeting rooms in public buildings are hereby closed except for essential services which shall be continued to be provided. The Village Manager may also open these facilities at his discretion. In the event that in-person service is needed, residents are to schedule an appointment using the information that is set forth on the Village website. The Village Manager may schedule Board and Commission meetings necessary to conduct Village business, at his discretion. Said meetings may occur telephonically, virtually or in person, in accordance with the Governor's Orders and state law.

Section 4. All activities of soliciting, as defined in Chapter 5.24 of the Buffalo Grove Municipal Code, are hereby prohibited until further notice.

Section 5. Any individual who is over age two and able to medically tolerate a face covering (a mask or cloth face covering) shall be required to cover their nose and mouth with a face covering at all times when in a public place or when outdoors and unable to maintain a six-foot social distance. A business owner or operator shall refuse admission or service to any individual who fails to wear face coverings as required by this Order. Additionally, all businesses subject to this Order shall post a notice at all public entrances, stating "Entrance Prohibited Without Face Covering". Said notice shall be visible by the public prior to entering the establishment and shall be in bold text a minimum of 75 type font in size and in the color and type attached hereto as Exhibit B.

Section 6. Restaurants. Consistent with the guidelines issued by the State of Illinois and attached hereto as Exhibit C and any Amendments thereto, restaurants may allow dining, including consumption of liquor subject to approval by the Liquor Control Commissioner. The Village Manager may promulgate rules governing the operation of restaurants including, but not limited to, sanitation, dining areas, permits, license, hours of operation and public health requirements as required during the duration of this Order.

Section 7. Penalty. The Village of Buffalo Grove Police Department and Community Development Department are authorized to enforce this Executive Order. In addition to other remedies the Village may seek, any violation of this Executive Order may subject the violator to a penalty as set forth in Chapters 1.08 and 1.12 of the Village Code.

Section 8. Golf courses are permitted to operate within the restrictions of Executive Order 2020-59 and any restrictions published by the Illinois Department ofCommerce and Economic Opportunity.

Section 9. This Executive Order shall be distributed in accordance with the Village Code.

Section 10. This Executive Order shall expire not later than the adjournment of the first regular meeting of the Corporate Authorities after the date of this Order unless sooner terminated by Proclamation of the Village President or unless amended or extended pursuant to the Village Code.

Beverly Sussman
Village President

OFFICIAL SEAL
Sandra L. Hansen
Notary Public-State of Illinois
Commission No: 483440, Expires 3/14/23

Sandra L Hansen
2/11/21

STATE OF ILLINOIS)
) SS.
COUNTY OF LAKE)

ACKNOWLEDGEMENT

I, the undersigned, a Notary Public, in and for the County and State aforesaid, **DO HEREBY CERTIFY** that Beverly Sussman, the Village President of the Village of Buffalo Grove, personally known to me, appeared before me, under oath, this day in person and acknowledged that in such capacity she signed and delivered the said instrument, as her free and voluntary act of the uses and purposes therein set forth.

GIVEN under my hand and notarial seal this 5th day of February, 2021.

Attachment: EO 2021-2 (R-2021-5 : Extending Executive Order 2021-2)

Information Item : Proclamation for 2021 National Engineers Week

Recommendation of Action

Staff recommends approval.

SUMMARY: A Proclamation recognizing National Engineers Week, February 21-27, 2021.

ATTACHMENTS:

- engineering week proclamation 2021 (DOCX)

Trustee Liaison	**Staff Contact**
Stein	Darren Monico, Public Works

Tuesday, February 16, 2021	

VILLAGE OF BUFFALO GROVE

Proclamation

PROCLAMATION

2021 National Engineers Week

WHEREAS, Engineers use their scientific and technical knowledge and skills in creative and innovative ways to fulfill society's needs; and,

WHEREAS, Engineers face the major technological challenges of our time – from rebuilding towns devastated by natural disaster, cleaning up the environment, and assuring safe, clean, and efficient sources of energy, to designing information systems that will speed our country into the future; and,

WHEREAS, Engineers are encouraging our young math and science students to realize the practical power of their knowledge; and,

WHEREAS, We will look more than ever to engineers and their knowledge and skills to meet the challenges of the twenty-first century:

THEREFORE, I, Beverly Sussman, President of the Village of Buffalo Grove, do hereby proclaim February 21 through February 27, 2021, as **NATIONAL ENGINEERS WEEK** in the Village of Buffalo Grove.

Proclaimed this 15th day of February 2021.

Beverly Sussman
Village President

Action Item : Certificate of Initial Acceptance and Approval: Woodman's Unattended Fuel Station Improvements

Recommendation of Action

Staff recommends approval to begin the one year maintenance period for the completed development.

SUMMARY: Attached is the Certificate of Initial Acceptance for the Woodman's unattended fuel station development located at 1515 Deerfield Parkway. Staff recommends approval to begin the one year maintenance period on February 16th, 2021.

ATTACHMENTS:

- acceptance memo Woodman's FS 2021-0205 (DOCX)
- Certificate of Initial Acceptance Woodmans FS (DOCX)

Trustee Liaison
Stein

Staff Contact
Darren Monico, Public Works

Tuesday, February 16, 2021	

VILLAGE OF
BUFFALO GROVE

MEMORANDUM

DATE: February 5, 2021

TO: Dane Bragg, Village Manager

FROM: Darren Monico, Village Engineer

SUBJECT: Woodman's Unattended Fuel Station Certificate of Initial Acceptance

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The Developer of the Woodman's Unattended Fuel Station (1515 Deerfield Parkway) located across from the Woodman's Grocery on the south side of Deerfield Parkway has completed the required improvements and the development will be moved to the one year maintenance period beginning February 16th, 2021.

Staff recommends approval of the approval of the Certificate of Initial Acceptance for the Development.

Attachment: acceptance memo Woodman's FS 2021-0205 (Initial Acceptance of Woodman's Unattended Fuel Station Improvements)

VILLAGE OF BUFFALO GROVE
CERTIFICATE OF INITIAL ACCEPTANCE AND APPROVAL

SUBMIT COMPLETED FORM ALONG WITH ONE MYLAR AND TWO SETS OF "AS-BUILT" PLANS. **ALL INFORMATION MUST BE TYPED.**

SUBDIVISION Woodman's Fuel Station DEVELOPER FoxArneson

UNIT NO. N/A LOCATION 1515 Deerfield Parkway

Dedicated Public Right of Way (if any): N/A

Description of Public Improvements: Water main, fire hydrant, sidewalks

Description of Private Improvements: Storm sewer system including detention, compensatory storage, storm sewer pipes, and water service. Gas station and appurtenances.

One-Year Maintenance Guarantee: Letter of Credit

DESIGN ENGINEER'S CERTIFICATION

To the best of my knowledge and belief, the construction of the improvements described above have been completed in accordance with the approved plans and specifications, and items indicated on the Final Punch List dated _____, which was prepared by the Village of Buffalo Grove have been completed.

_____
Engineer's Signature & Seal

Seal

OWNER'S/DEVELOPER'S CERTIFICATION

All improvements have been completed and are hereby presented for initial Acceptance and Conveyance to the Village of Buffalo Grove. I also herewith acknowledge my responsibility to provide a one-year Guarantee to cover workmanship, materials, and maintenance for all improvements referred to herein.

The undersigned Owner does hereby convey and deliver to the Village of Buffalo Grove the foregoing listed public improvements and does hereby covenant that said improvements are free of all encumbrances and does hereby warrant and will defend the same against the claims and demands of all persons.

_____
Owner's Signature

_____
Owner's Name

_____
Company Name

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.

Date _____ Municipal Inspector _____

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.

Date _____ Village Engineer _____

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.

Date _____ Director of Public Works _____

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.

Date _____ Village Manager _____

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.

Date _____ Village President _____

Resolution No. R-2021-6 : A Resolution Reallocating the 2021 Volume Cap to the Village of Buffalo Grove

Recommendation of Action

Staff recommends approval.

SUMMARY: The Village is the host of the Private Activity Bond Clearinghouse for Lake County. This is the annual Resolution that transfers the Village's Volume Cap to the Clearinghouse.

ATTACHMENTS:

- Buffalo Grove Cover Letter (PDF)
- Resolution (DOCX)

Trustee Liaison
Smith

Staff Contact
Nicole Woods, Community Development

Tuesday, February 16, 2021	

Lake County Partners

January 15, 2021

Ms. Nicole Woods, Deputy Director of Community Development
Village of Buffalo Grove
Sent via email to: nwoods@vbg.org

Dear Ms. Woods:

I am writing to request your municipality's participation in Lake County's Private Activity Bond Clearinghouse (PABC) in 2021. Each year, Lake County Partners contacts the home rule communities in Lake County to request a pooling together of the volume cap to ensure the best use of our collective private activity bond allocation. The PABC cap for each year is transferred to the Village of Buffalo Grove, the Pool's host home rule community. *If your municipality is interested in participating, your governing body must approve a resolution and submit it to the Governor's Office before April 30, 2021. A sample resolution is attached for your use.*

Since its inception, the Lake County PABC has funded nearly $200,000,000 in local projects, which has resulted in the construction of over 360,000 sq. ft. of new manufacturing space, the creation of 648 new manufacturing jobs, the renovation of 1,600 multi-family dwelling units, the purchase of an estimated 251 homes by first-time homebuyers, the expansion of a Montessori School, and the construction of a new solid waste disposal cell.

Please click on the following link to review the: "State of Illinois' Guidelines and Procedures for the Allocation of Private Activity Bonding Authority in Accordance with the Tax Reform Act of 1986 and 30 ILCS 345". Per page 5 of this document, this year's per capita amount is $110.00, and the population data estimates outlined within these guidelines are based on Census information. **The population estimate for the Village of Buffalo Grove is 40853, bringing your municipality's 2021 allocation to $4,493,830**

Your municipality's approval of a resolution to transfer its volume cap to the Village of Buffalo Grove will preserve the volume cap in Lake County for a three-year period for the important reasons outlined above. **Lake County Partners therefore requests that you place a resolution similar to the attached example on your Board's schedule for approval and forward the approved resolution to the attention of the Governor's Office as soon as possible in the manner outlined within page 3 of the above hyperlinked Guidelines and Procedures document; please note that all reporting submissions are to be submitted in both hard copy and electronic format.**

Please copy me at bprusila@lakecountypartners.com on your Board's actions and subsequent notification to the Governor's Office, or notify me if your community chooses not to participate in this year's pool so that we may more effectively manage the process next year. If you have any specific questions or concerns, please feel free to get in touch directly at 773-706-0057.We appreciate your support and look forward to working with you.

Sincerely,

Barbara C. Prusila
Marketing & Communications Director

VILLAGE OF BUFFALO GROVE
RESOLUTION NO. 2021-____

A RESOLUTION OF THE VILLAGE OF BUFFALO GROVE ILLINOIS REALLOCATING 2021 VOLUME CAP TO THE VILLAGE OF BUFFALO GROVE, ILLINOIS.

WHEREAS, the Village of Buffalo Grove Lake County, Illinois the ("Municipality"), is a municipality and a home rule unit of government duly organized and validly existing under Section 6(a) of Article VII of the 1970 Constitution and laws of the State of Illinois; and

WHEREAS, certain tax-exempt private activity bonds may be issued only if sufficient volume cap pursuant to Section 146 of the Internal Revenue Code of 1986, as amended (the "Code"), is available for the bonds; and

WHEREAS, pursuant to the Code, the Municipality has been allocated volume cap equal to $110.00 per resident of the Municipality in calendar year 2021, or $4,493,830 for the issuance of such tax-exempt private activity bonds; and

WHEREAS, pursuant to Section 6 and Section 6.1 of the Illinois Private Activity Bond Allocation Act, 30 ILCS 345/1 *et seq.* (the "Bond Allocation Act"), and the Guidelines and Procedures promulgated thereunder, the Municipality may, prior to May 1, 2021, reallocate to other home rule units of government the volume cap allocated to the Municipality by the Code for their issuance of such tax exempt private activity bonds or for subsequent transfer or reallocation; and

WHEREAS, the Municipality has not used any of its 2021 volume cap and has no present intention to use the same; and

WHEREAS, the Lake County Partnership for Economic Development, Inc. has offered Lake County home rule communities the opportunity to participate in a program to combine their respective volume cap allocations and create a Private Activity Bond Clearinghouse Pool (the "Pool") to facilitate the issuance of tax-exempt private activity bonds to finance manufacturing and multi-family housing commercial projects in Lake County, Illinois, for economic development purposes ("Eligible Projects"); and

WHEREAS, the Village of Buffalo Grove, a home rule unit of government ("Buffalo Grove"), pursuant to its Resolution No. 2001-51 adopted December 17, 2001, agreed to host the Pool and to reserve its own volume cap, and accept volume cap reallocated to Buffalo Grove by other home rule units of government, for the issuance of tax-exempt private activity bonds placed through the Pool to finance Eligible Projects; and

WHEREAS, Buffalo Grove has requested that the Municipality reallocate all of its 2021 volume cap to Buffalo Grove to be used for the issuance of tax-exempt private activity bonds placed through the Pool to finance Eligible Projects;

NOW, THEREFORE, BE IT RESOLVED BY LAKE COUNTY, ILLINOIS, AS FOLLOWS:

SECTION ONE: RECITALS. The foregoing recitals are incorporated in and made a part of this Resolution by this reference as findings of the Village of Buffalo Grove.

SECTION TWO: TRANSFER AND REALLOCATION OF 2021 VOLUME CAP. Pursuant to Section 6 and Section 6.1 of the Bond Allocation Act and the Guidelines and Procedures promulgated thereunder, the Municipality irrevocably agrees to, and does hereby, transfer and reallocate all of its 2021 volume cap to Buffalo Grove to be used for the issuance of tax-exempt private activity bonds placed through the Pool to finance Eligible Projects as directed by the Advisory Committee created pursuant to Buffalo Grove Resolution No. 2001-51.

SECTION THREE: AGREEMENT. This Resolution shall constitute the agreement of the Municipality to a different allocation under Section 146(e) (3) of the Code and the writing required under Section 6 of the Bond Allocation Act.

SECTION FOUR: WARRANTY. The Municipality covenants and warrants that it has taken no action or issued bonds that would abrogate, diminish, or impair its ability to fulfill the written agreement, covenants, and undertakings on its part under this Resolution.

SECTION FIVE: AUTHORIZATION. As required by the Bond Allocation Act and the Guidelines and Procedures promulgated thereunder, a certified copy of this Resolution shall be transmitted to the Office of the Governor of the State of Illinois. Any and all appropriate and proper officers, officials, agents, and employees of the Municipality are hereby authorized, empowered, and directed to take all necessary and advisable actions, and to execute all such documents and certificates, as may be necessary to further the purposes and intent of this Resolution.

SECTION SIX: MAINTAIN RECORD. The Municipality shall maintain a written record of this Resolution in its records for so long as the bonds to which the volume cap transferred by this Resolution is reallocated remain outstanding.

SECTION SEVEN: EFFECTIVE DATE. This Resolution shall be in full force and effect from and after its passage and approval as required by law and is enacted by the Municipality pursuant to its powers under the laws of the State of Illinois and the Illinois Constitution of 1970 and its home rule powers.

PASSED THIS ___ DAY OF _____, 2021
AYES:
NAYS:
ABSENT:
PASSED THIS ___ DAY OF _____, 2021

_____
Village President

ATTEST:

_____
Village Clerk

Ordinance No. O-2021-7 : Ordinance Approving a Joint Purchase of Turn Out Gear and SCBA Equipment for the Fire Department

Recommendation of Action

Staff recommends approval.

Staff recommends the Village Board authorize the Village Manger to purchase Turnout Gear and related PPE at a price not to exceed $76,000.00 annually from Air One Equipment Inc., using a joint procurement agency bid through the Houston Galveston Area Council purchasing cooperative program in accordance with the Illinois Governmental Joint Purchasing Act (30 ILCS 525/0.01 et seq.)

ATTACHMENTS:

- AirOne Memo (DOCX)
- Air One Equipment (PDF)
- AirOne Joint Purchase Ordinance (DOCX)

Trustee Liaison	**Staff Contact**
Smith	Brett Robinson, Finance

Tuesday, February 16, 2021	

VILLAGE OF
BUFFALO GROVE

DATE: February 8, 2021

TO: Dane Bragg, Village Manager

FROM: Brett Robinson, Administrative Services Director

RE: Air One Safety Equipment Joint Procurement

Background Information

The Fire Department purchases new Turnout Gear annually as new staff is hired and as older equipment wears out. Turnout Gear (including but not limited to the trousers, boots and jacket) is personal protective equipment (PPE) used by firefighters. In addition to Turnout Gear the Village also purchases equipment related to Self-Contained Breathing Apparatus (SCBA) on the same joint agreement. An estimated $60,000 is spent on Turnout gear and $16,000 on SCBA equipment annually. The supplier for the specific brands of equipment in use by the Village of Buffalo Grove Fire Department is Air One. The Houston Galveston Area Compact (HGAC) purchasing cooperative has awarded Air One as the supplier of these particular PPE.

Recommendation

Staff recommends the Village Board authorize the Village Manager to purchase PPE and SCBA equipment and accessories from Air One Inc., through the Houston Galveston Area Compact purchasing cooperative in accordance with the Illinois Joint Purchasing Act (30 ILCS 525/0.01 et seq.), in an amount not to exceed $76,000 annually.

CONTRACT ASSIGNMENT AND ASSUMPTION AGREEMENT

This Contract Assignment and Assumption Agreement is made by and between the **Houston-Galveston Area Council of Governments (H-GAC), Casco Industries, Inc. (Contractor)** and **Air One Equipment, Inc. (Assignee).**

WHEREAS, **Contractor** entered into a cooperative purchasing Contract, identified as **EE08-19**, with **H-GAC** for the sale of **Emergency Medical & Rescue Equipment** to various End User governmental agencies participating in **H-GAC's** Cooperative Purchasing Program; and

WHEREAS, **Contractor** assigns the performance of its obligations under the Contract to **Assignee** for Globe Products (H-GAC Product Codes EE19LFA-EE19LFI) and MSA Products (H-GAC Product Codes EE19ACA, EE19HDA, EE19LVA) in specific areas (per attached Information Sheet); and

WHEREAS, **Assignee** shall perform as stipulated in the original Contract (a copy of which is attached hereto) and comply with all the terms and conditions set forth therein; and

WHEREAS, **Contractor** will continue as originally contracted with **H-GAC**; and

NOW THEREFORE, **Assignee** agrees to accept this assignment, and **H-GAC** concurs.

Unless otherwise noted, this Agreement goes into effect on the date signed by **H-GAC**. All other terms and conditions of the Contract shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the parties have caused this Contract Assignment and Assumption Agreement to be executed by their respective duly authorized representatives.

Signed for **Houston-Galveston Area Council:** DocuSigned by: 82EC27DD5D61423...

Chuck Wemple, Executive Director

11/22/2019

Date

Signed for **Casco Industries, Inc.**
Shreveport, Louisiana: Raymond Murray Date: 11-1-19
(Signature of Contractor)

Raymond Murray - Vice-President, Sales & Marketing
Printed Name & Title

Signed for **Air One Equipment, Inc.**
South Elgin, Illinois: Sandra M. Frey Date: 11/1/2019
(Signature of Assignee)

SANDRA M. FREY, PRESIDENT
Printed Name & Title

Information Sheet

Assignee:

Air One Equipment, Inc.

Contact Person:

Name: Martin Svihra
Title: Operations Manager
TEL: 847-289-9000
FAX: 847-289-9001
EMAIL: msvihra@aoe.net

Address:

360 Production Drive
South Elgin, Il 60177-2637

Territory:

Globe Products:

Wisconsin (Entire state)
Illinois (Counties: Boone, Bureau, Carroll, Cook, Champaign, DeKalb, Dewitt, DuPage, Ford, Grundy, Henry, Iroquois, Jo Daviess, Kane, Kankakee, Kendall, Knox, LaSalle, Lake, Lee, Livingston, Logan, Macon, Marshall, McHenry, McLean, Ogle, Peoria, Piatt, Putnam, Stark, Stephenson, Tazewell, Vermilion, Whiteside, Will, Winnebago, Woodford)

MSA Products:

Illinois (Counties: Boone, Bureau, Carroll, Cook, Champaign, DeKalb, Dewitt, DuPage, Ford, Grundy, Henry, Iroquois, Jo Daviess, Kane, Kankakee, Kendall, Knox, LaSalle, Lake, Lee, Livingston, Logan, Macon, Marshall, McHenry, McLean, Ogle, Peoria, Piatt, Putnam, Stark, Stephenson, Tazewell, Vermilion, Whiteside, Will, Winnebago, Woodford)

Wisconsin (Counties: Dodge, Kenosha, Milwaukee, Ozaukee, Racine, Washington, Waukesha)

ORDINANCE 2021-____

AN ORDINANCE AUTHORIZING THE PURCHASE OF TURN OUT GEAR AND PERSONAL PROTECTIVE EQUIPMENT FROM AIR ONE EQUIPMENT

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

WHEREAS, the Village of Buffalo Grove Fire Department requires a safety gear for staff; 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 safety equipment including but not limited to self-contained breathing apparatus, turn out gear and related personal protective equipment from Air One Equipment Inc.,, through the Houston Galveston Area Compact, at a price not to exceed $76,000.00 each year.

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: _____, 2021
APPROVED: _____, 2021

APPROVED:

_____
Beverly Sussman, Village President

ATTEST:

_____
Janet Sirabian, Village Clerk

Ordinance No. O-2021-8 : Ordinance Authorizing the Purchase of Replacement Police, Fire and Public Works Vehicles through the Suburban Purchasing Cooperative

Recommendation of Action

Staff recommends approval.

Staff recommends that the Village Board authorize the Village Manager to purchase replacement vehicles, as further described in the attached memo, through the Northwest Municipal Conference Suburban Purchasing Cooperative in accordance with the Illinois Joint Purchasing Act (30 ILCS 525/0.01 et seq.), in a total not to exceed amount of $221,336.00 (base vehicle costs).

ATTACHMENTS:

- SPC Memo 2021 (DOCX)
- Vehicle Purchase Ordinance 2021 (DOCX)
- SPC_2021-Ford-Interceptor-PPV-Utility-152-Rollover-03-25-20 (PDF)
- SPC_2021-Ford-F-250XL-350XL-450XL-Ext-2-Currie-07-07-20 (PDF)

Trustee Liaison	**Staff Contact**
Smith	Brett Robinson, Finance

Tuesday, February 16, 2021	

VILLAGE OF
BUFFALO GROVE

DATE: February 16, 2021

TO: Dane Bragg, Village Manager

FROM: Brett Robinson, Administrative Services Director

RE: Fleet Replacements Winter 2021

Background Information

Staff requests authorization to purchase, five 2021 Ford Police Utility Vehicles, four for police and one for fire. The Public Works Department requests the purchase of one 2021 Ford F-250 pickup. These units are scheduled replacements for Fiscal Year 2021. These units will be procured through a joint purchase in conjunction with the Suburban Purchasing Cooperative/Northwest Municipal Conference. All units are fully funded in the capital reserve.

The units scheduled for replacement:

Police

745. A 2011 Jeep Cherokee, 119,957 miles currently shows on the odometer. This unit is due to be replaced as it is no longer in a condition that makes it wise to continue its service with the Police Department. The unit will be sold for asset recovery. This vehicle will be replaced with a 2021 Ford Police Utility Vehicle expected to cost $35,167.

721. A 2015 Ford Police Utility Vehicle, 79,681 miles currently shows on the odometer. This unit is due to be replaced as it is no longer in a condition that makes it wise to continue its service with the Police Department. The unit will be sold for asset recover. This vehicle will be replaced with a 2021 Ford Police Utility Vehicle expected to cost $35,167.

740. A 2016 Ford Police Utility Vehicle, 115,285 miles currently showing on the odometer. This unit is due to be replaced as it is no longer in a condition that makes it wise to continue its service with the Police Department. The unit will be sold for asset recover. This vehicle will be replaced with a 2021 Ford Police Utility Vehicle expected to cost $35,167.

742. A 2015 Ford Police Utility Vehicle, 89,493 miles currently shows on the odometer. This unit is due to be replaced as it is no longer in a condition that makes it wise to continue its service with the Police Department. The unit will be sold for asset recovery. This vehicle will be replaced with a 2021 Ford Police Utility Vehicle expected to cost $35,167.

The total cost for all four vehicles shall not exceed $140,668.

Police Vehicle up-fitting for the new 2021 Ford Police Utility vehicles will be completed by Ultra Strobe under a separate existing contract for a cost of $11,000 per vehicle. These costs will be expensed from the Police Court Supervision Fund and have direct impact on the Budget.

Fire

294. A 2009 Chevrolet Impala, 71,922 miles currently showing on the odometer. This unit is due to be replaced as it no longer meets the Fire Departments needs and lacks all-wheel drive for response in inclement weather. The unit will be sold for asset recovery.

The new 2021 Ford Police Utility base vehicle is expected to cost $34,266 with up-fitting to be completed by Ultra Strobe under a separate existing contract at a cost not to exceed $11,632 for a total cost of $45,898.

Public Works

444. A 2008 Ford F-350 pickup, 69,674 miles currently showing on the odometer. This unit is due to be replaced as it is no longer in a condition that makes it wise to continue its service with the Public Works Department. The unit will be sold for asset recovery.

The new 2021 Ford F-250 base vehicle is expected to cost $46,402. Additional up-fitting costs consisting of a light bar, lift gate, and vehicle decals are not estimated at $7,198 for a total cost of $53,600.

Recommendation

Staff recommends that the Village Board authorize the Village Manager to purchase replacement vehicles as described in this memo through the Northwest Municipal Conference Suburban Purchasing Cooperative in accordance with the Illinois Joint Purchasing Act (30 ILCS 525/0.01 et seq.), in a total not to exceed amount of $221,336.00 (base vehicle costs).

ORDINANCE 2021-____

AN ORDINANCE AUTHORIZING THE PURCHASE OF A FORD F-250 PICKUP AND FORD POLICE UTILITY VEHICLES FROM CURRIE MOTORS

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

WHEREAS, the Village is a member of the Northwest Municipal Conference and the Suburban Purchasing Cooperative and

WHEREAS, the Village may make purchases in accordance with Illinois Governmental Joint Purchasing Act (30 ILCS 525/0.01 et seq.)

WHEREAS, the Suburban Purchasing Cooperative 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 one model year 2021 Ford F-250 Pickup and Five model year 2021 Police Pursuit Utility Vehicles at a price not to exceed $221,336.00 from Currie Motors of Frankfort, Il.

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: _____, 2021
APPROVED: _____, 2021

APPROVED:

_____
Beverly Sussman, Village President

ATTEST:

_____
Janet Sirabian, Village Clerk

SPC
SUBURBAN PURCHASING
COOPERATIVE

A Joint Purchasing Program For Local Government Agencies

March 25, 2020

Currie Motors
Mr. Tom Sullivan
10125 W. Laraway Road
Frankfort, Il 60423

Dear Mr. Sullivan:

This letter is to request a rollover from Ford Motor Company on the 2021 Ford Interceptor Utility SPC Contract #152 with Currie Motors, Frankfort, IL through the end of the model year.

With acceptance of the 2021 model year roll over and contract extension, Currie Motors, Frankfort, IL agrees to all terms and conditions set forth in the specifications contained within the Request for Proposals to which you responded.

Currie Motors, Frankfort, IL will handle all billing. Each vehicle purchased will be assessed a $120.00 administrative fee per vehicle which shall be paid directly by the vendor to the SPC on a quarterly basis.

The SPC looks forward to a productive year working with Currie Motors, Frankfort, IL. Please sign and date this agreement below, retaining copies for your files and returning the original to my attention.

Sincerely,

Ellen Dayan

Ellen Dayan, CPPB
Purchasing Director
Northwest Municipal Conference

Ellen Dayan

03/25/20

Name: Ellen Dayan Date
Northwest Municipal Conference

Thomas F. Sullivan 04/20/20

Name: Tom Sullivan Date
Currie Motors

DuPage Mayors & Managers Conference
1220 Oak Brook Road
Oak Brook, IL 60523
Suzette Quintell
Phone: (630) 571-0480
Fax: (630) 571-0484

Northwest Municipal Conference
1600 East Golf Rd., Suite 0700
Des Plaines, IL 60016
Ellen Dayan, CPPB
Phone: (847) 296-9200
Fax: (847) 296-9207

South Suburban Mayors And Managers Association
1904 West 174th Street
East Hazel Crest, IL 60429
Kristi DeLaurentiis
(708) 206-1155
Fax: (708) 206-1133

Will County Governmental League
15905 S. Frederick Street
Suite 107
Plainfield, IL 60586
Cherie Belom
Phone: (815) 254-7700

Attachment: SPC_2021-Ford-Interceptor-PPV-Utility-152-Rollover-03-25-20 (O-2021-8 : SPC Vehicle Purchases 2021)

SPC
SUBURBAN PURCHASING
COOPERATIVE

A Joint Purchasing Program For Local Government Agencies

July 7, 2020

Mr. Thomas Sullivan
Currie Motors
10125 W. Laraway Road
Frankfort, IL 60423

Dear Mr. Sullivan,

This letter confirms that the Suburban Purchasing Cooperative (SPC) is requesting the second of three possible one-year contract extensions and 2021 model year rollovers on the following SPC contracts:

Model	SPC Contract #	Price	Effective
F-250 XL Regular Cab	178	$22,760.00	7/18/20 – 7/17/21
F-350 XL Chassis Cab	184	$24,365.00	8/22/20 – 8/21/21
F-450 XL Chassis Cab	181	$31,366.00	7/18/20 – 7/17/21

With acceptance of these contract extension, Currie Motors agrees to all terms and conditions set forth in the specifications contained within the Request for Proposals to which you responded.

Currie Motors will handle all billing. Each vehicle purchased will be assessed a **$120.00** administrative fee per vehicle which shall be paid directly by the vendor to the SPC on a quarterly basis.

The SPC looks forward to another productive year working with Currie Motors. Please sign and date this agreement below, retaining copies for your files and returning the original to my attention. basis.

Sincerely,

Ellen Dayan, CPPB
Purchasing Director
Northwest Municipal Conference

Ellen Dayan 07/07/20
Name: Ellen Dayan Date
Northwest Municipal Conference

Thomas F. Sullivan 08/25/20
Name: Date
Currie Motors

DuPage Mayors & Managers Conference
1220 Oak Brook Road
Oak Brook, IL 60523
Suzette Quintell
Phone: (630) 571-0480
Fax: (630) 571-0484

Northwest Municipal Conference
1600 East Golf Rd., Suite 0700
Des Plaines, IL 60016
Ellen Dayan, CPPB
Phone: (847) 296-9200
Fax: (847) 296-9207

South Suburban Mayors And Managers Association
1904 West 174th Street
East Hazel Crest, IL 60429
Kristi DeLaurentiis
Phone: (708) 206-1155
Fax: (708) 206-1133

Will County Governmental League
15905 S. Frederick Street
Suite 107
Plainfield, IL 60586
Cherie Belom
Phone: (815) 254-7700

Attachment: SPC_2021-Ford-F-250XL-350XL-450XL-Ext-2-Currie-07-07-20 (O-2021-8 : SPC Vehicle Purchases 2021)

Resolution No. R-2021-7 : Resolution Waiving Fifty Percent of Certain Liquor License Renewal Fees for 2021-22

Recommendation of Action

Staff recommends approval of a resolution waiving fifty percent of liquor license renewal fees for the 2021-22 renewal period, to include on-premise license holders of Class A, B, E and K licenses.

In response to the COVID-19 Pandemic and its impact on local restaurants, staff recommends that the Village Board approve a Resolution reducing 50 percent of liquor license renewal fees for on premise license holders of Class A, B, E and K licenses. This would be consistent with the actions done in 2020. The overall financial impact to the Village is approximately $45,000.

ATTACHMENTS:

- BOT Memo (DOCX)
- Resolution (DOCX)

Trustee Liaison
Sussman

Staff Contact
Chris Stilling, Community Development

Tuesday, February 16, 2021	

VILLAGE OF
BUFFALO GROVE

MEMORANDUM

TO: Dane C. Bragg, Village Manager

FROM: Christopher Stilling, Deputy Village Manager

DATE: February 11, 2021

SUBJECT: 2021 Liquor License Renewals

As part of the Village's BG Deliver's campaign, staff is requesting that the Village Board reduce liquor license fees for on premise license holders. Staff has reviewed the budgetary impact, and recommends that the Village Board waive 50 percent of liquor license fees for license holders limited to on-premise service and consumption. The following classes would be eligible for the 50% waiver, as recommended: A, B, E, and K. A full list of the license classifications can be found in Section 5.20.070 of the Municipal Code.

The budget impact of the recommended fee waiver is a reduction in General Fund revenue of $45,000. Given the impacts of the COVID-19 pandemic, staff expects that some license holders may choose to not renew their licenses for the 2021 year.

Staff requests that the Village Board approved the attached waiving 50 percent of liquor license fees for license holders limited to on premise service and consumption

RESOLUTION 2021-

WHEREAS, the COVID-19 pandemic continues to adversely impact local businesses;

WHEREAS, the food and beverage industry has been particularly impacted by the COVID-19 pandemic including but not limited to the closing of food and beverage establishments to in person dining;

WHEREAS, the Village President and Village Board desire to help local businesses impacted by the COVID-19 pandemic; and

WHEREAS, the Village Board finds that a 50% waiver of the liquor license renewal fees for holders of licenses Classifications A, B, E, and K will be in the Village's best interest and assist the continued viability of those businesses.

NOW, THEREFORE, be it resolved as follows:

1. For the 2021-22 license year renewal period establishments holding either a Class A, B, E, and/or K liquor license shall be entitled to renew their liquor license by payment of 50% of the renewal fee as set forth in the Village Code.

2. All other license renewal requirements remain in full force and effect.

3. This resolution shall apply to year 2021-22 renewals only.

AYES: _____
NAYES: _____
ABSENT: _____

Passed _____, 2021
Approved _____, 2021

Approved:

_____
Beverly Sussman, Village President

Attest:

_____
Janet Sirabian, Village Clerk

Action Item : Link Crossing Phase 2 Development Improvement Agreement

Recommendation of Action

Staff recommends approval.

The Link Crossing Subdivision is located at Buffalo Grove Road and Brandywyn Lane and consists of 187 single family and town homes. The Developer is preparing to start Phase 2 of the Subdivision. Staff recommends approval of the Development Improvement Agreement for Phase 2, subject to the receipt of the required fees and the Village Attorney review.

ATTACHMENTS:

- Link Crossing Phase 2 DIA Memo (DOCX)
- Link Crossing - Development Improvement Agreement Phase 2_1-28-21 (DOCX)
- Final Plat of ReSubdivision - Link Crossing (Outlots HH & II) 01-19-2021 (PDF)
- EOPC Phase 2 Letter of Credit- Link Crossing 01-06-2021 (PDF)
- Link Crossing - Final Engineering Plan 11-05-18_r (PDF)

Trustee Liaison
Stein

Staff Contact
Darren Monico, Public Works

Tuesday, February 16, 2021	

VILLAGE OF
BUFFALO GROVE

MEMORANDUM

DATE: January 28, 2021

TO: Dane Bragg, Village Manager

FROM: Darren Monico, Village Engineer

SUBJECT: Link Crossing Development Improvement Agreement

K. Hovnanian Homes has submitted a Development Improvement Agreement for Phase 2 of the Link Crossing Development, located south of Brandywyn Lane and east of Buffalo Grove Road.

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 in addition to the building addition. Typical items include the stormwater management, roads, sidewalks, streetlights, 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.

An agreement for Phase 1A and Phase 1B of the development remains in place. This agreement covers the upcoming Phase 2 of the development immediately north of Phase 1A and 1B.

LINK CROSSING PHASE 2

DEVELOPMENT IMPROVEMENT AGREEMENT

THIS AGREEMENT ("Agreement"), made and entered into as of this 16th day of February, 2021 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 K. Hovnanian at Link Farm, LLC, an Illinois limited liability company (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 Annexation Agreement with the Village approved pursuant to Village Ordinance No. 2018-004 and the Village's Development Ordinance, Developer has submitted to the Village certain (i) plans, dated 4/25/2018, last revised 4/17/2019, prepared by Mackie Consultants, LLC, who are registered professional engineers (the "Site Plan") and (ii) additional plans and specifications prepared by HKM Architects & Planners, Inc. dated 11/28/18 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, provided that this Agreement is executed to insure the completion of certain site improvements, as a condition precedent to the issuance of building permits for any buildings to be constructed on the Property.

NOW, THEREFORE, it is mutually agreed as follows:

1. Developer 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). All utility lines and services to be installed in the street shall be installed prior to paving.

2. Attached hereto as Exhibit "D" is a complete cost estimate for the construction of the improvement described in Exhibit "B" hereto. No later than three (3) business days following the execution of this Agreement and prior to the issuance of Village Permits, the Developer shall deposit a Letter of Credit acceptable to and in a form and substance approved by the Village in the original amount of four hundred seventy seven thousand, four hundred twenty one and 00/100 Dollars ($477,421.00), as further described in Paragraph 9 herein (the "Letter of Credit").

3. All 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" as set forth in exhibit D.

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.

In addition, by its execution of this Agreement, the Developer agrees 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. If work is not completed within the time prescribed herein, the Village shall have the right to call upon the Letter of Credit, in accordance with its terms, for the purpose of completing the Improvements. Upon completion of the Improvements herein provided for, as evidenced by the certificate or certificates of the Village President and Board of Trustees, the Village shall be deemed to have accepted said Improvements, and thereupon, the Letter of Credit shall automatically be reduced to serve as security for the obligations of the Developer as set forth in Paragraph 7 hereof. The Developer shall cause its consulting engineers to correct drawings to show work as actually constructed and said engineers shall turn over high quality Mylar reproducible copies thereof to the Village to become the Village's property prior to acceptance of the Improvements by the President and Board of Trustees.

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. The obligation of the Developer hereunder shall be secured by the Letter of Credit as further described in Paragraph 9 hereof.

8. It is agreed that no occupancy permit shall be granted by any official for the construction of any structure until all required utility facilities set forth in the Plans (to include, but not by way of limitation, sanitary sewer, water and storm sewer systems) have been installed and made ready to service the Property; and that all roadways (to include curbs) set forth in the Plans that provide access to the Property have been completely constructed, except for the designed surface course. It is understood and agreed that building permits may be granted for buildings on specific lots to which utility facilities have been installed and made ready for service and to which roadways have been constructed as described above, notwithstanding the fact that all improvements within the Development may not be completed.

9.A. The obligations of the Developer hereunder as to the deposit of security for the completion of the Improvements and the one year maintenance of said Improvements after acceptance by the Village (Paragraph 7) shall be satisfied upon delivery to the Village of a Letter of Credit in favor of the Village in a form acceptable to the Village, in the amount set forth in Paragraph 2 above. The Letter of Credit shall be made subject to this Agreement. The Developer hereby waives its option pursuant to 30 ILCS 550/3 and 65 ILCS 5/11-39-3 to utilize any type of security other than a Letter of Credit.

B. In addition to the terms, conditions, and covenants of the Letter of Credit, the Village hereby agrees to draw funds or to call said performance guarantee under such security solely for the purpose of payment for labor and materials supplied or to be supplied, by engineers, contractors, or subcontractors, to, or for the benefit of the Developer or the Village, as the case may be, under the provisions of this Agreement and the said Improvements for which payment is being made shall have been completed, or will be completed, in substantial accordance with the Plans.

C. The Village further hereby agrees that to the extent that the Developer causes the commitments of this Agreement to be completed, the outstanding liability of the issuer of the Letter of Credit shall during the course of construction of the Improvements, approximate the cost of completing all Improvements and paying unpaid contract balances for the completion of the Improvements referred to in this Agreement.

Until all required tests have been submitted and approved by the Village for each of the construction elements including, but not limited to, earthwork, street pavements, parking area pavements, sanitary sewers and water mains (as applicable), a minimum of that portion of the surety for each element shall be subject to complete retention. All Improvements are subject to a minimum fifteen (15%) percent retention until final acceptance by the Village.

D. In order to guarantee and warranty the obligations of Paragraph 7 herein, an amount equal to fifteen (15%) percent of the total amount of the Letter of Credit, or an amount equal to fifteen (15%) percent of the cost estimate of the individual Improvement(s) shall be retained in the Letter of Credit for a period of one-year beyond formal acceptance by the Village of the Improvement(s).

E. As a portion of the security amount specified in Paragraph 2, the Developer shall

maintain a cash deposit with the Village Clerk in the amount of Five Thousand Dollars ($5,000.00). If roads are not maintained with a smooth and firm surface reasonably adequate for access of emergency vehicles such as fire trucks and ambulances, or if any condition develops which is deemed a danger to public health or safety by the Village of Buffalo Grove due to the actions of the Developer or his failure to act; and after written notice of this condition, the Developer fails to immediately remedy the condition; then the Village may take action to remedy the situation and charge any expenses which results from the action to remedy the situation to the cash deposit. Upon notification that the cash deposit has been drawn upon, the Developer shall immediately deposit sufficient funds to maintain the deposit in the amount of Five Thousand Dollars ($5,000.00). If the Developer has not made the additional deposit required to maintain the total cash deposit within three (3) days from the date he received notice that such additional deposit was required, it is agreed that the Village may issue a Stop Work Order or also may revoke all permits which the Developer had been granted. This cash deposit shall continue to be maintained until the maintenance guarantee period has lapsed. The deposit may be drawn upon by the Village if the conditions of this Agreement are not met by the Developer within five (5) days after receipt of a written notice of noncompliance with the conditions of this Agreement, except in cases of danger to public health and safety as determined by the Village, in which case, the deposit may be drawn upon immediately following notice to the Developer and his failure to immediately remedy the situation. After termination of the one-year maintenance period and upon receipt by the Village Clerk of a written request for release of the deposit, the Village will either notify the Developer that the Improvements are not in a proper condition for final release of the deposit, or shall release the deposit within fifteen (15) days.

F. In addition to the terms, covenants, and conditions of the Letter of Credit, the Developer hereby agrees that no reduction shall occur in the outstanding liability of the issuer there under, except on the written approval of the Village; however, in all events, the Village shall permit such Letter of Credit to expire, either by its terms, or by return of such Letter of Credit to the Developer, upon the expiration of one (1) year from the acceptance of the Improvements referred to herein by the Village. To the extent that the provisions of Paragraph 9 herein, and of the Letter of Credit, permit the Village to draw funds under such Letter of Credit, the Village hereby agrees to reduce the outstanding liability of the issuer

of the Letter of Credit to the extent that funds are disbursed.

10. Any Letter of Credit shall provide that the issuer thereof shall not cancel or otherwise terminate said security without a written notice being given to the Village of not less than thirty-(30) days in advance of termination or cancellation.

11. No occupancy permit shall be issued until all exterior lighting specified on Exhibit "C" is installed and operational.

12. The Developer acknowledges that he is 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. It is further agreed that the Developer shall continue to be responsible for the proper maintenance of any parcels of property for which the Developer transfers ownership to the Village until such time as the development's Improvements are accepted by the Village in writing in accordance with the provisions of this Agreement.

If the Developer fails to perform his 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 deduct the costs of the maintenance from the cash deposit described in Paragraph 9.E.

13. 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.

14. 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, except for the Village's obligation to return the Letter of Credit and cash deposit to Developer or otherwise notify the issuer of the Letter of Credit of the expiration of the Letter of Credit. 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".

15. 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 or Annexation Approval Ordinance No. 2018-004 dated January 22, 2018, and the obligations contained therein.

16. Neither party shall cause this Agreement (or any memorandum hereof) to be recorded against the Property.

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:

K. Hovnanian at Link Farm LLC,
an Illinois limited liability company
1804 N. Naper Blvd., Suite 200
Naperville, Illinois 60563

By: _____

Name: _____

Title: _____

Attachment: Link Crossing - Development Improvement Agreement Phase 2_1-28-21 (Link Crossing Phase 2 Development Improvement

LINK CROSSING

DEVELOPMENT IMPROVEMENT AGREEMENT

EXHIBIT A

LEGAL DESCRIPTION

KNOWN AS: **LINK CROSSING, BEING A SUBDIVISION OF PART OF THE SOUTHWEST ¼ OF SECTION 21, TOWNSHIP 43 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, ILLINOIS, BUFFALO GROVE, ILLINOIS**

PERMANENT INDEX NUMBER: 15-21-300-026-0000

AREA = 2,178,000 SQ. FT. OR 50 ACRES

Attachment: Link Crossing - Development Improvement Agreement Phase 2_1-28-21 (Link Crossing Phase 2 Development Improvement

LINK CROSSING

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.

Attachment: Link Crossing - Development Improvement Agreement Phase 2_1-28-21 (Link Crossing Phase 2 Development Improvement

LINK CROSSING

DEVELOPMENT IMPROVEMENT AGREEMENT

EXHIBIT C

Final Engineering Plans prepared by: Mackie Consultants, LLC

Entitled: Final Engineering Plans for Link Crossing Residential Development Village of Buffalo Grove, Illinois

Consisting of: 30 sheet(s), last revised 11/5/18

Final Landscape Plans prepared by: HKM Architects & Planners, Inc.

Entitled: Link Crossing Landscape

Consisting of: 7 sheets, last revised 11/28/18

(see following pages)

Attachment: Link Crossing - Development Improvement Agreement Phase 2_1-28-21 (Link Crossing Phase 2 Development Improvement

LINK CROSSING

DEVELOPMENT IMPROVEMENT AGREEMENT

EXHIBIT D

Engineers Opinion of Probable Costs

(see following pages)

FINAL PLAT OF RESUBDIVISION
LINK CROSSING OUTLOTS HH & II

BEING A RESUBDIVISION OF PART OF THE SOUTHWEST 1/4 OF SECTION 21, TOWNSHIP 43 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, ILLINOIS.

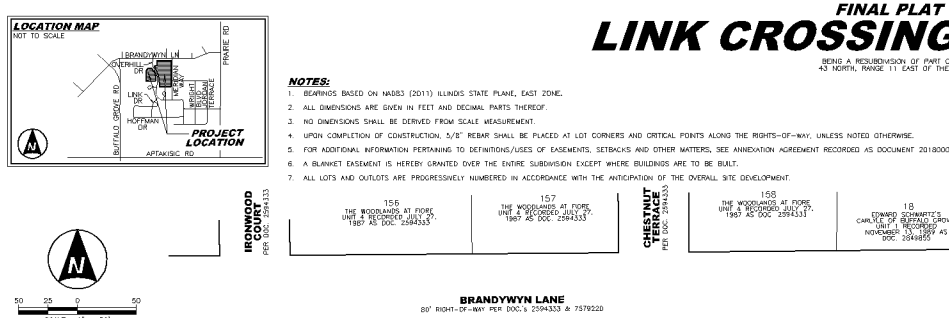
LOCATION MAP
NOT TO SCALE

NOTES:

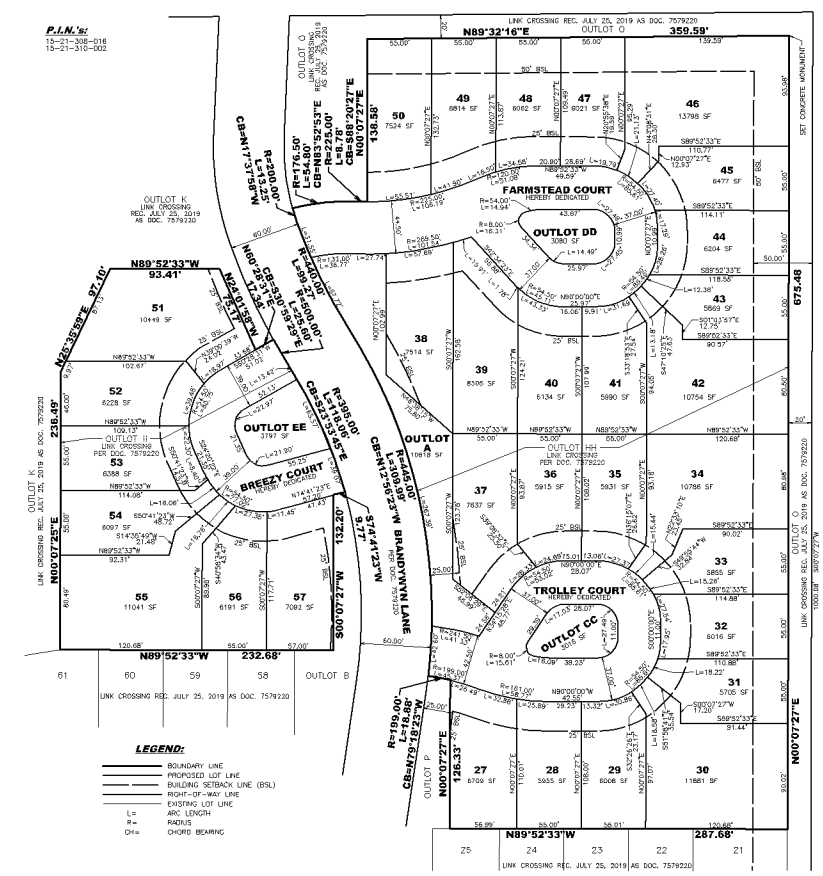
1. BEARINGS BASED ON NAD83 (2011) ILLINOIS STATE PLANE, EAST ZONE.
2. ALL DIMENSIONS ARE GIVEN IN FEET AND DECIMAL PARTS THEREOF.
3. NO DIMENSIONS SHALL BE DERIVED FROM SCALE MEASUREMENT.
4. UPON COMPLETION OF CONSTRUCTION, 5/8" REBAR SHALL BE PLACED AT LOT CORNERS AND CRITICAL POINTS ALONG THE RIGHTS-OF-WAY, UNLESS NOTED OTHERWISE.
5. FOR ADDITIONAL INFORMATION PERTAINING TO DEFINITIONS/USES OF EASEMENTS, SETBACKS AND OTHER MATTERS, SEE ANNEXATION AGREEMENT RECORDED AS DOCUMENT 20180002577I.
6. A BLANKET EASEMENT IS HEREBY GRANTED OVER THE ENTIRE SUBDIVISION EXCEPT WHERE BUILDINGS ARE TO BE BUILT.
7. ALL LOTS AND OUTLOTS ARE PROGRESSIVELY NUMBERED IN ACCORDANCE WITH THE ANTICIPATION OF THE OVERALL SITE DEVELOPMENT.

AREA TABLE:

	SQ.FT.	AC.
TOTAL LOTS	229,550	5.270
TOTAL OUTLOTS	20,512	0.471
TOTAL ROW	42,738	0.981
TOTAL AREA (OUTLOTS HH & II)	292,800	6.722



P.I.N.'s:
15-21-308-016
15-21-310-002



LEGEND:

- BOUNDARY LINE
- PROPOSED LOT LINE
- BUILDING SETBACK LINE (BSL)
- RIGHT-OF-WAY LINE
- EXISTING LOT LINE
- L= ARC LENGTH
- R= RADIUS
- CH= CHORD BEARING

CORPORATE AUTHORITY'S CERTIFICATE

STATE OF ILLINOIS }SS
COUNTIES OF COOK & LAKE}

APPROVED AND ACCEPTED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS, AT A MEETING

HELD THIS _____ DAY OF _____, A.D., 20___.

_____
VILLAGE PRESIDENT

ATTEST: _____
VILLAGE CLERK

PLANNING AND ZONING COMMISSION'S CERTIFICATE

STATE OF ILLINOIS }SS
COUNTIES OF COOK & LAKE}

APPROVED BY THE PLANNING AND ZONING COMMISSION OF THE VILLAGE OF BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS, AT A MEETING HELD THIS

_____ DAY OF _____, A.D., 20____.

_____
CHAIRMAN

VILLAGE COLLECTOR'S CERTIFICATE

STATE OF ILLINOIS }SS
COUNTIES OF COOK & LAKE}

I HEREBY CERTIFY THAT I FIND NO DEFERRED INSTALLMENTS OF OUTSTANDING UNPAID SPECIAL ASSESSMENTS DUE AGAINST THE PROPERTY DESCRIBED IN THE PLAT HEREON DRAWN. BUFFALO GROVE, COOK AND LAKE COUNTIES, ILLINOIS,

DATED THIS _____ DAY OF _____, A.D., 20____.

_____
VILLAGE COLLECTOR

VILLAGE ENGINEER'S CERTIFICATE

STATE OF ILLINOIS }SS
COUNTIES OF COOK & LAKE}

APPROVED BY THE VILLAGE ENGINEER OF THE VILLAGE OF BUFFALO GROVE, COOK

AND LAKE COUNTIES, ILLINOIS, DATED THIS _____ DAY OF _____,

A.D., 20____.

_____
VILLAGE ENGINEER

EASEMENT PROVISIONS:

AN EASEMENT FOR SERVICING THE SUBDIVISION AND OTHER PROPERTY WITH ELECTRIC AND COMMUNICATION SERVICE IS HEREBY RESERVED FOR AND GRANTED TO:

COMMONWEALTH EDISON COMPANY
AND
SBC TELEPHONE COMPANY, GRANTEES.

THEIR RESPECTIVE LICENSEES, SUCCESSORS AND ASSIGNS JOINTLY AND SEVERALLY, TO CONSTRUCT, OPERATE, REPAIR, MAINTAIN, MODIFY, RECONSTRUCT, REPLACE, SUPPLEMENT, RELOCATE AND REMOVE, FROM TIME TO TIME, POLES, GUYS, ANCHORS, WIRES, CABLES, CONDUITS, MANHOLES, TRANSFORMERS, PEDESTALS, EQUIPMENT CABINETS OR OTHER FACILITIES USED IN CONNECTION WITH OVERHEAD AND UNDERGROUND TRANSMISSION AND DISTRIBUTION OF ELECTRICITY, COMMUNICATIONS, SOUNDS AND SIGNALS IN, OVER, UNDER, ACROSS, ALONG AND UPON THE SURFACE OF THE PROPERTY SHOWN WITHIN THE BLANKET EASEMENT, THE DASHED OR DOTTED LINES (OR SIMILAR DESIGNATION) ON THE PLAT AND MARKED "EASEMENT", "UTILITY EASEMENT", "PUBLIC UTILITY EASEMENT", "PU/UE" (OR SIMILAR DESIGNATION), THE PROPERTY DESIGNED IN THE DECLARATION OF CONDOMINIUM AND/OR ON THIS PLAT AS "COMMON ELEMENTS", AND THE PROPERTY DESIGNATED ON THE PLAT AS "COMMON AREA OR AREAS", AND THE PROPERTY DESIGNATED ON THE PLAT FOR STREETS, WHETHER PUBLIC OR PRIVATE, TOGETHER WITH THE RIGHTS TO INSTALL REQUIRED SERVICE CONNECTIONS OVER OR UNDER THE SURFACE OF EACH LOT AND COMMON AREA OR AREAS TO SERVE IMPROVEMENTS THEREON, OR ON ADJACENT LOTS, AND COMMON AREA OR AREAS; THE RIGHT TO CUT, TRIM OR REMOVE TREES, BUSHES, ROOTS AND SAPLINGS AND TO CLEAR OBSTRUCTIONS FROM THE SURFACE AND SUBSURFACE AS MAY BE REASONABLY REQUIRED INCIDENT TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE SUBDIVIDED PROPERTY FOR ALL SUCH PURPOSES. OBSTRUCTIONS SHALL NOT BE PLACED OVER GRANTEES' FACILITIES OR IN, UPON OR OVER THE PROPERTY WITHIN THE DASHED OR DOTTED LINES (OR SIMILAR DESIGNATION) MARKED "EASEMENT", "UTILITY EASEMENT", "PUBLIC UTILITY EASEMENT", "PU/UE" (OR SIMILAR DESIGNATION) WITHOUT THE PRIOR WRITTEN CONSENT OF GRANTEES. AFTER INSTALLATION OF ANY SUCH FACILITIES, THE GRADE OF THE SUBDIVIDED PROPERTY SHALL NOT BE ALTERED IN A MANNER SO AS TO INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THEREOF.

THE TERM "COMMON ELEMENTS" SHALL HAVE THE MEANING SET FORTH FOR SUCH TERM IN THE "CONDOMINIUM PROPERTY ACT", CHAPTER 765 ILCS 605/2(C), AS AMENDED FROM TIME TO TIME.

THE TERM "COMMON AREA OR AREAS" IS DEFINED AS A LOT, PARCEL OR AREA OF REAL PROPERTY, THE BENEFICIAL USE AND ENJOYMENT OF WHICH IS RESERVED IN WHOLE OR AS AN APPORTIONMENT TO THE SEPARATELY OWNED LOTS, PARCELS OR AREAS WITHIN THE PLANNED DEVELOPMENT, EVEN THOUGH SUCH BE OTHERWISE DESIGNATED ON THE PLAT BY TERMS SUCH AS "OUTLOTS", "COMMON ELEMENTS", "OPEN SPACE", "OPEN AREA", "COMMON GROUND", "PARKING" AND "COMMON AREA". THE TERM "COMMON AREA OR AREAS" AND "COMMON ELEMENTS" INCLUDE REAL PROPERTY SURFACED WITH INTERIOR DRIVEWAYS AND WALKWAYS, BUT EXCLUDES REAL PROPERTY PHYSICALLY OCCUPIED BY A BUILDING, SERVICE BUSINESS DISTRICT OR STRUCTURES SUCH AS A POOL, RETENTION POND OR MECHANICAL EQUIPMENT.

RELOCATION OF FACILITIES WILL BE DONE BY GRANTEES AT COST OF THE GRANTOR/LOT OWNER, UPON WRITTEN REQUEST.

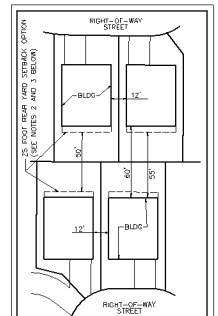
SIDEWALK EASEMENT PROVISIONS

A PUBLIC SIDEWALK EASEMENT IS HEREBY RESERVED FOR AND GRANTED TO

VILLAGE OF BUFFALO GROVE

ITS SUCCESSORS AND ASSIGNS FOR THE USE AND BENEFIT OF THE PUBLIC, TO INSTALL, OPERATE, MAINTAIN, AND REMOVE, FROM TIME TO TIME, SIDEWALKS ACROSS, ALONG AND UPON THE SURFACE OF THE PROPERTY CONTAINED WITHIN THE BLANKET EASEMENT. ALSO GRANTED HEREWITH IS THE RIGHT TO CUT, TRIM OR REMOVE TREES, BUSHES AND ROOTS AS MAY BE REASONABLY REQUIRED INCIDENT TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE SUBDIVIDED PROPERTY FOR ALL SUCH PURPOSES. OBSTRUCTIONS SHALL NOT BE PLACED OVER GRANTEE'S FACILITIES OR IN, UPON OR OVER THE PROPERTY WITHIN THE EASEMENTS WITHOUT THE PRIOR WRITTEN CONSENT OF GRANTEES. AFTER INSTALLATION OF ANY SUCH FACILITIES, THE GRADE OF THE SUBDIVIDED PROPERTY SHALL NOT BE ALTERED IN A MANNER SO AS TO INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THEREOF.

TYPICAL SETBACK DETAILS
UNLESS SHOWN OTHERWISE
NOT TO SCALE



SETBACK NOTES:
1. ALL COVERED FRONT PORCHES SHALL BE ALLOWED TO ENCROACH UP TO 6' INTO REQUIRED FRONT YARD SETBACKS.

2. ALL RANCH AND RANCH PLUS LOFT HOMES ON SINGLE FAMILY HOME LOTS ARE PERMITTED TO HAVE A 25 FOOT REAR YARD SETBACK.

3. THE CAPE COD HOME AS DEPICTED IN THE ANNEXATION AGREEMENT APPROVED BY ORDINANCE NUMBER 2018-004 AND RECORDED AS DOCUMENT NUMBER 7483977 IS PERMITTED TO HAVE A 25 FOOT REAR YARD SETBACK EXCEPT ON LOTS 27, 28, 29, 35, 36, 40 AND 41 WHERE THE STANDARD 30 FOOT REAR YARD SETBACK WILL APPLY.

OWNER'S CERTIFICATE

STATE OF ARIZONA }SS
COUNTY OF MARICOPA}

THIS IS TO CERTIFY THAT THE UNDERSIGNED IS THE OWNER OF THE LAND DESCRIBED IN THE ANNEXED PLAT, AND THAT HE/SHE HAS CAUSED THE SAME TO BE SURVEYED AND SUBDIVIDED AS INDICATED HEREON, FOR THE USES AND PURPOSES HEREIN SET FORTH, AND DOES HEREBY ACKNOWLEDGE AND ADOPT THE SAME UNDER THE STYLE AND TITLE HEREON INDICATED.

ALSO, THIS IS TO CERTIFY THAT THE PROPERTY BEING SUBDIVIDED AFORESAID, AND TO THE BEST OF OWNER'S KNOWLEDGE AND BELIEF, SAID SUBDIVISION LIES ENTIRELY WITHIN THE LIMITS OF:

APTAKISIC - TRIPP SCHOOL DISTRICT 102
STEVENSON HIGH SCHOOL DISTRICT 125

DATED THIS _____ DAY OF _____, A.D., 20____.

CDCG 4 HDV 2 LP, A DELAWARE LIMITED PARTNERSHIP

BY: CDCG ASSET MANAGEMENT, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, ITS AUTHORIZED AGENT

BY: _____
STEVEN S. BENSON, ITS MANAGER

NOTARY CERTIFICATE

STATE OF ARIZONA }SS
COUNTY OF MARICOPA}

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS _____

DAY OF _____, A.D., 20____, BY STEVEN S. BENSON, THE MANAGER OF CDCG ASSET MANAGEMENT, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, THE AUTHORIZED AGENT OF CDCG 4 HDV 2 LP, A DELAWARE LIMITED PARTNERSHIP, FOR AND ON BEHALF THEREOF.

_____
NOTARY PUBLIC

COUNTY CLERK CERTIFICATE

STATE OF ILLINOIS }SS
COUNTY OF LAKE}

I, _____, COUNTY CLERK OF LAKE COUNTY, ILLINOIS, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT GENERAL TAXES, UNPAID CURRENT GENERAL TAXES, DELINQUENT SPECIAL ASSESSMENTS OR UNPAID CURRENT SPECIAL ASSESSMENTS AGAINST ANY OF THE LAND INCLUDED IN THE DESCRIBED PROPERTY. I FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THE PLAT.

GIVEN UNDER MY HAND AND SEAL OF THE COUNTY CLERK OF LAKE COUNTY.

ILLINOIS, THIS _____ DAY OF _____, A.D., 20____.

_____
LAKE COUNTY CLERK

EASEMENT PROVISIONS:

AN EASEMENT FOR SERVING THE SUBDIVISION AND OTHER PROPERTY WITH ELECTRIC SOUNDS AND SIGNALS AND COMMUNICATIONS SERVICE IS HEREBY GRANTED TO

VILLAGE OF BUFFALO GROVE

ITS SUCCESSORS AND ASSIGNS, TO INSTALL, OPERATE, MAINTAIN AND REMOVE, FROM TIME TO TIME, FACILITIES USED IN CONNECTION WITH UNDERGROUND TRANSMISSION AND DISTRIBUTION OF ELECTRICITY, SOUNDS AND SIGNALS, INCLUDING BUT NOT LIMITED TO, TELEVISION, DATA AND RADIO SIGNALS AND COMMUNICATIONS IN, UNDER, ACROSS, ALONG AND UPON THE SURFACE OF THE PROPERTY CONTAINED WITHIN THE BLANKET EASEMENT, AND THE PROPERTY DESIGNATED ON THE PLAT FOR STREETS, TOGETHER WITH THE RIGHT TO INSTALL REQUIRED SERVICE CONNECTION UNDER THE SURFACE OF EACH LOT TO SERVE IMPROVEMENTS THEREON, THE RIGHT TO CUT, TRIM OR REMOVE TREES, BUSHES AND ROOTS AS MAY BE REASONABLY REQUIRED INCIDENT TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE SUBDIVIDED PROPERTY FOR ALL SUCH PURPOSES. OBSTRUCTIONS SHALL NOT BE PLACED OVER GRANTEE'S FACILITIES OR IN, UPON OR OVER THE PROPERTY WITHIN THE EASEMENTS WITHOUT THE PRIOR WRITTEN CONSENT OF GRANTEES. AFTER INSTALLATION OF ANY SUCH FACILITIES, THE GRADE OF THE SUBDIVIDED PROPERTY SHALL NOT BE ALTERED IN A MANNER SO AS TO INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THEREOF.

EASEMENT PROVISIONS:

AN EASEMENT FOR PURPOSES INCLUDING, BUT NOT LIMITED TO, WATER SUPPLY AND DISTRIBUTION, SEWERAGE, STORM SEWER AND DRAINAGE, AND STREET LIGHTING, IS HEREBY RESERVED FOR AND GRANTED TO

VILLAGE OF BUFFALO GROVE

ITS SUCCESSORS AND ASSIGNS TO INSTALL, OPERATE, MAINTAIN, AND REMOVE, FROM TIME TO TIME, FACILITIES USED FOR PURPOSES INCLUDING, BUT NOT LIMITED TO, WATER SUPPLY AND DISTRIBUTION, SEWERAGE, STORM SEWER AND DRAINAGE, AND STREET LIGHTING IN, UNDER, ACROSS, ALONG AND UPON THE SURFACE OF THE PROPERTY CONTAINED WITHIN THE BLANKET EASEMENT. ALSO GRANTED HEREWITH IS THE RIGHT TO CUT, TRIM OR REMOVE TREES, BUSHES AND ROOTS AS MAY BE REASONABLY REQUIRED INCIDENT TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE SUBDIVIDED PROPERTY FOR ALL SUCH PURPOSES. OBSTRUCTIONS SHALL NOT BE PLACED OVER GRANTEE'S FACILITIES OR IN, UPON OR OVER THE PROPERTY WITHIN THE EASEMENTS WITHOUT THE PRIOR WRITTEN CONSENT OF GRANTEES. AFTER INSTALLATION OF ANY SUCH FACILITIES, THE GRADE OF THE SUBDIVIDED PROPERTY SHALL NOT BE ALTERED IN A MANNER SO AS TO INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THEREOF.

STORM SEWER EASEMENT PROVISIONS:

AN EASEMENT FOR PURPOSES INCLUDING, BUT NOT LIMITED TO, STORM SEWER AND DRAINAGE, IS HEREBY RESERVED FOR AND GRANTED TO

LAKE COUNTY
VILLAGE OF BUFFALO GROVE

ITS SUCCESSORS AND ASSIGNS TO INSTALL, OPERATE, MAINTAIN, AND REMOVE, FROM TIME TO TIME, FACILITIES USED FOR PURPOSES INCLUDING, BUT NOT LIMITED TO, STORM SEWER AND DRAINAGE, IN, UNDER, ACROSS, ALONG AND UPON THE SURFACE OF THE PROPERTY SHOWN WITHIN THE BLANKET EASEMENT. ALSO GRANTED HEREWITH IS THE RIGHT TO CUT, TRIM OR REMOVE TREES, BUSHES AND ROOTS AS MAY BE REASONABLY REQUIRED INCIDENT TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE SUBDIVIDED PROPERTY FOR ALL SUCH PURPOSES. OBSTRUCTIONS SHALL NOT BE PLACED OVER GRANTEE'S FACILITIES OR IN, UPON OR OVER THE PROPERTY WITHIN THE EASEMENTS WITHOUT THE PRIOR WRITTEN CONSENT OF GRANTEES. AFTER INSTALLATION OF ANY SUCH FACILITIES, THE GRADE OF THE SUBDIVIDED PROPERTY SHALL NOT BE ALTERED IN A MANNER SO AS TO INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THEREOF.

NORTH SHORE GAS COMPANY EASEMENT PROVISIONS

AN EASEMENT IS HEREBY RESERVED FOR AND GRANTED TO NORTH SHORE GAS COMPANY, ITS SUCCESSORS AND ASSIGNS, TO INSTALL, CONSTRUCT, RECONSTRUCT, OPERATE, MAINTAIN, INSPECT, REPAIR, RENEW, REPLACE, ALTER, REMOVE, CHANGE THE SIZE OF OR ABANDON IN PLACE PIPELINES, GAS MAINS, SERVICES PIPES, GAS DRIPS, VALVES, VALVE BOXES, FITTINGS, METERS, REGULATORS AND OTHER EQUIPMENT AND APPURTENANCES AS MAY BE NECESSARY OR CONVENIENT FOR SUCH OPERATIONS IN, THROUGH, UNDER, ACROSS AND WITHIN ANY AREAS THAT ARE RESERVED FOR THE PURPOSE OF A UTILITY EASEMENT AND ALL ROADS, STREETS, OUTLOTS, COMMON AREAS (IF ANY) WITHIN THE SUBDIVISION TOGETHER WITH THE RIGHT TO INSTALL REQUIRED SERVICE CONNECTIONS UNDER THE SURFACE OF EACH LOT TO SERVE IMPROVEMENTS THEREON AND ALSO THE RIGHT TO ENTER UPON THE SUBDIVISION PROPERTY FOR ALL SUCH OPERATIONS. NO OBSTRUCTIONS OR STRUCTURES OF ANY KIND SHALL BE PLACED OVER GRANTEE'S FACILITIES WITHOUT THE PRIOR WRITTEN CONSENT OF GRANTEE. GRANTEE'S FACILITIES, EQUIPMENT AND APPURTENANCES, WHEN INSTALLED, WILL NOT INTERFERE WITH THE MOVEMENT OF TRAFFIC UPON SUCH ROADS, STREETS OR COMMON AREAS.

AUTHORIZATION TO RECORD CERTIFICATE

STATE OF ILLINOIS }SS
COUNTY OF COOK}

WE, MACKIE CONSULTANTS LLC, AN ILLINOIS PROFESSIONAL DESIGN FIRM NUMBER

184-002694, HEREBY GRANT PERMISSION TO _____ TO RECORD THIS PLAT OF SUBDIVISION.

DATED THIS _____ DAY OF _____, 20___.

_____
DALE A. GRAY
EMAIL: dgray@mackieconsult.com
ILLINOIS PROFESSIONAL LAND SURVEYOR NUMBER 035-003057
LICENSE EXPIRES: NOVEMBER 30, 2022

SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS }SS
COUNTY OF COOK}

WE, MACKIE CONSULTANTS, LLC, AN ILLINOIS PROFESSIONAL DESIGN FIRM NUMBER 184-002694, DO HEREBY CERTIFY THAT WE HAVE SURVEYED, SUBDIVIDED AND PLATTED THE FOLLOWING DESCRIBED PROPERTY AND THAT THE PLAT HEREON DRAWN IS A CORRECT REPRESENTATION OF SAID SURVEY, SUBDIVISION AND PLAT:

OUTLOTS HH AND II IN LINK CROSSING, BEING A SUBDIVISION IN PART OF THE SOUTHWEST 1/4 OF SECTION 21, TOWNSHIP 43 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN ACCORDING TO THE PLAT THEREOF RECORDED JULY 26, 2019 AS DOCUMENT 7579220, LAKE COUNTY, ILLINOIS.

THIS IS ALSO TO CERTIFY THAT UPON COMPLETION OF CONSTRUCTION, CONCRETE MONUMENTS, AS SHOWN, AND REBAR AT LOT CORNERS AND POINT OF CHANGES IN ALIGNMENT WILL BE SET.

WE FURTHER CERTIFY THAT THE PROPERTY IS LOCATED WITHIN THE VILLAGE OF BUFFALO GROVE, WHICH HAS ADOPTED A COMPREHENSIVE PLAN.

WE FURTHER CERTIFY THAT ACCORDING TO OUR INTERPRETATION OF THE FLOOD INSURANCE RATE MAPS THAT COVER THE AREA, A MAJORITY OF THE HEREON DESCRIBED PROPERTY FALLS WITHIN ZONE "X", AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AND A PORTION OF PROPOSED LOTS 35, 36, 37, 38, 39, 40, 41, 51, 52 AND 57, AND PROPOSED OUTLOTS A AND EE FALLS WITHIN ZONE "X", AREAS OF 0.2% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD AS IDENTIFIED BY THE FLOOD INSURANCE RATE MAP, MAP NUMBER 17097C0254H, WITH A MAP REVISED DATE OF SEPTEMBER 18, 2013. SUBJECT TO MAP INTERPRETATION AND SCALING.

GIVEN UNDER MY HAND AND SEAL THIS _____ DAY OF _____, 20____, IN ROSEMONT, ILLINOIS.

_____
DALE A. GRAY
EMAIL: dgray@mackieconsult.com
ILLINOIS PROFESSIONAL LAND SURVEYOR NUMBER 035-003057
LICENSE EXPIRES: NOVEMBER 30, 2022

ENGINEER/SURVEYOR:

MACKIE CONSULTANTS
Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

OWNER/SUBDIVIDER/MAIL TO:

CLIENT:
KHovnanian® Homes
1804 N. Naper Boulevard, Suite 200
Naperville, IL 60563
Phone: 630-210-0868
Fax: 630-946-6629

DATE	DESCRIPTION OF REVISION	BY
01-19-21	PER VILLAGE REVIEW	GKF

DESIGNED	
DRAWN	GKF
APPROVED	DAG
DATE	10-23-2020
SCALE	1" = 50'

FINAL PLAT OF RESUBDIVISION
LINK CROSSING OUTLOTS HH & II
BUFFALO GROVE, ILLINOIS

SHEET 1 OF 1

PROJECT NUMBER: 2814
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ILLINOIS FIRM LICENSE 184-002694

I:\2814\2814 - LINK CROSSING PHASE 2 DEVELOPMENT\DWG\2814-PLAT.DWG
Layout: 1 Plot Date: Oct 23, 2020 Plotted By: Dale A. Gray

ENGINEER'S OPINION OF PROBABLE COST
BOND REDUCTION PURPOSE
LINK CROSSING - PHASE 2
BUFFALO GROVE, ILLINOIS
(Final Engineering Plans, dated April 17, 2019)
January 6, 2021

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL	QUANTITY REMAINING	TOTAL REMAINI
SCHEDULE I - EROSION CONTROL							
1	Silt Fence	1,180	LF	$2.25	$2,655.00	1,180	$2,655
2	Inlet Filter Basket	13	EA	$200.00	$2,600.00	13	$2,600
3	Silt Fence Box	15	EA	$125.00	$1,875.00	15	$1,875
4	Erosion Control Blanket	3,560	SY	$1.50	$5,340.00	3,560	$5,340
TOTAL SCHEDULE I - EROSION CONTROL					$12,470.00		$12,470
SCHEDULE II - UNDERGROUND UTILITY IMPROVEMENTS							
A.	**SANITARY SEWER IMPROVEMENTS**						
1	6" Sanitary Service, Short	8	EA	$800.00	$6,400.00	8	$6,400
2	6" Sanitary Service, Long	23	EA	$2,000.00	$46,000.00	23	$46,000
3	8" Sanitary Sewer, <12' Deep, PVC SDR 26	640	LF	$31.00	$19,840.00	640	$19,840
4	48" Diameter Manhole <12' Deep	4	EA	$2,000.00	$8,000.00	4	$8,000
5	Granular Trench Backfill, <12' Deep	183	LF	$40.00	$7,320.00	183	$7,320
6	Televise Sanitary Sewer	640	LF	$1.95	$1,248.00	640	$1,248
SUBTOTAL A - SANITARY SEWER IMPROVEMENTS					$88,808.00		$88,808
B.	**WATER MAIN IMPROVEMENTS**						
1	1.00" Domestic Type K Copper Service, Short	15	EA	$670.00	$10,050.00	15	$10,050
2	1.00" Domestic Type K Copper Service, Long	16	EA	$1,500.00	$24,000.00	16	$24,000
3	8" Ductile Iron Water Main, D.I.P. Class 52	515	LF	$40.00	$20,600.00	515	$20,600
5	Fire Hydrant, Complete	2	EA	$4,000.00	$8,000.00	2	$8,000
6	Granular Trench Backfill	305	LF	$20.00	$6,100.00	305	$6,100
SUBTOTAL B - WATER MAIN IMPROVEMENTS					$68,750.00		$68,750
C.	**STORM SEWER IMPROVEMENTS**						
1	12" Storm Sewer, RCP	1,160	LF	$25.00	$29,000.00	0	$0
2	15" Storm Sewer, RCP	100	LF	$29.00	$2,900.00	0	$0
3	18" Storm Sewer, RCP	160	LF	$36.00	$5,760.00	0	$0
4	24" Storm Sewer, RCP	105	LF	$45.00	$4,725.00	0	$0
5	24" Diameter Inlet	7	EA	$1,200.00	$8,400.00	0	$0
6	48" Diameter Manhole	7	EA	$1,800.00	$12,600.00	0	$0
7	60" Diameter Manhole	3	EA	$2,500.00	$7,500.00	0	$0
8	Granular Trench Backfill	105	LF	$20.00	$2,100.00	0	$0
SUBTOTAL C - STORM SEWER IMPROVEMENTS					$72,985.00		$0
TOTAL SCHEDULE II - UNDERGROUND IMPROVEMENTS					$230,543.00		$157,558
SCHEDULE III - PAVEMENT IMPROVEMENTS							
1	2.0" HMA Surface Course, (Mix D, N50)	3,120	SY	$10.50	$32,760.00	3,120	$32,760
2	2.5" HMA Binder Course, (IL-19.0, N50)	3,120	SY	$12.50	$39,000.00	3,120	$39,000
3	9" Aggregate Base Course, CA-6, Type B	3,120	SY	$11.00	$34,320.00	3,120	$34,320
4	Geotextile Fabric	3,760	SY	$1.75	$6,580.00	3,760	$6,580
5	5" PCC Sidewalk, Complete	7,280	SF	$6.00	$43,680.00	7,280	$43,680
6	B4.12 Curb and Gutter, Complete	2,080	LF	$19.00	$39,520.00	2,080	$39,520
7	B6.12 Curb and Gutter, Complete (Islands)	770	LF	$22.00	$16,940.00	770	$16,940
TOTAL SCHEDULE III - PAVEMENT IMPROVEMENTS					$212,800.00		$212,800

Attachment: EOPC Phase 2 Letter of Credit- Link Crossing 01-06-2021 (Link Crossing Phase 2 Development Improvement Agreement)

ENGINEER'S OPINION OF PROBABLE COST
BOND REDUCTION PURPOSE
LINK CROSSING - PHASE 2
BUFFALO GROVE, ILLINOIS
(Final Engineering Plans, dated April 17, 2019)
January 6, 2021

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL	QUANTITY REMAINING	TOTAL REMAINI
SCHEDULE IV - MISCELLANEOUS							
1	Street Light, Single, Complete	5	EA	$3,500.00	$17,500.00	3	$10,500
2	Street Signage	1	LS	$2,000.00	$2,000.00	0	$0
TOTAL SCHEDULE IV - MISCELLANEOUS					$19,500.00		$10,500
SCHEDULE V - LANDSCAPING							
1	Landscaping, Common Areas	1	LS	$12,750.00	$12,750.00	1	$12,750
TOTAL SCHEDULE V - LANDSCAPING					$12,750.00		$12,750
TOTAL PROBABLE COST (SCHEDULES I-V)					$488,063.00		$406,078
TOTAL PROBABLE COST					**$488,063.00**		**$406,078**
TOTAL PROBABLE COST (15% RETENTION)					**$73,209.45**		**$73,209**

General Notes:

1. This Engineer's Opinion of Probable Cost (EOPC) is based on Final Engineering Plans, dated April 17, 2019, prepared by Mackie Consultants, LLC. This Engineer's Opinion of Probable Cost does not include demolition, tree removal, landscaping, utility relocations offsite roadway improvements, traffic control, dewatering, review fees, or permit fees or any other item not included.
2. The unit price is based on best available data and an understanding of the current market. Mackie Consultants cannot guarantee pricing or costs will not increase.
3. The above engineer's opinion of probable cost does not include additional items which may be necessary due to project phasing.

Prepared by: Mackie Consultants, LLC.
9575 W. Higgins Road, Suite 500
Rosemont, Illinois 60018
(847) 696-1400

Attachment: EOPC Phase 2 Letter of Credit- Link Crossing 01-06-2021 (Link Crossing Phase 2 Development Improvement Agreement)

FINAL ENGINEERING PLANS FOR

LINK CROSSING RESIDENTIAL DEVELOPMENT

VILLAGE OF BUFFALO GROVE, ILLINOIS

LEGEND

	EXISTING	PROPOSED
SANITARY SEWER	8" PVC	8" PVC
FORCE MAIN	FM	FM
STORM SEWER	12" RCP	12" RCP
UNDERDRAIN	UD UD	UD
MANHOLE		
CATCH BASIN		
INLET		
CLEANOUT		
WATER MAIN	WM 8"	8" WM
VALVE VAULT		
VALVE BOX		
FIRE HYDRANT		
FLARED END SECTION		
COMBINED SEWER		
STREET LIGHT/PARKING LOT LIGHT		
POWER POLE		
STREET SIGN		
FENCE		
GAS MAIN	G G	G
OVERHEAD LINE	OH OH	OH OH OH
TELEPHONE LINE	T T	T T T
ELECTRIC LINE	E E	E E E
CABLE TV LINE	CATV CATV	CATV CATV
HIGH WATER LEVEL		HWL XXX
NORMAL WATER LEVEL	NWL XXX	NWL XXX
CONTOUR LINE	XXX.XX	XXX.XX
TOP OF CURB ELEVATION	TC XXX.XX	TC XXX.XX
TOP OF DEPRESSED CURB	TDC XXX.XX	TDC XXX.XX
PAVEMENT ELEVATION	P XXX.XX	P XXX.XX
SPOT ELEVATION	XXX.XX	XXX.XX
FINISHED FLOOR ELEVATION	FF = XXX.XX	FF = XXX.XX
TOP OF FOUNDATION	TF = XXX.XX	TF = XXX.XX
GRADE AT FOUNDATION	GF = XXX.XX	GF = XXX.XX
HIGH OR LOW POINT		H = L
OVERLAND FLODD ROUTE		
PAVEMENT FLOW DIRECTION		2.0%
SWALE FLOW DIRECTION		
DEPRESSED CURB AND GUTTER		
REVERSE CURB AND GUTTER		

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10A TOWNHOME OWNERS ASSOCIATION STORM SEWER EXHIBIT
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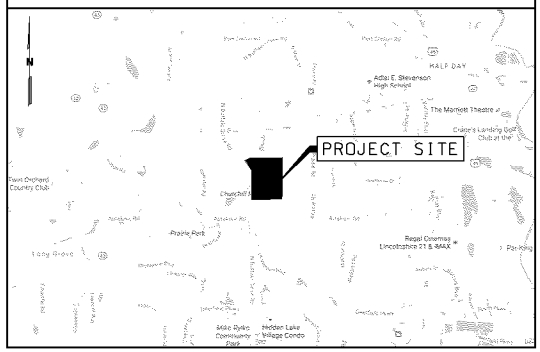
28 BUFFALO GROVE ROAD - CROSS SECTIONS
29 BUFFALO GROVE ROAD - CROSS SECTIONS
30 BUFFALO GROVE ROAD - CROSS SECTIONS

LOCATION MAP



ABBREVIATIONS

AC	ACRE	HWL	HIGH WATER ELEVATION	SAN	SANITARY SEWER
BC	BACK OF CURB	INL	INLET	SMH	SANITARY MANHOLE
BTM	BOTTOM	INV	INVERT	STA	STATION
CB	CATCH BASIN	LF	LINEAL FEET/FOOT	STM	STORM SEWER
CFS	CUBIC FEET PER SECOND	LP	LIGHT POLE	SY	SQUARE YARD
CY	CUBIC YARD	LT	LEFT	SWPP	STORMWATER POLLUTION PREVENTION PLAN
DIA	DIAMETER	L/W	LOWEST GRADE ADJACENT TO RETAINING WALL	TDC	TOP OF DEPRESSED CURB
DIWM	DUCTILE IRON WATER MAIN			TC	TOP OF CURB
EL	ELEVATION	MAX	MAXIMUM	TF	TOP OF FOUNDATION
EP	EDGE OF PAVEMENT	MH	STORM MANHOLE	T/W	TOP OF RETAINING WALL
FF	FINISHED FLOOR	MIN	MINIMUM	TYP	TYPICAL
FES	FLARED END SECTION	NWL	NORMAL WATER ELEVATION	VB	VALVE BOX
FT	FOOT/FEET	OCS	OUTLET CONTROL STRUCTURE	VC	VERTICAL CURVE
G	GUTTER ELEVATION	P	PAVEMENT ELEVATION	VV	VALVE VAULT
GF	GRADE AT FOUNDATION	PVC	POLYVINYL CHLORIDE PIPE	W	WALK ELEVATION
GR	GRADE RING ELEVATION	R	RADIUS	WM	WATER MAIN
HDPE	HIGH DENSITY POLYETHYLENE PIPE	RCP	REINFORCED CONCRETE PIPE	VPI	VERTICAL POINT OF INTERSECTION
		RIM	RIM ELEVATION		
HYD	FIRE HYDRANT	RT	RIGHT		
HMA	HOT MIX ASPHALT	ROW	RIGHT OF WAY		

BENCHMARKS

VILLAGE OF BUFFALO GROVE BENCHMARKS:

VBG BM 35:
23' NORTH OF CENTERLINE FOR JORDAN TERRACE, 30' EAST OF CENTERLINE FOR MERIDIAN WAY
ELEVATION = 699.76 [NAVD 88 DATUM]

VBG BM 02:
8.5' NORTHWEST OF ROW OF CARLYLE LANE AND 19' NORTH OF THE NORTHEAST CORNER OF 50 CARLYLE LANE
ELEVATION = 687.64 [NAVD 88 DATUM]

JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS
CALL JULIE 1-800-892-0123
Call 48 hours before you dig (Excluding Sat, Sun, & Holidays)
1-800-892-0123

DRAINAGE CERTIFICATION

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF SAID IMPROVEMENTS OR ANY PART THEREOF, OR THAT IF SUCH SURFACE WATER DRAINAGE WILL BE CHANGED, REASONABLE PROVISION HAS BEEN MADE FOR COLLECTION AND DIVERSION OF SUCH SURFACE WATERS INTO PUBLIC AREA OR DRAINS WHICH THE SUBDIVIDER HAS A RIGHT TO USE AND THAT SUCH SURFACE WATERS WILL BE PLANNED FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES SO AS TO REDUCE THE LIKELIHOOD OF DAMAGE TO THE ADJOINING PROPERTY, BECAUSE OF THE CONSTRUCTION OF THE IMPROVEMENTS.

ENGINEER'S SIGNATURE — ENGINEER'S SEAL

KEVIN J. MATRAY 062-058360 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

CLIENT: K Hovnanian Homes
1804 N. Naper Boulevard, Suite 200
Naperville, IL 60563
Phone: 630-210-0888
Fax: 630-946-6829

DATE	DESCRIPTION OF REVISION	BY
11/05/18	REVISED PER VILLAGE AND LCDOT COMMENTS	SDU
10/04/18	REVISED PER VILLAGE COMMENTS	KJM
09/17/18	REVISED PER LCDOT COMMENTS	KJM
08/21/18	REVISED PER IEPA COMMENTS	KJM
08/03/18	REVISED PER VILLAGE AND LCDOT COMMENTS	KJM
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
06/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	N.T.S.

COVER SHEET
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 1 OF 30

PROJECT NUMBER: 2014

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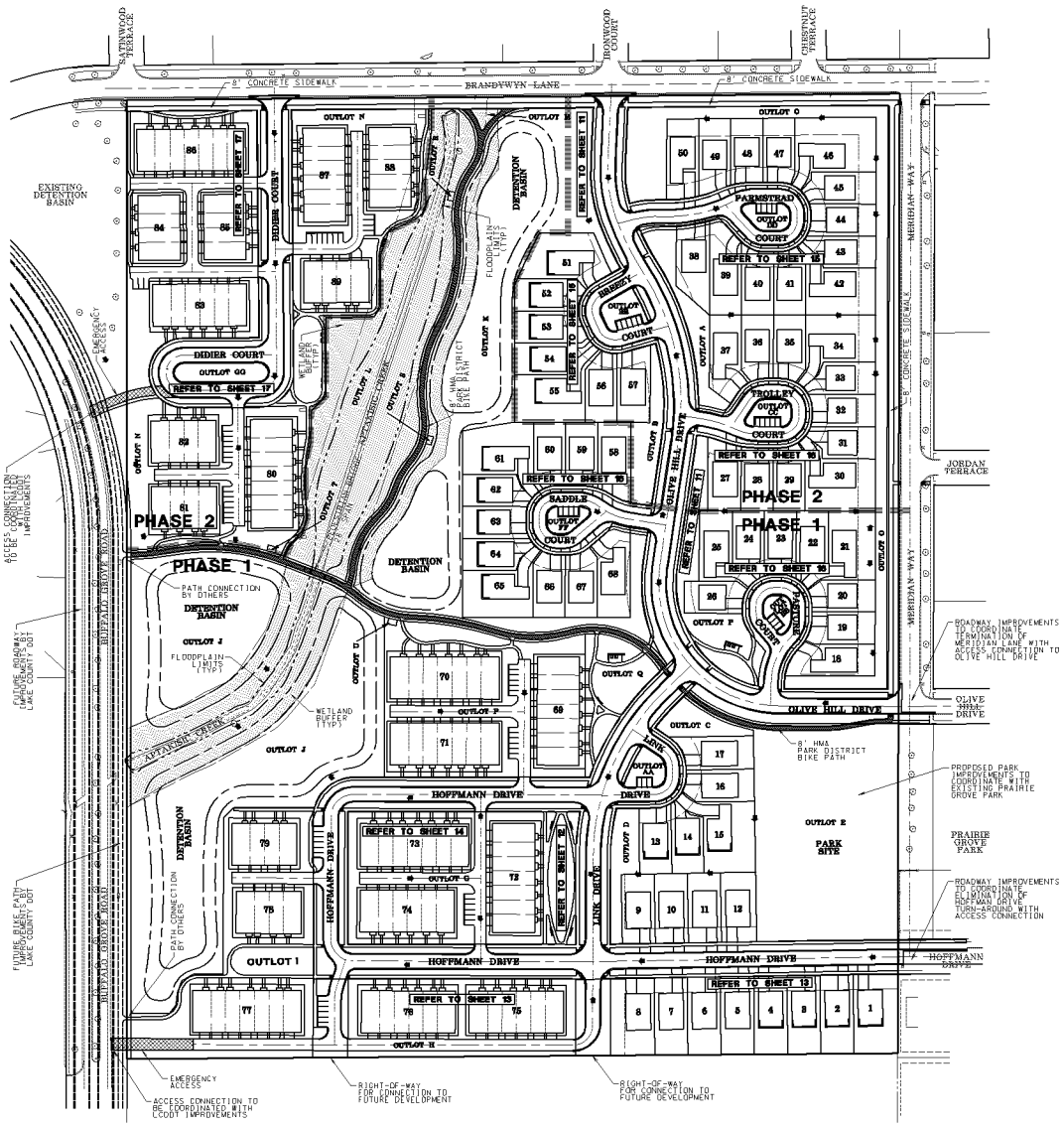
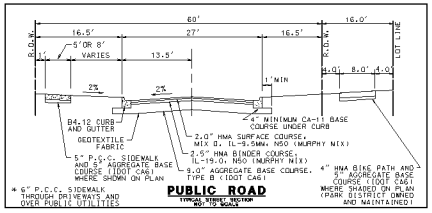
ILLINOIS FIRM LICENSE 184-002694

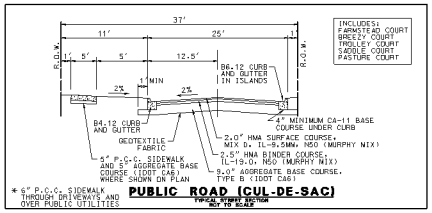


* PEDESTRIAN BRIDGE TO BE SUBMITTED FOR SHOP DRAWING APPROVAL UNDER SEPARATE COVER. BRIDGE ABUTMENTS TO BE LOCATED OUTSIDE OF THE PROPOSED BASE FLOOD ELEVATION.

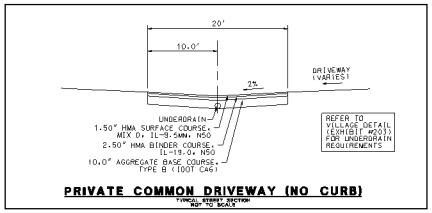
* HMA BIKE PATH FOR PARK DISTRICT HAS BEEN IDENTIFIED WITH SHADING



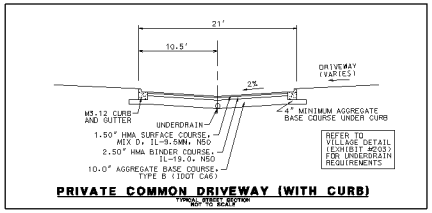
PUBLIC ROAD
TYPICAL RIGHT SECTION
NO TO SCALE



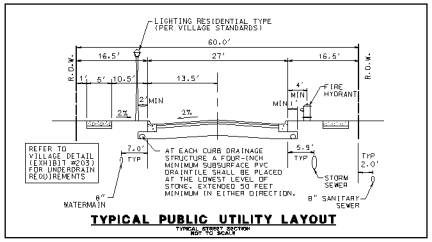
PUBLIC ROAD (CUL-DE-SAC)
TYPICAL RIGHT SECTION
NO TO SCALE



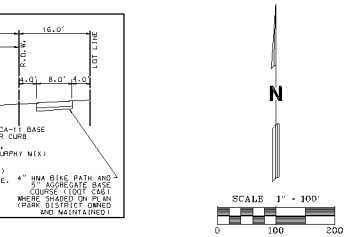
PRIVATE COMMON DRIVEWAY (NO CURB)
TYPICAL RIGHT SECTION
NO TO SCALE



PRIVATE COMMON DRIVEWAY (WITH CURB)
TYPICAL RIGHT SECTION
NO TO SCALE



TYPICAL PUBLIC UTILITY LAYOUT
TYPICAL RIGHT SECTION
NO TO SCALE



OVERALL SITE PLAN GENERAL NOTES

1. ALL DIMENSIONS ARE TO BACK OF CURB OR FACE OF BUILDING, UNLESS OTHERWISE NOTED.
2. ALL RADII ARE TO BACK OF CURB, UNLESS OTHERWISE NOTED.
3. ALL BUILDING DIMENSIONS ARE BASED ON ARCHITECTURAL PLANS. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS AND CONTACT THE ARCHITECT FOR ANY DISCREPANCIES.
4. ALL ONSITE PAVEMENT MARKINGS SHALL BE THERMOPLASTIC, UNLESS OTHERWISE NOTED.
5. ALL PROPOSED PUBLIC ROAD CURB AND GUTTER SHALL BE B4.12 EXCEPT CUL-DE-SAC ISLAND CURB AND GUTTER SHALL BE B6.12. ALL CURB SHALL BE DEPRESSED WHERE SIDEWALK MEETS A STREET, UNLESS OTHERWISE INDICATED. CURB DEPRESSIONS SHALL MEET ADA REQUIREMENTS.
6. ALL CURB TAPERS SHALL BE 2.0' AT DRIVEWAYS AND SIDEWALKS. ALL TYPE II STORM SEWER STRUCTURES SHALL BE RAISED TO 6" HEIGHT AND THEN THE CURB TAPERED DOWN OVER A DISTANCE OF 5.0'.
7. ALL JOINTS MADE WITH EXISTING PAVEMENT, CURB, WALK OR CURB AND GUTTER ARE TO BE SAWCUT FULL DEPTH WITHIN 24 HOURS OF PLACEMENT, AND CLEANED AND FILLED IN ACCORDANCE TO IDOT STANDARDS
8. ALL CURB ISLANDS TO HAVE 1-FOOT MINIMUM RADIUS ON CORNERS, UNLESS OTHERWISE SHOWN.
9. SEE ARCHITECTURAL PLANS FOR DETAIL REGARDING PROPOSED HOME STRUCTURES.
10. SIGNS AND FENCES DEPICTED ON THIS PLAN ARE NOT APPROVED AND ARE SUBJECT TO REVIEW AND APPROVAL BY THE BUILDING COMMISSIONER AND IF NECESSARY, THE PLANNING & ZONING COMMISSION. SUBJECT TO APPLICABLE ORDINANCES.

LAKE COUNTY DIVISION OF TRANSPORTATION GENERAL NOTES

1. THE CONSTRUCTION, INCLUDING MATERIALS USED, OF THIS UTILITY AND FACILITY SHALL BE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF THE MOST RECENT EDITIONS OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, AND THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, INCLUDING ALL AMENDMENTS AND SUCESSOR DOCUMENTS TO THE AFOREMENTIONED DOCUMENTS AS PUBLISHED OR ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND/OR LCDOT UNLESS OTHERWISE STATED IN THESE ENGINEERING PLANS.
2. THE CONSTRUCTION OF THE UTILITY OR FACILITY SHALL ALSO BE IN ACCORDANCE WITH THE "LAKE COUNTY HIGHWAY UTILITY AND FACILITY PLACEMENT ORDINANCE", LATEST EDITION, AS AMENDED, OR ANY SUCCESSOR DOCUMENT OR DOCUMENTS THERETO.
3. THE LAKE COUNTY DIVISION OF TRANSPORTATION SHALL NOT BE HELD LIABLE FOR ANY ERRORS OR OMISSIONS IN THESE ENGINEERING PLANS OR FOR ANY ADDITIONAL WORK WHICH MAY BE NEEDED DUE TO ERRORS OR OMISSIONS IN THESE ENGINEERING PLANS.
4. THE PERMITTEE SHALL BE RESPONSIBLE TO ANY ADDITIONAL WORK, AND ALL COSTS THEREOF, REQUIRED BECAUSE OF ERRORS OR OMISSIONS IN THESE ENGINEERING PLANS AND FOR THE CORRECTION OF ANY CONSTRUCTION, MAINTENANCE, OR SAFETY PROBLEMS, WHICH BECOME APPARENT DURING CONSTRUCTION OR BY INSPECTION MADE BY THE RESIDENT ENGINEER OR THE LAKE COUNTY DIVISION OF TRANSPORTATION.
5. THE PERSON IN CHARGE SHALL NOTE ANY CHANGES FROM THESE ENGINEERING PLANS AND SHALL NOTIFY THE PERMIT DEPARTMENT OF LAKE COUNTY DIVISION OF TRANSPORTATION ABOUT ANY CHANGES THAT DEVIATE FROM THE INTENT OF THE ENGINEERING PLANS.

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DATE	DESCRIPTION OF REVISION	BY
08/03/18	REVISED PER VILLAGE AND LCDOT COMMENTS	KJM
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
06/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	1" = 100'

OVERALL SITE PLAN
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 2 OF 30

PROJECT NUMBER: 2014

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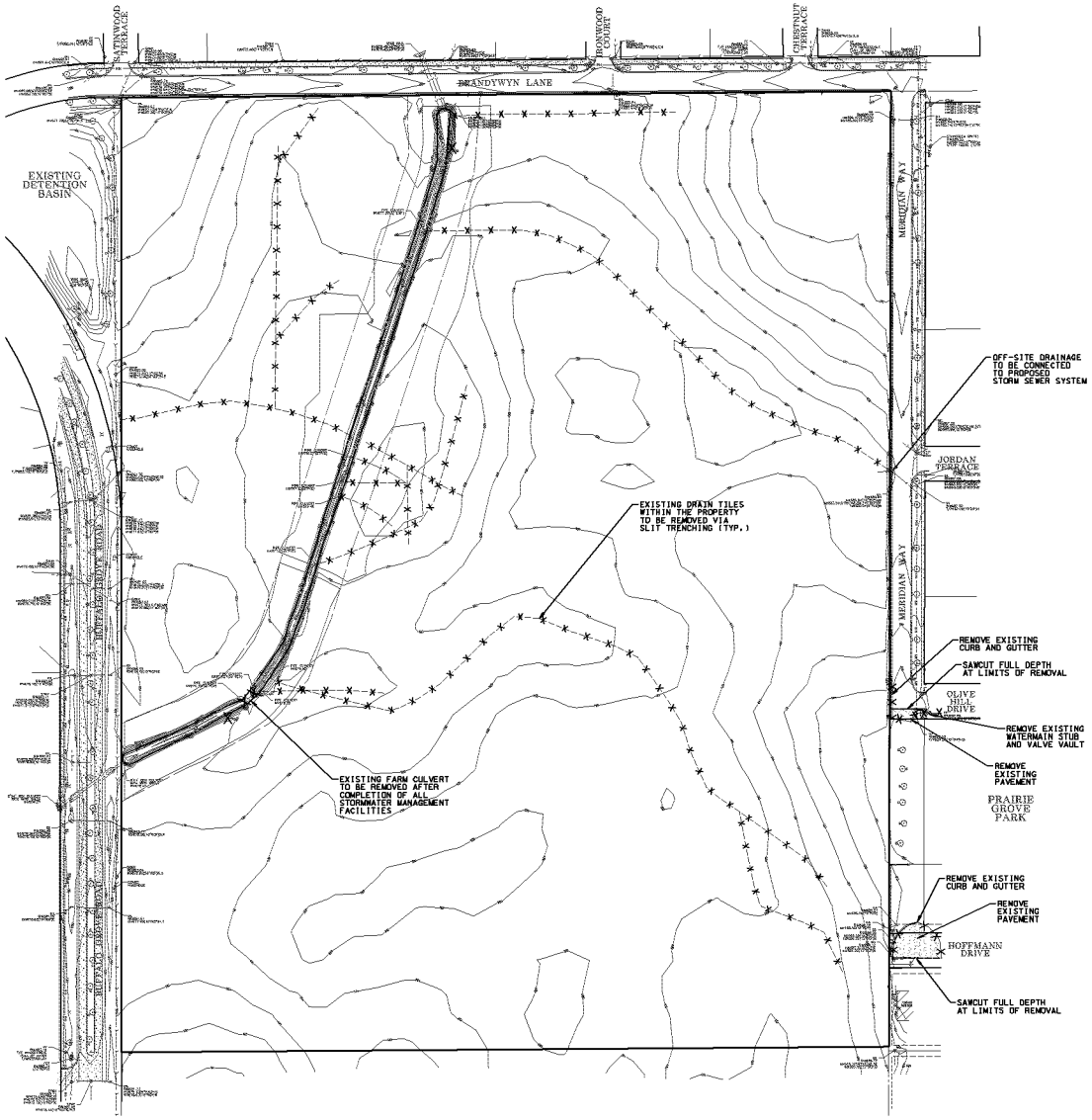
ILLINOIS FIRM LICENSE 184-002694



DEMOLITION LEGEND	
EXISTING HMA PAVEMENT TO BE REMOVED	
EXISTING CURB TO BE REMOVED	
EXISTING UTILITY TO BE REMOVED	WM
EXISTING UTILITY TO BE ABANDONED	WM
EXISTING UTILITY TO BE REMOVED OR ABANDONED AS NEEDED	WM
EXISTING STRUCTURE, TREE, MISCELLANEOUS OBJECT TO BE REMOVED	

N

SCALE 1" = 100'

0 100 200

DEMOLITION PLAN GENERAL NOTES:

1. CONTRACTOR SHALL PERFORM ALL DEMOLITION WORK IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR DEMOLITION WORK AND ASSOCIATED UTILITY DISCONNECT FEES.

3. THE MUNICIPALITY AND THE OWNER SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

4. THIS PLAN WAS PREPARED FROM TOPOGRAPHIC SURVEY PREPARED BY MACKIE CONSULTANTS, LLC, DATED JUNE 10, 2106 AND AVAILABLE RECORDS. CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES SHOWN AND NOT SHOWN BEFORE COMMENCING WORK AND NOTIFY THE ENGINEER OR OWNER OF ANY DISCREPANCIES.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO BEGINNING DEMOLITION WORK FOR THE EXACT LOCATIONS OF THE UTILITIES. THE CONTRACTOR SHALL ARRANGE FOR THE DISCONNECTION, PROTECTION OR RELOCATION OF ANY EXISTING UTILITY SERVICES, INCLUDING WATER, SEWER, GAS, ELECTRIC, TELEPHONE AND CABLE.

6. THE CONTRACTOR IS REQUIRED TO ASSURE HIMSELF OF LOCATION AND DEPTH OF EXISTING UTILITIES AND RELATED FEATURES AND SHALL REPORT AT ONCE TO THE OWNER OR ENGINEER ANY DISCREPANCIES WITH RESPECT TO INFORMATION INDICATED IN THE CONTRACT DOCUMENTS.

7. ALL HMA PAVEMENT AND BUILDING MATERIALS SHALL BE REMOVED TO AN OFFSITE LOCATION. GRAVEL BASE MATERIALS SHALL BE STOCKPILED ONSITE AND USED FOR TEMPORARY ROADS OR GENERAL FILL, AS APPROVED BY THE OWNER OR DEVELOPER. ANY BASE MATERIALS REMAINING UPON COMPLETION OF THE PROPOSED IMPROVEMENTS SHALL BE HAULED TO AN OFFSITE LOCATION.

8. ALL UTILITIES TO REMAIN AS NOTED SHALL BE ADJUSTED TO THE FINAL GRADES AS PROVIDED ON THE UTILITY PLANS.

9. GAS, TELEPHONE AND ELECTRIC DISTRIBUTION SYSTEM REMOVALS AND ADJUSTMENTS SHALL BE DONE BY RESPECTIVE UTILITY AND PAID FOR SEPARATELY BY OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THIS WORK INCIDENTAL TO THE CONTRACT. ALL ENVIRONMENTAL REMEDIATION WILL BE COMPLETED BY OWNER PRIOR TO START OF CONSTRUCTION.

10. ALL EXISTING UTILITIES ARE TO REMAIN IN SERVICE UNLESS SPECIFICALLY SHOWN TO BE REMOVED.

11. ALL UTILITIES AND STRUCTURES LOCATED WITHIN 5 FEET OF THE PROPOSED BUILDING LOCATION AND ASSOCIATED IMPROVEMENTS SHALL BE COMPLETELY REMOVED AND THE EXCAVATION BACKFILLED WITH SELECT GRANULAR MATERIAL. ALL REMAINING UTILITIES AND STRUCTURES LOCATED WITHIN THE PROJECT AREA SHALL BE REMOVED TO A DEPTH OF 2-FEET BELOW PROPOSED FINISHED GRADE.

12. ALL PIPES TO BE ABANDONED IN PLACE SHALL BE PLUGGED AT BOTH ENDS WITH A MINIMUM OF TWO (2) FEET NON-SHRINK CONCRETE MORTAR PLUGS. ANY STRUCTURES TO REMAIN SHALL HAVE THE BOTTOM BROKEN TO FACILITATE DRAINAGE AND FILLED WITH SAND OR PEA GRAVEL. ALL PIPES SHALL BE FILLED COMPLETELY OR REMOVED UNDER VILLAGE RIGHT OF WAY.

13. ALL EXISTING TREES, BRUSH, AND MISCELLANEOUS APPURTENANCES, SUCH AS FENCES, WHEEL STOPS, POLES LIGHTS AND MISCELLANEOUS DEBRIS SHALL BE HAULED TO AN OFFSITE LOCATION.

14. THE CONTRACTOR SHALL ENSURE THAT ALL ADJOINING AREAS, INCLUDING ADJACENT STREETS AND DRIVEWAYS, SHALL BE FREE OF DEBRIS AT ALL TIMES.

15. PAVEMENT, CURB AND GUTTER AND SIDEWALK SHALL BE SAWCUT FULL DEPTH AT THE LIMITS OF REMOVAL.

16. ALL TREES TO REMAIN SHALL BE PROTECTED WITH SILT FENCE OR ORANGE CONSTRUCTION FENCES. PROTECTIVE FENCING SHALL BE PLACED AT THE DRIP LINE OF THE TREE TO BE SAVED. CONSTRUCTION WITHIN THE FENCE WITHOUT PERMISSION FROM THE OWNER OR MUNICIPALITY IS STRICTLY PROHIBITED.

17. EXISTING WELLS ENCOUNTERED SHALL BE EXCAVATED, SEALED AND ABANDONED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS.

18. EXISTING SEPTIC FIELDS ENCOUNTERED SHALL BE EXPOSED, DRAINED AND ABANDONED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS.

19. ANY DAMAGE DONE TO EXISTING STRUCTURES OR OBJECTS NOT SHOWN TO BE REMOVED OR REPLACED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

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Fax: 630-946-6629

DATE	DESCRIPTION OF REVISION	BY
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
08/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	1" = 100'

EXISTING CONDITIONS AND DEMOLITION PLAN
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 3 OF 30

PROJECT NUMBER: 2014

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ILLINOIS FIRM LICENSE 184-002694

Attachment Link Crossing - Final Engineering Plan 11-05-18_r (Link Crossing Phase 2 Development Improvement Agreement)

WEST DETENTION BASIN

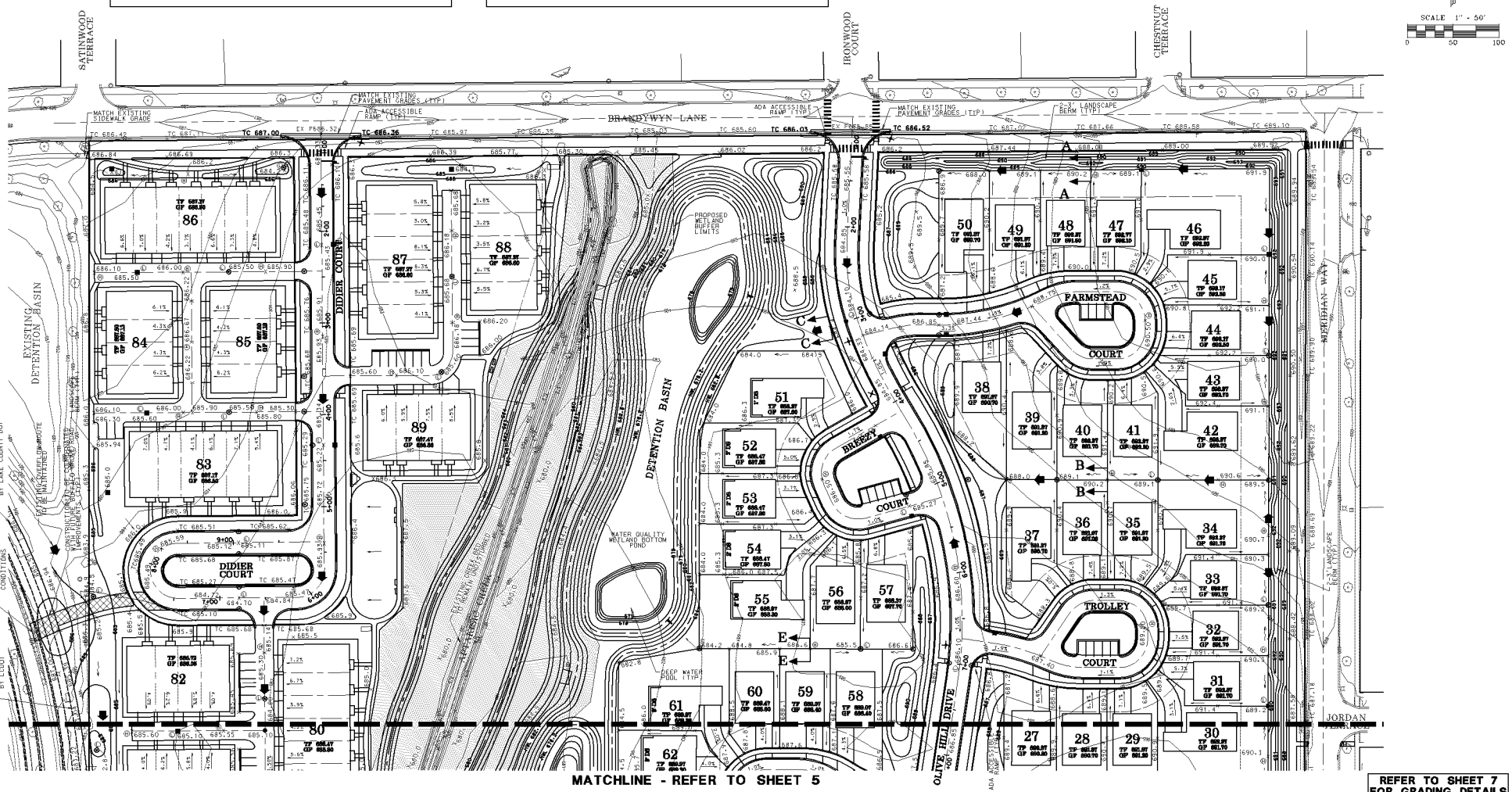
	100-YEAR	2-YEAR
STORMWATER VOLUME REQUIRED	= 3.58 AC-FT	1.39 AC-FT
STORMWATER VOLUME PROVIDED	= 4.20 AC-FT	1.39 AC-FT
NORMAL WATER ELEVATION	= 878.20 FT	
HIGH WATER ELEVATION	= 882.70 FT	879.81 FT
OVERFLOW WEIR ELEVATION	= 882.70 FT	
ALLOWABLE RELEASE RATE (100-YEAR)	= 1.39 CFS	0.37 CFS
ACTUAL RELEASE RATE (100-YEAR)	= 0.86 CFS	0.00 CFS

EAST DETENTION BASIN

	100-YEAR	2-YEAR
STORMWATER VOLUME REQUIRED	= 14.93 AC-FT	5.63 AC-FT
DEPRESSIONAL STORAGE REPLACEMENT REQUIRED *1	= 0.43 AC-FT	
STORMWATER VOLUME PROVIDED	= 16.69 FT	5.68 AC-FT
NORMAL WATER ELEVATION	= 678.20 FT	
HIGH WATER ELEVATION	= 682.73 FT	680.00 FT
OVERFLOW WEIR ELEVATION	= 682.70 FT	
ALLOWABLE RELEASE RATE (100-YEAR)	= 5.95 CFS	1.59 CFS
ACTUAL RELEASE RATE (100-YEAR) *2	= 9.23 CFS	0.00 CFS

*1 TOTAL RELEASE = 5.95 CFS ALLOWED - 3.28 CFS FROM OFFSITE OVERFLOW.
*2 HIGH WATER ELEVATION WITH BFE TAILWATER INCLUDES OVERFLOW DUE TO OFFSITE AREA. SEE STORM REPORT.

PROPOSED BASE FLOOD ELEVATION (BFE) RANGES FROM 681.66 (NORTH END OF SITE) TO 681.11 (SOUTH END OF SITE) CONTINGENT ON REVIEW OF LAKE COUNTY SMC



REFER TO SHEET 7 FOR GRADING DETAILS AND GENERAL NOTES

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DATE	DESCRIPTION OF REVISION	BY
11/05/18	REVISED PER LCDOT COMMENTS	SDU
09/17/18	REVISED PER LCDOT COMMENTS	KJM
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06/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	1"=50'

GRADING PLAN - NORTH
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 4 OF 30

PROJECT NUMBER: 2014

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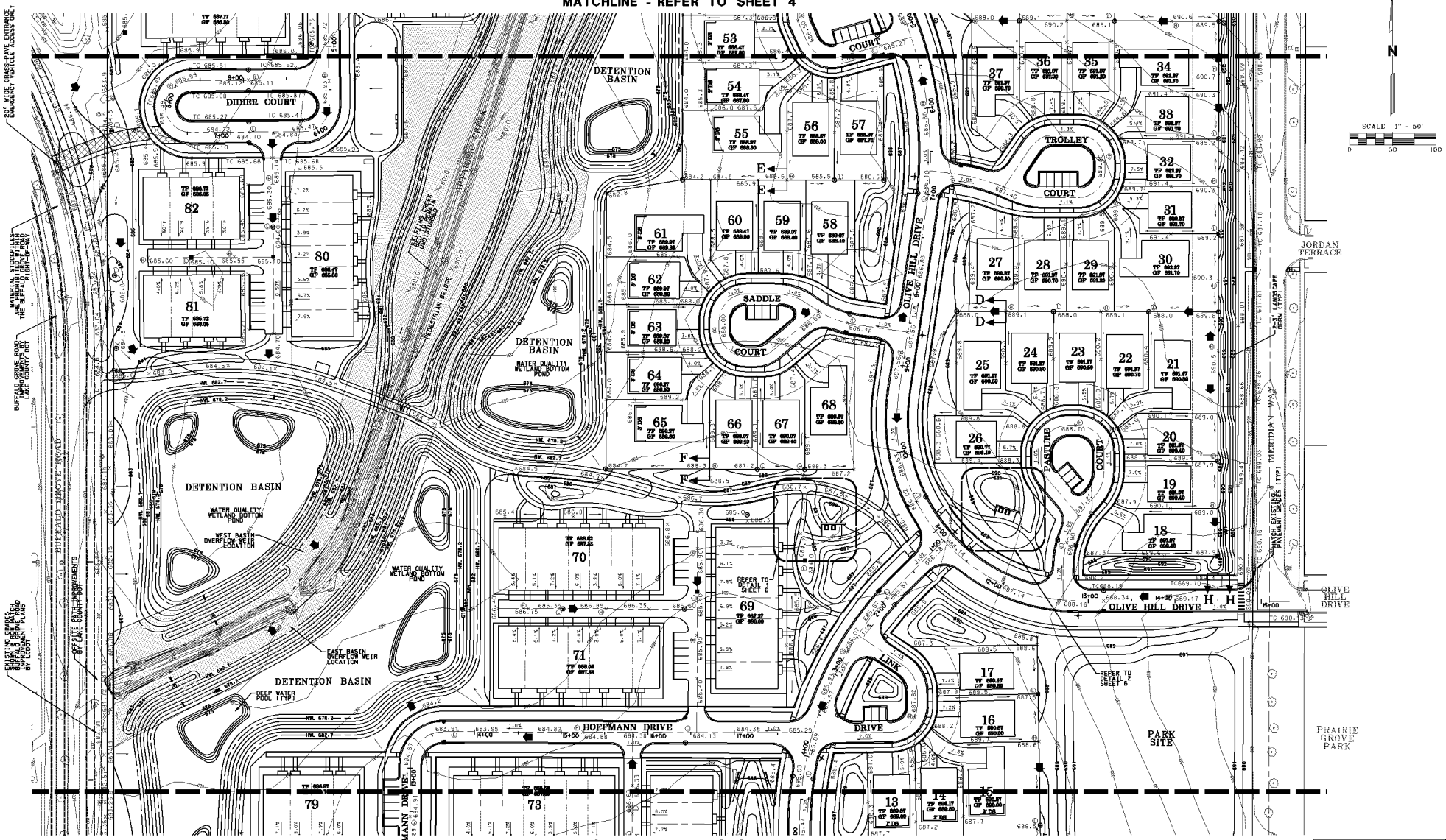
ILLINOIS FIRM LICENSE 184-002694

Attachment Link Crossing - Final Engineering Plan 11-05-18_r (Link Crossing Phase 2 Development Improvement Agreement)

MATCHLINE - REFER TO SHEET 4



MATCHLINE - REFER TO SHEET 6

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DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	1"=50'

GRADING PLAN - CENTRAL
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 5 OF 30

PROJECT NUMBER: 2014

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ILLINOIS FIRM LICENSE 184-002694

MATCHLINE - REFER TO SHEET 5

EXISTING CREEK BED TO REMAIN UNDISTURBED

DEEP WATER POOL (TYP)

EAST BASIN OVERFLOW WEIR LOCATION

DETENTION BASIN

WATER QUALITY KEY (WETLAND POND)

HOFFMANN DRIVE

LINK DRIVE

OLIVE HILL DRIVE

PARK SITE

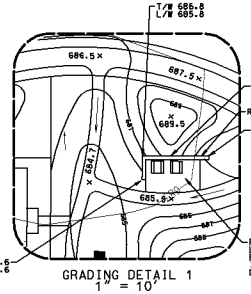
BUFFALO GROVE ROAD

20' WIDE GRASS-PAVE ENTRANCE EMERGENCY VEHICLE ACCESS ONLY

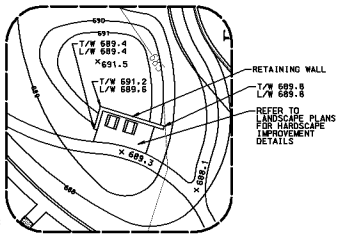
100-YEAR OVERFLOW ROUTE ALONG SOUTH PROPERTY LINE PROVIDED WITHIN STORM SEWER SYSTEM. REFER TO STORMWATER MANAGEMENT REPORT.

CONSTRUCTION TO BE COORDINATED WITH BUFFALO GROVE ROAD IMPROVEMENTS (TYP)

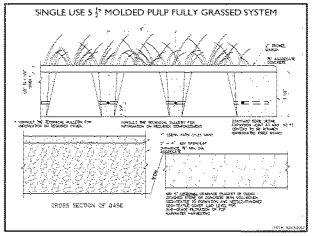
SCALE 1" - 50'



GRADING DETAIL 1
1" = 10'



GRADING DETAIL 2
1" = 10'



20' WIDE GRASS-PAVE PAVEMENT DETAIL

REFER TO SHEET 7 FOR GRADING DETAILS AND GENERAL NOTES

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DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	1"=50'

GRADING PLAN - SOUTH
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 6 OF 30

PROJECT NUMBER: 2014

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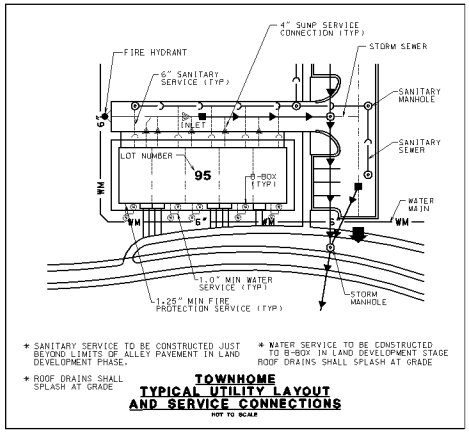
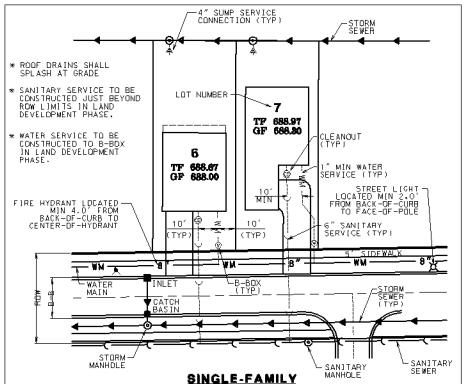
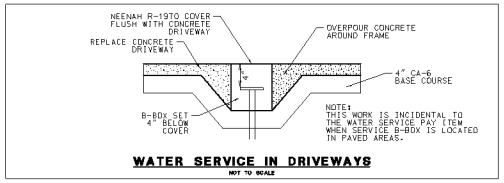


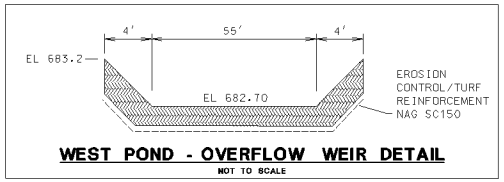
TOWNHOME
TYPICAL UTILITY LAYOUT AND SERVICE CONNECTIONS
NOT TO SCALE



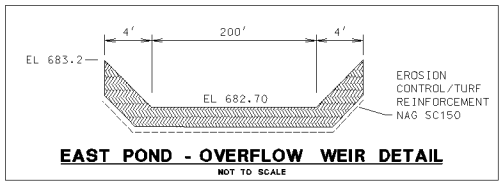
SINGLE-FAMILY
TYPICAL UTILITY LAYOUT AND SERVICE CONNECTIONS
NOT TO SCALE



WATER SERVICE IN DRIVEWAYS
NOT TO SCALE



WEST POND - OVERFLOW WEIR DETAIL
NOT TO SCALE



EAST POND - OVERFLOW WEIR DETAIL
NOT TO SCALE

GRADING PLAN GENERAL NOTES

1. EXISTING TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS ON JUNE 10, 2016. CONTRACTOR SHALL FIELD CHECK EXISTING CONDITIONS PRIOR TO START OF CONSTRUCTION AND NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES.

2. ALL DISTURBED AREAS SHALL BE RESTORED WITH 6-INCHES OF TOPSOIL AND SEEDED.

3. EXCAVATION AND EMBANKMENT SHALL BE PERFORMED PER THE DETAILED SPECIFICATIONS AND THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

4. ALL CURB ELEVATIONS SHOWN ARE TO BE TOP OF CURB. ALL GUTTER ELEVATIONS ARE 4" BELOW TOP OF CURB ELEVATION FOR PUBLIC ROADWAYS AND 6" BELOW TOP OF CURB ELEVATION FOR ISLANDS, UNLESS OTHERWISE NOTED.

5. DRIVEWAY SLOPES FROM THE RIGHT-OF-WAY SHALL BE A MINIMUM OF 3% AND A MAXIMUM OF 8%.

6. GRADING INDICATED MAY NEED TO BE ADJUSTED BASED ON FIELD CONDITIONS. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES WITH FIELD CONDITIONS PRIOR TO FINE GRADING.

7. BUILDING AREA INDICATED IS APPROXIMATE AND REPRESENTS ONE POSSIBLE OPTION OF HOME. GRADING MAY NEED TO BE ADJUSTED AS OTHER HOMES ARE SOLD.

8. CONTRACTOR SHOULD TAKE SPECIAL NOTE THAT THERE ARE VARYING SETBACKS WITHIN THE CUL-DE-SAC AREAS. THE LOCATION OF THE BUILDING PAD MUST BE CONSTRUCTED TO CORRESPOND TO THE LOCATIONS INDICATED.

9. ALL DRAIN TILES ENCOUNTERED DURING MASS GRADING/UTILITY WORK MUST BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM. A RECORD MUST BE KEPT, OF ANY DRAIN TILE ENCOUNTERED, TO BE INCLUDED IN RECORD DRAWINGS.

10. OVERFLOW DRAINAGE ROUTES AND SWALES MUST BE INSTALLED AT THE ELEVATION AND LOCATION SHOWN.

11. DO NOT INTERRUPT DRAINAGE FROM OFF SITE DURING CONSTRUCTION OPERATIONS. PROVIDE TEMPORARY DRAINAGE DITCHES WHERE REQUIRED.

12. CONTRACTOR SHALL MEET EXISTING GROUND ELEVATIONS AT PROPERTY LINE, UNLESS OTHERWISE NOTED AND THE APPROPRIATE EASEMENTS OR PERMISSION HAS BEEN OBTAINED.

SERVICE NOTES:

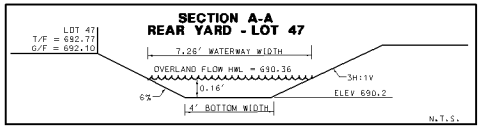
DOMESTIC WATER SERVICE SHALL BE 1" TYPE K, COPPER TUBING INCLUDING MUELLER H-15000 CORPORATION STOP, MUELLER H-15154 CURB STOP COUPLING, AND MUELLER H-10302 SERVICE BOX, ALL FLARE TYPE FITTINGS ARE REQUIRED.

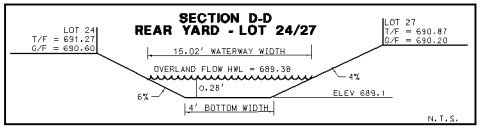
DOMESTIC WATER SERVICE TO SPLIT FOR FIRE PROTECTION SERVICE OUTSIDE FOUNDATION WITH SEPARATE B BOX.

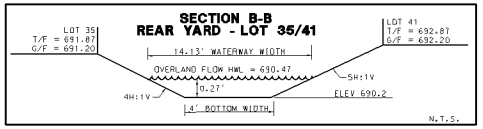
FIRE PROTECTION WATER SERVICE FOR MULTI-FAMILY SHALL BE 1.25" TYPE K, COPPER TUBING INCLUDING MUELLER H-15000 CORPORATION STOP, MUELLER H-15154 CURB STOP COUPLING, AND MUELLER H-10302 SERVICE BOX. USE FORD FC-202 STAINLESS STEEL BAND FOR 1 1/4" AND LARGER.

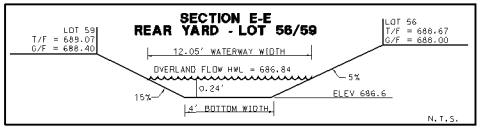
WATER SERVICE B-BOX TO TYPICALLY BE WITHIN PUBLIC ROW OR PRIVATE EASEMENT WHEN APPLICABLE AND WHEN LOCATED OUTSIDE OF PAVED AREAS WHEN POSSIBLE. IF B-BOX IS IN DRIVEWAY OR SIDEWALK USE NEENAH R-1970 COVER AND FOLLOW DETAIL.

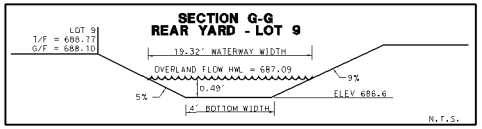
SANITARY SERVICE SHALL BE 6" PVC AT MINIMUM SLOPE OF 1.00%

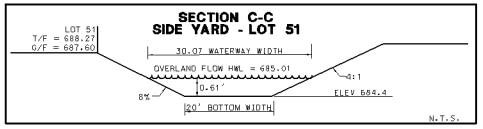


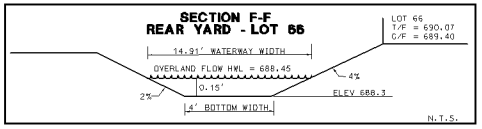


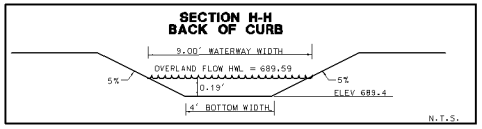


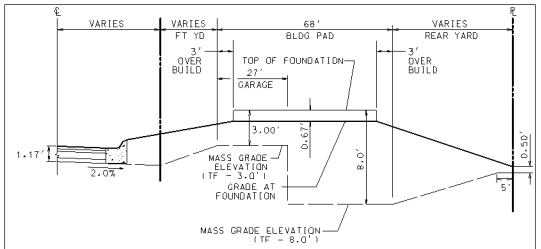




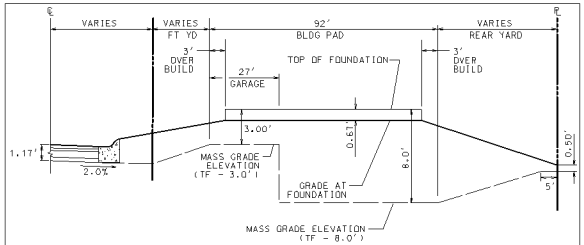




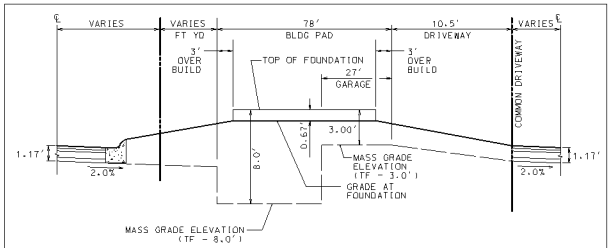




SINGLE FAMILY
MASS GRADING CROSS-SECTION



SINGLE FAMILY (FLAG LOT)
MASS GRADING CROSS-SECTION



MULTI-FAMILY
MASS GRADING CROSS-SECTION

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DATE	DESCRIPTION OF REVISION	BY
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
06/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	N.T.S.

GRADING DETAILS
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 7 OF 30

PROJECT NUMBER: 2014

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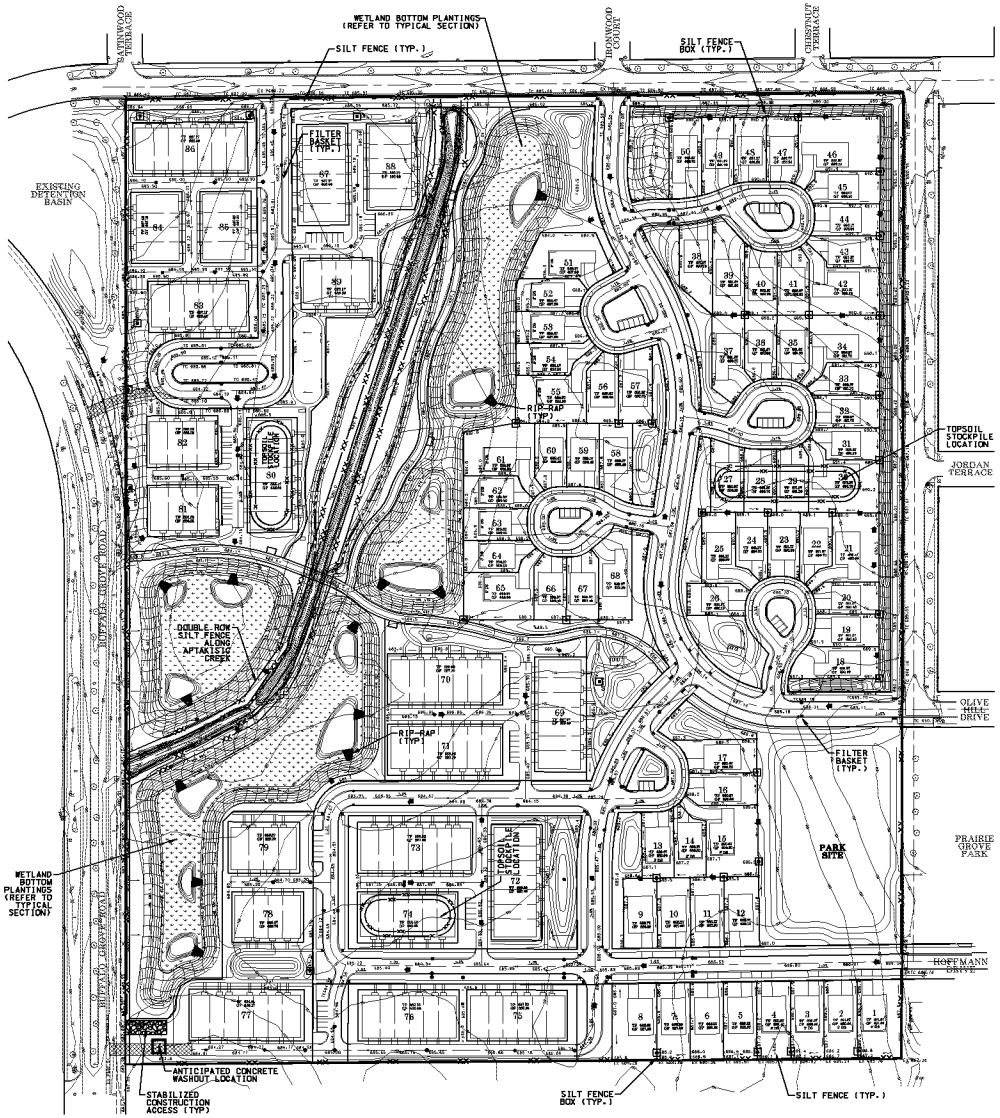
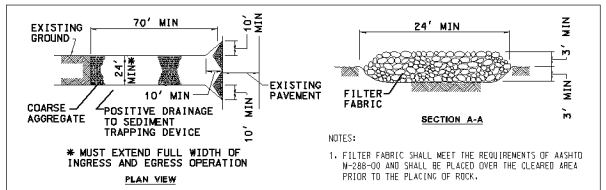




NOTES:

1. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF AASHTO M-288-00 AND SHALL BE PLACED OVER THE CLEARED AREA PRIOR TO THE PLACING OF ROCK.
2. ROCK OR RECLAIMED CONCRETE SHALL BE IDOT COARSE AGGREGATE GRADATION CA-1, CA-2, CA-3 OR CA-4.
3. STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED PRIOR TO ONSET OF CONSTRUCTION OPERATIONS AND SHALL BE MAINTAINED THROUGHOUT THE PROJECT DURATION.
4. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHALL BE CONSTRUCTED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
5. IF WASH RACKS ARE USED THEY SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.

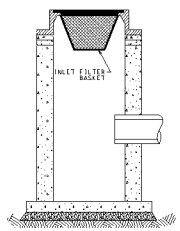
STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE

N

SCALE 1" - 100'

0 100 200



NOTES:

1. AN INLET FILTER BASKET SHALL BE INSTALLED IN ALL OPEN FRAME STRUCTURES AND SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED.
2. THE INLET BASKET SHALL BE CLEANED ON A WEEKLY BASIS AND AFTER ANY RAINFALL EVENT.
3. INLET FILTER BASKETS SHALL BE "CATCH-ALL" BY WARM-MAC MANUFACTURING OR APPROVED EQUAL.

INLET PROTECTION - FILTER BASKET DETAIL

NOT TO SCALE

TOPSOIL STOCKPILES TO BE LOCATED ON LOTS INDICATED WITH PILE LIMITS RESTRICTED TO ALLOW FOR UTILITY SERVICE INSTALLATION

PARK SITE AND OPEN SPACES TO BE IDOT CLASS 1 SEED (200 LBS/ACRE)

SWPPP LEGEND

INLET PROTECTION - FILTER BASKET	
INLET PROTECTION - SILT FENCE BOX	
CONCRETE WASH-OUT	
STABILIZED CONST. ENTRANCE	
SILT FENCE	—XX—
RIP-RAP	
EROSION CONTROL BLANKET	
TOPSOIL STOCKPILE	

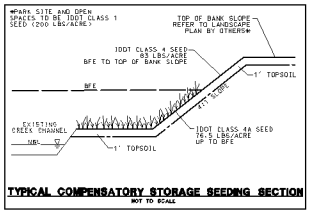
THE FOLLOWING ITEMS HAVE NOT BEEN SPECIFICALLY SHOWN BUT ARE REQUIRED AS PART OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND MUST BE INCORPORATED DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED.

- TEMPORARY AND/OR PERMANENT STABILIZATION
- WASTE MANAGEMENT
- CONCRETE WASTE MANAGEMENT (CONCRETE WASH-OUT FACILITY)
- SEDIMENT TRAPS
- DUST CONTROL
- ALLOWABLE DEWATERING OPERATIONS.

DETAILS AND INFORMATION REGARDING THESE MEASURES HAVE BEEN PROVIDED ON SHEET 9.

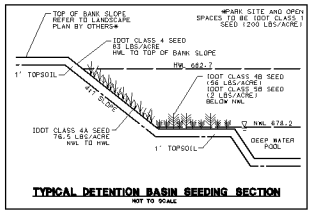
THE OWNER AND CONTRACTORS SHALL ALSO REVIEW ALL CONSTRUCTION PRACTICES TO MINIMIZE THE POTENTIAL IMPACTS TO STORMWATER DISCHARGES FROM THE SITE. SPECIFIC CONSIDERATIONS ARE PROVIDED ON PAGE FOR THE FOLLOWING ACTIVITIES:

- CONCRETE CUTTING
- VEHICLE STORAGE AND MAINTENANCE
- MATERIAL STORAGE
- SANITARY STATIONS
- SPILL PREVENTION



TYPICAL COMPENSATORY STORAGE SEEDING SECTION

NOT TO SCALE



TYPICAL DETENTION BASIN SEEDING SECTION

NOT TO SCALE

GENERAL INFORMATION

THIS STORM WATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN DEVELOPED TO FULFILL ONE OF THE REQUIREMENTS OF THE GENERAL NPDES PERMIT NO. ILR10 FOR THE DISCHARGE OF STORM WATER ASSOCIATED WITH CONSTRUCTION PROJECTS DISTURBING ONE ACRE OR MORE. THE OWNER AND CONTRACTORS SHALL COMPLY WITH ALL REQUIREMENTS OF THE ILR10 FOR ALL SUCH CONSTRUCTION PROJECTS. THE STORM WATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY FROM THIS SITE ARE SUBJECT TO THE CONDITIONS AND REQUIREMENTS OF THE ILR10 GENERAL NPDES PERMIT, MODIFIED DATE APRIL 30, 2014.

ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH "PROCEDURES AND STANDARDS FOR URBAN SOIL AND EROSION AND SEDIMENTATION CONTROL IN ILLINOIS" AND THE "ILLINOIS URBAN MANUAL."

THE EXECUTED OWNER CERTIFICATION AND THE CONTRACTOR CERTIFICATIONS SHALL BE KEPT ONSITE WITH THE APPROVED SWPPP.

SWPPP AVAILABILITY

THE OWNER SHALL RETAIN A COPY OF THE SWPPP AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

KEEPING PLANS CURRENT

THE PERMITTEE SHALL AMEND THE PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE PLAN OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY CONTROLLING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SITE ACTIVITY. IN ADDITION, THE PLAN SHALL BE AMENDED TO IDENTIFY ANY NEW CONTRACTOR AND/OR SUBCONTRACTOR THAT WILL IMPLEMENT A MEASURE OF THE PLAN. AMENDMENTS TO THE PLAN MAY BE REQUIRED BY THE MUNICIPALITY, OWNER, OR OTHER REVIEWING AGENCY. COPIES OF THE AMENDMENTS SHALL BE KEPT ONSITE AS PART OF THE SWPPP.

RETENTION OF RECORDS

THE OWNER SHALL RETAIN COPIES OF THIS PLAN AND ALL REPORTS AND NOTICES REQUIRED BY THIS PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT, FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE PERMIT COVERAGE EXPIRES OR IS TERMINATED. THIS PERIOD MAY BE EXTENDED BY THE REQUEST OF THE AGENCY AT ANY TIME. IN ADDITION, THE OWNER SHALL RETAIN A COPY OF THE PLAN REQUIRED BY THIS PERMIT AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

ILR10 NOTICE OF TERMINATION GUIDANCE

WHEN A SITE HAS BEEN FINALLY STABILIZED AND ALL STORM WATER DISCHARGES FROM CONSTRUCTION SITES THAT ARE AUTHORIZED BY THE ILR10 PERMIT ARE ELIMINATED, THE OWNER OF THE FACILITY MUST SUBMIT A COMPLETED NOTICE OF TERMINATION THAT IS SIGNED IN ACCORDANCE WITH PART II.F.1.a (SIGNATORY REQUIREMENTS) OF THE PERMIT.

BEST MANAGEMENT PRACTICES FOR POST CONSTRUCTION STORMWATER MANAGEMENT

THE FOLLOWING POST-CONSTRUCTION PRACTICES HAVE BEEN INCLUDED WITHIN THIS STORMWATER POLLUTION PREVENTION PLAN TO CONTROL POLLUTION UPON COMPLETION OF CONSTRUCTION ACTIVITIES:

- DEEP WATER DETENTION PONDS WITH NATIVE VEGETATION PLANTED ON SIDE SLOPES;
- DRY BOTTOM DETENTION PONDS WITH NATIVE PLANTINGS;
- WATER-QUALITY DETENTION BASIN WITH EMERGENT AND NATIVE PLANTINGS;
- POND INLET/OUTLET DESIGN TO PREVENT SHORT-CIRCUITING OF FLOW;
- SEDIMENT POOLS AT DISCHARGE POINTS IN WATER QUALITY PONDS;
- PERMANENT LEVEL SPREADERS;
- VEGETATED SWALES WITH NATIVE PLANTINGS;
- VEGETATED SWALES WITH NATIVE PLANTINGS AND UNDERDRAINS;
- VEGETATED SWALES WITH TURF GRASSES;
- FILTER STRIPS, 25-FOOT MINIMUM, WITH NATIVE GRASSES;
- FILTER STRIPS, 25-FOOT MINIMUM WITH TURF GRASSES;
- INFILTRATION BASINS;
- INFILTRATION TRENCHING;
- PERMEABLE PAVERS/PERMEABLE PAVEMENT;
- CDS OR EQUAL MANUFACTURED STORMWATER TREATMENT SYSTEM;
- RAIN BARRELS;
- DRY WELLS;
- RIP RAP AT STORMWATER DISCHARGE POINTS;
- HOUSE DOWNSPOUTS POSITIONED TO DISCHARGE ON GRADE VEGETATED/PERVIOUS GROUND COVER.

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DATE	DESCRIPTION OF REVISION	BY
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
08/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	1" = 100'

STORMWATER POLLUTION PREVENTION PLAN
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 8 OF 30

PROJECT NUMBER: 2014

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ILLINOIS FIRM LICENSE 184-002694

Attachment Link Crossing - Final Engineering Plan 11-05-18_r (Link Crossing Phase 2 Development Improvement Agreement)

GENERAL INFORMATION

SITE DESCRIPTION

A. THIS PLAN COVERS THE CONSTRUCTION OF THE RESIDENTIAL SUBDIVISION AND ALL ASSOCIATED EARTHWORK, UNDERGROUND UTILITY AND PAVEMENT IMPROVEMENTS.

B. THE FOLLOWING IS A DESCRIPTION OF THE INTENDED SEQUENCE OF CONSTRUCTION ACTIVITIES:
1. INSTALL PERIMETER SOIL EROSION AND SEDIMENT CONTROL MEASURES:
   - SELECTIVE VEGETATION REMOVAL FOR SILT FENCE INSTALLATION
   - PERIMETER SILT FENCE
   - CONSTRUCTION FENCING AROUND AREAS NOT TO BE DISTURBED
   - STABILIZED CONSTRUCTION ENTRANCE
2. DEMOLITION OF EXISTING STRUCTURES
3. TREE REMOVAL WHERE NECESSARY (CLEAR & GRUB).
4. CONSTRUCT SEDIMENT TRAPPING DEVICES (SEDIMENT TRAPS, BASINS).
5. CONSTRUCT DETENTION FACILITIES AND OUTLET CONTROL STRUCTURE WITH OUTLET PROTECTION NOTED ON PLAN.
6. STRIP TOPSOIL, STOCKPILE TOPSOIL AND GRADE SITE.
7. TEMPORARILY STABILIZE TOPSOIL STOCKPILES (INCLUDING SEED AND SILT FENCE AROUND THE PERIMETER).
8. INSTALL STORM SEWER, SANITARY SEWER, WATER MAIN.
9. INSTALL INLET PROTECTION WITHIN ALL STORM STRUCTURES WITH "OPEN" GRATES.
10. PERMANENTLY STABILIZE DETENTION BASINS WITH SEED AND EROSION CONTROL BLANKET OR AS SHOWN ON THE APPROVED LANDSCAPE PLAN.
11. TEMPORARILY STABILIZE ALL AREAS INCLUDING AREAS THAT HAVE REACHED TEMPORARY GRADE WITHIN 7 DAYS OF LAST CONSTRUCTION ACTIVITY IN THAT AREA.
12. INSTALL ROADWAYS.
13. PERMANENTLY STABILIZE GRASSY AREAS.
14. REMOVE ALL TEMPORARY CONTROL MEASURE AFTER SITE IS STABILIZED AND RE-SEED AREAS DISTURBED BY THEIR REMOVAL.

C. THE SITE HAS A TOTAL ACREAGE OF APPROXIMATELY 50 ACRES. CONSTRUCTION ACTIVITY WILL DISTURB APPROXIMATELY 50 ACRES OF THE SITE.

D. THE RUNOFF COEFFICIENT FOR THE SITE FOLLOWING COMPLETION OF CONSTRUCTION ACTIVITIES IS: COMPOSITE "C" = 0.73. THE EXISTING SOILS FROM THE SITE MAINLY CONSIST OF PELLA SILTY CLAY AND WONDELEIN SILT LOAM.

E. PLEASE REFER TO PAGE 8 FOR A MAP INDICATING DRAINAGE PATTERNS AND APPROXIMATE SLOPES ANTICIPATED BEFORE AND AFTER MAJOR GRADING ACTIVITIES, LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AND CONTROLS TO PREVENT OFFSITE SEDIMENT TRACKING, AREAS OF SOIL DISTURBANCE, THE LOCATION OF MAJOR STRUCTURAL AND NON-STRUCTURAL CONTROLS IDENTIFIED IN THE PLAN, THE LOCATION OF AREAS WHERE STABILIZATION PRACTICES ARE EXPECTED TO OCCUR, SURFACE WATERS (INCLUDING WETLANDS), AND LOCATIONS WHERE STORM WATER IS DISCHARGED TO A SURFACE WATER.

F. THE RECEIVING WATER OF THE PROPOSED DEVELOPMENT IS THE APTAKISIC CREEK.

G. POTENTIAL SOURCES OF POLLUTION ASSOCIATED WITH THIS CONSTRUCTION ACTIVITY MAY INCLUDE:
- SEDIMENT FROM DISTURBED SOILS
- FUEL TANKS
- WASTE CONTAINERS
- OIL OR OTHER PETROLEUM PRODUCTS
- TAR
- DETERGENTS
- PAINTS
- CONSTRUCTION DEBRIS
- CONCRETE AND CONCRETE TRUCKS
- SANITARY STATIONS
- STAGING AREAS
- CHEMICAL STORAGE AREAS
- ADHESIVES
- SOLVENTS
- FERTILIZERS
- RAW MATERIALS (I.E. BAGGED PORTLAND CEMENT)
- LANDSCAPE WASTE
- LITTER

ADDITIONAL MEASURES REQUIRED:

1. STABILIZATION: STABILIZATION PRACTICES MUST BE INITIATED WITHIN ONE (1) WORKING DAY OF PERMANENT OR TEMPORARY CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE BUT NOT LATER THAN 14 DAYS FROM THE INITIATION OF STABILIZATION WORK IN ANY AREA. EXCEPTIONS TO THESE TIME FRAMES ARE SPECIFIED AS PROVIDED BELOW:
   A. WHERE THE INITIATION OF STABILIZATION MEASURES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
   B. ON AREAS WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED AND WILL RESUME AFTER 14 DAYS, A TEMPORARY STABILIZATION METHOD CAN BE USED.
   C. THE FOLLOWING PRACTICES ARE ACCEPTABLE STABILIZATION MEASURES:
      - PERMANENT SEEDING: IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN.
      - TEMPORARY SEEDING: MAY CONSIST OF SPRING OATS (100 LBS/ACRE) AND/OR WHEAT OR CEREAL RYE (150 LBS/ACRE).
      - MULCHING
      - GEOTEXTILES
      - SODDING
      - VEGETATIVE BUFFER STRIPS

   THE APPROPRIATE STABILIZATION MEASURE SHALL BE DETERMINED BASED ON SITE CONDITIONS AT THE TIME THE CONSTRUCTION ACTIVITY HAS CEASED, INCLUDING BUT NOT LIMITED TO WEATHER CONDITIONS AND LENGTH OF TIME MEASURE MUST BE EFFECTIVE.

2. WASTE MANAGEMENT

   NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT. ALL WASTE MATERIALS SHOULD BE COLLECTED AND STORED IN APPROVED RECEPTACLES. NO WASTES SHOULD BE PLACED IN ANY LOCATION OTHER THAN IN THE APPROVED CONTAINERS APPROPRIATE FOR THE MATERIALS BEING DISCARDED. THERE SHOULD BE NO LIQUID WASTES DEPOSITED INTO DUMPSTERS OR OTHER CONTAINERS WHICH MAY LEAK. RECEPTACLES WITH DEFICIENCIES SHOULD BE REPLACED AS SOON AS POSSIBLE AND THE APPROPRIATE CLEAN-UP PROCEDURE SHOULD TAKE PLACE. IF NECESSARY, CONSTRUCTION WASTE MATERIAL IS NOT TO BE BURIED ONSITE. WASTE DISPOSAL SHOULD COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS

   ONSITE HAZARDOUS MATERIAL STORAGE SHOULD BE MINIMIZED AND STORED IN LABELED, SEPARATE RECEPTACLES FROM NON-HAZARDOUS WASTE. ALL HAZARDOUS WASTE SHOULD BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER.

3. CONCRETE WASTE MANAGEMENT

   CONCRETE WASTE OR WASHOUT SHOULD NOT BE ALLOWED IN THE STREET OR ALLOWED TO REACH A STORM WATER DRAINAGE SYSTEM OR WATERCOURSE. A SIGN SHOULD BE POSTED AT EACH LOCATION TO IDENTIFY THE WASHOUT. TO THE EXTENT PRACTICABLE, CONCRETE WASHOUT AREAS SHOULD BE LOCATED A REASONABLE DISTANCE FROM A STORM WATER DRAINAGE INLET OR WATERCOURSE. CONCRETE WASHOUT AREAS SHOULD BE LOCATED AT LEAST 10 FEET BEHIND THE CURB. IF THE WASHOUT AREA IS ADJACENT TO A PAVED ROAD, A STABILIZED ENTRANCE THAT MEETS ILLINOIS URBAN MANUAL STANDARDS SHOULD BE INSTALLED AT EACH WASHOUT AREA.

   THE CONTAINMENT FACILITIES SHOULD BE OF SUFFICIENT VOLUME TO COMPLETELY CONTAIN ALL LIQUID AND CONCRETE WASTE MATERIALS INCLUDING ENOUGH CAPACITY FOR ANTICIPATED LEVELS OF RAINWATER. THE DRIED CONCRETE WASTE MATERIAL SHOULD BE PICKED UP AND DISPOSED OF PROPERLY WHEN 75% CAPACITY IS REACHED. HARDENED CONCRETE CAN BE PROPERLY RECYCLED AS APPROVED BY THE MUNICIPALITY AND USED AGAIN ONSITE OR HAULED OFFSITE TO AN APPROPRIATE LANDFILL.

4. DEWATERING OPERATIONS

   DURING DEWATERING/PUMPING OPERATIONS, ONLY UNCONTAMINATED WATER SHOULD BE ALLOWED TO DISCHARGE TO PROTECTED NATURAL AREAS, WATERS OF THE STATE, OR TO A STORM SEWER SYSTEM (IN ACCORDANCE WITH LOCAL PERMITS). INLET HOSES SHOULD BE PLACED IN A STABILIZED SUMP PIT OR FLOATED AT THE SURFACE OF THE WATER IN ORDER TO LIMIT THE AMOUNT OF SEDIMENT INTAKE. PUMPING OPERATIONS SHOULD BE DISCHARGED TO A STABILIZED AREA THAT CONSISTS OF AN ENERGY DISSIPATING DEVICE (I.E. STONE, SEDIMENT FILTER BAG, OR BOTH). WHEN NECESSARY, STABILIZED CONVEYANCE CHANNELS SHOULD BE INSTALLED TO DIRECT WATER TO THE DESIRED LOCATION. ADDITIONAL BMP'S MAY BE REQUIRED AT THE OUTLET AREA AS REQUESTED BY THE MUNICIPALITY, OR OTHER REVIEWING AGENCY.

5. DUST CONTROL

   A WATER TRUCK MAY BE NECESSARY ONSITE TO LIMIT THE AMOUNT OF DUST LEAVING THE SITE. THE FOLLOWING LIST OF CONTROL MEASURES MAY BE IMPLEMENTED ONSITE TO LIMIT THE GENERATION OF DUST AS NEEDED:
   - SPRINKLING/IRRIGATION
   - MULCH
   - TILLAGE
   - VEGETATIVE COVER
   - SPRAY-ON SOIL TREATMENTS
   - STONE

6. OFF-SITE VEHICLE TRACKING

   STABILIZED CONSTRUCTION ENTRANCE(S) SHOULD BE INSTALLED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. ADJACENT ROADWAYS SHOULD BE SWEPT AS NEEDED, TO REDUCE EXCESS SEDIMENT, DIRT, OR STONE TRACKED FROM THE SITE. ACCUMULATED SEDIMENT AND STONE SHOULD BE REMOVED FROM THE STABILIZED ENTRANCE AS NEEDED. VEHICLES HAULING ERODIBLE MATERIAL TO AND FROM THE CONSTRUCTION SITE SHOULD BE COVERED WITH A TARP.

7. CONCRETE CUTTING

   CONCRETE WASTE MANAGEMENT SHOULD BE IMPLEMENTED TO CONTAIN AND DISPOSE OF SAW-CUTTING SLURRIES. CONCRETE CUTTING SHOULD NOT TAKE PLACE DURING OR IMMEDIATELY AFTER A RAINFALL EVENT. WASTE GENERATED FROM CONCRETE CUTTING SHOULD BE CLEANED-UP AND DISPOSED INTO THE CONCRETE WASHOUT FACILITY AS DESCRIBED ABOVE.

8. VEHICLE STORAGE AND MAINTENANCE

   WHEN NOT IN USE, VEHICLES UTILIZED IN THE DEVELOPMENT OPERATIONS OF THE SITE SHOULD BE STORED IN A DESIGNATED UPLAND AREA AWAY FROM ANY NATURAL OR CREATED WATERCOURSE, POND, DRAINAGE-WAY OR STORM DRAIN. WHENEVER POSSIBLE VEHICLE MAINTENANCE, FUELING, AND WASHING SHOULD OCCUR OFFSITE. IF ALLOWED ON-SITE: VEHICLE MAINTENANCE (INCLUDING BOTH ROUTINE MAINTENANCE AS WELL AS ON-SITE REPAIRS) SHOULD BE MADE WITHIN THE DESIGNATED AREA TO PREVENT THE MIGRATION OF MECHANICAL FLUIDS (OIL, ANTIFREEZE, ETC.) INTO WATERCOURSES, WETLANDS OR STORM DRAINS. DRIP PANS OR ABSORBENT PADS SHOULD BE USED FOR ALL VEHICLE AND EQUIPMENT MAINTENANCE ACTIVITIES THAT INVOLVE GREASE, OIL, SOLVENTS, OR OTHER VEHICLE FLUIDS. CONSTRUCTION VEHICLES SHOULD BE INSPECTED FREQUENTLY TO IDENTIFY ANY LEAKS. LEAKS SHOULD BE REPAIRED IMMEDIATELY OR THE VEHICLE SHOULD BE REMOVED FROM SITE. DISPOSE OF ALL USED OIL, ANTIFREEZE, SOLVENTS AND OTHER AUTOMOTIVE-RELATED CHEMICALS ACCORDING TO MANUFACTURER OR MSDS INSTRUCTIONS. CONTRACTORS SHOULD IMMEDIATELY REPORT SPILLS TO THE OWNER FOR PROPER REMEDIATION.

   WASH WATERS, FROM EQUIPMENT OR VEHICLE WASHING, WHEEL WASH WATER AND OTHER WASH WATERS, MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.

9. MATERIAL STORAGE

   MATERIALS AND OR CONTAMINANTS SHOULD BE STORED IN A MANNER THAT MINIMIZES THE POTENTIAL TO DISCHARGE INTO STORM DRAINS OR WATERCOURSES. AN ONSITE AREA SHOULD BE DESIGNATED FOR MATERIAL DELIVERY AND STORAGE. ALL MATERIALS KEPT ONSITE SHOULD BE STORED IN THEIR ORIGINAL CONTAINERS WITH LEGIBLE LABELS, AND IF POSSIBLE UNDER A ROOF OR OTHER ENCLOSURE. LABELS SHOULD BE REPLACED IF DAMAGED OR DIFFICULT TO READ. BERMED-OFF STORAGE AREAS ARE AN ACCEPTABLE CONTROL MEASURE TO PREVENT CONTAMINATION OF STORM WATER. MSDS SHEETS SHOULD BE AVAILABLE FOR REFERENCING CLEAN UP PROCEDURES. ANY RELEASE OF CHEMICALS OR CONTAMINANTS SHOULD BE IMMEDIATELY CLEANED UP AND DISPOSED OF PROPERLY. CONTRACTORS SHOULD IMMEDIATELY REPORT ALL SPILLS TO THE OWNER, WHO SHOULD NOTIFY THE APPROPRIATE AGENCIES, IF NEEDED.

   TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS ONSITE, HAZARDOUS PRODUCTS SHOULD BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RE-SEALABLE. THE ORIGINAL LABELS AND MSDS DATA SHOULD BE RETAINED ONSITE AT ALL TIMES. HAZARDOUS MATERIALS AND ALL OTHER MATERIALS ONSITE SHOULD BE STORED IN ACCORDANCE WITH MANUFACTURER OR MSDS SPECIFICATIONS. WHEN DISPOSING OF HAZARDOUS MATERIALS, FOLLOW MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS.

10. SANITARY STATIONS

    TO THE EXTENT PRACTICABLE, PORT-A-POTTIES SHOULD BE LOCATED AT A MINIMUM 8 FEET BEHIND THE CURB AND GUTTER OF THE INTERNAL ROADS AND BE LOCATED IN AN AREA THAT DOES NOT DRAIN TO ANY PROTECTED NATURAL AREAS, WATERS OF THE STATE, OR STORM WATER STRUCTURES AND SHOULD BE ANCHORED TO THE GROUND TO PREVENT FROM TIPPING OVER. PORT-A-POTTIES LOCATED ON IMPERVIOUS SURFACES SHOULD BE PLACED ON TOP OF A SECONDARY CONTAINMENT DEVICE, OR BE SURROUNDED BY A CONTROL DEVICE (I.E. GRAVEL-BAG BERM).

11. SPILL PREVENTION

    DISCHARGES OF A HAZARDOUS SUBSTANCE OR OIL CAUSED BY A SPILL (E.G., A SPILL OF OIL INTO A SEPARATE STORM SEWER OR WATERS OF THE STATE) ARE NOT AUTHORIZED BY THIS PERMIT. IF A SPILL OCCURS, NOTIFY THE OWNER IMMEDIATELY. THE CONSTRUCTION SITE SHOULD HAVE THE CAPACITY TO CONTROL, CONTAIN, AND REMOVE SPILLS IF THEY OCCUR. SPILLS SHOULD BE CLEANED IMMEDIATELY AFTER DISCOVERY IN ACCORDANCE WITH MSDS AND NOT BURIED ON SITE OR WASHED INTO STORM DRAINS OR WATERS OF THE STATE.

    SPILLS IN EXCESS OF FEDERAL REPORTABLE QUANTITIES (AS ESTABLISHED UNDER 40 CFR PARTS 110 ,117, OR 302), SHOULD BE REPORTED TO THE NATIONAL RESPONSE CENTER BY CALLING (800) 424-8802. MSDS OFTEN INCLUDE INFORMATION ON FEDERAL REPORTABLE QUANTITIES FOR MATERIALS. SPILLS OF TOXIC OR HAZARDOUS MATERIALS SHOULD BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF SIZE. WHEN CLEANING UP A SPILL, THE AREA SHOULD BE KEPT WELL VENTILATED AND APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT SHOULD BE USED TO MINIMIZE INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

    IN ADDITION TO PROPER WASTE MANAGEMENT, CONCRETE WASTE MANAGEMENT, CONCRETE CUTTING, VEHICLE STORAGE AND MAINTENANCE, MATERIAL STORAGE, AND SANITARY STATION PROTECTION, THE FOLLOWING MINIMUM PRACTICES SHOULD BE FOLLOWED TO REDUCE THE RISK OF SPILLS:
    - ON-SITE VEHICLES SHOULD BE MONITORED FOR LEAKS AND SHOULD RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE.
    - PETROLEUM PRODUCTS SHOULD BE STORED IN TIGHTLY SEALED AND CLEARLY LABELED CONTAINERS.
    - ALL PAINT CONTAINERS SHOULD BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHOULD BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS, AND SHOULD NOT BE DISCHARGED TO THE STORM SEWER.
    - CONTRACTORS SHOULD FOLLOW THE MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL OF MATERIALS.

MAINTENANCE

THE FOLLOWING IS A DESCRIPTION OF PROCEDURES THAT SHOULD BE USED TO MAINTAIN, IN GOOD AND EFFECTIVE OPERATION CONDITIONS, VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THIS PLAN AND STANDARD SPECIFICATIONS.

STABILIZED CONSTRUCTION ENTRANCE: THE ENTRANCES SHOULD BE MAINTAINED TO PREVENT TRACKING OF SEDIMENT ONTO PUBLIC STREETS. MAINTENANCE INCLUDES TOP DRESSING WITH ADDITIONAL STONE AND REMOVING TOP LAYERS OF STONES AND SEDIMENT. THE SEDIMENT RUN-OFF ONTO THE PUBLIC RIGHT OF WAY SHOULD BE REMOVED IMMEDIATELY.

RIPRAP OUTLET PROTECTION: RIPRAP SHOULD BE INSPECTED FOR ANY SCOUR BENEATH THE RIPRAP OR FOR STONES THAT HAVE BEEN DISLODGED. SEDIMENT ACCUMULATION IN THE OUTFALL AREA SHOULD BE REMOVED AS NEEDED.

CONCRETE WASHOUT AREA: EXISTING FACILITIES SHOULD BE CLEANED OUT, OR NEW FACILITIES SHOULD BE CONSTRUCTED AND OPERATIONAL ONCE THE EXISTING WASHOUT IS 75% FULL. WASHOUTS SHOULD BE INSPECTED FREQUENTLY TO ENSURE THAT PLASTIC LININGS ARE INTACT AND SIDEWALLS HAVE NOT BEEN DAMAGED BY CONSTRUCTION ACTIVITIES. WHEN THE WASHOUT AREA IS ADJACENT TO A PAVED ROAD, THE PAVED ROAD SHOULD BE INSPECTED FOR ACCUMULATED CONCRETE WASTE. ANY ACCUMULATED CONCRETE WASTE ON THE ROAD, CURB, OR GUTTER SHOULD BE REMOVED AND PROPERLY DISPOSED.

EROSION CONTROL BLANKET: THE BLANKET AND STAPLES SHOULD BE INSPECTED FREQUENTLY AND SHALL BE INSTALLED TO THE ILLINOIS URBAN MANUAL, UNLESS OTHERWISE INSTRUCTED BY THE MANUFACTURER. EROSION OCCURRING UNDERNEATH THE BLANKET SHOULD BE BACK-FILLED AND SEEDED WITH THE APPROPRIATE SEED MIX. ADDITIONAL BMP'S MAY NEED TO BE INSTALLED TO REDUCE EROSION UNDER THE BLANKET.

SILT FILTER FENCE: SILT FENCES SHOULD BE INSPECTED REGULARLY FOR UNDERCUTTING WHERE THE FENCE MEETS THE GROUND, OVERTOPPING, AND TEARS ALONG THE LENGTH OF THE FENCE. DEFICIENCIES SHOULD BE REPAIRED IMMEDIATELY. REMOVE ACCUMULATED SEDIMENTS FROM THE FENCE BASE WHEN THE SEDIMENT REACHES ONE-HALF THE FENCE HEIGHT. DURING FINAL STABILIZATION, PROPERLY DISPOSE OF ANY SEDIMENT THAT HAS ACCUMULATED ON THE SILT FENCE. INSTANCES WHEN AREAS OF SILT FENCE CONTINUALLY FAIL, REPLACE SILT FENCE WITH ANOTHER BMP AS SEEN FIT.

CATCH BASIN AND INLET FILTERS: INLET FILTERS SHOULD BE INSPECTED FOR PROPER FILTERING. IF FILTER BAGS ARE USED, REMOVE SEDIMENT FROM THE FILTER BAGS WHEN 50% PERCENT OF THE STORAGE VOLUME HAS BEEN FILLED, UNLESS OTHERWISE INSTRUCTED BY THE MANUFACTURER. REMOVE TRASH AND DEBRIS DURING INSPECTIONS. ACCUMULATED MATERIAL IN THE FILTERS SHOULD BE DISPOSED PROPERLY. DO NOT PUNCTURE HOLES IN FILTERS IF PONDING OCCURS.

INSPECTIONS

THE OWNER SHALL DESIGNATE A QUALIFIED PERSONNEL TO BE RESPONSIBLE FOR SEDIMENT AND EROSION CONTROL OBSERVATION REPORTING. THIS QUALIFIED PERSONNEL SHALL MEET THE REQUIREMENTS NOTED IN THE ILR10 PERMIT CONDITIONS AND LOCAL CODES. SITE OBSERVATIONS SHOULD OCCUR AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM OR BY THE END OF THE FOLLOWING BUSINESS OR WORK DAY THAT IS 0.5 INCHES OR GREATER, OR EQUIVALENT SNOWFALL. OBSERVATIONS MAY BE REDUCED TO ONCE A MONTH WHEN CONSTRUCTION ACTIVITIES HAVE CEASED DUE TO FROZEN CONDITIONS. WEEKLY OBSERVATIONS SHOULD RECOMMENCE WHEN CONSTRUCTION ACTIVITIES ARE CONDUCTED, OR IF THERE IS 0.5" OR GREATER RAIN EVENT, OR A DISCHARGE DUE TO SNOWMELT OCCURS.

SITE OBSERVATION REPORTS SHOULD BE MAINTAINED ONSITE AS PART OF THE SWPPP. EACH SITE OBSERVATION SHALL INCLUDE THE FOLLOWING COMPONENTS:

A. DISTURBED AREAS AND AREAS USED FOR THE STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE CHECKED FOR EVIDENCE OF, OR POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. THE EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY HAVE BEEN INSTALLED AND ARE OPERATING CORRECTLY. WHERE DISCHARGE POINTS ARE ACCESSIBLE, THEY SHOULD BE CHECKED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO THE RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHOULD BE CHECKED FOR OFF-SITE SEDIMENT TRACKING. ALL PUMPING OPERATIONS AND ALL OTHER POTENTIAL NON-STORM WATER DISCHARGES SHOULD BE OBSERVED.

B. BASED ON THE RESULTS OF THE SITE OBSERVATION, THE DESCRIPTION OF POTENTIAL POLLUTANT SOURCES IDENTIFIED, AND THE POLLUTION PREVENTION MEASURES DESCRIBED IN THIS PLAN SHALL BE REVISED AS APPROPRIATE, AS SOON AS PRACTICABLE AFTER THE OBSERVATION. THE MODIFICATIONS, IF ANY, SHALL PROVIDE FOR TIMELY IMPLEMENTATION OF ANY CHANGES TO THE PLAN WITHIN 7 CALENDAR DAYS FOLLOWING THE SITE OBSERVATION.

C. A REPORT SUMMARIZING THE SCOPE OF THE OBSERVATION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE OBSERVATION, THE DATE(S) OF THE OBSERVATION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PARAGRAPH B ABOVE SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE OF FINAL STABILIZATION OR PERMIT COVERAGE IS TERMINATED. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART VI.G (SIGNATORY REQUIREMENTS) OF THE ILR10 NPDES PERMIT.

D. THE OWNER SHALL NOTIFY THE APPROPRIATE AGENCY FIELD OPERATIONS SECTION OFFICE BY EMAIL AT EPA.SWNCOMP@ILLINOIS.GOV, TELEPHONE, OR FAX WITHIN 24 HOURS OF ANY INCIDENCE OF NONCOMPLIANCE FOR ANY VIOLATION OF THE STORM WATER POLLUTION PREVENTION PLAN OBSERVED DURING A SITE OBSERVATION, OR FOR VIOLATIONS OF ANY CONDITION OF THE PERMIT. THE OWNER SHALL COMPLETE AND SUBMIT WITHIN 5 DAYS AN INCIDENCE OF NONCOMPLIANCE(ION) REPORT FOR ANY VIOLATION OF THE STORM WATER POLLUTION PREVENTION PLAN OBSERVED DURING AN INSPECTION CONDUCTED. SUBMISSION SHALL BE ON FORMS PROVIDED BY THE AGENCY AND INCLUDE SPECIFIC INFORMATION ON THE CAUSE OF NONCOMPLIANCE, ACTIONS WHICH WERE TAKEN TO PREVENT ANY FURTHER CAUSES OF NONCOMPLIANCE, AND A STATEMENT DETAILING ANY ENVIRONMENTAL IMPACT WHICH MAY HAVE RESULTED FROM THE NONCOMPLIANCE.

E. ALL REPORTS OF NONCOMPLIANCE SHALL BE SIGNED BY A RESPONSIBLE AUTHORITY AS DEFINED IN PART VI.G OF THE ILR10 NPDES PERMIT (SIGNATORY REQUIREMENTS).

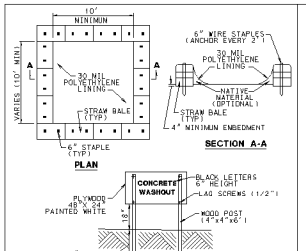
F. ALL REPORTS OF NONCOMPLIANCE SHALL BE MAILED TO THE AGENCY AT THE FOLLOWING ADDRESS:
   ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
   DIVISION OF WATER POLLUTION CONTROL
   COMPLIANCE ASSURANCE SECTION
   1021 NORTH GRAND AVENUE EAST
   POST OFFICE BOX 19276
   SPRINGFIELD, ILLINOIS 62794-9276

NON-STORM WATER DISCHARGES

NON-STORM WATER FLOWS THAT MAY BE COMBINED WITH STORM WATER DISCHARGES ARE INCLUDED WITHIN THIS PLAN. THESE DISCHARGES INCLUDE: DISCHARGES FROM FIRE FIGHTING ACTIVITIES; FIRE HYDRANT FLUSHINGS; WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED; WATERS USED TO CONTROL DUST; POTABLE WATER SOURCES INCLUDING UNCONTAMINATED WATERLINE FLUSHINGS; LANDSCAPE IRRIGATION DRAINAGES; ROUTINE EXTERNAL BUILDING WASHDOWN WHICH DOES NOT USE DETERGENTS; PAVEMENT WASH WATERS WHERE SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED (UNLESS ALL SPILLED MATERIAL HAS BEEN REMOVED) AND WHERE DETERGENTS ARE NOT USED; UNCONTAMINATED AIR CONDITIONING CONDENSATE; SPRINGS; UNCONTAMINATED GROUND WATER; AND FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS OR SOLVENTS.

THE FOLLOWING NON-STORM WATER DISCHARGES ARE PROHIBITED: CONCRETE AND WASTEWATER FROM WASHOUT OF CONCRETE (UNLESS MANAGED BY AN APPROPRIATE CONTROL), DRYWELL COMPOUND, WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS, FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE, SOAPS, SOLVENTS, OR DETERGENTS, TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE, OR ANY OTHER POLLUTANT THAT COULD CAUSE OR TEND TO CAUSE WATER POLLUTION.

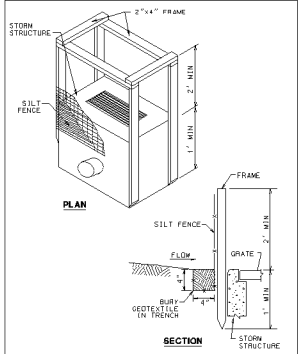
DISCHARGES FROM DEWATERING ACTIVITIES, INCLUDING DISCHARGES FROM DEWATERING TRENCHES AND EXCAVATIONS ARE ALLOWABLE IF MANAGED BY APPROPRIATE CONTROLS.



SIGN DETAIL (OR EQUIVALENT)

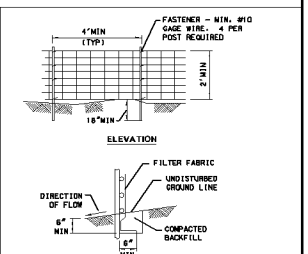
NOTES:
1. ACTUAL LAYOUT AND LOCATION TO BE DETERMINED IN FIELD.
2. MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHALL INCLUDE: REMOVING AND DISPOSING OF HARDENED CONCRETE AND GROUT/SLURRY AND RETURNING FACILITY TO A FUNCTIONAL CONDITION.
3. FACILITY SHALL BE CLEANED OR RE-CONSTRUCTED IN A NEW AREA ONCE WASHOUT BECOMES TWO-THIRDS FULL.
4. EACH STRAW BALE IS TO BE STAKED IN PLACE USING (2) 2"x2"x4' WOODEN STAKE.

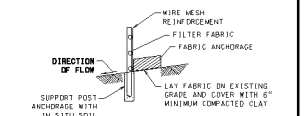
CONCRETE WASHOUT FACILITY
NOT TO SCALE



NOTES:
1. STRUCTURE SHALL BE CONSTRUCTED SUCH THAT GEOTEXTILE MATERIAL SHALL BE FASTENED TO POSTS CREATING A SEAMLESS JOINT.
2. ENSURE THAT PONDING HEIGHT OF WATER DOES NOT CAUSE FLOODING ON ADJACENT ROADWAYS OR PRIVATE PROPERTY.

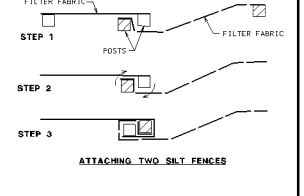
INLET PROTECTION - SILT FENCE BOX
NOT TO SCALE





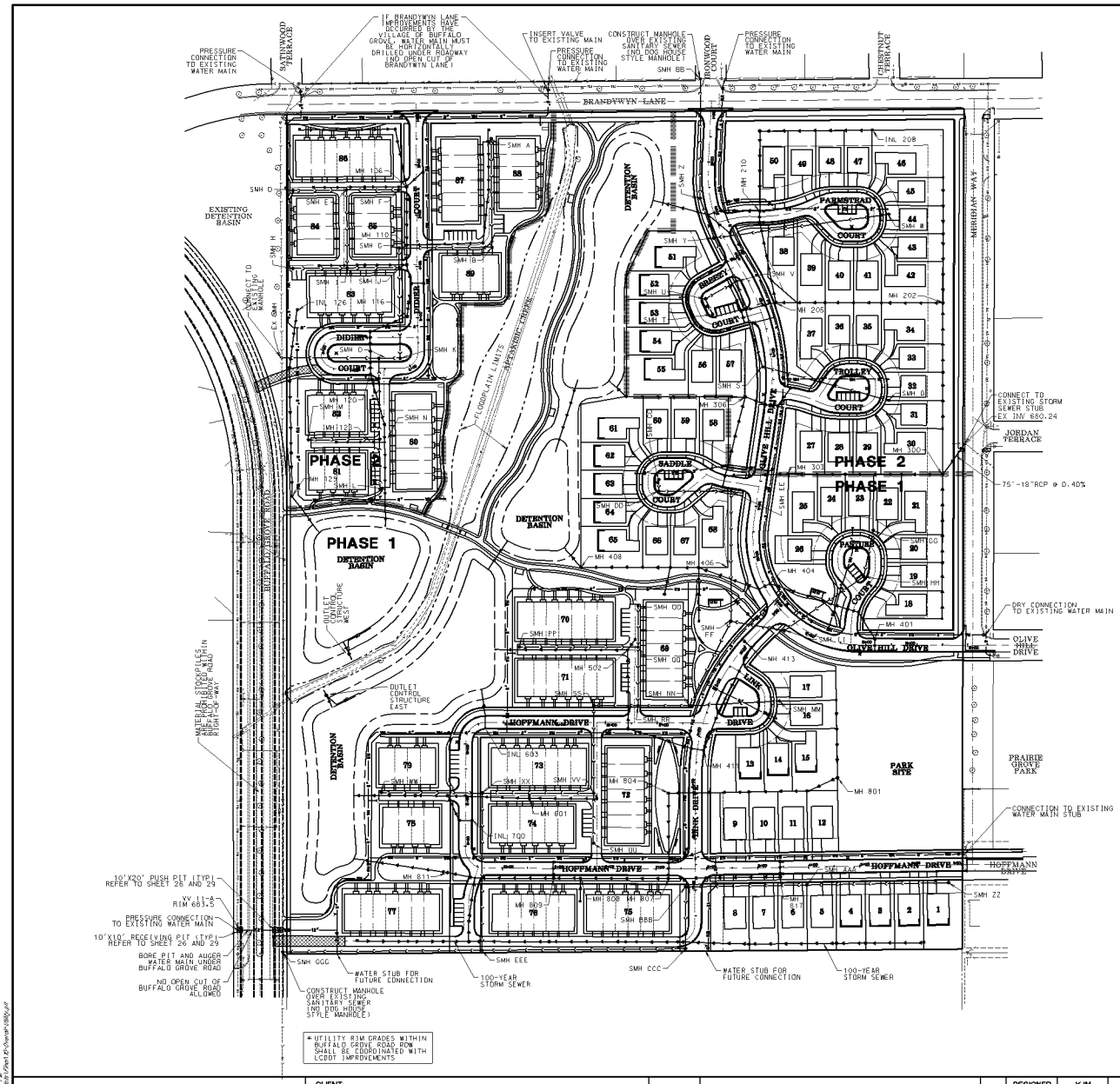
DETAIL TO BE USED IN AREAS ADJACENT TO TREE PROTECTION FENCE

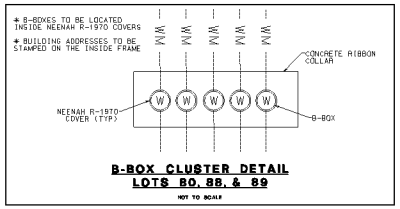
NOTES:
1. TEMPORARY SEDIMENT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. SILT FENCE SHALL BE REMOVED IN CONJUNCTION WITH FINAL GRADING AND SITE STABILIZATION.
2. FILTER FABRIC SHALL MEET THE REQUIREMENTS AS SET FORTH BY AASHTO M-288-00
3. FENCE POST SHALL EITHER BE STANDARD STEEL POST OR WOOD POST WITH A MINIMUM SECTIONAL AREA OF 3.0 SQ IN.



ATTACHING TWO SILT FENCES

1. PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE.
2. ROTATE BOTH POSTS AT LEAST 180 DEGREES IN A CLOCKWISE DIRECTION TO CREATE A TIGHT SEAL WITH THE FABRIC MATERIAL.
3. DRIVE BOTH POSTS A MINIMUM





B-BOX CLUSTER DETAIL
LOTS 80, 88, & 89
NOT TO SCALE

N

SCALE 1" = 100'
0 100 200

UNDERGROUND UTILITY GENERAL NOTES

1. ALL MANHOLES AND CATCH BASINS SHALL BE 48-INCH DIAMETER, UNLESS OTHERWISE INDICATED.

2. ALL SANITARY SEWER, LESS THAN 15 FEET DEEP, SHALL BE PVC, SDR 26, UNLESS OTHERWISE INDICATED. ALL SANITARY SEWERS GREATER THAN 15-FEET DEEP, SHALL BE PVC, C-900, UNLESS OTHERWISE INDICATED. PVC SANITARY SEWER SHALL HAVE ELASTOMERIC JOINTS IN CONFORMANCE WITH ASTM D-3212.

3. ALL WATER MAIN SHALL BE DUCTILE IRON PIPE, CLASS 52, AWWA C-600 WITH "PUSH-ON" TYPE JOINTS, UNLESS OTHERWISE INDICATED. ALL WATER MAIN SHALL HAVE A MINIMUM OF 5'-6" OF COVER FROM TOP OF WATERMAIN TO FINISHED GRADE.

4. ALL STORM SEWERS SHALL BE REINFORCED CONCRETE PIPE, MINIMUM CLASS III, WITH ASTM C76 PIPE AND C443 ("O"-RING) JOINTS, UNLESS OTHERWISE INDICATED.

5. GRANULAR TRENCH BACKFILL (CA-11) SHALL BE PROVIDED FOR ALL SANITARY, WATER AND STORM UTILITIES WHEN THE TRENCH LIMITS FALL WITHIN TWO FEET OF STREETS, SIDEWALKS, DRIVEWAYS AND AS NOTED ON THE SANITARY TRENCH DETAIL ON PAGE 22. ALL TRENCHES WITHIN BUFFALO GROVE RIGHT-OF WAY MUST BE TRENCH BACKFILLED WITH CA-11 IN ACCORDANCE WITH BUFFALO GROVE SPECIFICATIONS.

6. OVERHEAD SANITARY SEWER IS REQUIRED FOR ALL HOMES.

7. ALL SUMP PUMPS MUST BE CONNECTED TO THE STORM SEWER SYSTEM. SUMP PUMP CONNECTIONS SHALL BE 4" PVC, SDR 26, UNLESS OTHERWISE NOTED.

8. ALL WATERMAIN AND WATER SERVICE LINES SHALL BE PROTECTED FROM OTHER UTILITIES IN ACCORDANCE WITH SECTION 41-2.01 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS.

9. ALL DRAIN TILES ENCOUNTERED DURING MASS GRADING UTILITY WORK MUST BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM. A RECORD MUST BE KEPT, OF ANY DRAIN TILE ENCOUNTERED, TO BE INCLUDED WITH THE RECORD DRAWINGS.

10. ALL UNDERGROUND UTILITY INFORMATION NOTED ON THE PLANS IS BASED ON INFORMATION OBTAINED FROM THE MUNICIPALITY, UTILITY COMPANIES OR FIELD MEASUREMENTS. THIS INFORMATION, WHILE BELIEVED TO BE COMPLETE AND ACCURATE, CANNOT BE GUARANTEED.

11. CONTRACTOR SHALL VERIFY ALL BUILDING SERVICE LOCATIONS AND SIZES WITH ARCHITECTURAL PLANS PRIOR TO START OF CONSTRUCTION AND NOTIFY THE ENGINEER OR OWNER OF ANY DISCREPANCIES.

12. CONTRACTOR TO VERIFY CANOPY AND ROOF DRAIN CONNECTION LOCATIONS AND SIZES WITH ARCHITECTURAL PLANS BEFORE CONSTRUCTION.

13. SEE ARCHITECTURAL DRAWINGS FOR TRENCH DRAIN DETAILS AND SEWER CONNECTION LOCATIONS.

14. LOCATION OF ALL BUILDING SIAMESE CONNECTIONS TO BE APPROVED BY VILLAGE FIRE MARSHALL.

15. CONTRACTOR SHALL CONTACT JULIE (1-800-892-0123) PRIOR TO START OF CONSTRUCTION TO LOCATE ALL UTILITIES WITHIN THE RIGHT-OF-WAY.

16. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES AT ALL PROPOSED CONNECTIONS PRIOR TO START OF CONSTRUCTION AND NOTIFY THE ENGINEER AND OWNER OF ANY DISCREPANCIES.

17. FIELD LOCATION OF ALL HOUSE SERVICES TO BE SUPPLIED BY CONTRACTOR AND SHOWN ON RECORD DRAWINGS. SEE GENERAL CONSTRUCTION NOTES FOR MARKING WATER AND SANITARY SERVICES ON CURB.

18. WATERMAIN SERVICE AND SANITARY SERVICES SEPERATION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS.

19. IN CASE OF CONFLICTS, THE MUNICIPALITY STANDARDS AND NOTES SHALL TAKE PRECEDENCE.

20. PLUMBING CONTRACTOR TO MAKE ALL CONNECTIONS WITH BUILDING SERVICES CONSTRUCTED BY UTILITY CONTRACTOR. SITE UTILITY CONTRACTOR TO CONSTRUCT SERVICES TO WITHIN 5-FEET OF BUILDING, EXCEPT WATER INTO BUILDING 1-FOOT ABOVE FLOOR WITH BLIND FLANGE AND PROVIDE TESTING.

21. EXISTING PAVEMENT REMOVED FOR UTILITY CONSTRUCTION SHALL BE DONE BY THE RESPECTIVE UTILITY COMPANY AND PAID FOR SEPARATELY BY THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THIS WORK INCIDENTAL TO THE CONTRACT.

22. EXISTING OR PROPOSED MANHOLES, CATCH BASINS, INLETS AND VALVE VAULTS REQUIRING OVER 6-INCHES OF ADJUSTMENT RINGS SHALL USE AN ADDITIONAL BARRELL SECTION TO MAINTAIN A MAXIMUM OF 6-INCH TOTAL ADJUSTMENT RING DEPTH.

ALL ROOF DRAINS SHALL SPLASH AT GRADE AND BE TRIBUTARY TO THE STORM SEWER SYSTEM OR DETENTION BASIN.

ALL STORM STRUCTURES LOCATED WITHIN THE CURB LINE HAVE TOP OF CURB ("E") ELEVATION INDICATED. REFER TO DETAIL SHEET 20.

PROPOSED MANHOLE STRUCTURES NOT TO BE LOCATED WITHIN DRIVEWAYS AND APRONS

MATERIAL STOCKPILES ARE PROHIBITED WITHIN BUFFALO GROVE ROAD RIGHT-OF-WAY

REFER TO SHEET 2 FOR PLAN AND PROFILE SHEET REFERENCES

REFER TO SHEET 7 FOR TYPICAL UTILITY LAYOUT AND SERVICE CONNECTIONS

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Naperville, IL 60563
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Fax: 630-946-6829

DATE	DESCRIPTION OF REVISION	BY
11/05/18	REVISED PER VILLAGE COMMENTS	SDU
10/04/18	REVISED PER VILLAGE COMMENTS	KJM
09/17/18	REVISED PER LCDOT COMMENTS	KJM
08/03/18	REVISED PER VILLAGE AND LCDOT COMMENTS	KJM
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
06/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	1" = 100'

OVERALL UTILITY PLAN
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 10 OF 30

PROJECT NUMBER: 2014

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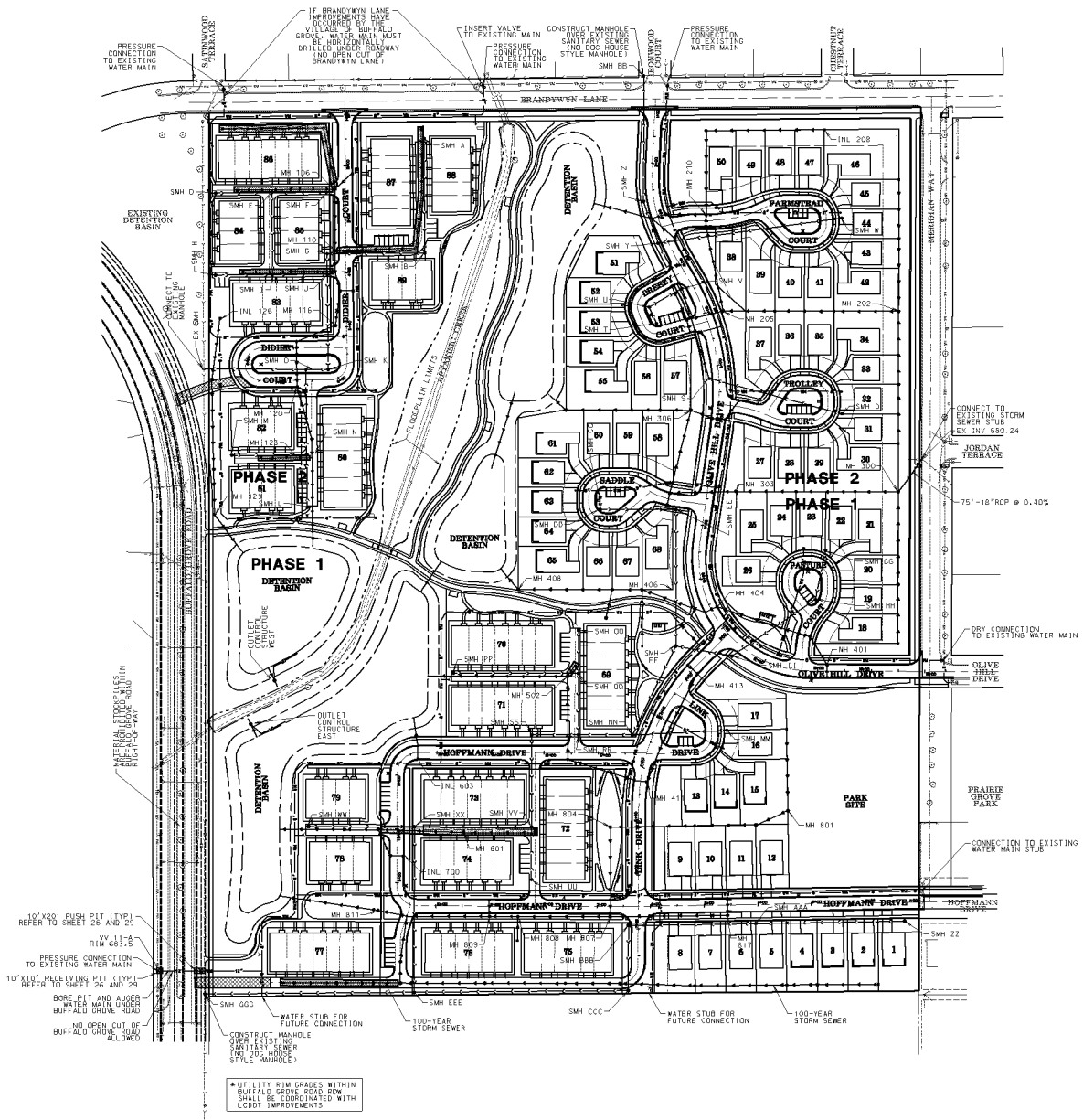
ILLINOIS FIRM LICENSE 184-002694

Attachment: Link Crossing - Final Engineering Plan 11-05-18_r (Link Crossing Phase 2 Development Improvement Agreement)



N

SCALE 1" = 100'

0 100 200

LINK CROSSING
TOWNHOME OWNERS ASSOCIATION
STORM SEWER EXHIBIT

DATED: 7-09-18
REVISED: 11-08-18

HATCHED STORM SEWER TO BE OWNED BY TOWNHOME OWNERS ASSOCIATION

Mackie Consultants, LLC
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MACKIE CONSULTANTS

CLIENT:
KHovnanian Homes
1804 N. Naper Boulevard, Suite 200
Naperville, IL 60563
Phone: 630-210-0888
Fax: 630-946-6829

DATE	DESCRIPTION OF REVISION	BY
11/05/18	REVISED PER VILLAGE COMMENTS	SDJ
10/04/18	REVISED PER VILLAGE COMMENTS	KJM
08/17/18	REVISED PER LCDOT COMMENTS	KJM
08/03/18	REVISED PER VILLAGE AND LCDOT COMMENTS	KJM
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
06/08/18	REVISED PER VILLAGE COMMENTS	KJM

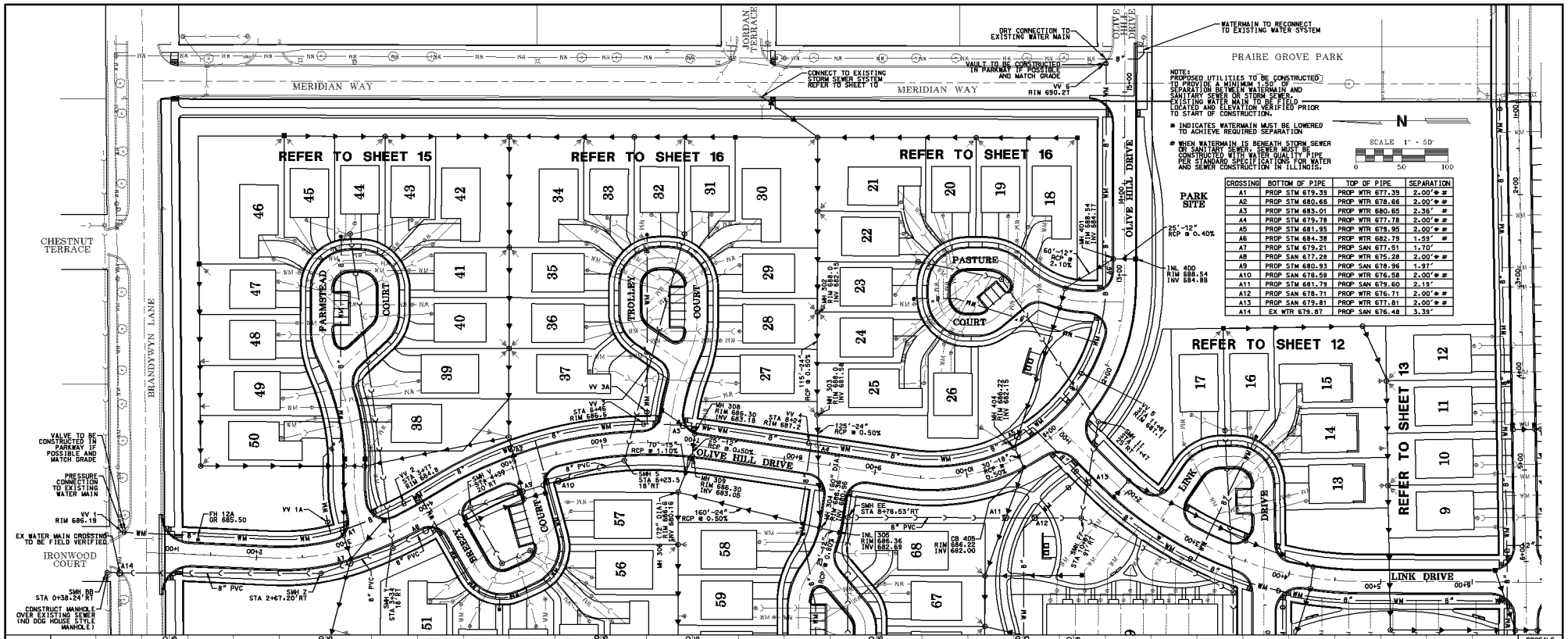
DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	1" = 100'

OVERALL UTILITY PLAN
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

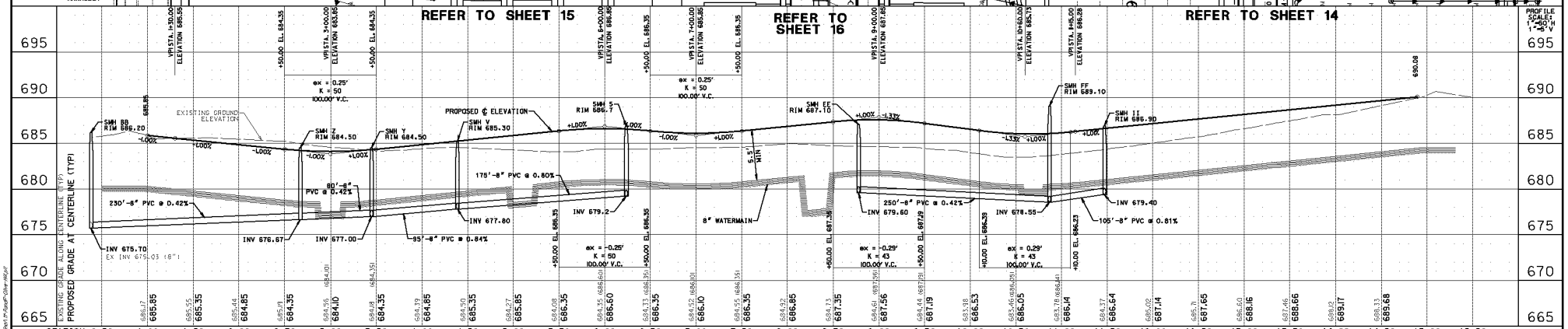
SHEET
10A OF **30**

PROJECT NUMBER: 2014
© MACKIE CONSULTANTS LLC, 2018
ILLINOIS FIRM LICENSE 184-002694

Attachment: Link Crossing - Final Engineering Plan 11-05-18_r (Link Crossing Phase 2 Development Improvement Agreement)



CROSSING	BOTTOM OF PIPE	TOP OF PIPE	SEPARATION
A1	PROP STM 679.39	PROP WTR 677.39	2.00'* #
A2	PROP STM 680.66	PROP WTR 678.66	2.00'* #
A3	PROP STM 683.01	PROP WTR 680.65	2.36' #
A4	PROP STM 679.78	PROP WTR 677.78	2.00'* #
A5	PROP STM 681.95	PROP WTR 679.95	2.00'* #
A6	PROP STM 684.38	PROP WTR 682.79	1.59' #
A7	PROP STM 679.21	PROP SAN 677.51	1.70'
A8	PROP SAN 677.28	PROP WTR 675.28	2.00'* #
A9	PROP STM 680.93	PROP SAN 678.96	1.97'
A10	PROP SAN 678.59	PROP WTR 676.58	2.00'* #
A11	PROP STM 681.79	PROP SAN 679.60	2.19'
A12	PROP SAN 678.71	PROP WTR 676.71	2.00'* #
A13	PROP SAN 679.81	PROP WTR 677.81	2.00'* #
A14	EX WTR 679.87	PROP SAN 676.48	3.39'



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CLIENT: KHovnanian Homes
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Phone: 630-210-0888
Fax: 630-946-6829

DATE	DESCRIPTION OF REVISION	BY
08/21/18	REVISED PER IEPA COMMENTS	KJM
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
06/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	1"=50'

OLIVE HILL DRIVE - STA 0+80 TO 15+10
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 11 OF 30

PROJECT NUMBER: 2814

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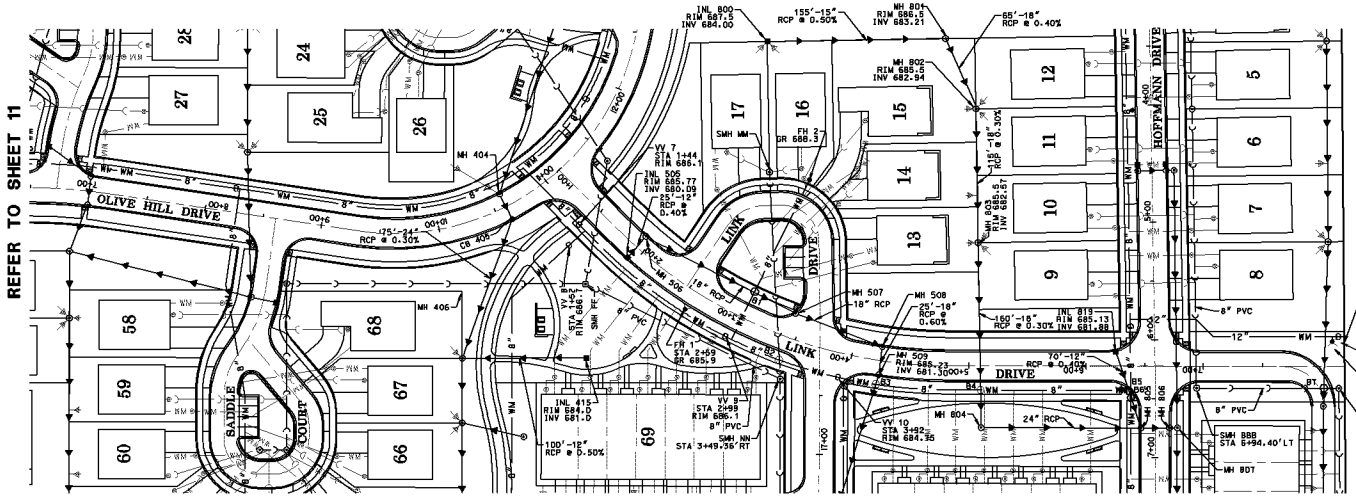
ILLINOIS FIRM LICENSE 184-002694

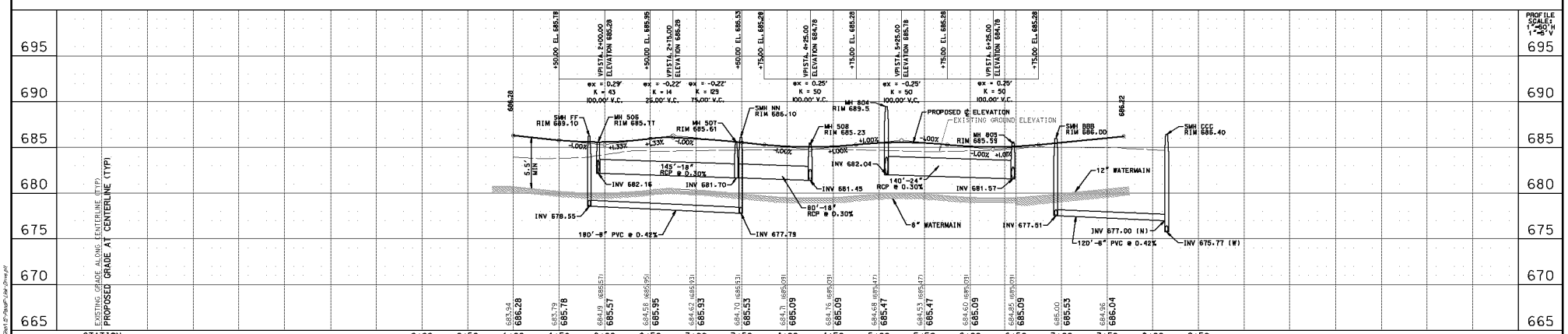


CROSSING	BOTTOM OF PIPE	TOP OF PIPE	SEPARATION
B1	PROP STM 681.58	PROP WTR 679.58	2.00'* #
B2	PROP SAN 677.87	PROP WTR 675.87	2.00'* #
B3	PROP STM 680.98	PROP WTR 678.98	2.00'* #
B4	PROP STM 681.85	PROP WTR 679.85	2.00'* #
B5	PROP STM 681.51	PROP WTR 679.51	2.00'* #
B6	PROP STM 681.48	PROP WTR 679.48	2.00'* #
B7	PROP STM 680.24	PROP SAN 677.75	2.49'

PROPOSED UTILITIES TO BE CONSTRUCTED TO PROVIDE A MINIMUM 1.50' OF SEPERATION BETWEEN WATER MAIN AND SANITARY SEWER OR STORM SEWER. EXISTING WATER MAIN TO BE FIELD LOCATED AND ELEVATION VERIFIED PRIOR TO START OF CONSTRUCTION.

* INDICATES WATERMAIN MUST BE LOWERED TO ACHIEVE REQUIRED SEPARATION

WHEN WATERMAIN IS BENEATH STORM SEWER OR SANITARY SEWER, SEWER MUST BE CONSTRUCTED WITH WATER QUALITY PIPE PER STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS.



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Naperville, IL 60563
Phone: 630-210-0888
Fax: 630-946-6629

DATE	DESCRIPTION OF REVISION	BY
08/21/18	REVISED PER IEPA COMMENTS	KJM
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
06/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	1"=50'

LINK DRIVE - STA 1+00 TO 8+20
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 12 OF 30

PROJECT NUMBER: 2014

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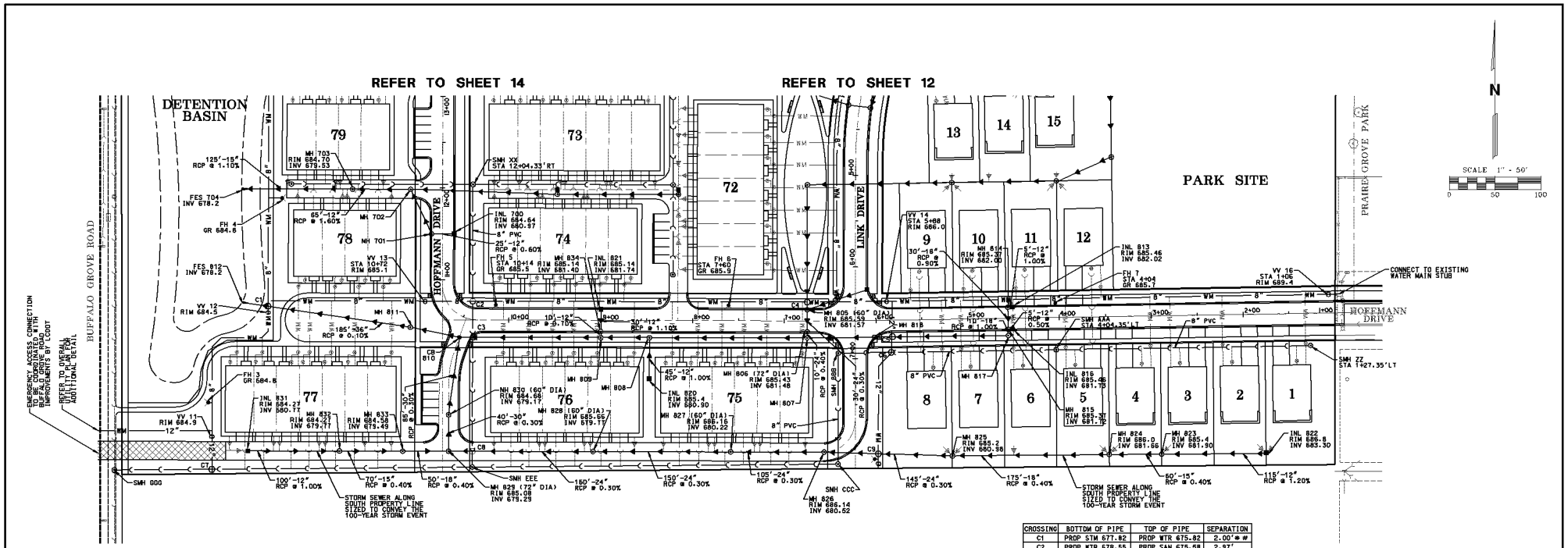
ILLINOIS FIRM LICENSE 184-002694

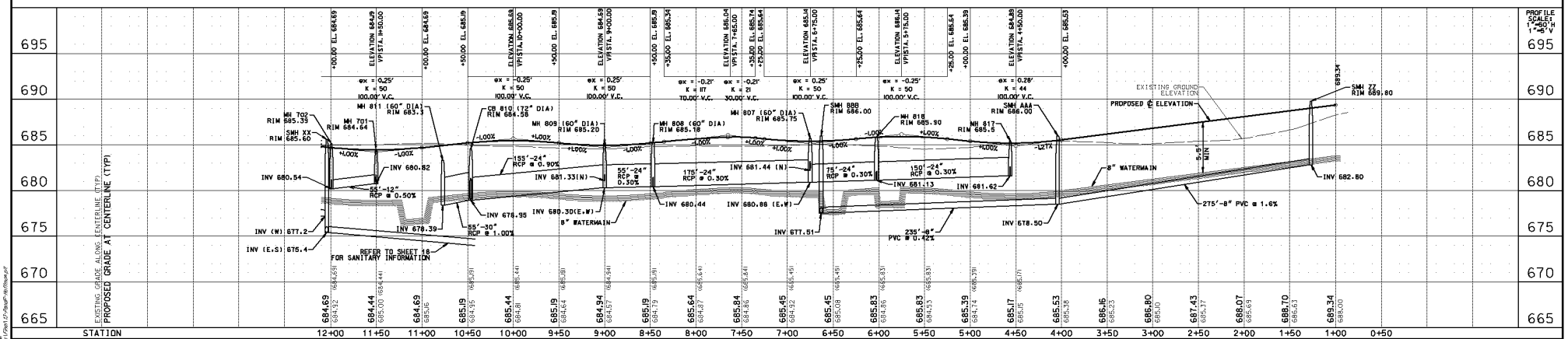


CROSSING	BOTTOM OF PIPE	TOP OF PIPE	SEPARATION
C1	PROP STM 677.82	PROP WTR 675.82	2.00'* #
C2	PROP WTR 678.55	PROP SAN 675.58	2.97'
C3	PROP STM 678.75	PROP SAN 675.41	3.34'
C4	PROP STM 681.28	PROP WTR 679.28	2.00'* #
C5	PROP STM 680.91	PROP WTR 678.91	2.00'* #
C6	PROP SAN 677.67	PROP WTR 675.67	2.00'* #
C7	PROP WTR 676.75	PROP SAN 673.39	3.36'
C8	PROP STM 679.05	PROP SAN 674.88	4.17'
C9	PROP STM 680.43	PROP WTR 678.43	2.00'* #

PROPOSED UTILITIES TO BE CONSTRUCTED TO PROVIDE A MINIMUM 1.50' OF SEPARATION BETWEEN WATER MAIN AND SANITARY SEWER OR STORM SEWER. EXISTING WATER MAIN TO BE FIELD LOCATED AND ELEVATION VERIFIED PRIOR TO START OF CONSTRUCTION.

* INDICATES WATER MAIN MUST BE LOWERED TO ACHIEVE REQUIRED SEPARATION

WHEN WATERMAIN IS BENEATH STORM SEWER OR SANITARY SEWER, SEWER MUST BE CONSTRUCTED WITH WATER QUALITY PIPE PER STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS.



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Naperville, IL 60563
Phone: 630-210-0888
Fax: 630-946-6829

DATE	DESCRIPTION OF REVISION	BY
11/05/18	REVISED PER VILLAGE COMMENTS	SDU
08/21/18	REVISED PER IEPA COMMENTS	KJM
08/03/18	REVISED PER VILLAGE AND LCDOT COMMENTS	KJM
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
06/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	1"=50'

HOFFMANN DRIVE - STA 0+79 TO 12+00
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 13 OF 30

PROJECT NUMBER: 2014

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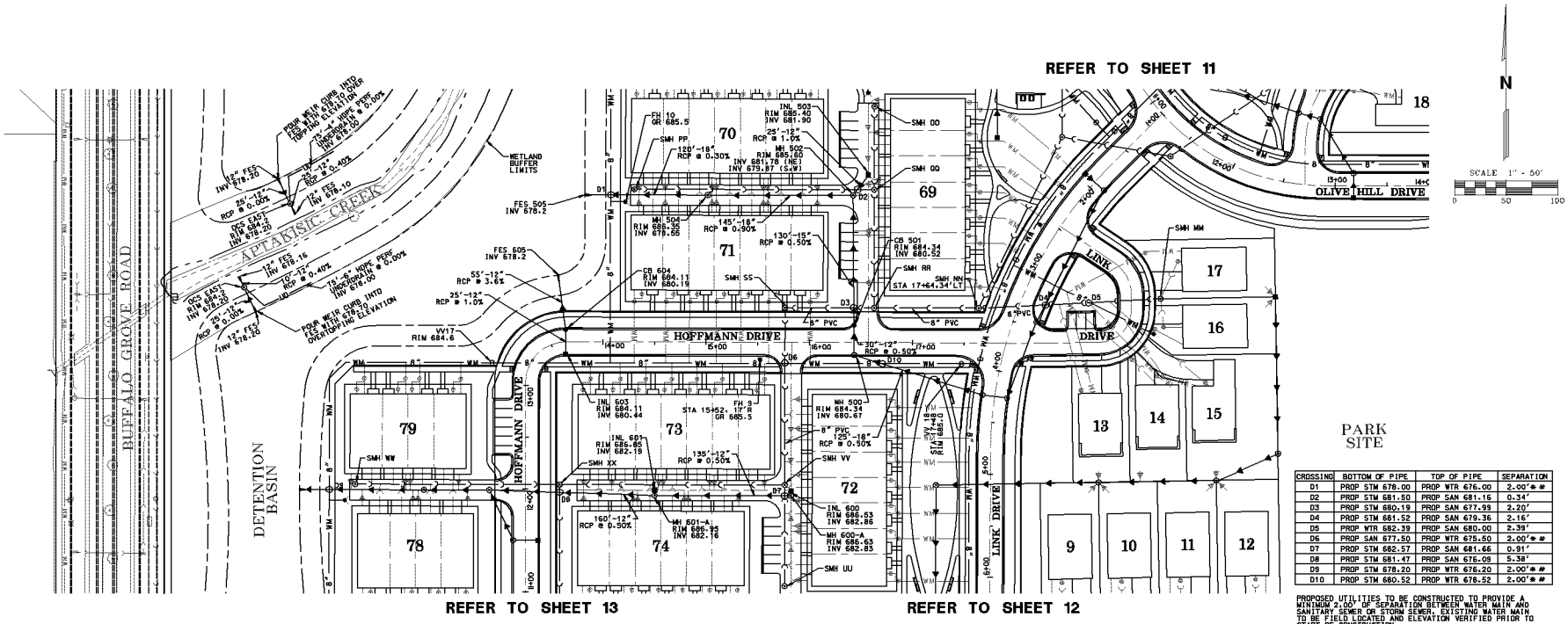
ILLINOIS FIRM LICENSE 184-002694

Attachment Link Crossing - Final Engineering Plan 11-05-18_r (Link Crossing Phase 2 Development Improvement Agreement)

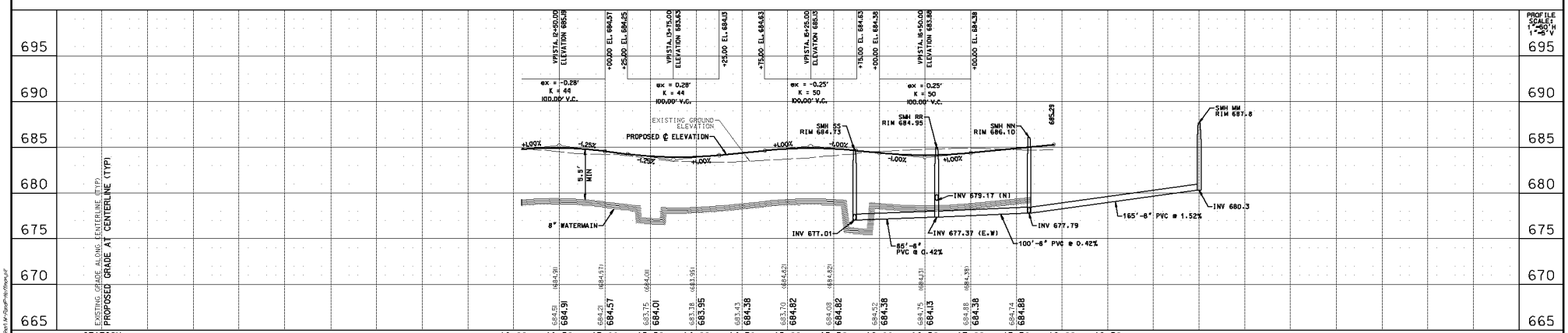


CROSSING	BOTTOM OF PIPE	TOP OF PIPE	SEPARATION
D1	PROP STM 678.00	PROP WTR 676.00	2.00'# #
D2	PROP STM 681.50	PROP SAN 681.16	0.34'
D3	PROP STM 680.19	PROP SAN 677.99	2.20'
D4	PROP STM 681.52	PROP SAN 679.36	2.16'
D5	PROP WTR 682.39	PROP SAN 680.00	2.39'
D6	PROP SAN 677.50	PROP WTR 675.50	2.00'# #
D7	PROP STM 682.57	PROP SAN 681.66	0.91'
D8	PROP STM 681.47	PROP SAN 676.09	5.38'
D9	PROP STM 678.20	PROP WTR 676.20	2.00'# #
D10	PROP STM 680.52	PROP WTR 678.52	2.00'# #

PROPOSED UTILITIES TO BE CONSTRUCTED TO PROVIDE A MINIMUM 2.00' OF SEPARATION BETWEEN WATER MAIN AND SANITARY SEWER OR STORM SEWER. EXISTING WATER MAIN TO BE FIELD LOCATED AND ELEVATION VERIFIED PRIOR TO START OF CONSTRUCTION.

# INDICATES WATERMAIN MUST BE LOWERED TO ACHIEVE REQUIRED SEPARATION

WHEN WATERMAIN IS BENEATH STORM SEWER OR SANITARY SEWER, SEWER MUST BE CONSTRUCTED WITH WATER QUALITY PIPE PER STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS.



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CLIENT:
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1804 N. Naper Boulevard, Suite 200
Naperville, IL 60563
Phone: 630-210-0888
Fax: 630-946-6629

DATE	DESCRIPTION OF REVISION	BY
08/21/18	REVISED PER IEPA COMMENTS	KJM
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
06/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	1"=50'

HOFFMANN DRIVE - STA 12+00 TO 18+41
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 14 OF 30

PROJECT NUMBER: 2014

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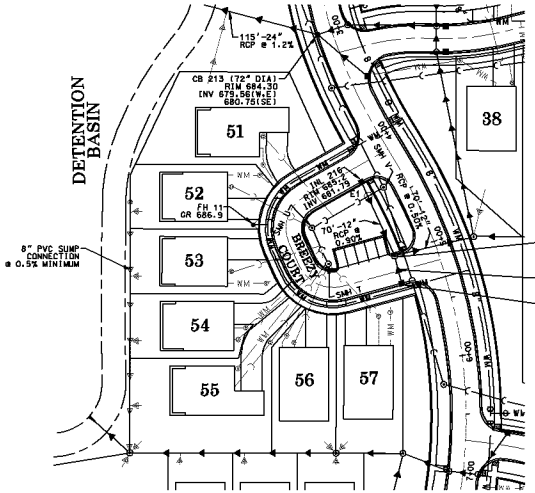
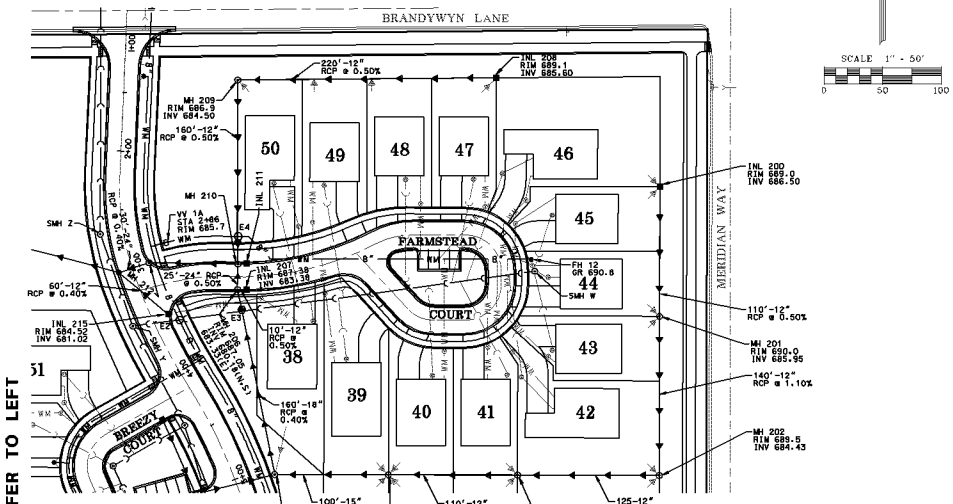
ILLINOIS FIRM LICENSE 184-002694

Attachment: Link Crossing - Final Engineering Plan 11-05-18_r (Link Crossing Phase 2 Development Improvement Agreement)

REFER TO SHEET 11



REFER TO SHEET 11



CROSSING	BOTTOM OF PIPE	TOP OF PIPE	SEPARATION
E1	PROP STM 681.44	PROP SAN 678.67	2.77'
E2	PROP SAN 677.62	PROP WTR 675.62	2.00'* #
E3	PROP STM 679.98	PROP SAN 679.44	0.54'
E4	PROP STM 683.60	PROP WTR 681.60	2.00'* #

PROPOSED UTILITIES TO BE CONSTRUCTED TO PROVIDE A MINIMUM 1.50' OF SEPARATION BETWEEN WATERMAIN AND SANITARY SEWER OR STORM SEWER. EXISTING WATERMAIN TO BE FIELD LOCATED AND ELEVATION VERIFIED PRIOR TO START OF CONSTRUCTION.

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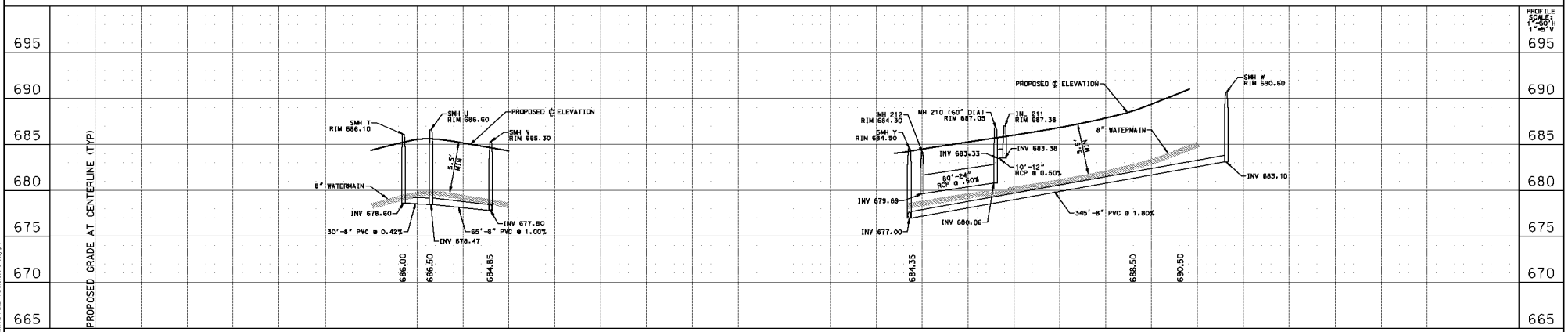

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DATE	DESCRIPTION OF REVISION	BY
08/21/18	REVISED PER IEPA COMMENTS	KJM
08/03/18	REVISED PER VILLAGE AND LCDOT COMMENTS	KJM
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
06/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	1"=50'

FARMSTEAD COURT, BREEZY COURT
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 15 OF 30

PROJECT NUMBER: 2014

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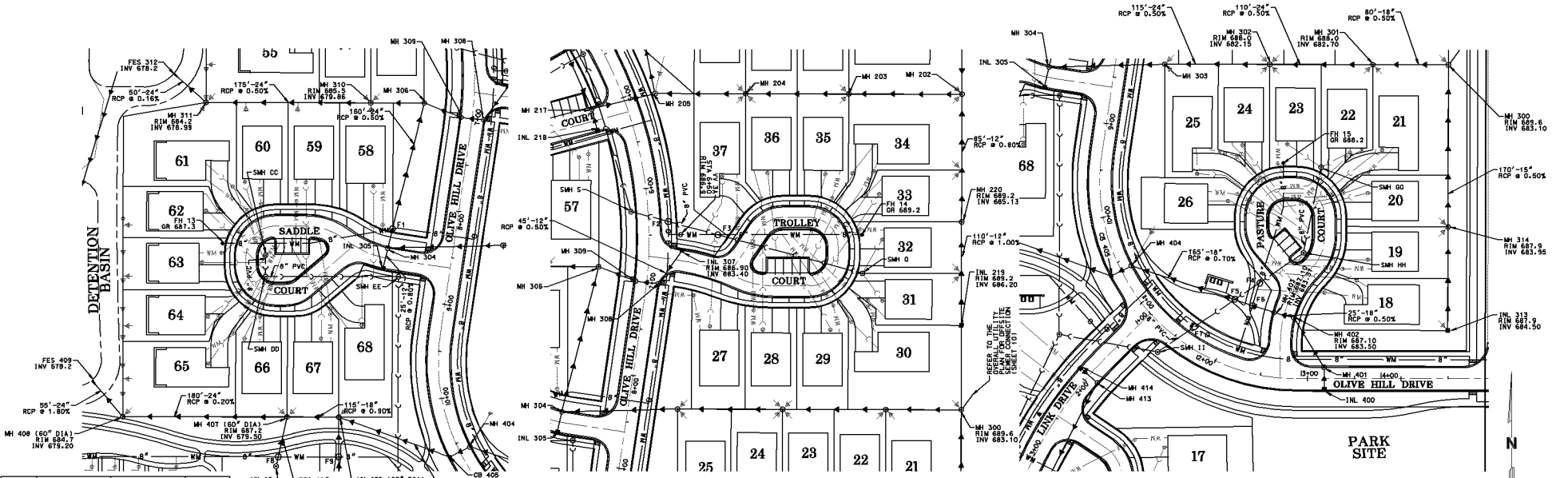
ILLINOIS FIRM LICENSE 184-002694

Attachment: Link Crossing - Final Engineering Plan 11-05-18_r (Link Crossing Phase 2 Development Improvement Agreement)



CROSSING	BOTTOM OF PIPE	TOP OF PIPE	SEPARATION
F1	PROP STM 680.53	PROP WTR 678.53	2.00'* #
F2	PROP SAN 679.57	PROP WTR 677.57	2.00'* #
F3	PROP SAN 680.17	PROP WTR 678.17	2.00'* #
F4	PROP SAN 679.93	PROP WTR 677.93	2.00'* #
F5	PROP STM 682.79	PROP SAN 680.54	2.25'
F6	PROP STM 682.93	PROP WTR 680.93	2.00'* #
F7	PROP SAN 679.55	PROP WTR 677.55	2.00'* #
F8	PROP STM 681.67	PROP WTR 679.67	2.00'* #
F9	PROP STM 680.47	PROP WTR 678.47	2.00'* #

PROPOSED UTILITIES TO BE CONSTRUCTED TO PROVIDE A MINIMUM 1.50' OF SEPARATION BETWEEN WATERMAIN AND SANITARY SEWER OR STORM SEWER. EXISTING WATERMAIN TO BE FIELD LOCATED AND ELEVATION VERIFIED PRIOR TO START OF CONSTRUCTION.

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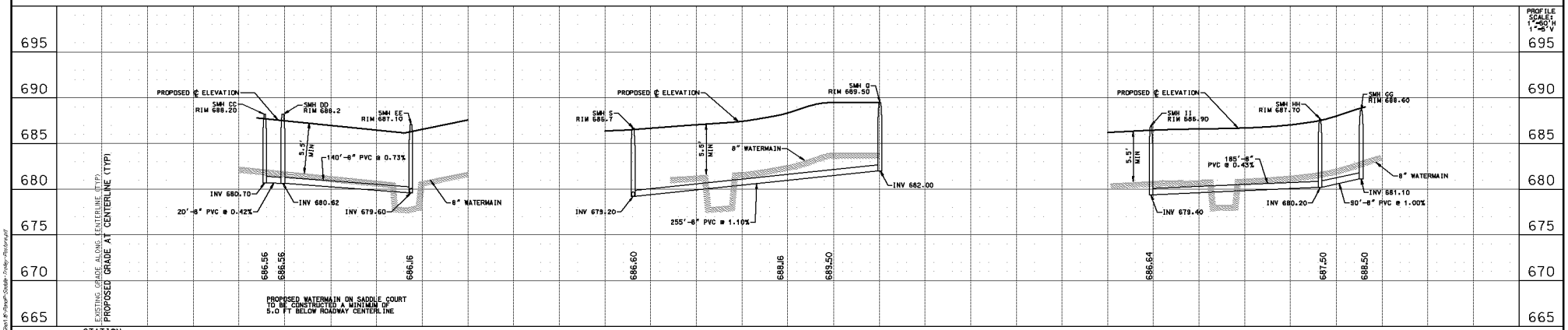
WHEN WATERMAIN IS BENEATH STORM SEWER OR SANITARY SEWER. SEWER MUST BE CONSTRUCTED WITH WATER QUALITY PIPE PER STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS.



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DATE	DESCRIPTION OF REVISION	BY
08/21/18	REVISED PER IEPA COMMENTS	KJM
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
06/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	1"=50'

SADDLE COURT, TROLLEY COURT, PASTURE COURT LINK CROSSING RESIDENTIAL DEVELOPMENT BUFFALO GROVE, ILLINOIS

SHEET 16 OF 30

PROJECT NUMBER: 2014

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ILLINOIS FIRM LICENSE 184-002694

Attachment: Link Crossing - Final Engineering Plan 11-05-18_r (Link Crossing Phase 2 Development Improvement Agreement)

CROSSING	BOTTOM OF PIPE	TOP OF PIPE	SEPARATION
G1	PROP STM 680.22	PROP WTR 678.22	2.00'* #
G2	PROP SAN 678.34	PROP WTR 676.34	2.00'* #
G3	PROP STM 680.27	PROP SAN 678.92	1.35'
G4	PROP STM 680.92	PROP SAN 678.72	2.20'
G5	PROP STM 681.60	PROP SAN 679.99	1.61'
G6	PROP STM 679.41	PROP SAN 678.29	1.12'
G7	PROP STM 679.25	PROP WTR 677.25	2.00'* #
G8	PROP STM 678.94	PROP SAN 677.49	1.45'
G9	PROP WTR 678.78	PROP SAN 677.21	1.57'
G10	PROP STM 678.79	PROP WTR 676.79	2.00'* #
G11	PROP STM 678.61	PROP SAN 677.69	0.92'
G12	PROP STM 681.00	PROP SAN 680.09	0.91'
G13	PROP SAN 679.38	PROP WTR 677.38	2.00'* #
G14	PROP STM 681.06	PROP WTR 679.06	2.00'* #
G15	PROP STM 677.96	PROP WTR 675.96	2.00'* #
G16	PROP STM 681.24	PROP WTR 679.24	2.00'* #
G17	PROP WTR 677.45	PROP SAN 672.87	4.58'
G18	PROP STM 680.19	PROP SAN 672.52	7.67'

PROPOSED UTILITIES TO BE CONSTRUCTED TO PROVIDE A MINIMUM 1.50' OF SEPARATION BETWEEN WATERMAIN AND SANITARY SEWER OR STORM SEWER. EXISTING WATER MAIN TO BE FIELD LOCATED AND ELEVATION VERIFIED PRIOR TO START OF CONSTRUCTION.

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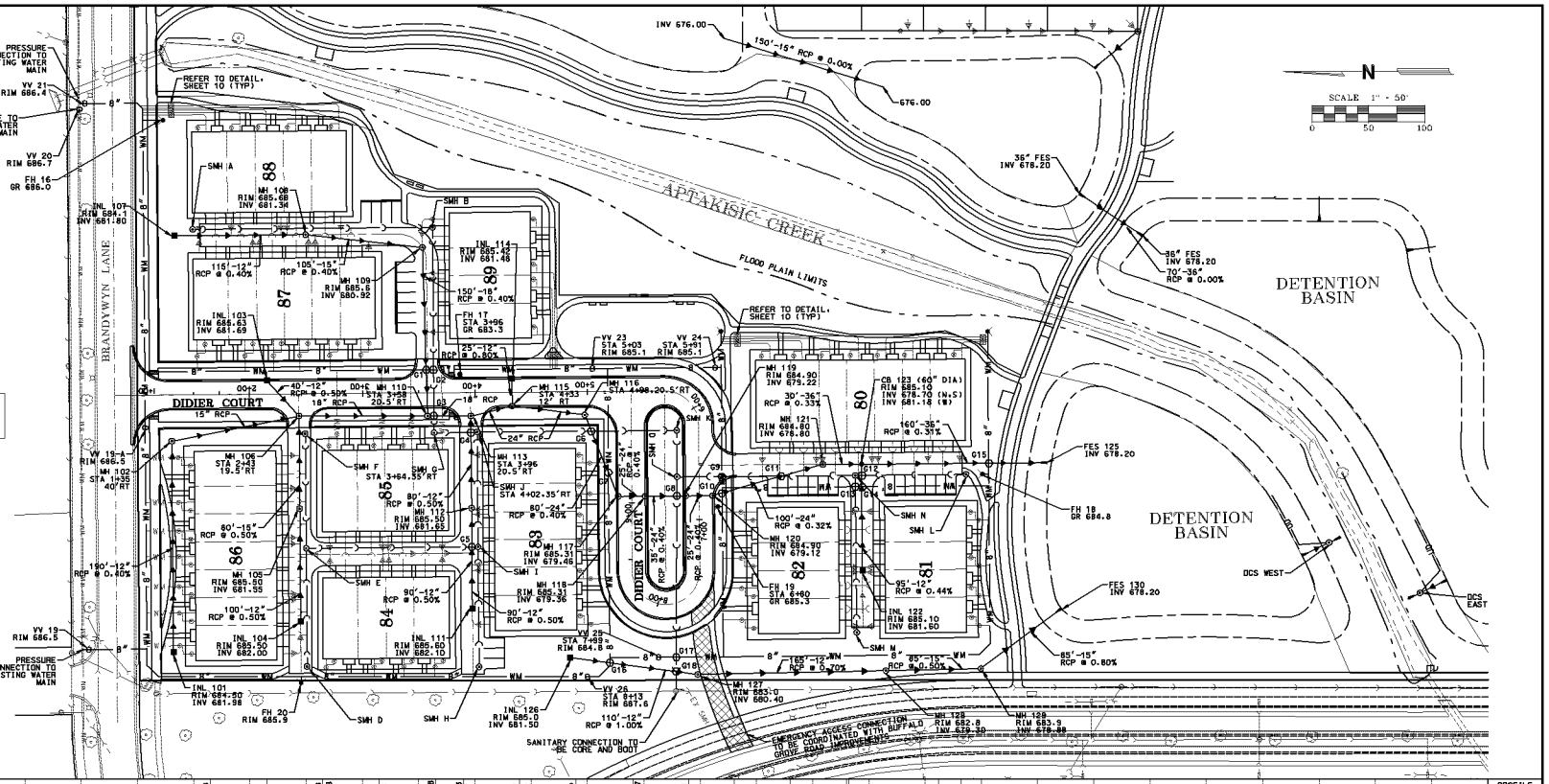
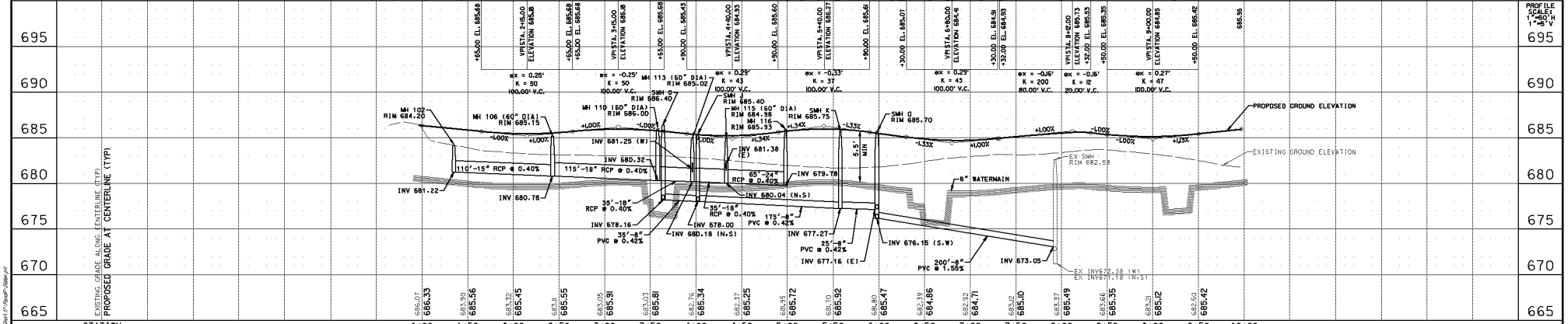
\# WHEN WATERMAIN IS BENEATH STORM SEWER OR SANITARY SEWER, SEWER MUST BE CONSTRUCTED WITH WATER QUALITY PIPE PER STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS.

FINAL B-BOX LOCATIONS FOR BUILDINGS 80, 86, AND 89 WILL BE DETERMINED AT THE TIME OF CONSTRUCTION AND AS DIRECTED BY THE VILLAGE ENGINEER. REFER TO DETAIL, SHEET 10





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Fax: 630-946-6629

DATE	DESCRIPTION OF REVISION	BY
08/21/18	REVISED PER IEPA COMMENTS	KJM
08/03/18	REVISED PER VILLAGE AND LCDOT COMMENTS	KJM
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
06/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	1"=50'

DIDIER COURT - STA 0+80 TO 9+99
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 17 OF 30

PROJECT NUMBER: 2014

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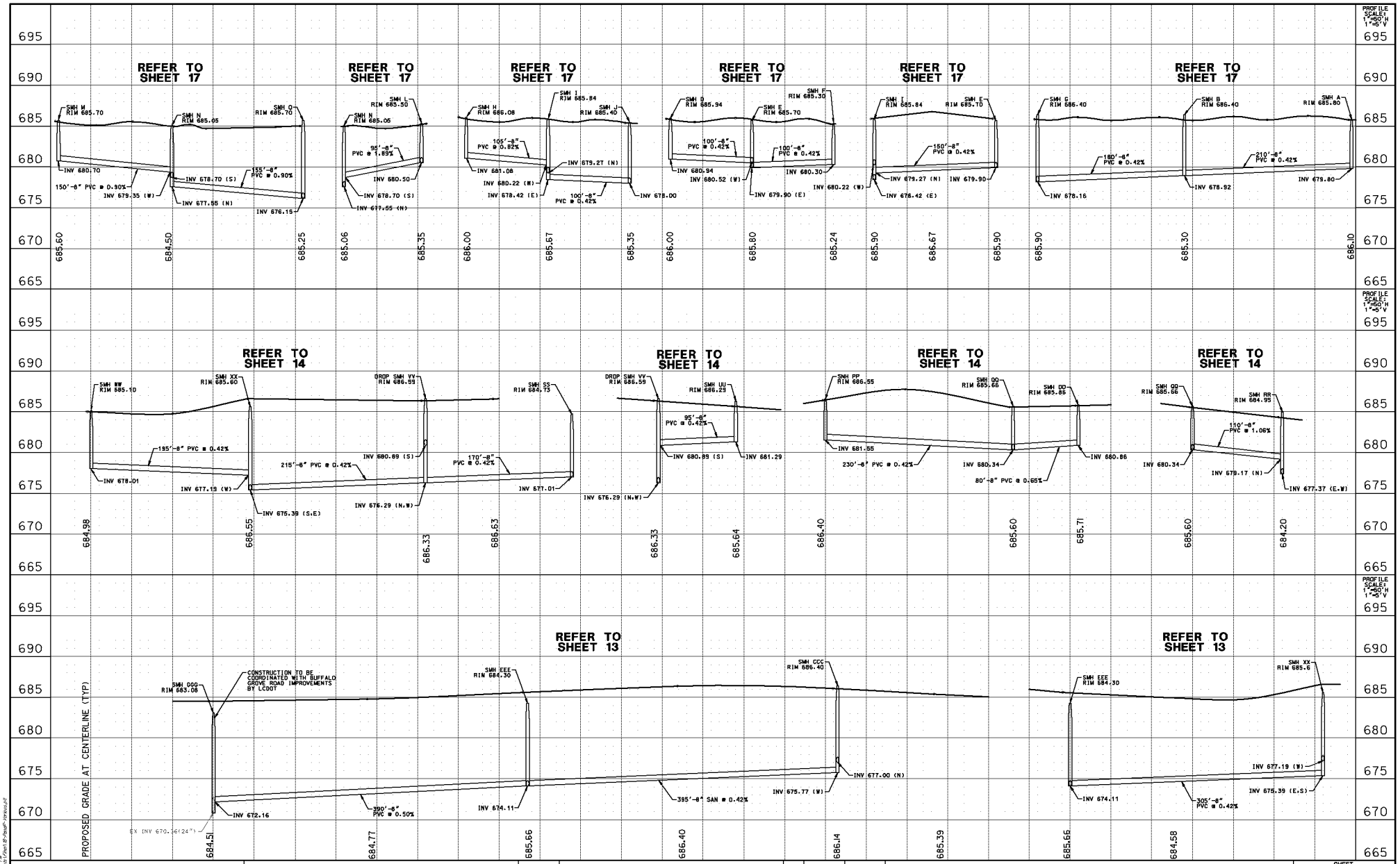
ILLINOIS FIRM LICENSE 184-002694



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CLIENT: KHovnanian Homes
1804 N. Naper Boulevard, Suite 200
Naperville, IL 60563
Phone: 630-210-0888
Fax: 630-946-6829

DATE	DESCRIPTION OF REVISION	BY
08/03/18	REVISED PER VILLAGE AND LCDOT COMMENTS	KJM
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
06/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	1"=50'

VARIOUS SANITARY SEWER PROFILES
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 18 OF 30

PROJECT NUMBER: 2014

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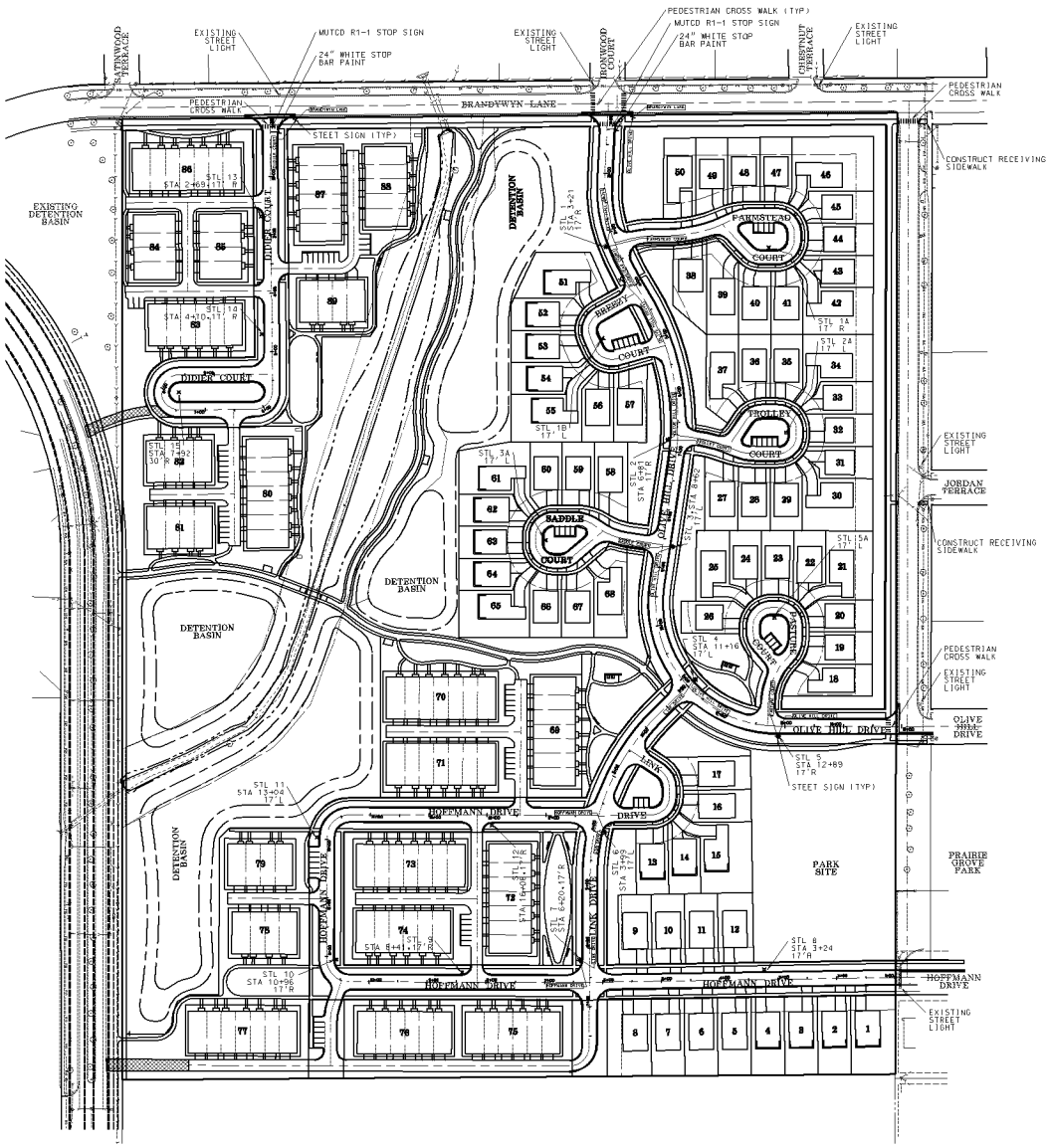
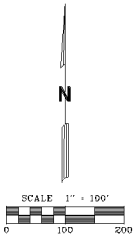
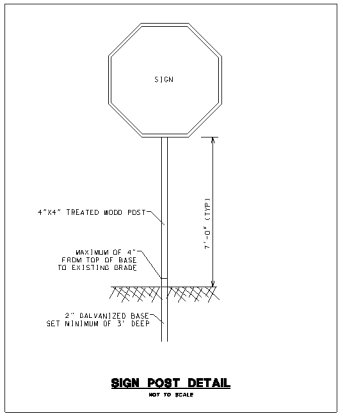
ILLINOIS FIRM LICENSE 184-002694

Attachment: Link Crossing - Final Engineering Plan 11-05-18_r (Link Crossing Phase 2 Development Improvement Agreement)







SIGN POST DETAIL

NOT TO SCALE

STREET LIGHTING, SIGNAGE, AND STRIPING GENERAL NOTES

1. TYPICAL STREET LIGHTS, LUMINAIRES AND LAMPS SHALL CONFORM TO THE VILLAGE STANDARDS AND ARE TO BE MATCHED TO THE PROXIMAL EXISTING SYSTEM:
   A. LUMINAIRE: LEOTECK LIGHT-ON GROUP, ECOBRA HEAD, ECI-6-M-MV-NW-3-700-08 (54 MATT).
   B. POLE: AMERON INTERNATIONAL, CENTRECON SERIES MEDIUM EMBEDDED OCTAGONAL POLE.23' IN HEIGHT OR 28' IN HEIGHT, DAVIT ARM.
   C. PHOTOCELL: ALL LUMINAIRES SHALL HAVE AN INDEPENDENT PHOTOCELL
2. STOP BARS SHALL BE INSTALLED AT ALL STOP LOCATIONS AS INDICATED IN ACCORDANCE WITH THE LATEST EDITION OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
3. ALL STOP SIGNS SHALL BE 30" WIDE UTILIZING DIAMOND GRADE MATERIAL AND INSTALLED PER THE MUTCD.
4. PEDESTRIAN CROSSWALKS TO BE PROVIDED AT THE FOLLOWING INTERSECTIONS: OLIVE HILL AND MERIDIAN, BRANDYWYN AND OLIVE HILL, BRANDYWYN AND MERIDIAN.

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DATE	DESCRIPTION OF REVISION	BY
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
06/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	1" = 100'

STREET LIGHT AND SIGNAGE PLAN
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 19 OF 30

PROJECT NUMBER: 2814

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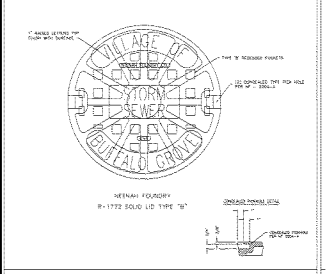
ILLINOIS FIRM LICENSE 184-002694

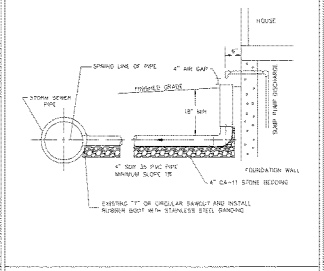
Attachment: Link Crossing - Final Engineering Plan 11-05-18_r (Link Crossing Phase 2 Development Improvement Agreement)

EXHIBIT NO. 201



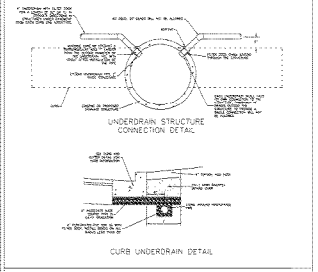
STORM SEWER MANHOLE LID DETAIL

EXHIBIT NO. 202



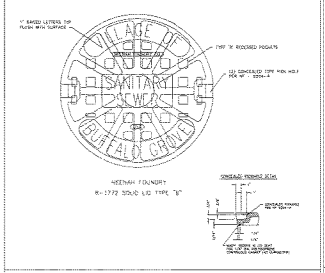
SUMP PUMP CONNECTION DETAIL

EXHIBIT NO. 203



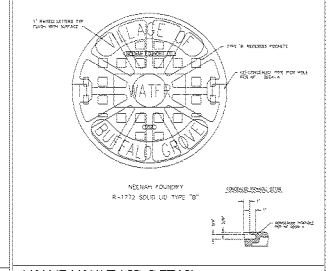
SUBSURFACE DRAINAGE DETAIL

EXHIBIT NO. 301



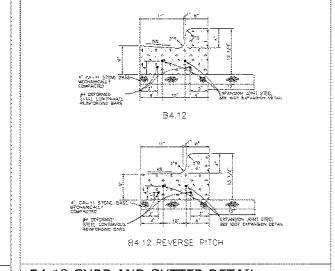
SANITARY SEWER MANHOLE LID DETAIL

EXHIBIT NO. 401



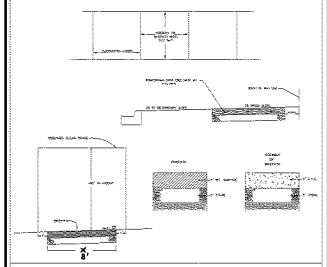
VALVE VAULT LID DETAIL

EXHIBIT NO. 501



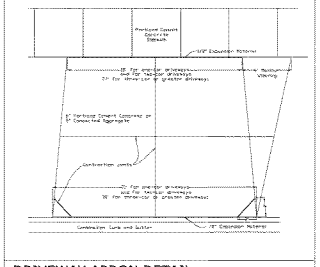
B4.12 CURB AND GUTTER DETAIL

EXHIBIT NO. 502



BIKEPATH & SIDEWALK DETAIL

EXHIBIT NO. 503



DRIVEWAY APRON DETAIL

EXHIBIT NO. 109
MATERIALS LIST

Water Distribution Material Specifications:

Water mains/pipe	Ductile Iron Pipe: Pipe shall be Ductile Iron, AWWA C150, minimum thickness Class 52. Pipe AWWA C151. Pipe lining: AWWA C104 (Cement Mortar). AWWA C115 (Joints: mechanical and push-on). AWWA C111 (Joints: Rubber Gasket). Pipe Wrapping: AWWA C105 (Polyethylene Wrap). Pipe Testing: AWWA C600 (Pipe Hydrostatic Pressure Test).
Valves	Gate Valves (Gate): Gate Valves (Gate) resilient wedge gate valve, AWWA Gate valve to be bronze, gate, resilient elastomer to open. AWWA C509 AWWA C509 - Gate Valves (Gate) Resilient Wedge Gate Valve for mains and shall meet Underwriters Laboratories (UL) and Factory Mutual (FM) Approved.
Valve Vault	All structures shall be manufactured, precast units designed specifically and individually cured at the plant and shall have rubber boots connecting to ASTM C-923. Step frame inserts are to match local frame requirements where requested by Village Engineer. Size: Pre-cast vault with 48-diameter minimum, with a minimum of 36 clear opening. Vault shall be designed to withstand surface loads and have a safety walk inside diameter. All Valve Vault covers must be individual, custom cast iron covers with the municipality stamped.
Hydrants	Hydrants Per IL-1772, embossed per Exhibit No. 400
Fire Hydrant	Minimum Design Model WB67-250, AWWA C-502, painted dark regular red gloss spread, with compact wedge operating gate valve, bronze stem and nut and the bell mark, one or two port and one bell mark, with Growth Underwriters or National Standard Specifications. Length: mains diameters vary with the Typical, two Hydrant Jumper, one each, where required attach. Lead cast, or, mechanical or pushon. All operating nut/bolts, Standard Jumper and hydrants shall be a dress flange to flange connection.
Fire Hydrant Extension	Fire hydrant extensions shall prove to be manufactured to Minimum, with - All standards shall meet.
Hydrant Valve Box / Valve Box	Hydrant Valve Box / valve box is 5 ft embossed "HYDRANT" Bottom valve box embossed "WATER"
Service Pipe	Copper tube, two inches: shall meet ASTM B88 Type K 1/2" minimum, Copper tube, two inches: shall meet ASTM B88 Type K 1/2" minimum, Service Saddle for existing water main pipe requires a stainless steel tap saddle design. Shall meet AWWA C-800 minimum length 12" long.
Corporation Stop	Mueller H15000, 1" minimum, AWWA C-800 1" (brass) tap or 2 1/4" end brass shall meet Shall AWWA standards and brass water control valve
Curb Stop	Copper service Mueller H15154 Double stop service. Resilient wedge control shutoffs to open, AWWA C-800 Stop and distribution, AWWA C-512
Curb Box	Copper service Mueller H10314 Double stop service, contains to Mueller Valve Box, stainless steel. Double stop service 5' rod heavy, modified to Mueller Valve Box.
Meter Set upper Fittings	Meter Set upper Fittings H-1900 - no all brass complete or equal, as required by the Village.
Pressure Connections	Meter Pits to be Sensus Meter / American Water Cutoff Valves 2500 regular. Split Pits with Sensus. All meter specifications.

Sanitary Sewer Material Specifications:

Sewer and Service Connections Pipe	Reinforced concrete pipe - circular reinforcement minimum Class 3 ASTM C-76, tube spigot Bands. 4"-6" solid wall PVC SDR 26 pipe. ASTM D-3034 for six to fifteen inches in diameter.
Sewer and Service Connections Pipe	Reinforced concrete pipe. ASTM C-425 PVC solid wall (SDR-26) pipe ASTM D-3034 for six to eighteen inches in diameter.
Sewer and Service Connections Pipe	8"-15" solid wall (SDR-26) pipe - ASTM D-3034 for six to eighteen inches in diameter.
Cleanout Pipes	Steel pipe. ASTM A120, Heavy weight, mill specification.
Manholes	Note: For sewer diameters with diameters of less, manholes shall have a bottom eight inch sump diameter. For sewer diameters more than eighteen inch diameter, manholes shall have a sump eight inches in depth. Manhole frames and lids shall be of the Neenah Foundry Co. R-1772, with self-sealing lid and recessed pick hole, manufactured per Exhibit No. 400.
Frames	Neenah No. R-1772, with self-sealing lid and recessed pick hole, manufactured per Exhibit No. 400.

Storm Sewer Material Specifications:

Inlets	All structures shall be poured with designed openings or manufacturing cured on the field.
Frames	Closed Lid Type 1 - Neenah No. R-1772 - embossed per Exhibit No. 301. Open Lid Type 1 - Neenah No. R-1772 - Embossed Grate or any other frames with Type 1 - Neenah No. R-1772 Grates with bars that length must be 30" equipped with 3 angles to match curb height. Designated frames, Type 2 - Neenah No. R-1707 Type grate. Type 3 - Neenah No. R-4270.
Storm Pipe Sewer	Reinforced concrete pipe - ASTM C-76 Class IV. PVC solid wall (ASTM D-3034) pipe - ASTM D-3034 for six to eighteen inches in diameter.
Swale pipes, culverts, connecting pipes and surface drain pipes	4"-6" solid wall sewer pipe ASTM 789 Blind connections must be cured in place. Blind pipe connection shall be water tight a rubber boot and stainless steel band. Swale pipes per Exhibit No. 202 and underdrain, per Exhibit No. 203.

Material Specifications for ARTERIALS:

Roadbed	Class II, Class III or Class IV. All roads shall be crowned, crowned segments will not be permitted. Roadbed shall be constructed to the specifications as specified in the IDOT Standard Specifications for Road and Bridge Construction. All roads shall be crowned, crowned segments will not be permitted. Roadbed shall be constructed to the specifications as specified in the IDOT Standard Specifications for Road and Bridge Construction. All roads shall be crowned, crowned segments will not be permitted. Roadbed materials, processed from IDOT approved sources, meeting the correct guidelines.
Crown Roadbed	Class II, Class III or Class IV. This item shall meet the requirements of Class II Class III per the IDOT Standard Specifications for Road and Bridge Construction. All roads shall be crowned, crowned segments will not be permitted. Roadbed shall be constructed to the specifications as specified in the IDOT Standard Specifications for Road and Bridge Construction. All roads shall be crowned, crowned segments will not be permitted. Roadbed materials, processed from IDOT approved sources, meeting the correct guidelines.
Appurtenances	No more than two passing opposite adjacent pipes with one each minimum length adjacent shall be allowed. Minimum pipe 7' total installed in each direction. Only one HDPE pipe with a max of 7' may be used within the ground adjacent. Pipe material quality or HDPE adjacent pipe installed. 7' x 3.5' turns to be used between all flatter, steep and shallow, blunt pipe, and any tension.

Miscellaneous Material Specifications:

Concrete Finishes	Spark resistant finishes on bridge decks in accordance with Section 1.1 of IDOT Standard Specifications for Road and Bridge Construction.
Concrete	In accordance with IDOT Standard Specifications for Road and Bridge Construction and Chapter 10 Section 10 of the Village of Buffalo Grove Municipal Code.
Asphalt	In accordance with IDOT Standard Specifications for Road and Bridge Construction and Chapter 10 Section 10 of the Village of Buffalo Grove Municipal Code.

* The Village Engineer shall have the authority to approve the use of alternative materials than those specifically required by Exhibit 109 in the manner provided for in this Title. The Village Engineer may approve alternative materials that are not specifically required by this title when:

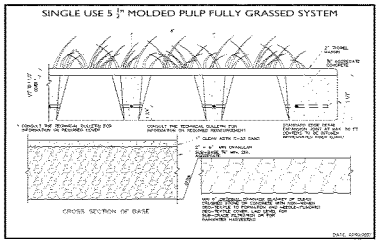
1. The materials or their components required by this title are no longer manufactured and available for purchase; and
2. The alternative materials are generally consistent with requirements of this title including but not limited to those standards relating to production, composition, safety and aesthetics.

Trenched Specifications:

In addition to the requirements of IDOT's Standard Specifications for Road and Bridge Construction or the Standard Specifications for Water and Sewer Construction in Illinois:

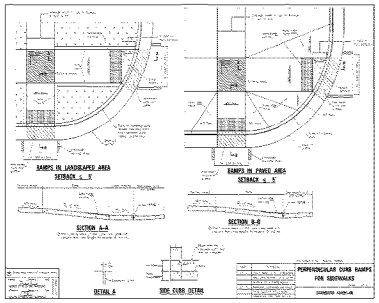
Trench Sewer	Trenching and bedding, with repairing, as limited by the Village Engineer
Sanitary Sewer	Trenching and bedding, with repairing, as directed by the Village Engineer

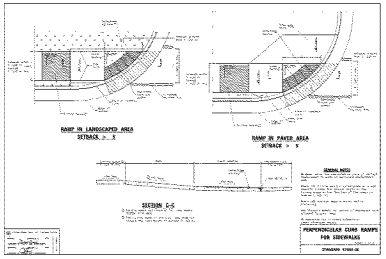
SINGLE USE 5 1/2" MOLDED PULP FULLY GRASSED SYSTEM

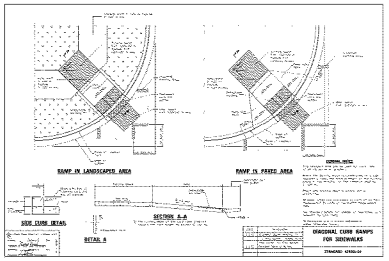


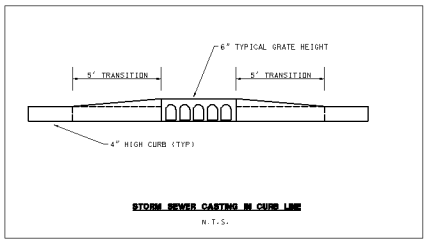
20' WIDE GRASS-PAVE EMERGENCY ACCESS DETAIL

ALL VILLAGE OF BUFFALO GROVE ENGINEERING STANDARDS AND SPECIFICATIONS SHALL TAKE PRECEDENCE ON VILLAGE STREETS









STORM SEWER CASTING IN CURB LINE

N.T.S.

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06/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	N.T.S.

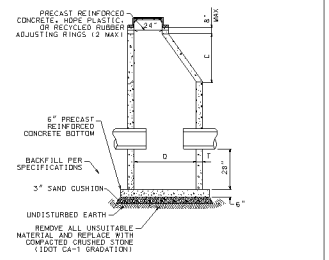
CONSTRUCTION DETAILS
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 20 OF 30

PROJECT NUMBER: 2014
© MACKIE CONSULTANTS LLC, 2018
ILLINOIS FIRM LICENSE 184-002694

Attachment Link Crossing - Final Engineering Plan 11-05-18_r (Link Crossing Phase 2 Development Improvement Agreement)

MATERIALS FOR WALLS	D	C	T (MIN)
PRECAST REINFORCED CONCRETE RISERS ASTM C-478	36"	15"	4"
	48"	30"	5"
	60"	45"	5"

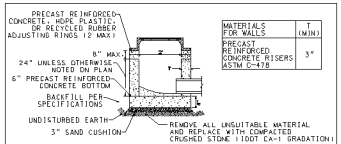


NOTES:

1. PRECAST MANHOLES AND STRUCTURES SHALL CONFORM TO ASTM C478 AND THE DIMENSIONS SHOWN ON THE PLANS. PRECAST COMPONENTS SHALL BE SUBSTANTIALLY FREE FROM FRACTURES, LARGE OR DEEP CRACKS AND SURFACE ROUGHNESS CONFORMING THE QUALITY CRITERIA ESTABLISHED IN ASTM C478.
2. PRECAST SECTIONS TO BE JOINED WITH TONGUE AND GROOVE JOINTS SEALED WITH A CONTINUOUS LAYER OF PREFORMED FLEXIBLE GASKETS, RUBBER GASKETS BUTYL ROPE OR OTHER EQUIVALENT BITUMINOUS MATERIAL PER THE STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.
3. STORM STRUCTURE FRAME AND COVERS SHALL BE IN ACCORDANCE WITH THE FRAME AND GRATE SCHEDULE PROVIDED.
4. STEPS SHALL BE NEENAH R-1980-J OR APPROVED EQUAL.
5. FRAME TO BE SET TO FINISHED GRADE SHOWN ON PLANS OR GRADE ESTABLISHED BY ENGINEER. STRUCTURE DIMENSIONS SHALL BE DETERMINED BASED ON ELEVATIONS PROVIDED ON THE PLANS.
6. ALL LIFT HOLES SHALL BE FILLED WITH A PRECAST CONCRETE PLUG SEALED AND COVERED WITH MASTIC OR THOROUGHLY WETTED, FILLED WITH MORTAR, SMOOTHED AND POINTED INSIDE AND OUT.
7. AGGREGATE BACKFILL (IDOT CA-6, CA-7, CA-10 OR FA-10) SHALL BE PROVIDED AROUND STRUCTURE TO SUBGRADE ELEVATION WHEN STRUCTURE FALLS WITHIN 24-INCHES OF ALL PAVEMENTS, CURB AND GUTTER, DRIVEWAYS AND SIDEWALKS.
8. STRUCTURES LOCATED IN THE CURB LINE SHALL REQUIRE OPENING TO BE PLACED IN PROPER LOCATION WITH RESPECT TO BACK OF CURB.

CATCH BASIN DETAIL

NOT TO SCALE



MATERIALS FOR WALLS	T (MIN)
PRECAST REINFORCED CONCRETE RISERS ASTM C-478	3"

NOTES:

1. PRECAST MANHOLES AND STRUCTURES SHALL CONFORM TO ASTM C478 AND THE DIMENSIONS SHOWN ON THE PLANS. PRECAST COMPONENTS SHALL BE SUBSTANTIALLY FREE FROM FRACTURES, LARGE OR DEEP CRACKS AND SURFACE ROUGHNESS CONFORMING THE QUALITY CRITERIA ESTABLISHED IN ASTM C478.
2. PRECAST SECTIONS TO BE JOINED WITH TONGUE AND GROOVE JOINTS SEALED WITH A CONTINUOUS LAYER OF PREFORMED FLEXIBLE GASKETS, RUBBER GASKETS BUTYL ROPE OR OTHER EQUIVALENT BITUMINOUS MATERIAL PER THE STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.
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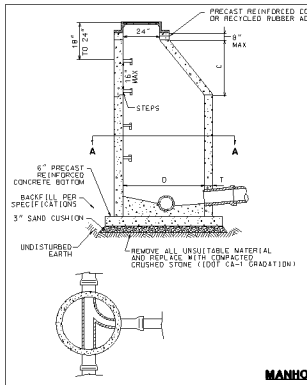
8. MANHOLES LOCATED IN THE CURB LINE SHALL REQUIRE OPENING TO BE PLACED IN PROPER LOCATION WITH RESPECT TO BACK OF CURB.

INLET DETAIL

NOT TO SCALE



SECTION A-A

MATERIALS FOR WALLS	D	C	T (MIN)
PRECAST REINFORCED CONCRETE RISERS ASTM C-478	48"	30"	5"
	60"	45"	5"

DIAMETER OF MAIN SEWER	D
18" AND UNDER	48"
21" THRU 42"	60"

NOTES:

1. PRECAST MANHOLES AND STRUCTURES SHALL CONFORM TO ASTM C478 AND THE DIMENSIONS SHOWN ON THE PLANS. PRECAST COMPONENTS SHALL BE SUBSTANTIALLY FREE FROM FRACTURES, LARGE OR DEEP CRACKS AND SURFACE ROUGHNESS CONFORMING THE QUALITY CRITERIA ESTABLISHED IN ASTM C478.
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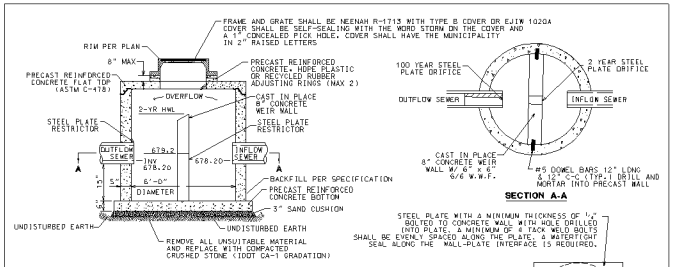
4. STEPS SHALL BE NEENAH R-1980-J OR APPROVED EQUAL.
5. FRAME TO BE SET TO FINISHED GRADE SHOWN ON PLANS OR GRADE ESTABLISHED BY ENGINEER. MANHOLE DIMENSIONS SHALL BE DETERMINED BASED ON ELEVATIONS PROVIDED ON THE PLANS.
6. ALL LIFT HOLES SHALL BE FILLED WITH A PRECAST CONCRETE PLUG SEALED AND COVERED WITH MASTIC OR THOROUGHLY WETTED, FILLED WITH MORTAR, SMOOTHED AND POINTED INSIDE AND OUT.
7. AGGREGATE BACKFILL (IDOT CA-6, CA-7, CA-10 OR FA-10) SHALL BE PROVIDED AROUND STRUCTURE TO SUBGRADE ELEVATION WHEN MANHOLE FALLS WITHIN 24-INCHES OF ALL PAVEMENTS, CURB AND GUTTER, DRIVEWAYS AND SIDEWALKS.
8. MANHOLES LOCATED IN THE CURB LINE SHALL REQUIRE OPENING TO BE PLACED IN PROPER LOCATION WITH RESPECT TO BACK OF CURB.

MANHOLE DETAIL

NOT TO SCALE



SECTION A-A

STEEL PLATE DETAIL

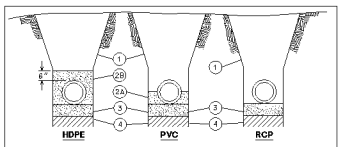
NOTES:

1. PRECAST MANHOLES AND STRUCTURES SHALL CONFORM TO ASTM C478 AND THE DIMENSIONS SHOWN ON THE PLANS. PRECAST COMPONENTS SHALL BE SUBSTANTIALLY FREE FROM FRACTURES, LARGE OR DEEP CRACKS AND SURFACE ROUGHNESS CONFORMING THE QUALITY CRITERIA ESTABLISHED IN ASTM C478.
2. PRECAST SECTIONS TO BE JOINED WITH TONGUE AND GROOVE JOINTS SEALED WITH A CONTINUOUS LAYER OF PREFORMED FLEXIBLE GASKETS, RUBBER GASKETS BUTYL ROPE OR OTHER EQUIVALENT BITUMINOUS MATERIAL PER THE STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.
3. STEPS SHALL BE NEENAH R-1980-J OR APPROVED EQUAL.
4. FRAME TO BE SET TO FINISHED GRADE SHOWN ON PLANS OR GRADE ESTABLISHED BY ENGINEER. MANHOLE DIMENSIONS SHALL BE DETERMINED BASED ON ELEVATIONS PROVIDED ON THE PLANS.
5. ALL LIFT HOLES SHALL BE FILLED WITH A PRECAST CONCRETE PLUG SEALED AND COVERED WITH MASTIC OR THOROUGHLY WETTED, FILLED WITH MORTAR, SMOOTHED AND POINTED INSIDE AND OUT.
6. AGGREGATE BACKFILL (IDOT CA-6, CA-7, CA-10 OR FA-10) SHALL BE PROVIDED AROUND STRUCTURE TO SUBGRADE ELEVATION WHEN STRUCTURE FALLS WITHIN 24-INCHES OF ALL PAVEMENTS, CURB AND GUTTER, DRIVEWAYS AND SIDEWALKS.

	RESTRICTION INVERT	2 YR PLATE ORIFICE DIAMETER	100 YR PLATE ORIFICE DIAMETER	2 YR WEIR TOP ELEVATION
WEST OCS	678.2	3.75"	5.55"	679.81
EAST OCS	678.2	7.70"	12.00"	680.00

OUTLET CONTROL STRUCTURE W/WEIR DETAIL

NOT TO SCALE



TRENCH DEPTH/PROTECTION	REQUIRED TRENCH WIDTH ON EACH SIDE OF THE PIPE
5' AND LESS, WITHOUT PROTECTION	12"
5' AND LESS, WITH PROTECTION	18"
GREATER THAN 5'	18"

LEGEND:

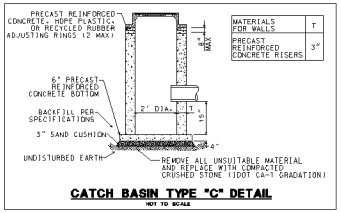
1. SELECTED GRANULAR BACKFILL. (IDOT CA-6, CA-10 OR FA-10 OR AS SPECIFIED. SHALL BE USED BENEATH AND WITHIN 2' OF PAVEMENTS, CURBS AND GUTTERS, DRIVEWAYS AND SIDEWALKS. SUITABLE EXCAVATED MATERIAL MAY BE USED WHEN SELECTED GRANULAR BACKFILL IS NOT REQUIRED.
2A. HAUNCHING MATERIAL - (IDOT CA-6, CA-10, OR FA-10. HAUNCHING MATERIAL SHALL BE PLACED LONGITUDINALLY ALONG THE PIPE IN MAXIMUM 6 INCH LIFTS, LOOSE MEASURE.
2B. INITIAL BACKFILL - (IDOT CA-6, CA-10 OR FA-10. INITIAL BACKFILL SHALL BE PLACED IN UNIFORM LAYERS NOT EXCEEDING 6 INCHES THICK LOOSE MEASURE.
3. 4" MINIMUM BEDDING -(IDOT CA-6, CA-10 OR FA-10. BEDDING THICKNESS SHALL BE 6" MINIMUM FOR ADS PIPE GREATER THAN 30".
4. UNSUITABLE MATERIAL TO BE REMOVED AND REPLACED AS DIRECTED BY SOILS ENGINEER.

NOTES:

1. ALL TRENCH AND BRACING SHALL CONFORM TO FEDERAL, STATE, AND LOCAL REGULATIONS.

STORM SEWER TRENCH DETAIL

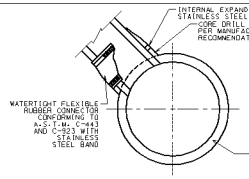
NOT TO SCALE



MATERIALS FOR WALLS	T
PRECAST REINFORCED CONCRETE RISERS	3"

CATCH BASIN TYPE "C" DETAIL

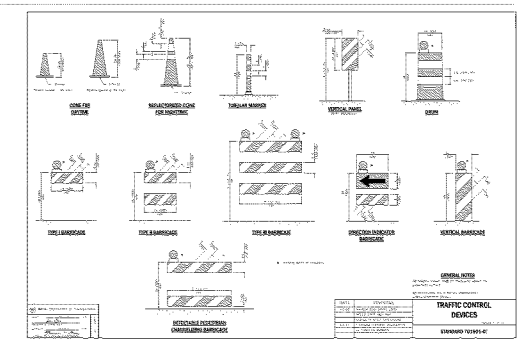
NOT TO SCALE

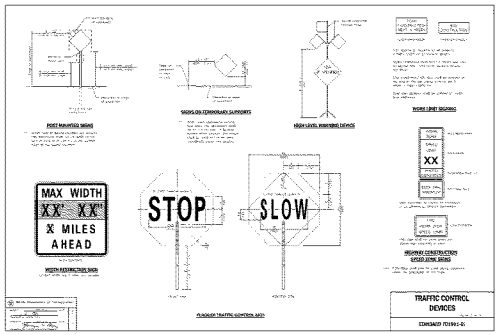


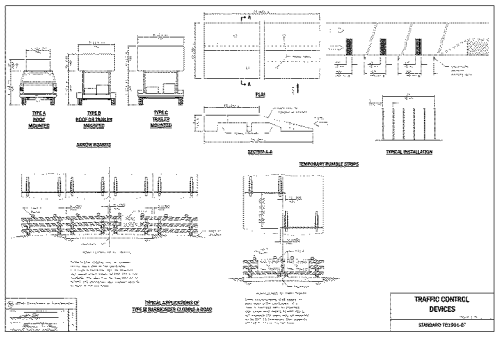
ALL STORM SEWER CONNECTIONS TO EXISTING TRUNK SEWERS SHALL COMPLY WITH THE DETAIL ABOVE. STORM SEWER CONNECTIONS SHALL BE CORED AND CONNECTED TO THE EXISTING TRUNK SEWER. CONNECTION SHALL BE MADE WITH A RUBBER BOOT AND ANY DAMAGE TO THE EXISTING TRUNK SEWER SHALL BE REPAIRED BY CONTRACTOR. MANHOLE MUST BE TESTED UPON COMPLETION. ALL WORK SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE STORM SEWER.

STORM SEWER CONNECTION DETAIL

NOT TO SCALE







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Fax: 630-946-6629

DATE	DESCRIPTION OF REVISION	BY
08/03/18	REVISED PER VILLAGE AND LCDOT COMMENTS	KJM
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
06/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	N.T.S.

CONSTRUCTION DETAILS
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 21 OF 30

PROJECT NUMBER: 2014

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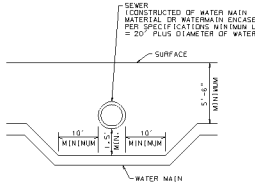
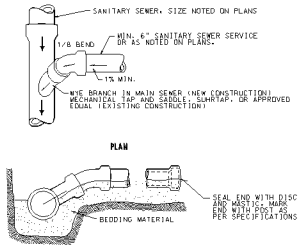
ILLINOIS FIRM LICENSE 184-002694

Attachment Link Crossing - Final Engineering Plan 11-05-18_v (Link Crossing Phase 2 Development Improvement Agreement)



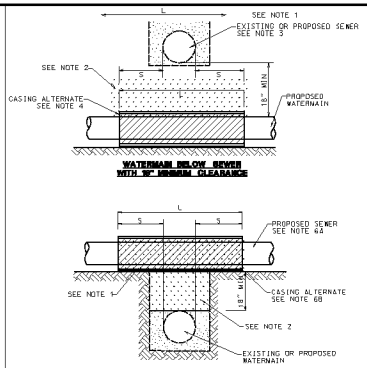
NOTE:
ALL FITTINGS REQUIRED FOR LOWERING OF WATER MAIN SHALL BE RESTRAINED JOINTS.

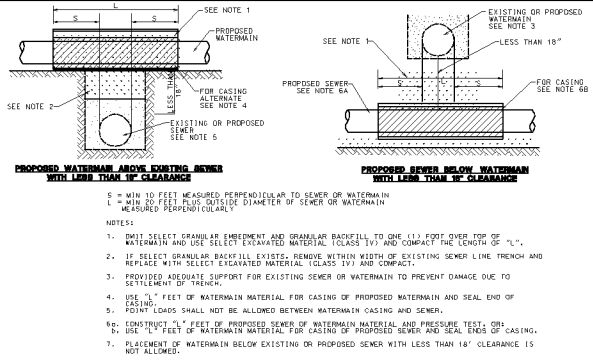
WATER MAIN LOWERING DETAILS
NOT TO SCALE



NOTES:
1. SANITARY SEWER MATERIAL NOTED ON PLANS, OR AS SPECIFIED.
2. SEWER SERVICE SHALL BE LOCATED AS NOTED ON PLANS.

SANITARY SEWER SERVICE DETAILS
NOT TO SCALE

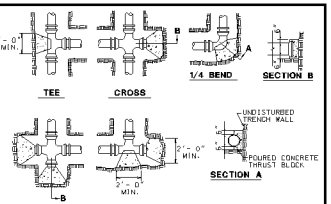




S = MIN 10 FEET MEASURED PERPENDICULAR TO SEWER OR WATERMAIN
L = MIN 20 FEET PLUS OUTSIDE DIAMETER OF SEWER OR WATERMAIN MEASURED PERPENDICULARLY

NOTES:
1. DWIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF WATERMAIN AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L".
2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
3. PROVIDED ADEQUATE SUPPORT FOR EXISTING SEWER OR WATERMAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF TRENCH.
4. USE "L" FEET OF WATERMAIN MATERIAL FOR CASING OF PROPOSED WATERMAIN AND SEAL END OF CASING.
5. POINT LOADS SHALL NOT BE ALLOWED BETWEEN WATERMAIN CASING AND SEWER.
6a. CONSTRUCT "L" FEET OF PROPOSED SEWER OF WATERMAIN MATERIAL AND PRESSURE TEST; OR:
b. USE "L" FEET OF WATERMAIN MATERIAL FOR CASING OF PROPOSED SEWER AND SEAL ENDS OF CASING.
7. PLACEMENT OF WATERMAIN BELOW EXISTING OR PROPOSED SEWER WITH LESS THAN 18' CLEARANCE IS NOT ALLOWED.
8. PROVIDE TRENCH COMPACTION IN ACCORD WITH SEC 20-2.2.2(B) OF STANDARD SPECIFICATIONS FOR WATER MAIN AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.

WATERMAIN AND SEWER SEPARATION DETAILS
N.T.S.

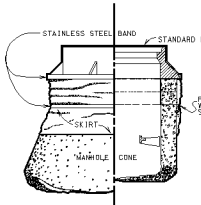


MINIMUM BEARING AREA IN SQUARE FEET

SIZE (DIA. IN INCH.)	DEAD END OR TEE (SQ. FT.)	1/4 BEND 90° BEND (SQ. FT.)	1/8 BEND 45° BEND (SQ. FT.)	1/16 BEND 22.5° BEND (SQ. FT.)
6	4.3	6.0	3.2	1.7
8	7.5	10.7	5.8	3.0
10	11.8	16.6	9.0	4.6
12	17.0	24.0	13.0	6.6
16	30.0	42.5	23.0	11.8

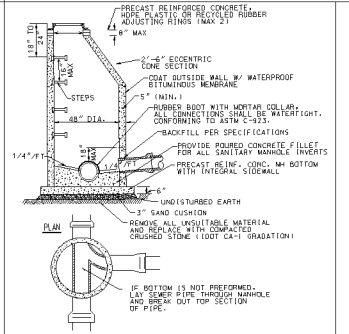
1. THE ABOVE TABLE IS BASED ON 2,000 PSF SOIL BEARING AGAINST THE UNDISTURBED TRENCH WALL AND REPRESENTS THE MINIMUM VERTICAL AREA OF THE THRUST BLOCK PERPENDICULAR TO THE FITTING INCLUDING THE ANGLE OF THE FITTING.
2. THRUST BLOCKING TO PREVENT MOVEMENT OF LINES UNDER PRESSURE AT BENDS, TEES, CAPS, VALVES, HYDRANTS AND AT POINTS SPECIFIED SHALL BE CLASS "B" CONCRETE, A MIN. OF 12" THICK, PLACED BETWEEN SOLID GROUND AND FITTING, AND SHALL BE ANCHORED IN SUCH A MANNER THAT PIPE AND FITTING WILL BE ACCESSIBLE FOR REPAIRS. THRUST BLOCK SHALL BE PLACED AT BENDS OR TEE 1/4 OR MORE. RETAINER GLANDS MAY BE USED IN PLACE OF THRUST BLOCKS.
3. PROVIDE POLYETHYLENE ENCASEMENT THROUGHOUT THE ENTIRE LENGTH OF THE WATERMAIN, AS REQUIRED.

THRUST BLOCK DETAILS
NOT TO SCALE



NOTES:
1. CHIMNEY SEAL SHALL BE INSTALLED ON ALL SANITARY SEWERAGE SYSTEM MANHOLES.
2. "CRETE" EXTERNAL OR INTERNAL SEALS ARE RECOMMENDED; OTHER PRODUCTS OR OTHER DESIGN SOLUTIONS SHALL REQUIRE THE APPROVAL OF THE MUNICIPAL ENGINEER.
3. CHIMNEY SEALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

MANHOLE CHIMNEY SEAL DETAILS
NOT TO SCALE



NOTES:
1. PRECAST MANHOLES AND STRUCTURES SHALL CONFORM TO ASTM C478 AND THE DIMENSIONS SHOWN ON THE PLANS. PRECAST COMPONENTS SHALL BE SUBSTANTIALLY FREE FROM FRACTURES, LARGE OR DEEP CRACKS AND SURFACE ROUGHNESS CONFORMING THE QUALITY CRITERIA ESTABLISHED IN ASTM C478.
2. JOINTS BETWEEN PRECAST SECTIONS SHALL BE PREFORMED FLEXIBLE GASKETS. RUBBER GASKETS BUTYL ROPE OR OTHER EQUIVALENT MATERIAL TO ENSURE A WATERTIGHT JOINT. PREFORMED GASKETS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C990. RUBBER GASKETS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C443.
3. STRUCTURE FRAME AND COVERS SHALL BE IN ACCORDANCE WITH THE FRAME AND GRATE SCHEDULE PROVIDED.
4. STEPS SHALL BE NEENAH R-1980-J OR APPROVED EQUAL.
5. FRAME TO BE SET TO FINISHED GRADE SHOWN ON PLANS OR GRADE ESTABLISHED BY ENGINEER. MANHOLE DIMENSIONS SHALL BE DETERMINED BASED ON ELEVATIONS PROVIDED ON THE PLANS.
6. ALL LIFT HOLES SHALL BE FILLED WITH A PRECAST CONCRETE PLUG SEALED AND COVERED WITH MASTIC OR THOROUGHLY WETTED, FILLED WITH MORTAR, SMOOTHED AND POINTED INSIDE AND OUT.
7. AGGREGATE BACKFILL (IDOT CA-6, CA-7, CA-10 OR FA-10) SHALL BE PROVIDED AROUND STRUCTURE TO SUBGRADE ELEVATION WHEN MANHOLE FALLS WITHIN 24-INCHES OF ALL PAVEMENTS, CURB AND GUTTER, DRIVEWAYS AND SIDEWALKS.
8. ALL SANITARY SEWER CONNECTIONS SHALL BE WATERTIGHT, CONFORMING TO ASTM C-923.

48" SANITARY MANHOLE - TYPE A - DETAILS
NOT TO SCALE

TRENCH DEPTH/PROTECTION	REQUIRED TRENCH WIDTH ON EACH SIDE OF THE PIPE
5' AND LESS, WITHOUT PROTECTION	12"
5' AND LESS, WITH PROTECTION	18"
GREATER THAN 5'	18"

LEGEND:
1. SELECTED GRANULAR BACKFILL, IDOT CA-6, CA-10 OR FA-10 OR AS SPECIFIED, SHALL BE USED BENEATH AND WITHIN 2' OF PAVEMENTS, CURBS AND GUTTERS, DRIVEWAYS AND SIDEWALKS. SUITABLE EXCAVATED MATERIAL MAY BE USED WHEN SELECTED GRANULAR BACKFILL IS NOT REQUIRED.
2. INITIAL BACKFILL SHALL BE SUITABLE MATERIAL EXCAVATED FROM THE TRENCH OR SELECTED GRANULAR BACKFILL. INITIAL BACKFILL SHALL BE PLACED IN UNIFORM LAYERS NOT EXCEEDING 6 INCHES THICK LOOSE MEASURE.
3. HAUNCHING MATERIAL - IDOT CA-6, CA-10, OR FA-10. HAUNCHING MATERIAL SHALL BE PLACED LONGITUDINALLY ALONG THE PIPE IN MAXIMUM 6 INCH LIFTS, LOOSE MEASURE.
4. 4" MINIMUM BEDDING - IDOT CA-6, CA-10 OR FA-10, UNLESS OTHERWISE APPROVED.
5. UNSUITABLE MATERIAL TO BE REMOVED AND REPLACED AS DIRECTED BY SOILS ENGINEER.

NOTES:
1. ALL TRENCH AND BRACING SHALL CONFORM TO FEDERAL, STATE, AND LOCAL REGULATIONS.

WATER MAIN TRENCH DETAIL
NOT TO SCALE

TRENCH DEPTH/PROTECTION	REQUIRED TRENCH WIDTH ON EACH SIDE OF THE PIPE
5' AND LESS, WITHOUT PROTECTION	12"
5' AND LESS, WITH PROTECTION	18"
GREATER THAN 5'	18"

LEGEND:
1. SELECTED GRANULAR BACKFILL, IDOT CA-6, CA-10 OR FA-10 OR AS SPECIFIED, SHALL BE USED BENEATH AND WITHIN 2' OF PAVEMENTS, CURBS AND GUTTERS, DRIVEWAYS AND SIDEWALKS. SUITABLE EXCAVATED MATERIAL MAY BE USED WHEN SELECTED GRANULAR BACKFILL IS NOT REQUIRED.
2. INITIAL BACKFILL SHALL BE SUITABLE MATERIAL EXCAVATED FROM THE TRENCH OR SELECTED GRANULAR MATERIAL. INITIAL BACKFILL SHALL BE PLACED IN UNIFORM LAYERS NOT EXCEEDING 6 INCHES THICK LOOSE MEASURE.
3. HAUNCHING MATERIAL - IDOT CA-6, CA-10, OR FA-10. HAUNCHING MATERIAL SHALL BE PLACED LONGITUDINALLY ALONG THE PIPE IN MAXIMUM 6 INCH LIFTS, LOOSE MEASURE.
4. 4" MINIMUM BEDDING - IDOT CA-6, CA-10 OR FA-10, UNLESS OTHERWISE APPROVED.
5. UNSUITABLE MATERIAL TO BE REMOVED AND REPLACED AS DIRECTED BY SOILS ENGINEER.

NOTES:
1. ALL TRENCH AND BRACING SHALL CONFORM TO FEDERAL, STATE, AND LOCAL REGULATIONS.

SANITARY SEWER TRENCH DETAIL
NOT TO SCALE

LAKE COUNTY DOT SPECIAL CONDITIONS FOR CONSTRUCTION WITHIN A COUNTY HIGHWAY RIGHT-OF-WAY

WORK NOTIFICATION
PRIOR TO STARTING CONSTRUCTION THE PERMIT SECTION, (847) 377-7400, SHALL BE CALLED AND GIVEN THE CONSTRUCTION START DATE.

SPECIFICATIONS
THE CONSTRUCTION AND RESTORATION METHODS AND PROCEDURES, MATERIALS USED AND CONSTRUCTION SIGNING AND TRAFFIC CONTROL SHALL, WHEN APPLICABLE, CONFORM OR MEET THE STANDARDS AND REQUIREMENTS SET FORTH IN THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS , STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION , STANDARD SPECIFICATION FOR TRAFFIC CONTROL ITEMS AND THE HIGHWAY STANDARDS MANUAL AS PUBLISHED OR ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

FIELD CHANGES FOR WATERMAIN OR SEWER LOCATION
NO CHANGES TO THE DEPTH OR LOCATION OF THE WATERMAIN OR SEWER AS SHOWN ON THESE PLANS DUE TO UNFORESEEN FIELD CONDITIONS OR CONFLICTS CAN BE MADE UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE PERMIT SECTION OF THE LAKE COUNTY DIVISION OF TRANSPORTATION. ADDITIONS, EXTENSIONS OR DELETIONS FOR THE WATERMAIN OR SEWER NO ADDITIONS, EXTENSIONS OR DELETIONS CAN BE MADE TO THE WATERMAIN OR SEWER AS SHOWN ON THESE PLANS UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE PERMIT SECTION OF THE LAKE COUNTY DIVISION OF TRANSPORTATION.

APPROVAL OF MATERIALS
THE LAKE COUNTY DIVISION OF TRANSPORTATION PERMIT SECTION, (847) 377-7400, SHALL BE CALLED FOR APPROVAL OF ANY MATERIALS (I.E. TRENCH BACKFILL, SAND, GRAVEL OR OTHER GRANULATED MATERIALS) THAT WILL BE PLACED WITHIN THE COUNTY HIGHWAY RIGHT-OF-WAY THAT ARE NOT ON THE APPROVED ENGINEERING PLANS.

HAZARDS TO THE PUBLIC
MEASURES SHALL BE TAKEN TO PREVENT OR PROTECT THE PUBLIC FROM HAZARDS CAUSED BY THE CONSTRUCTION OPERATIONS.

PARKING OF VEHICLES, EQUIPMENT AND STORAGE OF MATERIALS
CONSTRUCTION WORKER'S VEHICLES AND CONSTRUCTION EQUIPMENT SHALL BE PARKED IN AREAS OUTSIDE OF THE COUNTY HIGHWAY RIGHT-OF-WAY OR IN AREAS WHERE THERE WILL BE NO INTERFERENCE WITH THE NORMAL USE OF THE HIGHWAY OR VEHICLE SIGHT DISTANCE. CONSTRUCTION MATERIALS SHALL BE LOCATED AT LEAST 12 FEET FROM A THROUGH TRAFFIC LANE OR OUTSIDE OF THE COUNTY HIGHWAY RIGHT-OF-WAY.

MAINTAINING EXISTING TRAFFIC CONTROL DEVICES
EXISTING TRAFFIC CONTROL DEVICES THAT ARE REMOVED SHALL BE RE-ERECTED AS SOON AS POSSIBLE. DAMAGED OR LOST TRAFFIC CONTROL SIGNS SHALL BE REPORTED TO THE SIGN SHOP, (847) 377-7501, OF THE LAKE COUNTY DIVISION OF TRANSPORTATION FOR REPLACEMENT. REGULATORY AND WARNING TRAFFIC SIGNS SHALL BE KEPT IN VIEW OF THE HIGHWAY TRAFFIC.

EXISTING DRAINAGE AND ACCESS
DISTURBED HIGHWAY DRAINAGE FACILITIES SHALL BE RE-ESTABLISHED AT THE CLOSE OF EACH WORK DAY. OCCUPANTS OF ADJACENT PROPERTIES HAVING ACCESS TO THE COUNTY HIGHWAY SHALL BE NOTIFIED PRIOR TO BEING BLOCKED AND SUITABLE ARRANGEMENTS MADE WITH THE OCCUPANTS. ADJACENT PROPERTY ACCESS SHALL BE RE-ESTABLISHED AS SOON AS POSSIBLE.

HIGHWAY PAVEMENTS
CARE SHALL BE TAKEN NOT TO BREAK, CRACK OR DAMAGE THE HIGHWAY PAVEMENT WITH EQUIPMENT OR MATERIALS. ANY DIRT OR DEBRIS TRACKED ONTO THE HIGHWAY PAVEMENT SHALL BE REMOVED. EQUIPMENT WITH GROUZZER PADS, CLEATS OR STUDS ARE NOT PERMITTED TO OPERATE ON THE HIGHWAY PAVEMENT.
IF, DUE TO CONSTRUCTION OPERATIONS, THE HIGHWAY PAVEMENT BECOMES DAMAGED OR UNDERMINED, ALL CONSTRUCTION WORK IN THAT AREA SHALL BE STOPPED AND THE HIGHWAY PAVEMENT REPAIRED AS DIRECTED BY THE LAKE COUNTY DIVISION OF TRANSPORTATION. ALTERNATE CONSTRUCTION MEASURES SHALL THEN BE USED TO PREVENT FURTHER HIGHWAY PAVEMENT DAMAGE.

EXCAVATIONS, TRENCHES AND BORE PITS
EXCAVATED MATERIAL SHALL, WHEN PRACTICAL, BE PILED ON THE NEAR TRAFFIC SIDE OF THE EXCAVATION, TRENCH OR BORE PIT. OPEN EXCAVATIONS, TRENCHES OR BORE PITS REMAINING AFTER WORKING HOURS SHALL NOT EXCEED 50 FEET IN LENGTH AND SHALL BE PROPERLY PROTECTED (FENCING, COVERED, ETC.) AND MARKED (TYPE I OR II BARRICADES). BARRICADES ARE USED IN SERIES. ONLY STEADY BURNING LIGHTS SHALL BE USED. BORE PITS SHALL BE LOCATED NO CLOSER THAN 50 FEET TO THE HIGHWAY PAVEMENT, BACK OF CURB OR GUTTER, OR SHOULDER BREAK LINE, WHICHEVER IS FURTHER. IF CASING PIPES ARE USED, THE VOIDS IN THE CASING PIPE SHALL BE FILLED AND/OR THE ENDS SEALED SO THERE WILL BE NO SILTATION INTO THE CASING PIPE.

BACKFILLING
BACKFILLING OPERATIONS SHALL BE SIMULTANEOUS WITH THE CONSTRUCTION OPERATIONS AND SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ANY EXCAVATION, TRENCH, BORE PIT OR PORTION THEREOF WITHIN A 1:1 SLOPE OF THE PAVEMENT EDGE OR BACK OF CURB SHALL BE BACKFILLED WITH TRENCH BACKFILL (SAND). IN ADDITION, TRENCH BACKFILL (SAND) SHALL BE USED FOR ALL ACCESS CROSSINGS AND PAVEMENT AREAS AND SHALL EXTEND TWO FEET BEYOND THE EDGE OF THE ACCESS OR PAVEMENT AREA. AREAS BETWEEN THE PAVEMENT EDGE AND SHOULDER BREAK LINE SHALL BE BACKFILLED WITH AGGREGATE BASE COURSE (GRAVEL). BACKFILL OF SHOULDER AREAS SHALL NOT EXTEND ABOVE THE EXISTING GROUND AND ANY SETTLEMENT SHALL BE PROMPTLY FILLED.

MANHOLES, VALVES, VALVE VAULTS AND APPURTENANCES
THE TOP OF THE FRAME AND LID OR COVER OF A MANHOLE, VALVE, OR VALVE VAULT SHALL BE FLUSH AND CONTOURED TO THE SURROUNDING GROUND. IF THIS IS NOT POSSIBLE DUE TO AN EXCESSIVE SLOPE, THE SURROUNDING GROUND SHALL BE REGRADED OR THE FRAME AND LID OR COVER PARTIALLY BURIED TO PROVIDE FOR A GRADUAL TRANSITION SLOPE SO THE AREA CAN BE SAFELY MOWED AND NO HAZARD TO THE PUBLIC WILL RESULT. THE TOP OF THE FRAME AND LID OR COVER THAT IS LOCATED WITHIN THE GRAVEL SHOULDER SHALL HAVE A BITUMINOUS APRON INSTALLED AROUND THE FRAME OR COVER AS DIRECTED BY THE LAKE COUNTY DIVISION OF TRANSPORTATION. ANY FRAME AND LID OR COVER LOCATED IN A PAVED AREA SHALL BE CONTOURED AND INCH BELOW THE SURFACE OF THE SURROUNDING PAVEMENT. THE TOP OF THE FRAME AND LID OR COVER SHALL NOT BE LOCATED WITHIN THE AREA OF 27.5 FEET TO 30.5 FEET FROM THE HIGHWAY PAVEMENT CENTERLINE.
SURFACE APPURTENANCES THAT EXTEND ABOVE THE SURROUNDING GROUND SURFACE SHALL BE LOCATED WITHIN 2 OF THE COUNTY HIGHWAY RIGHT-OF-WAY.

TILE LINES AND STORM SEWERS
EXISTING TILE LINES AND STORM SEWERS THAT ARE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE REPLACED IF BROKEN WITH LIKE SIZE AND KIND OF MATERIAL. TILE LINE AND STORM SEWER CROSSINGS OF THE EXCAVATION SHALL BE BRIDGED WITH RIGID MATERIAL SUCH AS WOOD OR STEEL. THE LOCATION AND DEPTH OF ANY ENCOUNTERED TILE LINES AND STORM SEWERS SHALL BE RECORDED AND A COPY GIVEN TO THE LAKE COUNTY DIVISION OF TRANSPORTATION.

WINTER CONSTRUCTION WORK
SNOW AND ICE REMOVAL OPERATIONS OF THE LAKE COUNTY DIVISION OF TRANSPORTATION SHALL HAVE PRECEDENCE OVER THE CONSTRUCTION OPERATIONS. A 2-FOOT WIDE (MINIMUM) AREA FROM THE HIGHWAY PAVEMENT EDGE SHALL BE MAINTAINED FOR THE ROADSIDE STORAGE OF SNOW AND ICE. NO CONSTRUCTION EQUIPMENT OR MATERIALS SHALL BE STORED IN THIS 2-FOOT WIDE (MINIMUM) CLEAR AREA NOR SHALL ANY PILES OF DIRT OR EXCAVATED MATERIALS BE LEFT IN THIS AREA.

RESTORATION AND CLEAN-UP
THE AREA OF THE COUNTY HIGHWAY RIGHT-OF-WAY DISTURBED BY CONSTRUCTION OPERATIONS SHALL BE KEPT TO A MINIMUM AND SHALL BE RESTORED AS PROMPTLY AS WEATHER AND SOIL CONDITIONS PERMIT. IF RESTORATION IS NOT ACCOMPLISHED VOLUNTARILY, THE LAKE COUNTY DIVISION OF TRANSPORTATION MAY SET A FINAL DATE FOR THE COMPLETION OF THE RESTORATION WORK.
TURF AREAS OF THE RIGHT-OF-WAY DISTURBED BY CONSTRUCTION OPERATIONS SHALL BE COMPLETELY REGRADED TO AN EVENLY OR BETTER CONDITION THAN EXISTED BEFORE CONSTRUCTION. ALSO AN AVERAGE 3-INCH DEPTH OF TOPSOIL, FERTILIZER, SEED AND MULCH SHALL BE USED. HYDRO SEEDING IS ALSO ACCEPTABLE. SOD SHALL BE USED IN HIGH EROSION AREAS. THIS RESTORATION WORK WILL NOT BE CONSIDERED COMPLETED UNTIL THE TURF COVER IS ESTABLISHED.
GRAVEL AND PAVED SHOULDERS THAT ARE DAMAGED SHALL BE REPLACED AS DIRECTED BY THE LAKE COUNTY DIVISION OF TRANSPORTATION. DRIVEWAYS, SIDE ROADS AND OTHER ACCESSES, WHICH ARE DAMAGED, SHALL BE RESTORED WITH SIMILAR MATERIALS AND THICKNESS. THE EDGES OF EXCAVATED PAVED SURFACES SHALL BE SAWCUT PRIOR TO REPAIR. CULVERTS, STORM SEWER SYSTEMS AND OTHER DRAINAGE FACILITIES INCLUDING DITCH LINES SHALL BE CLEANED OF SILTATION AND DEBRIS DUE TO THE CONSTRUCTION OPERATIONS.
OTHER AREAS OF THE RIGHT-OF-WAY THAT HAVE BEEN DISTURBED SUCH AS CURB AND GUTTERS SHALL BE RESTORED WITH SIMILAR MATERIALS.
ANY DAMAGED PROPERTY OF THE COUNTY OF LAKE, ITS DIVISION OF TRANSPORTATION, OR OF OTHERS (INCLUDING UTILITY COMPANIES) SHALL BE REPAIRED OR REPLACED OR THE OWNER OF THE DAMAGED PROPERTY REIMBURSED FOR THE COSTS OF REPAIRING THE DAMAGED PROPERTY BY THE OWNER.

RESTORATION GUARANTEE
ANY RESTORATION WORK THAT FAILS WITHIN ONE YEAR OF COMPLETION SHALL BE REDONE. ALSO, ANY SETTLEMENT THAT OCCURS WITHIN ONE YEAR OF COMPLETION OF THE SURFACE RESTORATION WORK SHALL BE FILLED AND THE SURFACE AREA RESTORED.

KEEPING ROADS OPEN TO TRAFFIC
ALL ROADS SHALL REMAIN OPEN TO TRAFFIC. THE CONTRACTOR MAY CLOSE ONE LANE BECAUSE OF CONSTRUCTION ONLY BETWEEN THE HOURS OF 9:00 A.M. AND 3:00 P.M. THE PERSON IN CHARGE SHALL NOTIFY THE LAKE COUNTY DIVISION OF TRANSPORTATION - TRANSPORTATION MANAGEMENT CENTER, (847) 377-7000, OF ANY LANE CLOSURE AND WHEN THE LANE RE-OPENS. THIS INFORMATION WILL BE BROADCAST ON THE LAKE COUNTY PASSAGE WEBSITE AND HIGHWAY ADVISORY RADIO. THE CONTRACTOR SHALL MAINTAIN TRAFFIC DURING THESE RESTRICTED HOURS AS SHOWN ON THE TRAFFIC CONTROL STANDARDS. TWO LANES OF TRAFFIC WILL BE MAINTAINED BETWEEN 3:00 P.M. AND 9:00 A.M. AND WHEN NO CONSTRUCTION ACTIVITIES ARE BEING CARRIED OUT. TRAFFIC ROUTED AROUND CONSTRUCTION AREAS SHALL BE OVER PAVED SURFACES AND NOT OVER GRAVEL SHOULDERS.

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DATE	DESCRIPTION OF REVISION	BY
08/03/18	REVISED PER VILLAGE AND LCDOT COMMENTS	KJM
07/09/18	REVISED PER VILLAGE COMMENTS	KJM
06/08/18	REVISED PER VILLAGE COMMENTS	KJM

DESIGNED	KJM
DRAWN	DWP
APPROVED	KJM
DATE	04/25/18
SCALE	N.T.S.

CONSTRUCTION DETAILS
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 22 OF 30

PROJECT NUMBER: 2014
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ILLINOIS FIRM LICENSE 184-002694

Attachment Link Crossing - Final Engineering Plan 11-05-18_v (Link Crossing Phase 2 Development Improvement Agreement)

GENERAL NOTES

A. REFERENCED SPECIFICATIONS

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:

- STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
- STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION
- VILLAGE OF BUFFALO GROVE MUNICIPAL CODE;
- THE LAKE COUNTY WATERSHED DEVELOPMENT ORDINANCE;

IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

B. NOTIFICATIONS

1. THE VILLAGE OF BUFFALO GROVE MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK.CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OF EACH WORK PHASE.

2. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF THE UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

C. GENERAL NOTES

1. THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.

2. THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.

3. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY THE MUNICIPALITY OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.

4. A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL RENOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR SEWER DISTRICT AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.

5. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY UNPOLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.

6. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY AND/OR SEWER DISTRICT.

7. THE LOCATION OF VARIOUS EXISTING UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.

8. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

9. NO FINAL CONNECTION SHALL BE MADE TO THE EXISTING WATER MAIN SYSTEM UNTIL THE WATER MAIN HAS BEEN PRESSURE TESTED AND CHLORINATED.

10. ALL NON-PAVING CONCRETE USED ON THE PROJECT SHALL BE (IDOT CLASS S).

11. MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY AND OWNER.

12. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.

13. ALL EXISTING FIELD DRAINAGE TILE ENCOUNTERED OR DAMAGED DURING CONSTRUCTION WHICH DRAIN OFFSITE PROPERTY SHALL BE CONNECTED TO THE STORM SEWER SYSTEM. ALL EXISTING FIELD DRAINAGE TILE ENCOUNTERED OR DAMAGED DURING CONSTRUCTION THAT SERVES ON-SITE PROPERTY CAN BE CAPPED AND/OR REMOVED FROM THE SITE.

14. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS TO BE DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.

15. RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.

16. TRAFFIC CONTROL SIGNS SHALL BE INSTALLED DURING CONSTRUCTION IN ACCORDANCE WITH THE IDOT SS AND IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THE SAFE AND ORDERLY PASSAGE OF TRAFFIC AND PEDESTRIANS SHALL BE MAINTAINED AT ALL TIMES.

D. EXCAVATION AND SITE GRADING

1. EXCAVATION AND EMBANKMENT REQUIRED FOR SITE GRADING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SOILS REPORTS PREPARED FOR THIS SITE. COPIES OF THE SOILS REPORTS ARE AVAILABLE FROM THE OWNER.

2. BUILDING PAD, BUILDING FOOTING, AND PAVEMENT SUBGRADES SHALL BE CONSTRUCTED OF SUITABLE FILL MATERIAL, AS DETERMINED BY THE SOILS ENGINEER, AND COMPACTED TO A MINIMUM BEARING CAPACITY OF 3,000 PSF IN BUILDING PAD AREAS AND 95% MODIFIED PROCTOR DENSITY IN PAVEMENT AREAS.

3. ALL CLAY EMBANKMENT NECESSARY FOR STORMWATER MANAGEMENT AREAS AS NOTED ON THE EROSS SECTION SHALL CONSIST OF COHESIVE SOIL TYPES WITH LESS THAN 25% SAND AND GRAVEL. MATERIAL SHALL HAVE A COEFFICIENT OF PERMEABILITY OF LESS THAN 10 X -7 CM/SEC. MAXIMUM PARTICLE SIZE SHALL BE 4-INCHES. THESE MATERIALS WILL BE PRACTICALLY IMPERVIOUS. MATERIAL SHALL BE TESTED FOR CLASSIFICATION, COMPACTION CHABACTERISTICS, PERMEABILITY CHARACTERISTICS AND UNCONFINED COMPRESSIVE STRENGTH, IN ORDER TO ENSURE THAT THEY MEET THE ABOVE REQUIREMENTS.

THE MATERIAL SHALL BE CL TYPE (USING THE USC CLASSIFICATION SYSTEM, ASTM D2487) AND FREE FROM GRAVEL, ROOTS, ORGANIC MATTER, AND ANY OTHER OBJECTIONABLE MATERIALS.

THE EMBANKMENT SHALL BE PLACED IN ESSENTIALLY HORIZONTAL LIFTS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS. EACH LIFT SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED IN THE LABORATORY BY THE MODIFIED PROCTOR COMPACTION TEST (ASTM D1557). EACH LIFT TO BE COMPACTED TO SPECIFIED DENSITY PRIOR TO THE PLACEMENT OF ADDITIONAL FILL. MOISTURE CONTROL IS IMPORTANT IN THE COMPACTION OF COHESIVE SOIL TYPES, AND THE WATER CONTENT OF THE EMBANKMENT FILL SHALL BE WITHIN 4 PERCENTAGE POINTS OF OPTIMUM MOISTURE AS ESTABLISHED BY THE LABORATORY COMPACTION CURVE.

4. COMPACTION TESTING SHALL MEET THE REQUIREMENTS OF THE MUNICIPALITY AND THE OWNER.

5. NO EQUIPMENT, MATERIAL OR WORK IS TO BE PERFORMED OUTSIDE THE LIMITS OF CONSTRUCTION.

6. THE CONTRACTOR IS REQUIRED TO MEET ALL SOIL EROSION CONTROL AND SEDIMENTATION REQUIREMENTS AS SET FORTH IN THE IEPA STANDARDS, MUNICIPAL ORDINANCES, COUNTY ORDINANCES, AND THE ENGINEERING PLANS.

7. ALL PAVEMENT SUBGRADES SHALL BE PROOF-ROLLED WITH A FULLY LOADED TEN WHEEL TRUCK. ANY SOFT YIELDING AREAS SHALL BE REMOVED AND REPLACED WITH COMPACTED CA-6 CRUSHED STONE.

8. ALL UNSUITABLE MATERIAL, AS DETERMINED BY THE SOILS ENGINEER, SHALL BE REMOVED AND REPLACED WITH CRUSHED STONE, IDOT CA-6 GRADATION AND COMPACTED TO 95% MODIFIED PROCTOR DENSITY IN PAVEMENT AREAS AND COMPACTED TO 3,000 PSF IN BUILDING PAD LIMITS.

9. LIMITS OF BUILDING PAD SHALL EXTEND FIVE (5) FEET BEYOND PROPOSED BUILDING WALLS. LIMITS OF SUITABLE PAVEMENT SUBGRADE SHALL EXTEND TWO (2) FEET BEYOND BACK OF PROPOSED CURB, OR EDGE OF PAVEMENT.

10. ALL REMOVAL OR EXCAVATION ITEMS BEING DISPOSED OF AT AN UNCONTAMINATED SOIL FILL OPERATION OR CLEAN CONSTRUCTION AND DEMOLITION DEBRIS (CCDD) FILL SITE SHALL MEET THE REQUIREMENTS OF PUBLIC ACT 96-1416. ALL COSTS ASSOCIATED WITH MEETING THESE REQUIREMENTS SHALL BE INCLUDED IN THE UNIT PRICE COST FOR THE ASSOCIATED REMOVAL OR EXCAVATION ITEMS IN THE CONTRACT. THESE COSTS SHALL INCLUDE BUT ARE NOT LIMITED TO ALL REQUIRED TESTING, LAB ANALYSIS, CERTIFICATION BY A LICENSED PROFESSIONAL ENGINEER, AND STATE AND LOCAL TIPPING FEES.

E. PAVEMENT CONSTRUCTION

1. HOT-MIX ASPHALT PAVEMENT SHALL HAVE A MINIMUM TOTAL COMPACTED THICKNESS AS SHOWN ON THE DRAWINGS AND SHALL BE COMPACTED TO 93% OF THE MAXIMUM UNIT WEIGHT AS DETERMINED BY ASTM D-2041.

2. THE PAVEMENT SUBGRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 301 (SUBGRADE PREPARATION) OF THE IDOT SS. SUBGRADE SHALL BE COMPACTED TO A MINIMUM IBR OF 3.0.

3. THE AGGREGATE BASE COURSE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 351 (AGGREGATE BASE COURSE) OF THE IDOT SS.

4. NO AGGREGATE BASE COURSE SHALL BE INSTALLED UNTIL THE SUBGRADE HAS BEEN APPROVED BY THE OWNER.

5. HOT-MIX ASPHALT PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 406 (HOT-MIX ASPHALT BINDER AND SURFACE COURSE).

6. NO HOT-MIX ASPHALT BINDER SHALL BE INSTALLED UNTIL THE AGGREGATE BASE COURSE HAS BEEN APPROVED BY THE OWNER. AGGREGATE BASE COURSE PRIME COAT (MC-30) SHALL BE APPLIED AT A RATE OF 0.25 TO 0.5 GALLONS PER SQUARE YARD. THE EXACT RATE TO BE SPECIFIED BY THE ENGINEER.

7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY SIGNS, BARRICADES, FENCES, ETC. TO KEEP THE CONSTRUCTION SITE IN COMPLIANCE WITH STATE AND FEDERAL LAWS. THE MUNICIPALITY MAY REQUIRE ADDITIONAL SIGNAGE OR BARRICADES. THE CONTRACTOR SHALL COMPLY WITH ALL SUCH MUNICIPAL REQUIREMENTS.

8. ALL EXISTING PAVEMENT, SIDEWALK, OR CURB AND GUTTER TO BE REMOVED SHALL BE SAWCUT ALONG THE LIMITS OF THE PROPOSED REMOVAL BEFORE REMOVAL OPERATIONS BEGIN.

9. PRIOR TO PLACEMENT OF BASE COURSE, THE SUBGRADE SHALL BE PROOF-ROLLED WITH A FULLY LOADED TEN WHEEL TRUCK, AND ANY SOFT YIELDING AREAS SHALL BE REMOVED AND REPLACED WITH COMPACTED CA-6 CRUSHED STONE.

10. CURB AND GUTTER REMOVAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 440 (REMOVAL OF EXISTING PAVEMENT AND APPURTENANCES) OF THE IDOT SS.

11. ALL PAVEMENT MARKINGS SHALL BE (PAINT, THERMOPLASTIC, PREFORMED PLASTIC).

12. P.C.C. ROADWAY PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 420 (PORTLAND CEMENT CONCRETE PAVEMENT) OF THE IDOT SS. P.C.C. PAVEMENT FOR TRUCK DOCKS OR OTHER MISCELLANEOUS AREAS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 423 (PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT) OF THE IDOT SS. PCC PAVEMENT SHALL BE CLASS PV, UNLESS OTHERWISE NOTED. CONCRETE SHALL BE FINISHED AS DIRECTED BY THE OWNER OR ARCHITECT. JOINTS IN CONCRETE PAVEMENT SHALL BE PROVIDED AS FOLLOWS:
   a. JOINTS WITHIN SINGLE LANE PAVEMENT (APPROXIMATELY 12-FEET WIDE) SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 420.
   b. CONTRACTION JOINTS IN TRUCK DOCK PAVEMENT OR SIMILAR CONSTRUCTION SHALL BE DIVIDED BY GROOVES CONSTRUCTED AT 10 FOOT MAXIMUM INTERVALS BOTH TRANSVERSELY AND LONGITUDINALLY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THESE GROOVES SHALL EXTEND TO 1/4 THE DEPTH OF THE PAVEMENT, SHALL NOT BE LESS THAN 1/8 INCH NOR MORE THAN 1/4 INCH IN WIDTH AND SHALL BE EDGED WITH AN EDGING TOOL HAVING A 1/4 INCH RADIUS. THE EDGES OF THE SLABS SHALL BE EDGED AS DESCRIBED ABOVE.
   c. EXPANSION JOINTS SHALL BE PROVIDED WHERE THE PROPOSED PAVEMENT OCCUPIES THE ENTIRE SPACE BETWEEN THE CONCRETE CURB OR COMBINATION CURB AND GUTTER AND AN ADJACENT BUILDING, PERMANENT STRUCTURE, EXISTING DRIVEWAY OR OTHER SIMILAR OBSTRUCTION. A ONE (1) INCHED PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED BETWEEN THE DRIVEWAY PAVEMENT AND THE OBSTRUCTION. THE EXPANSION JOINT FILLER SHALL EXTEND THE ENTIRE DEPTH OF THE PAVEMENT.

13. ADA ACCESSIBLE CURB RAMPS SHALL BE PROVIDED AT ALL LOCATIONS WHERE THE SIDEWALK ADJOINS THE CURB AND GUTTER. ALL ADA RAMPS SHALL PROVIDE DETECTABLE WARNINGS PER THE DETAIL NOTED WITHIN THIS PLAN SET. THE INSTALLATION OF THE DETECTABLE WARNINGS SHALL COMPLY WITH SECTION 424 OF THE IDOT SS AND THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES.

14. ALL CONCRETE FOR SIDEWALK AND CURB AND GUTTER IS TO BE CLASS SI, 6.1 BAG MIX WITH NO FLY ASH.

15. COMBINATION CURB AND GUTTER SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 606 (CONCRETE GUTTER, CURB, MEDIAN, AND PAVED DITCH) OF THE IDOT SS.
   a. EXPANSION JOINTS SHALL BE PLACED AT THE END OF RADII AND AT INTERVALS OF NO MORE THAN 40-FEET IN STRAIGHT LINE PORTIONS OF WORK. EXPANSION JOINTS SHALL BE PROVIDED WHERE THE CURB AND GUTTER ABUTS AN EXISTING OR PROPOSED SIDEWALK, BUILDING, PERMANENT STRUCTURE OR EXISTING OR PROPOSED CONCRETE DRIVEWAY. EXPANSION JOINTS ARE REQUIRED 5-FEET ON EACH SIDE OF ANY STORM SEWER STRUCTURE IN THE CURB LINE. EXPANSION JOINTS SHALL CONSIST OF 1-INCH PREMOLDED EXPANSION JOINT FILLER MATERIAL.
   b. EXPANSION JOINTS SHALL INCLUDE 12-INCH LONG #4 DOWEL BARS WITH CAP.
   c. CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NO MORE THAN 10-FEET. CONTRACTION JOINTS SHALL BE SAWED TO A DEPTH EQUAL TO 1/3 THE THICKNESS OF THE GUTTER FLAG AND TO A WIDTH OF NOT LESS THAN 1/8 INCH.
   d. A MINIMUM 4-INCH COMPACTED AGGREGATE BASE SHALL BE PROVIDED UNDER THE CURB AND GUTTER AND SHALL EXTEND 1-FOOT BEHIND BACK OF CURB. REFER TO SECTION 606 FOR ADDITIONAL JOINTING REQUIREMENTS.

16. SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 424 (PORTLAND CEMENT CONCRETE SIDEWALK) OF THE IDOT SS.
   a. THE SURFACE SHALL BE DIVIDED BY GROOVES CONSTRUCTED AT RIGHT ANGLES TO THE CENTERLINE OF THE SIDEWALK OR AS SHOWN ON THE ENGINEERING PLANS. GROOVES SHALL EXTEND TO 1/4 THE DEPTH OF THE SIDEWALK, SHALL BE NOT LESS THAN 1/8 IN. NOR MORE THAN 1/4 IN. IN WIDTH, AND SHALL BE LONGER THAN 6 FT. NOR LESS THAN 4 FT. ON ANY SIDE, UNLESS OTHERWISENOTED.
   b. EXPANSION JOINTS SHALL BE 1/2 IN. THICK AND CONSIST OF PREFORMED JOINT FILLER. THE TOP OF THE JOINT FILLER SHALL BE 1/4 IN. BELOW THE SURFACE OF THE SIDEWALK.
   c. EXPANSION JOINTS SHALL BE PLACED BETWEEN THE SIDEWALK AND ALL STRUCTURES SUCH AS LIGHT POLES, TRAFFIC SIGNAL POLES, TRAFFIC POLES AND SIGNAL POLES, WHICH EXTEND THROUGH THE SIDEWALK. EXPANSION JOINTS SHALL BE PLACED AT MAXIMUM INTERVALS OF 50-FT. IN THE SIDEWALK. WHERE THE SIDEWALK IS CONSTRUCTED ADJACENT TO PAVEMENT OR CURB HAVING EXPANSION JOINTS, THE EXPANSION JOINTS IN THE SIDEWALK SHALL BE PLACED IN LINE WITH THE EXPANSION JOINTS AS NEARLY AS PRACTICABLE. EXPANSION JOINTS SHALL BE PLACED WHERE THE SIDEWALK ABUTS EXISTING SIDEWALKS, BETWEEN DRIVEWAY PAVEMENT AND SIDEWALK, AND BETWEEN SIDEWALK ACCESSIBILITY RAMPS AND CURBS WHERE THE RAMP ABUTS A CURB.

17. HOT-MIX ASPHALT BASE COURSE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 355 (HOT-MIX ASPHALT BASE COURSE) OF THE IDOT SS.

18. HOT-MIX ASPHALT SPECIFICATIONS SHALL BE AS FOLLOWS:

ITEM	AIR VOIDS
HMA SURFACE COURSE, MIX "D", IL-9.5MM, N50, 1.5" MIN.	4% AT 50 GYR.
HMA BINDER COURSE, IL-19.0, N50; 2.25" MIN	4% AT 50 GYR.
LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4" MIN	3.5% AT 50 GYR.
CLASS D PATCHES (HMA BINDER IL-19mm)	4% AT 70 GYR.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG.76-22" AND FOR ALL NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG.64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE SPECIAL PROVISIONS. APPLICABLE DISTRICT ONE SPECIAL PROVISIONS MAY INCLUDE: "RECLAIMED ASPHALT PAVEMENT AND SHINGLES", "HMA MIXTURE (L-4.75" AND "STONE MATRIX ASPHALT (SMA)".

19. ALL CURBS CONSTRUCTED OVER A UTILITY TRENCH SHALL BE REINFORCED WITH TWO EQUALLY SPACED #4 REBARS CENTERED IN THE FLAG FOR A LENGTH OF 10 FEET ON EITHER SIDE OF THE TRENCH. SIDEWALKS SHALL BE TREATED IN THE SAME MANNER USING THREE EQUALLY SPACED #4 REBARS CENTERED IN THE SIDEWALK FOR A LENGTH OF 10 FEET ON EITHER SIDE OF THE TRENCH.

F. SANITARY SEWER

1. ALL SANITARY SEWERS, SERVICES AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL MUNICIPAL REQUIREMENTS OR SANITARY DISTRICT SPECIFICATIONS AND THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS).

2. SANITARY SEWERS SHALL BE:
   a. POLYVINYL CHLORIDE PIPE (PVC), SDR 26 PER ASTM D-3034 WITH ELASTOMERIC JOINTS IN ACCORDANCE WITH ASTM D-3212 AND F477 or
   b. DUCTILE IRON PIPE (DIP) ANSI A21.51, CLASS 52 PER ANSI A 21.50 (AWWA C150), CEMENT LINED WITH BITUMINOUS COATING PER ANSI A21.4 (AWWA C104), WITH MECHANICAL OR RUBBER RING (SLIP SEAL OR PUSH-ON) JOINTS PER ANSI A21.11 (AWWA C111 AND C600);
   c. PRESSURE RATED PIPE (WATER MAIN QUALITY) SHALL BE IN ACCORDANCE WITH ASTM D 2241. PVC PIPE JOINTS SHALL BE SOLVENT CEMENTED JOINTS PER ASTM D 2672 OR FLEXIBLE ELASTOMERIC JOINTS PER ASTM D3139 AND F477.
   d. POLYPROPYLENE (PP) PIPE SHALL BE DOUBLE WALL PIPE CONFORMING TO ASTM F2736 FOR SIZES 6" TO 30". POLYPROPYLENE PIPE JOINTS SHALL BE FLEXIBLE ELASTOMERIC SEALS PER ASTM D3212 AND F477.

   SANITARY SEWERS AND WATER MAIN SHALL BE SEPARATED AS FOLLOWS:
   a. WATER MAINS SHALL BE SEPARATED FROM A SEWER SO THAT ITS INVERT IS A MINIMUM OF 18-INCHES ABOVE THE CROWN OF THE SEWER WHEREVER WATER MAINS CROSS A STORM SEWER, SANITARY SEWER OR SEWER SERVICE CONNECTION. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF WATER MAIN LOCATED WITHIN 10-FEET HORIZONTALLY OF ANY SEWER CROSSED. A LENGTH OF WATER MAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER or
   b. BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINTS OF PIPE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION WHEN IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED IN a) ABOVE OR THE WATER MAIN PASSES UNDER A SEWER or
   c. A VERTICAL SEPARATION OF 18-INCHES BETWEEN THE INVERT OF THE SEWER AND THE CROWN OF THE WATER MAIN SHALL BE MAINTAINED WHERE A WATER MAIN CROSSES UNDER A SEWER. SUPPORT THE SEWER TO PREVENT SETTLING AND BREAKING THE WATER MAIN or
   d. CONSTRUCTION OF WATER MAIN QUALITY PIPE SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE PERPENDICULAR DISTANCE FROM THE WATER MAIN TO THE SEWER IS AT LEAST 10-FEET.

3. GRANULAR PIPE BEDDING MATERIAL SHALL BE IDOT CA-11 AND SHALL BE INSTALLED PER ASTM D1557. GRANULAR BEDDING SHALL BE COMPACTED TO 90% MODIFIED PROCTOR DENSITY.

4. SELECTED GRANULAR BACKFILL, CA-11 SHALL BE USED WHERE THE TOP OF TRENCH LIES UNDER OR WITHIN 24-INCHES OF ALL PAVEMENTS, CURBS AND GUTTERS, DRIVEWAYS OR SIDEWALKS.

5. SANITARY SEWER TESTING SHALL INCLUDE EXFILTRATION TEST OR INFILTRATION TESTING IN ACCORDANCE WITH THE SSWS. MUNICIPAL REQUIREMENTS AND/OR SANITARY DISTRICT REQUIREMENTS. ALL SANITARY SEWERS CONSTRUCTED OF FLEXIBLE PIPE SHALL BE DEFLECTION TESTED IN ACCORDANCE WITH THE SSWS, MUNICIPAL REQUIREMENTS AND/OR SANITARY DISTRICT REQUIREMENTS. DEFLECTION TESTING SHALL NOT OCCUR SOONER THAN THIRTY (30) DAYS AFTER COMPLETION OF THE SEWER INSTALLATION OF THE SECTION BEING TESTED.

6. SANITARY MANHOLES SHALL BE TESTED FOR WATERTIGHTNESS BY EITHER ASTM C969 - STANDARD PRACTICE FOR INFILTRATION AND EXFILTRATION ACCEPTANCE TESTING OF INSTALLED PRECAST CONCRETE PIPE SEWER LINES OR ASTM C 1244 - STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY NEGATIVE PRESSURE (VACUUM) TEST.

7. SANITARY SEWER SERVICE FOR THE PROPOSED BUILDINGS SHALL BE COORDINATED WITH THE ARCHITECTURAL PLANS FOR SIZE AND LOCATION. LATER REVISIONS TO ARCHITECTURAL PLANS MAY EXIST. THEREFORE, CONTRACTOR SHALL VERIFY LOCATION OF SANITARY SERVICE AS SHOWN ON ENGINEERING PLANS IS CONSISTENT WITH ARCHITECTURAL PLANS. NOTIFY ENGINEER OR OWNER IF DISCREPANCY EXISTS.

G. WATER MAIN

1. ALL WATER MAINS, SERVICES, AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL MUNICIPAL REQUIREMENTS AND THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS).

2. WATER MAINS SHALL BE:
   a. DUCTILE IRON PIPE CONFORMING TO ANSI A 21.51 (AWWA C151), CLASS 52 PER ANSI A 21.50 (AWWA C150). SEAL COATED OR CEMENT LINED PER ANSI A21.4 (AWWA C104). WITH MECHANICAL OR RUBBER RING (SLIP SEAL OR PUSH ON) JOINTS. or;
   b. POLYVINYL CHLORIDE PIPE CONFORMING TO ASTM D 2241 AND BE DESIGNATED CLASS 12454B (CPVC 1120), CLASS 12454C (PVC 1120) IN CONFORMANCE WITH ASTM D1784. THE PIPE SHALL BE RATED AT 160 PSI (OR GREATER AT 73.4 DEGREES F. ALL PIPING SHALL BE A MINIMUM OF SDR 26. ALL PIPING AND FITTINGS SHALL BEAR THE NSF SEAL OF APPROVAL. THE PIPING SHALL VISIBLY MARKED WITH THE SPECIFIC SDR RATING NUMBER.
   c. ALL WATER SERVICES (2.5" DIA. AND SMALLER) SHALL BE COPPER WATER TUBE TYPE K OR GREATER SOFT TEMPER, FOR UNDERGROUND SERVICE AND CONFORMING TO ASTM B88 AND ASTM B251. THE PIPE SHALL BE MARKED WITH THE MANUFACTURER'S NAME OR TRADEMARK AND A MARK INDICATIVE OF THE TYPE OF PIPE. THE OUTSIDE DIAMETER OF THE PIPE SHALL CONFORM TO ASTM B251 TABLE 2. FITTINGS FOR SERVICE PIPE SHALL BE BRASS AND OF THE COMPRESSION TYPE FOR TYPE K TUBING. ONE PIECE SHALL BE USED FROM THE MAIN TO THE CURB STOP AND ONE PIECE FROM THE CURB STOP TO THE METER SPREAD FOR LENGTHS OF 100 FEET OR LESS.

3. A MINIMUM OF 5'-6" OF COVER SHALL BE MAINTAINED OVER THE WATER MAIN AND SERVICES AT ALL TIMES. UNLESS SPECIAL PROVISIONS HAVE BEEN MADE.

4. GRANULAR PIPE BEDDING MATERIAL SHALL BE IDOT CA-11 AND SHALL BE INSTALLED PER ASTM D1557. GRANULAR BEDDING SHALL BE COMPACTED TO 90% MODIFIED PROCTOR DENSITY.

5. SELECTED GRANULAR BACKFILL, CA-11 SHALL BE USED WHERE THE TOP OF TRENCH LIES UNDER OR WITHIN 24-INCHES OF ALL PAVEMENTS, CURBS AND GUTTERS, DRIVEWAYS OR SIDEWALKS.

6. ALL WATER VAULTS SHALL HAVE THE WORD "WATER" CAST INTO THE LID.

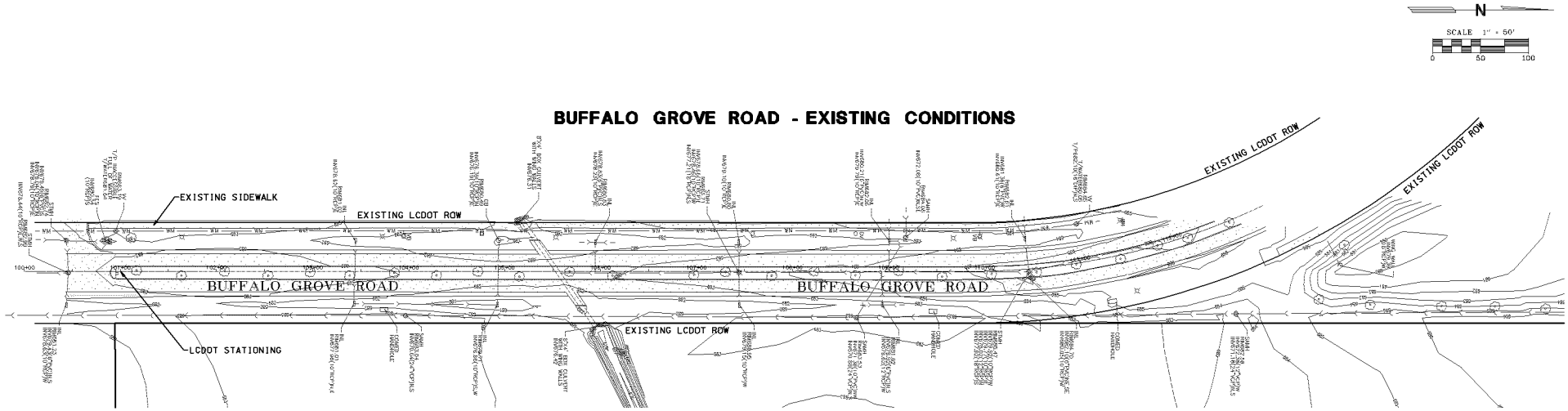
7. VALVES SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO THE RESPECTIVE STANDARDS OF THE LATEST AWWA C500, AWWA C509 AND AWWA C515 STANDARDS. ALL MATERIALS USED IN THE MANUFACTURE OF WATERWORKS GATE VALVES SHALL CONFORM TO THE AWWA STANDARDS DESIGNED FOR EACH MATERIAL LISTED. ALL VALVES SHALL CONFORM TO THE STANDARDS SET FORTH IN THE SSWS.

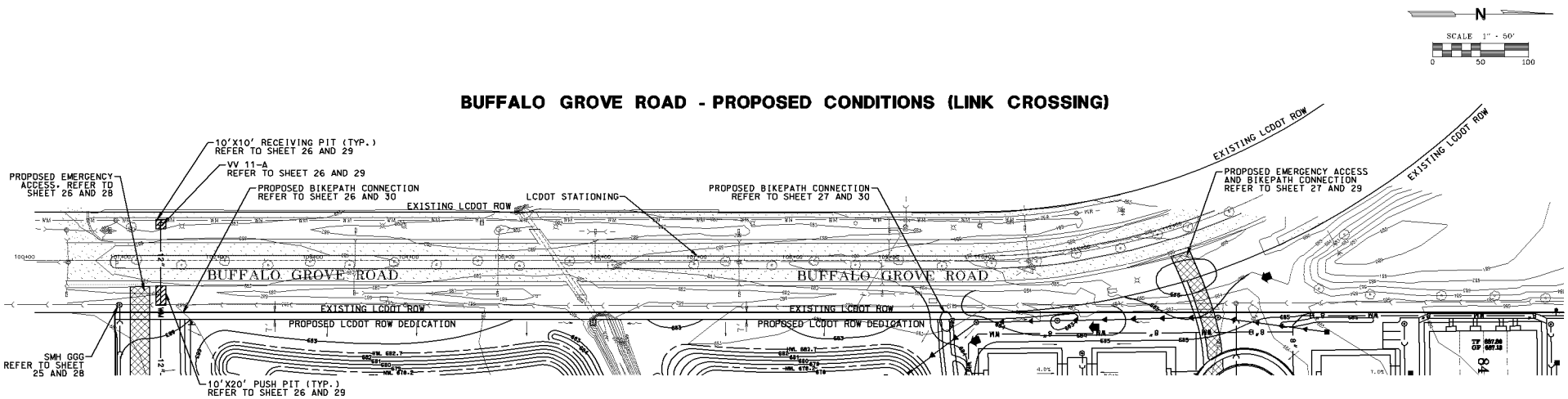
8. WATER MAINS SHALL BE PRESSURE TESTED, LEAK TESTED AND CHLORINATED IN ACCORDANCE WITH LOCAL MUNICIPAL REQUIREMENTS AND THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS, LATEST EDITION.

9. WATER SERVICE FOR THE PROPOSED BUILDINGS SHALL BE COORDINATED WITH THE ARCHITECTURAL PLANS FOR SIZE AND LOCATION. LATER REVISIONS TO THE ARCHITECTURAL PLANS MAY EXIST. THEREFORE, CONTRACTOR SHALL VERIFY LOCATION AND SIZE OF WATER SERVICES AS SHOWN ON ENGINEERING PLANS IS CONSISTENT WITH ARCHITECTURAL PLANS. NOTIFY ENGINEER OR OWNER IF DISCREPANCY EXISTS.

10. WATER MAINS SHALL BE LOCATED AT LEAST 10-FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SANITARY SEWER, STORM SEWER, COMBINED SEWER OR SEWER SERVICE CONNECTION. WATER MAINS MAY BE LOCATED CLOSER THAN 10-FEET TO A SEWER LINE WHEN:
   a. LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF 10-FEET AND
   b. THE WATER MAIN INVERT IS AT LEAST 18-INCHES ABOVE THE CROWN OF THE SEWER; AND
   c. THE WATER MAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER. WHEN IT IS IMPOSSIBLE TO MEET THE CONDITIONS ABOVE, BOTH THE WATER MAIN AND SEWER MAIN SHALL BE CONSTRUCTED OF PIPE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION WITH SLIP-ON OR MECHANICAL JOINTS. THE SEWER SHALL BE PRESSURE TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD BEFORE BACKFILLING.

11. WATER MAIN SHALL BE SEPARATED FROM STORM AND SANITARY SEWERS AS FOLLOWS:
   a. WATER MAINS SHALL BE SEPARATED FROM A SEWER SO THAT ITS INVERT IS A MINIMUM OF 18-INCHES ABOVE THE CROWN OF THE SEWER WHEREVER WATER MAINS CROSS A STORM SEWER, SANITARY SEWER OR SEWER SERVICE CONNECTION. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF WATER MAIN LOCATED WITHIN 10-FEET HORIZONTALLY OF ANY SEWER





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DATE	DESCRIPTION OF REVISION	BY
11/05/18	REVISED PER LCDOT COMMENTS	KJM

DESIGNED	KJM
DRAWN	SDU
APPROVED	KJM
DATE	09/17/18
SCALE	1" = 50'

BUFFALO GROVE ROAD - OVERALL PLAN
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 24 OF 30

PROJECT NUMBER: 2014

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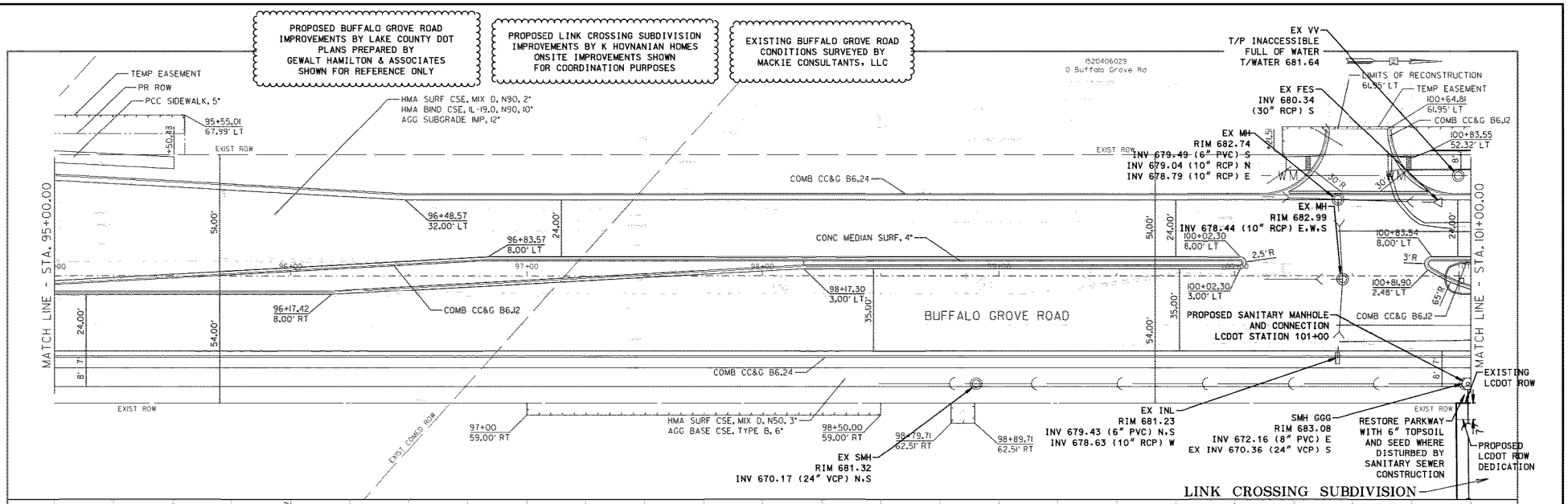
ILLINOIS FIRM LICENSE 184-002694

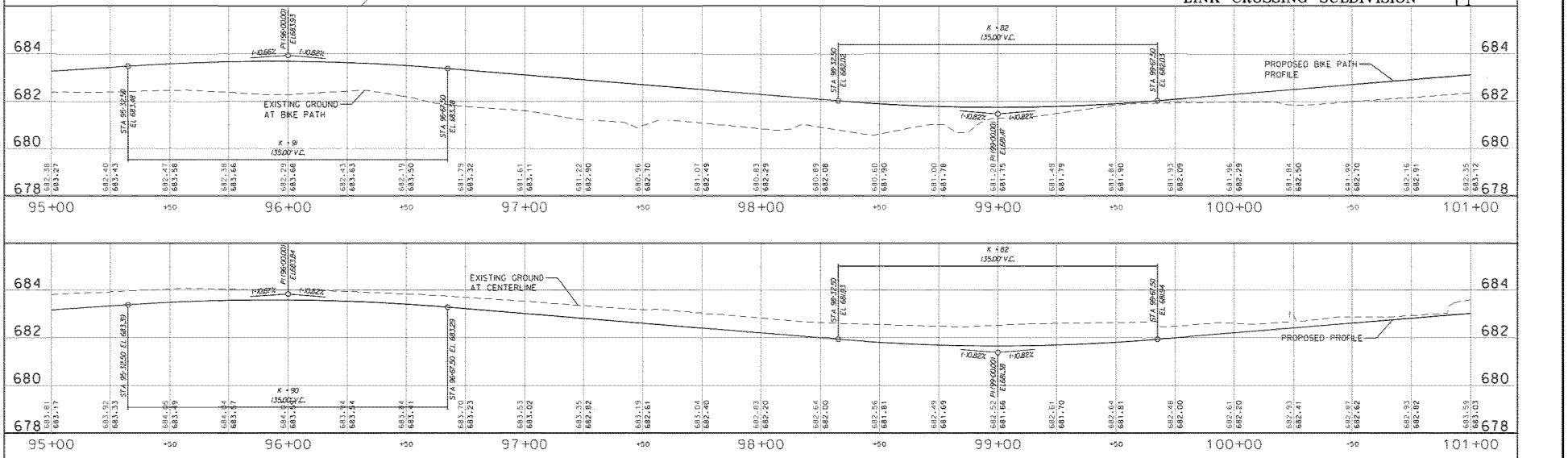
Attachment: Link Crossing - Final Engineering Plan 11-05-18_r (Link Crossing Phase 2 Development Improvement Agreement)

PROPOSED BUFFALO GROVE ROAD IMPROVEMENTS BY LAKE COUNTY DOT PLANS PREPARED BY GEWALT HAMILTON & ASSOCIATES SHOWN FOR REFERENCE ONLY

PROPOSED LINK CROSSING SUBDIVISION IMPROVEMENTS BY K HOVNANIAN HOMES ONSITE IMPROVEMENTS SHOWN FOR COORDINATION PURPOSES

EXISTING BUFFALO GROVE ROAD CONDITIONS SURVEYED BY MACKIE CONSULTANTS, LLC





REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	SURVEYOR:	CBBEL/GHA
		/ /		DSGNR/LIAISON:	MAC
		/ /		PLOTTED BY:	ewebsten 9/20/2018

SCALES
VERT. 2 0
HORIZ. 0 20 40

GEWALT HAMILTON ASSOCIATES, INC.
855 Plaza Drive • Vernon Hills, IL 60061
Tel: 847.478.9700 • Fax: 847.478.9701

LakeCounty
Division of Transportation

BUFFALO GROVE ROAD PLAN AND PROFILE
PLAN & PROFILE STA. 95+00 TO STA. 101+00

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
W-14	249	11-00249-03-WR	107	522

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Fax: 630-946-6629

DATE	DESCRIPTION OF REVISION	BY
11/05/18	REVISED PER LCDOT COMMENTS	SDU
09/17/18	REVISED PER LCDOT COMMENTS	SDU

DESIGNED	KJM
DRAWN	SDU
APPROVED	KJM
DATE	08/03/18
SCALE	1"=20'

BUFFALO GROVE ROAD - STA 95+00 TO 101+00
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 25 OF 30

PROJECT NUMBER: 2814

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ILLINOIS FIRM LICENSE 184-002694

Attachment Link Crossing - Final Engineering Plan 11-05-18_v (Link Crossing Phase 2 Development Improvement Agreement)

PROPOSED BUFFALO GROVE ROAD IMPROVEMENTS BY LAKE COUNTY DOT PLANS PREPARED BY GEWALT HAMILTON & ASSOCIATES SHOWN FOR REFERENCE ONLY

PROPOSED LINK CROSSING SUBDIVISION IMPROVEMENTS BY K HOVNANIAN HOMES ONSITE IMPROVEMENTS SHOWN FOR COORDINATION PURPOSES

EXISTING BUFFALO GROVE ROAD CONDITIONS SURVEYED BY MACKIE CONSULTANTS, LLC

EXISTING SIDEWALK TO BE RESTORED AS NECESSARY

EXISTING WATER MAIN ELEVATION TO BE FIELD VERIFIED

RESTORE PARKWAY WITH 6" TOPSOIL AND SEED WHERE DISTURBED BY WATER MAIN CONSTRUCTION

CONSTRUCTION WORK TO BE PERFORMED WITHIN LCDOT RIGHT-OF-WAY ONLY

PROPOSED WATER MAIN VALVE VAULT AND CONNECTION STATION 101+42

VV 11-A
RIM 683.5

10'X10' RECEIVING PIT (TYP.)

PRESSURE CONNECTION TO EXISTING WATER MAIN

BORE PIT AND AUGER WATER MAIN UNDER BUFFALO GROVE ROAD (NO OPEN CUT ALLOWED)

10'X20' PUSH PIT (TYP.)

PROPOSED EMERGENCY ACCESS STATION 101+20

HMA SURF CSE, MIX D, N90, 2"
HMA BIND CSE, IL-19.0, N90, 10"
AGG SUBGRADE IMP, 12"

PROPOSED BIKE PATH CONNECTION, STATION 101+55

EX INL
RIM 681.02
INV 678.62 (10" RCP) E

EX INL
RIM 681.01
INV 677.96 (10" RCP) N,E

EX INL
RIM 679.71
INV 676.86 (10" RCP) S,W

EX CB
RIM 680.49
INV 676.39 (10" RCP) N
INV 676.19 (10" RCP) E

EX VB

EX INL
RIM 680.83
INV 678.83 (6" PVC) N,S
INV 678.23 (10" RCP) E

EX SMH
RIM 683.04
INV 670.64 (24" VCP) N,S

8'X4' BOX CULVERT WITH WING WALLS
INV 676.31

8'X4' BOX CULVERT WITH WING WALLS
INV 676.42

NO ONSITE DRAINAGE SHALL BE TRIBUTARY TO LCDOT ROW

PROPOSED LCDOT ROW DEDICATION

EXISTING LCDOT ROW

PERMANENT EASEMENT

TEMP EASEMENT

PCC SIDEWALK, 5"

EXIST SIDEWALK

EXIST ROW

COMB CC&G B6.24

COMB CC&G B6.12

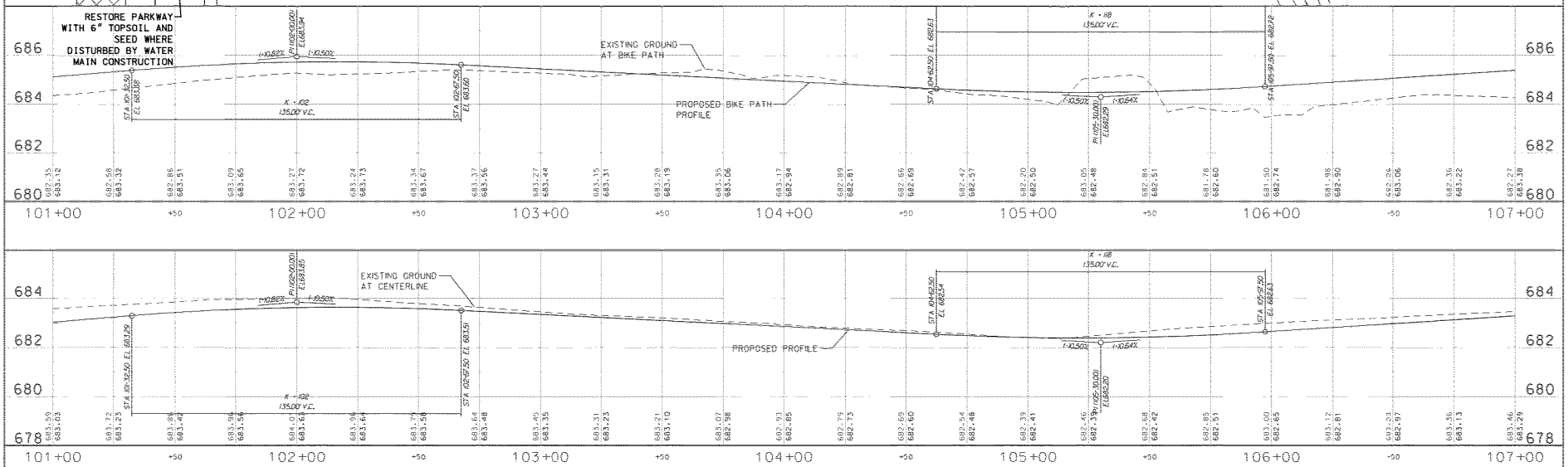
BUFFALO GROVE ROAD

MATCH LINE - STA. 101+00.00

MATCH LINE - STA. 107+00.00

1520406029
0 Buffalo Grove Rd

LINK CROSSING SUBDIVISION



REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	SURVEYOR:	CDBEL/CMA
		/ /		DSGNR/LIAISON:	M&C
		/ /		PLOTTED BY:	zwalsten 9/20/2016

SCALES
VERT. 1" = 2'
HORIZ. 1" = 20'

GEWALT HAMILTON ASSOCIATES, INC.

LakeCounty
Division of Transportation

BUFFALO GROVE ROAD PLAN AND PROFILE
PLAN & PROFILE STA. 101+00 TO STA. 107+00

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
W-14	249	11-00249-03-WR	108	522

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Naperville, IL 60563
Phone: 630-210-0888
Fax: 630-946-6629

DATE	DESCRIPTION OF REVISION	BY
11/05/18	REVISED PER LCDOT COMMENTS	SDU
09/17/18	REVISED PER LCDOT COMMENTS	SDU

DESIGNED	KJM
DRAWN	SDU
APPROVED	KJM
DATE	08/03/18
SCALE	1"=20'

BUFFALO GROVE ROAD - STA 101+00 TO 107+00
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 26 OF 30

PROJECT NUMBER: 2814

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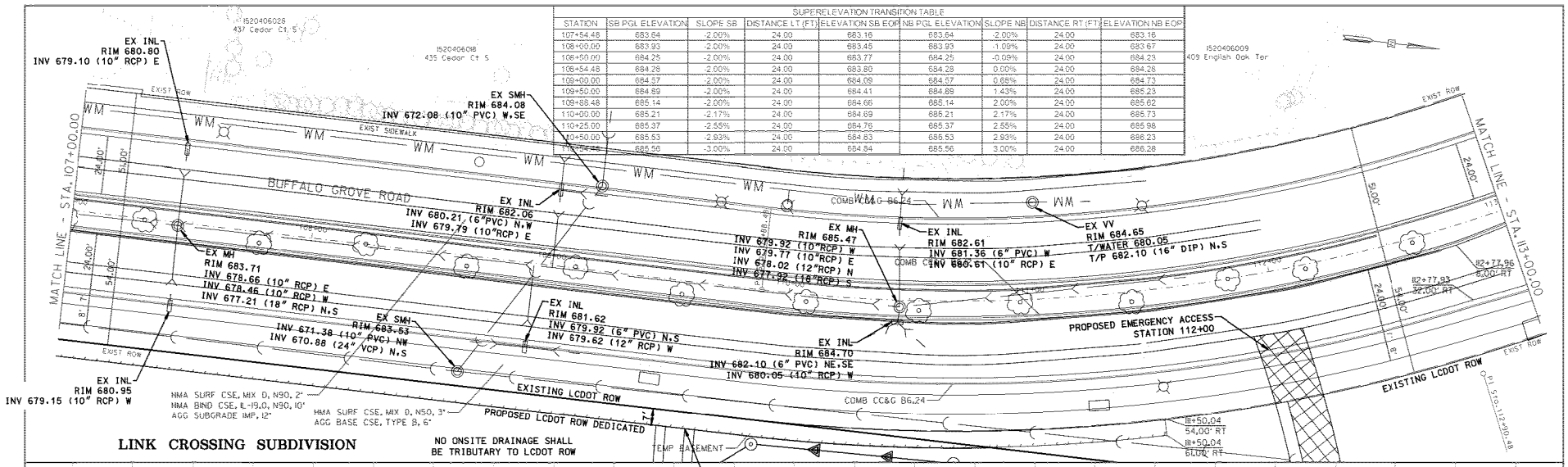
ILLINOIS FIRM LICENSE 184-002694

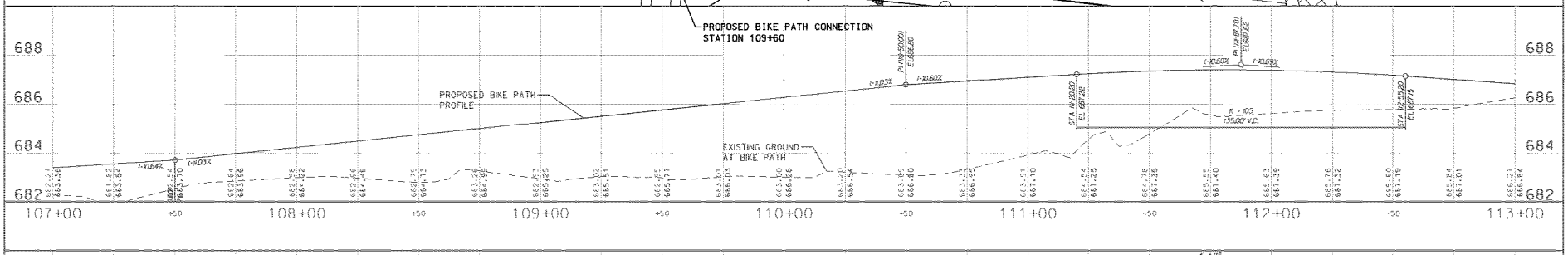
SUPERELEVATION TRANSITION TABLE								
STATION	SB PGL ELEVATION	SLOPE SB	DISTANCE LT (FT)	ELEVATION SB EOP	NB PGL ELEVATION	SLOPE NB	DISTANCE RT (FT)	ELEVATION NB EOP
107+54.48	683.64	-2.00%	24.00	683.16	683.64	-2.00%	24.00	683.16
108+00.00	683.93	-2.00%	24.00	683.45	683.93	-1.09%	24.00	683.67
108+50.00	684.25	-2.00%	24.00	683.77	684.25	-0.09%	24.00	684.23
106+54.48	684.28	-2.00%	24.00	683.80	684.28	0.00%	24.00	684.28
109+00.00	684.57	-2.00%	24.00	684.09	684.57	0.68%	24.00	684.73
109+50.00	684.89	-2.00%	24.00	684.41	684.89	1.43%	24.00	685.23
109+88.48	685.14	-2.00%	24.00	684.66	685.14	2.00%	24.00	685.62
110+00.00	685.21	-2.17%	24.00	684.69	685.21	2.17%	24.00	685.73
110+25.00	685.37	-2.55%	24.00	684.76	685.37	2.55%	24.00	685.98
110+50.00	685.53	-2.93%	24.00	684.83	685.53	2.93%	24.00	686.23
110+54.48	685.56	-3.00%	24.00	684.84	685.56	3.00%	24.00	686.28



LINK CROSSING SUBDIVISION

NO ONSITE DRAINAGE SHALL BE TRIBUTARY TO LCDOT ROW

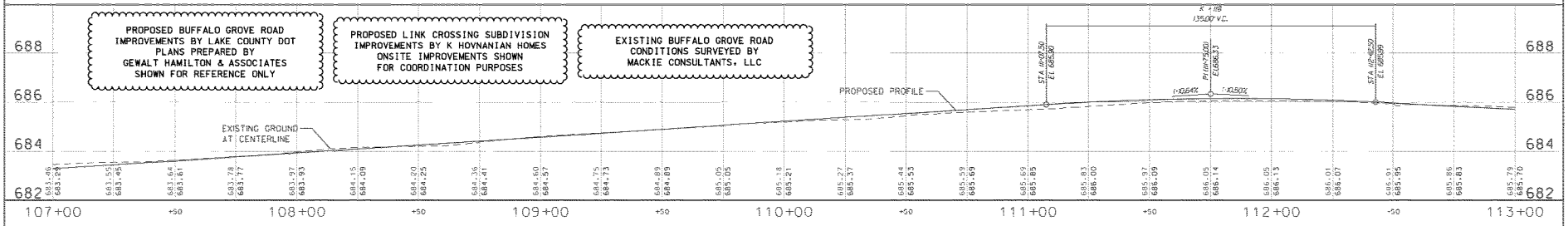
PROPOSED BIKE PATH CONNECTION STATION 109+60



PROPOSED BUFFALO GROVE ROAD IMPROVEMENTS BY LAKE COUNTY DOT PLANS PREPARED BY GEWALT HAMILTON & ASSOCIATES SHOWN FOR REFERENCE ONLY

PROPOSED LINK CROSSING SUBDIVISION IMPROVEMENTS BY K HOVNANIAN HOMES ONSITE IMPROVEMENTS SHOWN FOR COORDINATION PURPOSES

EXISTING BUFFALO GROVE ROAD CONDITIONS SURVEYED BY MACKIE CONSULTANTS, LLC



REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	SURVEYOR:	CDBEL/CMA
		/ /		DSGNR/LIAISON:	M&C
		/ /		PLOTTED BY:	zwalstein 9/20/2016

SCALES HORIZ. 0 20 40

GEWALT HAMILTON ASSOCIATES, INC.

LakeCounty Division of Transportation

BUFFALO GROVE ROAD PLAN AND PROFILE

PLAN & PROFILE STA. 107+00 TO STA. 113+00

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
W-14	249	11-00249-03-WR	109	522

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Phone: 630-210-0888
Fax: 630-946-6629

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09/17/18	REVISED PER LCDOT COMMENTS	SDU

DESIGNED	KJM
DRAWN	SDU
APPROVED	KJM
DATE	08/03/18
SCALE	1"=20'

BUFFALO GROVE ROAD - STA 107+00 TO 113+00
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 27 OF 30

PROJECT NUMBER: 2814

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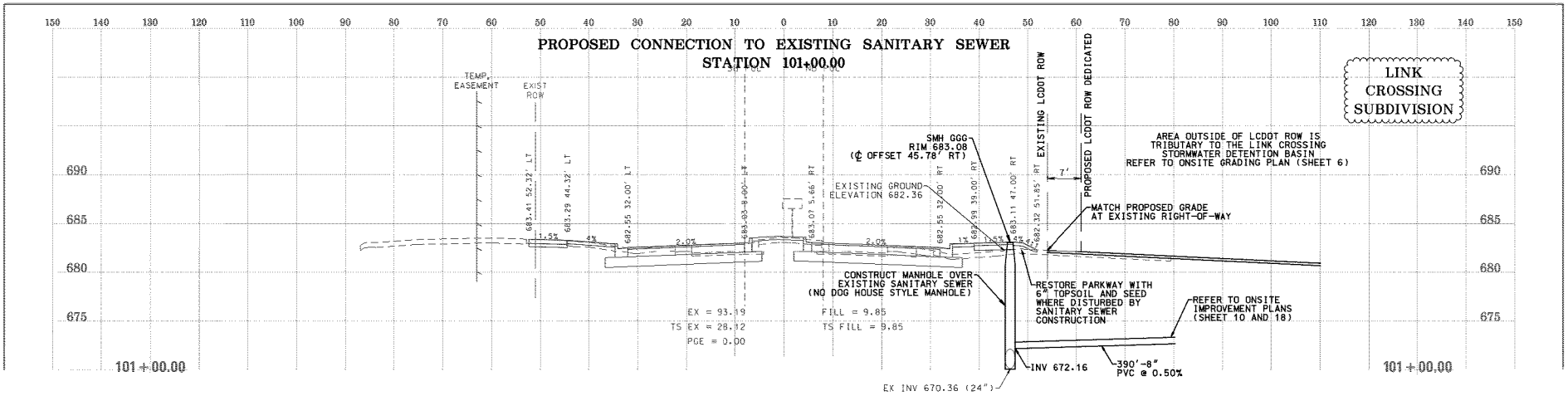

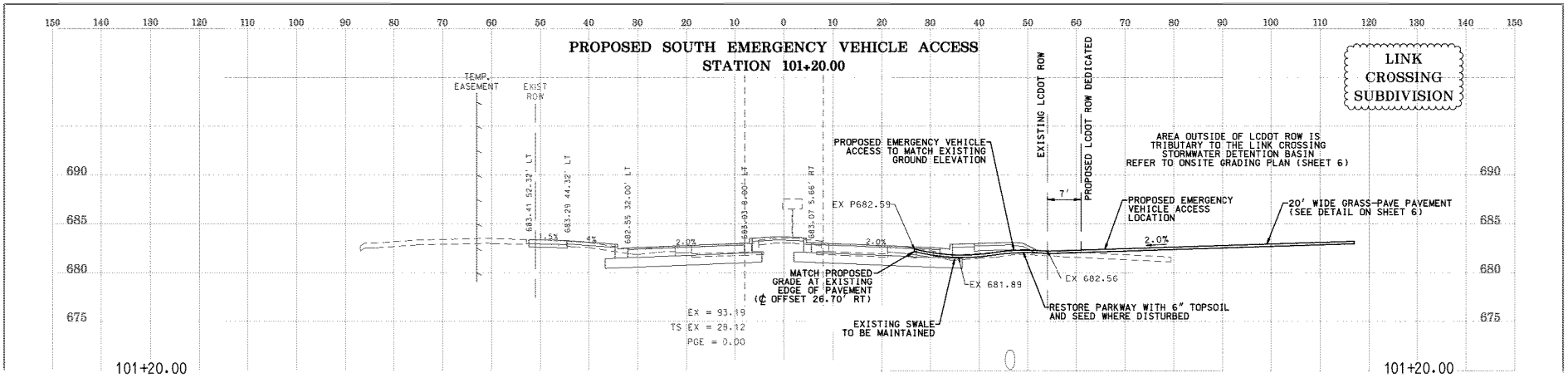

PROPOSED BUFFALO GROVE ROAD IMPROVEMENTS BY LAKE COUNTY DOT PLANS PREPARED BY GEWALT HAMILTON & ASSOCIATES SHOWN FOR REFERENCE ONLY

PROPOSED LINK CROSSING SUBDIVISION IMPROVEMENTS BY K HOVNANIAN HOMES ONSITE IMPROVEMENTS SHOWN FOR COORDINATION PURPOSES

EXISTING BUFFALO GROVE ROAD CONDITIONS SURVEYED BY MACKIE CONSULTANTS, LLC

REVISIONS / REMARKS

NO.	DESCRIPTION	DATE	BY
		/ /	
		/ /	

SURVEYOR:	CBBEL/GHA
DSGNR/DRAFSCN:	MAC
PLOTTED BY:	MColeman 9/20/2018

SCALES
VERT. 0
HORIZ. 0 10 20

GEWALT HAMILTON ASSOCIATES, INC.

LakeCounty Division of Transportation

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09/17/18	REVISED PER LCDOT COMMENTS	SDU

DESIGNED	KJM
DRAWN	SDU
APPROVED	KJM
DATE	08/03/18
SCALE	1"=20'

BUFFALO GROVE ROAD - CROSS SECTIONS
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 28 OF 30

PROJECT NUMBER: 2614

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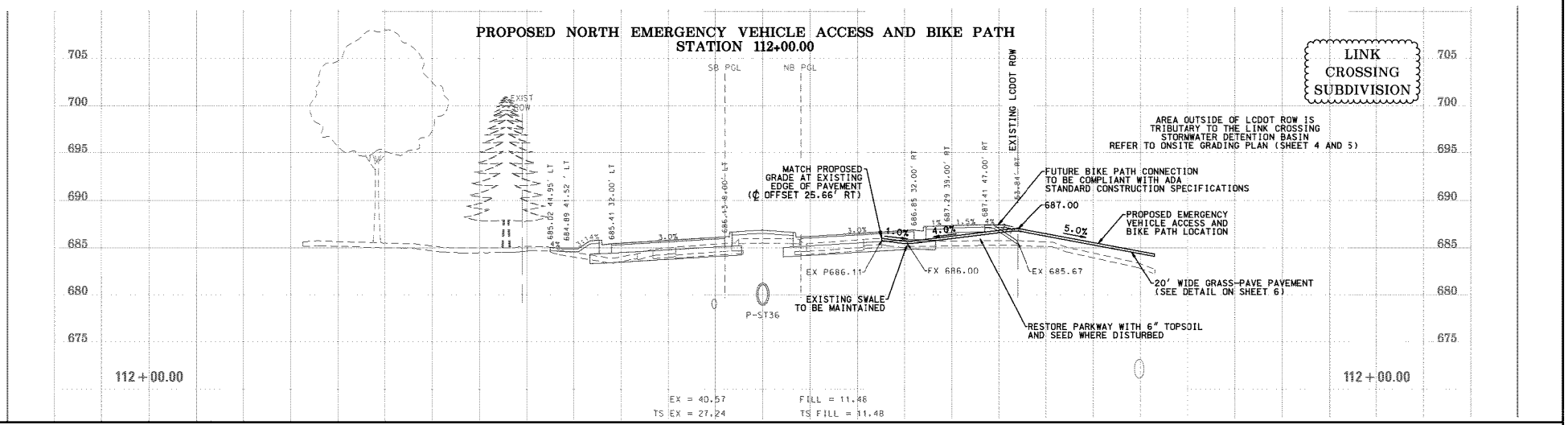
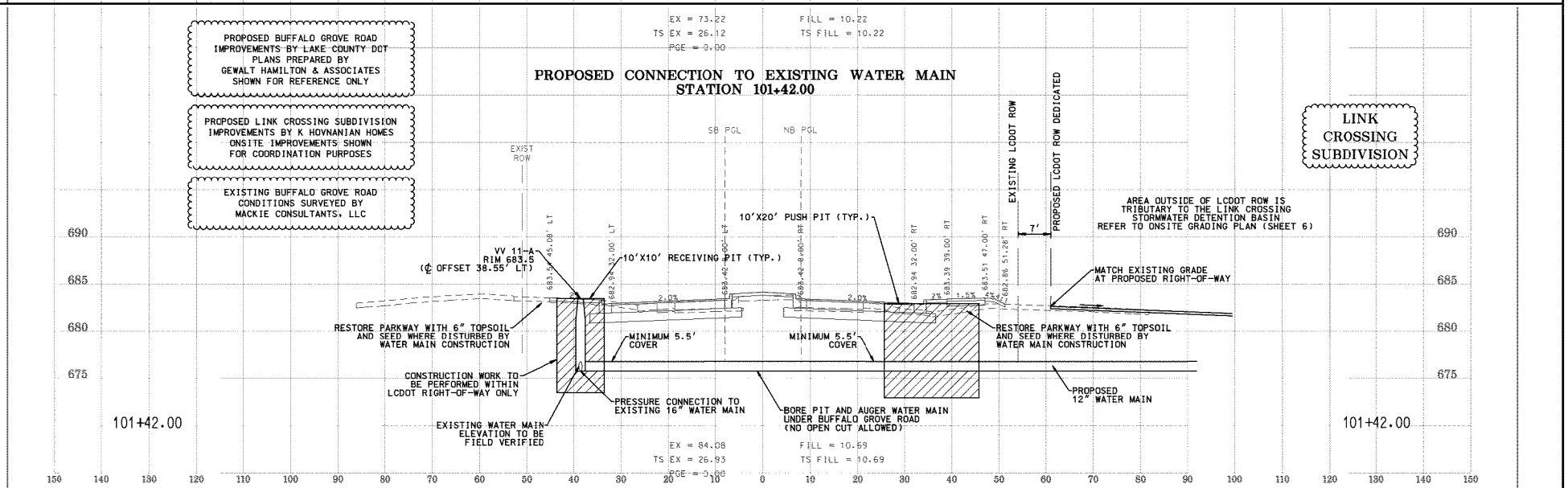
ILLINOIS FIRM LICENSE 184-002694

11/05/2018 8:30PM JM
N:\Projects\Link Crossing\Phase 2 Development\Link Cross Section-Sheet.dwg





REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	SURVEYOR:	CBBEL/CHA
		/ /		DSGNR/LIAISON:	MAC
		/ /		PLOTTED BY:	MColemon 9/20/2016

SCALES: VERT. 0 10 20 / HORIZ. NONE

CHA ASSOCIATES, INC. — Consulting Engineers

LakeCounty Division of Transportation

FILE NAME: 4423-XS-BUFFALO_GROVE_Sheets_Horizontal.dgn

Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

CLIENT: K Hovnanian Homes
1804 N. Naper Boulevard, Suite 200
Naperville, IL 60563
Phone: 630-210-0888
Fax: 630-946-6629

DATE	DESCRIPTION OF REVISION	BY
11/05/18	REVISED PER LCDOT COMMENTS	SDU
09/17/18	REVISED PER LCDOT COMMENTS	SDU

DESIGNED	KJM
DRAWN	SDU
APPROVED	KJM
DATE	08/03/18
SCALE	1"=20'

BUFFALO GROVE ROAD - CROSS SECTIONS
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 29 OF 30

PROJECT NUMBER: 2814

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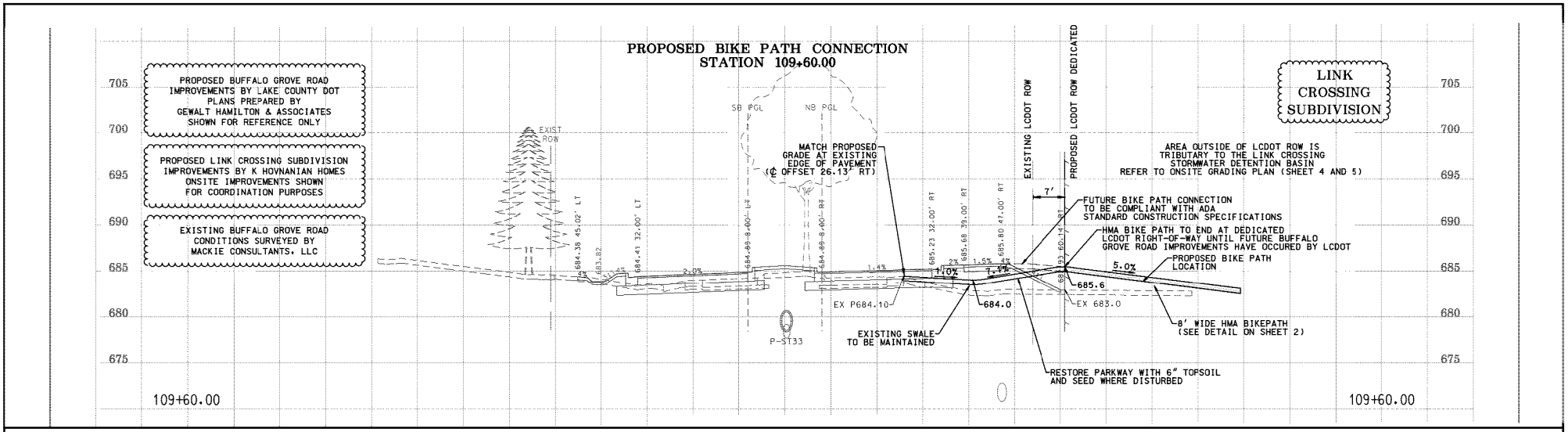
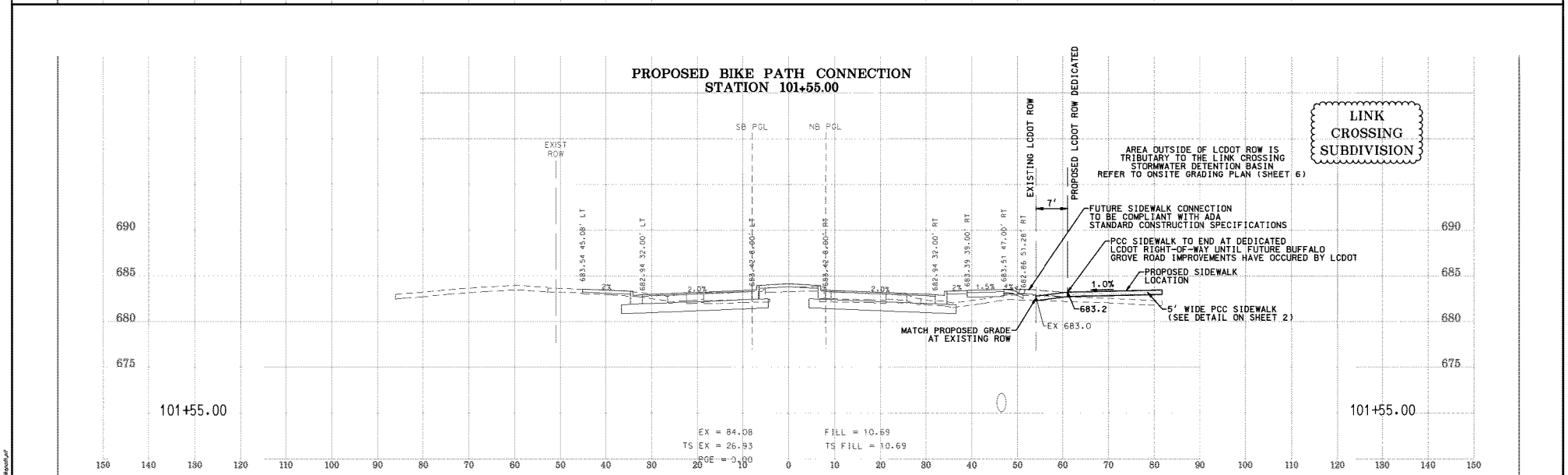
ILLINOIS FIRM LICENSE 184-002694





REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	SURVEYOR:	CBBEL/CHA
		/ /		DSGNR/LIAISON:	MAC
		/ /		PLOTTED BY:	MColeman 9/20/2016

SCALES NOBLE

FILE NAME: 4423-XS-BUFFALO_GROVE_Sheets_Horizontal.dgn

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DATE	DESCRIPTION OF REVISION	BY

DESIGNED	KJM
DRAWN	SDU
APPROVED	KJM
DATE	11/05/18
SCALE	1"=20'

BUFFALO GROVE ROAD - CROSS SECTIONS
LINK CROSSING RESIDENTIAL DEVELOPMENT
BUFFALO GROVE, ILLINOIS

SHEET 30 OF 30

PROJECT NUMBER: 2814

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