Regular Meeting Agenda

Sandra "Sandy" Frum Board Room
1225 Cedar Lane Northbrook, IL 60062
Tuesday, September 26, 2023

7:30 PM

1. **ROLL CALL**
2. **PLEDGE OF ALLEIGIANCE**
3. **MINUTES APPROVAL**
4. **PUBLIC COMMENT TIME**

   Please Note - Members of the public wishing to respectfully share thoughts about any matter concerning the Northbrook Board of Trustees may do so by coming to a meeting and speaking during the "Public Comment" time on general matters, or by speaking if and when comment is called during debate on a specific matter that is listed on the agenda. Members of the public can also submit a written comment via the Village's website. Each written comment submitted on the website will be delivered to each member of the Village Board prior to the meeting but will not be read out loud at the meeting unless specifically requested. Please note that while the Village Board will not immediately respond to public comments at the meeting, or engage in a back and forth discussion during the meeting, we are of course actively listening to all comments, thoughts, and suggestions. Thank you for your understanding and taking the time to contribute to the success of our community.

5. **MANAGER'S REPORT**

   A. Northbrook Court Redevelopment & Economic Incentive Agreement
   This is an informational report related to Northbrook Court.

6. **WARRANT LIST**

   A. Warrant List - Review and Approval of Payments to be Made Dated September 1, 2023 - September 15, 2023

   B. Review of Frontage Deposit List Dated September 14, 2023

7. **PRESIDENT'S REPORT**

   Community Moment

   A. A Proclamation Recognizing October as Cybersecurity Awareness Month

   B. A Proclamation Recognizing October as Down Syndrome Awareness Month

   C. A Proclamation Recognizing October as Learning Disabilities Month

   D. A Proclamation Recognizing October as Substance Abuse Prevention Month

E. A Resolution Declaring the Village of Northbrook a Book Sanctuary Community

F. A Proclamation Recognizing October 1, 2023 as Northbrook Historical Society Day

8. CONSENT AGENDA

The matters listed for consideration on the Consent Agenda are matters that appear to have the unanimous support of the Board of Trustees. The Village President will review, designate the resolution or ordinance number for passage and then inquire if any member of the Board or member of the public objects to any item on the Consent Agenda. If any objections are raised, the matter will be removed from the Consent Agenda and relocated to a location on this agenda for consideration during the appropriate Board Committee report. If no objection is voiced, the Village President will request a motion and second for passage of all items listed. The resultant roll call vote on the Consent Agenda will be applicable to each individual agenda item.

A. A Resolution Accepting the Utility Rate Study as Reviewed by the Public Works and Facilities Committee
The Village of Northbrook has undertaken a Utility Rate Study (URS) for the Water and Sanitary Sewer Funds to ensure the fiscal stability of these Enterprise Funds. The Public Works and Facilities Committee of the Village Board completed their review of the URS and recommended the Village Board of Trustees accept the same. The attached Resolution accepts the final draft of the URS in accordance with the Public Works and Facilities Committee's recommendation.

B. A Confirming Resolution Authorizing the Execution of an Agreement with NewGen Strategies and Solutions, LLC. of Annapolis, Maryland for a Stormwater Fund Utility Rate Study
The Village of Northbrook has completed Addendum #3 to the Master Stormwater Management Plan and to ensure adequate financial resources are available for the operations and capital investments in this fund, it is recommended the Village undertake a Utility Rate Study for the Stormwater Fund. In order to ensure work could begin as soon as possible, a contract for this work was executed by the Village Manager as the value of the work is within the Manager's purchasing authority, however staff is seeking a confirming Resolution should additional services related to this utility rate study be needed in the future.

C. A Resolution Authorizing the Purchase of LED Streetlight Fixtures from Graybar Electric Company, Inc. of St. Louis, MO
Consistent with the Climate Action Plan, new LED lights will replace 112 existing streetlight fixtures. Lights in residential areas will continue to be a "Town and Country" model while arterial roadway lights will continue to be "Cobra Head" styles. Both fixtures will conform to the Village's updated Engineering Standards and can be adjusted for brightness using a dial on the fixture.

D. An Ordinance Amending the Annual Fee Ordinance and Establishing Water and Sanitary Sewer Rates for FYs 2024-25 and 2025-26
The Village of Northbrook has undertaken a Utility Rate Study (URS) for the Water and Sewer Funds to ensure these enterprise funds were adequately financially supported. The Public Works and Facilities Committee of the Village Board completed their review of the URS and recommended the Village Board of Trustees accept the URS. The attached Resolution accepts the final draft of the URS in accordance with the Public Works and Facilities Committee's recommendation.

E. An Ordinance Providing for the Disposal of Surplus Property/Evidence
The Police Department is seeking authorization pursuant to the Law Enforcement Disposition of Property Act, 765 ILCS 1030/0.01 et seq. and according to Section 2-193 of the Northbrook

municipal code to dispose of surplus property and evidence that has been determined to be unclaimed.

9. ADMINISTRATION AND FINANCE

10. PLANNING AND ECONOMIC DEVELOPMENT

A. Consideration of various actions to approve the zoning relief application of Covenant Living of Northbrook, 2625 Techny Road, Plan Commission Docket No. PCD-22-11.
As requested by the Village Board on September 12, 2023 at the Committee of the Whole meeting, the following actions have been prepared to approve the application of Covenant Living for construction of three, 3-story residential buildings, totaling 36 units, replacing one 24-unit single-story residential building on the northeast side of the property with frontage on Techny Road and the relocate an above-ground stream onto residential lots owned by Covenant Living on the east side of Mayapple Lane.

i. *Covenant Living - Ordinance Amending Comp Plan*
ii. *Covenant Living - Rezoning Ordinance*
iii. *Covenant Living - Ordinance Amending PUD, Granting Special Permit, Variations and Site Plan Approval*
iv. *Covenant Living - Resolution Approving Final Plat of Subdivision*
v. *Covenant Living - Resolution Approving Development Agreement*

B. Preliminary Review of Zoning Request at 3100 Dundee Road
This is a preliminary review of an application of an application for zoning relief at 3100 Dundee Road for a Zoning Code Text Amendment or Rezoning of a portion of the property to allow medical office uses as a permitted use instead of the current conditional/special permit use. The Preliminary Review by the Village Board is a high level review of the concept and provides for the Village Board to provide non-binding comments on a proposal prior to submitting to the Village a detailed application.

11. COMMUNITY AND SUSTAINABILITY

12. PUBLIC WORKS AND FACILITIES

A. A Resolution Authorizing the Execution of a Sub-Lease Agreement for the Grind Cafe at the Metra Train Station with Charlie E. Bliss of Park Ridge, Illinois
The Village of Northbrook and the Sub-Lessee of space at the Metra Train Station desire to enter into a new lease with revised terms and conditions as well as a reduced rent at the request of the Charlie E. Bliss (Sub-Lessee).

13. PUBLIC SAFETY

14. COMMUNICATIONS AND OUTREACH

15. REMARKS FOR THE GOOD OF THE ORDER

16. CLOSED SESSION

17. ADJOURN

The Village of Northbrook is subject to the requirements of the Americans with Disabilities Act of 1990. Individuals with disabilities who plan to attend this meeting and who require certain accommodations in order to allow them to observe or participate in this meeting, or who have questions regarding the accessibility of the meeting or facilities, are requested to promptly contact the Village of Northbrook at (847) 272-5050, or the Illinois Relay Center at (800) 526-0844, to allow the Village of Northbrook to make reasonable accommodations for those persons.

MEMORANDUM

To: Village Board of Trustees
From: Village Manager Cara Pavlicek
Cc: Village Board of Trustees
Date: 2023-09-26
Subject: Northbrook Court Redevelopment & Economic Incentive Agreement

Overview/Synopsis.
This is an informational report related to Northbrook Court.

Fiscal Impact.
N/A.

Recommendation.
Information Only.

Background.

On August 2, 2019, the Village entered into a Redevelopment & Economic Incentive Agreement for certain property located at the shopping center commonly known as Northbrook Court. A First, Second, Third and Fourth Amendment to the Redevelopment & Economic Incentive Agreement have been approved and provide for various extensions up to and including through December 31, 2023. On September 22, 2023 the Village Manager granted the most recent extension. The letter granting the extension is attached for public information.

The Village continues to support its partnership with Brookfield Properties Development for redevelopment of Northbrook Court and during this extension of time the Village Board will be presented with various legislative actions to consider related to the property.

NB - Northbrook Court - Granting of Extension 9.22.2023.pdf
23_09_21_Brookfield_Northbrook_Village RDA Extension Request.pdf

northbrook

Village President
Kathryn L. Ciesla

Board of Trustees
Muriel J. Collison
Joy U. Ebhomielen
Johannah K. Hebl
Robert P. Israel
Daniel H. Pepoon
Heather E. Ross

Village Clerk
Debra J. Ford

Village Manager
Cara L. Pavlicek

September 22, 2023

Via Overnight Delivery
Northbrook Anchor Acquisition, LLC
c/o Brookfield Properties
350 N. Orleans St. Suite 300
Chicago, IL 60654
c/o Ben Freeman, Senior Vice President, Brookfield Properties Development
Adam Tritt, Chief Development Officer, Brookfield Properties

Re: Granting of Extension to that certain Redevelopment & Economic Incentive Agreement dated as of August 2, 2019 (the "Original RDA"), as amended by that certain First Amendment to Redevelopment & Economic Incentive Agreement dated as of July 27, 2021 (the "First Amendment"), that certain Second Amendment to Redevelopment & Economic Incentive Agreement dated as of July 26, 2022 (the "Second Amendment"), and that certain Third Amendment to Redevelopment & Economic Incentive Agreement dated as of December 13, 2022 (the "Third Amendment", that certain Fourth Amendment to the Redevelopment & Economic Incentive Agreement dated April 11, 2023, and together with the First Amendment, Second Amendment and the Original RDA, collectively, the "RDA") with respect to the redevelopment of the Northbrook Court Shopping Center Property

Dear Mr. Freeman and Mr. Tritt:

The Village has received your request, dated September 21, 2023 for an additional extension of the Required Submittals Due Date pursuant to Section 2.A of the Fourth Amendment. That Section allows the Village Manager to grant an extension terminating on December 31, 2023, upon a finding that: (1) the Developer Parties have made diligent efforts and progress to proceed with the Redevelopment Project, and (2) such extension is in the best interest of the Village.

I have determined that both required conditions have been met and, therefore, I hereby grant the extension to December 31, 2023. I appreciate your continued commitment to working towards the future redevelopment of Northbrook Court.

The redevelopment of this property remains a high priority for the Village of Northbrook. I continue to appreciate Brookfield's shared recognition of the historical importance of Northbrook Court to the community as a commercial anchor and the community's desire to ensure its future viability.

Sincerely

Cara Pavlicek
Village Manager

cc: Village President and Board of Trustees
Steven M. Elrod, Village Attorney

Brookfield
Properties

September 21, 2023

Ms. Cara Pavlicek, Village Manager
Village of Northbrook
1225 Cedar Lane
Northbrook, Illinois 60062

RE: Redevelopment and Economic Incentive Agreement dated August 2, 2019, as amended by First Amendment dated July 27, 2021, as further amended by Second Amendment dated July 26, 2022, Third Amendment dated December 13, 2022, and Fourth Amendment ("Fourth Amendment") dated April 11, 2023 (collectively, the "REIA") (all terms not otherwise defined herein shall have the same meaning as ascribed to them in the REIA)

Dear Ms. Pavlicek:

As you know, pursuant to the Fourth Amendment the Required Submittals Due Date was extended through and including September 26, 2023. We write to request that the Village agree to further extend the Required Submittals Due Date and to reaffirm all other terms in the REIA through November 30, 2023, pursuant to the terms of the Fourth Amendment.

The basis for the request is that the Developer Parties continue to work diligently and closely with the Village to secure preliminary assent to a prospective set of entitlements and incentives that will transform Northbrook Court. The Developer Parties are hard at work to finalize consideration of plans to significantly enhance the retail experience for shoppers, and to create residential opportunities to nurture live, work, and gather options, and to cultivate pedestrian-friendly and inviting street level interaction.

Between now and November 30, 2023, the Developer Parties intend to work with the Village to complete the framework for land use approvals and economic incentives. Extending the Required Submittals Due Date will allow sufficient time to complete and consider the framework for the Redevelopment Project to the Village staff and Village Board.

Thank you for your consideration.

Best Regards,

Benjamin Freeman

BEN FREEMAN

Senior Vice President, Brookfield Properties Development

Chicago, Illinois

cc: Steven M. Elrod

CONFIDENTIAL, PRIVILEGED, AND PROPRIETARY MATERIAL SUBJECT TO REVISION.
NOT FOR PUBLIC DISTRIBUTION. DISCLOSURE COULD LEAD TO COMPETITIVE HARM.

VILLAGE OF NORTHBROOK

GENERAL LEDGER SYSTEM
WARRANT LIST

SEPTEMBER 1, 2023 - SEPTEMBER 15, 2023
FOR 09/26/23 MEETING

CHECK NUMBER	VENDOR NAME	PURPOSE	AMOUNT
304067	A. EPSTEIN AND SONS INTERNATIONAL	SERVICES - PW (*)	78,202.79
304018	ACE NORTHBROOK HARDWARE & RENTAL	SUPPLIES - PW	208.87
6005(A)	ADVANCED TREE CARE	SERVICES - PW (*)	15,967.00
6006(A)	AIR ONE EQUIPMENT INC	MAINTENANCE - FD	170.00
304064	AL WARREN OIL CO INC	FUEL - PW	28,483.59
304006	ALAN F. FRIEDMAN PH.D., INC.	PROFESSIONAL SERVICES - FD	828.75
6007(A)	ALEXANDER CHEMICAL CORPORATION	SUPPLIES - PW (*)	15,582.24
304085	ALLIED GARAGE DOOR INC	SERVICES - PW	1,561.30
6037(A)	ALPHA BUILDING MAINTENANCE SERVICE	PROFESSIONAL SERVICES - PW (*)	9,013.03
303991	AMALGAMATED BANK OF CHICAGO	ADMINISTRATION FEES - FIN	475.00
304082	AMAZON WEB SERVICES, INC.	SUPPLIES - PW	285.00
6035(A)	AMAZON.COM SERVICES, INC.	SUPPLIES - DPS	1,902.89
6038(A)	AMERICAN PRINTING TECHNOLOGIES INC	PRINTING - FIN	711.99
304083	AMERICAN TAXI DISPATCH, INC	SENIOR TRANSPORTATION - FIN	450.00
304094	ANGELA BAIOCCHI	REIMBURSEMENT - PD	27.29
304058	APEX LANDSCAPING INC.	SERVICES - PW	1,414.40
6008(A)	ARLINGTON POWER EQUIPMENT	PARTS - PW	54.58
303992	ARROW ROAD CONSTRUCTION COMPANY	MATERIALS - PW (*)	3,714.08
303994	AT&T MOBILITY NATIONAL ACCOUNTS LLC	TELECOMMUNICATIONS - IT	7,274.15
304068	BACKFLOW SOLUTIONS, INC.	PROFESSIONAL SERVICES - PW (*)	5,787.57
6009(A)	BAXTER & WOODMAN INC.	PROFESSIONAL SERVICES - PW (*)	5,295.94
304096	BRANDON PRATE	REIMBURSEMENT - PD	150.00
304055	BUILDERS ASPHALT, LLC	MATERIALS - PW (*)	627.64
6033(A)	CABCONNECT	SENIOR TRANSPORTATION - FIN	87.10
304024	CASH	PETTY CASH - FD	380.35
304112	CATHIE DUNAL	VEHICLE STICKER REFUND - FIN	20.50
303993	CDS OFFICE TECHNOLOGIES	EQUIPMENT - IT	649.37
6011(A)	CDW GOVERNMENT INC.	EQUIPMENT - IT	176.15
304074	CERTIFIED LABORATORIES	PARTS - PW	980.11
6010(A)	CHICAGO COMMUNICATIONS LLC	MAINTENANCE- PD	670.50
304040	CINTAS CORPORATION #2	SUPPLIES - PD	409.18
304041	CINTAS CORPORATION #2	UNIFORMS - PW	87.47
304079	CIVILTECH ENGINEERING, INC.	PROFESSIONAL SERVICES - DPS	2,194.15
303995	COLLEGE OF DUPAGE	TRAINING - FD	432.00
303996	COMCAST CABLE	TELECOMMUNICATIONS - IT	274.80
304080	CONSTELLATION ENERGY CORPORATION	UTILTIES - PW	50,487.93
304076	CONSULTING ENGINEERING INC.	PROFESSIONAL SERVICES - PW (*)	24,395.00
303997	COOK COUNTY RECORDER OF DEEDS	RECORDING FEES - DPS	91.00
304097	CRAIG ROSCOE	REIMBURSEMENT - PD	629.86
304047	CUMMINS SALES AND SERVICE	PARTS - PW	91.10
303998	CUTLER WORKWEAR	UNIFORMS - PW	1,167.11
304098	DENISE JASSO	REIMBURSEMENT - PD	95.63
303999	DIMEO BROS., INC.	SERVICES - PW (*)	21,966.00
304000	DJS SCUBA LOCKER, INC	SUPPLIES - FD	2,290.00
304088	DRAIN & PLUMBING SERVICES	SERVICES - PW	10,229.00
304109	ELIZABETH NAREWSKI	PARKING TICKET REFUND - FIN	25.00
304089	EN VENDING LLC	CANTEEN - FD	644.16
304104	ERIC BROUILETTE	REIMBURSEMENT - PD	33.71
304001	EVANSTON FUNERAL & CREMATION, INC.	PROFESSIONAL SERVICES - PD	450.00
304065	F.H. PASCHEN, S.N. NIELSEN & ASSOC.	PROFESSIONAL SERVICES - PW (*)	83,605.45
6012(A)	FASTSIGNS	SUPPLIES - PD	95.81
304002	FEDEX	SERVICES - PD	5.49

VILLAGE OF NORTHBROOK

GENERAL LEDGER SYSTEM
WARRANT LIST

SEPTEMBER 1, 2023 - SEPTEMBER 15, 2023
FOR 09/26/23 MEETING

CHECK NUMBER	VENDOR NAME	PURPOSE	AMOUNT
6032(A)	FIRE SAFETY CONSULTANTS, INC	PROFESSIONAL SERVICES - FD	1,250.00
6034(A)	FIRST CHOICE COFFEE SERVICES	SUPPLIES - PW	743.63
304084	FLECK'S LANDSCAPING	PROFESSIONAL SERVICES - PW (*)	10,897.28
304003	FOOT STONE, INC.	PROFESSIONAL SERVICES - PW (*)	3,138.83
304004	FORCE AMERICA DISTRIBUTING LLC	PARTS - PW	316.74
304005	FOSTER COACH SALES INC.	PARTS - PW	98.79
6013(A)	GALLS, LLC	UNIFORMS - PD	278.78
304106	GARY MIKHAYLOV	ESCROW RELEASE - PW	600.00
304007	GENE'S VILLAGE TOWING INC	SERVICES - PW	250.00
304008	GOLF MILL FORD	PARTS - PW	3,098.75
6014(A)	GRAINGER	PARTS - PW	278.22
304009	GRAYBAR ELECTRIC COMPANY INC.	SUPPLIES - PW	1,837.08
304105	GREGORY GIOMETTI	ESCROW RELEASE - PW	300.00
6015(A)	HAVEY COMMUNICATIONS, INC.	PARTS - PW	456.30
304054	HEALTH INSPECTION PROFESSIONALS INC	PROFESSONAL SERVICES - DPS	11,000.00
304010	HOME DEPOT CREDIT SERVICES	SUPPLIES - PW	172.80
304087	HOUSEAL LAVIGNE ASSOCIATES, LLC	SERVICES - DPS	4,370.00
304011	ILLINOIS SECRETARY OF STATE	LICENSE PLATES - PD	151.00
304012	ILLINOIS STATE POLICE	PROFESSIONAL SERVICES - GG	84.75
304060	ILLINOIS STATE POLICE	LEGAL FEES - PD	1,109.11
304108	INSITUFORM	SERVICES - PW	900.00
304059	J & B SOLUTIONS TO HEALTHY TREES	SERVICES - PW	1,185.00
6026(A)	J.F. WAGNER PRINTING COMPANY	PROFESSIONAL SERVICES - GG	7,761.00
304099	JAMES FRIEL	REIMBURSEMENT - PD	344.17
304107	JANICE MAZEWKI	ESCROW RELEASE - PW	300.00
304100	JONATHAN SALMI	REIMBURSEMENT - PD	45.00
6017(A)	KIESLER POLICE SUPPLY, INC.	SUPPLIES - PD	2,110.25
304013	LAKE COUNTY PUBLIC WORKS DEPT	SERVICES - PW	455.00
304057	LAKE SHORE ATHLETIC SERVICES, INC	SUPPLIES - PW	9,650.00
304113	LIDIA CURYLO	UTILITY REFUND - FIN	76.57
304081	LINDE GAS & EQUIPMENT INC.	PARTS - PW	86.72
6018(A)	LOGSDON OFFICE SUPPLY	SUPPLIES - PD	717.84
304014	LOOP1 SYSTEMS, INC.	ANNUAL MAINTENANCE - IT	7,434.70
6023(A)	M.E.S.	TOOLS - FD	60.00
6036(A)	MACQUEEN EMERGENCY GROUP	PARTS - PW	2,575.69
304101	MATTHEW JOHNSON	REIMBURSEMENT - PD	155.24
304015	MAURO SEWER CONSTRUCTION, INC.	PROFESSIONAL SERVICES - PW (*)	461,924.34
6020(A)	MEADE INC.	SERVICES - PW	3,689.00
6039(A)	MERCHANTS' CREDIT GUIDE CO.	COLLECTIONS - FIN	319.44
304102	MICHAEL TADLEY	REIMBURSEMENT - PD	102.35
303960	MICHAEL TRACY	REIMBURSEMENT - PD	2,549.46
304048	MIDWEST OPERATING ENGINEERS WELFARE	HEALTH INSURANCE - GG	995.48
304049	MIDWEST OPERATING ENGINEERS WELFARE	HEALTH INSURANCE - GG	995.48
304050	MIDWEST OPERATING ENGINEERS WELFARE	HEALTH INSURANCE - GG	995.48
304051	MIDWEST OPERATING ENGINEERS WELFARE	HEALTH INSURANCE - GG	11,999.00
304052	MIDWEST OPERATING ENGINEERS WELFARE	HEALTH INSURANCE - GG	20,295.00
304053	MIDWEST OPERATING ENGINEERS WELFARE	HEALTH INSURANCE - GG	36,582.00
304114	MIKE BARTHOLOMEW	UTILITY REFUND - FIN	350.02
304062	MINDSIGHT	CONSULTING - IT	9,345.50
304016	MONROE TRUCK EQUIPMENT, INC	PARTS - PW	1,348.96
304056	MOORE LANDSCAPES, LLC	SERVICES - PW	600.00
6021(A)	MOTION INDUSTRIES, INC.	PARTS - PW	1,600.05

VILLAGE OF NORTHBROOK

GENERAL LEDGER SYSTEM
WARRANT LIST

SEPTEMBER 1, 2023 - SEPTEMBER 15, 2023
FOR 09/26/23 MEETING

CHECK NUMBER	VENDOR NAME	PURPOSE	AMOUNT
6022(A)	MOTOROLA SOLUTIONS, INC.	RADIO EQUIPMENT - FD	11,212.58
304066	MWM CONSULTING GROUP, INC.	PROFESSIONAL SERVICES - FIN	4,500.00
304061	NAPA AUTO PARTS	PARTS - PW	378.08
304017	NEHER ELECTRIC SUPPLY, INC.	SUPPLIES - PW	2,475.12
304086	NELBUD SERVICES, LLC	SERVICES - PW	457.00
6024(A)	NEMETH GLASS OF ILLINOIS, INC.	PARTS - PW	758.27
304093	NICHOLAS BECKER	AMBULANCE REIMB - FD	110.00
304020	NICOR	UTILITIES - PW	2,449.07
304019	NORTH EAST MULTI-REGIONAL TRAINING	TRAINING - PD	875.00
304022	NORTHSHORE OMEGA	PROFESSIONAL SERVICES - FD	5,030.00
304021	NORTHSHORE UNIVERSITY HEALTHSYSTEM	TRAINING - FD	550.00
304023	NORTHWEST FREIGHTLINER	PARTS - PW	290.99
304078	PACE ANALYTICAL SERVICES, LLC	SERVICES - PW	1,474.40
304045	PARTNERS & PAWS VETERINARY SERVICE	K-9 CARE - PD	906.07
304092	PAULA LEVY	AMBULANCE REIMB - FD	116.99
304077	PEERLESS NETWORK, INC.	TELECOMMUNICATIONS - IT	4,564.63
6025(A)	POMP'S TIRE SERVICE, INC.	SERVICES - PW	7,345.56
304090	PROFORM TECHNOLOGIES, INC.	SUPPLIES - DPS	6,957.00
304025	PROMO'S 911, INC.	SUPPLIES - PD	1,389.95
6027(A)	REALTY & MORTGAGE CO.	SHF EXPENSE REIMB - FIN	34,137.50
304026	RED'S GARDEN CENTER, INC.	SUPPLIES - PW	545.50
304063	RICKMAN CONTRACT SERVICES, INC.	PROFESSIONAL SERVICES - FIN	6,500.00
304115	ROBERT & MELINDA ENGDAHL	UTILITY REFUND - FIN	21.96
304027	ROSATI'S PIZZA	TRAINING - FD	86.97
304028	ROWELL CHEMICAL CORPORATION	SUPPLIES - PW (*)	7,559.04
304029	SAF-T-GARD INTERNATIONAL, INC.	SUPPLIES - PW	693.89
304030	SCHROEDER & SCHROEDER, INC.	PROFESSIONAL SERVICES - PW (*)	204,602.62
304091	SEARCH, INC	AWARENESS TRAINING - GG	850.00
304031	SHERMAN MECHANICAL INC.	SERVICES - PW (*)	19,896.00
304032	SHERWIN WILLIAMS	SUPPLIES - PW	219.21
6028(A)	SIRCHIE	SUPPLIES - PD	190.32
304033	SPOK, INC.	PAGERS - PW	63.27
304034	STANDARD EQUIPMENT COMPANY	PARTS - PW	1,097.95
304070	STANTEC CONSULTING SERVICES INC.	PROFESSIONAL SERVICES - PW (*)	4,756.20
304035	STRYKER SALES CORP.	MECHANICAL CPR DEVICES - FD	16,047.76
304111	SUSANNE FERET	REIMBURSEMNET - PW	3,425.00
304069	SYMMETRY ENERGY SOLUTIONS, LLC	UTILITIES - PW	810.34
304036	TAPCO	SUPPLIES - PW	388.10
304095	TERRENCE JORIA	REIMBURSEMENT - PD	130.99
6019(A)	TERRI LUECHT	SUPPLEMENT PAYMENT - FIN	1,659.00
304072	THALMANN ALIGNMENT INC	SERVICES - PW	130.00
6040(A)	THE ORGANIC GARDENER LTD	PROFESSIONAL SERVICES - DPS	800.00
304037	THOMPSON ELEVATOR INSPECTION	PROFESSIONAL SERVICES - DPS	86.00
304039	THOMSON REUTERS	SERVICES - PD	316.83
304075	TODAY'S UNIFORMS INC.	UNIFORMS - FD	3,677.05
304103	TODD FEINGOLD	MEMBERSHIP - PD	282.84
304110	TOM GERNER	REIMBURSEMENT - PW	540.00
304044	TRANE U.S. INC.	SUPPLIES - PW	1,325.00
304073	TYLER TECHNOLOGIES, INC	ANNUAL SUBSCRIPTION - IT	62.50
6031(A)	UNIQUE PRODUCTS & SERVICE CORP	SUPPLIES - PW	271.50
304071	UNITED DISPATCH	SENIOR TRANSPORTATION - FIN	80.00
304043	UNIVERSITY OF ILLINOIS	TRAINING - PD	300.00

VILLAGE OF NORTHBROOK

GENERAL LEDGER SYSTEM
WARRANT LIST

SEPTEMBER 1, 2023 - SEPTEMBER 15, 2023
FOR 09/26/23 MEETING

CHECK NUMBER	VENDOR NAME	PURPOSE	AMOUNT
6016(A)	USABLUEBOOK	SUPPLIES - PW	76.22
304038	VOLLMAR CLAY PRODUCTS CO.	SUPPLIES - PW	532.00
6030(A)	WATER RESOURCES INC	PROFESSIONAL SERVICES - PW (*)	860.00
304046	WATERWAY GAS AND WASH COMPANY	MAINTENANCE - PD	470.00
6029(A)	WEIDNER FARMS MATERIAL INC.	PROFESSIONAL SERVICES - PW (*)	34,117.95
304042	WILSON LAWN & LANDSCAPE, LLC	PROFESSIONAL SERVICES - DPS	943.00
		CLASS 'A' TOTAL	**1,409,226.05**

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GENERAL LEDGER SYSTEM
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SEPTEMBER 1, 2023 - SEPTEMBER 15, 2023
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CHECK NUMBER	VENDOR NAME	PURPOSE	AMOUNT
	CLASS 'B' WARRANTS		
388(E)	OTTOSEN DINOLFO	PROFESSIONAL SERVICES - FD	4,295.34
389(E)	MWM CONSULTING GROUP, INC.	PROFESSIONAL SERVICES - FD	6,850.00
387(E)	LOWE'S	SUPPLIES - PW	1,146.89
9/15/23	PAYROLL	9/15/2023 PAYROLL	994,766.05
		CLASS 'B' TOTAL	**1,007,058.28**
		REPORT TOTAL	***2,416,284.33***

by roll call vote of the Northbrook Village Board of Trustees at a duly noticed official meeting on the day

of 20 .

Village President

ATTEST:

VILLAGE OF NORTHBROOK

GENERAL LEDGER SYSTEM
WARRANT LIST

SEPTEMBER 1, 2023 - SEPTEMBER 15, 2023
FOR 09/26/23 MEETING

CHECK NUMBER	VENDOR NAME	PURPOSE	AMOUNT
304015	MAURO SEWER CONSTRUCTION, INC.	PROFESSIONAL SERVICES - PW (*)	461,924.34
304030	SCHROEDER & SCHROEDER, INC.	PROFESSIONAL SERVICES - PW (*)	204,602.62
304065	F.H. PASCHEN, S.N. NIELSEN & ASSOC.	PROFESSIONAL SERVICES - PW (*)	83,605.45
304067	A. EPSTEIN AND SONS INTERNATIONAL	SERVICES - PW (*)	78,202.79
304080	CONSTELLATION ENERGY CORPORATION	UTILTIES - PW	50,487.93
304053	MIDWEST OPERATING ENGINEERS WELFARE	HEALTH INSURANCE - GG	36,582.00
6027(A)	REALTY & MORTGAGE CO.	SHF EXPENSE REIMB - FIN	34,137.50
6029(A)	WEIDNER FARMS MATERIAL INC.	PROFESSIONAL SERVICES - PW (*)	34,117.95
304064	AL WARREN OIL CO INC	FUEL - PW	28,483.59
304076	CONSULTING ENGINEERING INC.	PROFESSIONAL SERVICES - PW (*)	24,395.00
303999	DIMEO BROS., INC.	SERVICES - PW (*)	21,966.00
304052	MIDWEST OPERATING ENGINEERS WELFARE	HEALTH INSURANCE - GG	20,295.00
304031	SHERMAN MECHANICAL INC.	SERVICES - PW (*)	19,896.00
304035	STRYKER SALES CORP.	MECHANICAL CPR DEVICES - FD	16,047.76
6005(A)	ADVANCED TREE CARE	SERVICES - PW (*)	15,967.00
6007(A)	ALEXANDER CHEMICAL CORPORATION	SUPPLIES - PW (*)	15,582.24
304051	MIDWEST OPERATING ENGINEERS WELFARE	HEALTH INSURANCE - GG	11,999.00
6022(A)	MOTOROLA SOLUTIONS, INC.	RADIO EQUIPMENT - FD	11,212.58
304054	HEALTH INSPECTION PROFESSIONALS INC	PROFESSONAL SERVICES - DPS	11,000.00
304084	FLECK'S LANDSCAPING	PROFESSIONAL SERVICES - PW (*)	10,897.28
304088	DRAIN & PLUMBING SERVICES	SERVICES - PW	10,229.00
304057	LAKE SHORE ATHLETIC SERVICES, INC	SUPPLIES - PW	9,650.00
304062	MINDSIGHT	CONSULTING - IT	9,345.50
6037(A)	ALPHA BUILDING MAINTENANCE SERVICE	PROFESSIONAL SERVICES - PW (*)	9,013.03
6026(A)	J.F. WAGNER PRINTING COMPANY	PROFESSIONAL SERVICES - GG	7,761.00
304028	ROWELL CHEMICAL CORPORATION	SUPPLIES - PW (*)	7,559.04
304014	LOOP1 SYSTEMS, INC.	ANNUAL MAINTENANCE - IT	7,434.70
6025(A)	POMP'S TIRE SERVICE, INC.	SERVICES - PW	7,345.56
303994	AT&T MOBILITY NATIONAL ACCOUNTS LLC	TELECOMMUNICATIONS - IT	7,274.15
304090	PROFORM TECHNOLOGIES, INC.	SUPPLIES - DPS	6,957.00
304063	RICKMAN CONTRACT SERVICES, INC.	PROFESSIONAL SERVICES - FIN	6,500.00
304068	BACKFLOW SOLUTIONS, INC.	PROFESSIONAL SERVICES - PW (*)	5,787.57
6009(A)	BAXTER & WOODMAN INC.	PROFESSIONAL SERVICES - PW (*)	5,295.94
304022	NORTHSHORE OMEGA	PROFESSIONAL SERVICES - FD	5,030.00
304070	STANTEC CONSULTING SERVICES INC.	PROFESSIONAL SERVICES - PW (*)	4,756.20
304077	PEERLESS NETWORK, INC.	TELECOMMUNICATIONS - IT	4,564.63
304066	MWM CONSULTING GROUP, INC.	PROFESSIONAL SERVICES - FIN	4,500.00
304087	HOUSEAL LAVIGNE ASSOCIATES, LLC	SERVICES - DPS	4,370.00
303992	ARROW ROAD CONSTRUCTION COMPANY	MATERIALS - PW (*)	3,714.08
6020(A)	MEADE INC.	SERVICES - PW	3,689.00
304075	TODAY'S UNIFORMS INC.	UNIFORMS - FD	3,677.05
304111	SUSANNE FERET	REIMBURSEMNET - PW	3,425.00
304003	FOOT STONE, INC.	PROFESSIONAL SERVICES - PW (*)	3,138.83
304008	GOLF MILL FORD	PARTS - PW	3,098.75
6036(A)	MACQUEEN EMERGENCY GROUP	PARTS - PW	2,575.69
303960	MICHAEL TRACY	REIMBURSEMENT - PD	2,549.46
304017	NEHER ELECTRIC SUPPLY, INC.	SUPPLIES - PW	2,475.12
304020	NICOR	UTILITIES - PW	2,449.07
304000	DJS SCUBA LOCKER, INC	SUPPLIES - FD	2,290.00
304079	CIVILTECH ENGINEERING, INC.	PROFESSIONAL SERVICES - DPS	2,194.15
6017(A)	KIESLER POLICE SUPPLY, INC.	SUPPLIES - PD	2,110.25
6035(A)	AMAZON.COM SERVICES, INC.	SUPPLIES - DPS	1,902.89

VILLAGE OF NORTHBROOK

GENERAL LEDGER SYSTEM
WARRANT LIST

SEPTEMBER 1, 2023 - SEPTEMBER 15, 2023
FOR 09/26/23 MEETING

CHECK NUMBER	VENDOR NAME	PURPOSE	AMOUNT
304009	GRAYBAR ELECTRIC COMPANY INC.	SUPPLIES - PW	1,837.08
6019(A)	TERRI LUECHT	SUPPLEMENT PAYMENT - FIN	1,659.00
6021(A)	MOTION INDUSTRIES, INC.	PARTS - PW	1,600.05
304085	ALLIED GARAGE DOOR INC	SERVICES - PW	1,561.30
304078	PACE ANALYTICAL SERVICES, LLC	SERVICES - PW	1,474.40
304058	APEX LANDSCAPING INC.	SERVICES - PW	1,414.40
304025	PROMO'S 911, INC.	SUPPLIES - PD	1,389.95
304016	MONROE TRUCK EQUIPMENT, INC	PARTS - PW	1,348.96
304044	TRANE U.S. INC.	SUPPLIES - PW	1,325.00
6032(A)	FIRE SAFETY CONSULTANTS, INC	PROFESSIONAL SERVICES - FD	1,250.00
304059	J & B SOLUTIONS TO HEALTHY TREES	SERVICES - PW	1,185.00
303998	CUTLER WORKWEAR	UNIFORMS - PW	1,167.11
304060	ILLINOIS STATE POLICE	LEGAL FEES - PD	1,109.11
304034	STANDARD EQUIPMENT COMPANY	PARTS - PW	1,097.95
304048	MIDWEST OPERATING ENGINEERS WELFARE	HEALTH INSURANCE - GG	995.48
304049	MIDWEST OPERATING ENGINEERS WELFARE	HEALTH INSURANCE - GG	995.48
304050	MIDWEST OPERATING ENGINEERS WELFARE	HEALTH INSURANCE - GG	995.48
304074	CERTIFIED LABORATORIES	PARTS - PW	980.11
304042	WILSON LAWN & LANDSCAPE, LLC	PROFESSIONAL SERVICES - DPS	943.00
304045	PARTNERS & PAWS VETERINARY SERVICE	K-9 CARE - PD	906.07
304108	INSITUFORM	SERVICES - PW	900.00
304019	NORTH EAST MULTI-REGIONAL TRAINING	TRAINING - PD	875.00
6030(A)	WATER RESOURCES INC	PROFESSIONAL SERVICES - PW (*)	860.00
304091	SEARCH, INC	AWARENESS TRAINING - GG	850.00
304006	ALAN F. FRIEDMAN PH.D., INC.	PROFESSIONAL SERVICES - FD	828.75
304069	SYMMETRY ENERGY SOLUTIONS, LLC	UTILITIES - PW	810.34
6040(A)	THE ORGANIC GARDENER LTD	PROFESSIONAL SERVICES - DPS	800.00
6024(A)	NEMETH GLASS OF ILLINOIS, INC.	PARTS - PW	758.27
6034(A)	FIRST CHOICE COFFEE SERVICES	SUPPLIES - PW	743.63
6018(A)	LOGSDON OFFICE SUPPLY	SUPPLIES - PD	717.84
6038(A)	AMERICAN PRINTING TECHNOLOGIES INC	PRINTING - FIN	711.99
304029	SAF-T-GARD INTERNATIONAL, INC.	SUPPLIES - PW	693.89
6010(A)	CHICAGO COMMUNICATIONS LLC	MAINTENANCE- PD	670.50
303993	CDS OFFICE TECHNOLOGIES	EQUIPMENT - IT	649.37
304089	EN VENDING LLC	CANTEEN - FD	644.16
304097	CRAIG ROSCOE	REIMBURSEMENT - PD	629.86
304055	BUILDERS ASPHALT, LLC	MATERIALS - PW (*)	627.64
304056	MOORE LANDSCAPES, LLC	SERVICES - PW	600.00
304106	GARY MIKHAYLOV	ESCROW RELEASE - PW	600.00
304021	NORTHSHORE UNIVERSITY HEALTHSYSTEM	TRAINING - FD	550.00
304026	RED'S GARDEN CENTER, INC.	SUPPLIES - PW	545.50
304110	TOM GERNER	REIMBURSEMENT - PW	540.00
304038	VOLLMAR CLAY PRODUCTS CO.	SUPPLIES - PW	532.00
303991	AMALGAMATED BANK OF CHICAGO	ADMINISTRATION FEES - FIN	475.00
304046	WATERWAY GAS AND WASH COMPANY	MAINTENANCE - PD	470.00
304086	NELBUD SERVICES, LLC	SERVICES - PW	457.00
6015(A)	HAVEY COMMUNICATIONS, INC.	PARTS - PW	456.30
304013	LAKE COUNTY PUBLIC WORKS DEPT	SERVICES - PW	455.00
304001	EVANSTON FUNERAL & CREMATION, INC.	PROFESSIONAL SERVICES - PD	450.00
304083	AMERICAN TAXI DISPATCH, INC	SENIOR TRANSPORTATION - FIN	450.00
303995	COLLEGE OF DUPAGE	TRAINING - FD	432.00
304040	CINTAS CORPORATION #2	SUPPLIES - PD	409.18

VILLAGE OF NORTHBROOK

GENERAL LEDGER SYSTEM
WARRANT LIST

SEPTEMBER 1, 2023 - SEPTEMBER 15, 2023
FOR 09/26/23 MEETING

CHECK NUMBER	VENDOR NAME	PURPOSE	AMOUNT
304036	TAPCO	SUPPLIES - PW	388.10
304024	CASH	PETTY CASH - FD	380.35
304061	NAPA AUTO PARTS	PARTS - PW	378.08
304114	MIKE BARTHOLOMEW	UTILITY REFUND - FIN	350.02
304099	JAMES FRIEL	REIMBURSEMENT - PD	344.17
6039(A)	MERCHANTS' CREDIT GUIDE CO.	COLLECTIONS - FIN	319.44
304039	THOMSON REUTERS	SERVICES - PD	316.83
304004	FORCE AMERICA DISTRIBUTING LLC	PARTS - PW	316.74
304043	UNIVERSITY OF ILLINOIS	TRAINING - PD	300.00
304105	GREGORY GIOMETTI	ESCROW RELEASE - PW	300.00
304107	JANICE MAZEWKI	ESCROW RELEASE - PW	300.00
304023	NORTHWEST FREIGHTLINER	PARTS - PW	290.99
304082	AMAZON WEB SERVICES, INC.	SUPPLIES - PW	285.00
304103	TODD FEINGOLD	MEMBERSHIP - PD	282.84
6013(A)	GALLS, LLC	UNIFORMS - PD	278.78
6014(A)	GRAINGER	PARTS - PW	278.22
303996	COMCAST CABLE	TELECOMMUNICATIONS - IT	274.80
6031(A)	UNIQUE PRODUCTS & SERVICE CORP	SUPPLIES - PW	271.50
304007	GENE'S VILLAGE TOWING INC	SERVICES - PW	250.00
304032	SHERWIN WILLIAMS	SUPPLIES - PW	219.21
304018	ACE NORTHBROOK HARDWARE & RENTAL	SUPPLIES - PW	208.87
6028(A)	SIRCHIE	SUPPLIES - PD	190.32
6011(A)	CDW GOVERNMENT INC.	EQUIPMENT - IT	176.15
304010	HOME DEPOT CREDIT SERVICES	SUPPLIES - PW	172.80
6006(A)	AIR ONE EQUIPMENT INC	MAINTENANCE - FD	170.00
304101	MATTHEW JOHNSON	REIMBURSEMENT - PD	155.24
304011	ILLINOIS SECRETARY OF STATE	LICENSE PLATES - PD	151.00
304096	BRANDON PRATE	REIMBURSEMENT - PD	150.00
304095	TERRENCE JORIA	REIMBURSEMENT - PD	130.99
304072	THALMANN ALIGNMENT INC	SERVICES - PW	130.00
304092	PAULA LEVY	AMBULANCE REIMB - FD	116.99
304093	NICHOLAS BECKER	AMBULANCE REIMB - FD	110.00
304102	MICHAEL TADLEY	REIMBURSEMENT - PD	102.35
304005	FOSTER COACH SALES INC.	PARTS - PW	98.79
6012(A)	FASTSIGNS	SUPPLIES - PD	95.81
304098	DENISE JASSO	REIMBURSEMENT - PD	95.63
304047	CUMMINS SALES AND SERVICE	PARTS - PW	91.10
303997	COOK COUNTY RECORDER OF DEEDS	RECORDING FEES - DPS	91.00
304041	CINTAS CORPORATION #2	UNIFORMS - PW	87.47
6033(A)	CABCONNECT	SENIOR TRANSPORTATION - FIN	87.10
304027	ROSATI'S PIZZA	TRAINING - FD	86.97
304081	LINDE GAS & EQUIPMENT INC.	PARTS - PW	86.72
304037	THOMPSON ELEVATOR INSPECTION	PROFESSIONAL SERVICES - DPS	86.00
304012	ILLINOIS STATE POLICE	PROFESSIONAL SERVICES - GG	84.75
304071	UNITED DISPATCH	SENIOR TRANSPORTATION - FIN	80.00
304113	LIDIA CURYLO	UTILITY REFUND - FIN	76.57
6016(A)	USABLUEBOOK	SUPPLIES - PW	76.22
304033	SPOK, INC.	PAGERS - PW	63.27
304073	TYLER TECHNOLOGIES, INC	ANNUAL SUBSCRIPTION - IT	62.50
6023(A)	M.E.S.	TOOLS - FD	60.00
6008(A)	ARLINGTON POWER EQUIPMENT	PARTS - PW	54.58
304100	JONATHAN SALMI	REIMBURSEMENT - PD	45.00

VILLAGE OF NORTHBROOK

GENERAL LEDGER SYSTEM
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SEPTEMBER 1, 2023 - SEPTEMBER 15, 2023
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CHECK NUMBER	VENDOR NAME	PURPOSE	AMOUNT
304104	ERIC BROUILETTE	REIMBURSEMENT - PD	33.71
304094	ANGELA BAIOCCHI	REIMBURSEMENT - PD	27.29
304109	ELIZABETH NAREWSKI	PARKING TICKET REFUND - FIN	25.00
304115	ROBERT & MELINDA ENGDAHL	UTILITY REFUND - FIN	21.96
304112	CATHIE DUNAL	VEHICLE STICKER REFUND - FIN	20.50
304002	FEDEX	SERVICES - PD	5.49
		CLASS 'A' TOTAL	**1,409,226.05**

VILLAGE OF NORTHBROOK

GENERAL LEDGER SYSTEM
WARRANT LIST

SEPTEMBER 1, 2023 - SEPTEMBER 15, 2023
FOR 09/26/23 MEETING

CHECK NUMBER	VENDOR NAME	PURPOSE	AMOUNT
	CLASS 'B' WARRANTS		
9/15/23	PAYROLL	9/15/2023 PAYROLL	994,766.05
389(E)	MWM CONSULTING GROUP, INC.	PROFESSIONAL SERVICES - FD	6,850.00
388(E)	OTTOSEN DINOLFO	PROFESSIONAL SERVICES - FD	4,295.34
387(E)	LOWE'S	SUPPLIES - PW	1,146.89
		CLASS 'B' TOTAL	**1,007,058.28**
		REPORT TOTAL	***2,416,284.33***

by roll call vote of the Northbrook Village Board of Trustees at a duly noticed official meeting on the day

of 20 .

Village President

ATTEST:

VILLAGE OF NORTHBROOK

GENERAL LEDGER SYSTEM
WARRANT LIST

SEPTEMBER 14 , 2023 FRONTAGE DEPOSIT REFUNDS

CHECK NUMBER	VENDOR NAME	PURPOSE	AMOUNT
303990	JOHN'S SPRINKLER SYSTEMS, INC.	FRONTAGE DEPOSIT REFUND ®	500.00
		CLASS 'A' TOTAL	**500.00**

by roll call vote of the Northbrook Village Board of Trustees at a duly noticed official meeting on the day

of 20 .

Village President

ATTEST: _____

P R O C L A M A T I O N

Cybersecurity education and awareness is crucial for everyone, including large corporations, small businesses, financial institutions, schools, government agencies, the home user, and anyone who connects anything to the Internet. Monitoring your accounts, being conscientious of what you share online, keeping computer software up to date, creating uniue and complex passwords and changing them regularly, installing antimalware programs and utilizing firewalls, and using mobile devices safely are all ways you can protect yourself from phishing, viruses, malware, identity theft, financial loss, and loss of sensitive data.

Since 2004, the President of the United State and Congress have declared October as Cybersecurity Awareness Month, and have shared information and resources intended to help individuals and businesses protect themselves online as threats to technology and confidential data become more commonplace. The Village encourages our residents and businesses to take steps to mitigate cybersecurity risks and to utilize the resources and information provided by the Cybersecurity and Infrastructure Security Agency (CISA) and the National Cybersecurity Alliance (NCA).

Maintaining the security of cyberspace is a shared responsibility in which each of us has a critical role to play, and awareness of computer security essentials will improve the security of information, infrastructure, and economy for all.

NOW, THEREFORE, I, Kathryn L. Ciesla President of the Village of Northbrook, County of Cook and State of Illinois, do hereby proclaim October 2023 as

Cybersecurity Awareness Month

in the Village of Northbrook and encourage all Village residents and businesses to create and engage in cyber awareness campaigns to encourage safe and secure cyberspace.

Dated: This 26th day of September, 2023.

Kathryn L. Ciesla
Village President

P R O C L A M A T I O N

October was first designated as Down Syndrome Awareness Month in the 1980s and has been recognized every October since. It is a time to celebrate people with Down Syndrome and make others aware of their abilities and accomplishments.

Down Syndrome is one of the most common types of intellectual disabilities. It is a condition in which a person is born with an extra chromosome that changes how a baby's body or brain develops. Approximately one in every 700 children are born with Down Syndrome, representing an estimated 6,000 births per year in the United States.

There are over 400,000 individuals living with Down Syndrome in the United States; and while research and early intervention have resulted in dramatic improvements in the life span and potential of those who are affected, more research is needed into the causes and treatment of Down Syndrome.

People with Down Syndrome are active participants in educational, occupational, social, and recreational circles of our communities, and should have equal opportunity to achieve the universally desired goals of self-fulfillment, pride in their achievements, inclusion in their community, and reaching their fullest potential.

Local Down Syndrome foundations aid families, schools, healthcare professionals, and governments to help create opportunities, raise awareness, and facilitate solutions for these valued members of our community.

NOW, THEREFORE, I, Kathryn L. Ciesla, President of the Village of Northbrook, County of Cook and State of Illinois, do hereby proclaim October 2023 as

Down Syndrome Awareness Month

in Northbrook and do hereby encourage all residents to work together to promote respect and inclusion of individuals with Down Syndrome and to celebrate their accomplishments and contributions.

Dated: This 26th day of September, 2023.

Kathryn L. Ciesla
Village President

P R O C L A M A T I O N

October is Learning Disabilities Awareness Month, a time when organizations, schools, communities, and the nation turn their attention to the one in five students who learn differently because they have learning and/or attention disabilities.

Awareness of learning disabilities is one of the most important advances in education in recent years. As more and more Americans become aware, our residents with learning disabilities will have even greater opportunity to lead full and productive lives and to make a contribution to our society. The disability experience is a natural part of life and is valued as a part of our community's rich diversity.

The most effective way to increase awareness is through everyone's openness to learn and acknowledge that there are systemic barriers that reduce the likelihood of those with disabilities enjoying equitable experiences and living independent, productive lives within their communities.

Equitable experiences and full inclusion is a matter of social justice. Consequently, creating equitable inclusive environments is a shared responsibility of everyone. Policies must be developed, attitudes shaped, and equitable experiences be offered to all individuals, including those with developmental disabilities.

Residents should do all in their power to recognize the value and intersectionality of the disability experience in our lives and the valued role it has in our rich diversity. Recognize the barriers presented to those with disabilities. Create ways to include everyone; especially those with developmental disabilities, to be fully included in all aspects of life. Understand the losses when our communities segregate and create barriers for those with disabilities.

NOW, THEREFORE, I, Kathryn L. Ciesla President of the Village of Northbrook, County of Cook and State of Illinois, do hereby proclaim October 2023 as

Learning Disabilities Awareness Month

in the Village of Northbrook and encourage all residents to work together to promote respect and inclusion of individuals with learning disabilities and to celebrate their accomplishments and contributions.

Dated: This 26th day of September, 2023.

Kathryn L Ciesla
Village President

P R O C L A M A T I O N

Addiction to alcohol, illicit drugs, and prescription medications fuels havoc, heartache, and hopelessness in the lives of far too many individuals, as well as their friends and family members. Substance Abuse Prevention Awareness is about renewing our commitment to breaking the grip of alcohol and drug addiction. Through the continued efforts of local partners, we can save lives and work to ensure a stronger and healthier community.

Increasing public awareness of, and action around positive mental health and substance abuse prevention is also an opportunity to celebrate the efforts of organizations which are leaders in the substance abuse prevention space. Through collaborating with community-based organizations and coalitions we are aware that evidence-based and evidence-informed prevention activities are helping families and communities save lives by engaging those most at risk of developing a substance use disorder.

This month, we ask each resident to reflect upon the lives lost to addiction, and recommit to protecting all residents - particularly our young people - from the devastating effects drugs can have on them and their loved ones. We also commend the healthcare professionals, law enforcement officials, educators, family members, and community volunteers who raise awareness about the risks and dangers of alcohol and drug use, treat the afflicted, and support prevention. Together, we will build healthy families, safe neighborhoods, and thriving communities by preventing substance misuse.

NOW, THEREFORE, I, Kathryn L. Ciesla, President of the Village of Northbrook, County of Cook and State of Illinois, do hereby proclaim October 2023 as

Substance Abuse Awareness Month

in the Village of Northbrook and encourage all residents to renew their commitment to support individuals and organizations in their efforts in Substance Abuse Prevention work.

Dated: This 26th day of September, 2023.

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Kathryn L Ciesla
Village President

104: ALA Freedom to Read

Created:	March 2020	Updated:	

The freedom to read is essential to our democracy. It is continuously under attack. Private groups and public authorities in various parts of the country are working to remove or limit access to reading materials, to censor content in schools, to label "controversial" views, to distribute lists of "objectionable" books or authors, and to purge libraries. These actions apparently rise from a view that our national tradition of free expression is no longer valid; that censorship and suppression are needed to counter threats to safety or national security, as well as to avoid the subversion of politics and the corruption of morals. We, as individuals devoted to reading and as librarians and publishers responsible for disseminating ideas, wish to assert the public interest in the preservation of the freedom to read.

Most attempts at suppression rest on a denial of the fundamental premise of democracy: that the ordinary individual, by exercising critical judgment, will select the good and reject the bad. We trust Americans to recognize propaganda and misinformation, and to make their own decisions about what they read and believe. We do not believe they are prepared to sacrifice their heritage of a free press in order to be "protected" against what others think may be bad for them. We believe they still favor free enterprise in ideas and expression.

These efforts at suppression are related to a larger pattern of pressures being brought against education, the press, art and images, films, broadcast media, and the internet. The problem is not only one of actual censorship. The shadow of fear cast by these pressures leads, we suspect, to an even larger voluntary curtailment of expression by those who seek to avoid controversy or unwelcome scrutiny by government officials.

Such pressure toward conformity is perhaps natural to a time of accelerated change. And yet suppression is never more dangerous than in such a time of social tension. Freedom has given the United States the elasticity to endure strain. Freedom keeps open the path of novel and creative solutions, and enables change to come by choice. Every silencing of a heresy, every enforcement of an orthodoxy, diminishes the

toughness and resilience of our society and leaves it the less able to deal with controversy and difference.

Now as always in our history, reading is among our greatest freedoms. The freedom to read and write is almost the only means for making generally available ideas or manners of expression that can initially command only a small audience. The written word is the natural medium for the new idea and the untried voice from which come the original contributions to social growth. It is essential to the extended discussion that serious thought requires, and to the accumulation of knowledge and ideas into organized collections.

We believe that free communication is essential to the preservation of a free society and a creative culture. We believe that these pressures toward conformity present the danger of limiting the range and variety of inquiry and expression on which our democracy and our culture depend. We believe that every American community must jealously guard the freedom to publish and to circulate, in order to preserve its own freedom to read. We believe that publishers and librarians have a profound responsibility to give validity to that freedom to read by making it possible for the readers to choose freely from a variety of offerings.

The freedom to read is guaranteed by the Constitution. Those with faith in free people will stand firm on these constitutional guarantees of essential rights and will exercise the responsibilities that accompany these rights.

We therefore affirm these propositions:

1. It is in the public interest for publishers and librarians to make available the widest diversity of views and expressions, including those that are unorthodox, unpopular, or considered dangerous by the majority.

   Creative thought is by definition new, and what is new is different. The bearer of every new thought is a rebel until that idea is refined and tested. Totalitarian systems attempt to maintain themselves in power by the ruthless suppression of any concept that challenges the established orthodoxy. The power of a democratic system to adapt to change is vastly strengthened by the freedom of its patrons to choose widely from among conflicting opinions offered freely to them. To stifle

every nonconformist idea at birth would mark the end of the democratic process. Furthermore, only through the constant activity of weighing and selecting can the democratic mind attain the strength demanded by times like these. We need to know not only what we believe but why we believe it.

2. Publishers, librarians, and booksellers do not need to endorse every idea or presentation they make available. It would conflict with the public interest for them to establish their own political, moral, or aesthetic views as a standard for determining what should be published or circulated.

   Publishers and librarians serve the educational process by helping to make available knowledge and ideas required for the growth of the mind and the increase of learning. They do not foster education by imposing as mentors the patterns of their own thought. The people should have the freedom to read and consider a broader range of ideas than those that may be held by any single librarian or publisher or government or church. It is wrong that what one can read should be confined to what another thinks proper.

3. It is contrary to the public interest for publishers or librarians to bar access to writings on the basis of the personal history or political affiliations of the author.

   No art or literature can flourish if it is to be measured by the political views or private lives of its creators. No society of free people can flourish that draws up lists of writers to whom it will not listen, whatever they may have to say.

4. There is no place in our society for efforts to coerce the taste of others, to confine adults to the reading matter deemed suitable for adolescents, or to inhibit the efforts of writers to achieve artistic expression.

   To some, much of modern expression is shocking. But is not much of life itself shocking? We cut off literature at the source if we prevent writers from dealing with the stuff of life. Parents and teachers have a responsibility to prepare the young to meet the diversity of experiences in life to which they will be exposed, as they have a responsibility to help them learn to think critically for themselves. These are affirmative responsibilities, not to be discharged simply by preventing them from reading works for which they are not yet prepared. In these matters values differ,

and values cannot be legislated; nor can machinery be devised that will suit the demands of one group without limiting the freedom of others.

5. It is not in the public interest to force a reader to accept the prejudgment of a label characterizing any expression or its author as subversive or dangerous.

   The ideal of labeling presupposes the existence of individuals or groups with wisdom to determine by authority what is good or bad for others. It presupposes that individuals must be directed in making up their minds about the ideas they examine. But Americans do not need others to do their thinking for them.

6. It is the responsibility of publishers and librarians, as guardians of the people's freedom to read, to contest encroachments upon that freedom by individuals or groups seeking to impose their own standards or tastes upon the community at large; and by the government whenever it seeks to reduce or deny public access to public information.

   It is inevitable in the give and take of the democratic process that the political, the moral, or the aesthetic concepts of an individual or group will occasionally collide with those of another individual or group. In a free society individuals are free to determine for themselves what they wish to read, and each group is free to determine what it will recommend to its freely associated members. But no group has the right to take the law into its own hands, and to impose its own concept of politics or morality upon other members of a democratic society. Freedom is no freedom if it is accorded only to the accepted and the inoffensive. Further, democratic societies are more safe, free, and creative when the free flow of public information is not restricted by governmental prerogative or self-censorship.

7. It is the responsibility of publishers and librarians to give full meaning to the freedom to read by providing books that enrich the quality and diversity of thought and expression. By the exercise of this affirmative responsibility, they can demonstrate that the answer to a "bad" book is a good one, the answer to a "bad" idea is a good one.

> The freedom to read is of little consequence when the reader cannot obtain matter fit for that reader's purpose. What is needed is not only the absence of restraint, but the positive provision of opportunity for the people to read the best that has been thought and said. Books are the major channel by which the intellectual inheritance is handed down, and the principal means of its testing and growth. The defense of the freedom to read requires of all publishers and librarians the utmost of their faculties, and deserves of all Americans the fullest of their support.

We state these propositions neither lightly nor as easy generalizations. We here stake out a lofty claim for the value of the written word. We do so because we believe that it is possessed of enormous variety and usefulness, worthy of cherishing and keeping free. We realize that the application of these propositions may mean the dissemination of ideas and manners of expression that are repugnant to many persons. We do not state these propositions in the comfortable belief that what people read is unimportant. We believe rather that what people read is deeply important; that ideas can be dangerous; but that the suppression of ideas is fatal to a democratic society. Freedom itself is a dangerous way of life, but it is ours.

A RESOLUTION DECLARING THE VILLAGE OF NORTHBROOK A BOOK SANCTUARY COMMUNITY

is hereby adopted, as follows:

WHEREAS, the freedom to read is a human right, constitutionally protected by the First Amendment of the United States Constitution, and individuals have the right to free inquiry and the equally important right to form their own opinions; and

WHEREAS, Article 19 of the Universal Declaration of Human Rights states that ‘‘everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers□; and

WHEREAS, books do not require readers to agree with topics or themes but instead allow readers to explore and engage with differing perspectives to form and inform their own views; and

WHEREAS, over the last several years, there has been a significant increase in censorship activities in the United States resulting in books being removed from library shelves and schools; and

WHEREAS, book bans have multifaceted, harmful consequences on—

(A) students who have a right to access a diverse range of stories and perspectives;
(B) students, from historically marginalized backgrounds, whose communities are often underrepresented in literature;
(C) educators and librarians who are being restricted in their access to information;
(D) the authors whose works are being targeted; and
(E) parents who want to raise students in schools that remain open to curiosity, discovery, and the freedom to read; and

WHEREAS, classic and award-winning literature and books that have been part of school curricula for decades have been challenged, removed from libraries pending review, or outright banned from schools; and

WHEREAS, numerous books referring to Lesbian, Gay, Bisexual, Transgender, Queer and plus (“LGBTQ+”) themes or with LGBTQ+ characters have been banned from libraries and schools in the United States this year; and

WHEREAS, numerous books, both fiction and nonfiction, with protagonists of color or prominent secondary characters of color have been banned from libraries and schools in the United States; and

WHEREAS, the Village President and the Board of Trustees declare their opposition to the banning of books in any form; and

WHEREAS, the Village President and the Board of Trustees applaud and support the recent action by the Illinois General Assembly and Illinois Governor JB Pritzker in enacting Public Act 103-0100 on June 12, 2023 which takes effect on January 1, 2024 and declares it to be the “policy of the State to encourage and protect the freedom of libraries and library systems to acquire materials without external limitation and to be protected against attempts to ban, remove, or otherwise restrict access to books or other materials;” and

WHEREAS, the Northbrook Public Library has adopted the American Library Association’s Library Bill of Rights and has taken other actions to support the freedom to read in the Village, including maintaining a wide and varied collection; and

WHEREAS, the Northbrook Public Library Board of Trustees has adopted a Collection Development Policy that supports a fair, equitable, and accessible collections for the public.

WHEREAS, the Village of Northbrook supports having a fair, equitable, and accessible collections for the public.

NOW THEREFORE, BE IT RESOLVED by the President and Board of Trustees of the Village of Northbrook, Illinois, in the exercise of their home rule powers, as follows:

Section 1. Recitals Incorporated. The above recitals are incorporated herein as though fully set forth.

Section 2. Adoption of American Library Association's Freedom to Read Statement. The Village President and the Board of Trustees support and adopt the American Library Association's "Freedom to Read Statement," attached hereto and incorporated herein by reference.

Section 3. Book Sanctuary Declaration. The Village President and Board of Trustees declare that the Village is a book sanctuary community and the Village shall actively support, celebrate, and recognize business, organization or governmental entities that encourage intellectual freedom and the free exchange of ideas including the reading of banned and challenged books.

Section 4. Book Sanctuary Community. As a book sanctuary community, the Village shall be a place where everyone can: (1) borrow and read challenged books; (2) make endangered books accessible to everyone; (3) host book talks, story times, and other events about banned and challenged books; and (4) educate others on the history of book banning and burning.

Section 5. Book Sanctuary Actions. The Village supports the efforts of the Northbrook Public Library to advance and support Northbrook as being a book sanctuary Village and calls upon community members to do the following: (1) host and join in-person or virtual banned book clubs to encourage critical discussion of censored stories that are most often challenged; (2) lend banned books to friends and neighbors; (3) use local Little Free Libraries as book sanctuaries, adding banned books as a way to support the freedom to read; (4) facilitate a book drive for banned and challenged books and donating books to local community centers, including the Friends of the Northbrook Public Library, for distribution at Little Free Libraries in the community; (5) host story times with inclusive characters that reflect the diversity of our world; and (6) amplify individual voices on social media with #TheBookSanctuary.

Section 6. Effective Date. This Resolution shall be in full force and effect immediately after its passage and publication as provided by law.

Draft: 9/26/2023

ATTEST:

_____

Village President

_____

Village Clerk

P R O C L A M A T I O N

In April 1974 the Village of Northbrook issued a proclamation recognizing the purpose and goals of the newly organized Northbrook Historical Society, which was incorporated on March 18, 1974. In part, the proclamation recognized the Society as a welcomed and essential contribution to the total life of this community and all citizens were urged to give full support to the activities of the society. Emphasis was put on finding a site for the Northbrook Historical Society.

On October 9, 1973, Larry Sommers, Lowell Mueller, Norman Watson, John S. Clark, Louis Werhane, Barbara Nolan, Marci Johnson, Helen Nordland and Morris and Rose Anderson held a meeting to determine if they wanted to form a Historical Society. At their second meeting on October 25, 1973 the members discussed saving Bartelme's Northfield Inn and by the January 17, 1974 meeting the group reported discussion with the Park District and preliminary reports on moving the Inn.

On March 18, 1974 the Secretary of State issued a certificate of incorporation, which was filed on March 21, 1974. The first "official" Northbrook Historical Society meeting was held on March 22, 1974. The Incorporation papers were signed by Larry Sommers, H.E. Durrenberger with Robert Nix as registered agent for the Society. Two additional directors, Attorney Robert Nix and Louis Werhane were also elected at this meeting.

On January 17, 1975, thanks to a partnership with the Northbrook Park District and contributions from the community Bartelme's Northfield Inn, now known as the Northbrook History Museum, was moved to the Village Green. The Museum opened for the first time at the Village's 75th Birthday and the nation's Bicentennial Celebration on July 4, 1976. Since 1988 the children of Northbrook have come to the Museum to learn the history of the Village.

In 2009, the Memorial Plaza, which was spearheaded by the Historical Society, was dedicated in the Village Green Park. The memorial honors those who gave their lives in service to our country while on active duty.

In 2015 the 1892 church located at 1812 Chapel Court was donated to the Society. It was opened to the public in 2017 and also serves as the Society's archives and offices.

The Historical Society will celebrate its 50th Anniversary. In honor of its anniversary the Northbrook Historical Society will kick off a year-long celebration at the 45th Annual Shermerfest. Shermerfest is the second oldest outdoor event in Northbrook.

NOW, THEREFORE, I, Kathryn L. Ciesla, President of the Village of Northbrook, in recognition of 50 years of service to the Village do hereby proclaim October 1, 2023 to be

Northbrook Historical Society Day

in the Village of Northbrook and encourage all Village residents take advantage of the opportunities offered by the Northbrook Historical Society.

Dated: This 26th day of September, 2023.

Kathryn L Ciesla
Village President

MEMORANDUM

To: Cara Pavlicek, Village Manager
From: Kelly Hamill, Director of Public Works
Cc: Village Board of Trustees
Date: 2023-09-26
Subject: A Resolution Accepting the Utility Rate Study as Reviewed by the Public Works and Facilities Committee

Overview/Synopsis.

The Village of Northbrook has undertaken a Utility Rate Study (URS) for the Water and Sanitary Sewer Funds to ensure the fiscal stability of these Enterprise Funds. The Public Works and Facilities Committee of the Village Board completed their review of the URS and recommended the Village Board of Trustees accept the same. The attached Resolution accepts the final draft of the URS in accordance with the Public Works and Facilities Committee's recommendation.

Fiscal Impact.

While the URS provides recommendations related to water and sewer rates, approval of the final report does not establish rates. All rate changes are considered by the Village Board separately by ordinance.

Recommendation.

Approval.

Background.

The Village Board acting as a Committee of a Whole reviewed the draft Utility Rate Study (URS) prepared by NewGen Strategies and Solutions (NewGen) on November 8, 2022. At that meeting the Committee of the Whole provided feedback on the draft URS and recommended referring the URS and associated topics to the Public Works and Facilities Committee. The Village Board formally referred the URS to the Public Works and Facilities Committee on December 13, 2022 with Resolution 2022-126.

At the initial meeting of the Public Works and Facilities Committee on February 7, 2023, staff solicited further comments on the URS. Using the feedback from the Committee of the Whole and Public Works and Facilities Committee meetings, staff worked with NewGen to further refine the draft URS. The Public Works and Facilities Committee reviewed the revised draft at their July 11, 2023 meeting and unanimously recommended that Village Board accept the final draft of the URS.

Exhibit A - A Resolution Accepting the URS as Reviewed by the Public Works Committee.docx
Exhibit B - Final Draft of Utility Rate Study.pdf

Resolution _____

BE IT RESOLVED by the President and Board of Trustees of the Village of Northbrook, County of Cook and State of Illinois, THAT:

A Resolution Accepting the Utility Rate Study as Reviewed by the Public Works & Facilities Committee

is hereby adopted, as follows:

Section 1. Recitals.

The Village of Northbrook undertook a Utility Rate Study for the Water and Sanitary Sewer Funds with the awarding of a contract to NewGen Strategies and Solutions, LLC of Annapolis, Maryland (NewGen) with Resolution 2022-34. The Village Board acting as a Committee of a Whole reviewed the draft Utility Rate Study ("***URS***") prepared NewGen on November 8, 2022. At that meeting the Committee of the Whole provided feedback on the draft URS and recommended referring the URS and associated topics to the Public Works and Facilities Committee. The Village Board formally referred the URS to the Public Works and Facilities Committee on December 13, 2022 with Resolution 2022-126.

At the initial meeting of the Public Works and Facilities Committee on February 7, 2023, staff solicited further comments on the URS. Using the feedback from the Committee of the Whole and Public Works and Facilities Committee meetings, staff worked with NewGen to further refine the draft URS. The Public Works and Facilities Committee reviewed the revised draft at their July 11, 2023 meeting and unanimously recommended that Village Board accept the final draft of the URS.

The President and the Board of Trustees have considered the URS in its final draft format and determined that it is in the best interests of the Village and the public to accept the URS.

Section 2. Acceptance of Water and Sanitary Sewer Utility Rate Study.

The URS has been reviewed by the Village Board and is hereby accepted.

Draft: 9/26/2023

ATTEST:

_____
Village President

_____
Village Clerk

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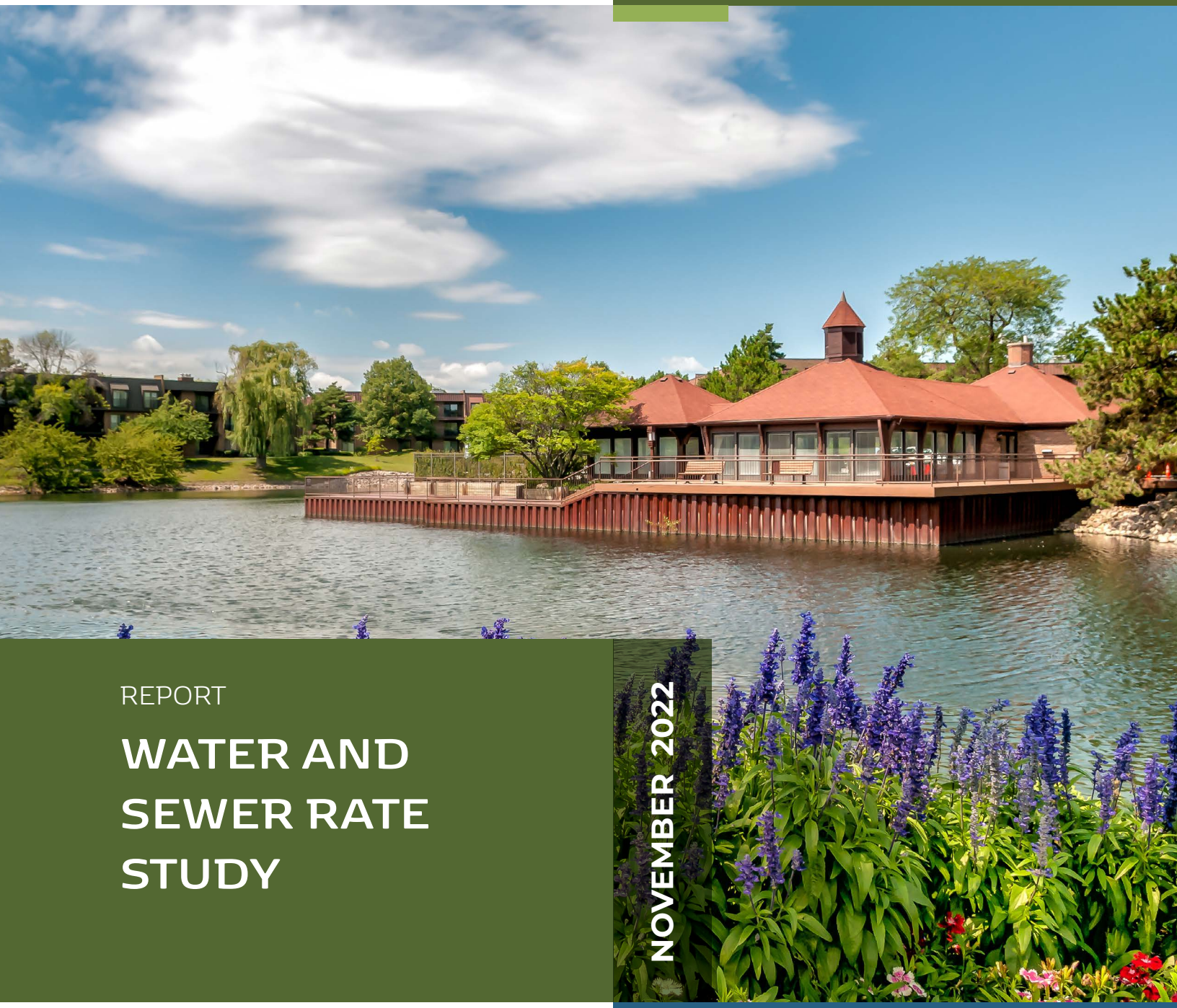
NewGen Strategies & Solutions

www.newgenstrategies.net

FINAL



REPORT

WATER AND SEWER RATE STUDY

NOVEMBER 2022

Village of Northbrook

Prepared for:
Village of Northbrook, Illinois
655 Huehl Road
Northbrook, Illinois 60062

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NewGen Strategies & Solutions

900 Bestgate Road, Suite 402
Annapolis, MD 21401
Phone: (410) 266-9101

September 18, 2023

Matthew Morrison
Deputy Public Works Director
Village of Northbrook
655 Huehl Road
Northbrook, Illinois 60062

Subject: Water and Sewer Rate Study Report

Dear Mr. Morrison:

NewGen Strategies and Solutions, LLC (NewGen) is pleased to submit to the Village of Northbrook our report detailing our completed Water and Sewer Rate Study. This report summarizes our study's results regarding the forecasted costs of providing water and sewer service to the Village's customers and our recommendations for recovering these costs over the next five years. Our recommendations relating to revenue increases will result in the sustainable operation of the Village's water and sewer utilities and the financial health of the Village's Water and Sewer Funds.

We appreciate the opportunity to provide our services to the Village and would like to express our sincere appreciation to Village staff. The dedication and assistance provided by Village staff was essential to the completion of this study. It has been a distinct pleasure to work with the Village of Northbrook.

Very truly yours,

DocuSigned by:
C11651334F8F462...
Eric Callocchia
Partner
NewGen Strategies and Solutions, LLC

DocuSigned by:
95BBEDC8271340F...
Aidan Oates
Consultant
NewGen Strategies and Solutions, LLC

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EXECUTIVE SUMMARY

The Village of Northbrook (Village) is a suburb of Chicago, located at the northern edge of Cook County, Illinois, on the border of Lake County. Per the 2020 census, the Village's population was 35,222. The Village provides water and sanitary sewer utility service to over 15,000 customer connections.

To supply water to customers, the Village pumps water directly from Lake Michigan and provides all treatment necessary to make it safe to use and drink. The treatment process is managed by the Village's Water Plant. The Village of owns and maintains two separate sewer systems: one for sanitary sewage and one for stormwater runoff. Sanitary sewage is made up of the wastewater from inside homes and businesses from various plumbing fixtures such as sinks, toilets, dishwashers, and washing machines. The sanitary sewer system is comprised of over 124 miles of pipes and 13 lift stations which transport wastewater to the Metropolitan Water Reclamation District's (MWRD) sewer system. Once in MWRD's sewer system, sewage is transported to and treated at MWRD's wastewater treatment plant in Skokie, Illinois.

The Village engaged NewGen Strategies and Solutions, LLC (NewGen) to complete a Water and Sewer Rate and Fee Study. The goal of the study was to work with the Village Managers Office, Finance, and Public Works Department to conduct a comprehensive water and sanitary sewer rate and fee study to develop a fair, equitable, and sustainable rate structure for the long term fiscal health and maintenance of the Village's water and sanitary sewer utilities.

As the basis for its cost projections NewGen used the Village's FY 2023 operating budget, currently payable debt service, and financing for the Village's five-year capital spending plan, including both new debt service and cash funded (i.e., pay-as-you-go, or PAYGO) projects. NewGen applied appropriate cost escalation for future years to ensure that future rates cover increased future costs. Although the Village does have some proposed commercial and residential growth, the study assumes that the Village will not add any additional water or sewer customers over the forecast period. However, during the course of the study, the Village identified meters within its system that were either under-reading water usage or not functional. Therefore, the Village was not accounting for all of the water demand in its system. The Village is in the process of replacing meters, and therefore NewGen's study includes an assumption that due to the replacement of deficient meters, the Village will bill 3% more water in the first three years of the study forecast period, and then maintain that level of billable usage for the remainder of the forecast.

As a part of the study, NewGen worked with the Village to develop a reserve policy based on operating and capital spending characteristics of each system. NewGen's recommended rates are designed to maintain a minimum of 30 days of operating costs in both the Water Fund and Sewer Fund's reserves for the five year projection, with the ability to increase those targets to 90 days over the next five year period.

Given all the information and adjustments described above, NewGen's study determined that the Village's FY 2023 rates are not sufficient to maintain the financial and operational health of the Village's Water and Sewer Funds over the next five years. The following figures show the cash flow and fund balance projections if the Village does not increase water or sewer rates over the five-year planning period.

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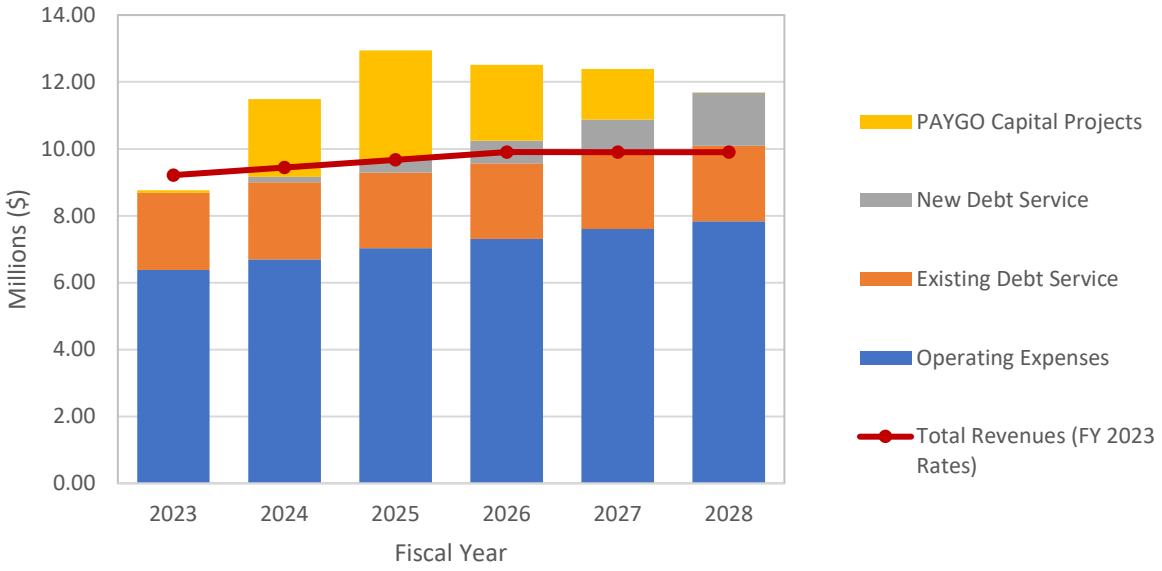
Figure E-1: Water Fund Expenses vs. Revenues at FY 2023 Rates



The forecasted expenses are driven by significant capital investments in the water system, particularly water main replacements. It is also worth noting that the revenues under the current rates are forecasted to decline due to decreases in future water demand. The following figure shows the forecasted Water Fund balance assuming the Village does not increase water rates. Note that part of the Village's FY 2023 fund balance is comprised of bond proceeds that are restricted for the use on capital spending only.

Figure E-2: Water Fund Balance Projection at FY 2023 Rates

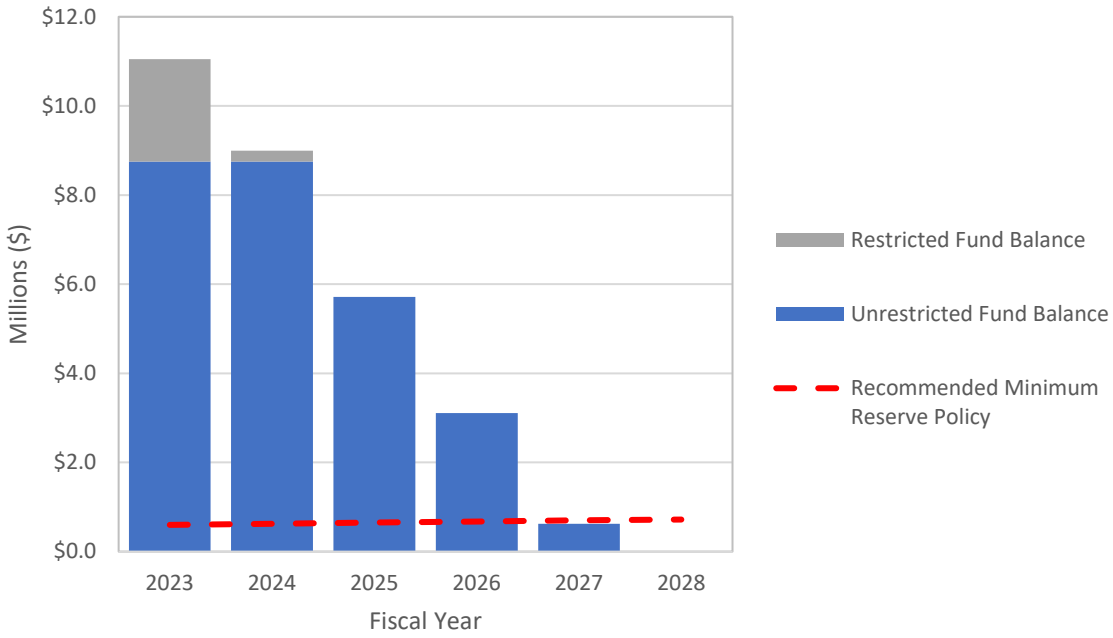


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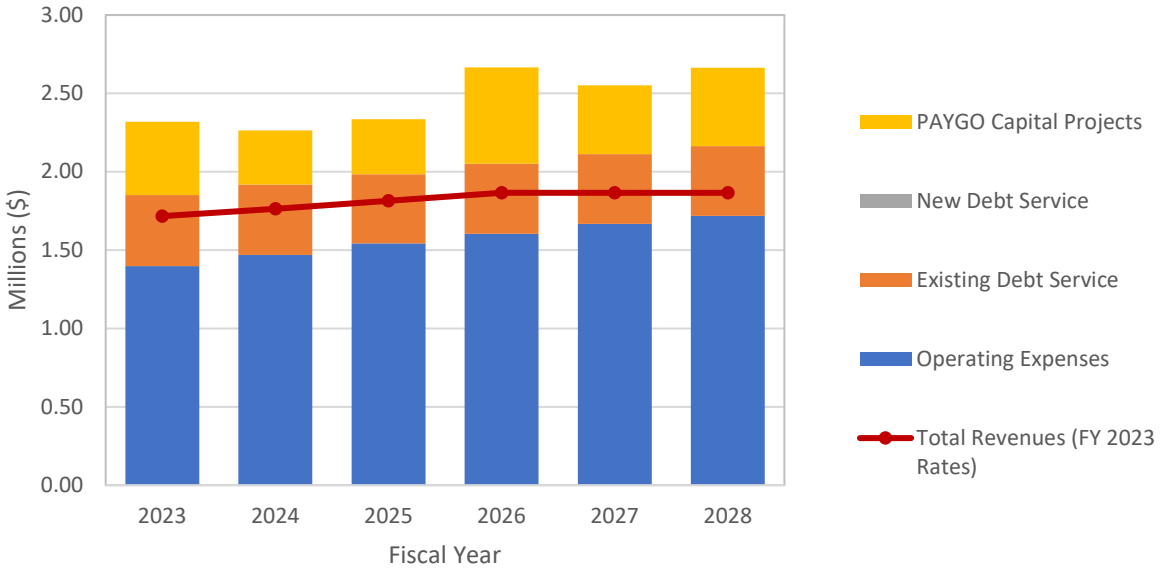
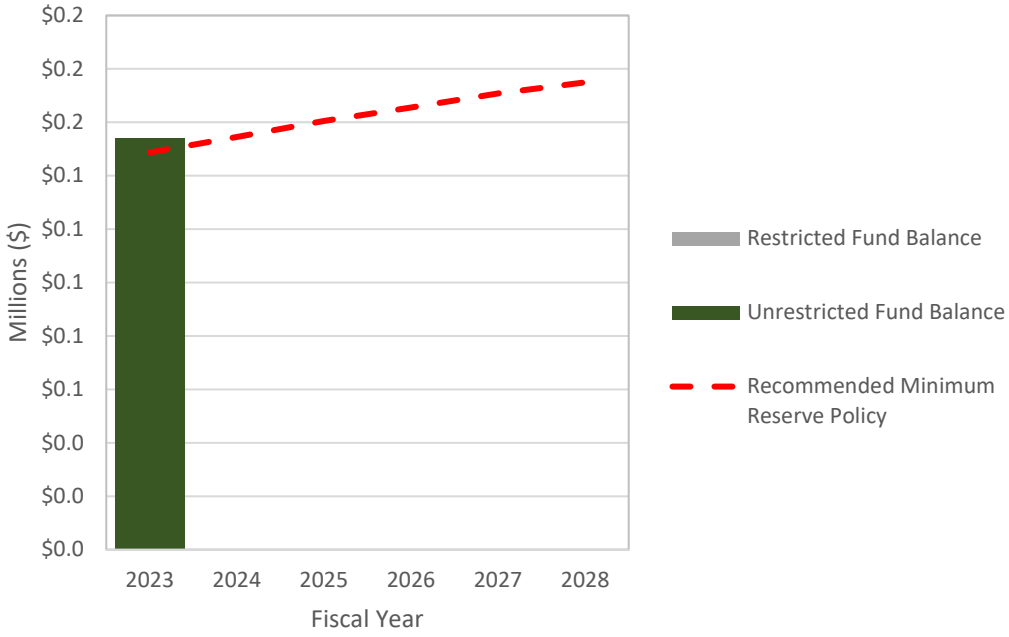
Figure E-3: Sewer Fund Expenses vs. Revenues at FY 2023 Rates



The forecasted sewer expenses are also driven by significant increases in expenses due to and the planned capital improvement projects, specifically, sewer main and lift station rehabilitation. Sewer rate revenues are forecasted to decline due to decreases in future water demand. The following figure shows the forecasted Sewer Fund balance assuming the Village does not increase sewer rates. Note that part of the Village's FY 2023 fund balance is comprised of bond proceeds that are restricted for the use on capital spending only.

Figure E-4: Sewer Fund Balance Projection at FY 2023 Rates



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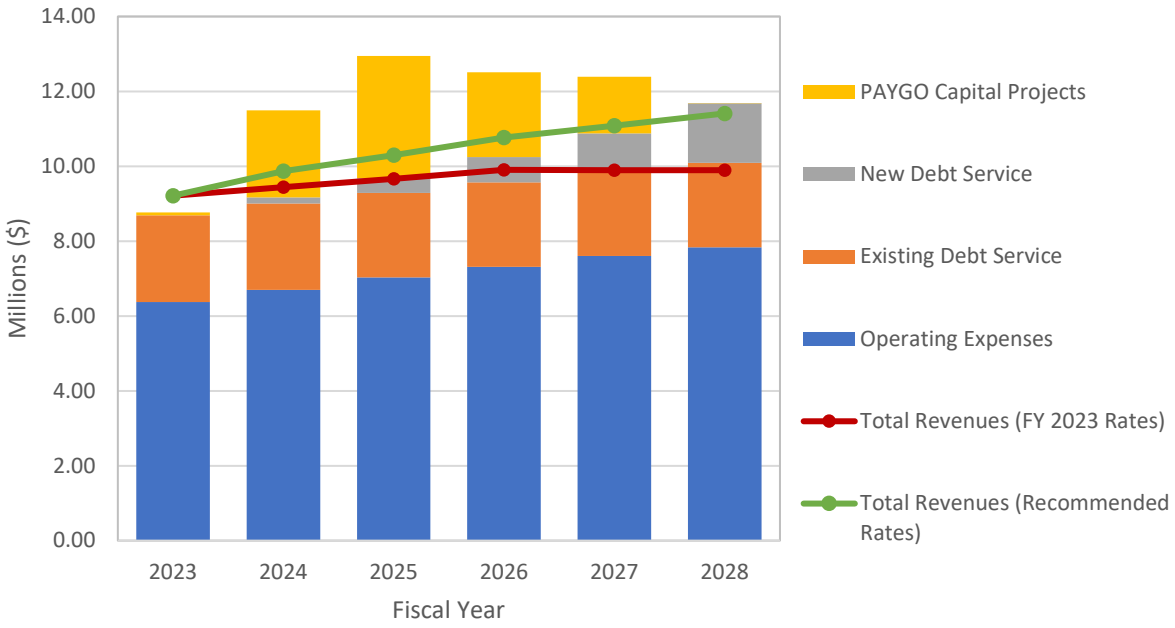
NewGen's recommended revenue increases to maintain the financial health of the Village's Water and Sewer Funds in the near term are shown in Table E-1 below.

Table E-1
Recommended Water and Sewer Rate Revenue Increases[1]

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Water Rate Revenue Increase	4.6%	2.0%	2.0%	3.0%	3.0%
Sewer Rate Revenue Increase	35.0%	0.0%	0.0%	0.0%	0.0%

The following figures show the Water Fund and Sewer Fund cash flows and fund balance projections if the Village adopts the revenue increases shown in Table E-1.

Figure E-5: Water Expenses vs. Revenues at Recommended Rates



[1] The Village adopted FY 2024 took effect on May 1, 2023.

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Figure E-6: Water Fund Balance Projection at Recommended Rates

Under the recommended rates, the Village maintains a Water Fund balance sufficient to meet and exceed the recommended minimum balance.

Figure E-7: Sewer Expenses vs. Revenues at Recommended Rates

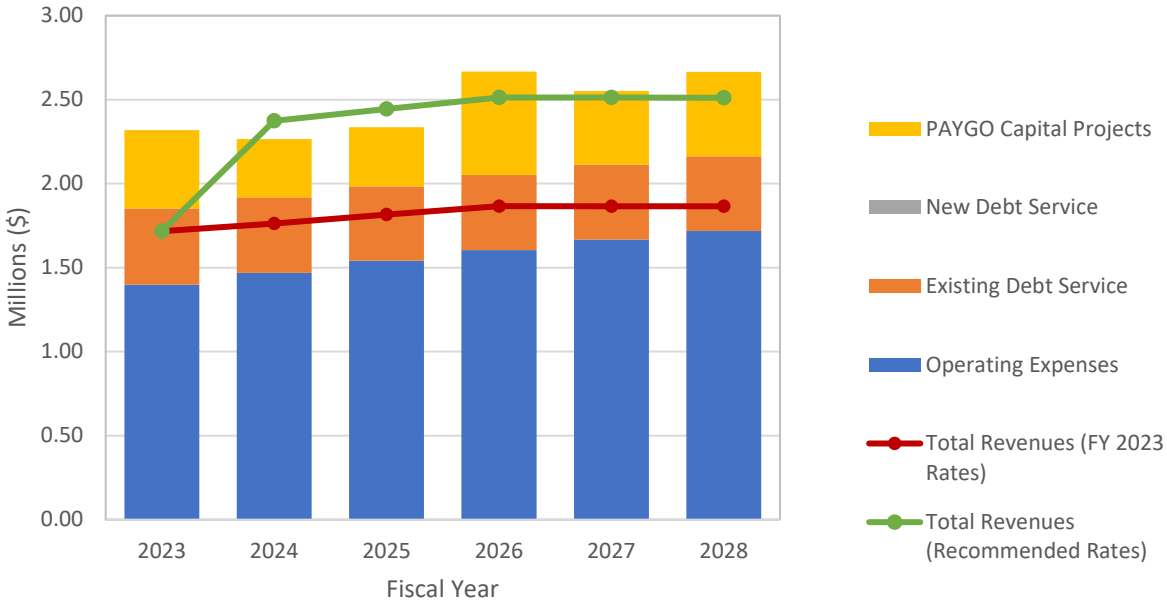

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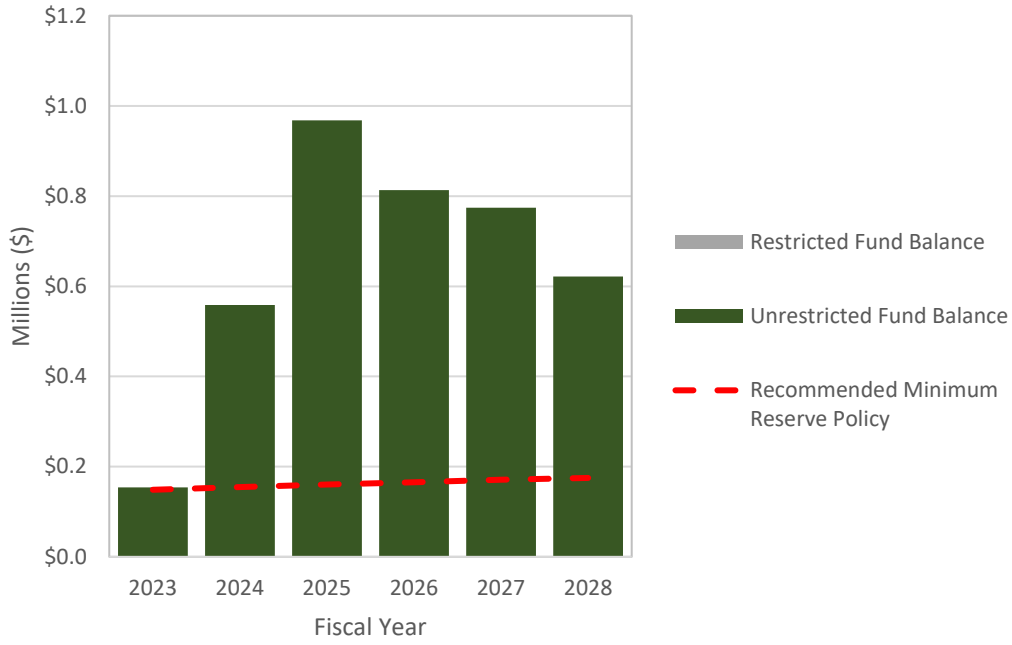
Figure E-8: Sewer Fund Balance Projection at Recommended Rates



Under the recommended rates, the Village maintains a Sewer Fund balance sufficient to meet and exceed the recommended minimum balance.

NewGen developed an alternative rate structure for the Village's water and sewer rates. Currently, the Village charges only a volumetric rate per 1,000 gallons (kgal) of usage per quarter, with a quarterly minimum of 7,000 gallons. NewGen developed a rate alternative that includes a fixed quarterly fee based on meter size with a Small Meter (up to 1 ½" and a Large Meter (over 1 ½") fee that includes no usage, and a volumetric rate per kgal for all metered usage. The impact of the alternative rate structure is different on customers based on their water demand.

The average Village residential customer uses 15,000 gallons of water per quarter. The following Tables show the impact of the recommended revenue increases on sample customer water and sewer bills under both the current and alternative rate structure. Both rate structures include the revenue increases recommended in Table E-1 and generate the same amount of total water and sewer revenue.

The tables assume that the Village adopts only the rate increase in FY 2024 and FY 2025 and keeps the current rate structure. The alternative rate structure is assumed to begin in FY 2026, after the Village has had time to evaluate the cost and impact of replacing the Village's meters with newer technology.

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Table E-9
Projected Quarterly Customer Water Bills – Current Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Low Use	**$41.16**	**$43.05**	**$43.89**	**$44.80**	**$46.13**	**$47.53**
Small Meter	*$ Change*	*$1.89*	*$0.84*	*$0.91*	*$1.33*	*$1.40*
3 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*2.1%*	*3.0%*	*3.0%*
Minimum Use	**$41.16**	**$43.05**	**$43.89**	**$44.80**	**$46.13**	**$47.53**
Small Meter	*$ Change*	*$1.89*	*$0.84*	*$0.91*	*$1.33*	*$1.40*
7 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*2.1%*	*3.0%*	*3.0%*
Average Use	**$88.20**	**$92.25**	**$94.05**	**$96.00**	**$98.85**	**$101.85**
Small Meter	*$ Change*	*$4.05*	*$1.80*	*$1.95*	*$2.85*	*$3.00*
15 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*2.1%*	*3.0%*	*3.0%*
High Use	**$294.00**	**$307.50**	**$313.50**	**$320.00**	**$329.50**	**$339.50**
Large Meter	*$ Change*	*$13.50*	*$6.00*	*$6.50*	*$9.50*	*$10.00*
50 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*2.1%*	*3.0%*	*3.0%*

Table E-10
Projected Quarterly Customer Sewer Bills – Current Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Low Use	**$8.82**	**$11.90**	**$11.90**	**$11.90**	**$11.90**	**$11.90**
Small Meter	*$ Change*	*$3.08*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
3 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Minimum Use	**$8.82**	**$11.90**	**$11.90**	**$11.90**	**$11.90**	**$11.90**
Small Meter	*$ Change*	*$3.08*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
7 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Average Use	**$18.90**	**$25.50**	**$25.50**	**$25.50**	**$25.50**	**$25.50**
Small Meter	*$ Change*	*$6.60*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
15 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
High Use	**$63.00**	**$85.00**	**$85.00**	**$85.00**	**$85.00**	**$85.00**
Large Meter	*$ Change*	*$22.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
50 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*

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Table E-11
Projected Quarterly Customer Water Bills – Alternative Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Low Use	**$41.16**	**$43.05**	**$43.89**	**$30.81**	**$37.81**	**$44.81**
Small Meter	*$ Change*	*$1.89*	*$0.84*	*($13.08)*	*$7.00*	*$7.00*
3 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*(29.8%)*	*22.7%*	*18.5%*
Minimum Use	**$41.16**	**$43.05**	**$43.89**	**$55.89**	**$62.89**	**$69.89**
Small Meter	*$ Change*	*$1.89*	*$0.84*	*$12.00*	*$7.00*	*$7.00*
7 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*27.3%*	*12.5%*	*11.1%*
Average Use	**$88.20**	**$92.25**	**$94.05**	**$106.05**	**$113.05**	**$120.05**
Small Meter	*$ Change*	*$4.05*	*$1.80*	*$12.00*	*$7.00*	*$7.00*
15 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*12.8%*	*6.6%*	*6.2%*
High Use	**$294.00**	**$307.50**	**$313.50**	**$505.50**	**$617.50**	**$729.50**
Large Meter	*$ Change*	*$13.50*	*$6.00*	*$192.00*	*$112.00*	*$112.00*
50 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*61.2%*	*22.2%*	*18.1%*

Table E-12
Projected Quarterly Customer Sewer Bills – Alternative Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Low Use	**$8.82**	**$11.90**	**$11.90**	**$24.10**	**$33.10**	**$42.10**
Small Meter	*$ Change*	*$3.08*	*$0.00*	*$12.20*	*$9.00*	*$9.00*
3 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*102.5%*	*37.3%*	*27.2%*
Minimum Use	**$8.82**	**$11.90**	**$11.90**	**$30.90**	**$39.90**	**$48.90**
Small Meter	*$ Change*	*$3.08*	*$0.00*	*$19.00*	*$9.00*	*$9.00*
7 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*159.7%*	*29.1%*	*22.6%*
Average Use	**$18.90**	**$25.50**	**$25.50**	**$44.50**	**$53.50**	**$62.50**
Small Meter	*$ Change*	*$6.60*	*$0.00*	*$19.00*	*$9.00*	*$9.00*
15 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*74.5%*	*20.2%*	*16.8%*
High Use	**$63.00**	**$85.00**	**$85.00**	**$104.00**	**$113.00**	**$122.00**
Large Meter	*$ Change*	*$22.00*	*$0.00*	*$19.00*	*$9.00*	*$9.00*
50 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*22.4%*	*8.7%*	*8.0%*

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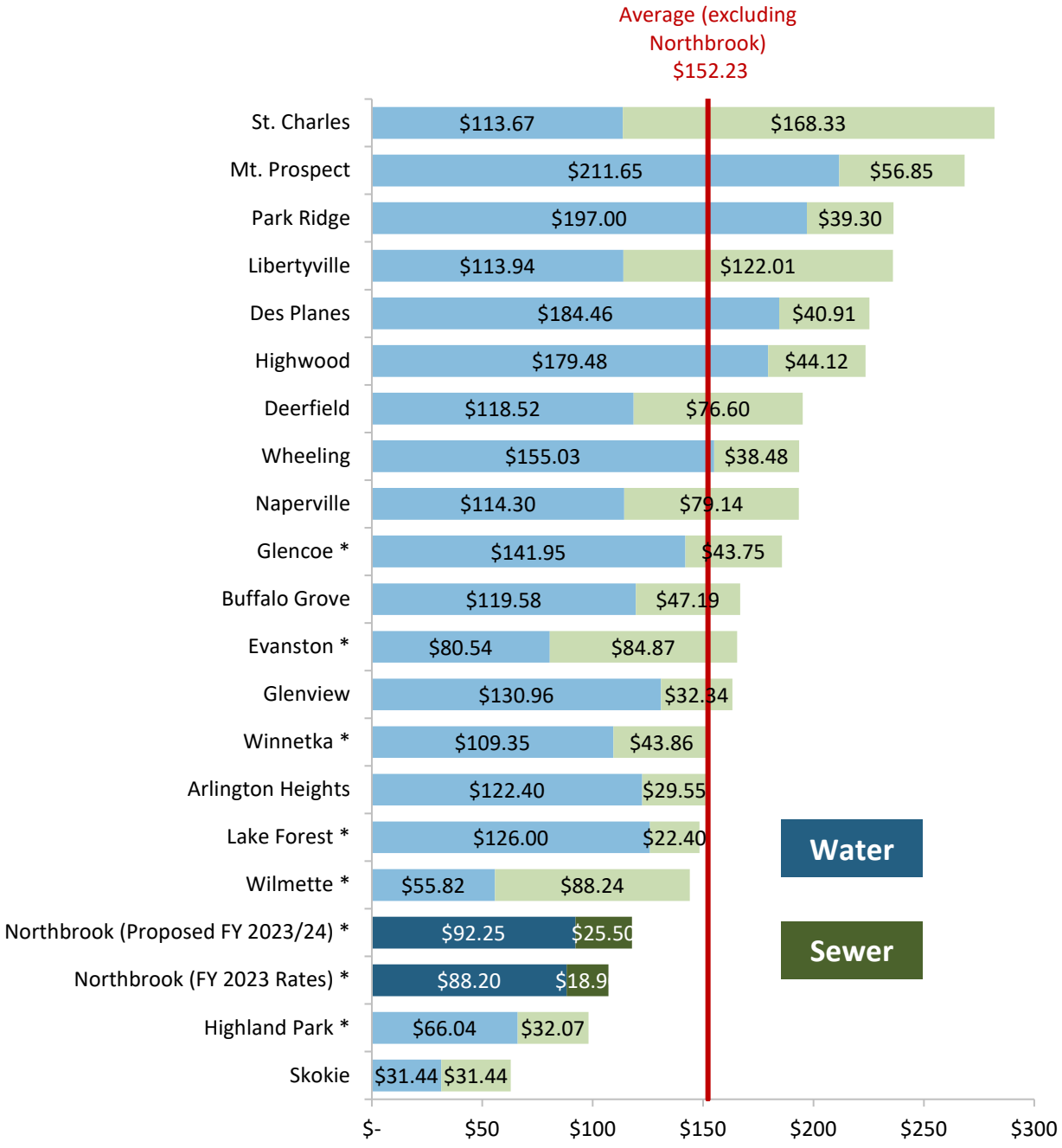
If the Village adopts the rates recommended in this report for FY 2024 and FY 2025, then the Village's combined water and sewer bill for a median Retail Village customer would still remain below the average of similar utilities in the region, as shown in the following Figure E-13. Utilities that produce their own water are marked with an asterisk (*). Again, FY 2024 assumes only an increase in rates, while FY 2025 assumes the adoption of the alternative rate structure.

Figure E-13: Regional Bill Comparison – Quarterly Bill, 5/8" Meter, 15,000 Gallons



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SECTION 1
STUDY BACKGROUND AND SCOPE OF WORK

Study Background

The Village of Northbrook (Village) is an established home rule community located in northern Illinois, approximately 25 miles north of downtown Chicago. The Village, which covers 13 square miles, is home to 35,222 residents as of the 2020 Census. The Village operates three utilities including a water utility, sanitary sewer utility, and stormwater utility. The Village's water utility is inclusive of drawing water from Lake Michigan through our own intakes, pumping this raw water to the Village's treatment facility, treatment of the water, distribution of the water, and billing for the sale of that water. The Village provides retail water service to customers within the Village limits and wholesale water service to the Mission Brook Sanitary District and the Village of Riverwoods. The Village's sanitary sewer utility is a collector system that feeds into the trunk line sewers of the Metropolitan Water Reclamation District of Greater Chicago (MWRD) that treats the wastewater.

The Village engaged NewGen Strategies and Solutions, LLC to complete a Water and Sewer Rate and Fee Study. The goal of the study was to work with the Village Managers Office, Finance, and Public Works Department to conduct a comprehensive water and sanitary sewer rate and fee study to develop a fair, equitable, and sustainable rate structure for the long term fiscal health and maintenance of the Village's water and sanitary sewer utilities.

Project Approach

NewGen's approach to reviewing and evaluating municipal utility rates is governed by the view that the ideal rate structure must satisfy seven criteria:

- ***Equity*** requires that rates and charges result in no undue discrimination among customers or customer classes. Although equity is normally related to the cost of service, it should be realized that customer acceptance will center on preconceived notions of equity and fairness.
- ***Efficiency*** refers to the ability of the rate schedule to encourage wise use of the resources devoted to the services that the utility provides.
  - Rates should reflect the cost of providing service.
  - Rates should be similar for customers or customer classes served under similar conditions.
  - Customers should be able to understand the rate schedules so that they can make rational decisions regarding their purchase of additional service(s).
- ***Revenue Adequacy*** is the most fundamental of all considerations, as it recognizes that rates are cost driven. When evaluating any rate structure, the rates must produce revenues sufficient to operate the system and those rates produce sufficient revenues if there are changes in demand for service.
- ***Affordability*** means that the recommended rates must result in bills that are realistically within the ability of customers to pay.

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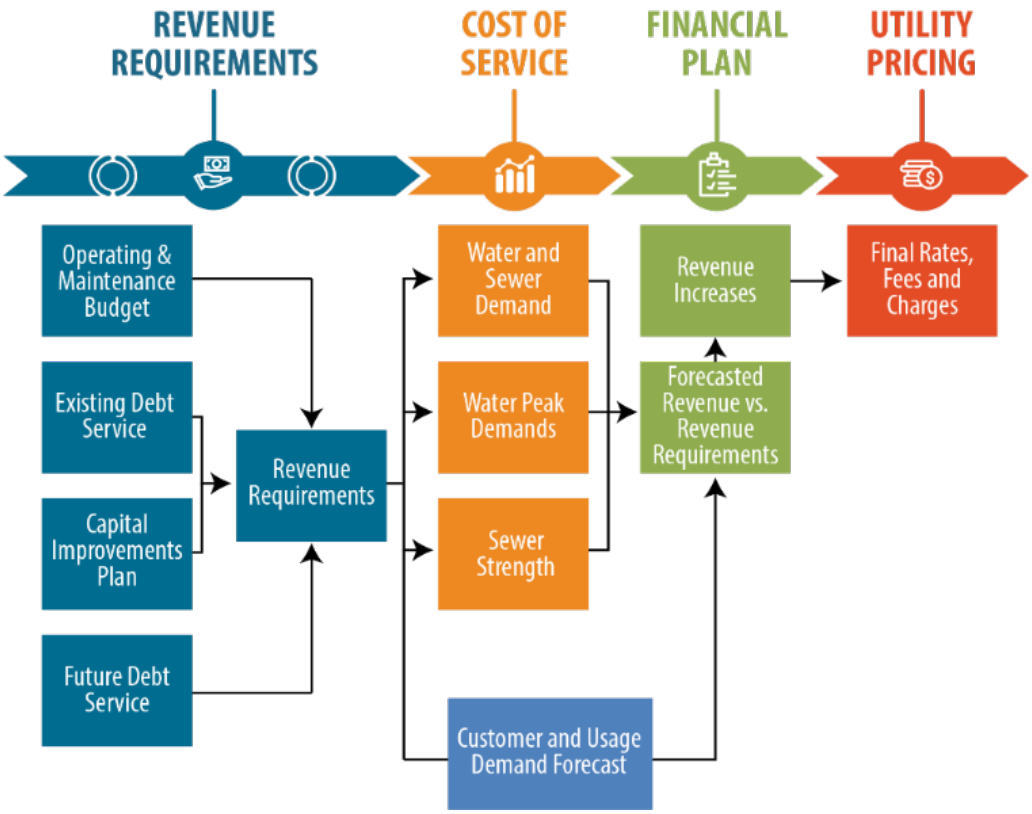
- ***Sustainability*** means that the objective of the rate methodology is to keep rates low over time, not to merely keep them low for the short-term by omitting or deferring needed expenses such as maintenance and funding of necessary cash reserves.
- ***Administrative Simplicity*** recognizes that limits must be placed on the number of customer classes, the complexity of the rate schedule, and the frequency of billing.
- ***Legal and Regulatory Compliance*** is a prime consideration because rate structures must incorporate applicable local, state, and federal statutes.

The application of the criteria should recognize that a rate schedule is a form of public policy statement, setting forth those values that the utility considers important. Rate structures must be tailored to community perceptions, realities, and values. While each utility's budgeting, financial reporting and flow of funds is unique, a generalized schematic illustrating our approach to a cost of service / rate study is shown in the figure below.

Figure 1-1: Water and Sewer Rate Study Process



NewGen's approach to completing a utility rate study is predicated on a four-step process which includes:

- **Revenue Requirements** - Development of the full cost of providing water and sewer service to each class of Village customers, including those costs that may not be identified such as the need for repair and replacement of assets (i.e., deferred maintenance).
- **Cost of Service** - Allocation of revenue requirements to customer classes or types of customers based on the cost of providing service and each class's demand for service.
- **Financial Plan** - Development of a financial plan to fund system revenue requirements considering customer and usage demand forecasts.

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- **Utility Pricing** - Review of the current and alternative rate designs based on revenue needs and rate design pricing objectives with specific rate projections.

This report details the results of our study and our recommendations regarding water and sewer rates sufficient to meet the future costs of each utility.

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SECTION 2
REVENUE REQUIREMENTS

The first step in the rate study is to identify and forecast the revenue requirements of the water and sewer systems. The revenue requirements reflect the true cost of operating and maintaining each system when accounting for day-to-day operation and maintenance (O&M) costs, existing debt service, planned capital improvements, and contributions to reserves. This section of our report will detail the full costs of each system and how those costs are reasonably expected to increase in the future.

Study Assumptions

While the study is predicated on the most recently available data, several assumptions must be made to forecast future costs and revenues.

Operating Budget Escalation Factors

NewGen's cost projections are based on the Village's FY 2023 adopted Water Fund and Sewer Fund budgets. To reasonably project future costs, NewGen applied inflation factors to each of the Village's budget line items. The study includes the following operating and maintenance line-item escalation factors in Table 2-1.

Table 2-1
Operating Budget Escalation Factors

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Salaries	5.0%	5.0%	4.0%	4.0%	3.0%
Benefits	5.0%	5.0%	4.0%	4.0%	3.0%
General	5.0%	5.0%	4.0%	4.0%	3.0%
Electricity	5.0%	5.0%	4.0%	4.0%	3.0%
Natural Gas	5.0%	5.0%	4.0%	4.0%	3.0%
Chemicals	5.0%	5.0%	4.0%	4.0%	3.0%

On average, NewGen projects that the water and sewer utility operating budgets will increase by 4.2% per year over the five-year forecast.

Water and Sewer Operating Costs

The Village's FY 2023 budget and forecasted FY 2024 – FY 2028 Water and Sewer Fund O&M expenses are shown in Tables 2-2 and 2-3. Also included are forecasted O&M cost impacts of the Village's Capital Improvement Plans.

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Table 2-2
Projected Water Operating and Maintenance Expenses

	FY 2023 Budget	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected	FY2027 Projected	FY2028 Projected
Personnel Services	$2,518,350	$2,644,268	$2,776,481	$2,887,540	$3,003,042	$3,093,133
Services & Commodities	$3,492,730	$3,667,367	$3,850,735	$4,004,764	$4,164,955	$4,289,903
Maintenance	$364,865	$383,108	$402,264	$418,354	$435,088	$448,141
Total O&M	**$6,375,945**	**$6,694,742**	**$7,029,479**	**$7,310,659**	**$7,603,085**	**$7,831,177**
% Change		*5.0%*	*5.0%*	*4.0%*	*4.0%*	*3.0%*

The Village budgets its water production and water distribution operating costs separately. The FY 2023 budget is 45% production costs and 55% distribution costs.

Table 2-3
Projected Sewer Operating and Maintenance Expenses

	FY 2023 Budget	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected	FY2027 Projected	FY2028 Projected
Personnel Services	$548,045	$575,447	$604,220	$628,388	$653,524	$673,130
Services & Commodities	$746,920	$784,266	$823,479	$856,418	$890,675	$917,395
Maintenance	$103,750	$108,938	$114,384	$118,960	$123,718	$127,430
Total O&M	**$1,398,715**	**$1,468,651**	**$1,542,083**	**$1,603,767**	**$1,667,917**	**$1,717,955**
% Change		*5.0%*	*5.0%*	*4.0%*	*4.0%*	*3.0%*

The rates and fees developed in this study are sufficient to cover the increasing operating and maintenance costs of the water and sewer utilities.

Water and Sewer Capital Costs

There are two components to the capital costs of the water and sewer systems. The first is the existing debt obligations payable by the Water and Sewer Funds. The second is any planned capital expenditures to be paid by the Funds, which can be paid on an annual basis (i.e., pay-as-you-go, or PAYGO funded) or with the issuance of new debt (i.e., debt funded). The Village's practice is to PAYGO fund smaller capital projects (i.e., less than $100,000) that are routine or rehabilitative in nature and issue debt to finance less frequent replacements or upgrades to assets that have longer useful lives, typically 30 to 40 years. A more detailed discussion on capital project funding will follow in this report.

Existing Debt Service

From time to time, when the Village issues General Obligation debt, it includes debt proceeds to support capital projects for the water and/or sewer systems. As of FY 2023, the Village is obligated to pay seven outstanding debt issuances which values in each split across water and sewer. The forecasted cost of Northbrook's debt service is a driver in the model's rate projections. The Village maintains a policy of taking on debt to finance capital projects instead of relying on PAYGO funding.

Tables 2-4 and 2-5 shows the projected water loan payments over the five-year study planning period.

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Table 2-4
Current Water Debt Service Obligations by Issue

GO Bond Issue Series	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
2013A	$87,437	$87,309	$87,140	$87,542	$87,069	$87,156
2014A	$485,739	$486,189	$486,594	$488,709	$488,601	$490,509
2015B	$578,500	$579,321	$576,038	$574,631	$570,316	$567,877
2016	$118,863	$118,702	$73,427	$72,928	$73,943	$73,957
2018A	$515,585	$513,863	$513,781	$515,257	$514,109	$513,904
2019	$341,150	$340,400	$339,150	$337,400	$340,150	$342,150
2021	$184,577	$182,150	$182,150	$181,900	$181,400	$180,650
Total Debt Service	**$2,311,851**	**$2,307,934**	**$2,258,280**	**$2,258,367**	**$2,255,588**	**$2,256,203**
% Change		*(0.2%)*	*(2.2%)*	*0.0%*	*(0.1%)*	*0.0%*

Table 2-5 shows the projected sewer loan payments over the five-year study planning period.

Table 2-5
Current Sewer Debt Service Obligations by Issue

GO Bond Issue Series	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
2013A	$41,637	$41,576	$41,495	$41,686	$41,461	$41,503
2014A	$215,884	$216,084	$216,264	$217,204	$217,156	$218,004
2015B	$82,643	$82,760	$82,291	$82,090	$81,474	$81,125
2016	$18,494	$18,469	$11,425	$11,347	$11,505	$11,507
2018A	$62,876	$62,666	$62,656	$62,836	$62,696	$62,671
2019	$9,500	$9,250	$9,000	$8,750	$8,500	$8,250
2021	$22,139	$19,500	$19,000	$23,500	$22,750	$22,000
Total Debt Service	**$453,173**	**$450,305**	**$442,131**	**$447,413**	**$445,542**	**$445,060**
% Change		*(0.6%)*	*(1.8%)*	*1.2%*	*(0.4%)*	*(0.1%)*

The rates and fees developed in this report are sufficient to fund the above stated debt obligations now and through their maturities.

Planned Capital Improvements

A major component of owning a sustainable water and sewer utility is the planning for the rehabilitation and replacement of the Village's assets. The Village provided NewGen with a ten-year Capital Improvement Plan (CIP) that is a detailed list of projects including when they are planned to be completed and how much they are projected to cost. Key capital projects include:

- **Water Main Replacements** – The Village plans to spend an average of $5.9 million per year on water main replacements.
- **Water Meter Replacement Project** – The Village plans to replace all meters with Advanced Metering Infrastructure (AMI) technology at a cost of $4.5 million. AMI is an integrated system of water meters, communication networks and data management systems that will enable the

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Village to remotely read meters on an hourly basis, detect system leaks in real time, and provide customers with hourly usage information, typically via a mobile app.

- **Sewer Line Repairs and Rehabilitation** – The Village plans to spend an average of $350,000 per year on sewer line repairs and rehabilitation.

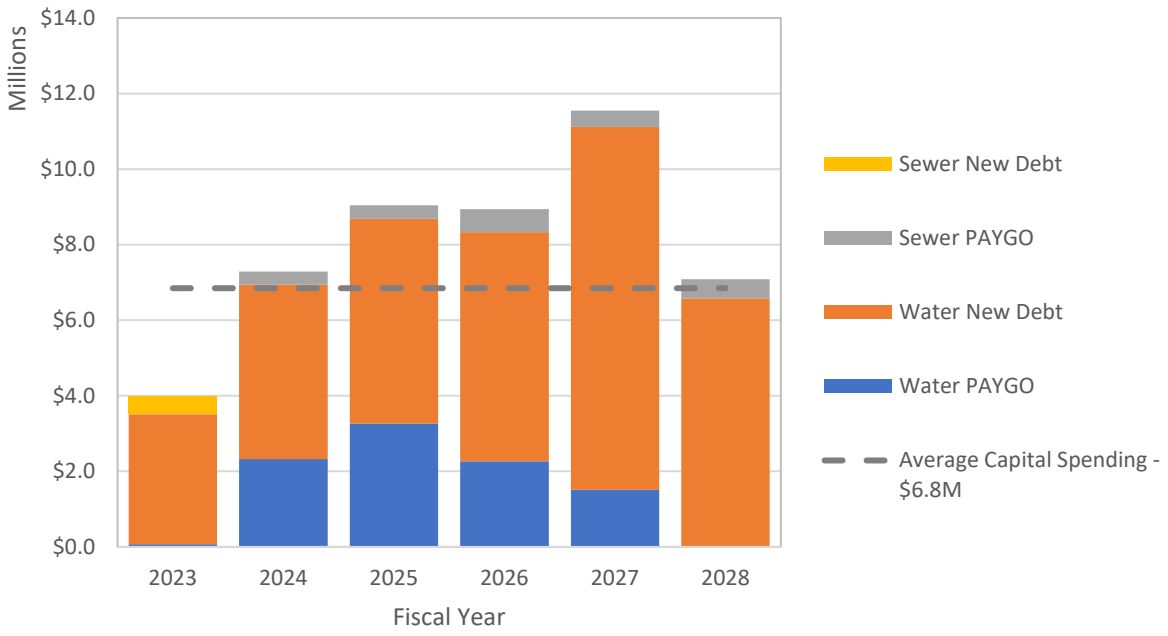
Table 2-6 summarizes the projects included in the study. FY 2023 reflects the Village's adopted budget, and future years are estimates developed by Village staff for the period FY 2024 – FY 2028.

Table 2-6
Planned Capital Improvement Projects

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Water Projects	$3,513,270	$6,942,541	$8,687,139	$8,326,403	$11,112,378	$6,579,422
Sewer Projects	466,000	345,690	351,910	615,750	437,915	501,480
Total Planed CIP	**$3,979,270**	**$7,288,231**	**$9,039,049**	**$8,942,153**	**$11,550,293**	**$7,080,902**

A full list of planned capital improvement projects is provided in Appendix A of this report. Figure 2-1 shows the annual variation of the Village's planned CIP spending and the funding source.

Figure 2-1: Capital Improvement Plan Financing Forecast



Based on the Village's financing plans provided to NewGen, all sewer line repairs/rehabilitation will be PAYGO funded beginning in FY 2024. Most of the water system CIP will be sustained by new loans. As the Village issues debt to support the water plan, the debt payable by the Water and Sewer Funds is forecasted to increase about 56% from FY 2023 to FY 2028 as shown in Figure 2-2.

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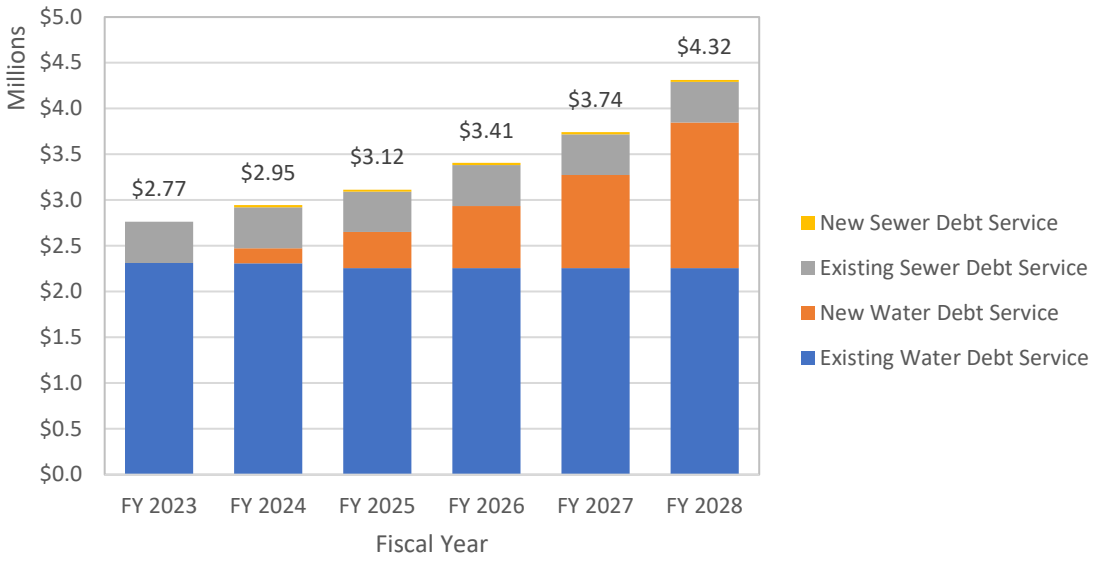
Figure 2-2: Total Forecasted Water and Sewer Debt Service



Miscellaneous Revenues

The Village accounts for certain Water and Sewer Fund revenues that are in addition to the water and sewer rates charged to customers. These non-rate revenues may be volatile from year to year, and therefore the Village budgets for a conservative amount each year. To determine the annual revenue needs of the water and sewer systems, these non-rate revenues need to be included in the fund's revenue. These revenues include Utility Permits, Hydrant Usage Fees, Recapture Fees, and investment interest. Tables 2-7 and 2-8 detail these non-rate revenues.

Table 2-7
Projected Non-Rate Water Revenue

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Utility Permits	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
Hydrant / Meter Usage Fees	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500
Miscellaneous	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000
Recapture Fees	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000
Hydrant Damage/Turn-On	$8,500	$8,500	$8,500	$8,500	$8,500	$8,500
Interest Income	$53,000	$47,121	$33,891	$25,181	$18,641	$17,233
Total Non-Rate Revenues	**$148,000**	**$142,121**	**$128,891**	**$120,181**	**$113,641**	**$112,233**

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Table 2-8
Projected Non-Rate Sewer Revenue

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Miscellaneous	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Interest Income	$6,000	$2,793	$4,839	$4,067	$3,873	$3,108
Total Non-Rate Revenues	**$16,000**	**$12,793**	**$14,839**	**$14,067**	**$13,873**	**$13,108**

Net Revenue Requirements

Based on the latest available FY 2023 budgeted operating, debt service, and capital expense data as well as the methodologies and assumptions detailed above, NewGen developed a net revenue requirement forecast for the Village's water and sewer systems, shown in Tables 2-9 and 2-10.

Table 2-9
Water Fund Net Revenue Requirement Projection

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Operating Expenses	$6,375,945	$6,694,742	$7,029,479	$7,310,659	$7,603,085	$7,831,177
Existing Debt Service	$2,311,851	$2,307,934	$2,258,280	$2,258,367	$2,255,588	$2,256,203
New Debt Service	$ -	$164,272	$392,307	$677,955	$1,017,924	$1,590,167
PAYGO Capital	$75,000	$2,325,000	$3,265,000	$2,265,000	$1,510,700	$15,000
Total Rev. Req.	**$8,762,796**	**$11,491,949**	**$12,945,066**	**$12,511,980**	**$12,387,297**	**$11,692,548**
Less: Non-Rate Rev.	($148,000)	($142,121)	($128,891)	($120,181)	($113,641)	($112,233)
Net Rev Req.	**$8,614,796**	**$11,349,827**	**$12,816,176**	**$12,391,799**	**$12,273,656**	**$11,580,315**

Table 2-10
Sewer Fund Net Revenue Requirement Projection

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Operating Expenses	$1,398,715	$1,468,651	$1,542,083	$1,603,767	$1,667,917	$1,717,955
Existing Debt Service	$453,173	$450,305	$442,131	$447,413	$445,542	$445,060
New Debt Service	$ -	$ -	$ -	$ -	$ -	$ -
PAYGO Capital	$466,000	$345,690	$351,910	$615,750	$437,915	$501,480
Total Rev. Req.	**$2,317,888**	**$2,264,646**	**$2,336,124**	**$2,666,930**	**$2,551,374**	**$2,664,495**
Less: Non-Rate Rev.	($16,000)	($12,793)	($14,839)	($14,067)	($13,873)	($13,108)
Net Rev Req.	**$2,301,888**	**$2,251,853**	**$2,321,285**	**$2,652,862**	**$2,537,502**	**$2,651,386**

The net revenue requirement is the basis upon which all rates and fees are calculated for the Village's systems. Although the net revenue requirement varies from year to year, the financial plan developed during the study takes a long-term perspective to maintain stable rates and sufficient reserves.

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SECTION 3
WATER AND SEWER CUSTOMERS AND USAGE

This section will detail the composition of the Village's water and sewer system customers. The Village's primary revenue source for the Water and Sewer Funds is the rates and fees charged to customers of the water and sewer systems. The latest full year of customer and consumption data available for the study was FY 2022. However, due to the impacts of COVID-19 on both customer demand and the ability of the Village to determine actual meter reads beginning March 2020, NewGen used the average of the past three full fiscal years to determine the Village's customer and usage amounts. This reflects a more typical usage profile on which to base rate calculations.

Water Customers and Consumption

Retail customers make up most of Village's water users and usage. The Village provides wholesale water service to the Mission Brook Sanitary District and the Village of Riverwoods. The Village serves about 15,490 retail customers. The number of water customers is expected to remain consistent throughout the study period.

Water Billing Units

Table 3-1 shows the billable water usage breakdown of the Village's water customers used in the study. Each billing unit is equal to 1,000 gallons.

Table 3-1
Water Billing Units by Customer Class (kgal)

Customer Type	Billing Units (kgal)
Retail	1,292,463
Mission Brook Sanitary District	62,697
Village of Riverwoods	123,316
Total Units	**1,478,476**

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Projected Water System Demand

The Village's projected consumption is outlined in Table 3-3 below. During the course of the study, the Village identified meters within its system that were either under-reading water usage or not functional. Therefore, the Village was not accounting for all of the water demand in its system. The Village is in the process of replacing meters, and therefore NewGen's study includes an assumption that due to the replacement of deficient meters, the Village will bill 3% more retail water in the first three years of the study forecast period, and then maintain that level of billable usage for the remainder of the forecast.

Table 3-3
Projected Water Billing Units (kgal)

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Retail	1,292,463	1,331,237	1,371,174	1,412,309	1,412,309	1,412,309
Mission Brook Sanitary District	62,697	62,697	62,697	62,697	62,697	62,697
Village of Riverwoods	123,316	123,316	123,316	123,316	123,316	123,316
Total Water Sold (kgal)	**1,478,476**	**1,517,250**	**1,557,187**	**1,598,322**	**1,598,322**	**1,598,322**
% Change		*2.6%*	*2.6%*	*2.6%*	*0.0%*	*0.0%*

Table 3-4 below shows the study's forecasted sewer usage totals in kgal.

Table 3-4
Projected Sewer Billing Units (kgal)

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Retail	1,292,463	1,331,237	1,371,174	1,412,309	1,412,309	1,412,309
Total Sewer Sold (kgal)	**1,292,463**	**1,331,237**	**1,371,174**	**1,412,309**	**1,412,309**	**1,412,309**
% Change		*3.0%*	*3.0%*	*3.0%*	*0.0%*	*0.0%*

Sewer usage is expected to change in a similar fashion to water demand.

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SECTION 4
FINANCIAL PLAN AND CASH FLOW PROJECTIONS

NewGen developed Water Fund and Sewer Fund balance projections assuming the revenue requirements detailed in Section 2 of this report and that the Village does not increase any water or sewer rates in any year of the five-year projection.

Recommended Minimum Cash Reserve Policy

The American Water Works Association's (AWWA) Rates and Charges Committee states that "The level of reserves maintained by a utility is an important component of short and long-term financial management, and is a key consideration in the rate-setting process."[2] Other industry groups have published specific recommendations for minimum utility fund reserve levels, including the Water Environment Federation (one – three months O&M costs), the International City/County Management Association (one – two months of total expenses), and The Government Finance Officers Association (Not less than 45 days of total expenses).

NewGen recommends that the Village establish a minimum fund balance policy for both the Water and Sewer Funds based on the annual operating and capital expanse of the water and sewer systems. NewGen's recommended policy has two components:

- **Minimum Operating Reserve**: 30 days of annual operating expenses
- **Minimum Capital Reserve**: 30 days of average 10-year PAYGO CIP

The following table shows NewGen's recommended fund balance for the Village in FY 2023 compared to the recommendations of the organizations referenced above.

Table 4-1
Minimum Fund Balance Recommendation Comparison – FY 2023

	Water Fund	Sewer Fund
WEF (30-90 Days O+M)	$524,050 - $1,572,151	$114,963 - $344,889
GFOA (45 Days Total Expenses)	$1,080,345	$285,767
ICMA (30-60 Days Total Expenses)	$720,230 - $1,440,460	$190,511 - $381,023
NewGen Strategies and Solutions	**$599,282**	**$148,719**

NewGen's recommendation falls slightly below the top "best practices" recommendations of industry organizations.

[2] AWWA Rates and Charges Committee Whitepaper, *Cash Reserve Policy Guidelines*, 2018

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The minimum Water Fund and Sewer Fund balance recommended for each year of NewGen's five-year projection is shown in Tables 4-2 and 4-3.

Table 4-2
Recommended Minimum Water Fund Balance Policy

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Annual O&M Costs	$6,375,945	$6,694,742	$7,029,479	$7,310,659	$7,603,085	$7,831,177
Days Required	30	30	30	30	30	30
O&M Reserve	**$524,050**	**$550,253**	**$577,765**	**$600,876**	**$624,911**	**$643,658**
Average PAYGO CIP	$915,319	$915,319	$915,319	$915,319	$915,319	$915,319
Days Required	30	30	30	30	30	30
Capital Reserve	**$75,232**	**$75,232**	**$75,232**	**$75,232**	**$75,232**	**$75,232**
Total Minimum Reserve	**$599,282**	**$625,484**	**$652,997**	**$676,108**	**$700,143**	**$718,890**

Table 4-2
Recommended Minimum Sewer Fund Balance Policy

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Annual O&M Costs	$1,398,715	$1,468,651	$1,542,083	$1,603,767	$1,667,917	$1,717,955
Days Required	30	30	30	30	30	30
O&M Reserve	**$114,963**	**$120,711**	**$126,747**	**$131,816**	**$137,089**	**$141,202**
Average PAYGO CIP	$410,699	$410,699	$410,699	$410,699	$410,699	$410,699
Days Required	30	30	30	30	30	30
Capital Reserve	**$33,756**	**$33,756**	**$33,756**	**$33,756**	**$33,756**	**$33,756**
Total Minimum Reserve	**$148,719**	**$154,467**	**$160,503**	**$165,573**	**$170,845**	**$174,958**

If in any year, based on NewGen's cash flow projections, the Village's Water Fund or Sewer Fund balance would fall below the required minimum, NewGen's study includes revenue increases that achieve the cash flow necessary to maintain the minimum recommended balance.

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Cash Flow Projections at FY 2023 Rates

The current structure of the Village's water and sewer rates is a usage rate per one thousand gallons (kgal) that is charged to each unit of metered consumption for all water customers. For retail customers, there is a minimum quarterly bill amount equal to 7,000 gallons of usage.

The FY 2023 retail water rate is $5.88 per kgal, and the FY 2023 sewer rate is $1.26 per kgal. The wholesale water rate applied to both Mission Brook and Ridgewood is $5.26 per kgal.

Water and Sewer Fund Cash Balance Projection at Current Rates

If the Village does not increase water or sewer rates from their current FY 2023 levels, the following four figures show NewGen's forecasted cash flow and Water and Sewer Funds balance for the period FY 2023 through FY 2028.

Figure 4-1: Water Fund Expenses vs. Revenues Forecast

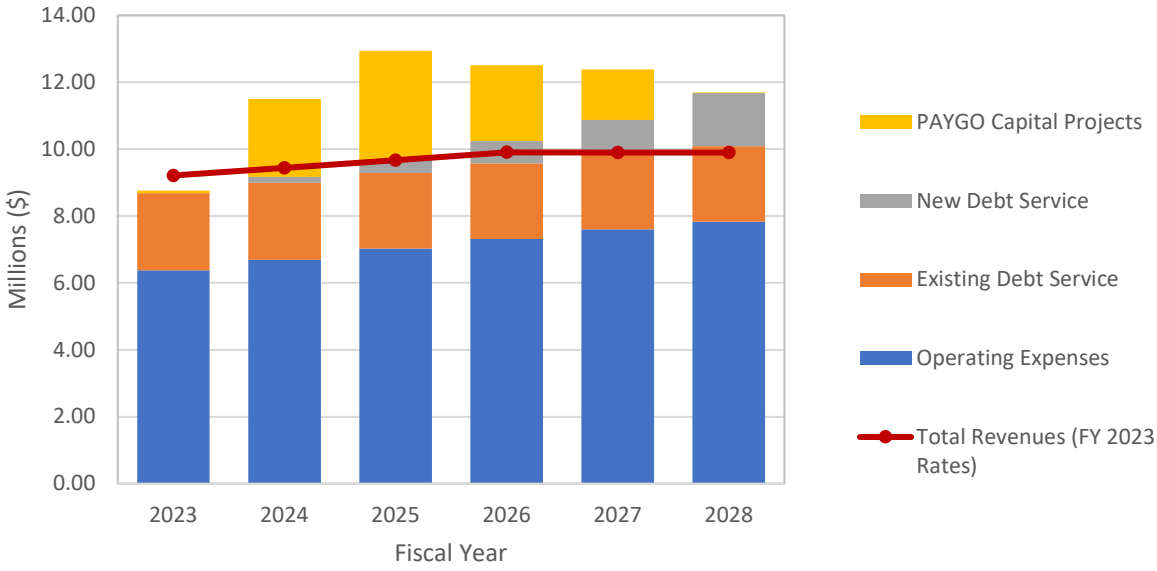

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Figure 4-2: Projected Water Fund Balance at FY 2023 Rates

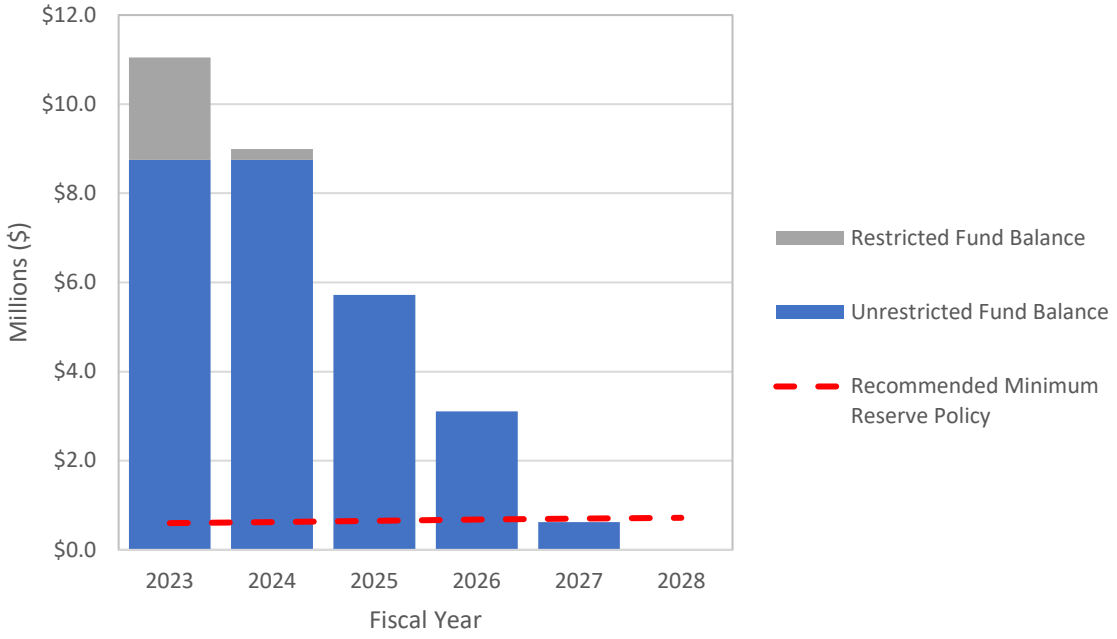

Figure 4-3: Sewer Fund Expenses vs. Revenues Forecast

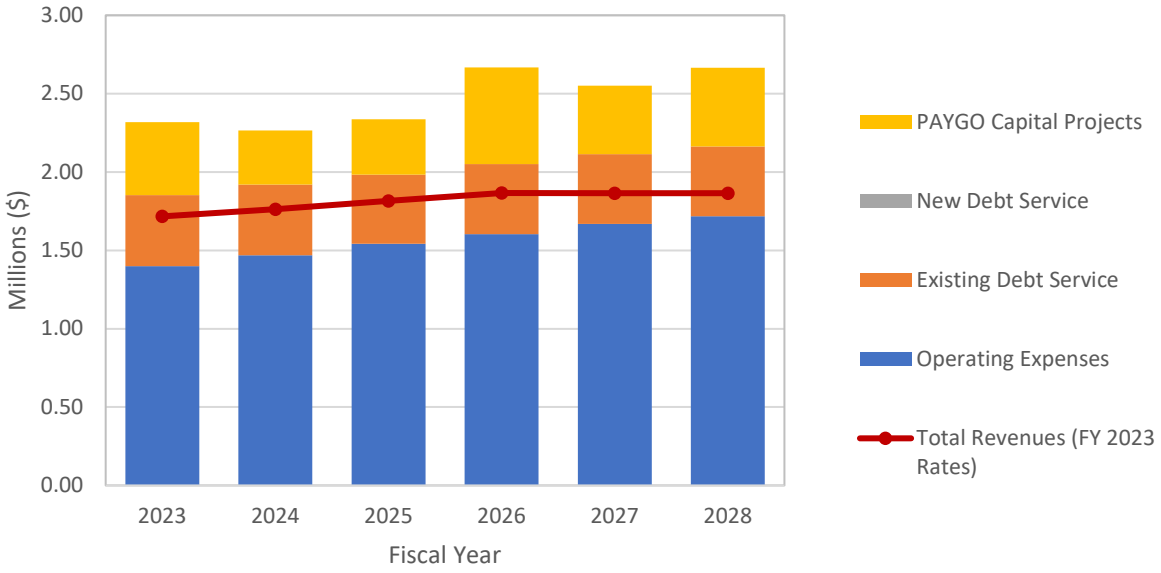

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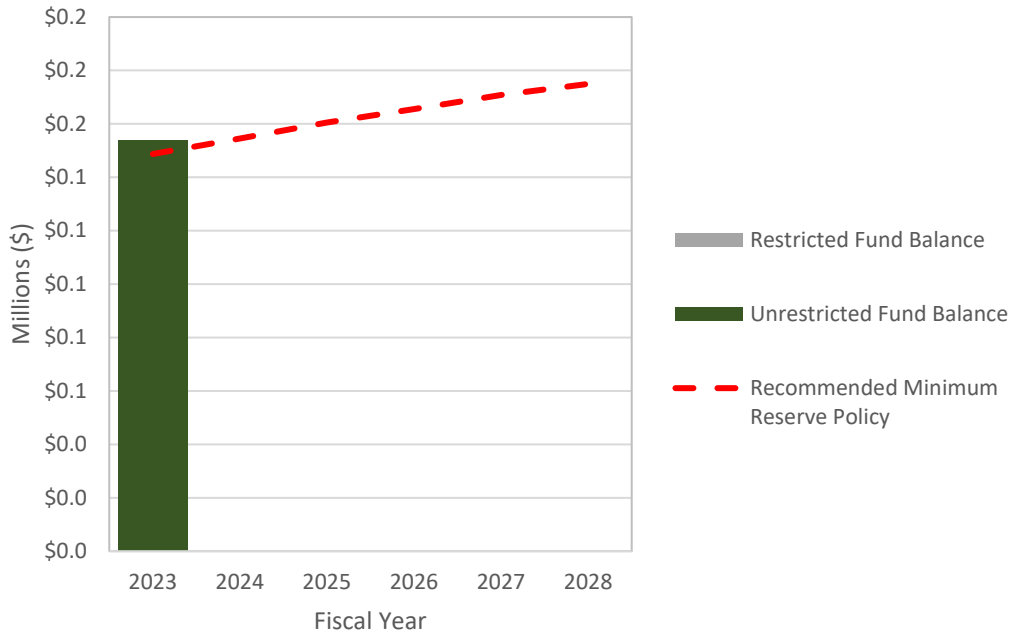
Figure 4-4: Projected Sewer Fund Balance at FY 2023 Rates



The Village's current FY 2023 water and sewer rates are not sufficient to maintain the financial health of the water and sewer systems. The next sections of this report will detail the revenue increases necessary to produce sufficient cash flow to maintain the minimum recommended fund balance for the Village's Water and Sewer Funds.

Recommended Rate Revenue Increases

To increase revenues that will sustain the water and sewer systems, NewGen recommends the following percent increases for the Village's water and sewer rates. The FY 2024 rate increases assume that the Village does not adopt any changes in rate structure.

Table 4-3
Recommended Water and Sewer Rate Revenue Increases

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Water Rate Revenue Increase	4.6%	2.0%	2.0%	3.0%	3.0%
Sewer Rate Revenue Increase	35.0%	0.0%	0.0%	0.0%	0.0%

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Water and Sewer Funds Cash Balance Projection at Recommended Rates

If the Village increases its water and sewer revenues consistent with the table above, the result is that the Village can fund each system's projected operating, capital, and debt service expenses while also maintaining the recommended reserves.

Figure 4-5: Water Fund Expenses vs. Revenues – Recommended Rates

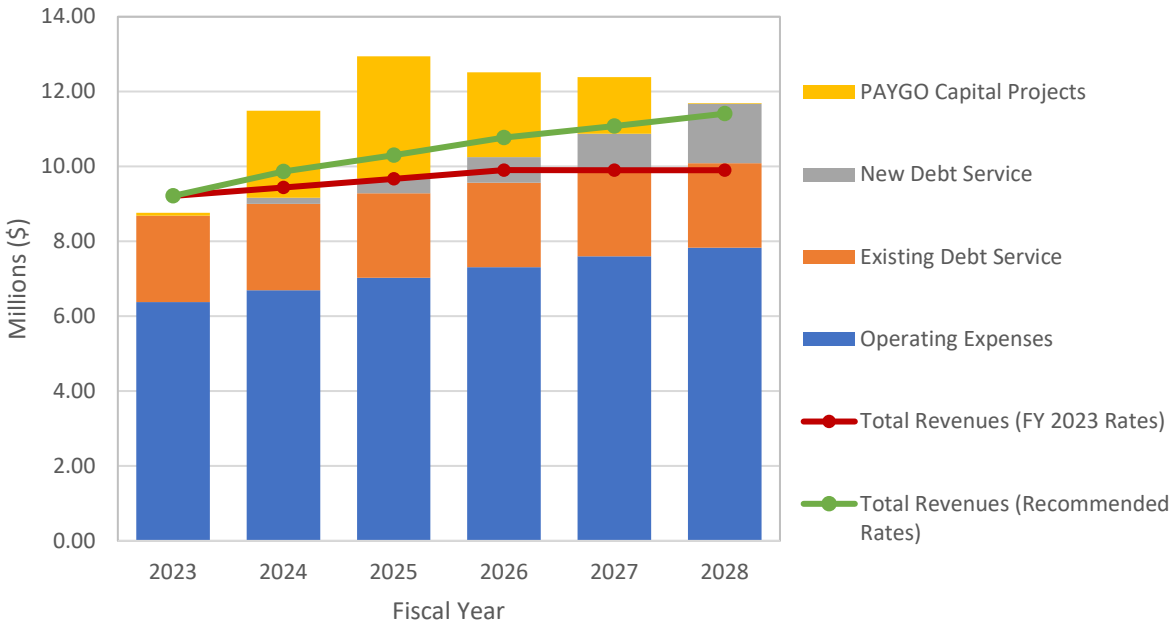
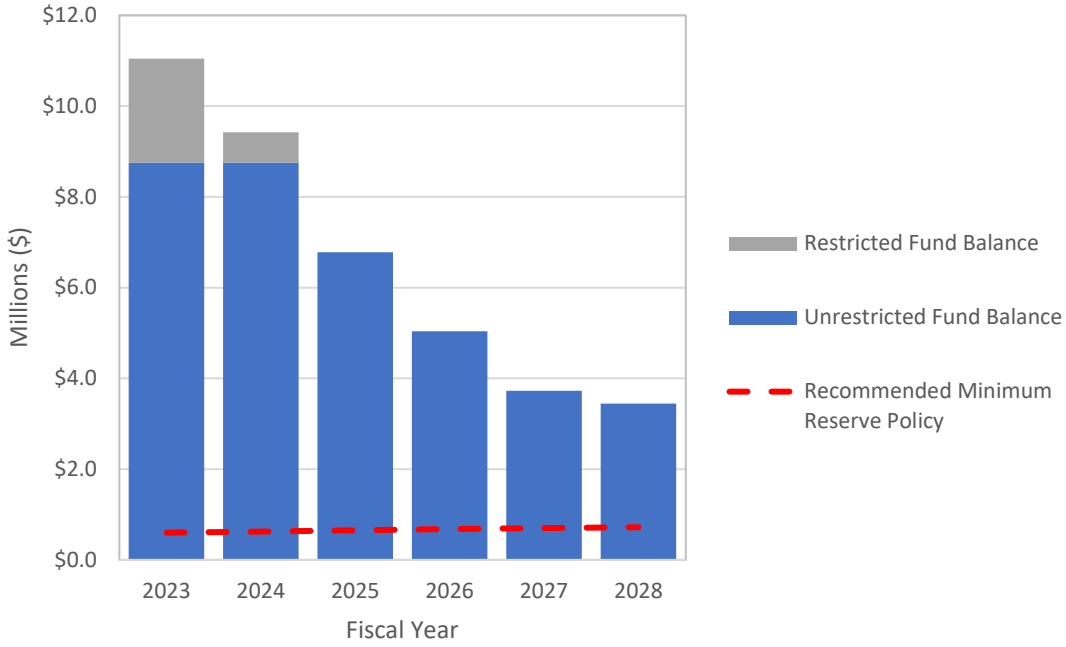


Figure 4-6: Water Fund Balance – Recommended Rates



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It should be noted that at the rates forecasted the Water Fund balance falls below NewGen's recommended minimum fund balance policy. The Village may in the future determine that rate increases need to be higher, or that a different minimum policy is better suited for the Water Fund.

Figure 4-7: Sewer Fund Expenses vs. Revenues – Recommended Rates

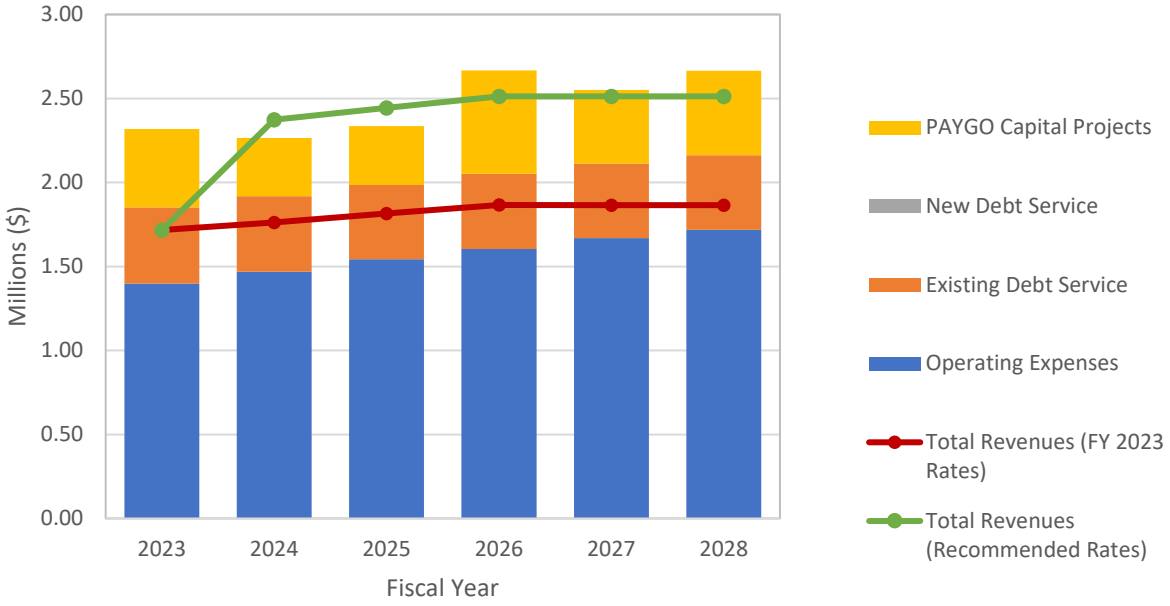
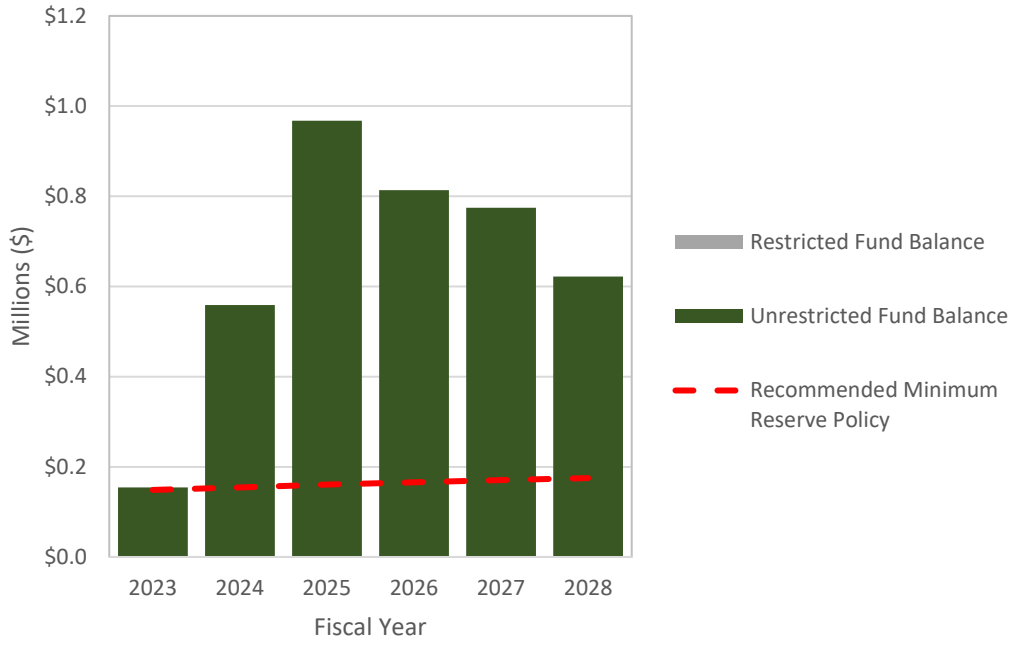


Figure 4-8: Sewer Fund Balance – Recommended Rates



The next section of our report will detail the specific rates that are projected to generate the revenue shown in the above figures.

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SECTION 5
RECOMMENDED RATES AND RATE ALTERNATIVE

This section of our report details our recommended water and sewer rates both under the Village's existing rate structure and an alternative rate structure that includes a quarterly fixed Service Charge.

Recommended Revenue Increases

This section includes the total increases in revenue shown in Table 5-1, as described in Section 4. These revenue increases are necessary to maintain the financial and operational health of the Village's water sewer infrastructure.

Table 5-1
Recommended Water and Sewer Rate Revenue Increases

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Water Rate Revenue Increase	4.6%	2.0%	2.0%	3.0%	3.0%
Sewer Rate Revenue Increase	35.0%	0.0%	0.0%	0.0%	0.0%

Projected Rates under Current Rate Structure

The following water rates shown in Table 5-2 are projected to fully support the future operating, capital, debt service, and reserve requirements of the water system. The rates below assume that the Village continues to bill a minimum of 7,000 gallons of water usage for each quarterly customer bill. Also, the rates assume that the wholesale rates charged to Mission Brook and Riverwoods continue to comply with all contract provisions relating to rates.

Table 5-2
Recommended Quarterly Water Rates

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Retail	$5.88	$6.15	$6.27	$6.40	$6.59	$6.79
Mission Brook	$5.29	$5.54	$5.64	$5.76	$5.93	$6.11
Riverwoods	$5.29	$5.54	$5.64	$5.76	$5.93	$6.11

If the Village adopts the recommended revenue increases for sewer rates in each year from FY 2024 – FY 2028, then the Village's sewer rates would be as shown in Table 5-3. Again, the rates below assume that the Village continues to bill a minimum of 7,000 gallons of water usage for each quarterly customer bill.

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Table 5-3
Recommended Quarterly Sewer Rates

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Retail	$1.26	$1.70	$1.70	$1.70	$1.70	$1.70

Projected Rates under Alternative Rate Structure

A key task of NewGen's study was to calculate a rate structure alternative in which there is a fixed component that is not based on a minimum usage, does not include any usage, and is charged to all customers monthly regardless of usage. The Village's current minimum charge is not an effective method of stabilizing revenue. AWWA Manual M1 states:

> *"It is often assumed that a minimum charge adds to the utility's revenue stability. However, if the consumption allotment for a minimum charge is set at a low level, a utility may actually receive little benefit in terms of revenue stability. The amount of revenue generated from the consumption component of the minimum charge is revenue that, for the most part, would normally be generated from water sales using the consumption charge."* – AWWA Manual M1, 7th Edition. p. 153

AWWA Manual M1 also states:

> *"In light of the decreased predictability and increased volatility of the variable or consumption portion of water-rate revenues, many utilities are looking to increase the portion of fixed-charge revenues."* – AWWA Manual M1, 7th Edition, p. 150

While M1 offers no specific percentage of revenues that should be collected via fixed charges, there are several categories of the Village's expenses that can be defined as "fixed", that is, they do not vary with customer demand. Expenses such as salaries and benefits, customer meter reading and billing, and investments in system capacity (whether that capacity is used or not). The only true variable costs of the Village's water system are electricity, natural gas, and chemical costs. These costs total only 7.8% of the Village's FY 2023 budget, meaning that 92.2% of the Village's total water expenses each year are fixed.

Large increases in fixed fees have a disproportionate impact on the customers with the smallest demand. The fixed costs drive up the average cost per unit for small customers because there is little demand over which to spread those costs. Because of this, a balance must be struck between revenue stability and customer affordability. Generally, utilities target 25% - 30% of revenue from fixed fees to balance these impacts.

An immediate adjustment to a fixed fee generating 25% of water rate revenues would place a burden on the smaller customers. Therefore, NewGen recommends phasing-in the proportion of revenue generated by fixed fees in the manner shown in Table 5-4. FY 2024 assumes that the Village does not adopt any fixed fee and only updates rates within the current structure.

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Table 5-4
Alternative Scenario Fixed Percentages

	FY 2023[3]	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Fixed Revenue %	0.0%	0.0%	10.0%	15.0%	20.0%	0.0%

The basis on which to apply a fixed fee can vary. For the Village's water rates, NewGen recommends generating the proportion of fixed rate revenue from a monthly fee per meter, with larger meters paying higher fees based on flow capacity. The AWWA publishes the maximum flow capacity in gallons per minute (gpm) of each meter size, shown in Table 5-5.

Table 5-5
AWWA Meter Flow Capacity Ratios

Meter Size	Flow Capacity (gpm)	Flow Capacity Ratio
5/8"	20	1.0
3/4"	30	1.5
1"	50	2.5
1 1/2"	100	5.0
2"	160	8.0
3"	300	15.0
4"	500	25.0
6"	1000	50.0
Average of 5/8" – 1 ½"	60	
Average of 2" – 10"	977	
Ratio of Averages		16.0

NewGen recommends charging large meters (over 2") a fee 16 times that of the fee charged to small meters, which reflects the average flow capacity of the two groups of meters. The fees, in total, are calculated to generate the percentage of rate revenue shown in Table 5-4 each year.

NewGen recommends charging the same quarterly fixed fee to all meter sizes for sewer rates.

Table 5-6 shows the recommended fixed monthly service charges for FY 2023 through FY 2027 consistent with the overall revenue forecast, percentage of fixed revenues, and AWWA meter flow factors.

[3] The Village's current 7,000 gallon quarterly minimum generates about 3.7% of total water rate revenue from usage that is not actually metered.

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Table 5-6
Recommended Retail Quarterly Water Service Charges

Meter Size	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Small Meters (5/8" – 1 ½")	N/A	N/A	N/A	$12.00	$19.00	$26.00
Large Meters (2" – 10")				$192.00	$304.00	$416.00

As the Village increases the proportion of revenues generated by fixed fees, the quarterly fee per meter increases relative to the variable rate per kgal.

Table 5-7
Recommended Retail Quarterly Sewer Service Charges

Meter Size	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
All Meters	N/A	N/A	N/A	$19.00	$28.00	$37.00

NewGen recommends that all meters pay the same Sewer Service Charge.

The above service charges would accompany a shift in water rates depicted in Table 5-7 and Sewer rates depicted in Table 5-8.

Table 5-7
Recommended Quarterly Water Rates – Alternative Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Retail	$5.88	$6.15	$6.27	$6.27	$6.27	$6.27
Mission Brook	$5.29	$5.50	$5.60	$5.60	$5.60	$5.60
Riverwoods	$5.29	$5.50	$5.60	$5.60	$5.60	$5.60

Table 5-8
Recommended Quarterly Sewer Rates – Alternative Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Retail	$1.26	$1.70	$1.70	$1.70	$1.70	$1.70

The fixed and variable rates shown above generate the same revenue as the Village's existing rate structure, assuming that the Village adopt the rate increases described in Section 4.

Any time a utility changes its rate structure, there are different impacts on different types of customers. The next section in this report shows the impact on customer bills of the increases in existing rates and the implementation of the alternative rate structure.

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SECTION 6
CUSTOMER BILL IMPACTS AND BENCHMARKING

A major consideration when developing any utility financial plan is the impact on the system's customer bills. The recommendations detailed in this report will result in revenue increases, and therefore cost increases to many of the system's customers. This section summarizes the impact on the system's customers as well as provide a comparison the total customer bill set against surrounding utilities.

Projected Customer Bills under Current Rate Structure

The following table shows the impact of NewGen's recommended revenue increases and rate structure changes on an average inside Village residential customer if the Village were to adopt the rate changes detailed in our report.

If the Village maintains its current rate structure, the percentage impact is the same for all types of retail customers.

Table 6-1
Projected Quarterly Customer Water Bills – Current Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Low Use	**$41.16**	**$43.05**	**$43.89**	**$44.80**	**$46.13**	**$47.53**
Small Meter	*$ Change*	*$1.89*	*$0.84*	*$0.91*	*$1.33*	*$1.40*
3 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*2.1%*	*3.0%*	*3.0%*
Minimum Use	**$41.16**	**$43.05**	**$43.89**	**$44.80**	**$46.13**	**$47.53**
Small Meter	*$ Change*	*$1.89*	*$0.84*	*$0.91*	*$1.33*	*$1.40*
7 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*2.1%*	*3.0%*	*3.0%*
Average Use	**$88.20**	**$92.25**	**$94.05**	**$96.00**	**$98.85**	**$101.85**
Small Meter	*$ Change*	*$4.05*	*$1.80*	*$1.95*	*$2.85*	*$3.00*
15 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*2.1%*	*3.0%*	*3.0%*
High Use	**$294.00**	**$307.50**	**$313.50**	**$320.00**	**$329.50**	**$339.50**
Large Meter	*$ Change*	*$13.50*	*$6.00*	*$6.50*	*$9.50*	*$10.00*
50 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*2.1%*	*3.0%*	*3.0%*

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Table 6-2
Projected Quarterly Customer Sewer Bills – Current Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Low Use	**$8.82**	**$11.90**	**$11.90**	**$11.90**	**$11.90**	**$11.90**
Small Meter	*$ Change*	*$3.08*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
3 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Minimum Use	**$8.82**	**$11.90**	**$11.90**	**$11.90**	**$11.90**	**$11.90**
Small Meter	*$ Change*	*$3.08*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
7 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Average Use	**$18.90**	**$25.50**	**$25.50**	**$25.50**	**$25.50**	**$25.50**
Small Meter	*$ Change*	*$6.60*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
15 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
High Use	**$63.00**	**$85.00**	**$85.00**	**$85.00**	**$85.00**	**$85.00**
Large Meter	*$ Change*	*$22.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
50 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*

Projected Customer Bills under Alternative Rate Structure

The following table shows the impact of NewGen's recommended revenue increases and rate structure changes on an average inside Village residential customer if the Village were to adopt the alternative rate changes detailed in our report.

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Table 6-3
Projected Quarterly Customer Water Bills – Alternative Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Low Use	**$41.16**	**$43.05**	**$43.89**	**$30.81**	**$37.81**	**$44.81**
Small Meter	*$ Change*	*$1.89*	*$0.84*	*($13.08)*	*$7.00*	*$7.00*
3 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*(29.8%)*	*22.7%*	*18.5%*
Minimum Use	**$41.16**	**$43.05**	**$43.89**	**$55.89**	**$62.89**	**$69.89**
Small Meter	*$ Change*	*$1.89*	*$0.84*	*$12.00*	*$7.00*	*$7.00*
7 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*27.3%*	*12.5%*	*11.1%*
Average Use	**$88.20**	**$92.25**	**$94.05**	**$106.05**	**$113.05**	**$120.05**
Small Meter	*$ Change*	*$4.05*	*$1.80*	*$12.00*	*$7.00*	*$7.00*
15 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*12.8%*	*6.6%*	*6.2%*
High Use	**$294.00**	**$307.50**	**$313.50**	**$505.50**	**$617.50**	**$729.50**
Large Meter	*$ Change*	*$13.50*	*$6.00*	*$192.00*	*$112.00*	*$112.00*
50 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*61.2%*	*22.2%*	*18.1%*

Table 6-4
Projected Quarterly Customer Sewer Bills – Alternative Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Low Use	**$8.82**	**$11.90**	**$11.90**	**$24.10**	**$33.10**	**$42.10**
Small Meter	*$ Change*	*$3.08*	*$0.00*	*$12.20*	*$9.00*	*$9.00*
3 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*102.5%*	*37.3%*	*27.2%*
Minimum Use	**$8.82**	**$11.90**	**$11.90**	**$30.90**	**$39.90**	**$48.90**
Small Meter	*$ Change*	*$3.08*	*$0.00*	*$19.00*	*$9.00*	*$9.00*
7 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*159.7%*	*29.1%*	*22.6%*
Average Use	**$18.90**	**$25.50**	**$25.50**	**$44.50**	**$53.50**	**$62.50**
Small Meter	*$ Change*	*$6.60*	*$0.00*	*$19.00*	*$9.00*	*$9.00*
15 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*74.5%*	*20.2%*	*16.8%*
High Use	**$63.00**	**$85.00**	**$85.00**	**$104.00**	**$113.00**	**$122.00**
Large Meter	*$ Change*	*$22.00*	*$0.00*	*$19.00*	*$9.00*	*$9.00*
50 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*22.4%*	*8.7%*	*8.0%*

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Because of the shift to fixed revenues and away from a minimum bill, small users see a decrease in their quarterly water bill because they will no longer be paying for demand they did not use. Even with the increase in fixed costs, this represents a savings for the Village's smallest customers. The offsetting impact is that large users see a higher percent increase that the current structure increases because the fixed revenue impact is in addition to the consumption they were already being billed (i.e., above 7,000 gallons per quarter).

Regional Bill Comparison

The following figure shows a comparative bill for a median Retail Village customer (5/8" meter, 15 kgal quarterly usage) in surrounding service areas.

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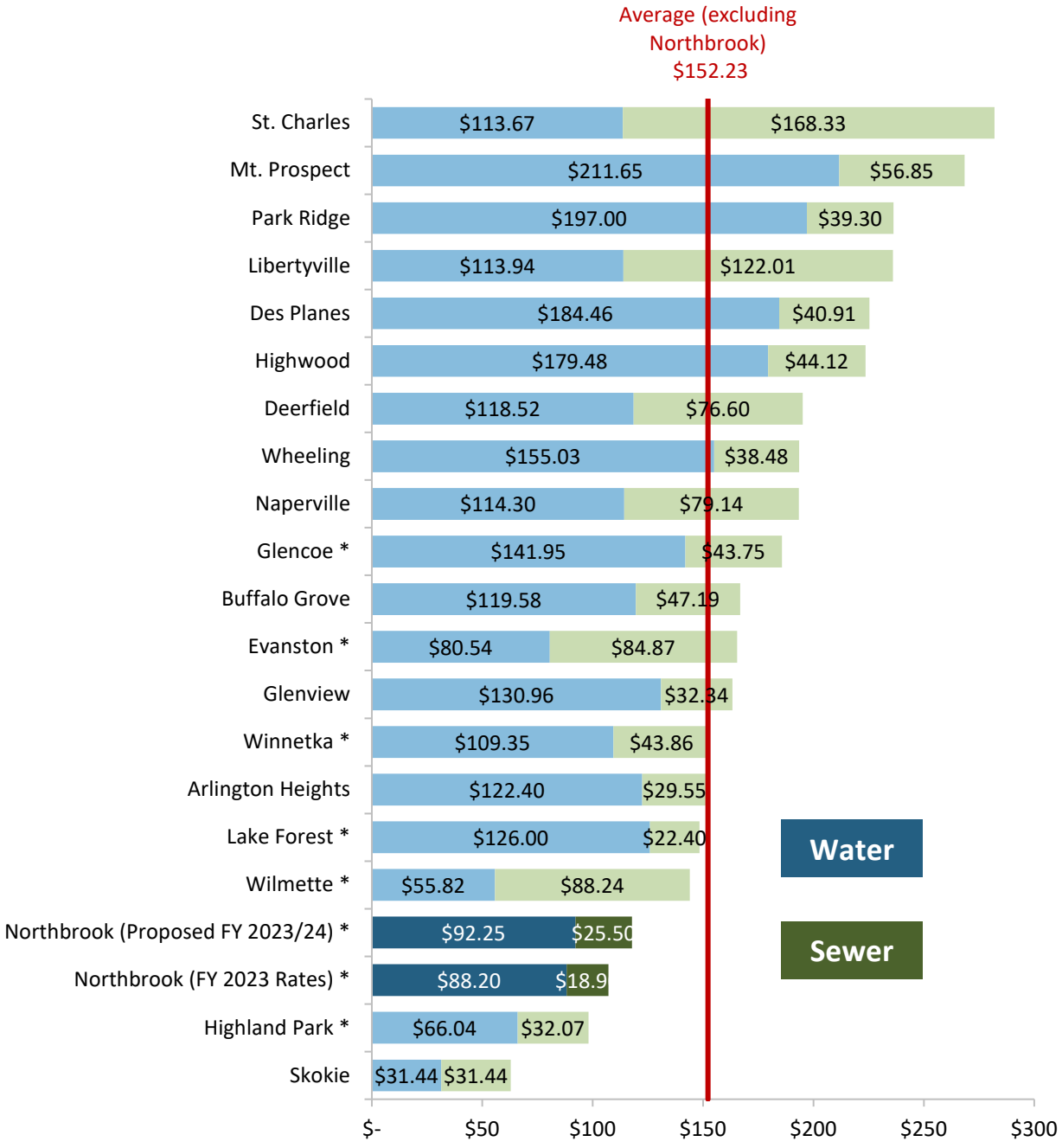
Figure 6-1: Regional Bill Comparison



While regional comparisons may provide some context, the ranking of individual customer bills is not a consideration when developing a financial plan and rate structure. The Village's cash needs are independent of the rates in the surrounding jurisdictions, and this comparison is provided for information only.

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SECTION 7
LONG-TERM PROJECTIONS

This report details the short-term, five-year impacts of the various revenue and rate options developed as a part of NewGen's study. It is recommended that the Village re-evaluate rate increases based on the previous year's actual data every year and re-evaluate rate structures every three to five years as a part of a full rate study. The charts below assume that the Village implements the revenue increases shown in Table 7-1 below.

Table 7-1
Projected Long-Term Revenue Increase Needs

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
Water Rates	4.6%	2.0%	2.0%	3.0%	3.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Sewer Rates	35.0%	0.0%	0.0%	0.0%	0.0%	1.5%	1.5%	1.5%	1.5%	1.5%

The following figures show the long-term revenue vs. expenses and fund balance charts based on the long-term projections at the time of NewGen's study.

Figure 7-1: Long-Term Water Revenues vs. Expenses Projection

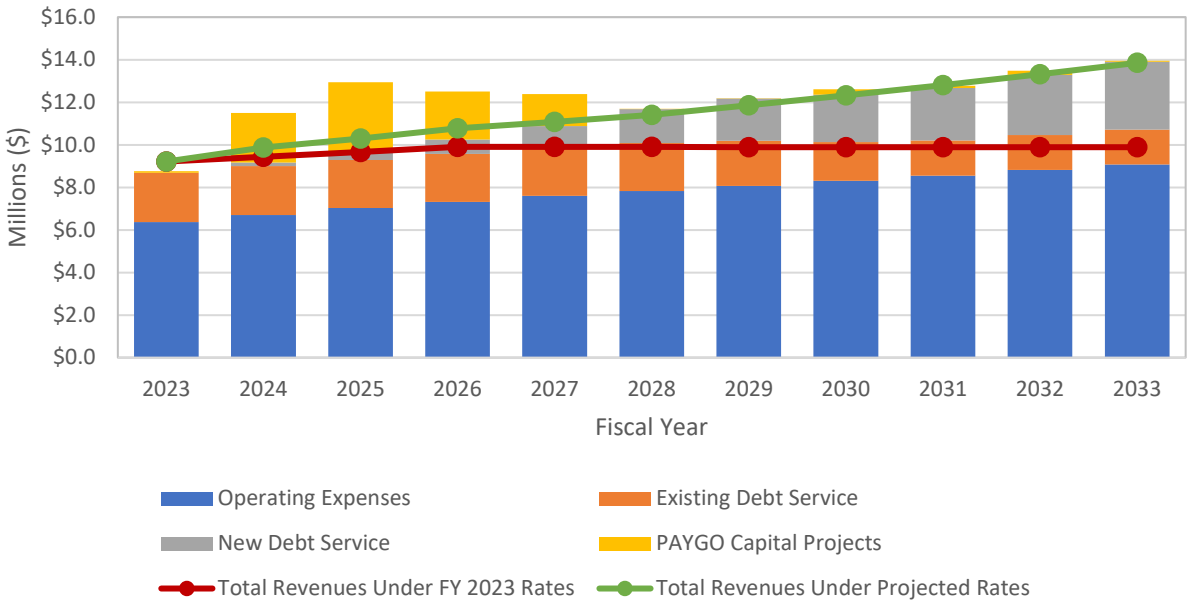

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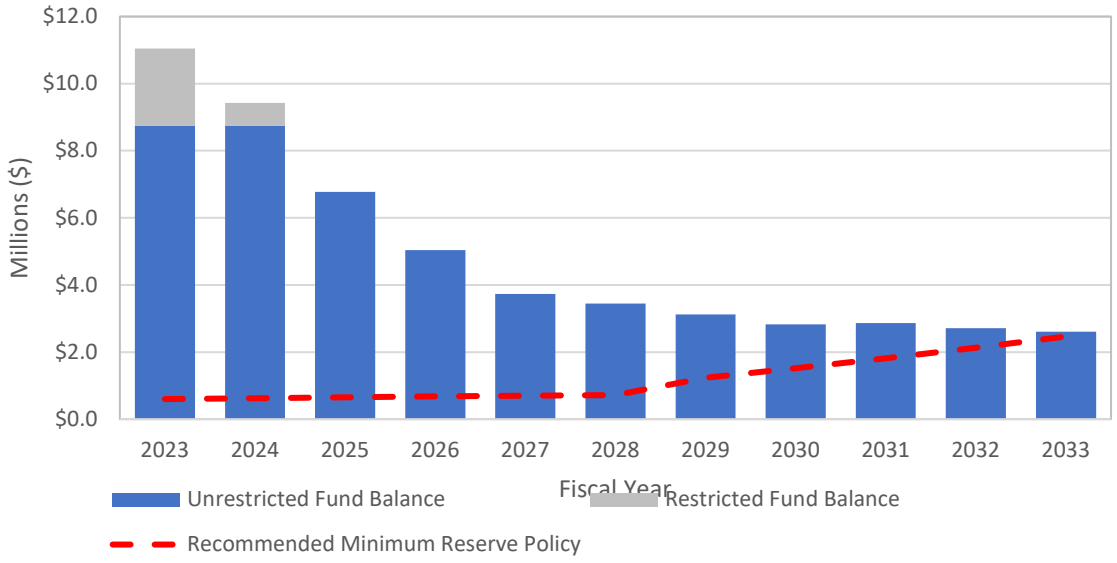
Figure 7-2: Long-Term Water Fund Balance Projection



The Village's Water Fund balance is stable in the out years of the forecast; however it remains below NewGen's recommended minimum reserve policy. The Village will have the opportunity to either revise rate increases in future years to meet the recommended fund balance policy or consider a different policy.

Figure 7-3 Long-Term Sewer Revenues vs. Expenses Projection

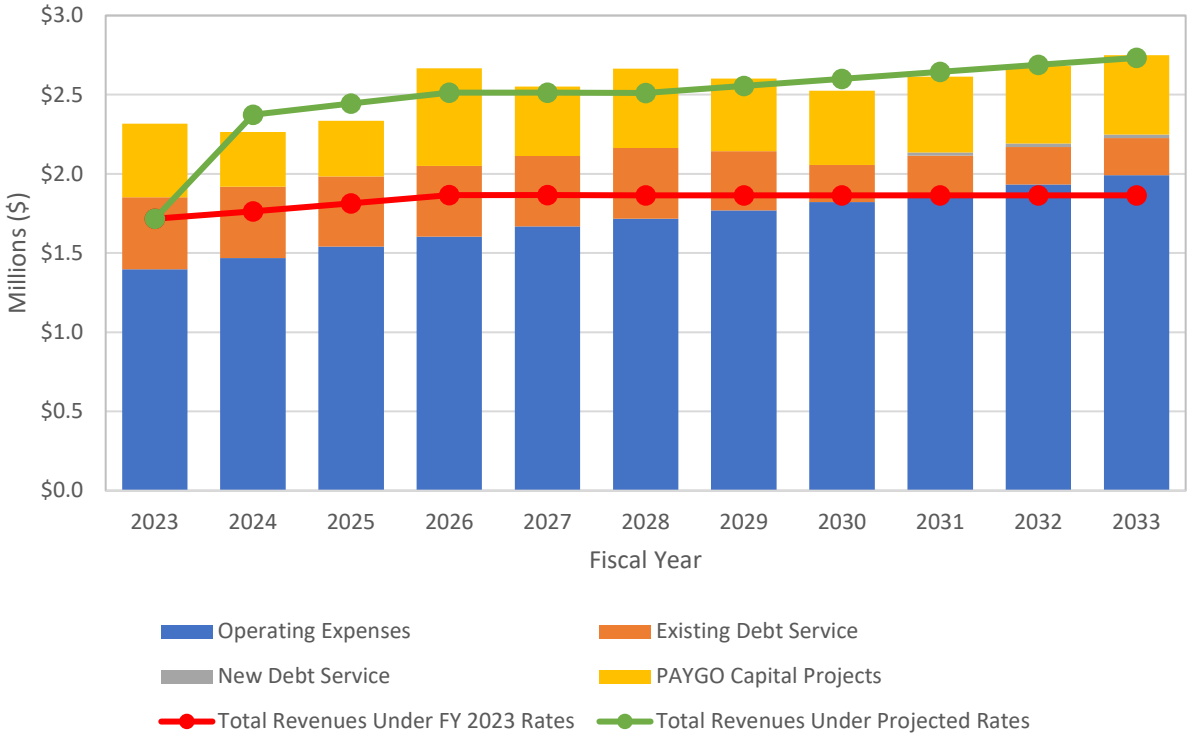


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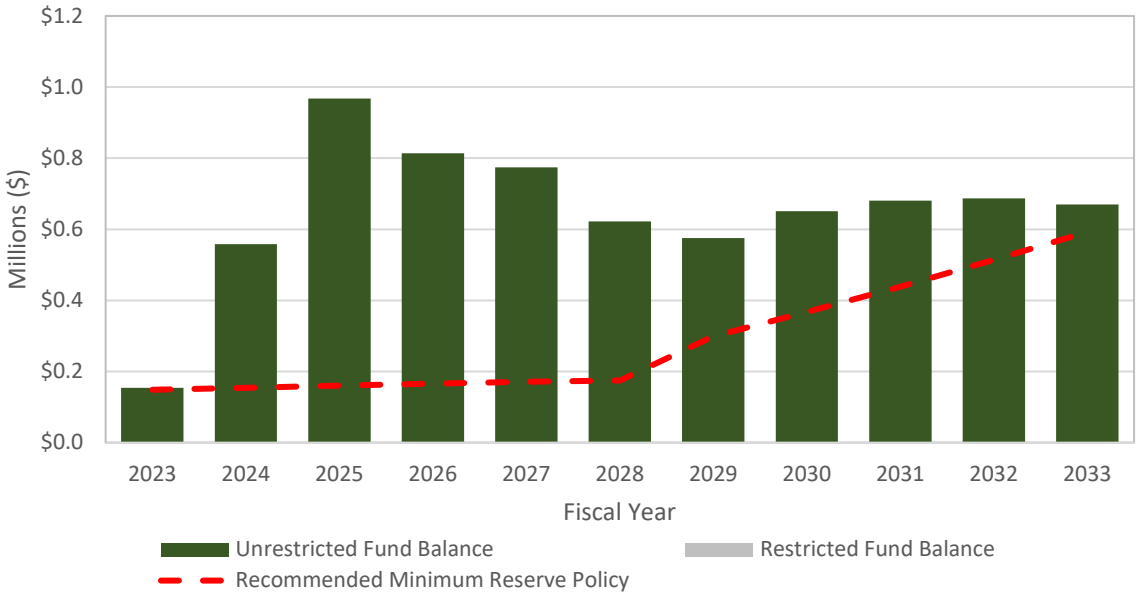
Figure 7-4: Long-Term Sewer Fund Balance Projection



The above projections are preliminary in nature and there will be unanticipated conditions that impact the projected expenses, customer demands, and revenues of the water and Sewer system over the next ten years.

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NewGen Strategies & Solutions

THANK YOU!

911-A Commerce Road, Annapolis, MD 21401
Phone: 1-443-951-4207
E-mail: ecallocchia@newgenstrategies.net
www.newgenstrategies.net

MEMORANDUM

To: Village Manager Cara Pavlicek
From: Director of Public Works Kelly Hamill
Cc: Village Board of Trustees
Date: 2023-09-26
Subject: A Confirming Resolution Authorizing the Execution of an Agreement with NewGen Strategies and Solutions, LLC. of Annapolis, Maryland for a Stormwater Fund Utility Rate Study

Overview/Synopsis.
The Village of Northbrook has completed Addendum #3 to the Master Stormwater Management Plan and to ensure adequate financial resources are available for the operations and capital investments in this fund, it is recommended the Village undertake a Utility Rate Study for the Stormwater Fund. In order to ensure work could begin as soon as possible, a contract for this work was executed by the Village Manager as the value of the work is within the Manager's purchasing authority, however staff is seeking a confirming Resolution should additional services related to this utility rate study be needed in the future.

Fiscal Impact.

Sufficient funds for this work are available in the Fiscal Year 2023/24 Budget in Account No. 16-4190-554-00.

Account Name	Account Number	Budget	Available	Requested	Remaining
Professional Services	16-4190-554-00	$81,700	$73,020	$19,105	$53,915

Recommendation.
Approval.

Background.

The Village issued a Request for Proposals for a Utility Rate Study for the Water and Sanitary Sewer Funds in 2022. Included in that proposal was an alternate for a rate study of the Stormwater Fund. With Resolution 2022-34 the execution of an agreement with NewGen Strategies and Solutions was authorized for the Water and Sanitary Sewer Funds. The Stormwater Fund was not included in the award at that time due to Addendum Number 3 to the Master Stormwater Management Plan being prepared, which would have significant

impacts to the planned capital in the Stormwater Fund and thus the financial resources needed in this fund.

Addendum Number 3 to the Master Stormwater Management Plan is now complete with eight projects identified at an estimated cost of $15 million. With that, Village staff reached out to NewGen Strategies and Solutions to see if they would honor their price for the Stormwater Fund Utility Rate Study. NewGen Strategies and Solutions indicated they would hold their price of $19,105 for this work. It is important to note that the scope of work in this rate study is be based on the current rate structure, if a significant change is desired (such as to an ERU basis) a review of the scope and change order to the contract will be necessary.

Exhibit A - A Confirming Resolution Authorizing the Execution of an Agreement for a Stormwater Fund Utility Rate Study.docx
Exhibit B - Agreement for Stormwater Fund Utility Rate Study.pdf

Resolution _____

BE IT RESOLVED by the President and Board of Trustees of the Village of Northbrook, County of Cook and State of Illinois, THAT:

A Confirming Resolution Authorizing the Execution of an Agreement with NewGen Strategies and Solutions, LLC of Annapolis, Maryland for a Stormwater Fund Utility Rate Study

is hereby adopted, as follows:

Section 1. Recitals.

The Village of Northbrook has completed Addendum #3 to the Master Stormwater Management Plan and to ensure adequate financial resources are available for the operations and capital investments in this fund, it is recommended the Village undertake a Utility Rate Study for the Stormwater Fund. With Resolution 2022-34, the execution of an agreement with NewGen Strategies and Solutions ("***Vendor***") was authorized for the Water and Sanitary Sewer Funds. The Stormwater Fund, which was included in the RFP and for which the Village received pricing at that time, was not included in the award due to Addendum Number 3 to the Master Stormwater Management Plan being prepared, which would have significant impacts to the planned capital in the Stormwater Fund. NewGen Strategies and Solutions indicated they would hold their price of $19,105 for this work.

Based on these factors, the Village staff recommends entering into an agreement with the Vendor for a Utility Rate Study for the Stormwater Fund ("***Agreement***").

The President and the Board of Trustees have reviewed the Agreement and have determined that it is in the best interests of the Village and the public to enter into the Agreement.

Section 2. Ratification of the Agreement

The execution of the Agreement is hereby ratified.

Section 3. Authorization of Expenditure.

The Village Manager is hereby authorized to execute such documents and make such payments as are necessary to complete the procurement of the services from the Vendor.

Section 4. Effective Date.

This Resolution shall be in full force and effect upon passage.

ATTEST:

_____
Village President

_____
Village Clerk

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CONTRACT BETWEEN

THE VILLAGE OF NORTHBROOK

AND

NewGen Strategies and Solutions, LLC.

Professional Utility Rate Study Services

Stormwater Utility

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CONTRACT BETWEEN

THE VILLAGE OF NORTHBROOK

AND

NewGen Strategies and Solutions, LLC.

Professional Utility Rate Study Services

Stormwater Utility

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ATTACHMENT A - Supplemental Schedule of Contract Terms

ATTACHMENT B - Scope of Services

ATTACHMENT C - Schedule

ATTACHMENT D - Special Project Requirements

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CONTRACT BETWEEN

THE VILLAGE OF NORTHBROOK

AND

NewGen Strategies and Solutions, LLC

Professional Utility Rate Study Services

Stormwater Utility

In consideration of the mutual promises set forth below, the Village of Northbrook, 1225 Cedar Lane, Northbrook, Illinois 60062, a unit of local government created and existing under the laws of the State of Illinois ("Owner"), and NewGen Strategies and Solutions, LLC, ("Consultant"), make this Contract as of the _____ day of _____, 2023, and hereby agree as follows:

ARTICLE I
THE SERVICES

1.1 Performance of the Services

Consultant shall, at its sole cost and expense, provide, perform, and complete all of the following, all of which is herein referred to as the "Services":

1. Labor, Equipment, Materials, and Supplies. Provide, perform, and complete, in the manner described and specified in this Contract, all necessary work, labor, services, transportation, equipment, materials, apparatus, information, data, and other items necessary to accomplish the Project, as defined in Attachment A, in accordance with the Scope of Services attached hereto as Attachment B, the Submittal Requirements attached hereto as Attachment C, and the Special Project Requirements attached hereto as Attachment D.

2. Approvals. Procure and furnish all approvals and authorizations specified in Attachment A.

3. Insurance. Procure and furnish all certificates and policies of insurance specified in this Contract.

4. Quality. Provide, perform, and complete all of the foregoing in a proper and workmanlike manner, consistent with the highest standards of professional practice and in full compliance with, and as required by or pursuant to, this Contract.

1.2 Commencement and Completion Dates

Consultant shall commence the Services not later than the "Commencement Date" set forth on Attachment A and shall diligently and continuously prosecute the Services at such a rate as will allow the Services to be fully

provided, performed, and completed in full compliance with this Contract not later than the "Completion Date" or, if the Services are to be performed in separate tasks with separate completion dates, the "Completion Dates" set forth in Attachment A. The time of commencement, rate of progress, and time of completion are referred to in this Contract as the "Contract Time."

1.3 Required Submittals

A. Submittals Required. Consultant shall submit to Owner all reports, documents, data, and information specifically set forth in Attachment C or otherwise required to be submitted by Consultant under this Contract and shall, in addition, submit to Owner all such reports, documents, data, and information as may be requested by Owner to fully document the Services ("Required Submittals").

B. Time of Submission and Owner's Review. All Required Submittals shall be provided to Owner no later than the time, if any, specified in Attachment C or otherwise in this Contract. If no time for submission is specified for any Required Submittal, such Submittal shall be submitted within a reasonable time in light of its purpose and, in all events, in sufficient time, in Owner's sole opinion, to permit Owner to review the same prior to the commencement of any part of the Services to which such Required Submittal may relate. Owner shall have the right to require such corrections as may be necessary to make any Required Submittal conform to this Contract. No Services related to any Required Submittal shall be performed by Consultant until Owner has completed review of such Required Submittal with no exception noted. Owner's review and stamping of any Required Submittal shall not relieve Consultant of the entire responsibility for the performance of the Services in full compliance with, and as required by or pursuant to this Contract, and shall not be regarded as any assumption of risk or liability by Owner.

C. Responsibility for Delay. Consultant shall be responsible for any delay in the Services due to delay in providing Required Submittals conforming to this Contract.

1.4 Review and Incorporation of Contract Provisions

Consultant represents and warrants that it has carefully reviewed, and fully understood, this Contract, including all of its Attachments, all of which are by this reference incorporated into and made a part of this Contract.

1.5 Financial and Technical Ability to Perform

Consultant represents and warrants that it is financially solvent, and has the financial resources necessary, and that it is sufficiently experienced and competent, and has the necessary capital, facilities, plant, organization, and staff necessary, to provide, perform, and complete the Services in full compliance with, and as required by or pursuant to, this Contract.

1.6 Time

Consultant represents and warrants that it is ready, willing, able, and prepared to begin the Services on the Commencement Date and that the Contract Time is sufficient time to permit completion of the Services in full compliance with, and as required by or pursuant to, this Contract for the Contract Price.

1.7 Consultant's Personnel and Subcontractors

A. Consultant's Personnel. Consultant shall provide all personnel necessary to complete the Services, including without limitation the "Key Project Personnel" identified in Attachment D. Consultant shall provide to Owner telephone numbers at which the Key Project Personnel can be reached

on a 24 hour basis. Consultant and Owner may by mutual written agreement make changes and additions to the designations of Key Project Personnel. Prior to terminating the employment of any Key Project Personnel, or reassigning any of the Key Project Personnel to other positions, or upon receiving notification of the resignation of any of the Key Project Personnel, Consultant shall notify Owner as soon as practicable in advance of such proposed termination, reassignment, or resignation. Consultant shall submit justification, including a description of proposed substitute personnel, in sufficient detail to permit evaluation by Owner of the impact of the proposed action on the Services. No such termination or reassignment shall be made by Consultant without prior written approval of Owner. Consultant shall have no claim for damages, for compensation in excess of the Contract Price, or for a delay or extension of the Contract Time as a result of any such termination, reassignment, resignation, or substitution.

B. Approval and Use of Subcontractors. Consultant shall perform the Services with its own personnel and under the management, supervision, and control of its own organization unless otherwise approved by Owner in writing. All subcontractors and subcontracts used by Consultant shall be acceptable to, and approved in advance by, Owner. Owner's approval of any subcontractor or subcontract shall not relieve Consultant of full responsibility and liability for the provision, performance, and completion of the Services in full compliance with, and as required by or pursuant to, this Contract. All Services performed under any subcontract shall be subject to all of the provisions of this Contract in the same manner as if performed by employees of Consultant. Every reference in this Contract to "Consultant" shall be deemed also to refer to all subcontractors of Consultant. Every subcontract shall include a provision binding the subcontractor to all provisions of this Contract.

C. Removal of Personnel and Subcontractors. If any personnel or subcontractor fails to perform the part of the Services undertaken by it in a manner satisfactory to Owner, Consultant shall immediately upon notice from Owner remove and replace such personnel or subcontractor. Consultant shall have no claim for damages, for compensation in excess of the Contract Price, or for a delay or extension of the Contract Time as a result of any such removal or replacement.

1.8 Owner's Responsibilities

Owner shall, at its sole cost and expense and except as otherwise provided in Attachment D: (a) designate in writing a person with authority to act as Owner's representative and on Owner's behalf with respect to the Services except those matters that may require Board approval of Owner; (b) provide to Consultant all criteria and full information as to Owner's requirements for the Project or work to which the Services relate, including Owner's objectives and constraints, schedule, space, capacity and performance requirements, and budgetary limitations relevant to the Project; (c) provide to Consultant all existing studies, reports, and other available data relevant to the Project; (d) arrange for access to and make all provisions for Consultant to enter upon public and private property as reasonably required for Consultant to perform the Services; (e) provide surveys describing physical characteristics, legal limitations, and utility locations for the Project and the services of geotechnical engineers or other consultants when such services are reasonably requested by the Consultant, are necessary for the performance of the Services, and are not already provided for in Attachments B and D; (f) provide structural, mechanical, chemical, air and water pollution tests, test for hazardous materials, and other laboratory and environmental tests, inspections, and reports required by law to be provided by Owner in connection with the Project; (g) review and comment on all Required Submittals and other reports, documents, data, and information presented by Consultant; (h) except as otherwise provided in Attachment A, provide approvals from all governmental authorities having jurisdiction over the Project when such services are reasonably requested by the Consultant, are necessary for the performance of the Services, and are not already provided for in Attachments B and D; (i) except as provided in Article IV of this Contract provide, all accounting, insurance, and legal counseling services as may be necessary from time to time in the sole judgment of Owner to protect Owner's interests with respect to the Project; (j) attend Project related meetings; and (k) give prompt written notice to Consultant whenever Owner

observes or otherwise becomes aware of any development that affects the scope or timing of the Services, provided, however, that failure to give such notice shall not relieve Consultant of any of its responsibilities under this Contract.

1.9 Owner's Right to Terminate or Suspend Services for Convenience

A. Termination or Suspension for Convenience. Owner shall have the right, for its convenience, to terminate or suspend the Services in whole or in part at any time by written notice to Consultant. Every such notice shall state the extent and effective date of such termination or suspension. On such effective date, Consultant shall, as and to the extent directed, stop Services under this Contract, cease all placement of further orders or subcontracts, terminate or suspend Services under existing orders and subcontracts, and cancel any outstanding orders or subcontracts that may be canceled.

B. Payment for Completed Services. In the event of any termination pursuant to Subsection 1.9A above, Owner shall pay Consultant (1) such direct costs, including overhead, as Consultant shall have paid or incurred for all Services done in compliance with, and as required by or pursuant to, this Contract up to the effective date of termination; and (2) such other costs pertaining to the Services, exclusive of overhead and profit, as Consultant may have reasonably and necessarily incurred as the result of such termination. Any such payment shall be offset by any prior payment or payments and shall be subject to Owner's rights to withhold and deduct as provided in this Contract.

ARTICLE II
CHANGES AND DELAYS

2.1 Changes

Owner shall have the right, by written order executed by Owner, to make changes in the Contract, the Project, the Services and the Contract Time ("Change Order"). If any Change Order causes an increase or decrease in the amount of the Services, an equitable adjustment in the Contract Price or Contract Time may be made. No decrease in the amount of the Services caused by any Change Order shall entitle Consultant to make any claim for damages, anticipated profits, or other compensation.

2.2 Delays

For any delay that may result from causes that could not be avoided or controlled by Consultant, Consultant shall, upon timely written application, be entitled to issuance of a Change Order providing for an extension of the Contract Time for a period of time equal to the delay resulting from such unavoidable cause. No extension of the Contract Time shall be allowed for any other delay in completion of the Services.

2.3 No Constructive Change Orders

No claims for equitable adjustments in the Contract Price or Contract Time shall be made or allowed unless embodied in a Change Order. If Owner fails to issue a Change Order including, or fully including, an equitable adjustment in the Contract Price or Contract Time to which Consultant claims it is entitled, or, if Consultant believes that any requirement, direction, instruction, interpretation, determination, or decision of Owner entitles Consultant to an equitable adjustment in the Contract Price or Contract Time that has not been included, or fully included, in a Change Order, then Consultant shall submit to Owner a written request for the issuance of, or revision of, a Change Order, including the equitable adjustment, or the additional equitable adjustment, in the Contract Price or Contract Time that Consultant claims has not been included, or fully included, in a Change Order. Such request shall be submitted before Consultant proceeds with any Services for which Consultant claims an equitable

adjustment is due and shall, in all events, be submitted no later than two business days after receipt of such Change Order or receipt of notice of such requirement, direction, instruction, interpretation, determination, or decision. Notwithstanding the submission of any such request, Consultant shall, unless otherwise directed by Owner within two business days after receipt by Owner of such request, proceed without delay to perform the Services in compliance with the Change Order or as required, directed, instructed, interpreted, or decided by Owner and shall, pending a final resolution of the issue, keep a daily record of such Services. Unless Consultant submits such a request within two business days after receipt of such Change Order or receipt of notice of such requirement, direction, instruction, interpretation, determination, or decision, Consultant shall be conclusively deemed (1) to have agreed that such Change Order, requirement, direction, instruction, interpretation, determination, or decision does not entitle Consultant to an equitable adjustment in the Contract Price or Contract Time and (2) to have waived all claims based on such Change Order, requirement, direction, instruction, interpretation, determination, or decision.

ARTICLE III

CONSULTANT'S RESPONSIBILITY FOR DEFECTIVE SERVICES

3.1 Consultant's Responsibilities.

A. Standard of Care. Consultant agrees that the Services and all components thereof shall conform to the requirements of this Contract; shall be fit, sufficient and suitable for the purposes expressed in, or reasonably inferred from, this Contract; shall be performed in accordance with the standards of professional practice, care and diligence practiced by recognized consulting firms performing services of a similar nature in existence at the time of performance of the Services; and the Services shall free from defects and flaws in design consistent with such standards of professional practice, care and diligence. The standards and obligations contained herein shall be in addition to any other requirements expressed in this Contract, or expressed or implied by law, which are hereby reserved unto Owner.

B. Opinions of Cost. It is recognized that neither Consultant nor Owner has control over the costs of labor, material, equipment or services furnished by others or over competitive bidding, market or negotiating conditions, or construction contractors' methods of determining their prices. Accordingly, any opinions of probable Project costs or construction costs provided for herein are estimates only, made on the basis of Consultant's experience and qualifications and represent Consultant's best judgment as an experienced and qualified professional, familiar with the industry. Consultant does not guaranty that proposals, bids or actual Project costs or construction costs will not vary from opinions of probable cost prepared by Consultant.

3.2 Corrections

Consultant shall be responsible for the quality, technical accuracy, completeness and coordination of all reports, documents, data, information and other items and services under this Contract. Consultant shall, promptly and without charge, provide, to the satisfaction of Owner, all corrective Services necessary as a result of Consultant's errors, omissions, negligent acts, or failure to meet the standard of care.

3.3 Risk of Loss

The Services and everything pertaining thereto shall be provided, performed, and completed at the sole risk and cost of Consultant. Consultant shall be responsible for any and all damages to property or persons as a result of Consultant's errors, omissions, negligent acts, or failure to meet the standard of care and for any losses or costs to repair or remedy any work undertaken by Owner based upon the

Services as a result of any such errors, omissions, negligent acts or failure to meet the standard of care. Notwithstanding any other provision of this Contract, Consultant's obligations under this Section 3.3 shall exist without regard to, and shall not be construed to be waived by, the availability or unavailability of any insurance, either of Owner or Consultant, to indemnify, hold harmless or reimburse Consultant for such damages, losses or costs.

ARTICLE IV
FINANCIAL ASSURANCES

4.1 Insurance

Contemporaneous with Consultant's execution of this Contract, Consultant shall provide certificates and policies of insurance evidencing at least the minimum insurance coverages and limits set forth in Attachment A. For good cause shown, Owner may extend the time for submission of the required policies of insurance upon such terms, and with such assurances of complete and prompt performance, as Owner may impose in the exercise of its sole discretion. **Such policies shall be in a form acceptable to Owner and from companies with a general rating of A minus and a financial size category of Class X or better in Best's Insurance Guide and otherwise acceptable to Owner. Such insurance shall provide that no change, modification in, or cancellation of any insurance shall become effective until the expiration of 30 days after written notice thereof shall have been given by the insurance company to Owner.** Consultant shall, at all times while providing, performing, or completing the Services, including, without limitation, at all times while correcting any failure to meet the standard of care pursuant to Section 3.2 of this Contract, maintain and keep in force, at Consultant's expense, at least the minimum insurance coverages and limits set forth in Attachment A.

4.2 Indemnification

Consultant shall, without regard to the availability or unavailability of any insurance, either of Owner or Consultant; (A) as to Consultant's professional activities, indemnify, and save harmless Owner against any and all lawsuits, claims, demands, damages, liabilities, losses, and expenses, including attorneys' fees and administrative expenses, (collectively "Claims") that may arise out of or in connection with Consultant's negligent performance of, or failure to perform, the Services or any part thereof; and (B) as to all other activities of Consultant, indemnify, save harmless and defend Owner against any and all Claims that may arise, or be alleged to have arisen, out of or in connection with Consultant's performance of, or failure to perform, the Services or any part thereof, provided that Consultant shall not be required to indemnify Owner under provisions A or B of this Section for injury or damage to the extent caused by the negligence of Owner.

ARTICLE V
PAYMENT

5.1 Contract Price

Owner shall pay to Consultant, in accordance with and subject to the terms and conditions set forth in this Article V and Attachment A, and Consultant shall accept in full satisfaction for providing, performing, and completing the Services, the amount or amounts set forth in Attachment A (the "Contract Price"), subject to any additions, deductions, or withholdings provided for in this Contract.

5.2 Taxes, Benefits and Royalties

The Contract Price includes all applicable federal, state, and local taxes of every kind and nature applicable to the Services as well as all taxes, contributions, and premiums for unemployment insurance, old age or retirement benefits, pensions, annuities, or other similar benefits and all costs, royalties, and fees arising from the use on, or the incorporation into, the Services, of patented equipment, materials, supplies, tools, appliances, devices, processes, or inventions. All claim or right to claim additional compensation by reason of the payment of any such tax, contribution, premium, costs, royalties, or fees is hereby waived and released by Consultant.

5.3 Progress Payments

A. Payment in Installments. The Contract Price shall be paid in the manner set forth in Attachment A ("Progress Payments").

B. Pay Requests. Consultant shall, as a condition precedent to its right to receive each Progress Payment, submit to Owner an invoice accompanied by such receipts, vouchers, and other documents as may be necessary to establish Consultant's prior payment for all labor, material, and other things covered by the invoice and the absence of any interest, whether in the nature of a lien or otherwise, of any party in any property, work, or fund with respect to the Services performed under this Contract. In addition to the foregoing, such invoice shall include (a) employee classifications, rates per hour, and hours worked by each classification, and, if the Services are to be performed in separate tasks, for each task; (b) total amount billed in the current period and total amount billed to date, and, if the Services are to be performed in separate tasks, for each task; (c) the estimated percent completion, and, if the Services are to be performed in separate tasks, for each task; and (d) Consultant's certification that all prior Progress Payments have been properly applied to the Services with respect to which they were paid. Owner may, by written notice to Consultant, designate a specific day of each month on or before which pay requests must be submitted.

5.4 Final Acceptance and Final Payment

The Services, or, if the Services are to be performed in separate tasks, each task of the Services, shall be considered complete on the date of final written acceptance by Owner of the Services or each task of the Services, as the case may be, which acceptance shall not be unreasonably withheld or delayed. The Services or each task of the Services, as the case may be, shall be deemed accepted by Owner if not objected to in writing within 60 days after submission by Consultant of the Services or such task of Services for final acceptance and payment plus, if applicable, such additional time as may be considered reasonable for obtaining approval of governmental authorities having jurisdiction to approve the Services, or task of Services, as the case may be. As soon as practicable after final acceptance, Owner shall pay to Consultant the balance of the Contract Price or, if the Services are to be performed in separate tasks, the balance of that portion of the Contract Price with respect to such task of the Services, after deducting therefrom all charges against Consultant as provided for in this Contract ("Final Payment"). The acceptance by Consultant of Final Payment with respect to the Services or a particular task of Services, as the case may be, shall operate as a full and complete release of Owner of and from any and all lawsuits, claims, demands, damages, liabilities, losses, and expenses of, by, or to Consultant for anything done, furnished for, arising out of, relating to, or in connection with the Services or a particular task of Services, as the case may be, or for or on account of any act or neglect of Owner arising out of, relating to, or in connection with the Services or a particular task of Services, as the case may be.

5.5 Deductions

A. Owner's Right to Withhold. Notwithstanding any other provision of this Contract and without prejudice to any of Owner's other rights or remedies, Owner shall have the right at any time or times, whether before or after approval of any pay request, to deduct and withhold from any Progress or Final Payment that may be or become due under this Contract such amount as may reasonably appear necessary to compensate Owner for any actual or prospective loss due to: (1) Services that are defective, damaged, flawed, unsuitable, nonconforming, or incomplete; (2) damage for which Consultant is liable under this Contract; (3) liens or claims of lien regardless of merit; (4) claims of subcontractors, suppliers, or other persons regardless of merit; (5) delay in the progress or completion of the Services; (6) inability of Consultant to complete the Services; (7) failure of Consultant to properly complete or document any pay request; (8) any other failure of Consultant to perform any of its obligations under this Contract; or (9) the cost to Owner, including attorneys' fees and administrative costs, of correcting any of the aforesaid matters or exercising any one or more of Owner's remedies set forth in Section 6.1 of this Contract.

B. Use of Withheld Funds. Owner shall be entitled to retain any and all amounts withheld pursuant to Subsection 5.5A above until Consultant shall have either performed the obligations in question or furnished security for such performance satisfactory to Owner. Owner shall be entitled to apply any money withheld or any other money due Consultant under this Contract to reimburse itself for any and all costs, expenses, losses, damages, liabilities, suits, judgments, awards, attorneys' fees, and administrative expenses incurred, suffered, or sustained by Owner and chargeable to Consultant under this Contract.

5.6 Accounting

Consultant shall keep accounts, books, and other records of all its billable charges and costs incurred in performing the Services in accordance with generally accepted accounting practices, consistently applied, and in such manner as to permit verification of all entries. Consultant shall make all such material available for inspection by Owner, at all reasonable times during this Contract and for a period of three years following termination of this Contract. Copies of such material shall be furnished, at Owner's expense, upon request.

ARTICLE VI
REMEDIES

6.1 Owner's Remedies

If it should appear at any time prior to Final Payment for all work that Consultant has failed or refused to prosecute, or has delayed in the prosecution of, the Services with diligence at a rate that assures completion of the Services in full compliance with the requirements of this Contract, or has attempted to assign this Contract or Consultant's rights under this Contract, either in whole or in part, or has falsely made any representation or warranty in this Contract, or has otherwise failed, refused, or delayed to perform or satisfy any other requirement of this Contract or has failed to pay its debts as they come due ("Event of Default"), and has failed to cure any such Event of Default within five business days after Consultant's receipt of written notice of such Event of Default, then Owner shall have the right, at its election and without prejudice to any other remedies provided by law or equity, to pursue any one or more of the following remedies:

1. Owner may require Consultant, within such reasonable time as may be fixed by Owner, to complete or correct all or any part of the Services that are defective, damaged, flawed, unsuitable, nonconforming, or incomplete; to accelerate all or any part of the Services; and to take any or all other action necessary to bring Consultant and the Services into strict compliance with this Contract.

2. Owner may accept the defective, damaged, flawed, unsuitable, nonconforming, incomplete, or dilatory Services or part thereof and make an equitable reduction in the Contract Price.

3. Owner may terminate this Contract without liability for further payment of amounts due or to become due under this Contract.

4. Owner may withhold from any Progress Payment or Final Payment, whether or not previously approved, or may recover from Consultant, any and all costs, including attorneys' fees and administrative expenses, incurred by Owner as the result of any Event of Default or as a result of actions taken by Owner in response to any Event of Default.

5. Owner may recover any damages suffered by Owner.

6.2 Terminations and Suspensions Deemed for Convenience

Any termination or suspension of Consultant's rights under this Contract for an alleged default that is ultimately held unjustified shall automatically be deemed to be a termination or suspension for the convenience of Owner under Section 1.9 of this Contract.

ARTICLE VII
LEGAL RELATIONSHIPS AND REQUIREMENTS

7.1 Binding Effect

This Contract shall be binding upon Owner and Consultant and upon their respective heirs, executors, administrators, personal representatives, and permitted successors and assigns. Every reference in this Contract to a party shall also be deemed to be a reference to the authorized officers, employees, agents, and representatives of such party.

7.2 Relationship of the Parties

Consultant shall act as an independent contractor in providing and performing the Services. Nothing in or done pursuant to, this Contract shall be construed (1) to create the relationship of principal and agent, partners, or joint ventures between Owner and Consultant or (2) to create any relationship between Owner and any subcontractor of Consultant.

7.3 No Collusion

Consultant hereby represents and certifies that Consultant is not barred from contracting with a unit of state or local government as a result of (i) a delinquency in the payment of any tax administered by the Illinois Department of Revenue unless Consultant is contesting, in accordance with the procedures established by the appropriate revenue Act, its liability for the tax or the amount of the tax, as set forth in 65 ILCS 5/11-42.1-1; or (ii) a violation of either Section 33E-3 or Section 33E-4 of Article 33E of the Criminal Code of 1961, 720 ILCS 5/33E-1 et seq. Consultant hereby represents that the only persons, firms, or corporations interested in this Contract as principals are those disclosed to Owner prior to the execution of this Contract, and that this Contract is made without collusion with any other person, firm, or corporation. If at any time it shall be found that Consultant has, in procuring this Contract, colluded with any other person, firm, or corporation, then Consultant shall be liable to Owner for all loss or damage that Owner may suffer thereby, and this Contract shall, at Owner's option, be null and void.

7.4 Assignment

Consultant shall not (1) assign this Contract in whole or in part, (2) assign any of Consultant's rights or obligations under this Contract, or (3) assign any payment due or to become due under this Contract without the prior express written approval of Owner, which approval may be withheld in the sole and unfettered discretion of Owner; provided, however, that Owner's prior written approval shall not be required for assignments of accounts, as defined in the Illinois Commercial Code, if to do so would violate Section 9-318 of the Illinois Commercial Code, 810 ILCS 5/9-318. Owner may assign this Contract, in whole or in part, or any or all of its rights or obligations under this Contract, without the consent of Consultant.

7.5 Confidential Information

All information supplied by Owner to Consultant for or in connection with this Contract or the Services shall be held confidential by Consultant and shall not, without the prior express written consent of Owner, be used for any purpose other than performance of the Services.

7.6 No Waiver

No examination, inspection, investigation, test, measurement, review, determination, decision, certificate, or approval by Owner, nor any order by Owner for the payment of money, nor any payment for, or use, occupancy, possession, or acceptance of, the whole or any part of the Services by Owner, nor any extension of time granted by Owner, nor any delay by Owner in exercising any right under this Contract, nor any other act or omission of Owner shall constitute or be deemed to be an acceptance of any defective, damaged, flawed, unsuitable, nonconforming, or incomplete Services, nor operate to waive or otherwise diminish the effect of any warranty or representation made by Consultant; or of any requirement or provision of this Contract; or of any remedy, power, or right of Owner.

7.7 No Third Party Beneficiaries

No claim as a third party beneficiary under this Contract by any person, firm, or corporation other than Consultant shall be made or be valid against Owner.

7.8 Notices

All notices required or permitted to be given under this Contract shall be in writing and shall be deemed received by the addressee thereof when delivered in person on a business day at the address set forth below or on the third business day after being deposited in any main or branch United States post office, for delivery at the address set forth below by properly addressed, postage prepaid, certified or registered mail, return receipt requested. Notices and communications to Owner shall be addressed to, and delivered at, the following
address:

Village of Northbrook
Public Works Center
655 Huehl Road
Northbrook, Illinois 60062
Attention: Matt Morrison, Deputy Public Works Director

Notices and communications to Consultant shall be addressed to, and delivered at, the following address:

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NewGen Strategies and Solutions, LLC
900 Bestgate Road
Suite 402
Annapolis, MD 21401
Attention: Eric Callocchia, Partner

The foregoing shall not be deemed to preclude the use of other non-oral means of notification or to invalidate any notice properly given by any such other non-oral means.

By notice complying with the requirements of this Section 7.8, Owner and Consultant each shall have the right to change the address or addressee or both for all future notices to it, but no notice of a change of address or addressee shall be effective until actually received.

7.9 Governing Laws

This Contract and the rights of Owner and Consultant under this Contract shall be interpreted according to the internal laws, but not the conflict of laws rules, of the State of Illinois.

7.10 Changes in Laws

Unless otherwise explicitly provided in this Contract, any reference to laws shall include such laws as they may be amended or modified from time to time.

7.11 Compliance with Laws and Grants

Consultant shall give all notices, pay all fees, and take all other action that may be necessary to ensure that the Services are provided, performed, and completed in accordance with all required governmental permits, licenses, or other approvals and authorizations that may be required in connection with providing, performing, and completing the Services, and with all applicable statutes, ordinances, rules, and regulations, including without limitation the Fair Labor Standards Act; any statutes regarding qualification to do business; any statutes prohibiting discrimination because of, or requiring affirmative action based on, race, creed, color, national origin, age, sex, or other prohibited classification, including, without limitation, the Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12101 et seq., and the Illinois Human Rights Act, 775 ILCS 5/1-101 et seq. Consultant shall also comply with all conditions of any federal, state, or local grant received by Owner or Consultant with respect to this Contract or the Services.

Consultant shall be solely liable for any fines or civil penalties that are imposed by any governmental or quasi-governmental agency or body that may arise, or be alleged to have arisen, out of or in connection with Consultant's, or its subcontractors', performance of, or failure to perform, the Services or any part thereof.

Every provision of law required by law to be inserted into this Contract shall be deemed to be inserted herein.

7.12 Documents

Drawings, plans, specifications, photos, reports, information, observations, calculations, notes and any other reports, documents, data or information, in any form, prepared, collected, or received by Consultant in connection with any or all of the Services (the "Documents") shall be and remain the property of Owner. At Owner's request, or upon termination of this Contract, the Documents shall be delivered

promptly to Owner. Consultant shall have the right to retain copies of the Documents for its files. Consultant shall maintain files of all Documents unless Owner shall consent in writing to the destruction of the Documents. Consultant shall make, and shall cause all of its subcontractors to make,

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the Documents available for Owner's review, inspection and audit during the entire term of this Contract and for three years after termination of this Contract; provided, however, that prior to the disposal or destruction of the Documents by Consultant or any of its subcontractors following said three year period, Consultant shall give notice to Owner of any Documents to be disposed of or destroyed and the intended date, which shall be at least 90 days after the effective date of such notice of disposal or destruction. Owner shall have 90 days after receipt of any such notice to give notice to Consultant or any of its subcontractors not to dispose of or destroy said Documents and to require Consultant or any of its subcontractors to deliver same to Owner, at Owner's expense.

7.13 Time

The Contract Time is of the essence of this Contract. Except where otherwise stated, references in this Contract to days shall be construed to refer to calendar days.

7.14 Severability

The provisions of this Contract shall be interpreted when possible to sustain their legality and enforceability as a whole. In the event any provision of this Contract shall be held invalid, illegal, or unenforceable by a court of competent jurisdiction, in whole or in part, neither the validity of the remaining part of such provision, nor the validity of any other provisions of this Contract shall be in any way affected thereby.

7.15 Entire Agreement

This Contract sets forth the entire agreement of Owner and Consultant with respect to the accomplishment of the Services and the payment of the Contract Price therefor, and there are no other understandings or agreements, oral or written, between Owner and Consultant with respect to the Services and the compensation therefor.

7.16 Amendments

No modification, addition, deletion, revision, alteration, or other change to this Contract shall be effective unless and until such change is reduced to writing and executed and delivered by Owner and Consultant.

IN WITNESS WHEREOF, Owner and Consultant have caused this Contract to be executed in two original counterparts as of the day and year first written above.

(SEAL)

Attest/Witness:

VILLAGE OF NORTHBROOK:

By: _____
Debra J. Ford
Title: Village Clerk

By: _____
Cara Pavlicek
Title: Village Manager

Attest/Witness:

NewGen Strategies and Solutions, LLC:

By: DocuSigned by: Jordan Parker
Title: Administrative Assistant

By: DocuSigned by:
Title: Partner

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ATTACHMENT A

SUPPLEMENTAL SCHEDULE OF CONTRACT TERMS

1. BACKGROUND

The Village of Northbrook is an established home rule community located in northern Illinois, approximately 25 miles north of downtown Chicago. The Village of Northbrook is a full service community that provides Police, Fire, Develop and Planning (building, zoning, planning, and health), Finance (inclusive of utility billing), Public Works (water production, water distribution, streets and forestry, facilities, fleet maintenance, and storm/sanitary sewers), and administration through the Village Manager's office. The Village, which covers 13 square miles, is home to 35,222 residents as of the 2020 Census.

The Village operates three utilities including a water utility, sanitary sewer utility, and stormwater utility. The Village's water utility is inclusive of drawing water from Lake Michigan through our own intakes, pumping this raw water to our treatment facility, treatment of the water, distribution of the water, and billing for the sale of that water. Within the Village, there are about 12,500 households as well as 7 million square feet of industrial/warehouse usage, 4 million square feet of office use, and 2.6 million square feet of retail usage including a regional shopping mall Northbrook Court. Much of the Village is developed, with most building occurring as re-development. The Village is also home to 9 elementary schools, 4 junior highs, 1 high school and 4 private schools. Lastly, the Village provides wholesale potable water to the Mission Brook Sanitary District and the Village of Riverwoods.

2. STUDY OBJECTIVES

The goal of this study is to engage a qualified firm to work with the Village Managers Office, Finance, and Public Works Department to conduct a comprehensive water and sanitary sewer rate and fee study. The intent of this study is to develop a fair, equitable, and sustainable rate structure for the long term fiscal health and maintenance of the Village's stormwater utility. Specifically the rate and fee study will include:

1. Determine the fully burdened cost of providing stormwater services to all customers, including a review of outstanding debt and current and projected operational expenses.

2. Provide estimates of future capital and operational requirements based upon budget information currently available or to be made available during interviews with staff and utilizing optimistic, pessimistic and most likely assumptions. In conjunction with this, identify an appropriate level of capital spending or replacement schedule of key components of the utility.

3. Provide studies of present and future cash flow and revenue requirements based on various options, including for each option, a demonstration of the effect of variations in such critical assumptions as customer growth, water sales, seasonable aberrations, rate of change in operating expenses, the cost of capital, amount and timing of capital programs, debt service and the like for the last year of record and ten years in the future.

4. Describe the rationale for and use of extension agreements, requirements for property contributions, connection charges, charges for stormwater service.

5. Describe the rationale for, use of, and desirability of demand charges, minimum charges, uniform commodity rates, progressive steps rates, regressive step rates, seasonable rate surcharges and charges for property benefits attributable to stormwater service.

6. Demonstrate the effect on revenues or revenue requirements attributable to rate changes, billing frequency, physical and other restrictions on water use, regulatory requirements and changes in service standards.

7. Identify potential revenue sources in addition to the fees currently charged.

8. Recommend fair, easy to understand and legally defensible alternative rate structures in light of the Village's pricing objectives including customer class (i.e. number of residential, industrial, commercial, institutional, and other customers by number of connections and percentage of usage).

9. Recommend appropriate rates, charges, and one time connection fees In order to keep the Water Fund "healthy" in the short as well as long term with the least adverse impact on current and future customers as well as bondholders.

10. Demonstrate the effect of proposed rates on typical water customers.

11. Make such other observations or recommendations as may be prudent, desirable or necessary to adequately respond to ratemaking concerns of Village staff, elected officials and customer classes.

3. STORMWATER UTILITY RATE STUDY (OPTIONAL)

The Village of Northbrook owns, operates, and maintains a storm sewer system that consists of:

-125 miles of storm sewer
-5,300 inlets, catch basins, and manhole structures
-6 lift stations or pump sites
-24 miles of drainage ditch

The Village of Northbrook established the stormwater utility in 2012 for the purposes of funding stormwater improvements, as well as the operation and maintenance of that system. The creation of the stormwater utility was done at the same time as the 2012 Master Stormwater Management Plan was completed. This plan contained 23 capital stormwater projects. Since the creation of that plan, the Village has completed two addendums bringing the total of improvement projects to 31. Of those 31 projects, 24 have been completed with one project scheduled to be completed in FY 2022/23 while the other remaining projects have been found to provide no benefit to the affected properties or the cost to construction made the project not feasible. The Village has plans in the future to work with a consulting engineer to prepare a third addendum to the Stormwater Master Plan.

The stormwater utility fee is calculated on the basis of water usage (per 1,000 gallons). Revenue from this fee is used to fund improvement projects (including the applicable debt service on these projects), vehicles associated with the sewer fund, and the operations/maintenance of the system. All residents and businesses currently pay the same rate and have the same minimum billing threshold. The Village does not charge a separate fixed fee for stormwater service.

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The stormwater utility has never had a rate study conducted. The rate, which has also not been adjusted, was established at the creation of the fund and intended to pay for the debt service of the original 23 projects associated with the Stormwater Master Plan and the operations/maintenance of the system for approximately 7 years. If the Village determines it is in its best interest it will move forward with the stormwater utility rate study.

4. INSURANCE COVERAGES:

A. Worker's Compensation and Employer's Liability with limits not less than:

(1) Worker's Compensation: Statutory;

(2) Employer's Liability:
$1,000,000 injury-per occurrence

$500,000 disease-per employee

$1,000,000 disease-policy limit

Such insurance shall evidence that coverage applies in the State of Illinois.

B. Comprehensive Motor Vehicle Liability with a combined single limit of liability for bodily injury and property damage of not less than $1,000,000 for vehicles owned, non-owned, or rented.

All employees shall be included as insureds.

C. Comprehensive General Liability with coverage written on an "occurrence" basis and with limits no less than:

General Aggregate: $2,000,000 Bodily Injury and Property Damage Combined Single Limit for this Project.

Coverages shall include:

- Broad Form Property Damage Endorsement

- Blanket Contractual Liability (must expressly cover the indemnity provisions of the Contract)

D. Professional Liability Insurance. With a limit of liability of not less than $1,000,000 per occurrence and $2,000,000 in the aggregate and covering Consultant against all sums that Consultant may be obligated to pay on account of any liability arising out of the Contract.

E. Umbrella Policy. The required coverages may be in any combination of primary, excess, and umbrella policies. Any excess or umbrella policy must provide excess coverage over underlying insurance on a following-form basis such that when any loss covered by the primary policy exceeds the limits under the primary policy, the excess or umbrella policy becomes effective to cover such loss.

F. Owner as Additional Insured. Owner shall be named as an Additional Insured and a Cancellation Notice recipient on all policies except for:

Worker's Compensation
Professional Liability

Each such additional Insured endorsement shall identify Owner as follows: The Village of Northbrook, including its Board members and elected and appointed officials, its officers, employees, agents, attorneys, consultants, and representatives.

G. Other Parties as Additional Insureds. In addition to Owner, the following parties shall be named as additional insured on the following policies: N/A

5. CONTRACT PRICE:

SCHEDULE OF PRICES

For providing, performing, and completing each task of Services, an amount equal to Consultant's Direct Labor Costs, plus an amount equal to the actual costs of all Reimbursable Expenses, but not to exceed, in each task of Services, the following not to exceed amount set forth opposite each such task except as adjusted by Change Order issued pursuant to Section 2.1 of the Contract:

TOTAL NOT TO EXCEED CONTRACT PRICE:

Nineteen thousand one hundred and five Dollars and **zero** Cents
(in writing) (in writing)

$19,105 Dollars and **00** Cents
(in figures) (in figures)

8. Payments:

For purposes of payments to Consultant, the value of the Services shall be determined as follows:

Direct Labor Costs shall mean salaries and wages paid to all Consultant personnel as set forth on the list supplied by Consultant attached hereto and referenced as Attachment A1, including all professionals whether owners or employees, engaged directly on the Project, but shall not include indirect payroll related costs or fringe benefits.

Reimbursable Expenses shall mean the actual expenses incurred by Consultant directly or indirectly in connection with the Project, including expenses for transportation, telephone, postage, computer time and other highly specialized equipment, reproduction and similar Project related items.

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ATTACHMENT B

SCOPE OF SERVICES

In order to meet the objectives, the Village anticipates that the consultant's scope of work will include at a minimum the following tasks. Deviation from these tasks shall be highlighted in the proposal. The scope of work should be conducted in conformance with standard industry methodologies and generally accepted practices.

1. Review the Village's current rate methodology and billing format and evaluate current rate design for compliance with federal and state laws and equitability among customers. Conduct a conceptual rate design workshop to evaluate rate structures alternatives and billing formats in light of current industry practice and Village input.

2. Review the Village's Climate Action Plan and incorporate into rate structures, key strategies and actions that will effect water usage and therefore water, sanitary sewer, and stormwater (if applicable) revenues. Key strategies and actions may include but are not limited to reducing water consumption, targeting top users to reduce usage, reduced irrigation, etc.

3. In order to understand and incorporate into ten-year revenue projections an analysis of reduced water consumption.

4. Project revenue requirements for stormwater operations for a ten-year period corresponding to the Village's fiscal year (May 1 to April 30). This will include projecting operating costs as well as capital costs. In addition, prepare a model to estimate rates for the next ten years.

5. Develop approximately three rate model alternatives (not rate structures) and calculate proposed water and sewer rates for the ten-year period. Evaluate impact of proposed rates on customers. Provide rate data for similar utilities in this region. Describe reasonable operational or policy level strategies including but not limited to multi-year schedule of rate changes, non-rate increase revenue enhancements, deferring or accelerating capital investment, or debt retirement and/or new debt issuance which the Village may reasonably consider as complimentary fiscal strategy in order to mitigate the impact of future revenue needs of the utility on customer rates.

6. Make presentations to staff and the Board, develop materials and participate in two (2) formal day or night meetings related to discussion, status updates, critiquing and implementation of the rate recommendations. These meetings do not include progress or project development meetings (which will be held as needed at the Village's discretion) and will be incidental to the contract.

7. The Village of Northbrook shall be provided copies and own all data produced during utility rate study. This shall include but not be limited to all reports, spreadsheets, research, etc. The Village shall be provided with at least one copy of all materials in an electronic format of its choosing.

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ATTACHMENT B-1

SCOPE OF SERVICES CONT.

NewGen Strategies and Solutions, LLC:

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ATTACHMENT C

SCHEDULE

(Tentative – To Be Completed After Proposal Submission)

Initial project meeting	Week of August 31, 2023
Project completion	April 30, 2024

DocuSign Envelope ID: 99771CC0-9F0A-4F46-843A-803D16355E9C

ATTACHMENT D

SPECIAL PROJECT REQUIREMENTS

1. Key Project Personnel Contact Information:

Name/Project Function: Telephone: E-Mail:

MEMORANDUM

To: Village Manager Cara Pavlicek
From: Director of Public Works Kelly Hamill
Cc: Village Board of Trustees
Date: 2023-09-26
Subject: A Resolution Authorizing the Purchase of LED Streetlight Fixtures from Graybar Electric Company, Inc. of St. Louis, MO

Overview/Synopsis.

Consistent with the Climate Action Plan, new LED lights will replace 112 existing streetlight fixtures. Lights in residential areas will continue to be a "Town and Country" model while arterial roadway lights will continue to be "Cobra Head" styles. Both fixtures will conform to the Village's updated Engineering Standards and can be adjusted for brightness using a dial on the fixture.

Fiscal Impact.

The price to purchase 112 fixtures is $51,504. Purchase of the fixtures will be made through the Omina Partners joint purchasing cooperative (OMNIA Contract #EV2370). These cooperatives competitively bid items and typically offer better pricing than the Village could individually obtain because of the economies of scale involved and meet the requirements of the Village's purchasing policies. Additionally, the Village will be seeking a rebate from ComEd for the energy savings as a result of the conversion to LEDs. This rebate could be as much as $9,742 to offset the cost of the material purchase.

Sufficient funds are available in the Infrastructure Capital Projects Fund in account 40-7400-531-24.

Account Name	Number	Budget	Available	Requested	Remaining	Within Budget
Traffic Signals and Street Lights	40-7400-531-24	$ 200,000	$ 139,244	$ 51,504	$87,740	Yes

Recommendation.

Approval.

Background.

Action Item BE 5-1 in the Village's Climate Action Plan (CAP) outlines the goal for all street lights to be converted to 100% LED by 2030. The Village owns and maintains 1,513 streetlights of which 229 have been converted to LED. To continue with this initiative, Village staff has identified 112 streetlight fixtures to be converted to LED. Residential lights will be the Town and Country model while roadway lights will be the Cobra Head model. Both fixtures will conform to the Village's updated Engineering Standards and can be adjusted for brightness using a dial on the fixture.

Village staff is in the process of applying for a ComEd rebate to offset the cost of this initiative. If approved, it would provide a maximum refund of $9,742. Installation of the 112 fixtures will be completed by Village staff in the North Commuter Lot, Charlemagne Subdivision, and Sky Harbor Business Park.

All fixtures come with a five-year warranty and have an estimated lifespan of 100,000 hours. Current energy consumption of the lights is roughly 23,768 kWh. With the LED fixtures, energy consumption reduces by 50% to 11,647 kWh.

Exhibit A - A Resolution Authorizing the Purchase of LED Streetlight Materials from Graybar Electric Company Inc. of St. Louis MO.docx
Exhibit B - Quote for LED Streetlight Materials.pdf

Resolution _____

BE IT RESOLVED by the President and Board of Trustees of the Village of Northbrook, County of Cook and State of Illinois, THAT:

A Resolution Authorizing the Purchase of LED Streetlight Fixtures from Graybar

is hereby adopted, as follows:

Section 1. Recitals.

The Village's Fiscal Year 2023/24 Budget includes sufficient funds for the purchase of 112 residential and roadway lighting fixtures ("***Material***") to replace old and outdated fixtures. The Village is participating in joint purchasing through Omina Partners purchasing cooperative. Public Works staff has determined that Omnia Partners purchasing polices satisfy all state and local competitive bidding requirements. Graybar Electric Company, Inc. of St. Louis, MO (***"Vendor"***) holds the competitively bid contract for the Material through Omnia Partners.

The Village's Fiscal Year 20223/24 Budget includes sufficient funds for the purchase of Material in the Infrastructure Capital Projects Fund, Account 40-7400-531-24 (Traffic Signals and Street Lights), for the purchase of 112 LED streetlight fixtures for $51,504. Based on these factors, staff recommends that the Village Board authorize the purchase of the Material from the Vendor.

The President and the Board of Trustees have reviewed the expenditure and have determined that it is in the best interests of the Village and the public to complete the procurement of the Material from the Vendor.

Section 2. Authorization of Expenditure.

The Village Manager is hereby authorized and directed to execute such documents and make such payments as are necessary to complete procurement of the Material from the Vendor.

Section 3. Effective Date.

This Resolution shall be in full force and effect upon passage.

ATTEST:

_____
Village President

_____
Village Clerk

GraybaR.
ONE PIERCE PLACE, SUITE 800
ITASCA IL 60143-3149
Phone: 630-671-6000
Fax: 630-671-6953

To: VILLAGE OF NORTHBROOK
1225 CEDAR LANE
NORTHBROOK IL 60062-4513
Attn: Joe Rizzo
Phone: 847-272-5050
Fax:
Email: adam.morrison@graybar.com

Date: 08/23/2023
Proj Name: GE COBRAHEAD & TC
GB Quote #: 0244123328
Release Nbr:
Purchase Order Nbr:
Additional Ref#
Valid From: 08/17/2023
Valid To: 09/16/2023
Contact: ADAM MORRISON
Email: adam.morrison@graybar.com

Proposal

We Appreciate Your Request and Take Pleasure in Responding As Follows

Item	Item/Type	Quantity	Supplier	Catalog Nbr	Description	Price	Unit	Ext.Price
100		63 EA	ELECTRICAL RESOURCE	ERL1016C540DG RAYL		$402.44	1	$25,353.72
200		41 EA	ELECTRICAL RESOURCE	EPTT02006AA40 EPBLCKL		$536.59	1	$22,000.19
300		8 EA	ELECTRICAL RESOURCE	EACL010H3AW7 40NAD1DKBZ		$518.75	1	$4,150.00
400		1 EA		OMNIA CONTRACT #EV2370				

Total in USD (Tax not included): $51,503.91

This equipment and associated installation charges may be financed for a low monthly payment through Graybar Financial Services (subject to credit approval). For more information call 1-800-241-7408 to speak with a leasing specialist.

To learn more about Graybar, visit our website at www.graybar.com **24-Hour Emergency Phone#: 1-800-GRAYBAR**

This Graybar quote is based on the terms of sale in the EV2370 Master Agreement which can be found by clicking the link found at https://www.omniapartners.com/hubfs/PUBLIC%20SECTOR/Supplier%20Information/Graybar/EV2370_Graybar_MAD_2017_12_20.pdf

To: VILLAGE OF NORTHBROOK
1225 CEDAR LANE
NORTHBROOK IL 60062-4513
Attn: Joe Rizzo

Date: 08/23/2023
Proj Name: GE COBRAHEAD & TC
GB Quote #: 0244123328

Proposal

We Appreciate Your Request and Take Pleasure in Responding As Follows

Signed:_____

This equipment and associated installation charges may be financed for a low monthly payment through Graybar Financial Services (subject to credit approval). For more information call 1-800-241-7408 to speak with a leasing specialist.

To learn more about Graybar, visit our website at www.graybar.com **24-Hour Emergency Phone#: 1-800-GRAYBAR**

This Graybar quote is based on the terms of sale in the EV2370 Master Agreement which can be found by clicking the link found at https://www.omniapartners.com/hubfs/PUBLIC%20SECTOR/Supplier%20Information/Graybar/EV2370_Graybar_MAD_2017_12_20.pdf

MEMORANDUM

To: Village Manager Cara Pavlicek
From: Director of Public Works Kelly Hamill
Cc: Village Board of Trustees
Date: 2023-09-26
Subject: An Ordinance Amending the Annual Fee Ordinance and Establishing Water and Sanitary Sewer Rates for FYs 2024-25 and 2025-26

Overview/Synopsis.

The Village of Northbrook has undertaken a Utility Rate Study (URS) for the Water and Sewer Funds to ensure these enterprise funds were adequately financially supported. The Public Works and Facilities Committee of the Village Board completed their review of the URS and recommended the Village Board of Trustees accept the URS. The attached Resolution accepts the final draft of the URS in accordance with the Public Works and Facilities Committee's recommendation.

Fiscal Impact.

In accordance with the URS, the recommended water and sewer rates are outlined in the table below which shows current and the proposed in FY 2024-25 and FY 2025-26, which would become effective May 1, 2024 and May 1, 2025 respectively. The water rates would increase approximately 2.0% each year and there is no increase in sewer rates. These rates will help ensure these funds are adequately financially supported.

Table 1. Proposed Water and Sewer Rates For FY 2024-25 and FY 2025-26

	FY 2023/24	FY 2024-25	FY 2025-26
Water Rates	$6.15	$6.27	$6.40
Sanitary Sewer Rates	$1.70	$1.70	$1.70

All rates are per 1,000 gallons of water used.

Recommendation.

Village Board approval of an Ordinance amending the Annual Fee Ordinance and Establishing

Water and Sanitary Sewer Rates for FYs 2024-25 and 2025-26.

Background.

The Village Board acting as a Committee of a Whole reviewed the draft Utility Rate Study (URS) prepared by NewGen Strategies and Solutions (NewGen) on November 8, 2022. At that meeting the Committee of the Whole provided feedback on the draft URS and recommended referring the URS and associated topics to the Public Works and Facilities Committee. The Village Board formally referred the URS to the Public Works and Facilities Committee on December 13, 2022 with Resolution 2022-126.

At the initial meeting of the Public Works and Facilities Committee on February 7, 2023, staff solicited further comments on the URS. Using the feedback from the Committee of the Whole and Public Works and Facilities Committee meetings, staff worked with NewGen to further refine the draft URS and the recommended rates included therein. The Public Works and Facilities Committee reviewed the revised draft of the URS and the recommended rates at their July 11, 2023 meeting and unanimously recommended that the Village Board approve the utility rates for the Water and Sewer Funds for FYs 2024-25 and 2025-26. The complete meeting packet for July 11, 2023 can be found at https://www.northbrook.il.us/AgendaCenter/ViewFile/Agenda/_07112023-2213.

Exhibit A - An Ordinance Amending the Annual Fee Ordinance for Water and Sewer Rates in FYs 24-25 and 25-26.docx

Ordinance _____

BE IT ORDAINED by the President and Board of Trustees of the Village of Northbrook, County of Cook and State of Illinois THAT:

An Ordinance Amending the Annual Fee Ordinance Regarding Water and Sanitary Sewer User Rates

shall be, and is hereby, adopted as follows:

Section 1. RECITALS.

The Village of Northbrook has undertaken a Utility Rate Study ("***Rate Study***") of the Water and Sanitary Sewer Funds to ensure the continued fiscal health of these funds. The Rate Study has been discussed and considered by the Public Works and Facilities Committee of the Village Board and the Village Board. The Utility Rate Study recommends an increase in rates, which the Public Works and Facilities Committee recommended the Village Board adopt.

Village staff recommends amendments to the Village's Annual Fee Ordinance (Ordinance No. 2022-25), as amended ("***Annual Fee Ordinance***") to enact the necessary increases in fees and charges recommended in the Rate Study. The Village is authorized by Division 124 of Article 11 of the Illinois Municipal Code to charge rates for water and sanitary sewers sufficient to provide for the maintenance, operation, and expansion of its utility systems, and the increased water rates set forth herein are adopted pursuant to that authority. The Village Board intends to maintain the current sewer rates for Fiscal Years 2024-25 and 2025-26.

Section 2. AMENDMENTS TO ANNUAL FEE ORDINANCE FOR FY 2024-25.

Section 5, entitled "Schedule of Fees, Charges and Rates," of the Annual Fee Ordinance, shall be as of May 1, 2024, further amended as follows: [Added text **bold and double underlined**; deleted text ~~struck through~~]

Annual Fee Ordinance (Municipal Code Section)	**Description**	**Fees for FY 24/25**
Section 27-61(a): Rates and Charges	Water Supply (Per 1,000 Gallons, Minimum Quarterly Charge of ~~$43.05~~ **$43.89**)	~~$6.15~~ **$6.27**

Section 3. AMENDMENTS TO ANNUAL FEE ORDINANCE FOR FY 2025-26.

Section 5, entitled "Schedule of Fees, Charges and Rates," of the Annual Fee Ordinance, shall be as of May 1, 2025, further amended as follows: [Added text **bold and double underlined**; deleted text ~~struck through~~]

Annual Fee Ordinance (Municipal Code Section)	**Description**	**Fees for FY 25/26**
Section 27-61(a): Rates and Charges	Water Supply (Per 1,000 Gallons, Minimum Quarterly Charge of ~~$43.89~~ **$44.80**)	~~$6.27~~ **$6.40**

Section 4. EFFECTIVE DATE.

This ordinance shall be in full force and effect from and after its passage, approval, and publication in pamphlet form as provided by law, but in no event prior to September 27, 2023.

ATTEST:

_____
Village President

_____
Village Clerk

MEMORANDUM

To: Village Manager Cara Pavlicek
From: Police Chief Christopher Kennedy
Cc: Village Board of Trustees
Date: 2023-09-26
Subject: An Ordinance Providing for the Disposal of Surplus Property/Evidence

Overview/Synopsis.
The Police Department is seeking authorization pursuant to the Law Enforcement Disposition of Property Act, 765 ILCS 1030/0.01 et seq. and according to Section 2-193 of the Northbrook municipal code to dispose of surplus property and evidence that has been determined to be unclaimed.

Fiscal Impact.
The Village will receive any sales proceeds, minus applicable fees, should any items be sold. Fees are set within the Vendor agreement. After roughly 120 days, any unsold items will become the property of PropertyRoom.com or will be destroyed. There is no upfront cost for this service.

Recommendation.
Approval of an Ordinance authorizing the disposal of surplus, unclaimed property.

Background.
A review of the current inventory of property held by the Police Department has identified items which are related to cases that have been adjudicated and the victim no longer wishes them returned or are found property that belongs to an owner that cannot be located after all required measures have been taken. Pursuant to the Law Enforcement Disposition of Property Act, 765 ILCS 1030/0.01 et seq., which establishes the Police Department to sell certain abandoned, lost or stolen or otherwise illegally possessed personal property six months after making a reasonable inquiry and efforts to identify and notify the owner or other person entitled to possession. Therefore, the items identified may now be categorized as “non-evidentiary” or “found property” without an owner and since it is not feasible for the Department to continue to store such property, this property is recommended for disposal in accordance with Section 2-193 of the Municipal Code.

The Code requires Village Manager approval to dispose of items with a value less than $20,000 and Village Board approval for items with a value greater than $20,000.

On March 14, 2023, by Resolution 2023-36, the Village Board authorized an Agreement with PropertyRoom.com of Frederick, Maryland, to dispose of excess non-evidentiary and found property through an online auction platform. In order to streamline the process, the Police

Department has prepared a list of the items (Attachment A) to be disposed which are individually expected to be valued less than $20,000 and have an aggregate value greater than $20,000; therefore, Village Board approval is recommended. Subject to Village Board approval, the items identified in the attached inventory list will be picked up by the vendor as soon as possible for sale by auction.

All sale proceeds, minus applicable fees, will be returned to the Village. After roughly 120 days, any unsold items will become the property of PropertyRoom.com or will be destroyed. In regards to electronic items, all information will be removed from the item's memory by Police Department staff or PropertyRoom.com staff prior to their sale.

Ordinance - An Ordincance Providing for the Disposal of Surplus Property - EF REV.docx
Exhibit A - Unclaimed Property Inventory_092623.pdf

Resolution _____

BE IT RESOLVED by the President and Board of Trustees of the Village of Northbrook, County of Cook and State of Illinois, THAT:

An Ordinance Providing for the Disposal of Surplus Property/Evidence

is hereby adopted, as follows:

Section 1. BACKGROUND.

After reviewing inventory held in the Police Department's property rooms, Police Department staff have noted an excess of property that can been categorized as "non-evidentiary" or "found property" without an owner. These items are related to cases that have been adjudicated and the victim no longer wishes them returned or are found property that belongs to an owner that cannot be located after all required measures have been taken. Due to this excess inventory, there is currently very limited room to store any new evidence or found property.

The Village Board authorized, via Resolution 2023-36, an agreement with PropertyRoom.com of Frederick, MD (***"Vendor"***) to handle the disposition of the department's surplus evidence/property inventory through an online auction platform. Police Department staff have prepared surplus items to be picked up by the vendor as soon as possible. An inventory list of the items to be disposed is attached as ***Exhibit A***.

Section 2. DISPOSAL OF EQUIPMENT.

Pursuant to the Home Rule powers of the Village of Northbrook, the Illinois Municipal Code 65 ILCS 5/11-76-4 and the Illinois Law Enforcement Disposition of Property Act 765 ILCS 1030/3, the Village President and Board of Trustees hereby find that the following described items in ***Exhibit A*** (***"Surplus Property"***) are no longer necessary or useful to the Village, and the best interests of the Village would be served by disposal of same.

Section 3. MANNER OF DISPOSAL

The Village Manager is hereby authorized and directed to transfer the Surplus Property to Vendor for sale via its online auction platform. The sales shall be advertised and the auction conducted by the Vendor as provided in the previously authorized agreement.

The Vendor shall return any sales proceeds to the Village as prescribed in the previously authorized agreement.

Section 4. ALTERNATE MANNER OF DISPOSAL.

In the event that any of the Surplus Property is not able to sell for the minimum sale price within 120 days, the Village Manager is authorized to allow Vendor to be dispose of the Surplus Property as the Vendor sees fit.

Section 5. EFFECTIVE DATE.

This Ordinance shall be in full force and effect from and after its passage and publication in the manner provided by law.

Draft: 9/26/2023

ATTEST:

_____
Village President

_____
Village Clerk

2581-000018				**2581-000032**			
14-10180	042	Golf club set		11-01754	010	bag of coins	
2581-000019				11-01754	011	bag of coins	
21-07742	001	Set of soccer goals		**2581-000033**			
2581-000020				17-10415	003	14 piece calphalon set	
15-15935	001	womans watch, yellow hoop earing		**2581-000034**			
16-06022	001	yellow bangle		17-10415	004	14 piece calphalon set	
2581-000021				**2581-000035**			
17-10415	001	Edge CTS2 monitor		17-10415	005	14 piece calphalon set	
2581-000022				**2581-000036**			
20-01945	001	red coach wristlet		17-10415	002	12" calphalon pan	
15-18246	001	leather Perry Ellis wallet with $1050 pesos					
18-12437	001	coach wallet					
2581-000023							
14-06985	001	16GB iphone					
14-06985	002	16GB iphone					
2581-000024							
16-18066	001	64GB ipad					
2581-000025							
16-03167	001	RayBan sunglasses					
2581-000026							
11-05382	006	2 jewelry boxes, 1 purse					
2581-000027							
13-01768	011	9 rings					
2581-000028							
11-01754	013	bag of silver coins					
2581-000029							
19-03819	001	ring with clear stones					
2581-000030							
11-01754	011	bag of coins					
11-01754	012	bag of coins					
2581-000031							
11-01754	012	set of congressional coins					

MEMORANDUM

To: Village Manager Cara Pavlicek
From: Director of Development and Planning Services Jonathan Mendel
Cc: Village Board of Trustees
Date: 2023-09-26
Subject: Consideration of various actions to approve the zoning relief application of Covenant Living of Northbrook, 2625 Techny Road, Plan Commission Docket No. PCD-22-11.

Overview/Synopsis.

As requested by the Village Board on September 12, 2023 at the Committee of the Whole meeting, the following actions have been prepared to approve the application of Covenant Living for construction of three, 3-story residential buildings, totaling 36 units, replacing one 24-unit single-story residential building on the northeast side of the property with frontage on Techny Road and the relocate an above-ground stream onto residential lots owned by Covenant Living on the east side of Mayapple Lane.

i. Covenant Living - Ordinance Amending Comp Plan
ii. Covenant Living - Rezoning Ordinance
iii. Covenant Living - Ordinance Amending PUD, Granting Special Permit, Variations and Site Plan Approval
iv. Covenant Living - Resolution Approving Final Plat of Subdivision
v. Covenant Living - Resolution Approving Development Agreement

Fiscal Impact.

The recommended amendments to the PUD include a Non-Emergency Fee and a Fire/EMS Service Impact Fee.

The Non-Emergency Fee is set at a base of $2,238 per call for Non-Emergency Calls upon issuance of a Certificate of Occupancy for the new units. Non emergency calls include, for example, lift/invalid assist, unintentional, and false calls for Fire and EMS services, and/or elevators and a 20 percent reduction from 2022 calls in these categories from 245 is required to avoid the fee as well as a requirement that total invalid/lift assist calls do not exceed 80 times per calendar year no individual lift/invalid assist calls to not exceed four times per calendar year.

The Fire/EMS Service Impact Fee will go into effect beginning January 1, 2025, in the amount of $1,500 for each call in excess of 471 each calendar year which is the 2018 call volume and an approximate 20% reduction from the 2022 call volume.

The Village will calculate the amount due of the Fire/EMS Service Impact Fee, if any, on or

around January 1 of each calendar year.

Recommendation.
The Village Board is asked to take final action.

Background.

On September 26, 2023, the Board of Trustees is scheduled to consider approval documents for the application filed by Covenant Home d/b/a Covenant Living of Northbrook (the "Applicant"), as owner of 2625 Techny Road; 2539 Techny Road; 2074 Greenview Road; and 2090 Greenview Road (collectively the "Subject Property"). The Applicant requests the necessary approvals to allow **construction of three, 3-story residential buildings, totaling 36 units,** replacing one 24-unit single-story residential building on the northeast side of the property with frontage on Techny Road. The plan also proposes to relocate an above-ground stream onto residential lots owned by Covenant Living on the east side of Mayapple Lane.

BACKGROUND INFORMATION

The Plan Commission and the Architectural Control Commission recommended approval of the application.

The Village Board of Trustees reviewed the application on August 8, and September 12, 2023. On September 12, upon review and discussion, the Board directed staff to draft approval documents for the Application subject to conditions including:

- Public sidewalk extension on south side of Techny Road in front of the properties owned by the Applicant;
- Site improvement related conditions as noted in the Development Agreement;
- Emergency Medical Services Impact Fee;
- Maintain single family structure on lots facing Greenview Road;
- Prohibit future purchase of single family home by the Applicant on Greenview Road;
- Comply with the Affordable Housing Ordinance and pay the agreed fee-in-lieu by the Applicant.

The Village Board meeting minutes from September 12 Committee of the Whole meeting is not available at this time.

All public comments received and submitted to the Village Board since August 8, 2023 have been attached to the agenda for the record.

VILLAGE BOARD CONSIDERATION

Upon direction received from the Board, staff and the Village Attorney have prepared approval documents for the Village Board's consideration. Also attached are the Applicant's responses to a few public comments received on September 12, 2023.

The Applicant has submitted revised engineering, landscaping, and Plat of Subdivision plans (attached) to address minor staff comments due to the design changes that were made during the public hearing process.

On September 26, 2023, the Board is scheduled to consider the following documents:

- An Ordinance Amending the Comprehensive Plan of the Village of Northbrook;
- An Ordinance Rezoning the Property at 2539 Techny Road; and a portion of 2625 Techny Road and Amending the District Zoning Map;
- An Ordinance Further Amending the Special Permit for a Planned Development and Final Plan Approval Granted by Ordinance No. 63-14 and Granting Approval of a Special Permit, Variations, and Site Plan Approval for Independent Living Senior Living Expansion;
- A Resolution Approving a Final Plat of Subdivision; and
- A Resolution Approving a Development Agreement for Covenant Living of Northbrook Redevelopment Plan

The Applicant and staff will attend the September 26, 2023 meeting in case there are any questions.

i. Covenant Living - Ordinance Amending Comp Plan.pdf
ii. Covenant Living - Rezoning Ordinance.pdf
iii. Covenant Living - Ordinance Amending PUD, Granting Special Permit, Variations and Site Plan Approval.pdf
iv. Covenant Living - Resolution Approving Final Plat of Subdivision.pdf
v. - Covenant Living - Resolution Approving Development Agreement.pdf
Exhibit A - Public Comments.pdf
Exhibit B - Staff Review Comment.pdf
Exhibit C - Applicant Response 9-12-23.pdf
Exhibit D - Applicant Submittal 9-18-23.pdf

Ordinance 2023-

BE IT ORDAINED by the President and Board of Trustees of the Village of Northbrook, County of Cook and State of Illinois THAT:

An Ordinance Amending the Comprehensive Plan of the Village of Northbrook

(2625 Techny Road – Covenant Living of Northbrook) (Plan Commission Docket No. PCD-22-11)

shall be and is hereby adopted as follows:

Section 1. BACKGROUND.

Covenant Home d/b/a Covenant Living of Northbrook ("***Applicant***"), as owner, has submitted an application requesting a comprehensive plan amendment of those parcels located at 2539 Techny Road ("***Property***").

The Property is currently designated for Single Family use in the Village of Northbrook Comprehensive Plan (2010), as amended ("***Comprehensive Plan***"), and the Applicants have requested an amendment to the Comprehensive Plan to re-designate the Property as appropriate for Senior or Special Residential ("***Amendment***").

The President and Board of Trustees hereby find that it is in the best interest of the Village and the public to adopt the Amendment in accordance with the Northbrook Zoning Code (1988), as amended ("***Zoning Code***"), and pursuant to the Village's home rule powers

Section 2. PUBLIC MEETINGS & HEARINGS.

A public hearing to consider the Requested Relief was duly advertised on April 27, 2023, and June 1, 2023 in the *Northbrook Herald* and was held at the Plan Commission's regular meeting on May 16, 2023; June 20, 2023; and July 18, 2023. On August 1, 2023, the Plan Commission formally adopted Resolution No. 23-PC-09 recommending approval of the Amendment to the Comprehensive Plan.

Section 3. AMENDMENT OF THE COMPREHENSIVE PLAN.

The Comprehensive Plan shall be, and is hereby, amended by re-designating the Property as appropriate for "Senior or Special Residential" as depicted in ***Exhibit A***, and as legally described in ***Exhibit B***, attached to and by this reference incorporated into this Ordinance, in accordance with Section 11-201 E3 of the Zoning Code and pursuant to the home rule powers of the Village of Northbrook.

Section 4. CERTIFICATE OF NOTICE

The Village Manager is hereby authorized and directed to file a Certificate of Notice of Adoption of this Amendment to the Comprehensive Plan with the Office of the Cook County Clerk in accordance with and pursuant to Paragraph 11-201 E4 of the Zoning Code.

Section 5. EFFECTIVE DATE.

This Ordinance shall be in full force and effect only upon the occurrence of all of the following events:

A. passage by the Board of Trustees by a majority vote in the manner required by law;

B. publication in pamphlet form in the manner required by law;

C. passage and publication of Ordinances (i) rezoning the Property from the R-2 and R-3 Single Family Residential to R-8 Multiple Family Residential; and (ii) granting a special permit and variations to Applicant for Independent Senior Living Facility (SIC No. 9867.00) on the Property.

PASSED: This __ day of _____, 2023.

AYES: ( )

NAYS: ( )

ABSENT: ( )

ABSTAIN: ( )

_____
Village President

ATTEST:

_____
Village Clerk

EXHIBIT A

DEPICTION OF REZONED PROPERTY

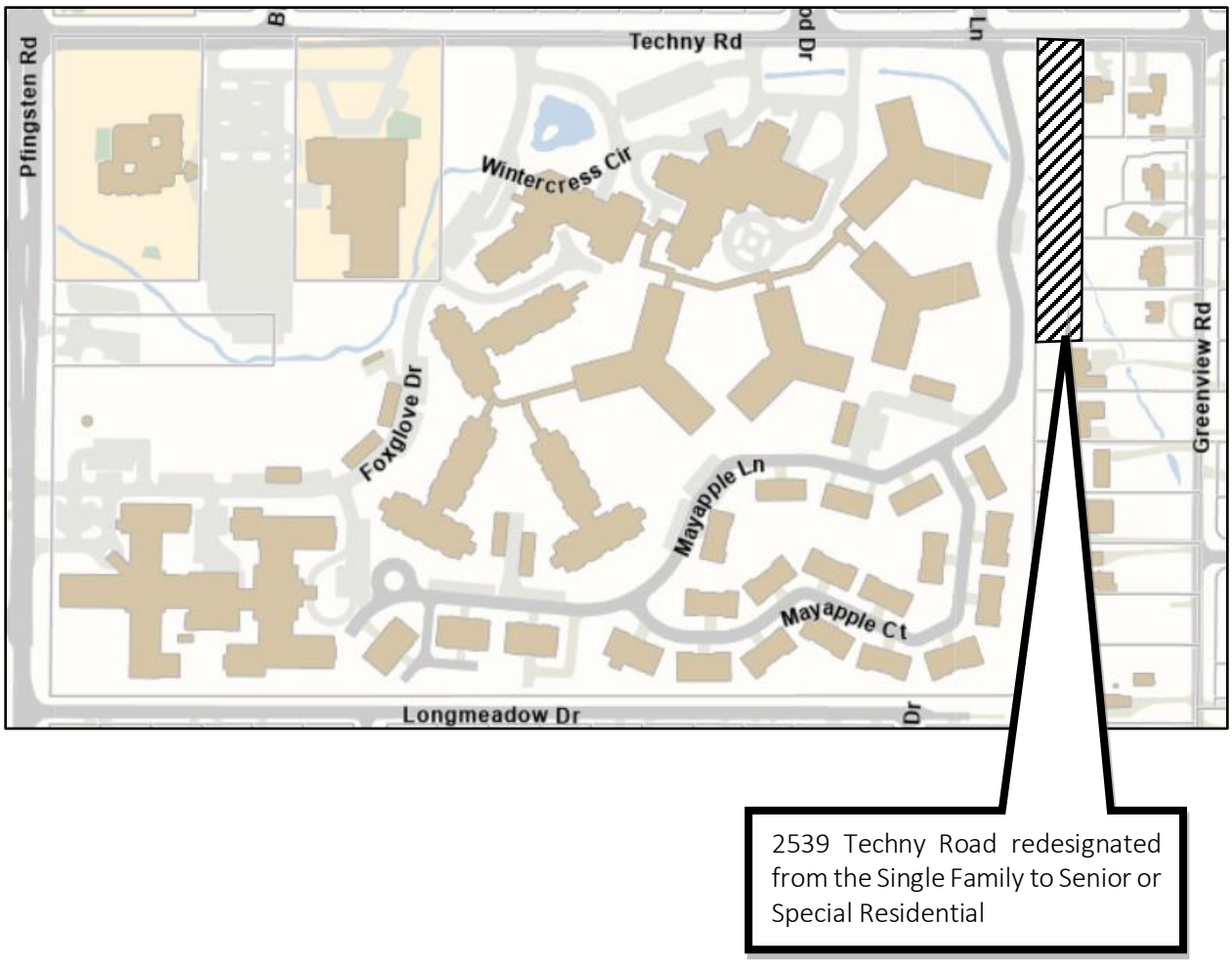


EXHIBIT B

CURRENT LEGAL DESCRIPTION

PARCEL 1:

THE EAST 1/2 OF THAT PART OF THE NORTH 400 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THRID PRICIPAL MERIDIAN, LYING WEST OF THE EAST 245 FEET OF SAID NORTH 400 FEET, (EXCEPT THEREFROM THE NORTH 33 FEET THEREOF), IN COOK COUNTY, ILLINOIS.

A NON-EXCLUSIVE EASEMENT AGREEMENT FOR THE BENEFIT OF PARCEL 1 AS CREATED BY THE VILLAGE OF NORTHBROOK DATED JULY 9, 2013 AND RECORDED SEPTEMBER 27, 2013 AS DOCUMENT NUMBER 1327013004 FOR THE PURPOSE OF PUBLIC SIDEWALK OVER THE FOLLOWING DESCRIBED LAND: THE SOUTH TWENTY FEET OF THE NORTH FIFTY FEET OF THE EAST HALF OF THAT PART OF THE NORTH 400 FEET OF THE WEST HALF OF THE EAST HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL, LYING WEST OF THE EAST 245 FEET THEREOF; IN COOK COUNTY, ILLINOIS.

PARCEL 2:

THE SOUTH 100 FEET OF THE NORTH 500 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL 3:

THE SOUTH 100 FEET OF THE NORTH 600 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PERMANENT INDEX NUMBER: 04-16-301-047-0000; 04-16-301-048-0000; 04-16-301-008-0000; 04-16-301-009-0000

Commonly known as 2539 Techny Road; 2074 Greenview Road; and 2090 Greenview Road, Northbrook, Illinois.

POST-SUBDIVISION LEGAL DESCRIPTION

LOT 3 IN GREENWOOD ROAD SUBDIVISION, BEING A SUBDIVISION OF PART OF THE NORTH 600 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED _____,___,____, AS DOCUMENT _____ IN COOK COUNTY, ILLINOIS.

Ordinance 2023-

BE IT ORDAINED by the President and Board of Trustees of the Village of Northbrook, County of Cook and State of Illinois THAT:

An Ordinance Rezoning the Property at 2539 Techny Road; and a portion of 2625 Techny Road and Amending the District Zoning Map

(2625 Techny Road – Covenant Living of Northbrook) (Plan Commission Docket No. PCD-22-11)

shall be and is hereby adopted as follows:

Section 1. BACKGROUND.

Covenant Home d/b/a Covenant Living of Northbrook ("***Applicant***"), as owner, has submitted an application requesting rezoning of the properties at 2539 Techny Road; ("***Eastern Parcels***"); and a portion of 2625 Techny Road ("***Western Parcel***") to the R-8 Multi-Family District.

On [***INSERT DATE***], the Board of Trustees of the Village of Northbrook adopted Ordinance No. 2023-[***INSERT***] which amended the Northbrook Comprehensive Plan (2010) to re-designate the Property as appropriate for Senior or Special Residential.

The Eastern Parcels are currently zoned R-3 Single Family Residential District and the Western Parcel is currently zoned R-2 Single Family Residential District. The Applicant has requested an amendment to the District Zoning Map to rezone the Eastern Parcels and the Western Parcel from to the R-8 Multi-Family Residential District ("***District Zoning Map Amendment***").

The President and Board of Trustees hereby find that it is in the best interest of the Village and the public to adopt the Amendment in accordance with the Northbrook Zoning Code (1988), as amended ("***Zoning Code***"), and pursuant to the Village's home rule powers

Section 2. PUBLIC MEETINGS & HEARINGS.

A public hearing to consider the Requested Relief was duly advertised on April 27, 2023, and June 1, 2023 in the *Northbrook Herald* and was held at the Plan Commission's regular meeting on May 16, 2023; June 20, 2023; and July 18, 2023. On August 1, 2023, the Plan Commission formally adopted Resolution No. 23-PC-09 recommending approval of the District Zoning Map Amendment.

Section 3. AMENDMENT TO THE DISTRICT ZONING MAP.

A. The District Zoning Map shall be, and is hereby, amended to rezone the Eastern Parcels, as legally described in ***Exhibit A*** and depicted in ***Exhibit B***, attached to and by this reference made a part of this Ordinance, from the R-3 Single Family Residential District to the R-8 Multi-Family Residential District, in accordance with Section 11-601 of the Zoning Code and pursuant to the Village's home rule powers.

B. The District Zoning Map shall be, and is hereby, amended to rezone the Western Parcel, as legally described in ***Exhibit A*** and depicted in ***Exhibit B***, attached to and by this reference made a part of this Ordinance, from the R-2 Single Family Residential District to the R-8 Multi-Family Residential District, in accordance with Section 11-601 of the Zoning Code and pursuant to the Village's home rule powers.

Section 4. EFFECTIVE DATE.

This Ordinance shall be in full force and effect only upon the occurrence of all of the following events:

A. passage by the Board of Trustees by a majority vote in the manner required by law;

B. publication in pamphlet form in the manner required by law;

C. passage and publication of an Ordinance granting a special permit and variations to Applicant for an Independent Senior Living Facility (SIC No. 9867.00) on the Property.

PASSED: This __ day of _____, 2023.

AYES: ( )

NAYS: ( )

ABSENT: ( )

ABSTAIN: ( )

_____
Village President

ATTEST:

_____
Village Clerk

EXHIBIT A

LEGAL DESCRIPTION

CURRENT LEGAL DESCRIPTION FOR EASTERN PARCELS

PARCEL 1:

THE EAST 1/2 OF THAT PART OF THE NORTH 400 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THRID PRICIPAL MERIDIAN, LYING WEST OF THE EAST 245 FEET OF SAID NORTH 400 FEET, (EXCEPT THEREFROM THE NORTH 33 FEET THEREOF), IN COOK COUNTY, ILLINOIS.

A NON-EXCLUSIVE EASEMENT AGREEMENT FOR THE BENEFIT OF PARCEL 1 AS CREATED BY THE VILLAGE OF NORTHBROOK DATED JULY 9, 2013 AND RECORDED SEPTEMBER 27, 2013 AS DOCUMENT NUMBER 1327013004 FOR THE PURPOSE OF PUBLIC SIDEWALK OVER THE FOLLOWING DESCRIBED LAND: THE SOUTH TWENTY FEET OF THE NORTH FIFTY FEET OF THE EAST HALF OF THAT PART OF THE NORTH 400 FEET OF THE WEST HALF OF THE EAST HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL, LYING WEST OF THE EAST 245 FEET THEREOF; IN COOK COUNTY, ILLINOIS.

PARCEL 2:

THE SOUTH 100 FEET OF THE NORTH 500 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL 3:

THE SOUTH 100 FEET OF THE NORTH 600 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PERMANENT INDEX NUMBER: 04-16-301-047-0000; 04-16-301-048-0000; 04-16-301-008-0000; 04-16-301-009-0000

Commonly known as 2539 Techny Road; 2074 Greenview Road; and 2090 Greenview Road, Northbrook, Illinois.

POST-SUBDIVISION LEGAL DESCRIPTION FOR EASTERN PARCELS

LOT 3 IN GREENWOOD ROAD SUBDIVISION, BEING A SUBDIVISION OF PART OF THE NORTH 600 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED _____,___,____, AS DOCUMENT _____ IN COOK COUNTY, ILLINOIS.

WESTERN PARCEL

PARCEL 1:

THE WEST 1/2 OF LOT 11, EXCEPT THE NORTH 33 FEET AND EXCEPT THE SOUTH 27 FEET THEREOF; AND LOT 12, EXCEPT THE NORTH 33 FEETAND EXCEPT THE SOUTH 27 FEET AND EXCEPT THE WEST 50 FEET THEREOF AND EXCEPT THE FOLLOWING DESCRIBED PARCELS:

1. THE EAST 289.00 FEET OF THE WEST 339.00 FEET OF THE SOUTH 452.55 FEET OF THE NORTH 485.55 FEET THEREOF;

2. THE EAST 289.00 FEET OF THE WETS 816.00 FEET OF THE SOUTH 452.55 FEET OF THE NORTH 485.55 FEET THEREOF;

3. BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 12 AND RUNNING THENCE NORTH, ALONG THE WEST LINE OF SAID LOT 12, A DISTANCE OF 487.00 FEET; THENCE EAST, ALONG THE NORTH LINE OF THE SOUTH 487.00 FEET OF SAID LOT 12, A DISTANCE OF 687.60 FEET; THENCE SOUTH, ALONG A STRAIGHT LINE PARALLEL WITH SAID WEST LINE OF LOT 12, A DISTANCE OF 267.00 FEET; THENCE SOUTHWESTWARDLY, ALONG A STRAIGHT LINE, A DISTANCE OF 95.82 FEET TO AN INTERSECTION WITH THE EAST LINE OF THE WEST 624.60 FEET OF SAID LOT 12 AT A POINT 150.00 FEET NORTH FROM THE SOUTH LINE OF SAID LOT 12; THENCE SOUTH, ALONG SAID EAST LINE OF THE WEST 624.60 FEET OF LOT 12, A DISTANCE OF 150.00 FEET TO THE SOUTH LINE OF LOT 12; THENCE WEST, ALONG THE SOUTH LINE OF LOT 12, A DISTANCE OF 624.60 FEET TO THE POINT OF BEGINNING, ALL IN SCHOOL TRUSTEES' SUBDIVISION OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL 2:

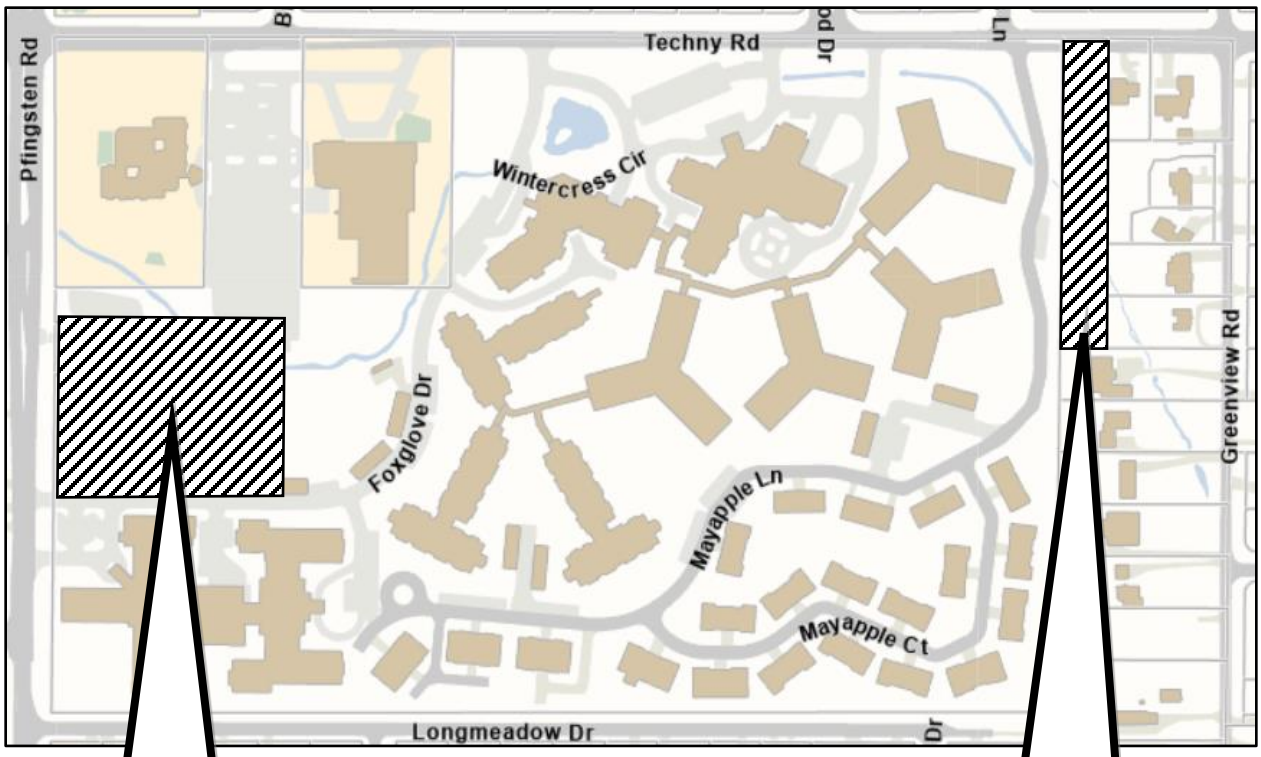
THAT PART OF THE SOUTH 487.00 FEET OF LOT 12 IN SCHOOL TRUSTEES' SUBDIVISION OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, BOUNDED AND DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 12 AND RUNNING THENCE NORTH, ALONG THE WEST LINE OF SAID LOT 12, A DISTANCE OF 487.00 FEET; THENCE EAST, ALONG THE NORTH LINE OF THE SOUTH 487.00 FEET OF SAID LOT 12, A DISTANCE OF 689.60 FEET; THENCE SOUTH, ALONG A STRAIGHT LINE PARALLEL WITH SAID WEST LINE OF LOT 12, A DISTANCE OF 267.00 FEET; THENCE SOUTHWESTWARDLY, ALONG A STRAIGHT LINE, A DISTANCE OF 95.82 FEET TO AN INTERSECTION WITH THE EAST LINE OF THE WEST 624.60 FEET OF SAID LOT 12 AT A POINT 150.00 FEET NORTH FROM THE SOUTH LINE OF SAID LOT 12; THENCE SOUTH, ALONG SAID EAST LINE OF THE WEST 624.60 FEET OF LOT 12, A DISTANCE OF 150.00 FEET TO THE SOUTH LINE OF LOT 12; THENCE WEST, ALONG THE SOUTH LINE OF LOT 12, A DISTANCE OF 624.60 FEET TO THE POINT OF BEGINNING, EXCEPTING THEREFROM THE SOUTH 27 FEET THEREOF AND EXCEPTING THEREFROM THE WEST 50 FEET THEREOF TAKEN FOR PUBLIC ROAD, ALL IN COOK COUNTY, ILLINOIS.

PERMANENT INDEX NUMBER: 04-16-300-005-0000; 04-16-300-006-0000

Commonly known as 2625 Techny Road, Northbrook, Illinois.

EXHIBIT B

DEPICTION OF REZONED PROPERTY



Western Parcel: Rezone a portion of 2625 Techny Road from the R-2 Single Family Residential District to the R-8 Multiple-Family Residential District

Eastern Parcels: Rezone 2539 Techny Road from the R-3 Single Family Residential District to the R-8 Multiple-Family Residential District

ORDINANCE 2023-____

BE IT ORDAINED by the President and Board of Trustees of the Village of Northbrook, County of Cook and State of Illinois THAT:

An Ordinance Further Amending the Special Permit for a Planned Development and Final Plan Approval Granted by Ordinance No. 63-14 and Granting Approval of a Special Permit, Variations, and Site Plan Approval for Independent Living Senior Living Expansion

(Covenant Living of Northbrook – 2625 Techny Road)
(Plan Commission Docket No. PCD-22-11)

shall be, and is hereby, adopted as follows:

SECTION 1. BACKGROUND

Covenant Home, an Illinois not for profit corporation doing business as Covenant Living of Northbrook, ("***Owner***") is the legal owner of that parcel commonly known as 2625 Techny Road ("***Existing Property***") upon which it operates an independent senior living community known as Covenant Living of Northbrook ("***Existing Planned Development***"). The Existing Planned Development is subject to Ordinance No. 63-14, which grants "Community Unit Plan" approval (***"Approved Plan"***), now referred to as a "Planned Development", to the Existing Property. Amendments, variations, alterations, and adjustments to the Approved Plan have been approved by the Village from time to time including, without limitation, Ordinance No. 72-14, Resolution No. 75-R-137, Ordinance No. 76-11, Resolution No. 76-R-15, Ordinance No. 95-10, Ordinance No. 96-32, Ordinance No. 99-63, Ordinance No. 06-25, and Ordinance No. 09-3 (collectively, the "***Prior Approval Documents***").

The Owner has acquired title to three residential lots located immediately to the east of the Existing Property commonly known as 2539 Techny Road ("***Techny Road Residential Parcel***"); 2074 Greenview Road; and 2090 Greenview Road (collectively, the "***Greenview Road Properties***"). As of the effective date of this Ordinance, the both the Existing Property and the Techny Road Residential Parcel are zoned R-8 Multiple Family Residential under the Northbrook Zoning Code (1988), as amended ("***Zoning Code***"). The Techny Road Residential Parcel is to be incorporated into the Existing Planned Development. The Greenview Road Properties will remain in the R-3 zoning district and will not be incorporated into the Existing Planned Development.

The Owner is proposing to (1) construct three, three-story senior independent living apartment buildings with a total of 36 units ("***New Apartment Buildings***") on the Existing Property and (2) install certain stormwater drainage and detention improvements including the relocation of the Techny Creek and a large stormwater detention basin ("***Stormwater Improvements***") on portions of the Existing Property and the Techny Road Residential Parcel to serve the Existing Planned Development as modified by the addition of the New Apartment Buildings (collectively, "***Expanded Planned Development***"). To bring the Expanded Planned Development into full compliance with the Zoning Code, it will also require a special use permit for the operation of an Independent Senior Living Facility (SIC No. 9867.00) on the Existing Property.

On May 16, 2023, June 20, 2023 and July 18, 2023, the Plan Commission held a public hearing to consider Owner's request for the following zoning approvals: (i) amendment to the special permit for a Planned Development authorized by the Prior Approval Documents to (1) incorporate the Techny Road Residential Parcel into the Planned Development; and (2) to allow the construction and operation of the New Apartment Buildings and the Stormwater Improvements as part of the Covenant Village Planned Development; (ii) a Special Permit to allow for an Independent Senior Living Facility (SIC No. 9867.00) on the Existing Property in the R-8 zoning district; (iii) variation to reduce the required corner side (Techny Road) yard of the Combined Property from 25' to 10' and required front (Pfingsten Road) yard of the Combined Property from 25' to 17; (vi) Site Plan approval for the Expanded Planned Development on the Combined Property; and (v) other variations, exceptions and relief as may be necessary based on the final plan (collectively, "***Requested Relief***").

The Architectural Control Commission also reviewed the application on May 11, 2023, at which time it made a recommendation to the Board to approve the proposed building elevations for the New Apartment Buildings as submitted.

The President and Board of Trustees hereby find that it is in the best interest of the public and the Village to grant the Requested Relief to allow the construction and operation of the New Apartment Buildings and the Stormwater Improvements and establishing the boundaries and operational conditions for the Expanded Planned Development.

The President and the Board of Trustees have determined that granting the Requested Relief to allow the development of the Combined Property, pursuant to, and in accordance with, the terms, conditions, and restrictions of this Ordinance, would be in the best interest of the Village and the public. This Ordinance is adopted pursuant to the Village's home rule powers.

SECTION 2. DESCRIPTION OF COMBINED PROPERTY.

For the purposes of this Ordinance, the "***Combined Property***" consists of the following components:

A. The Existing Property consists of approximately 52.38 acres and is generally located at the southeast corner of Techny Road and Pfingsten Road and legally described in ***Exhibit A*** attached to and, by this reference, made a part of this Ordinance. The Existing Property is commonly known as 2625 Techny Road.

B. The Techny Road Residential Parcel consists of approximately 1.11 acres, and is legally described in ***Exhibit A*** attached to, and by this reference, made a part of this Ordinance. The Techny Road Residential Parcel is commonly known as 2539 Techny Road.

The Combined Property consists of a total of approximately 53.49 acres.

SECTION 3. PUBLIC HEARINGS.

A public notice for the Owner's Requested Relief was duly published on April 27, 2023, and June 1, 2023 in *The Northbrook Herald* and a public hearing was held at the Plan Commission's regular meetings on May 16, 2023, June 20, 2023, and July 18, 2023. On August 1, 2023, the Plan Commission formally adopted Resolution No. 23-PC-09 recommending approval of the Requested Relief.

SECTION 4. AMENDMENT TO SPECIAL PERMIT FOR PLANNED DEVELOPMENT.

Subject to and contingent upon the conditions, restrictions, and provisions set forth in Section 9 of this Ordinance, the special permit for a phased planned development (Village SIC No. 9820.00) granted by Ordinance No. 63-14, is hereby further amended in accordance with and pursuant to Section 11-602 of the Code and the home rule powers of the Village of Northbrook to permit the construction of the New Apartment Buildings on the Existing Property and the Stormwater Improvements on a portion of the Combined Property and to permit the use and operation of the Expanded Planned Development on the Combined Property.

SECTION 5. AMENDMENT TO FINAL PLAN.

The Final Plan for the Existing Planned Development is amended specifically by replacing and supplementing the Final Plan with those plans, attached to this Ordinance as ***Exhibit B*** which shall hereafter be deemed the Final Plan for the Expanded Planned Development and shall serve as the Approved Plan for the Expanded Planned Development. All revisions to any of the plans listed in this Section 5 that are reviewed, accepted, and approved by either the Village Engineer or the Village's Director of Development and Planning Services subsequent to the date of adoption of this Ordinance shall be incorporated into, and made a part of this Ordinance and the Final Plan with no further action required by the Corporate Authorities.

SECTION 6. SPECIAL PERMIT.

Subject to and contingent upon the conditions, restrictions, and provisions set forth in Section 9 of this Ordinance, a special permit for the operation and maintenance of an Independent Senior Living Facility (SIC No. 9867.00) on the Combined Property is hereby granted to the Owner in accordance with and pursuant to Section 11-602 of the Code and the home rule powers of the Village of Northbrook. This special permit specifically does not extend to the Greenview Road Properties and Owner is prohibited from operating an Independent Senior Living Facility on the Greenview Road Properties without the approval by the Village of the applicable and necessary zoning relief.

SECTION 7. VARIATIONS.

Subject to, and contingent upon, the conditions, restrictions, and provisions set forth in Section 9 of this Ordinance, the Combined Property shall be, and is hereby granted the following variations, all in accordance with and pursuant to Section 11-503 of the Zoning Code and the home rule powers of the Village of Northbrook.

a) Variation to reduce the required corner side (Techny Road) yard from 25’ to 10’ and;

b) Variation to reduce the required front (Pfingsten Road) yard from 25’ to 17’.

SECTION 8. SITE PLAN APPROVAL.

Subject to, and contingent upon, the conditions, restrictions, and provisions set forth in Section 9 of this Ordinance, the Site Plan for the Expanded Planned Development on the Combined Property, prepared by Kimley Horn and THW Design, consisting of one page, with the most recent revision date of June 29, 2023, a copy of which is attached to, and by this reference made a part of, this Ordinance as ***Exhibit C*** (“***Site Plan***”), shall be, and is hereby, approved in accordance with and pursuant to Section 11-604 of the Zoning Code and the home rule powers of the Village.

SECTION 9. APPROVAL CONDITIONS FOR SPECIAL PERMIT, VARIATIONS, AND SITE PLAN.

The Planned Development Amendment granted in Section 4, the Special Permit granted in Section 6, the Variations granted in Section 7, and Site Plan Approval granted in Section 8 of this Ordinance are contingent upon the development, operations, and maintenance of the Expanded Planned Development on the Combined Property and the Greenview Road Properties being and remaining in substantial compliance with the following terms, conditions, and provisions:

1) Compliance with Approvals. Development, construction, use, operation, and maintenance of the Expanded Planned Development on the Combined Property shall at all times be in substantial compliance with this Ordinance, except for minor changes and site work approved by the Director of Development and Planning Services or the Village Engineer (for matters within their respective permitting authorities) in accordance with all applicable Village standards.

2) Compliance with Plans and Codes: The Expanded Planned Development on the Combined Property shall be developed in general conformance with the following plans, attached as ***Exhibit B***:

A. "Overall Exhibit," prepared by Kimley Horn and THW Design, consisting of one sheet, with a latest revision date of June 29, 2023;

B. "Engineering Plans," prepared by Kimley Horn and THW Design, consisting of seven sheets, with a latest revision date of September 14, 2023;

C. "Landscape Plans," prepared by THW Design, consisting of eight sheets, with a latest revision date of February 20, 2023; and

D. "Residential Elevations," prepared by THW Design, consisting of three sheets, with most recent revision date of January 6, 2023.

E. "Town Center & Accessory Elevations," prepared by THW Design, consisting of eight sheets, with most recent revision date of January 6, 2023.

All revisions to any of the plans listed in this Section 9 that are reviewed, accepted, and approved by either the Village Engineer or the Village's Director of Development and Planning Services subsequent to the date of adoption of this Ordinance shall be incorporated into, and made a part of this Ordinance and the Final Plan with no further action required by the Corporate Authorities

3) Compliance with Development Agreement. The Owner shall execute, and development, construction, use, operation, and maintenance of the Expanded Planned Development on the Combined Property shall at all times be in substantial compliance with, the Development Agreement in the form attached to this Ordinance as ***Exhibit D*** ("***Development Agreement***").

4) Sidewalk Extension. The Owner will construct a 153.5 feet public sidewalk on the south side of Techny Road adjacent to the Combined Property to be designed and built in accordance with the Public Improvements Standard Manual and in the specific location designated by the Village Engineer.

5) Affordable Housing. In order comply with the Village's Affordable Housing Ordinance, Article IX, Part III of the Zoning Code, the Owner will pay to the Village a fee-in-lieu in the amount of $675,000.00. This payment must be received by the Village before any Certificate of Occupancy will be issued for the New Development.

6) Fire Protection District Impact Fee. The Owner will comply with the following emergency medical services ("***EMS***") conditions:

A. Fee for Non-Emergency Calls.

i. Effective upon the issuance of a Certificate of Occupancy for the New Apartment Buildings, the Owner will pay to the Village the ambulance service fee charged by the Village and established annually by the State of Illinois Health and Family Services Cost Report GEMT Program, currently set at $2,238.00, for each occasion on which: (i) a resident of the Expanded Planned Development or the operators of the development calls the Village to provide a lift/invalid assist for a resident, visitor or employee of the development in excess of 80 times per calendar year, or (ii) a resident, visitor or employee requires a lift/invalid assist more than four times per calendar year.

ii. Beginning January 1, 2024 thru December 31, 2024, the Owner will take steps to reduce all lift/invalid assist, unintentional, and false calls for Fire and EMS services (including without limitation, false alarm, as defined in the Village Code, and calls related to elevators and/or smoke detectors) by five percent per quarter in order to achieve a 20% annual reduction from 245 (2022 number) to 196.

The Owner and the Village's Fire Chief, or their designee, will confer quarterly in 2024 to review data and progress toward the reduction in calls related to lift/invalid assists, unintentional, and false incidents responded to by the Fire Department.

B. Fire/EMS Service Impact Fee for Calls in Excess of Annual Estimate.

i. Beginning January 1, 2025, subject to force majeure, the Owner will pay the Village a Fire/EMS Service Impact Fee in the amount of $1,500 for each call in excess of 471 each calendar year which is the 2018 call volume and an approximate 20% reduction from the 2022 call volume.

ii. The Fire/EMS Service Impact Fee will be subject to review every five years to determine the current average number of Non-Emergency Calls and the corresponding annual fee. The amount of the Fire/EMS Service Impact Fee will be subject to an increase of no more than five percent on the fifth anniversary of this Ordinance.

iii. The Village will calculate the amount due of the Fire/EMS Service Impact Fee, if any, on or around January 1 of each calendar year, beginning with the January 1 after the first full calendar year following the Effective Date of this Ordinance. The Owner will pay the Village within 30 days after receipt of an invoice from the Village for the Fire/EMS Service Impact Fee.

7) Use of Greenview Road Properties. The Greenview Road Properties must at all times be used and developed in compliance with all requirements of the Village's R-3 Zoning District for so long as the Approved Plan, as amended, is in full force and effect. The Village will not issue any demolition permit for any such properties unless said demolition permit is issued concurrent with a building permit for the construction of a new single-family residential structure to be built and used in compliance with the Village's R-3 Zoning District.

8) Purchase of Properties on Greenview Road: Neither the Owner nor any entity, subsidiary or agent controlled by the Owner, may purchase, or cause to be purchased on behalf of the Owner, any property on Greenview Road in the Village of Northbrook, south of Techny Road and North of Sherman Drive, other than the Greenview Road Properties, for so long as the Approved Plan, as amended, is in full force and effect.

SECTION 10. SURVIVAL OF TERMS OF PLANNED DEVELOPMENT ORDINANCE.

Except as specifically modified in this Ordinance, all terms, covenants and conditions of Ordinance No. 63-14, as amended, shall remain in full force and effect; provided, however, that any other provisions of Ordinance No. 63-14, as amended, shall be deemed to be modified as necessary to give practical effect to the provisions of this Ordinance.

SECTION 11. FAILURE TO COMPLY WITH CONDITIONS.

Upon failure or refusal of the Owner to comply with any or all of the conditions, restrictions or provisions of this Ordinance, the Amendment granted in Section 4, Special Permit granted in Section 6, the Variations granted in Section 7, and Site Plan Approval granted in Section 8 of this ordinance shall, at the sole discretion of the Board of Trustees, by ordinance duly adopted, be revoked and become null and void; provided, however, that the Board of Trustees may not so revoke the amendment, special permit, variations, and site plan approval unless it shall first provide the Owner with two months advance written notice of the reasons for revocation and an opportunity to be heard at a regular meeting of the Board of Trustees. In the event of revocation, the development and use of the Combined Property shall be governed solely by the regulations of Ordinance No. 63-14 and the R-8 Multiple Family Residential District, as the same may, from time to time, be amended. Further, in the event of such revocation of the special permit, variations, and site plan approval, the Village Manager and Village Attorney are hereby authorized and directed to bring such zoning enforcement action as may be appropriate under the circumstances. The Owner acknowledges that public notices and hearings have been held with respect to the adoption of this Ordinance, have considered the possibility of the revocation provided for in this Section, and agree not to challenge any such revocation on the grounds of any procedural infirmity or any denial of any procedural right, provided that the notice to the Owner required by this Section has been given.

SECTION 12. AMENDMENT TO RELIEF.

Any amendment to the relief granted by this Ordinance that may be requested by the Owner after the effective date of this Ordinance may be granted only pursuant to the procedures, and subject to the standards and limitations, provided in the Zoning Code.

SECTION 13. BINDING EFFECT; TRANSFERABILITY.

The privileges, obligations, and provisions of each and every Section of this Ordinance, are for the sole benefit of, and shall be binding on, the Owner, except as otherwise expressly provided in this Ordinance. Nothing in this Ordinance shall be deemed to allow this Ordinance to be transferred to any person or entity unless and until (a) such person or entity ("***Transferee***") executes and files with the Village Clerk an unconditional agreement and consent to accept and abide by each and all of the terms, conditions, and limitations set forth in this Ordinance in a form acceptable to the Village Manager and (b) the Board of Trustees has approved such transfer by resolution duly adopted.

SECTION 14. EFFECTIVE DATE.

A. This Ordinance shall be in full force and effect only upon the occurrence of all of the following events:

i. passage by the Board of Trustees of the Village of Northbrook by a majority vote in the manner required by law;

ii. publication in pamphlet form in the manner required by law;

iii. execution and recording of the Development Agreement and;

iv. recordation of this Ordinance, together with such exhibits as the Village Clerk shall deem appropriate for recordation, with the Cook County Clerk's Office. The Owner shall bear the full cost of such recordation.

B. The Village shall have no obligation to issue any permit for the Combined Property until this Ordinance becomes effective pursuant to the conditions set forth in Subsection 14.A. In the event that the conditions set forth in Subparagraphs 14.A of this Ordinance are not satisfied within 60 days after the date of passage of this Ordinance by the Board of Trustees, the Board of Trustees shall have the right, in their sole discretion, to declare this Ordinance null and void and of no force or effect.

EXHIBIT A

LEGAL DESCRIPTION OF COMBINED PROPERTY

EXISTING PROPERTY

PARCEL 1:

THE WEST 1/2 OF LOT 11, EXCEPT THE NORTH 33 FEET AND EXCEPT THE SOUTH 27 FEET THEREOF; AND LOT 12, EXCEPT THE NORTH 33 FEET AND EXCEPT THE SOUTH 27 FEET AND EXCEPT THE WEST 50 FEET THEREOF AND EXCEPT THE FOLLOWING DESCRIBED PARCELS:

1. THE EAST 289.00 FEET OF THE WEST 339.00 FEET OF THE SOUTH 452.55 FEET OF THE NORTH 485.55 FEET THEREOF;

2. THE EAST 289.00 FEET OF THE WEST 816.00 FEET OF THE SOUTH 452.55 FEET OF THE NORTH 485.55 FEET THEREOF;

3. BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 12 AND RUNNING THENCE NORTH, ALONG THE WEST LINE OF SAID LOT 12, A DISTANCE OF 487.00 FEET; THENCE EAST, ALONG THE NORTH LINE OF THE SOUTH 487.00 FEET OF SAID LOT 12, A DISTANCE OF 687.60 FEET; THENCE SOUTH, ALONG A STRAIGHT LINE PARALLEL WITH SAID WEST LINE OF LOT 12, A DISTANCE OF 267.00 FEET; THENCE SOUTHWESTWARDLY, ALONG A STRAIGHT LINE, A DISTANCE OF 95.82 FEET TO AN INTERSECTION WITH THE EAST LINE OF THE WEST 624.60 FEET OF SAID LOT 12 AT A POINT 150.00 FEET NORTH FROM THE SOUTH LINE OF SAID LOT 12; THENCE SOUTH, ALONG SAID EAST LINE OF THE WEST 624.60 FEET OF LOT 12, A DISTANCE OF 150.00 FEET TO THE SOUTH LINE OF LOT 12; THENCE WEST, ALONG THE SOUTH LINE OF LOT 12, A DISTANCE OF 624.60 FEET TO THE POINT OF BEGINNING, ALL IN SCHOOL TRUSTEES' SUBDIVISION OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL 2:

THAT PART OF THE SOUTH 487.00 FEET OF LOT 12 IN SCHOOL TRUSTEES' SUBDIVISION OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, BOUNDED AND DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 12 AND RUNNING THENCE NORTH, ALONG THE WEST LINE OF SAID LOT 12, A DISTANCE OF 487.00 FEET; THENCE EAST, ALONG THE NORTH LINE OF THE SOUTH 487.00 FEET OF SAID LOT 12, A DISTANCE OF 689.60 FEET; THENCE SOUTH, ALONG A STRAIGHT LINE PARALLEL WITH SAID WEST LINE OF LOT 12, A DISTANCE OF 267.00 FEET; THENCE SOUTHWESTWARDLY, ALONG A STRAIGHT LINE, A DISTANCE OF 95.82 FEET TO AN INTERSECTION WITH THE EAST LINE OF THE WEST 624.60 FEET OF SAID LOT 12 AT A POINT 150.00 FEET NORTH FROM THE SOUTH LINE OF SAID LOT 12; THENCE SOUTH, ALONG SAID EAST LINE OF THE WEST 624.60 FEET OF LOT 12, A DISTANCE OF 150.00 FEET TO THE SOUTH LINE OF LOT 12; THENCE WEST, ALONG THE SOUTH LINE OF LOT 12, A DISTANCE OF 624.60 FEET TO THE POINT OF BEGINNING, EXCEPTING THEREFROM THE SOUTH 27 FEET THEREOF AND EXCEPTING THEREFROM THE WEST 50 FEET THEREOF TAKEN FOR PUBLIC ROAD, ALL IN COOK COUNTY, ILLINOIS.

PERMANENT INDEX NUMBER: 04-16-300-005-0000; 04-16-300-006-0000

Commonly known as 2625 Techny Road, Northbrook, Illinois.

CURRENT LEGAL DESCRIPTION OF TECHNY ROAD RESIDENTIAL PARCEL AND GREENVIEW ROAD PROPERTIES

PARCEL 1:

THE EAST 1/2 OF THAT PART OF THE NORTH 400 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, LYING WEST OF THE EAST 245 FEET OF SAID NORTH 400 FEET, (EXCEPT THEREFROM THE NORTH 33 FEET THEREOF), IN COOK COUNTY, ILLINOIS.

A NON-EXCLUSIVE EASEMENT AGREEMENT FOR THE BENEFIT OF PARCEL 1 AS CREATED BY THE VILLAGE OF NORTHBROOK DATED JULY 9, 2013 AND RECORDED SEPTEMBER 27, 2013 AS DOCUMENT NUMBER 1327013004 FOR THE PURPOSE OF PUBLIC SIDEWALK OVER THE FOLLOWING DESCRIBED LAND: THE SOUTH TWENTY FEET OF THE NORTH FIFTY FEET OF THE EAST HALF OF THAT PART OF THE NORTH 400 FEET OF THE WEST HALF OF THE EAST HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL, LYING WEST OF THE EAST 245 FEET THEREOF; IN COOK COUNTY, ILLINOIS.

PARCEL 2:

THE SOUTH 100 FEET OF THE NORTH 500 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL 3:

THE SOUTH 100 FEET OF THE NORTH 600 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PERMANENT INDEX NUMBER: 04-16-301-047-0000; 04-16-301-048-0000; 04-16-301-008-0000; 04-16-301-009-0000

Commonly known as 2539 Techny Road; 2074 Greenview Road; and 2090 Greenview Road, Northbrook, Illinois.

POST-SUBDIVISION LEGAL DESCRIPTION OF TECHNY ROAD RESIDENTIAL PARCEL AND GREENVIEW ROAD PROPERTIES

LOT 1 IN GREENWOOD ROAD SUBDIVISION, BEING A SUBDIVISION OF PART OF THE NORTH 600 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED _____,___,____, AS DOCUMENT _____ IN COOK COUNTY, ILLINOIS.

LOT 2 IN GREENWOOD ROAD SUBDIVISION, BEING A SUBDIVISION OF PART OF THE NORTH 600 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED _____,___,____, AS DOCUMENT _____ IN COOK COUNTY, ILLINOIS.

LOT 3 IN GREENWOOD ROAD SUBDIVISION, BEING A SUBDIVISION OF PART OF THE NORTH 600 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF, RECORDED _____,___,____, AS DOCUMENT _____ IN COOK COUNTY, ILLINOIS.

EXHIBIT B

FINAL PLANS

The Final Plan for the Expanded Planned Development Property shall be supplemented by the following plans and specifications which are attached hereto.* In the event of any conflict or inconsistency among the plans and specifications, the later dated plan or specification shall control. Upon approval the Final Plan for the Expanded Planned Development shall also be deemed the "Approved Plan" for the Expanded Planned Development.

A. "Overall Exhibit," prepared by Kimley Horn and THW Design, consisting of one sheet, with a latest revision date of June 29, 2023;

B. "Engineering Plans," prepared by Kimley Horn and THW Design, consisting of seven sheets, with a latest revision date of September 14, 2023;

C. "Landscape Plans," prepared by THW Design, consisting of eight sheets, with a latest revision date of February 20, 2023; and

D. "Residential Elevations," prepared by THW Design, consisting of three sheets, with most recent revision date of January 6, 2023.

E. "Town Center & Accessory Elevations," prepared by THW Design, consisting of eight sheets, with most recent revision date of January 6, 2023.

* Pursuant to Section 5 of this Ordinance, all revisions to any of the plans listed in this ***Exhibit B*** that are reviewed, accepted, and approved by either the Village Engineer or the Village's Director of Development and Planning Services subsequent to the date of adoption of this Ordinance shall be incorporated into, and made a part of this Ordinance and the Final Plan with no further action required by the Corporate Authorities.

BULK, SPACE AND YARD REQUIREMENTS	R-8	PROPOSED DEVELOPMENT
A. MAXIMUM HEIGHT (WHICHEVER IS LESS)		
1. FEET	65	52'7"
2. STORIES	5	3
B. MINIMUM LOT AREA AND DIMENSIONS		
1. TOTAL LOT AREA (SQUARE FEET)		
A. PLANNED DEVELOPMENT	150,000	51.2 AC
B. INDEPENDENT SENIOR LIVING FACILITY	100,000	51.2 AC
2. GROSS LOT AREA PER DWELLING UNIT (SQUARE FEET) [SEC. 6-110H.3.]		
A. INDEPENDENT SENIOR LIVING FACILITY	1,750	
B. ASSISTED LIVING FACILITY	1,750	
C. NURSING HOME FACILITY	1,750	
3. LOT WIDTH (FEET)		
ALL USES	60	2,033
C. MINIMUM YARDS & SETBACKS		
1. CORNER SIDE (FEET) ALL USES (TECHNY) [NEW CONSTRUCTION]		
A. YARD	25	10
B. SETBACK	25	70
2. FRONT (FEET) ALL USES (PFINGSTEN) [EXISTING CONDITIONS]		
YARD	25	18
SETBACK	25	30
3. INTERIOR SIDE (FEET) - SOUTH PROPERTY LINE		
YARD	6	190
SETBACK	6	188
4. REAR (FEET) - EAST PROPERTY LINE		
YARD	30	144
SETBACK	30	32
D. MINIMUM DWELLING UNIT SIZE		
1. INDEPENDENT SENIOR LIVING FACILITY	625	1,244 SF
E. MAXIMUM FLOOR AREA RATIO		
	0.6	0.32
F. MAXIMUM LOT COVERAGE		
	70	30

SITE LEGEND

- PUD BOUNDARY
- SETBACK LINE
- PROPOSED REDEVELOPMENT WITHIN PLANNED DEVELOPMENT AREA
- PROPOSED REDEVELOPMENT OUTSIDE OF PLANNED DEVELOPMENT AREA

GRAPHIC SCALE IN FEET
0 40 80 160

NORTH

BP: 10+00.00

EP: 22+60.71

EXISTING ENTRANCE TO REMAIN

EXISTING SIDEWALK TO REMAIN

375 LF OF STREAM IMPACTED

8'x4' BOX CULVERT

PROPOSED 5.0' SIDEWALK

4' EXISTING BLACK METAL FENCE

EX. HOUSE, TYP.

2535 TECHNY ROAD

2525 TECHNY ROAD

PROPOSED RELOCATED STREAM

6' EXISTING FLAT WOOD FENCE

6' PROPOSED TREX HORIZONS FENCE

REAR YARD

REALIGNMENT OF MAYAPPLE LANE

2044 GREENVIEW RD

2050 GREENVIEW RD

2074 GREENVIEW RD

2090 GREENVIEW RD

2104 GREENVIEW RD

HOMES TO REMAIN

EXISTING STREAM

DETENTION AREA

VOLUME CONTROL AREA

STREAM TO REMAIN

PEDESTRIAN BRIDGE

8' TREX HORIZONS FENCE

MOVE-IN MOVE-OUT ENTRY

TOWN CENTER EXPANSION

PROPOSED SITE LIGHTING, TYP.

LOT WIDTH 2022.6'

EXISTING 6' FLAT WOOD FENCE

PROPOSED EXPANDED PAVED LOT

PROPOSED SIDEWALK PATH

4.5' EXISTING ROUNDED WOOD FENCE

6' PROPOSED BLACK CHAINLINK FENCE

25.0' FRONT YARD/SETBACK

348.85'

PROPOSED MAINTENANCE GARAGE EXPANSION SLAB SIZE: 80'-0"x40'-0"

689.60'

619.55'

17.7' FRONT YARD

29.6' FRONT SETBACK

460.00'

PROPOSED PARKING STALLS

PROPOSED PARKING GARAGE SLAB SIZE: 82'-0" X 27'-0"

574.60'

624.60'

1364.55'

30.0' REAR YARD/SETBACK

32.9' REAR YARD SETBACK

HERETOFORE DEDICATED PER DOC. 27315702

HERETOFORE DEDICATED PER DOC. 16730498

35' BUILDING LINE

10' PUBLIC UTILITY EASEMENT

MON AT CORNER

NO.	DATE	DESCRIPTION
8	6/29/23	MWRD REVIEW #1
7	6/2/23	DETENTION REVISION
6	5/9/23	WATERMAIN REROUTE
5	3/31/23	MUDJACK ENGINEERING COMMENTS
4	2/3/23	VILLAGE ENGINEERING COMMENTS
3	1/6/23	DD ISSUANCE
2	9/30/22	PROGRESS CD'S
1	8/22/22	50% CD'S
8	6/23/22	DD ISSUANCE
7	6/10/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK

2625 TECHNY RD, NORTHBROOK, IL 60062

Kimley»Horn

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THW DESIGN

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PRELIMINARY DRAWINGS. NOT TO BE USED FOR RECORDING, IMPLEMENTATION, REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

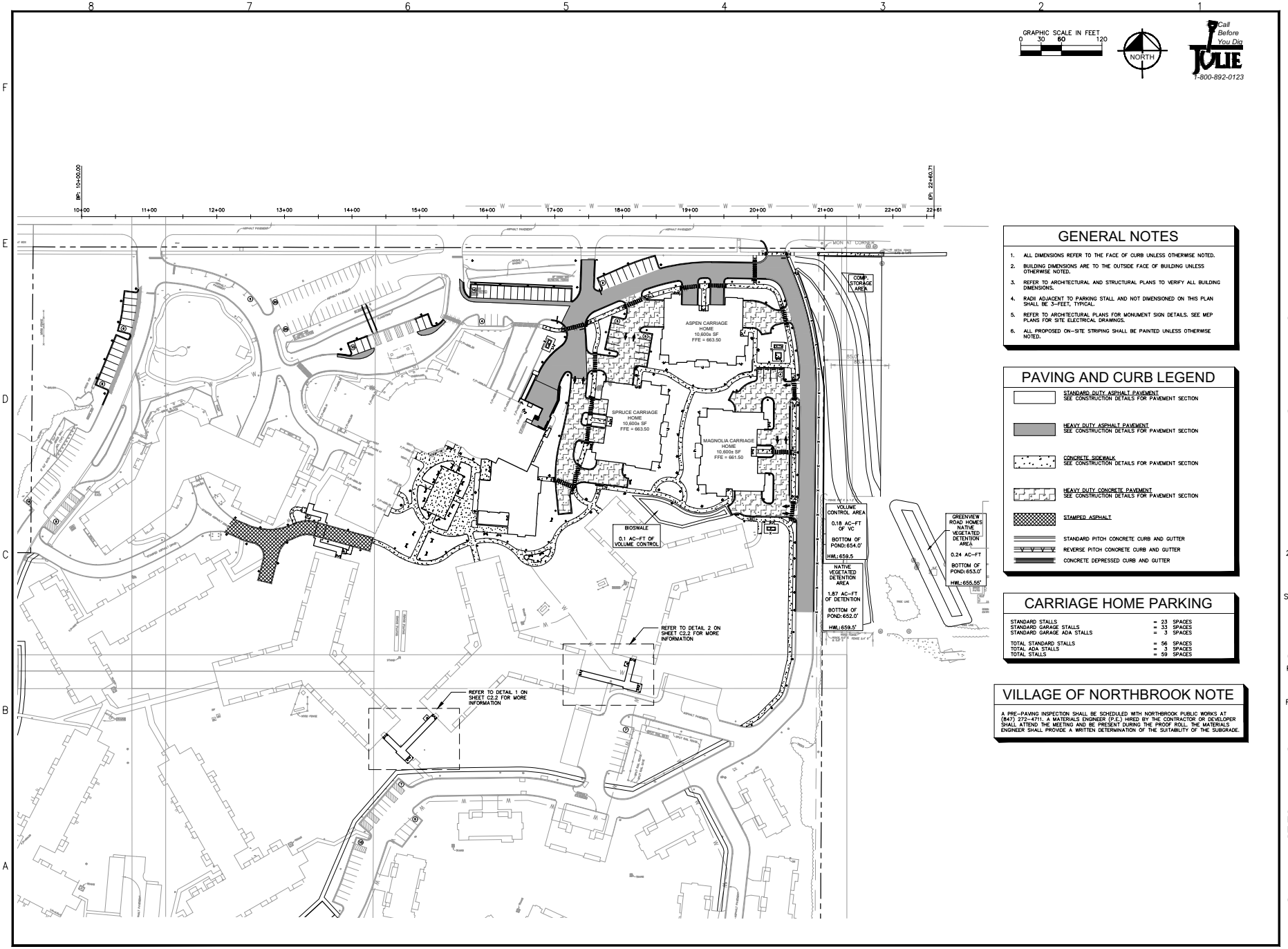
PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

OVERALL EXHIBIT

Sheet No.: C-100

K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\Exhibits\2022-0111 Overall Site Plan.dwg



GENERAL NOTES

1. ALL DIMENSIONS REFER TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
3. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
4. RADII ADJACENT TO PARKING STALL AND NOT DIMENSIONED ON THIS PLAN SHALL BE 3-FEET, TYPICAL.
5. REFER TO ARCHITECTURAL PLANS FOR MONUMENT SIGN DETAILS. SEE MEP PLANS FOR SITE ELECTRICAL DRAWINGS.
6. ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.

PAVING AND CURB LEGEND

- STANDARD DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- CONCRETE SIDEWALK — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY CONCRETE PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- STAMPED ASPHALT
- STANDARD PITCH CONCRETE CURB AND GUTTER
- REVERSE PITCH CONCRETE CURB AND GUTTER
- CONCRETE DEPRESSED CURB AND GUTTER

CARRIAGE HOME PARKING

STANDARD STALLS	= 23 SPACES
STANDARD GARAGE STALLS	= 33 SPACES
STANDARD GARAGE ADA STALLS	= 3 SPACES
TOTAL STANDARD STALLS	= 56 SPACES
TOTAL ADA STALLS	= 3 SPACES
TOTAL STALLS	= 59 SPACES

VILLAGE OF NORTHBROOK NOTE

A PRE-PAVING INSPECTION SHALL BE SCHEDULED WITH NORTHBROOK PUBLIC WORKS AT (847) 272-4711. A MATERIALS ENGINEER (P.E.) HIRED BY THE CONTRACTOR OR DEVELOPER SHALL ATTEND THE MEETING AND BE PRESENT DURING THE PROOF ROLL. THE MATERIALS ENGINEER SHALL PROVIDE A WRITTEN DETERMINATION OF THE SUITABILITY OF THE SUBGRADE.

NO.	DATE	DESCRIPTION
13	8/14/23	VILLAGE REVIEW
12	8/30/23	MWRD REVIEW #3
11	7/31/23	MWRD REVIEW #2
10	7/21/23	QA/QC - THW
9	6/29/23	MWRD REVIEW #1
8	6/2/23	DETENTION REVISION
7	5/9/23	WATERMAIN REROUTE
6	3/31/23	VILLAGE ENGINEERING COMMENTS
5	2/3/23	VILLAGE ENGINEERING COMMENTS
4	1/6/23	DD ISSUANCE
3	9/30/22	PROGRESS CD'S
2	8/22/22	50% CD'S
1	6/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

SITE PLAN

Sheet No.: C2.0

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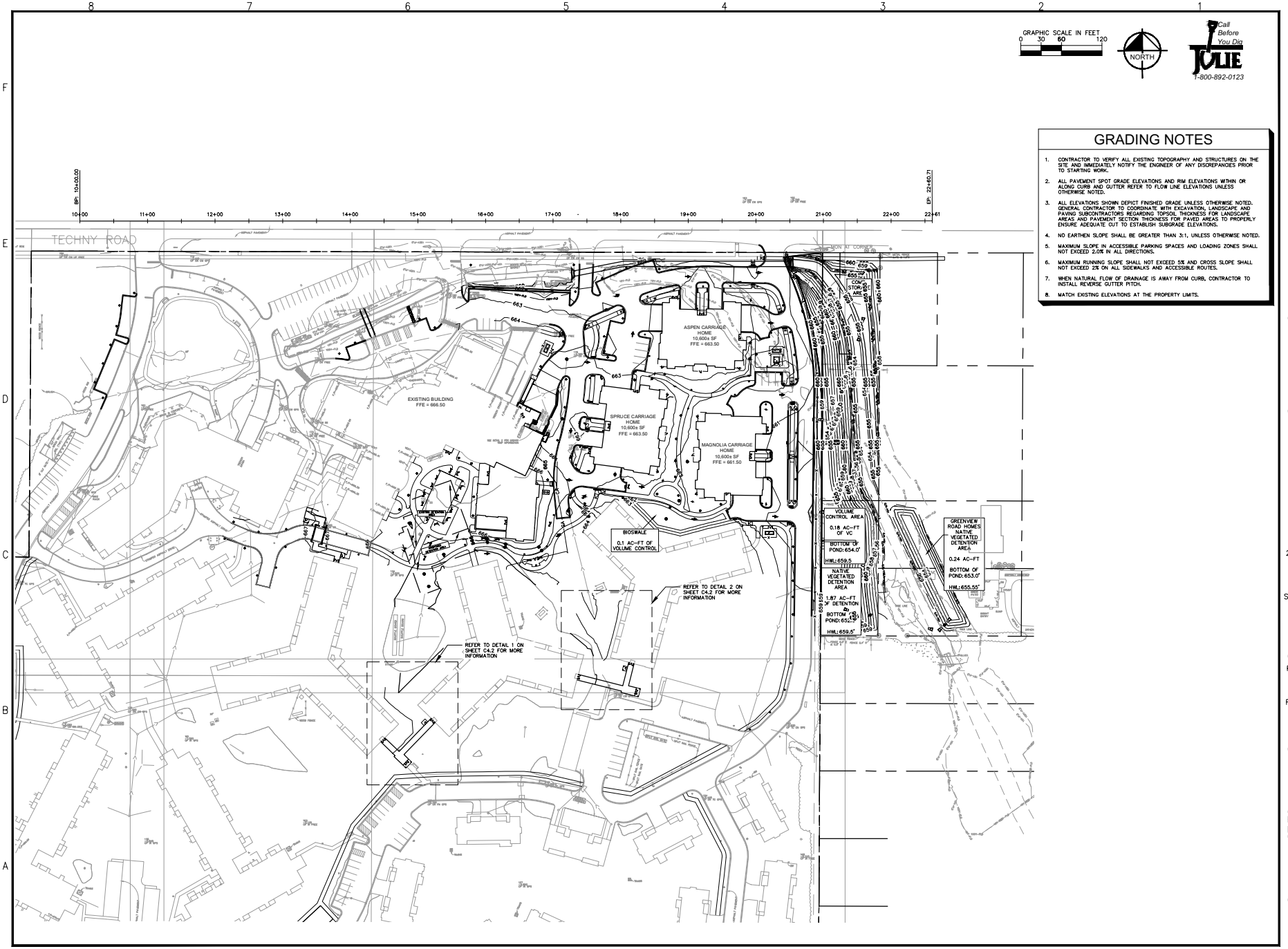

GRADING NOTES

1. CONTRACTOR TO VERIFY ALL EXISTING TOPOGRAPHY AND STRUCTURES ON THE SITE AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING WORK.
2. ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO FLOW LINE ELEVATIONS UNLESS OTHERWISE NOTED.
3. ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR TO COORDINATE WITH EXCAVATION, LANDSCAPE AND PAVING SUBCONTRACTORS REGARDING TOPSOIL THICKNESS FOR LANDSCAPE AREAS AND PAVEMENT SECTION THICKNESS FOR PAVED AREAS TO PROPERLY ENSURE ADEQUATE CUT TO ESTABLISH SUBGRADE ELEVATIONS.
4. NO EARTHEN SLOPE SHALL BE GREATER THAN 3:1, UNLESS OTHERWISE NOTED.
5. MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
6. MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES.
7. WHEN NATURAL FLOW OF DRAINAGE IS AWAY FROM CURB, CONTRACTOR TO INSTALL REVERSE GUTTER PITCH.
8. MATCH EXISTING ELEVATIONS AT THE PROPERTY LIMITS.

NO.	DATE	DESCRIPTION
8	9/14/23	VILLAGE REVIEW
7	8/30/23	MWRD REVIEW #3
6	7/31/23	MWRD REVIEW #2
5	7/21/23	QA/QC - THW
4	6/29/23	MWRD REVIEW #1
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	2/3/23	VILLAGE ENGINEERING COMMENTS
	1/6/23	DD ISSUANCE
	9/30/22	PROGRESS CD'S
	8/22/22	50% CD'S
	6/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

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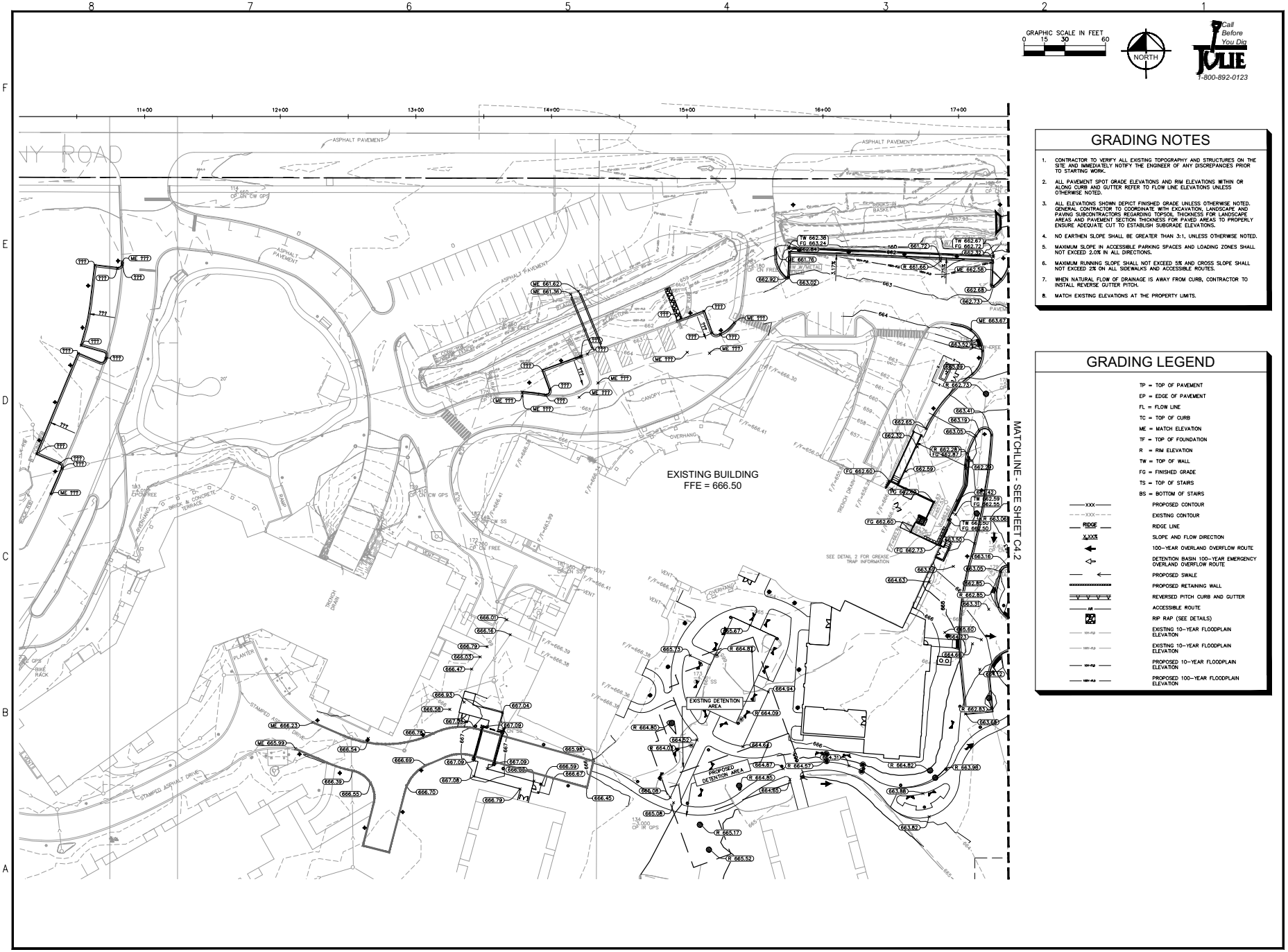
PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

GRADING AND DRAINAGE PLAN

Sheet No.: C4.0

K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\PlanSheets\C4.0 GRADING AND DRAINAGE PLAN.dwg



GRADING NOTES

1. CONTRACTOR TO VERIFY ALL EXISTING TOPOGRAPHY AND STRUCTURES ON THE SITE AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING WORK.
2. ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO FLOW LINE ELEVATIONS UNLESS OTHERWISE NOTED.
3. ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR TO COORDINATE WITH EXCAVATION, LANDSCAPE AND PAVING SUBCONTRACTORS REGARDING TOPSOIL THICKNESS FOR LANDSCAPE AREAS AND PAVEMENT SECTION THICKNESS FOR PAVED AREAS TO PROPERLY ENSURE ADEQUATE CUT TO ESTABLISH SUBGRADE ELEVATIONS.
4. NO EARTHEN SLOPE SHALL BE GREATER THAN 3:1, UNLESS OTHERWISE NOTED.
5. MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
6. MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES.
7. WHEN NATURAL FLOW OF DRAINAGE IS AWAY FROM CURB, CONTRACTOR TO INSTALL REVERSE GUTTER PITCH.
8. MATCH EXISTING ELEVATIONS AT THE PROPERTY LIMITS.

GRADING LEGEND

- TP = TOP OF PAVEMENT
- EP = EDGE OF PAVEMENT
- FL = FLOW LINE
- TC = TOP OF CURB
- ME = MATCH ELEVATION
- TF = TOP OF FOUNDATION
- R = RIM ELEVATION
- TW = TOP OF WALL
- FG = FINISHED GRADE
- TS = TOP OF STAIRS
- BS = BOTTOM OF STAIRS
- PROPOSED CONTOUR
- EXISTING CONTOUR
- RIDGE LINE
- SLOPE AND FLOW DIRECTION
- 100-YEAR OVERLAND OVERFLOW ROUTE
- DETENTION BASIN 100-YEAR EMERGENCY OVERLAND OVERFLOW ROUTE
- PROPOSED SWALE
- PROPOSED RETAINING WALL
- REVERSED PITCH CURB AND GUTTER
- ACCESSIBLE ROUTE
- RIP RAP (SEE DETAILS)
- EXISTING 10-YEAR FLOODPLAIN ELEVATION
- EXISTING 10-YEAR FLOODPLAIN ELEVATION
- PROPOSED 10-YEAR FLOODPLAIN ELEVATION
- PROPOSED 100-YEAR FLOODPLAIN ELEVATION

NO.	DATE	DESCRIPTION
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3	6/2/23	DETENTION REVISION
2	5/9/23	WATERMAIN REROUTE
1	3/31/23	VILLAGE ENGINEERING COMMENTS
	2/3/23	VILLAGE ENGINEERING COMMENTS
	1/6/23	DD ISSUANCE
	9/30/22	PROGRESS CD'S
	8/22/22	50% CD'S
	6/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK

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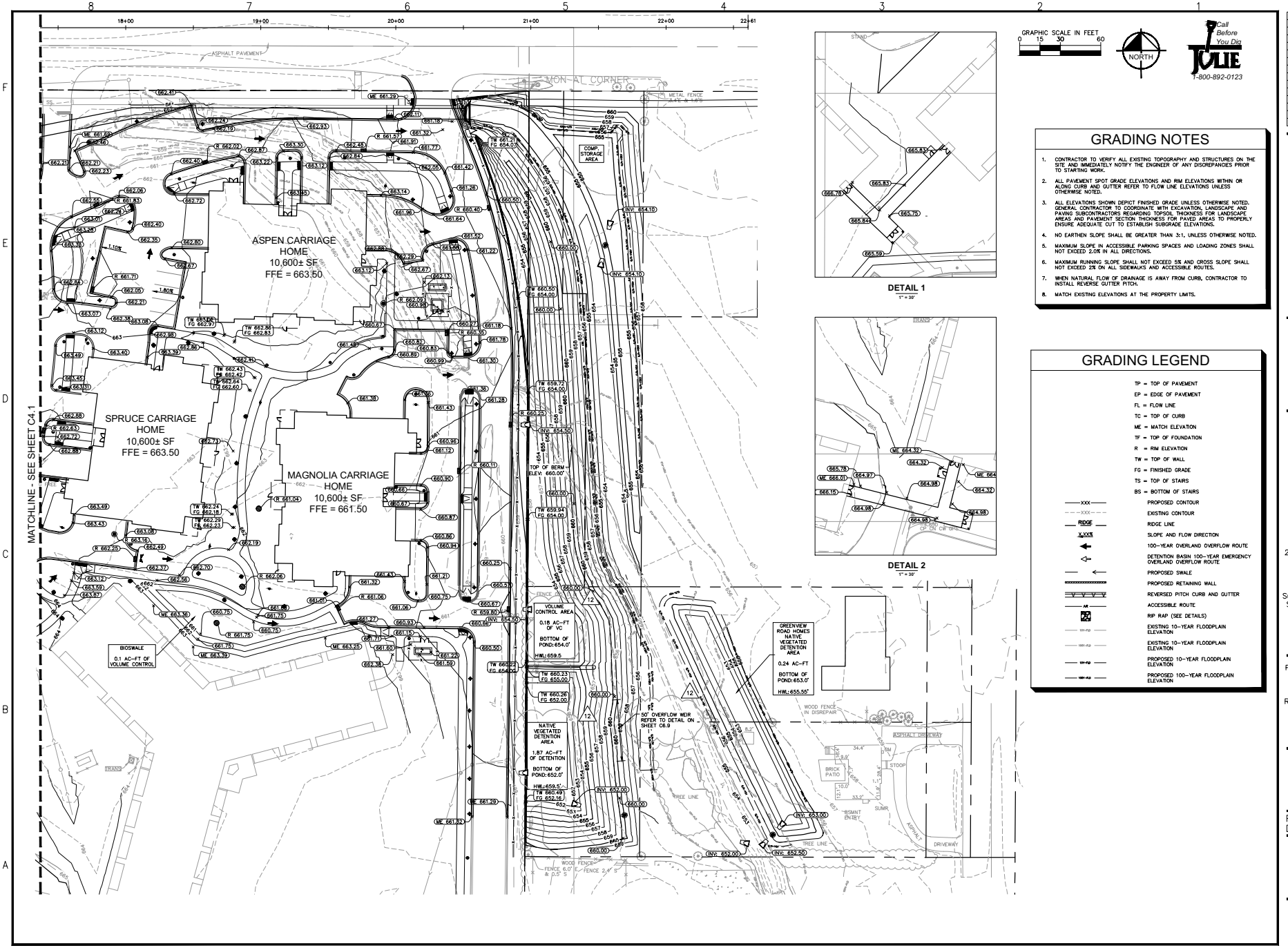
PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

GRADING AND DRAINAGE PLAN

Sheet No.: C4.1

K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\PlanSheets\C4.0 GRADING AND DRAINAGE PLAN.dwg



DETAIL 1
1" = 30'

DETAIL 2
1" = 30'

GRADING NOTES

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GRADING LEGEND

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FL	FLOW LINE
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R	RIM ELEVATION
TW	TOP OF WALL
FG	FINISHED GRADE
TS	TOP OF STAIRS
BS	BOTTOM OF STAIRS
XXX	PROPOSED CONTOUR
XXX	EXISTING CONTOUR
RIDGE	RIDGE LINE
X.XX%	SLOPE AND FLOW DIRECTION
	100-YEAR OVERLAND OVERFLOW ROUTE
	DETENTION BASIN 100-YEAR EMERGENCY OVERLAND OVERFLOW ROUTE
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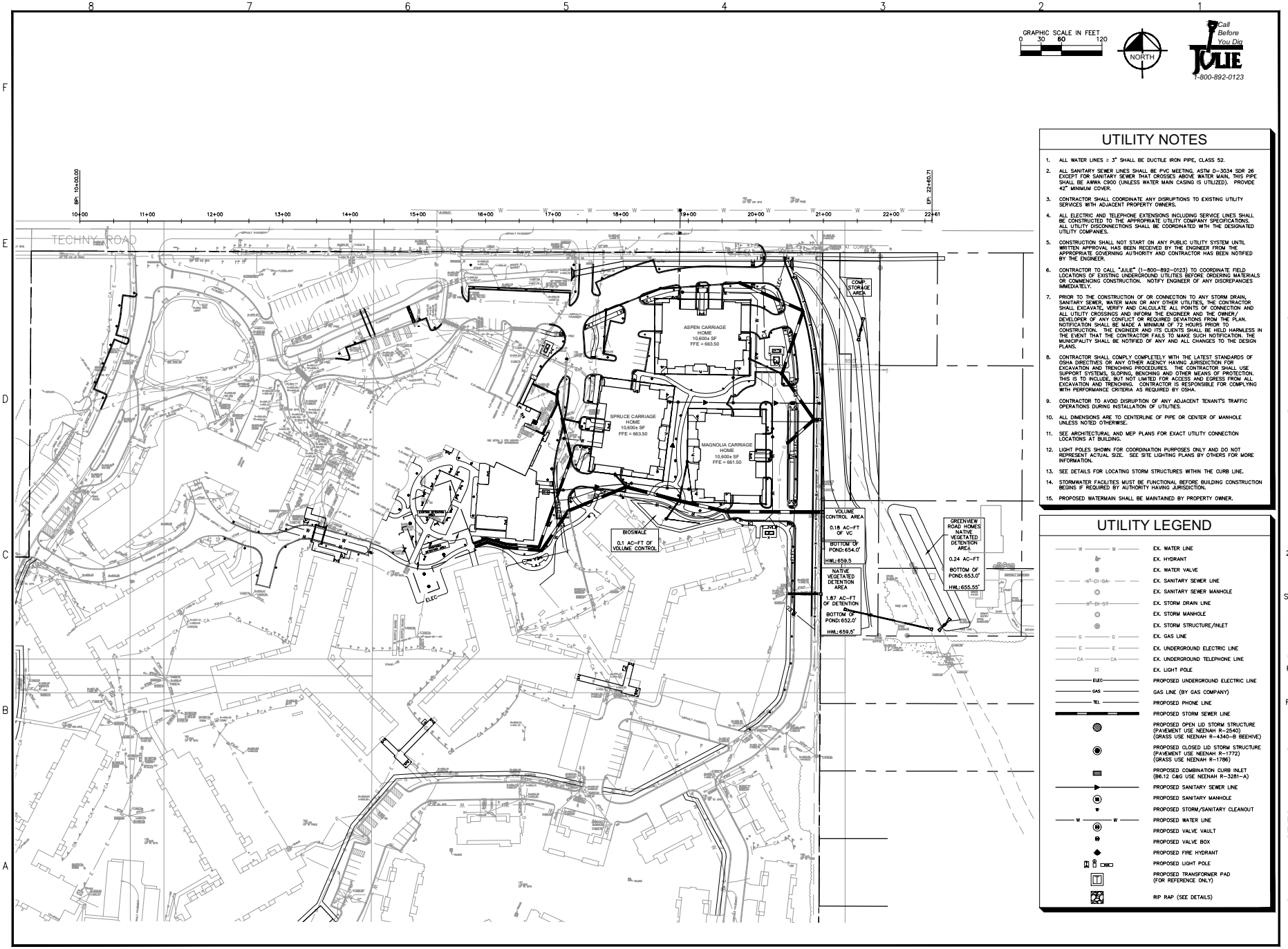
PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

GRADING AND DRAINAGE PLAN

Sheet No.: C4.2

K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\PlanSheets\C4.0 GRADING AND DRAINAGE PLAN.dwg



UTILITY NOTES

1. ALL WATER LINES ≥ 3" SHALL BE DUCTILE IRON PIPE, CLASS 52.
2. ALL SANITARY SEWER LINES SHALL BE PVC MEETING, ASTM D-3034 SDR 26 EXCEPT FOR SANITARY SEWER THAT CROSSES ABOVE WATER MAIN, THIS PIPE SHALL BE AWWA C900 (UNLESS WATER MAIN CASING IS UTILIZED). PROVIDE 42" MINIMUM COVER.
3. CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
4. ALL ELECTRIC AND TELEPHONE EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.
5. CONSTRUCTION SHALL NOT START ON ANY PUBLIC UTILITY SYSTEM UNTIL WRITTEN APPROVAL HAS BEEN RECEIVED BY THE ENGINEER FROM THE APPROPRIATE GOVERNING AUTHORITY AND CONTRACTOR HAS BEEN NOTIFIED BY THE ENGINEER.
6. CONTRACTOR TO CALL "JULIE" (1-800-892-0123) TO COORDINATE FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE ORDERING MATERIALS OR COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
7. PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OTHER UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM THE ENGINEER AND THE OWNER/DEVELOPER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. THE ENGINEER AND ITS CLIENTS SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION. THE MUNICIPALITY SHALL BE NOTIFIED OF ANY AND ALL CHANGES TO THE DESIGN PLANS.
8. CONTRACTOR SHALL COMPLY COMPLETELY WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH PERFORMANCE CRITERIA AS REQUIRED BY OSHA.
9. CONTRACTOR TO AVOID DISRUPTION OF ANY ADJACENT TENANT'S TRAFFIC OPERATIONS DURING INSTALLATION OF UTILITIES.
10. ALL DIMENSIONS ARE TO CENTERLINE OF PIPE OR CENTER OF MANHOLE UNLESS NOTED OTHERWISE.
11. SEE ARCHITECTURAL AND MEP PLANS FOR EXACT UTILITY CONNECTION LOCATIONS AT BUILDING.
12. LIGHT POLES SHOWN FOR COORDINATION PURPOSES ONLY AND DO NOT REPRESENT ACTUAL SIZE. SEE SITE LIGHTING PLANS BY OTHERS FOR MORE INFORMATION.
13. SEE DETAILS FOR LOCATING STORM STRUCTURES WITHIN THE CURB LINE.
14. STORMWATER FACILITIES MUST BE FUNCTIONAL BEFORE BUILDING CONSTRUCTION BEGINS IF REQUIRED BY AUTHORITY HAVING JURISDICTION.
15. PROPOSED WATERMAIN SHALL BE MAINTAINED BY PROPERTY OWNER.

UTILITY LEGEND

- EX. WATER LINE
- EX. HYDRANT
- EX. WATER VALVE
- EX. SANITARY SEWER LINE
- EX. SANITARY SEWER MANHOLE
- EX. STORM DRAIN LINE
- EX. STORM MANHOLE
- EX. STORM STRUCTURE/INLET
- EX. GAS LINE
- EX. UNDERGROUND ELECTRIC LINE
- EX. UNDERGROUND TELEPHONE LINE
- EX. LIGHT POLE
- PROPOSED UNDERGROUND ELECTRIC LINE
- GAS LINE (BY GAS COMPANY)
- PROPOSED PHONE LINE
- PROPOSED STORM SEWER LINE
- PROPOSED OPEN LID STORM STRUCTURE (PAVEMENT USE NEENAH R-2540) (GRASS USE NEENAH R-4340-B BEEHIVE)
- PROPOSED CLOSED LID STORM STRUCTURE (PAVEMENT USE NEENAH R-1772) (GRASS USE NEENAH R-1786)
- PROPOSED COMBINATION CURB INLET (B6.12 C&G USE NEENAH R-3281-A)
- PROPOSED SANITARY SEWER LINE
- PROPOSED SANITARY MANHOLE
- PROPOSED STORM/SANITARY CLEANOUT
- PROPOSED WATER LINE
- PROPOSED VALVE VAULT
- PROPOSED VALVE BOX
- PROPOSED FIRE HYDRANT
- PROPOSED LIGHT POLE
- PROPOSED TRANSFORMER PAD (FOR REFERENCE ONLY)
- RIP RAP (SEE DETAILS)

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

UTILITY PLAN

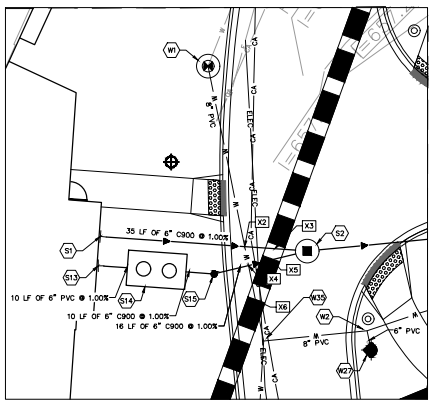
Sheet No.: C5.0

K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\PlanSheets\C5.0 UTILITY PLAN.dwg

UTILITY CROSSING LEGEND

X1	30" STORM 8" WATER	B/P = 658.89 T/P = 657.39	X4	6" SAN. 8" WATER	B/P = 660.86 T/P = 657.38
X2	6" SAN. 8" WATER	B/P = 660.07 T/P = 657.38	X5	6" SAN. 30" STORM	B/P = 660.07 T/P = 657.38
X3	6" SAN. 30" STORM	B/P = 660.43 T/P = 659.43	X6	30" STORM 8" WATER	B/P = 657.58 T/P = 655.58

NOTE: WHERE THERE IS LESS THAN 10 FT HORIZONTAL OR 18-IN VERTICAL SEPARATION BETWEEN A SEWER AND WATER MAIN, OR IF WATER MAIN CROSSES UNDER A SEWER, WATER MAIN QUALITY PIPE IS TO BE USED TO CONSTRUCT THE SEWER OR EITHER PIPE IS TO BE ENCASED. THE PROTECTION MUST EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE DISTANCE BETWEEN THE WATER MAIN AND SEWER IS AT LEAST 10 FT. ACCEPTABLE WATER MAIN QUALITY PIPE INCLUDES PVC SDR/WM2 MEETING ASTM D2241 WITH JOINTS MEETING ASTM D3139 OR DUCTILE IRON PIPE. RCP STORM SEWER WITH FLEXIBLE GASKET JOINTS MEETING ASTM C361 OR ASTM C443 IS ALSO ACCEPTABLE AT CROSSINGS.



UTILITY DETAIL
1" = 10'

GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

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UTILITY LEGEND

- EX. WATER LINE
- EX. HYDRANT
- EX. WATER VALVE
- EX. SANITARY SEWER LINE
- EX. SANITARY SEWER MANHOLE
- EX. STORM DRAIN LINE
- EX. STORM MANHOLE
- EX. STORM STRUCTURE/INLET
- EX. GAS LINE
- EX. UNDERGROUND ELECTRIC LINE
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- PROPOSED FIRE HYDRANT
- PROPOSED LIGHT POLE
- PROPOSED TRANSFORMER PAD (FOR REFERENCE ONLY)
- RIP RAP (SEE DETAILS)

MATCHLINE - SEE SHEET C5.2

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D1	CONNECT TO EXIST STORM RIM: 664.65 INV OUT: 657.80 (E, 36")
D2	5' MH – CLOSED LID RIM: 664.57 INV IN: 657.78 (W, 36") INV OUT: 657.78 (E, 36")
D3	5' MH CLOSED LID RIM: 664.19 INV IN: 657.59 (N, 36") INV OUT: 657.59 (E, 36")
D4	5' MH – OPEN LID RIM: 663.98 INV IN: 657.43 (N, 36") INV OUT: 657.43 (NE, 36")
D5	8' MH – OUTLET CONTROL STRUCTURE RIM: 662.83 INV IN: 657.22 (SW, 36") INV IN: 657.92 (S, 12") INV OUT: 657.22 (E, 36")
D6	CONNECT TO EXIST STORM RIM: 664.72 INV IN: 657.71 (E, 30")
D7	5' MH CLOSED LID RIM: 665.42 INV IN: 657.72 (E, 30") INV OUT: 657.72 (W, 30")
D8	5' MH CLOSED LID RIM: 664.98 INV IN: 657.77 (E, 30") INV OUT: 657.77 (W, 30")
D9	6' MH – OPEN LID RIM: 664.82 INV IN: 657.81 (N, 30") INV OUT: 657.81 (W, 30")
D10	5' CURB INLET RIM: 662.85 INV IN: 657.92 (N, 30") INV OUT: 657.92 (S, 30")

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D11	TRENCH DRAIN CONNECTION RIM: 662.28 INV OUT: 659.09 (SE, 12")
D33	STRUCTURE TO SIT ON UNDERGROUND DETENTION RIM: 664.80
D34	TRENCH DRAIN CONNECTION RIM: 662.28 INV IN: 658.71 (NW, 12") INV OUT: 658.71 (S, 12")
D35	INLET CONNECTION TO STORMTRAP RIM: 664.85
D36	INLET CONNECTION TO STORMTRAP RIM: 665.17
D37	INLET CONNECTION TO STORMTRAP RIM: 665.52
ED1	ADJUST RIM TO FINISH GRADE RIM: 662.73 INV OUT: 658.78 (S, 12")
ED2	CONTRACTOR TO CONFIRM SIZE AND INTACTNESS OF MH. MH TO BE 6' DIA. ADJUST RIM TO FINISHED GRADE RIM: 663.06 INV IN: 658.35 (N, 12") INV IN: 658.35 (N, 12") INV IN: 658.35 (E, 12") INV OUT: 658.35 (S, 30")

SANITARY STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
S1	SANITARY BUILDING CONNECTION RIM: 666.29 INV OUT: 660.30 (E, 6")
S2	MANHOLE RIM: 664.48 INV IN: 660.74 (W, 6") INV IN: 659.95 (W, 6") INV OUT: 659.75 (E, 6")
S13	SEWER STUB RIM: 666.29 INV OUT: 661.50 (E, 6")
S14	GREASE TRAP RIM: 665.67 INV IN: 661.40 (W, 6") INV OUT: 661.20 (E, 6")
S15	6" CLEANOUT RIM: 665.07 INV IN: 661.10 (W, 6") INV OUT: 660.90 (E, 6")

WATER STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
W1	VALVE VAULT FG ELEV: 664.46
W3	VALVE VAULT FG ELEV: 663.45
W27	FH FG ELEV: 663.63
W28	FH FG ELEV: 666.17

MISCELLANEOUS WATER STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
W2	TEE
W31	PRESSURE CONNECT TO EXISTING WATERMAIN
W32	PRESSURE CONNECT TO EXISTING WATERMAIN
W33	TEE
W34	TEE
W35	TEE
W36	TEE

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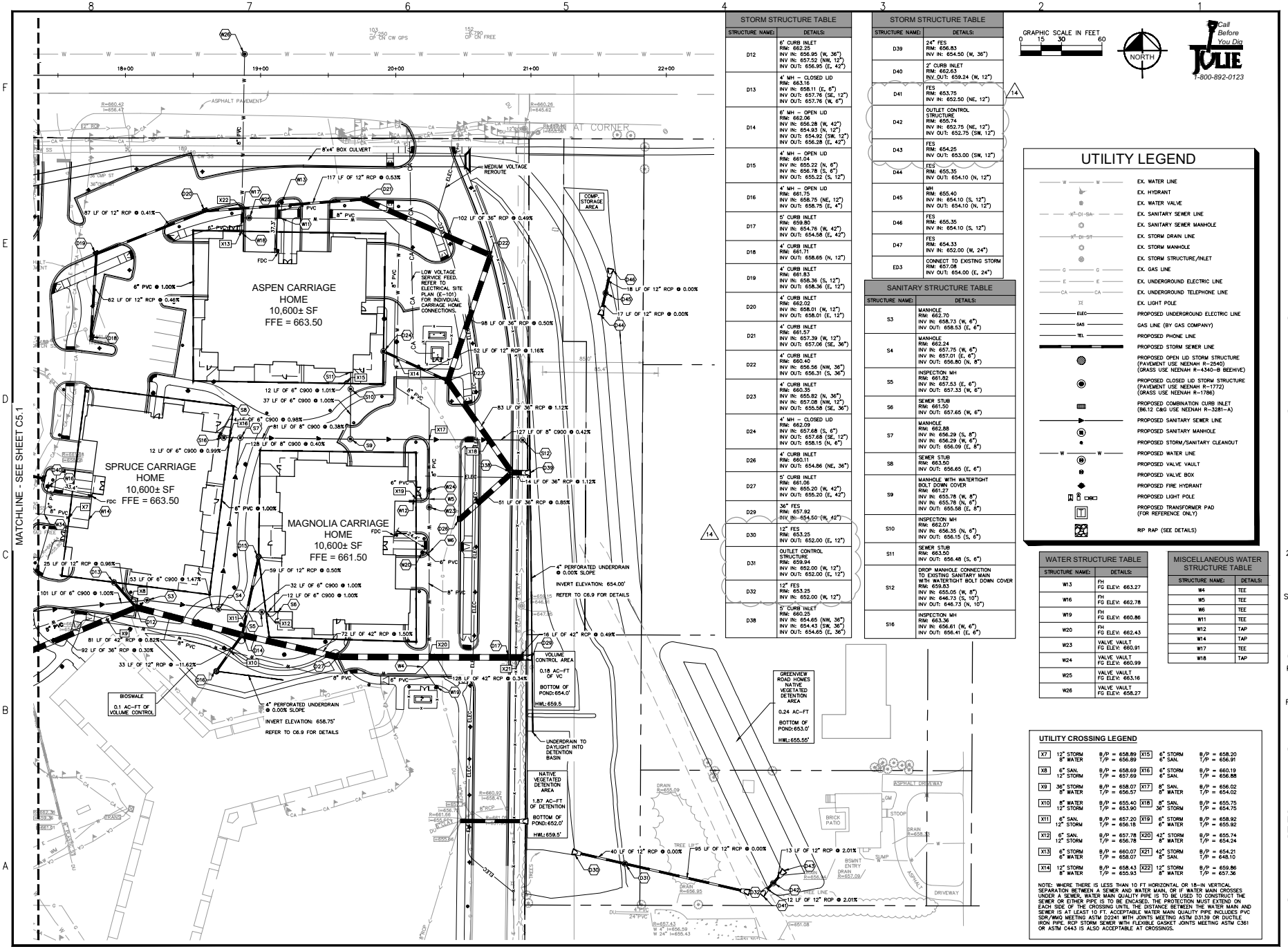
Date: 9/30/2022

UTILITY PLAN

Sheet No.: C5.1

K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\PlanSheets\C5.0 UTILITY PLAN.dwg



STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D12	6' CURB INLET RIM: 662.25 INV IN: 656.95 (W, 36") INV IN: 657.52 (NW, 12") INV OUT: 656.95 (E, 42")
D13	4' MH – CLOSED LID RIM: 663.16 INV IN: 658.11 (E, 6") INV OUT: 657.76 (SE, 12") INV OUT: 657.76 (W, 6")
D14	6' MH – OPEN LID RIM: 662.06 INV IN: 656.28 (W, 42") INV IN: 654.93 (N, 12") INV OUT: 654.92 (SW, 12") INV OUT: 656.28 (E, 42")
D15	4' MH – OPEN LID RIM: 661.04 INV IN: 655.22 (N, 6") INV IN: 656.78 (S, 6") INV OUT: 655.22 (S, 12")
D16	4' MH – OPEN LID RIM: 661.75 INV IN: 658.75 (NE, 12") INV OUT: 658.75 (E, 4")
D17	5' CURB INLET RIM: 659.80 INV IN: 654.76 (W, 42") INV OUT: 654.58 (E, 42")
D18	4' CURB INLET RIM: 661.71 INV OUT: 658.65 (N, 12")
D19	4' CURB INLET RIM: 661.83 INV IN: 658.36 (S, 12") INV OUT: 658.36 (E, 12")
D20	4' CURB INLET RIM: 662.02 INV IN: 658.01 (W, 12") INV OUT: 658.01 (E, 12")
D21	4' CURB INLET RIM: 661.57 INV IN: 657.39 (W, 12") INV OUT: 657.06 (SE, 36")
D22	4' CURB INLET RIM: 660.40 INV IN: 656.56 (NW, 36") INV OUT: 656.31 (S, 36")
D23	4' CURB INLET RIM: 660.35 INV IN: 655.82 (N, 36") INV IN: 657.08 (NW, 12") INV OUT: 655.58 (SE, 36")
D24	4' MH – CLOSED LID RIM: 662.09 INV IN: 657.68 (S, 6") INV OUT: 657.68 (SE, 12") INV OUT: 658.15 (N, 6")
D26	4' CURB INLET RIM: 660.11 INV OUT: 654.86 (NE, 36")
D27	5' CURB INLET RIM: 661.06 INV IN: 655.20 (W, 42") INV OUT: 655.20 (E, 42")
D29	36" FES RIM: 657.92 INV IN: 654.50 (W, 42")
D30	12" FES RIM: 653.25 INV OUT: 652.00 (E, 12")
D31	OUTLET CONTROL STRUCTURE RIM: 659.94 INV IN: 652.00 (W, 12") INV OUT: 652.00 (E, 12")
D32	12" FES RIM: 653.25 INV IN: 652.00 (W, 12")
D38	5' CURB INLET RIM: 660.25 INV IN: 654.65 (NW, 36") INV IN: 654.43 (SW, 36") INV OUT: 654.65 (E, 36")

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D39	24" FES RIM: 656.83 INV IN: 654.50 (W, 36")
D40	2' CURB INLET RIM: 662.63 INV OUT: 659.24 (W, 12")
D41	FES RIM: 653.75 INV IN: 652.50 (NE, 12")
D42	OUTLET CONTROL STRUCTURE RIM: 655.74 INV IN: 652.75 (NE, 12") INV OUT: 652.75 (SW, 12")
D43	FES RIM: 654.25 INV OUT: 653.00 (SW, 12")
D44	FES RIM: 655.35 INV OUT: 654.10 (N, 12")
D45	MH RIM: 655.40 INV IN: 654.10 (S, 12") INV OUT: 654.10 (N, 12")
D46	FES RIM: 655.35 INV IN: 654.10 (S, 12")
D47	FES RIM: 654.33 INV IN: 652.00 (W, 24")
ED3	CONNECT TO EXISTING STORM RIM: 657.08 INV OUT: 654.00 (E, 24")

SANITARY STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
S3	MANHOLE RIM: 662.70 INV IN: 658.73 (W, 6") INV OUT: 658.53 (E, 6")
S4	MANHOLE RIM: 662.24 INV IN: 657.75 (W, 6") INV IN: 657.01 (E, 6") INV OUT: 656.80 (N, 8")
S5	INSPECTION MH RIM: 661.62 INV IN: 657.53 (E, 6") INV OUT: 657.33 (W, 6")
S6	SEWER STUB RIM: 661.50 INV OUT: 657.65 (W, 6")
S7	MANHOLE RIM: 662.88 INV IN: 656.29 (S, 8") INV IN: 656.29 (W, 6") INV OUT: 656.09 (E, 8")
S8	SEWER STUB RIM: 663.50 INV OUT: 656.65 (E, 6")
S9	MANHOLE WITH WATERTIGHT BOLT DOWN COVER RIM: 661.27 INV IN: 655.78 (W, 8") INV IN: 655.78 (N, 6") INV OUT: 655.58 (E, 8")
S10	INSPECTION MH RIM: 662.07 INV IN: 656.35 (N, 6") INV OUT: 656.15 (S, 6")
S11	SEWER STUB RIM: 663.50 INV OUT: 656.48 (S, 6")
S12	DROP MANHOLE CONNECTION TO EXISTING SANITARY MAIN WITH WATERTIGHT BOLT DOWN COVER RIM: 659.93 INV IN: 655.05 (W, 8") INV IN: 646.73 (S, 10") INV OUT: 646.73 (N, 10")
S16	INSPECTION MH RIM: 663.36 INV IN: 656.61 (W, 6") INV OUT: 656.41 (E, 6")

GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

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UTILITY LEGEND

- EX. WATER LINE
- EX. HYDRANT
- EX. WATER VALVE
- EX. SANITARY SEWER LINE
- EX. SANITARY SEWER MANHOLE
- EX. STORM DRAIN LINE
- EX. STORM MANHOLE
- EX. STORM STRUCTURE/INLET
- EX. GAS LINE
- EX. UNDERGROUND ELECTRIC LINE
- EX. UNDERGROUND TELEPHONE LINE
- EX. LIGHT POLE
- PROPOSED UNDERGROUND ELECTRIC LINE
- GAS LINE (BY GAS COMPANY)
- PROPOSED PHONE LINE
- PROPOSED STORM SEWER LINE
- PROPOSED OPEN LID STORM STRUCTURE (PAVEMENT USE NEENAH R-2540) (GRASS USE NEENAH R-4340-B BEEHIVE)
- PROPOSED CLOSED LID STORM STRUCTURE (PAVEMENT USE NEENAH R-1772) (GRASS USE NEENAH R-1786)
- PROPOSED COMBINATION CURB INLET (86.12 C&G USE NEENAH R-3281-A)
- PROPOSED SANITARY SEWER LINE
- PROPOSED SANITARY MANHOLE
- PROPOSED STORM/SANITARY CLEANOUT
- PROPOSED WATER LINE
- PROPOSED VALVE VAULT
- PROPOSED VALVE BOX
- PROPOSED FIRE HYDRANT
- PROPOSED LIGHT POLE
- PROPOSED TRANSFORMER PAD (FOR REFERENCE ONLY)
- RIP RAP (SEE DETAILS)

WATER STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
W13	FH FG ELEV: 663.27
W16	FH FG ELEV: 662.78
W19	FH FG ELEV: 660.86
W20	FH FG ELEV: 662.43
W23	VALVE VAULT FG ELEV: 660.91
W24	VALVE VAULT FG ELEV: 660.99
W25	VALVE VAULT FG ELEV: 663.16
W26	VALVE VAULT FG ELEV: 658.27

MISCELLANEOUS WATER STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
W4	TEE
W5	TEE
W6	TEE
W11	TEE
W12	TAP
W14	TAP
W17	TEE
W18	TAP

UTILITY CROSSING LEGEND

X7	12" STORM 8" WATER	B/P = 658.89 T/P = 656.89	X15	6" STORM 6" SAN.	B/P = 658.20 T/P = 656.91
X8	6" SAN. 12" STORM	B/P = 658.69 T/P = 657.69	X16	6" STORM 6" SAN.	B/P = 660.19 T/P = 656.88
X9	36" STORM 8" WATER	B/P = 658.07 T/P = 656.57	X17	8" SAN. 8" WATER	B/P = 656.02 T/P = 654.02
X10	8" WATER 12" STORM	B/P = 655.40 T/P = 653.90	X18	8" SAN. 36" STORM	B/P = 655.75 T/P = 654.75
X11	6" SAN. 12" STORM	B/P = 657.20 T/P = 656.18	X19	6" STORM 6" WATER	B/P = 658.92 T/P = 655.92
X12	6" SAN. 12" STORM	B/P = 657.78 T/P = 656.78	X20	42" STORM 8" WATER	B/P = 655.74 T/P = 654.24
X13	6" STORM 6" WATER	B/P = 660.07 T/P = 658.07	X21	42" STORM 8" SAN.	B/P = 654.21 T/P = 648.10
X14	12" STORM 8" WATER	B/P = 658.43 T/P = 655.93	X22	12" STORM 8" WATER	B/P = 659.86 T/P = 657.36

NOTE: WHERE THERE IS LESS THAN 10 FT HORIZONTAL OR 18-IN VERTICAL SEPARATION BETWEEN A SEWER AND WATER MAIN, OR IF WATER MAIN CROSSES UNDER A SEWER, WATER MAIN QUALITY PIPE IS TO BE USED TO CONSTRUCT THE SEWER OR EITHER PIPE IS TO BE ENCASED. THE PROTECTION MUST EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE DISTANCE BETWEEN THE WATER MAIN AND SEWER IS AT LEAST 10 FT. ACCEPTABLE WATER MAIN QUALITY PIPE INCLUDES PVC SDR/DWG MEETING ASTM D2241 WITH JOINTS MEETING ASTM D3139 OR DUCTILE IRON PIPE. RCP STORM SEWER WITH FLEXIBLE GASKET JOINTS MEETING ASTM C361 OR ASTM D443 IS ALSO ACCEPTABLE AT CROSSINGS.

NO.	DATE	DESCRIPTION
1	8/14/23	VILLAGE REVIEW
2	8/30/23	MWRD REVIEW #3
3	7/31/23	MWRD REVIEW #2
4	7/21/23	QA/QC – THW
5	6/29/23	MWRD REVIEW #1
6	6/2/23	DETENTION REVISION
7	5/9/23	WATERMAIN REROUTE
8	3/31/23	VILLAGE ENGINEERING COMMENTS
9	2/3/23	VILLAGE ENGINEERING COMMENTS
10	1/6/23	DD ISSUANCE
11	9/30/22	PROGRESS CD'S
12	8/22/22	50% CD'S
13	6/23/22	DD ISSUANCE
14	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK

2625 TECHNY RD,
NORTHBROOK, IL 60062

Kimley»Horn

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

UTILITY PLAN

Sheet No.: C5.2

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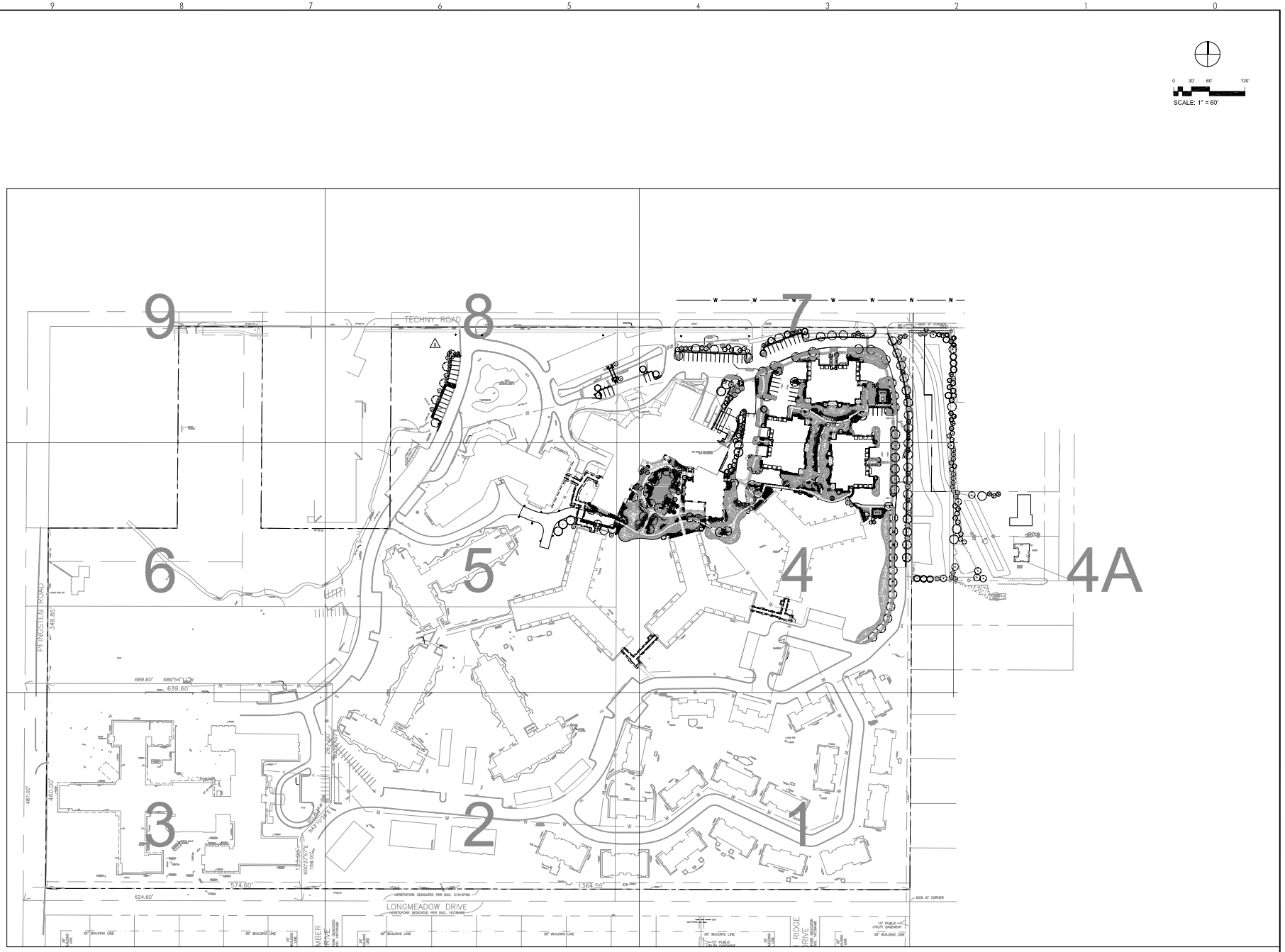

NO.	DATE	DESCRIPTION
5	01/06/2023	PUD RESUB

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ARCHITECT INFO
12345678

PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 2020066
Date: 09/30/2022

OVERALL LANDSCAPE PLAN

L-400

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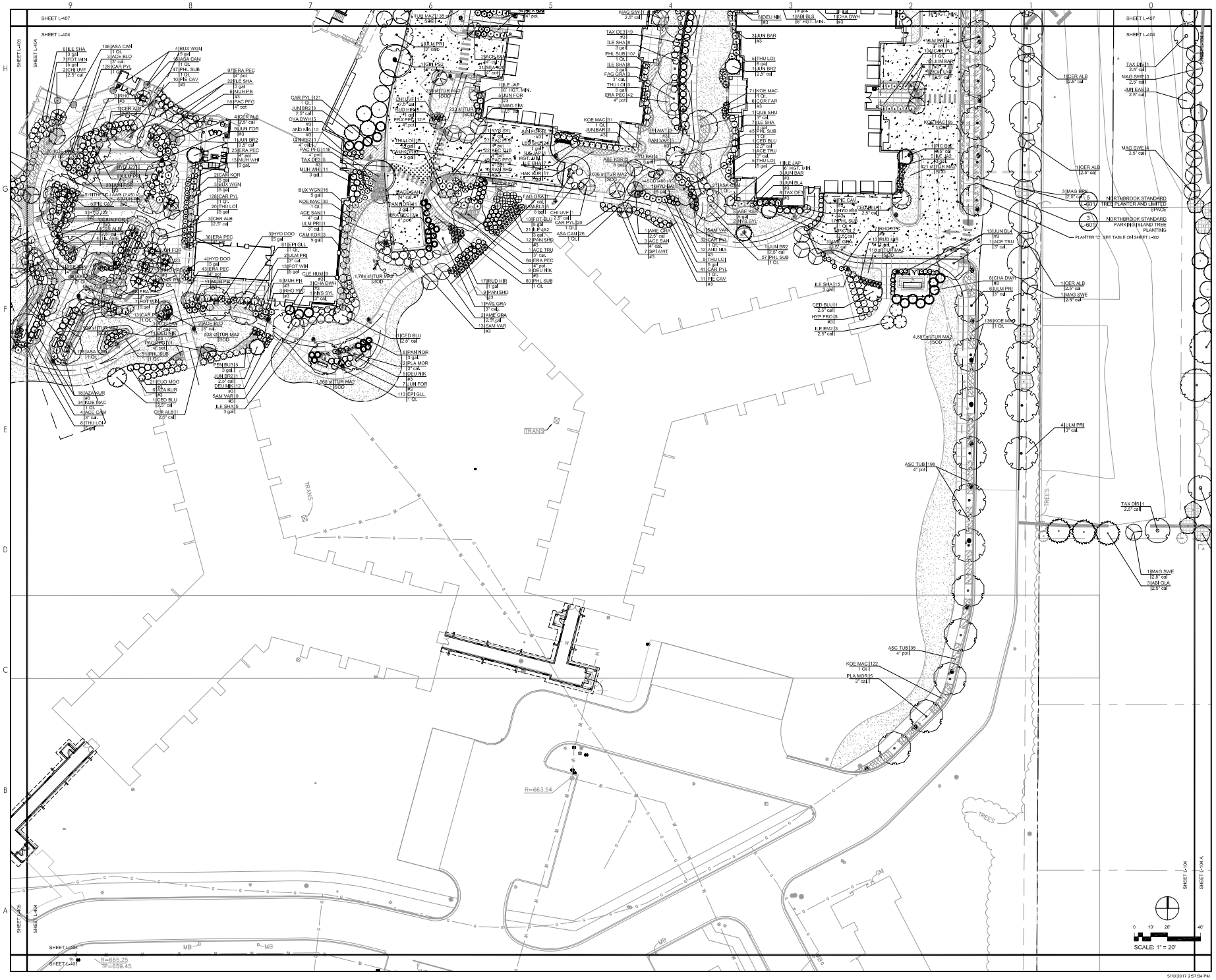

NO.	DATE	DESCRIPTION
6	10/20/2023	PUD RESUB
5	10/06/2023	PUD RESUB

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ARCHITECT INFO
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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 2020066
Date: 09/30/2022

LANDSCAPE PLAN

L-404

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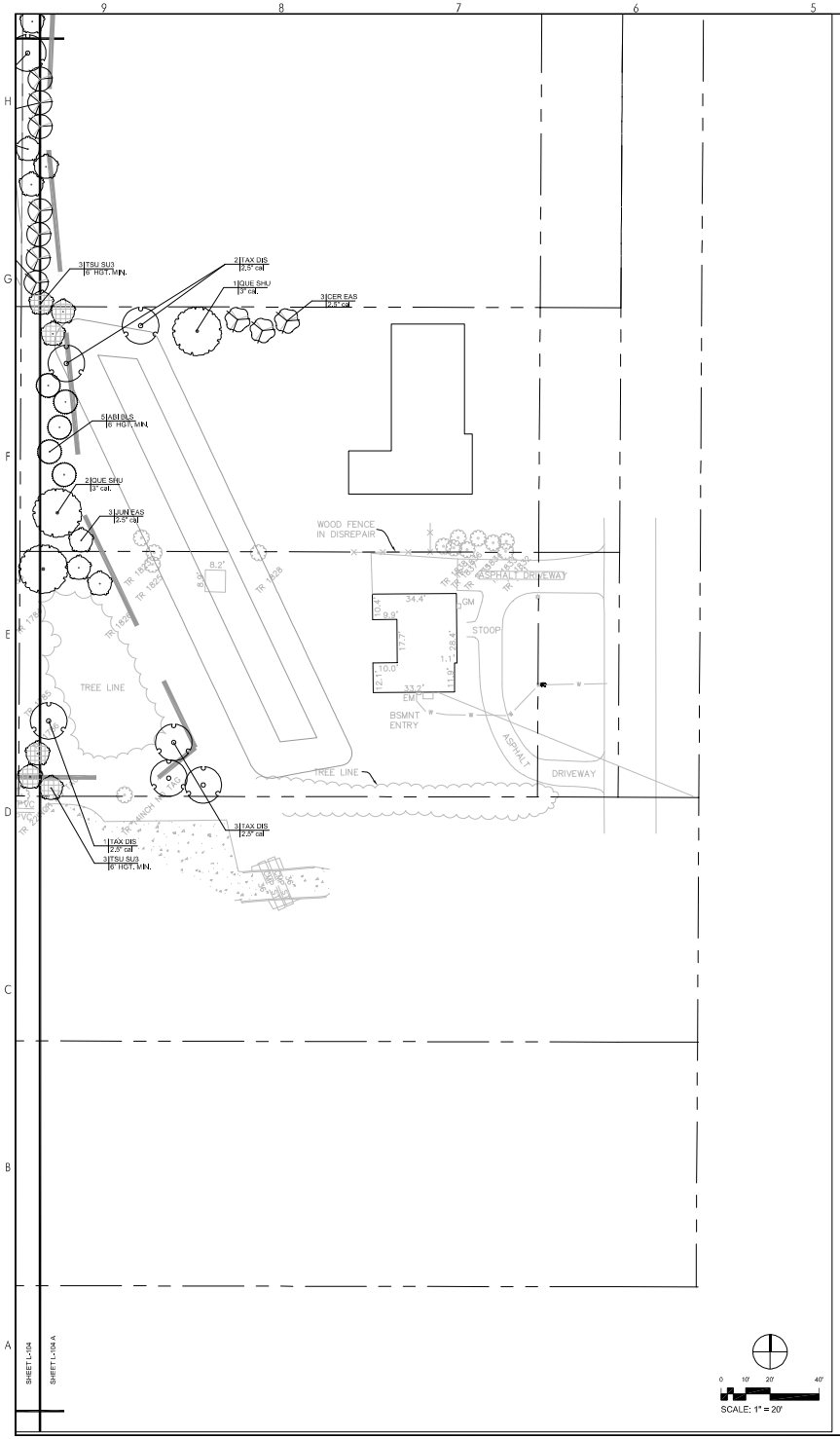

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Project No.: 2020066
Date: 09/30/2022

LANDSCAPE PLAN

L-404A

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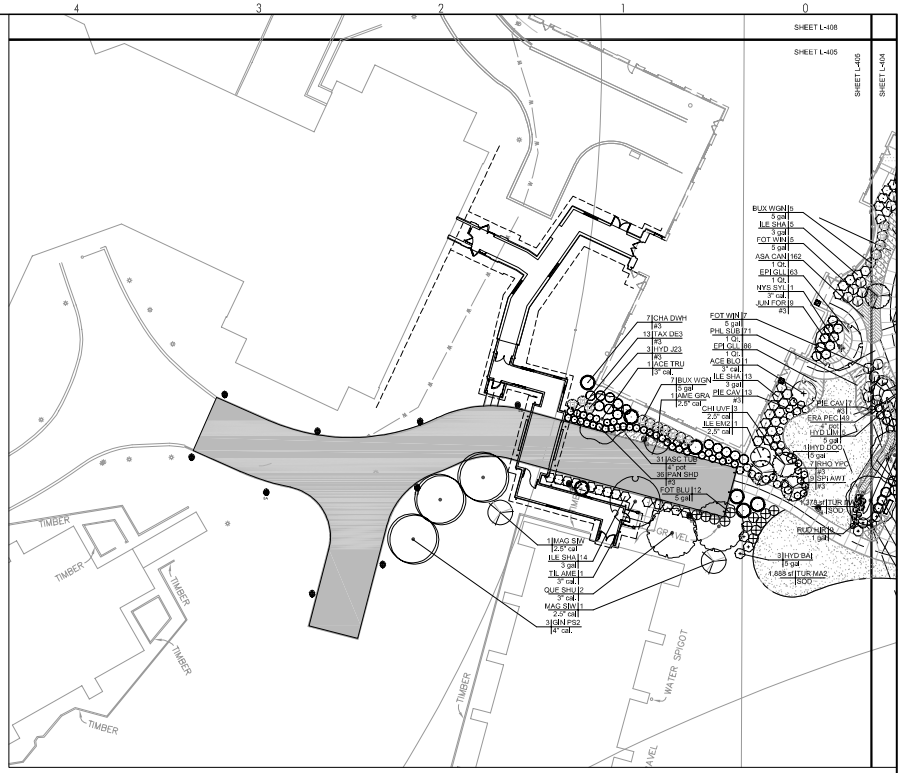

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Project No.: 2020066
Date: 09/30/2022

LANDSCAPE PLAN

L-405

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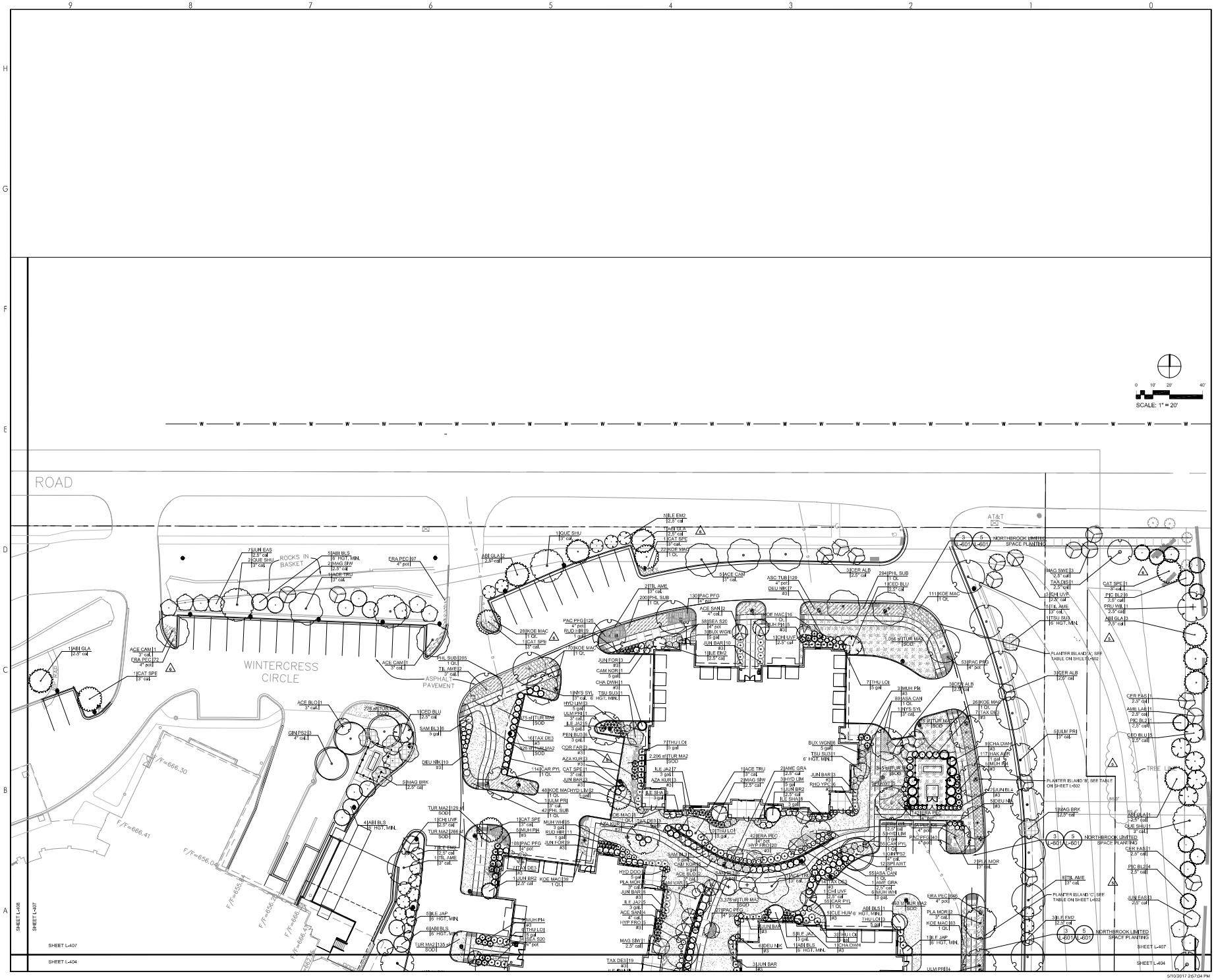

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Project No.: 2020066
Date: 09/30/2022

LANDSCAPE PLAN

L-407

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NO.	DATE	DESCRIPTION
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5	01/06/2023	PUD RESUB

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 2020066
Date: 09/30/2022

LANDSCAPE PLAN

L-408

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PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT	SIZE
	ACE CAM	11	Acer campestre / Hedge Maple (S) to be used as Replacement Trees	3" cal.	12' TO 14' MIN.
	ACE TRU	9	Acer truncatum / Shantung Maple (S) to be used as Replacement Landmark Trees	3" cal.	12' TO 14' MIN.
	CAT SPR	7	Catalpa speciosa / Northern Catalpa (S) to be used as Replacement Landmark Trees	3" cal.	12' TO 14' MIN.
	FAG GRA	5	Fagus grandifolia / American Beech (S) to be used as Replacement Landmark Trees	3" cal.	16' TO 18' HOT, MIN.
	GIN PS2	9	Ginkgo biloba 'Princeton Sentry' / Princeton Sentry Maidenhair Tree (S) to be used as Replacement Landmark Trees	3" cal.	14' TO 16' HOT, MIN.
	NYS SYL	9	Nyssa sylvatica / Tupelo (S) to be used as Replacement Landmark Trees	3" cal.	12' TO 14' MIN.
	PLA MOR	15	Platanus x acerifolia 'Morton Circle' / Exclaim™ London Plane Tree (S) to be used as Replacement Trees	3" cal.	12' TO 14' MIN.
	PRU WIL	7	Prunus serotina / Black Cherry (S) to be used as Replacement Tree	2.5" cal.	16' TO 18' HOT, MIN.
	QUE SHU	10	Quercus shumardii / Shumard Oak (S) to be used as Replacement Landmark Trees	3" cal.	12' TO 14' MIN.
	TAX DIS	9	Taxodium distichum / Bald Cypress (S) to be used as Replacement Tree, 2.5" cal. code minimum	2.5" cal.	16' TO 18' HOT, MIN.
	TIL AME	23	Tilia americana / American Linden Variety (S) to be used as Replacement Trees	3" cal.	12' TO 14' MIN.
	ULM PRE	32	Ulmus carpinifolia 'Prospector' / Prospector American Elm (S) to be used as Replacement Trees	3" cal.	12' TO 14' MIN.
EVERGREEN	CODE	QTY	BOTANICAL / COMMON NAME	CONT	SIZE
	ABI BLS	22	Abies balsamea / Balsam Fir Planting Soil Blend: 1 6' Top, Code minimum	6' HOT, MIN.	
	ABI CLA	12	Abies glauca / White Spruce (S) to be used as Replacement Trees, 2.5" cal. code minimum	2.5" cal.	8' TO 10' HOT, MIN.
	CED BLU	12	Cedrus atlantica 'Glauca' / Blue Atlas Cedar (S) to be used as Replacement Landmark Trees, 2.5" cal. code minimum	2.5" cal.	8' TO 10' HOT, MIN.
	ILE JAP	14	Ilex crenata 'Steeds' / Steeds Japanese Holly Planting Soil Blend: 1 6' Top, Code minimum	6' HOT, MIN.	
	JUI EMO	33	Juniperus chinensis 'Emerald' / Emerald Green Juniper (S) to be used as Replacement Trees, 2.5" cal. code minimum	2.5" cal.	8' TO 10' HOT, MIN.
	JUN EAS	16	Juniperus virginiana / Eastern Redcedar (S) to be used as Replacement Trees, 2.5" cal. code minimum	2.5" cal.	8' TO 10' HOT, MIN.
	JUN BRZ	9	Juniperus virginiana 'Brodie' / Brodie Eastern Redcedar (S) to be used as Replacement Trees, 2.5" cal. code minimum	2.5" cal.	8' TO 10' HOT, MIN.
	MAG BRK	9	Magnolia grandiflora 'Bracken's Brown Beauty' / Bracken's Beauty Southern Magnolia (S) to be used as Replacement Trees, 2.5" cal. code minimum	2.5" cal.	8' TO 10' HOT, MIN.
	MAG SVK	14	Magnolia virginiana / Sweetbay Magnolia (S) to be used as Replacement Landmark Trees, 2.5" cal. code minimum	2.5" cal.	8' TO 10' HOT, MIN.
	MAG SWI	14	Magnolia virginiana 'Moon Glow' / Sweetbay Magnolia (S) to be used as Replacement Trees, 2.5" cal. code minimum	2.5" cal.	8' TO 10' HOT, MIN.
	PIC BLS	12	Picea pungens / Blue Spruce (S) to be used as Replacement Trees, 2.5" cal. code minimum	2.5" cal.	8' TO 10' HOT, MIN.
	TSU DUS	9	Tsuga canadensis 'Dumosa' / Dumosa Dwarf Canadian Hemlock Planting Soil Blend: 1 6' HT, Code Minimum	6' HOT, MIN.	
LINDEN HISTORY TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	SIZE
	ACE BLO	10	Acer palmatum 'Bloodgood' / Bloodgood Japanese Maple (S) to be used as Replacement Trees	3" cal.	8' TO 10' HOT, MIN.
	ACE SAK	19	Acer palmatum 'Sangokaku' / Coral Bark Japanese Maple (S) to be used as Replacement Trees	3" cal.	10' TO 12' HOT, MIN.
	AME LAC	1	Amelanchier laevis / Allegheny Serviceberry	2.5" cal.	8' TO 10' HOT, MIN.
	AME GRA	12	Amelanchier x grandiflora 'Autumn Brilliance' / Autumn Brilliance Apple Serviceberry (S) to be used as Replacement Trees, 2.5" cal. code minimum	2.5" cal.	8' TO 10' HOT, MIN.
	CER EAS	5	Cercis canadensis / Eastern Redbud Multi-stem (S) to be used as Replacement Trees, 2.5" cal. code minimum	2.5" cal.	8' TO 10' HOT, MIN.
	CER ALB	23	Cercis canadensis 'Alba' / White Eastern Redbud (S) to be used as Replacement Trees, 2.5" cal. code minimum	2.5" cal.	8' TO 10' HOT, MIN.
	CHI LVP	10	Chionanthus virginicus 'CVTSNF' TM / Spring Snow® White Fringetree (S) to be used as Replacement Trees, 2.5" cal. code minimum	2.5" cal.	8' TO 10' HOT, MIN.
SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	ABE KSR	6	Abelia x grandiflora 'Kaleidoscope' TM / Kaleidoscope Abelia	5 gal.	
	AZA KUR	33	Azalea x 'Coral Bells' / Coral Bells Kurume Azalea	#3	
	BUX WGN	44	Buxus sinica var. insularis 'Wintergreen' / Wintergreen Korean Boxwood	5 gal.	
	CAM KOR	14	Camellia sasanqua 'Korean Fire' / Korean Fire Camellia	5 gal.	
	CHA EMH	34	Chamaecyparis thyoides 'Ericoides' PP 9119 TM / Soft Serve Elegance Cypress	#3	
	CLE HUM	14	Clethra alnifolia 'Hummingbird' / Hummingbird Summersweet	#3	
	COR FAR	14	Cornus sericea 'Farrow' TM / Arctic Fire Red Tidy Dogwood	#3	
	DEU NIK	64	Deutzia gracilis 'Nikko' / Slender Deutzia	#3	
	EUO MOO	24	Euonymus fortunei 'Moonshadow' TM / Moonshadow Wintercreeper	#3	
	FOT BLU	23	Forsythia x intermedia 'Blue Hill' / Blue Hill® Dwarf Forsythia	5 gal.	
	FOT MIN	58	Forsythia x intermedia 'Mikon City' / Mikon City Dwarf Forsythia	5 gal.	
	HYD QUE	1	Hydrangea arborescens 'Hills Arrow' / Hills Arrow Hydrangea	#3	
	HYD OOO	10	Hydrangea macrophylla 'Oooky' / Oooky Hydrangea	5 gal.	
	HYD BAI	8	Hydrangea macrophylla 'Endless Summer' TM / Endless Summer Hydrangea	5 gal.	
	HYD J23	19	Hydrangea paniculata 'Jane' TM / Little Lime Panicle Hydrangea	#3	
	HYD LIM	18	Hydrangea paniculata 'Limelight' / Limelight Panicle Hydrangea	5 gal.	
	HYP FRO	38	Hypericum frondosum 'Sunburst' / Sunburst Hypericum	#3	
	ILE JAZ	44	Ilex crenata 'Steeds' / Steeds Japanese Holly	5 gal.	
	ILE SHA	139	Ilex glabra 'Shamrock' / Shamrock Inkberry Holly	5 gal.	
	JUN FOR	33	Juniperus chinensis 'Sea Green' / Sea Green Juniper	#3	
	JUN BAR	48	Juniperus horizontalis 'Bar Harbor' / Bar Harbor Creeping Juniper	#3	
	JUN BLA	28	Juniperus virginiana 'Blue Arrow' / Blue Arrow Eastern Redcedar	#3	
	LEU SWE	31	Leucothoe fontanesiana x populifolia / Scarlet Dolly	5 gal.	
	PIC SAY	66	Picea glauca 'Conica' / Conical or Japanese Picea	#3	
	RHO YPC	58	Rhododendron x 'Yaku Prince' / Yaku Prince Rhododendron	#3	
	RUD HIR	64	Rudbeckia hirta / Black-eyed Susan	1 gal.	
	SAM VAR	32	Sambucus nigra 'Variegata' / Variegated Elderberry	#3	
	SAM BL3	22	Sambucus nigra 'Black Lace' / Black Lace Elderberry	5 gal.	
	SPI JAP	36	Spiraea x bumalda 'Anthony Waterer' / Anthony Waterer Bumald Spirea	#3	
	TAX DEE	82	Taxus cuspidata 'Densa' / Dense Japanese Yew	#3	
	THU LIT	82	Thuja occidentalis 'SMATSMART TM / Tiger Tail Arborvitae	5 gal.	
GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	AND NM	22	Andropogon gerardii 'Niagara' / Niagara Big Bluestem	#3	
	MUH PH	35	Muhlenbergia capillaris 'Pink Cloud' / Pink Cloud Pink Muhly Grass	#3	
	MUH WHI	35	Muhlenbergia capillaris 'White Cloud' / White Cloud Muhly Grass	3 gal.	
	PAN DHD	67	Panicum virgatum 'Shenandoah' / Shenandoah Switch Grass	#3	
	PAN NOR	19	Panicum virgatum 'Northwind' / Northwind Switch Grass	5 gal.	
	PEN BUD	11	Pennisetum alopecuroides 'Burgundy Bunny' / Burgundy Bunny Dwarf Fountain Grass	3 gal.	
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	ASA CAN	697	Asarum canadense / Wild Ginger	1 Gl.	12" o.c.
	ASC TUB	415	Asclepias tuberosa / Butterfly Milkweed	4" pot	18" o.c.
	CAR PYL	828	Carex pensylvanica / Pennsylvania Sedge	1 Gl.	12" o.c.
	EPI CLL	343	Epimedium grandiflorum 'Lipstick' / Lipstick Bishop's Hat	1 Gl.	12" o.c.
	ERA PEC	1,583	Eragrostis spectabilis / Purple Tufted Lovegrass	4" pot	12" o.c.
	HAK AUR	734	Hakonechloa macra 'Aureola' / Golden Variegated Hakonechloa	1 gal	24" o.c.
	HOS MAC	1,193	Hosta fortunei 'Albopicta' / Albopicta Hosta	1 Gl.	18" o.c.
	PAC PRO	801	Pachysandra procumbens 'Forest Green' / Allegheny Spurge	4" pot	12" o.c.
	PHL SUB	1,216	Phlox subulata 'White Delight' / White Delight Creeping Phlox	1 Gl.	12" o.c.
	SEA SDI	123	Seasonal Color x / Seasonal Color	4" pot	12" o.c.
COATINGS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	TUR MA2	26,186 sf	Turf Sod Variation III / Turfgrass Tall Fescue	SOD	

PLANTER ISLANDS SOIL

PLANTER ISLAND	SOIL AREA (*SF*)
PLANTER ISLAND 'A'	2,894 SF
PLANTER ISLAND 'B'	4,175 SF
PLANTER ISLAND 'C'	1,978 SF

TREE REPLACEMENT NOTES

Tree Replacement Requirements:

- **The total sum of protected, landmark, and heritage tree** diameter at breast height of trees being removed is = **81 diameter inches**
  - Village of Northbrook requires the sum of the diameter of protected, landmark, and heritage trees to be replaced equal to or greater than the sum of DBH of those trees being removed.
  - Village of Northbrook requires a 2.5" cal. Min. tree size to be installed.

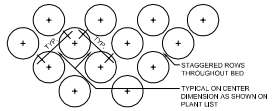
  The total quantity of non-landmark trees trees (> 6" DBH) being removed is = **89**
  - The Village of Northbrook requires tree replacements on a tree for tree basis (with a min. caliper of 2.5")

Proposed Tree Replacement:

The total sum of protected, landmark, and heritage tree diameter at breast height of trees being replaced is = **82 diameter inches***
- All trees proposed noted as shown: "To be used as Replacement Landmark Tree"*

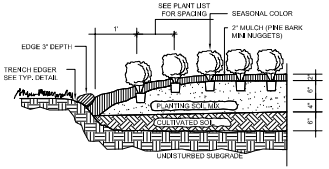
The total quantity of non-landmark trees (> 6" DBH) being replaced is = **89 trees***
- All trees proposed noted as shown: "To be used as Replacement Tree"*

*See tree remarks under tree names on plant schedule for designation



NOTE:
SEE PLANTING PLANS FOR SHRUB AND GROUNDCOVER BED AREAS. ROWS SHALL BE STRAIGHT AND PARALLEL.

7 PLANT SPACING
SCALE: 1"=1'-0"



7 PERENNIAL INSTALLATION
SCALE: 1"=1'-0"

NO.	DATE	DESCRIPTION
6	07/20/2023	PUD RESUB
5	01/06/2023	PUD RESUB

COVENANT LIVING OF NORTHBROOK

2625 TECHNY ROAD, NORTHBROOK, IL 60062

THW DESIGN

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PROGRESS CONSTRUCTION DOCUMENTS

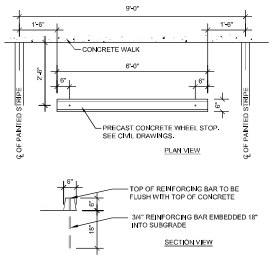
Project No.: 2020066
Date: 09/30/2022

PLANTING DETAILS

L-602

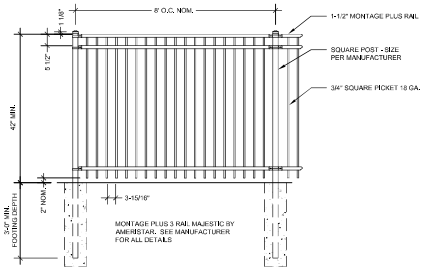
5/10/2017 2:57:34 PM

I:\2020\2020066 Covenant Living of Northbrook Expansion Studies\300 Design\335 CD\DSheets\PLANTING DETAILS.dwg



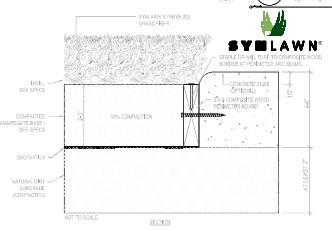
13 WHEEL STOP

1/2" = 1'-0" 03-31



12 42" STEEL FENCE

1/2" = 1'-0" 03-32



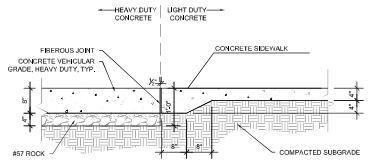
SYNRYE 200 - INSTALLED OVER AGGREGATE BASE W/ BENDER BOARD

MANUFACTURER NOTES:
1. THIS GRASS MUST BE INSTALLED AND SEAMED WITH ADJACENT PIECES RUNNING IN THE SAME DIRECTION. SEAMS SHOULD BE GLUED WITH SUITABLE SEAMING GLUE AND SEAMING CLOTH, NOT ADHESIVE TAPE.

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT INSTALL OVER SNOW.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FAMILIAR WITH THE PROVISIONS ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION PROVIDED, NOTES AND CONTENT AT THE TIME OF DEVELOPMENT IS T MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR IS NOTED TO CONTACT AND CONFIRM INFORMATION VISIT www.CASmithLawn.com AND ENTER REFERENCE NUMBER LAKE 6782.

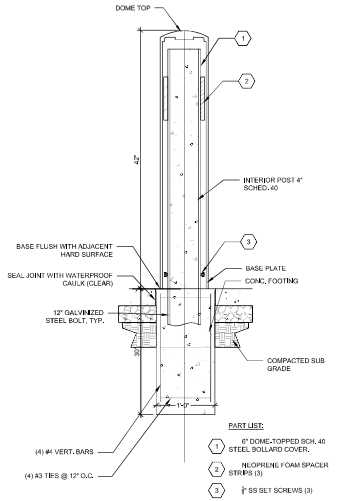
11 MULTI-PURPOSE SYNTHETIC LAWN SYNRYE 200

6" = 1'-0" 03-30



10 HEAVY DUTY VEHICULAR CONCRETE

3/4" = 1'-0" 03-29



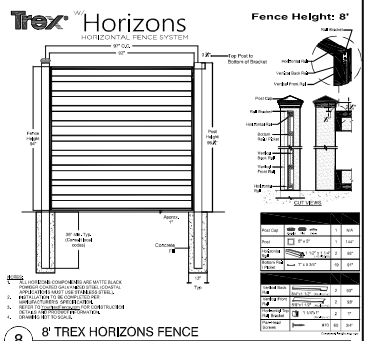
NOTE: FOOTER DETAILS FOR REFERENCE ONLY; PROPER FOOTER CONSTRUCTION DEPEND ON LOCAL SOIL CONDITIONS AND ENGINEERING REQUIREMENTS.

350 -SD - 6" DIA. BOLLARD * PIPE SLEEVE MOUNTING

STEEL BOLLARD SLEEVES COVER EXISTING INTERIOR CONCRETE EMBEDDED PIPE. BOLLARD IS FASTENED TO INTERIOR PIPE WITH S.S. SET SCEWS.

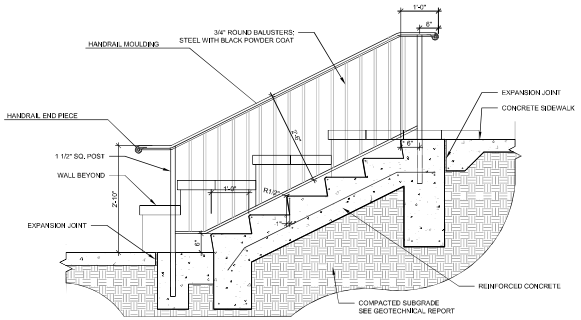
9 STAINLESS STEEL SECURITY BOLLARD

1" = 1' 03-27



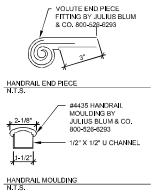
8 8' TREX HORIZONS FENCE

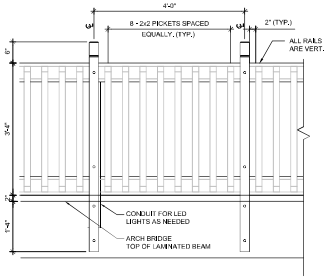
3/8" = 1'-0" 03-28



7 CONCRETE STAIRS

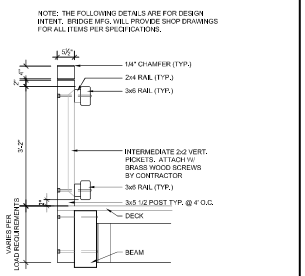
3/4" = 1'-0" 03-26





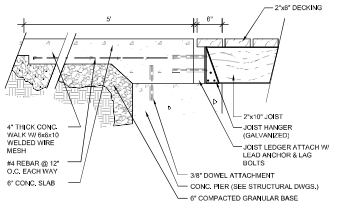
6 PEDESTRIAN BRIDGE ELEVATION

3/4" = 1'-0" 03-24



5 PEDESTRIAN BRIDGE SECTION

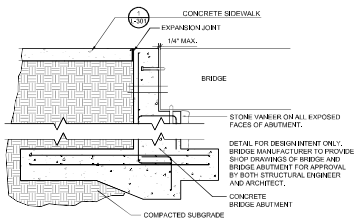
3/4" = 1'-0" 03-22



NOTES: FOR DECKING DETAILS / RAILS REFER TO ARCH. DWGS.

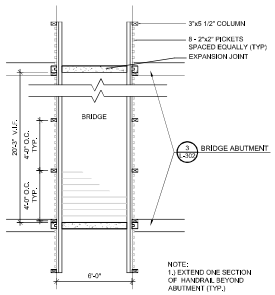
4 BRIDE TO SIDEWALK CONNECTION

1" = 1'-0" 03-23



3 BRIDGE ABUTMENT

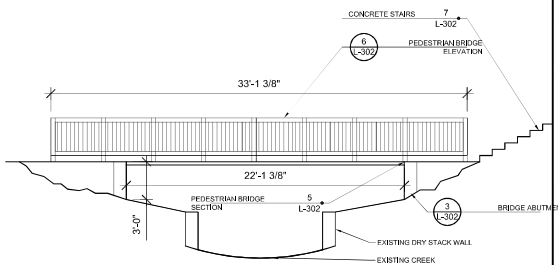
3/8" = 1'-0" 03-18



NOTE: 1) EXTEND ONE SECTION OF HANDRAIL BEYOND ABUTMENT (TYP.)

2 PEDESTRIAN BRIDGE PLAN

1/4" = 1'-0" 03-20



1 PEDESTRIAN BRIDGE OVERALL SECTION

1/4" = 1'-0" 03-33

5/10/2017 2:57:04 PM

NO.	DATE	DESCRIPTION

COVENANT LIVING OF NORTHBROOK

2625 TECHNY ROAD, NORTHBROOK, IL 60062

THW DESIGN

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Suite 900
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PROGRESS CONSTRUCTION DOCUMENTS

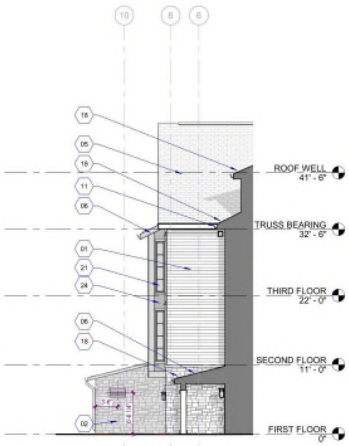
Project No.: 2020066
Date: 09/30/2022

SITE DETAILS

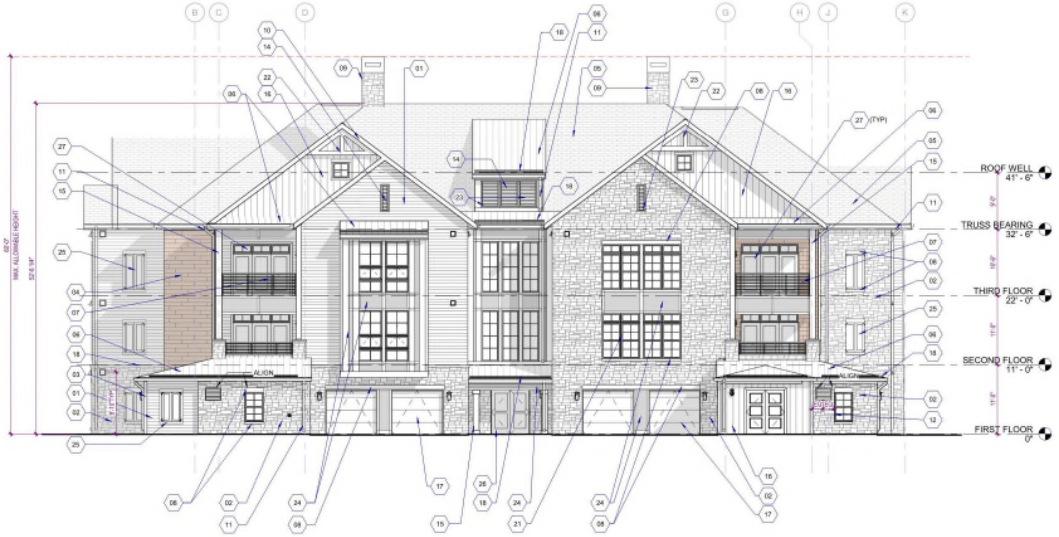
L-302

4 ELEVATION B
A-201 SCALE: 1/8" = 1'-0"

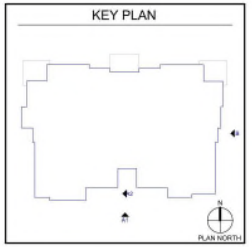
CH - EXTERIOR ELEVATION KEY NOTES (PUD / ENTITLEMENT)			
NOTE #	MATERIAL / DESCRIPTION	MANUFACTURE	COLOR / TEXTURE
01	FIBER CEMENT PLANK SIDING (TRIM AT ALL CORNERS, ROOF EAVES, ETC. - TYPICAL)	HARDIE	SW7038 TONY TAUPE
02	MASONRY VENEER	STONE CRAFT	CHARDONNAY HERITAGE
03	FIBER CEMENT TRIM	HARDIE	SW 7028 BLACK FOX OR SW7035 AESTHETIC WHITE - (DEPENDING ON LOCATION, SEE RENDERINGS)
04	HIGH PRESSURE LAMINATE WALL SYSTEM - PANEL SIZE AND PATTERN AS INDICATED	TRESPA - METEON WOOD DECOR	LIGHT MAHOGANY
05	ARCHITECTURAL ASPHALT SHINGLE ROOFING	CERTAINTEED LANDMARK SERIES	DRIFTWOOD
06	STANDING SEAM METAL ROOFING	BERRIDGE, CENTRIA OR PETERSON	DARK BRONZE
07	ALUMINUM RAILINGS (WITH GATE AT GROUND LEVEL)	BLUM, BLUMCRAFT, OR LAURENCE	DARK BRONZE
08	MASONRY BAND, CAP, HEADS, AND/OR SILLS	STONE CRAFT	CREAM
09	MASONRY VENEER CHIMNEY WITH CUSTOM METAL CAP	STONE CRAFT / CYPRESS METAL	CHARDONNAY HERITAGE W/ BLACK METAL CAP
10	FIBER CEMENT FASCIA BOARD	HARDIE	SW 7035 AESTHETIC WHITE
11	ALUMINUM GUTTER (WITH GUTTER GUARD) AND DOWNSPOUTS	BERRIDGE, CENTRIA, PETERSON, STORM MASTER GUTTERS	DARK BRONZE
12	SINGLE HUNG WINDOW (w/ SCREEN)	PLY-GEM	DARK BRONZE
13	SINGLE HUNG WINDOWS WITH TRANSOM (w/ SCREEN)	PLY-GEM	DARK BRONZE
14	ARCHITECTURAL LOUVER - STATIONARY, WIND DRIVEN RAIN RESISTANT	RUSKIN	TO MATCH ADJACENT SURFACES DARK BRONZE OR
15	CEMENTITIOUS PANEL COLUMNS WITH 5/4 X 4 TRIM	HARDIE	SW 7028 AESTHETIC WHITE
16	FIBER CEMENT BOARD AND BATTEN SIDING	HARDIE	SW 7036 ACCESSIBLE BEIGE
17	INSULTED GARAGE DOOR	OVERHEAD DOOR - 301 SERIES INSULATED DOORS	CUSTOM COLOR LIGHT MAHOGANY
18	SNOW GUARD SYSTEM - PER MFR RECOMMENDATIONS	BERGER BUILDING PRODUCTS	DARK BRONZE
19	PVC / FIBERGLASS BRACKET WITH CEMENTITIOUS BACKER PANEL	STROMBERG, EKENA, OR EDON	LIGHT MAHOGANY
20	CONTROL JOINT, TYP.	BACKROD & SEALANT	COLOR TO MATCH ADJACENT WALL SURFACE
21	FIXED PICTURE WINDOW	KAWNEER - 601-T THERMAL	DARK BRONZE
22	DECORATIVE GABLE PEDIMENT	STROMBERG, EKENA, OR EDON	LIGHT MAHOGANY
23	DECORATIVE VENT - PROVIDE BLOCK OFF PANELS	CONSTRUCTION SPECIALTIES	DARK BRONZE
24	FIBER CEMENT PANEL WITH TRIM	HARDIE	DARK BRONZE OR SW7035 AESTHETIC WHITE - (DEPENDING ON LOCATION, SEE RENDERINGS)
25	DECORATIVE SHUTTER WITH HARDWARE (PINTLES, STRAPS, AND STAYS)	BRISCOE SHUTTERS	NEAPOLITAN CUSTOM - LIGHT MAHOGANY
26	INSULATED STOREFRONT ENTRY W/ 1" INSULATED LOW-E GLAZING	KAWNEER - 601-T THERMAL - 350T	DARK BRONZE
26	BALCONY DOORS W/ TRANSOM & SCREENS - 1" INSULATED LOW-E GLAZING	PELLA, JELD-WEN	SIDELIGHTS AND TRANSOM DARK BRONZE



2 ELEVATION A2
A-201 SCALE: 1/8" = 1'-0"



1 ELEVATION A1
A-201 SCALE: 1/8" = 1'-0"



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REF: A-201 EXTERIOR ELEVATIONS

Date: 01/06/2023
Project No.: 2020066

PROGRESS CONSTRUCTION DOCUMENTS

EXTERIOR ELEVATIONS

COVENANT LIVING OF NORTHBROOK CARRIAGE HOMES

2625 TECHNY ROAD
NORTHBROOK, IL 60062

2100 RiverEdge Parkway
Suite 900
Atlanta, GA 30328

PH: 770 916 2220
FAX: 770 916 2299

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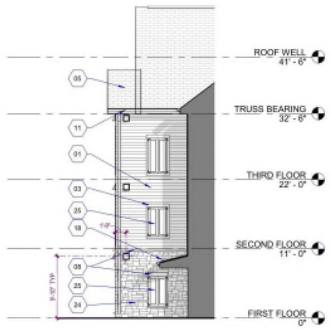

3 ELEVATION D2
A-202 SCALE: 1/8" = 1'-0"

2 ELEVATION D1
A-202 SCALE: 1/8" = 1'-0"

CH - EXTERIOR ELEVATION KEY NOTES (PUD / ENTITLEMENT)			
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13	SINGLE HUNG WINDOWS WITH TRANSOM (w/ SCREEN)	PLY-GEM	DARK BRONZE
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25	DECORATIVE SHUTTER WITH HARDWARE (PINTLES, STRAPS, AND STAYS)	BRISCOE SHUTTERS	NEAPOLITAN CUSTOM - LIGHT MAHOGANY
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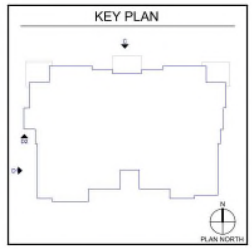
26	BALCONY DOORS W/ TRANSOM & SCREENS - 1" INSULATED LOW-E GLAZING	PELLA, JELD-WEN	SIDELIGHTS AND TRANSOM DARK BRONZE

1 ELEVATION C
A-202 SCALE: 1/8" = 1'-0"



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THOMPSON HANCOCK WITTE & ASSOCIATES, INC.

REF: A-202 EXTERIOR ELEVATIONS

Date: 01/06/2023
Project No.: 2020066

PROGRESS CONSTRUCTION DOCUMENTS

EXTERIOR ELEVATIONS

COVENANT LIVING OF NORTHBROOK CARRIAGE HOMES

2625 TECHNY ROAD
NORTHBROOK, IL 60062

2100 RiverEdge Parkway
Suite 900
Atlanta, GA 30328

PH: 770 916 2220
FAX: 770 916 2299

www.thw.com

THW DESIGN

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REF: MARKETING RENDERINGS

Date: 01/06/2023
Project No.: 2020066

PROGRESS CONSTRUCTION DOCUMENTS

CARRIAGE HOME COLORED ELEVATIONS

COVENANT LIVING OF NORTHBROOK CARRIAGE HOMES

2625 TECHNY ROAD
NORTHBROOK, IL 60062

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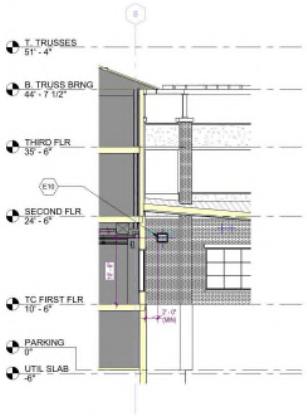
5 LOUVER 1 AT EXISTING FACADE
SCALE: 1/8" = 1'-0"

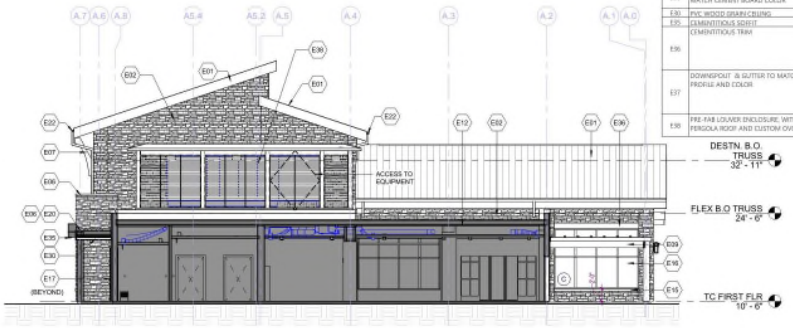


6 LOUVER 2 AT EXISTING FACADE
SCALE: 1/8" = 1'-0"

TC - EXTERIOR ELEVATION KEY NOTES (PUD / ENTITLEMENT)

NOTE #	MATERIAL / DESCRIPTION	MANUFACTURE	COLOR / TEXTURE
E01	INSULATED STANDING SEAM METAL ROOF	BERRIDGE, CENTRIA OR PETERSON	DARK BRONZE / TSE PANELS
E02	MANUFACTURED STONE VENEER	STONECRAFT	CHARCONWAY HERITAGE / 2"-8" IN HT. AND 5"-17" IN LENGTH VARIED PATTERN
E03	PRECAST STONE BASE	STONECRAFT	CREAM / CAST STONE
E04	HIGH PRESSURE METAL LAMINATE PANELS	TRESPA	LIGHT MAHOGANY / MISTEON WOOD DECOR
E05	NON- INSULATED STANDING SEAM METAL ROOF	BERRIDGE, CENTRIA OR PETERSON	DARK BRONZE / TSE PANELS
E06	METAL COPING	CARLISLE	DARK BRONZE / SMOOTH
E07	CUSTOM FIB RGLASS / PVC BRACKET	STRUWARES, DEENA, OR IDDIN	LIGHT MAHOGANY / SMOOTH
E08	EIFS SYSTEM, THICKNESS AS NOTED ON DRAWINGS	STO THERM O	SW7036 ACCESSIBLE BEIGE
E09	ALUMINUM PERGOLA	REFLECTION ARCHITECTURAL SYSTEMS	DARK BRONZE
E10	LOUVER, PROVIDE FREE AREA PER MECHNICAL DRAWINGS	RUSKIN	COLOR TO BE FIELD MATCHED TO EXISTING BRICK
E11	CAST STONE BANDING	STONECRAFT	CREAM / CAST STONE
E12	TPO ON TOP OF RIGID INSULATION PER ECC WITH BALLAST	CARLISLE	WHITE W/ 1"-2" NATURAL RIVER ROCK
E13	TRIANGLE LOUVER, PAINT TO MATCH BOARD & BATTEN SIDING, PROVIDE INSECT SCREEN @ 75.9 FREE AREA (MIN)	RUSKIN, DEENA	SW7036 ACCESSIBLE BEIGE
E14	BOARD AND BATTEN SIDING	HARDIE	SW7036 ACCESSIBLE BEIGE
E15	CAST STONE SILL	STONECRAFT	CREAM / CAST STONE
E16	INSULATED STOREFRONT W/ 1" INSULATED LOW-E GLAZING	KAWNEER - 601-T THERMAL	DARK BRONZE @ DINING EXPANSION / WHITE AT PERGOLA ENTRY (TO MATCH EXISTING ADJACENCY)
E17	INSULATED STOREFRONT ENTRY W/ 1" INSULATED LOW-E GLAZING.	KAWNEER - 601-T THERMAL - 350T	DARK BRONZE @ DINING EXPANSION / WHITE AT PERGOLA ENTRY (TO MATCH EXISTING ADJACENCY)
E18	VERTICAL FOLDING DOOR W/ 1" INSULATED GLAZING LOW-E GLAZING	SOVEREIGN AUTOMATIC BIFOLD DOORS	DARK BRONZE
E19	CUSTOM CHIMNEY CAP W/ S-HROUD W/ PRECAST CROWN SURROUND	CYPRESS METAL	BLACK
E20	TPO W/ RIGID INSULATION	CARLISLE	WHITE
E21	WALL SYSTEM W/ 1" INSULATED LOW E-GLAZING	NANA WALL / EURO-WALL	DARK BRONZE
E22	GUTTER AND DOWNSPOUT SYSTEM CONNECTED TO STORM WATER SYSTEM	BERRIDGE, CENTRIA OR PETERSON	K-STYLE GUTTERS W/ ROUND DS DARK BRONZE
E23	CEMENTITIOUS COLUMN ENCLOSURE	HARDIE	SW 7020 BLACK FOX
E24	EXTERIOR GRADE DECORATIVE LIGHTING	HINKLEY - HARBOR LINE	SATIN BLACK W/ ETCHED SEED BOUND GLASS
E25	SLIDING DOORS WITH 1" INSULATED LOW-E GLAZING & BREAKAWAY	HORTON	WHITE TO MATCH EXISTING WINDOWS ADJACENT TO...
E26	INSULATED STOREFRONT ENTRY W/ 1" INSULATED LOW-E GLAZING & TRANSOM	KAWNEER 601-T THERMAL -	DARK BRONZE
E27	CEMENTITIOUS BOARD AND BATTEN CEILING	HARDIE	SW 7036 ACCESSIBLE BEIGE
E28	BARRIER FREE AUTOMATIC DOOR OPENER	HORTON	ANODIZED PUSH-PLATE W/ BLUE LETTERING
E29	CEMINT BOARD W/ GALV. METAL FLASHING TO MATCH CEMENT BOARD COLOR	HARDIE	TO MATCH ADJACENT SURFACE
E30	PVC WOOD GRAIN CEILING	VERSATEX CANVAS SERIES	LIGHT MAHOGANY
E31	CEMENTITIOUS SOFFIT	HARDIE	TO MATCH ADJACENT SURFACE
E32	CEMENTITIOUS TRIM	HARDIE	DARK BRONZE OR SW7015 AESTHETIC WHITE - (DEPENDING ON LOCATION, SEE RENDERINGS)
E33	DOWNSPOUT & GUTTER TO MATCH EXISTING PROFILE AND COLOR	BERRIDGE, CENTRIA OR PETERSON	K-STYLE GUTTERS W/ SQUARE DS TO MATCH EXISTING PROFILE & FINAL COLOR TO BE FIELD MATCHED (TAUPE)
E34	PRE-FAB LOUVER ENCLOSURE, WITH MOTORIZED PERGOLA ROOF AND CUSTOM OVERHANG	STRUKURE - ALUMINUM	DARK BRONZE

1 DINING EXPANSION - SW ELEVATION
SCALE: 1/8" = 1'-0"

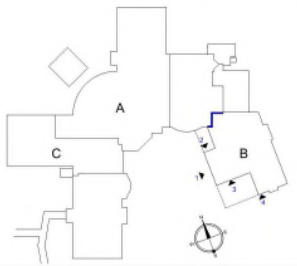


2 DINING EXPANSION - NW ELEVATION / SECTION
SCALE: 1/8" = 1'-0"

3 DINING EXPANSION - SE FS PORCH
SCALE: 1/8" = 1'-0"

4 DINING EXPANSION - SE ELEVATION
SCALE: 1/8" = 1'-0"

KEY PLAN



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REF: A-200 EXTERIOR ELEVATIONS

PROGRESS CD SET

Date: 01/06/2023
Project No.: 2020066

EXTERIOR ELEVATIONS

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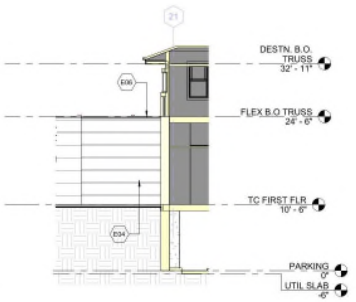
1 DINING EXPANSION -NE ELEVATION
SCALE: 1/8" = 1'-0"



2 DINING - N ELEVATION
SCALE: 1/8" = 1'-0"

3 EXISTING EAST ELEVATION
SCALE: 1/8" = 1'-0"

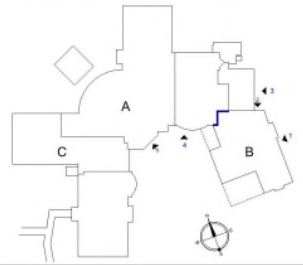
4 EXT. ELEV. - WNDW INFILL AT SEATING 152 & VESTIBULE 151
SCALE: 1/8" = 1'-0"

5 EXT. ELEV. OF WNDW INFILL AT LIVING RM 150
SCALE: 1/8" = 1'-0"

TC - EXTERIOR ELEVATION KEY NOTES (PUD / ENTITLEMENT)

NOTE #	MATERIAL / DESCRIPTION	MANUFACTURE	COLOR / TEXTURE
E01	INSULATED STANDING SEAM METAL ROOF	BERRIDGE, CENTRIA OR PETERSON	DARK BRONZE / TSE PANELS
E02	MANUFACTURED STONE VENEER	STONECRAFT	CHARDONNAY HERITAGE / 2"-8" IN HT. AND 3"-17" IN LENGTH VARIED PATTERN
E03	PRECAST STONE BASE	STONECRAFT	CREAM / CAST STONE
E04	HIGH PRESSURE METAL LAMINATE PANELS	TREOPA	LIGHT MAHOGANY / MITEON WOOD DECOR
E05	NON-INSULATED STANDING SEAM METAL ROOF	BERRIDGE, CENTRIA OR PETERSON	DARK BRONZE / TSE PANELS
E06	METAL COPING	CARLISLE	DARK BRONZE / SMOOTH
E07	CUSTOM FIBERGLASS / PVC BRACKET	STROMBERG, EKENA, OR EDON	LIGHT MAHOGANY / SMOOTH
E08	EIFS SYSTEM. THICKNESS AS NOTED ON DRAWINGS	STO THERM CI	SW7006 ACCESSIBLE BEIGE
E09	ALUMINUM PERGOLA	PERFECTION ARCHITECTURAL SYSTEMS	DARK BRONZE
E10	LOUVER. PROVIDE FREE AREA PER MECHNICAL DRAWINGS	RUSKIN	COLOR TO BE FIELD MATCHED TO EXISTING BRICK
E11	CAST STONE BANDING	STONECRAFT	CREAM / CAST STONE
E12	TPO ON TOP OF RIGID INSULATION PER IECC WITH BALLAST	CARLISLE	WHITE W/ 1"-2" NATURAL RIVER ROCK
E13	TRIANGLE LOUVER, PAINT TO MATCH BOARD & BATTEN SIDING. PROVIDE INSECT SCREEN & 78.9 FREE AREA (NFA)	RUSKIN, EKENA	SW7036 ACCESSIBLE BEIGE
E14	BOARD AND BATTEN SIDING	HARDIE	SW7036 ACCESSIBLE BEIGE
E15	CAST STONE SILL	STONECRAFT	CREAM / CAST STONE
E16	INSULATED STOREFRONT W/ 1" INSULATED LOW-E GLAZING	KAWNEER - 601-T THERMAL	DARK BRONZE @ DINING EXPANSION / WHITE AT PERGOLA ENTRY (TO MATCH EXISTING ADJACENCY)
E17	INSULATED STOREFRONT ENTRY W/ 1" INSULATED LOW-E GLAZING.	KAWNEER - 601-T THERMAL - 350T	DARK BRONZE @ DINING EXPANSION / WHITE AT PERGOLA ENTRY (TO MATCH EXISTING ADJACENCY)
E18	VERTICAL FOLDING DOOR W/ 1" INSULATED GLAZING LOW-E GLAZING	SOVERSIGN AUTOMATIC BIFOLD DOORS	DARK BRONZE
E19	CUSTOM CHIMNEY CAP W/ SHROUD W/ PRECAST CROWN SURROUND	CYPRESS METAL	BLACK
E20	TPO W/ RIGID INSULATION	CARLISLE	WHITE
E21	WALL SYSTEM W/ 1" INSULATED LOW E GLAZING	NANA WALL / EURO-WALL	DARK BRONZE
E22	GUTTER AND DOWNSPOUT SYSTEM CONNECTED TO STORM WATER SYSTEM	BERRIDGE, CENTRIA OR PETERSON	K-STYLE GUTTERS W/ ROUND DS DARK BRONZE
E23	CEMENTITIOUS COLUMN ENCLOSURE	HARDIE	SW 7008 BLACK FOX
E24	EXTERIOR GRADE DECORATIVE LIGHTING	HINKLEY - HARBOR LINE	SATIN BLACK W/ ETCHED SEED BOUND GLASS
E25	SLIDING DOORS WITH 1" INSULATED LOW-E GLAZING & BREAKAWAY	HORTON	WHITE TO MATCH EXISTING WINDOWS ADJACENT TO...
E26	INSULATED STOREFRONT ENTRY W/ 1" INSULATED LOW-E GLAZING & TRANSOM	KAWNEER 601-T THERMAL -	DARK BRONZE
E27	CEMENTITIOUS BOARD AND BATTEN CEILING	HARDIE	SW 7036 ACCESSIBLE BEIGE
E28	BARRIER-FREE AUTOMATIC DOOR OPENER	HORTON	ANODIZED PUSH PLATE W/ BLUE LETTERING
E29	CEMENT BOARD W/ GALV. METAL FLASHING TO MATCH CEMENT BOARD COLOR	HARDIE	TO MATCH ADJACENT SURFACE
E30	PVC WOOD GRAIN CEILING	VERSATEX CANVAS SERIES	LIGHT MAHOGANY
E31	CEMENTITIOUS SOFFIT	HARDIE	TO MATCH ADJACENT SURFACE
E36	CEMENTITIOUS TRIM	HARDIE	DARK BRONZE OR SW7035 AESTHETIC WHITE - (DEPENDING ON LOCATION, SEE RENDERINGS)
E37	DOWNSPOUT & GUTTER TO MATCH EXISTING PROFILE AND COLOR	BERRIDGE, CENTRIA OR PETERSON	K-STYLE GUTTERS W/ SQUARE DS TO MATCH EXISTING PROFILE & FINAL COLOR TO BE FIELD MATCHED (TAUPE)
E38	PRE-FAB LOUVER ENCLOSURE, WITH MOTORIZED PERGOLA ROOF AND CUSTOM OVERHANG	STRUXURE - ALUMINUM	DARK BRONZE

KEY PLAN



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REF: A-201 EXTERIOR ELEVATIONS

PROGRESS CD SET

Date: 01/06/2023
Project No.: 2020066

EXTERIOR ELEVATIONS

COVENANT LIVING OF NORTHBROOK - TOWN CENTER

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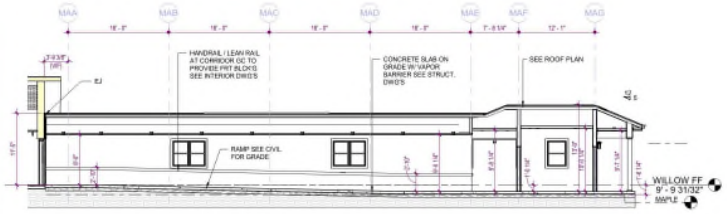
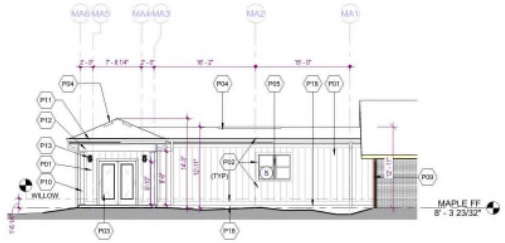
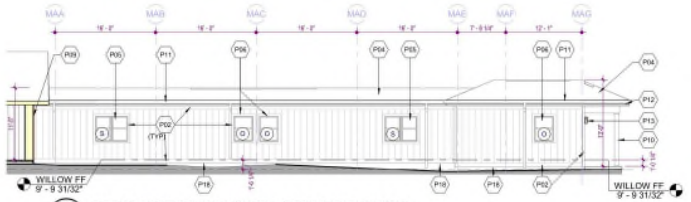


7 BUILDING SECTION - EAST TO WEST
SCALE: 1/8" = 1'-0"

6 SE PEDESTRIAN WALKWAY - NORTH ELEVATION
SCALE: 1/8" = 1'-0"

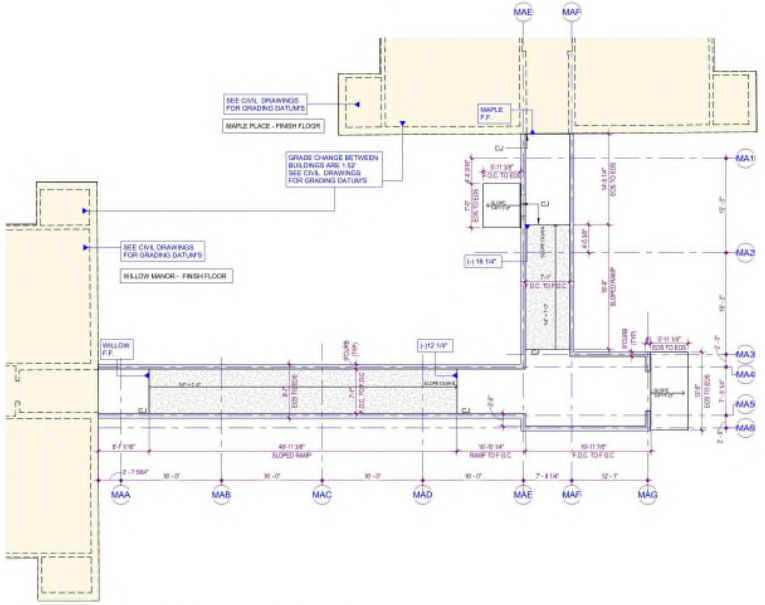


5 SE PEDESTRIAN WALKWAY - EAST ELEVATION
SCALE: 1/8" = 1'-0"

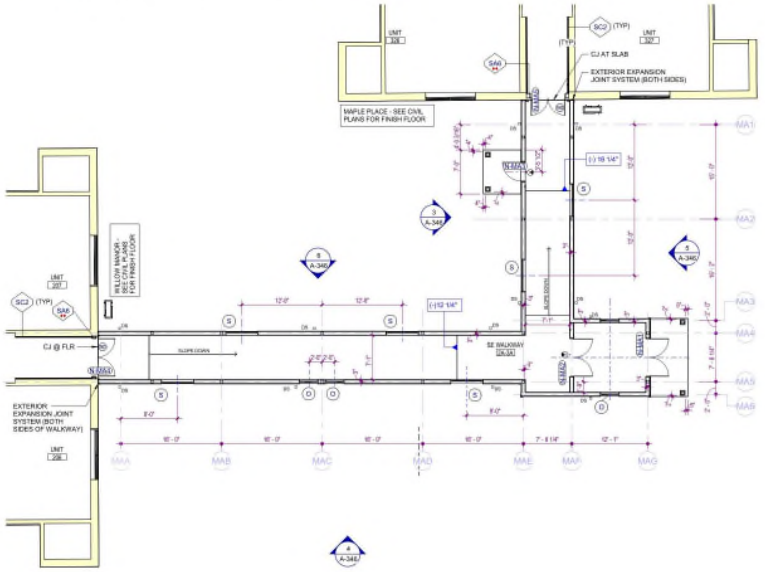


4 SE PEDESTRIAN WALKWAY - SOUTH ELEVATION
SCALE: 1/8" = 1'-0"

3 SE PEDESTRIAN WALKWAY - WEST ELEVATION
SCALE: 1/8" = 1'-0"



2 SE PEDESTRIAN WALKWAY SLAB PLAN
SCALE: 1/8" = 1'-0"



1 SE PEDESTRIAN WALKWAY PLAN
SCALE: 1/8" = 1'-0"

PEDESTRIAN WALKWAYS EXTERIOR ELEVATION KEY NOTES (PUD / ENTITLEMENT)

NOTE	MATERIAL / DESCRIPTION	MANUFACTURE	COLOR / TEXTURE
P01	BOARD AND BATTEN SIDING	HARDIE	SW7015 ACCESSIBLE BEIGE
P02	FIBER CEMENT TRIM	HARDIE	SW7015 AESTHETIC WHITE
P03	DOUBLE STOREFRONT DOORS WITH LOW E GLAZING	KAWNEER 601-T THERMAL - 1SST	WHITE
P04	SHINGLE ROOF W/ RIGID FOAM INSULATION AND INSULATION BETWEEN CTSF TRUSSES	CERTAINTEED LANDMARK SERIES	DRIFTWOOD
P05	DOUBLE HUNG WINDOWS WITH LOW E GLAZING	PLY-GEM	WHITE
P06	SINGLE HUNG WINDOWS WITH LOW E GLAZING	PLY-GEM	WHITE
P07	SINGLE ENTRY DOOR, HALF LITE W/ LOW E GLAZING AT TOP PANEL	PELLA, RED-WEN OR KAWNEER	WHITE
P08	VISION SLATS IN COILING DOOR	OVERHEAD DOOR	INSULATED GLAZING
P09	EXTERIOR EXPANSION JOINT SYSTEM CONTINUOUS AT EXTERIOR WALL AND ROOF	CARLISLE / JOHNS MANVILLE / C/S INPRO	COLOR TO MATCH ADJACENT SURFACES
P10	PRE-FABRICATED PVC COLUMNS, FACTORY PRIMED. PAINT	FYPON / VERSAWRAP	SW7015 AESTHETIC WHITE
P11	GUTTER & DOWNSPOUT SYSTEM TO GRADE, PROVIDE SPLASH BLOCKS.	STORM MASTER GUTTERS	BRONZE - K-BOX GUTTERS W/ ROUND DOWN SPOUTS
P12	FIBER CEMENTITIOUS PANEL BOARD	HARDIE	SW 7035 AESTHETIC WHITE
P13	DECORATIVE LIGHTING	HINKLEY - HARBOR	SATIN BLACK W/ ETCHED SEED ROUND GLASS
P14	ALUMINUM GUARDRAILS AND OR HANDRAILS	BLUM, BLUMCRAFT, OR LAURENCE	WHITE
P15	CUSTOM BRACKETS	STROMBERG, EKENA, OR EDON	LIGHT MAHOGANY
P16	CONCRETE BOLLARDS W/ DECORATIVE COVER	RELIANCE FOUNDRY	BLACK
P17	AUTOMATIC OVERHEAD COILING DOOR AND OPENER, CONNECTED TO FIRE ALARM. PROVIDE KNOX BOX FOR FIRE MARSHAL	OVERHEAD DOOR	WHITE
P18	CONCRETE CURB WITH WATERSTOP. EXTERIOR FACE SHALL HAVE A TROWELED FINISH. PAINT WITH ELASTOMERIC PAINT. COLOR TBD.	GC	ELASTOMERIC PAINT TO MATCH BOARD AND BATTEN - SW 7036 ACCESSIBLE BEIGE
P19	EIFS SYSTEM	STO THERM CI	SW 7036 ACCESSIBLE BEIGE

SLAB GENERAL NOTES

GENERAL NOTE:
GC SHALL COORDINATE THE SLAB PENETRATIONS WITH OTHER TRADES, INCLUDING BUT NOT LIMITED TO, POWER, DATA, PLUMBING, MECHANICAL AND STRUCTURAL.

PHASING TO BE CONFIRMED PRIOR TO SLAB POUR. EOS DIMENSIONS COULD CHANGE BASED ON SEQUENCE.

GC TO COORDINATE FINAL LOCATION OF EXISTING WALLS TO SLAB EDGES.

EOS= EDGE OF SLAB
T.S.= TOPPING SLAB
CJ = CONTROL JOINT
F.O.C. = FACE OF CURB

- EXISTING WALL TO REMAIN - FIELD VERIFY
- EXISTING ELEVATED SLAB (VIF)
- EXISTING SLAB ON GRADE (VIF)
- SAW CUTTING OF SLAB
- CONTROL JOINTS (CJ)
- CONCRETE CURB W/ WATERSTOP TO FOLLOW GRADE
- SLAB ON GRADE SEE STRUCT. DWG'S
- SLOPED ELEVATED SLAB SEE STRUCT. DWG'S
- SLAB CUT
- RAMPS (EXISTING AND NEW) ALL RAMPS EXISTING TO REMAIN SHALL BE FIELD VERIFIED

PEDESTRAIN WALKWAY SYMBOLS

CEILING SYMBOLS: [SEE SHEET A-001 FOR A FULL LEGEND]

- RECESSED DOWNLIGHT FIXTURE
- EXTERIOR DECORATIVE LIGHTING
- EXTERIOR DECORATIVE PENDANT FIXTURE
- SUPPLY AIR GRILLE
- RETURN AIR GRILLE
- JUNCTION BOX
- SPRINKLER HEAD
- FIRE ALARM SPEAKER
- FIRE ALARM STROBE
- FIRE ALARM SPEAKER / STROBE
- CEILING MOUNTED EXIT SIGN
- WALL MOUNTED EXIT SIGN
- CAMERA
- CEILING TYPE / HEIGHT
- FINISH / FINISH NUMBER

ROOF SYMBOLS: [SEE SHEET A-001 FOR A FULL LEGEND]

- DOWNSPOUTS AND GUTTERS AS SPECIFIED
- EAVE VENTS INTEGRATED IN CEMENTIOUS SOFFIT
- RIDGE VENT
- VENT LENGTH IN FEET

PLAN SYMBOLS: [SEE SHEET A-001 FOR A FULL LEGEND]

- HANDRAIL / LEANRAIL SEE INTERIORS DWG'S
- DOOR LETTER & NUMBER
- WINDOW LETTER SEE SCHEDULE
- PREFIX / MODIFIER PARTITION TYPE FIRE RATING
- PARTITION TYPE INDICATOR

PEDESTRIAN WALKWAY FLOOR PLAN NOTES

1. EXTERIOR DIMENSIONS ARE FROM EXTERIOR FACE OF SHEATHING, EXTERIOR FACE OF CONCRETE BLOCK, AND EXTERIOR FACE OF CONCRETE.
2. INTERIOR DIMENSIONS ARE FROM FACE OF GYPSUM BOARD, FACE OF TILE BACKER BOARD, FACE OF SHEATHING, FACE OF CONCRETE BLOCK, AND FACE OF CONCRETE. WHERE MULTIPLE LAYERS OF GYPSUM BOARD, BACKER BOARD, AND/OR SHEATHING ARE LOCATED ON THE SAME SIDE OF A PARTITION, DIMENSION IS FROM THE FACE OF THE OUTERMOST LAYER.
3. PROVIDE PARTITION BRACING TO STRUCTURE AS REQUIRED FOR HORIZONTAL STABILIZATION. DO NOT FASTEN STUDS TO HEAD RUNNERS.
4. EXISTING BUILDINGS FINISH FLOOR ELEVATION VARY FROM BUILDING TO BUILDING. SEE CIVIL AND LAND PLANNING DRAWING FOR ADDITIONAL INFORMATION.
5. EXTERIOR WALKWAYS SHALL HAVE A CONTINUOUS CONCRETE CURB WITH WATER STOP AND WATERPROOFING AT LOCATIONS WHERE CONCRETE JOINTS ARE LOWER THAN GRADE. EXTERIOR WALL FRAMING SHALL BE INSTALLED ON TOP OF THE CURB, DUE TO VARIATION OF GRADE CHANGES. SEE LP AND CE FOR ADDITIONAL INFORMATION.
6. THE EXISTING END WALL CONDITION AT OAK, WILLOW, AND MAPLE, IS 8" CMU W/ 2" OF INSULATION AND 5/8" OF FIRE CODE GWB, RATED 2-HR PER 722.2.1.2. CONDITION TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
7. THE EXTERIOR SIDE WALLS AT OAK, WILLOW, AND MAPLE ARE EXISTING 2-5/8" BRICK W/ A 5/8" AIR GAP BEHIND 4" CMU.CONDITION TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
8. PROVIDE CONTINUOUS WALL FLASHING AND KICK-OUT FLASHING AT ROOF INTERSECTION TO WALL SURFACES AT EXISTING 1x10 CHANNEL LAP SIDING.
9. PROVIDE CONTINUOUS JOINT AT DOWELED IN SLAB. PROVIDE 2" CONTINUOUS EXPANSION JOINT AT WALL, ROOF AND CEILING. AT EXISTING BUILDINGS / WALKWAYS THAT JOIN NEW CONSTRUCTION WITH OLD.
10. SIDE ENTRIES OUT OF THE WEST WALKWAY SHALL BE CONNECTED TO SIDEWALKS. SEE LP AND CIVIL DRAWINGS. SOUTH AND SOUTHEAST SIDE ENTRIES SHALL BE EXIT OUT TO GRADE.
11. THE EXISTING PEDESTRIAN WALKWAY AT THE WEST, OVERALL WIDTH AND ROOF LINE IS TO ALIGN WITH RECONFIGURED WALKWAY. EXISTING CONNECTOR TO BE FIELD VERIFIED BY THE CONTRACTOR.

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REF: A-346 SOUTH EAST PEDESTRIAN WALKWAY

Date: 01/06/2023
Project No.: 2020066

PROGRESS CD SET

SOUTH EAST PEDESTRIAN WALKWAY PLANS & ELEVATIONS

NOTE: TYPICAL PEDESTRIAN WALKWAY ON CAMPUS TO BE SIMILAR FOR THE SOUTH AND WEST WALKWAYS. FINISHES TO BE NEUTRAL COLORS AS SHOWN ON THE COLORED ELEVATIONS

COVENANT LIVING OF NORTHBROOK - TOWN CENTER

2625 TECHNY ROAD, NORTHBROOK, IL 60062

2100 RiverEdge Parkway
Suite 900
Atlanta, GA 30328

PH: 770 916 2220
FAX: 770 916 2299

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REF: MARKETING RENDERINGS

Date: 01/06/2023
Project No.: 2020066

PROGRESS CD SET

DINING ADDITION COLORED ELEVATIONS

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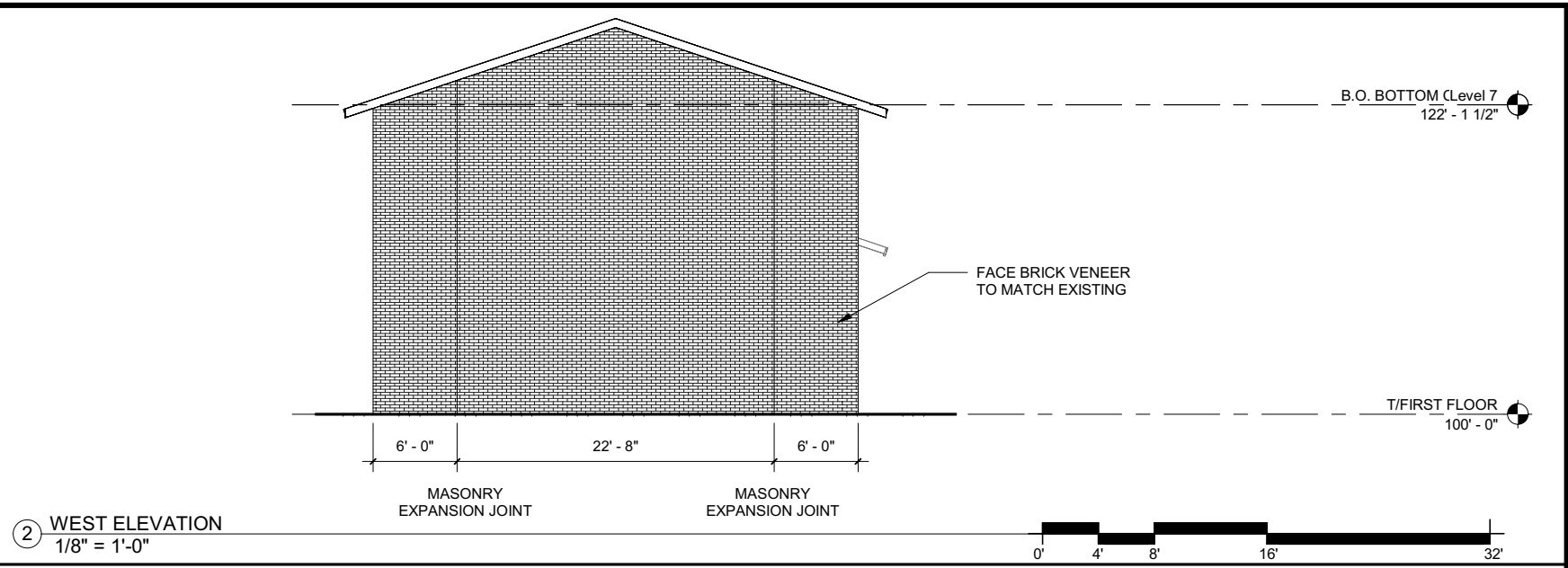
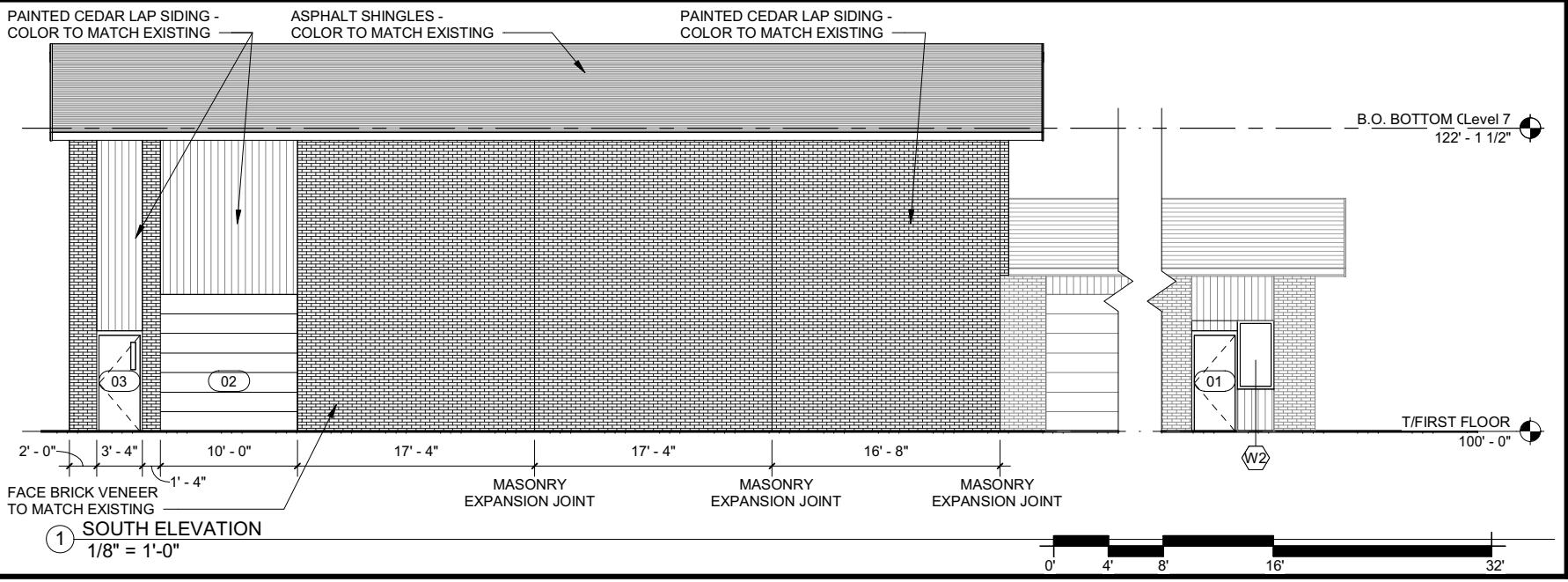


2 WEST ELEVATION
1/8" = 1'-0"



1 SOUTH ELEVATION
1/8" = 1'-0"

date
12/28/2022
revised

drawn by
RJP
checked by
EFG

BLDD ARCHITECTS
Design Firm Registration #184-000723

BUILDING ELEVATIONS

Maintenance Garage Addition
Covenant Living of Northbrook
Foxglove Drive, Northbrook, IL 60062

sheet
A201

project
224SX07.400

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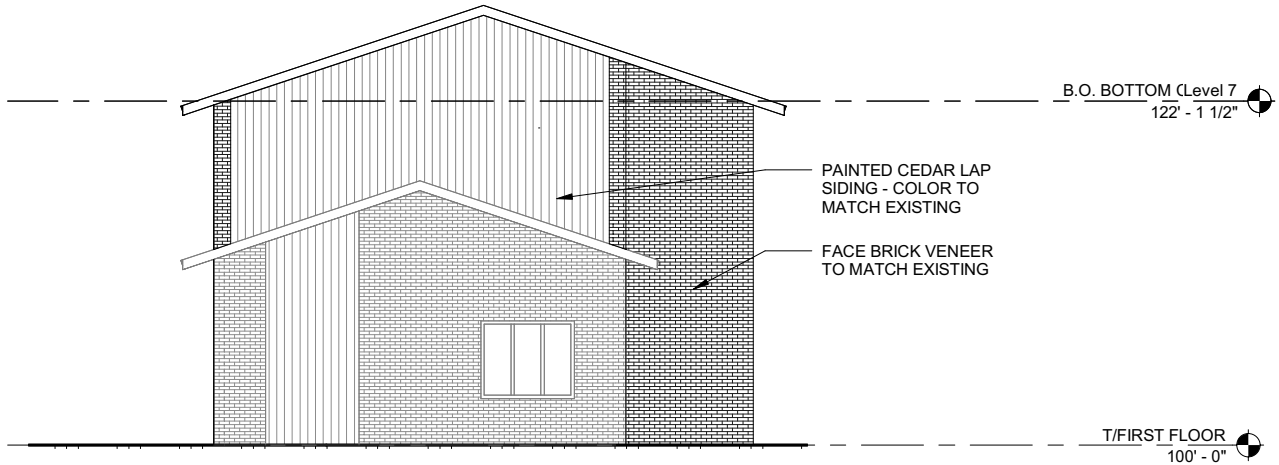
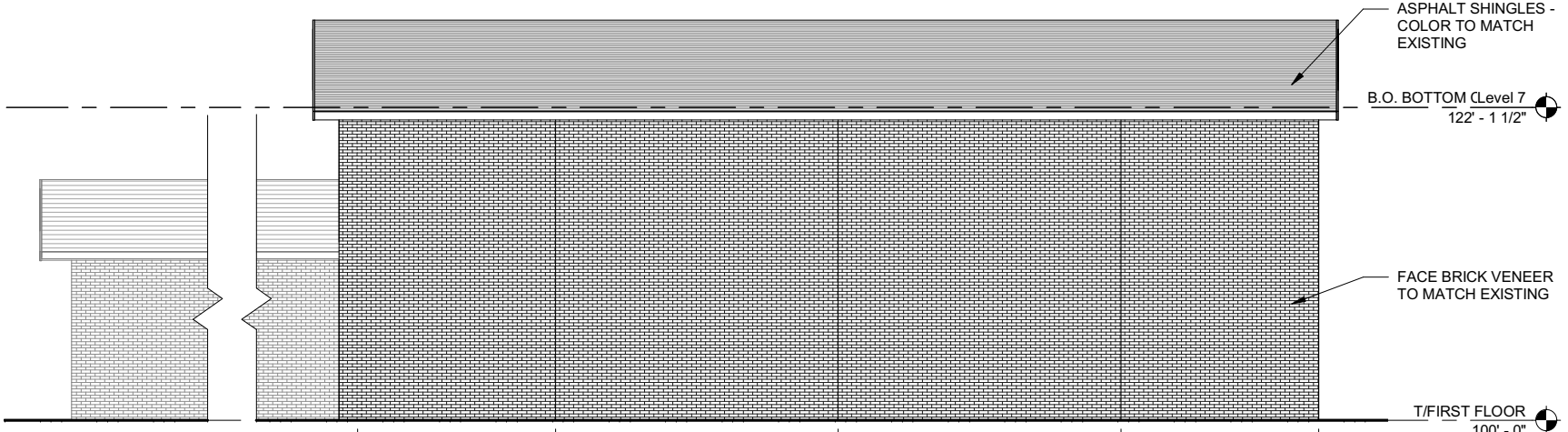


2 EAST ELEVATION
1/8" = 1'-0"

0' 4' 8' 16' 32'



1 NORTH ELEVATION
1/8" = 1'-0"

0' 4' 8' 16' 32'

date
12/28/2022
revised

drawn by
RJP
checked by
EFG

BLDD ARCHITECTS
Design Firm Registration #184-000723

BUILDING ELEVATIONS

Maintenance Garage Addition
Covenant Living of Northbrook
Foxglove Drive, Northbrook, IL 60062

sheet
A202

project
224SX07.400

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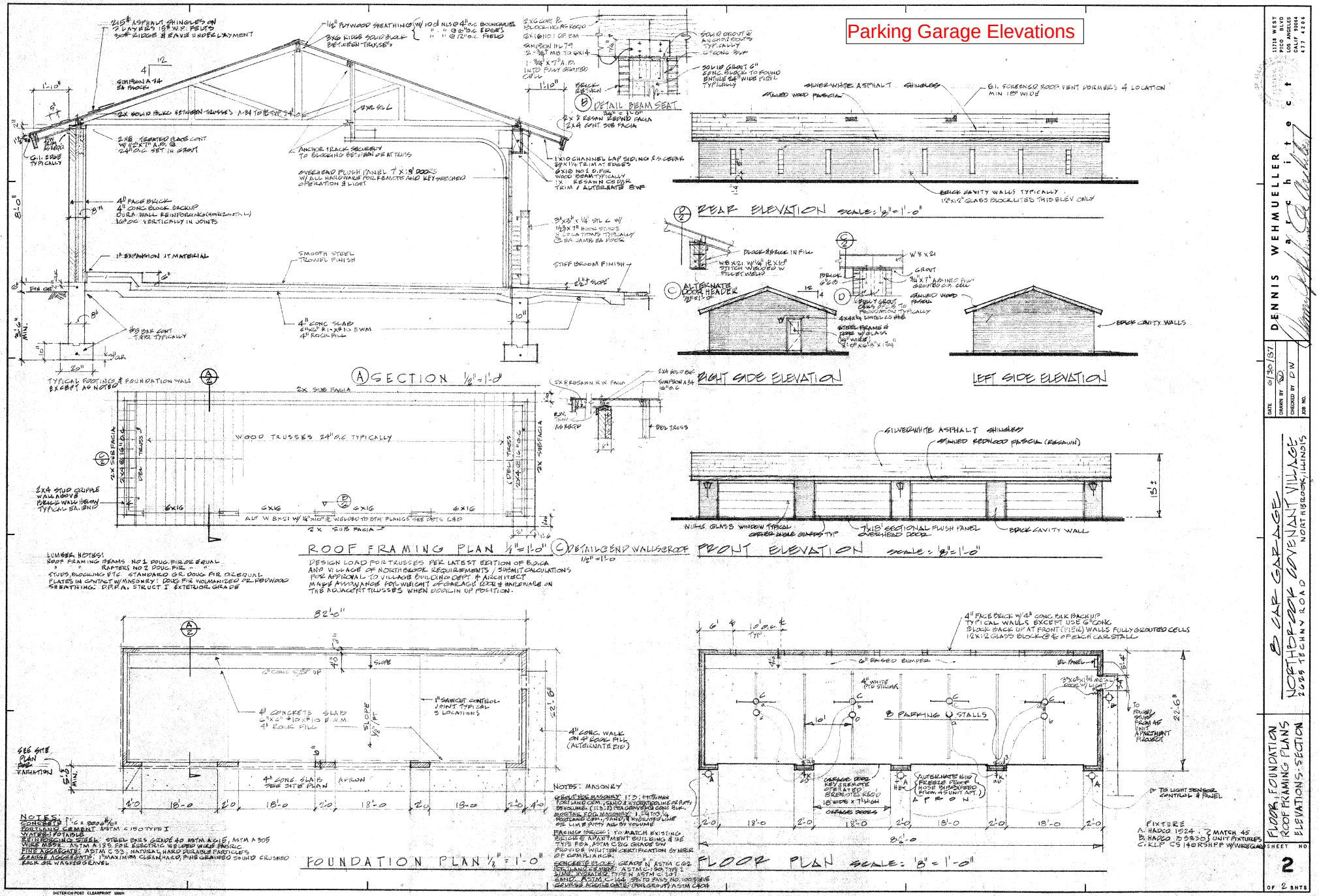
12/28/2022 3:30:13 PM C:\REVIT_TEMP\CLoN Maintenance Garage\224SX07.400 CLoN Maintenance Garage Addition - Revit 2022 - EFG.rvt

PROGRESS SET

Parking Garage Elevations



8 CAR GARAGE
NORTHBROOK COVENANT VILLAGE
2055 TECHNY ROAD NORTHBROOK, ILLINOIS

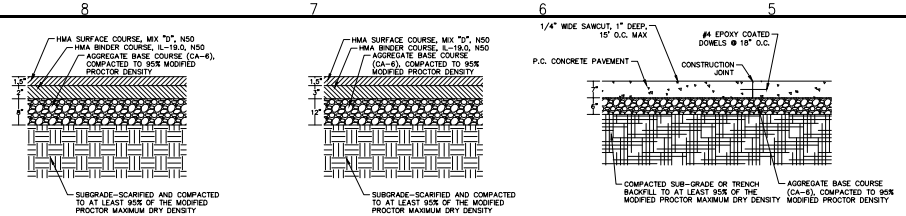
DENNIS WEHMUELLER architect
11118 WEST PICO BLVD LOS ANGELES CALIF 90064 477 4246

DATE 6/30/87
DRAWN BY
CHECKED BY DW
JOB NO.

FLOOR, FOUNDATION
ROOF FRAMING PLANS
ELEVATIONS & SECTION

SHEET NO 2 OF 2 SHTS

176

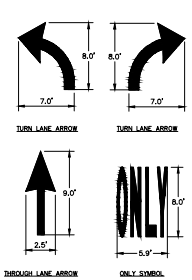


STANDARD DUTY ASPHALT PAVEMENT SECTION N.T.S. 10/19/20

HEAVY DUTY ASPHALT PAVEMENT SECTION N.T.S.

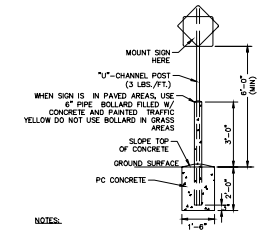
HEAVY DUTY CONCRETE PAVEMENT SECTION N.T.S.

PEDESTRIAN PATH ASPHALT PAVEMENT SECTION N.T.S. 10/19/20



NOTE: ALL TRAFFIC FLOW ARROWS TO BE PAINTED PER STATE DOT STANDARDS PER DIMENSIONS ABOVE.

TRAFFIC FLOW ARROW N.T.S.



NOTES:

POLE AND SIGN TO BE PROVIDED AND INSTALLED BY GENERAL CONTRACTOR.

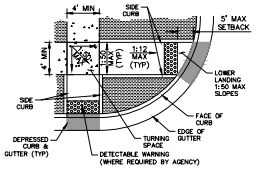
ALL SIGNS SHALL COMPLY WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED. MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

STANDARD SIGN BASE N.T.S.

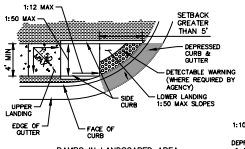
GENERAL NOTES:

1. THE MAXIMUM SLOPE OF THE SIDE FLARE FOR TYPE B RAMPS SHALL BE 1:10; HOWEVER, IF THE WIDTH OF THE LANDING AREA BETWEEN THE TOP OF THE RAMP AND AN OBSTRUCTION IS LESS TAN 1.2m (4'-0") THEN THE MAXIMUM SLOPE SHALL BE 1:12.
2. ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMNT (V:H).
3. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SHOWN.
4. RAMP DETAILS TO BE COORDINATED PER VILLAGE REQUIREMENTS.
5. DETECTABLE WARNINGS SHALL CONSIST OF TRUNCATED DOMES WHICH CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT.
6. CONTRACTOR TO SELECT ADA DETECTABLE WARNING PERMEABLE PAVERS OR CONCRETE WITH ADA DETECTABLE WARNING DOMES FOR RAMPS.

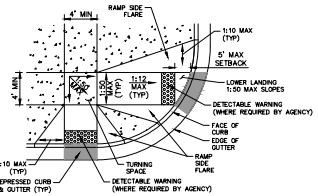
LEGEND
- SIDEWALK
- RAMP
- DETECTABLE WARNINGS
- NON WALKING AREA
- FACE OF BUILDING



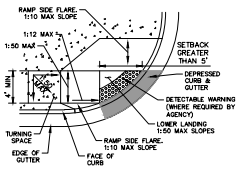
RAMPS IN LANDSCAPED AREA (SETBACK < 5')



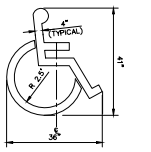
RAMPS IN LANDSCAPED AREA (SETBACK > 5')



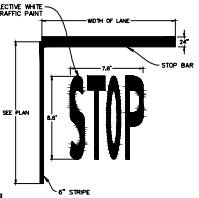
RAMPS IN PAVED AREA (SETBACK < 5')



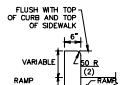
RAMPS IN PAVED AREA (SETBACK > 5')



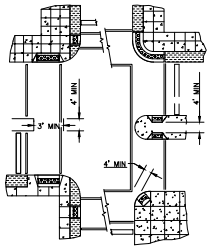
ACCESSIBLE PARKING SYMBOL N.T.S.



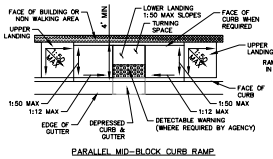
STOP BAR N.T.S.



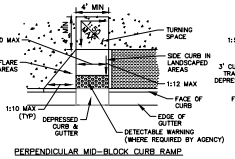
DETAIL OF SIDE CURB (SIDE CURB MAY BE CONSTRUCTED MONOLITHICALLY WITH RAMP)



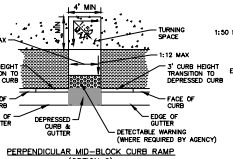
RECOMMENDED LOCATION OF RAMPS



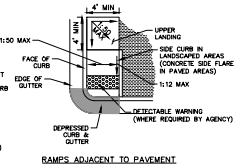
PARALLEL MID-BLOCK CURB RAMP



PERPENDICULAR MID-BLOCK CURB RAMP

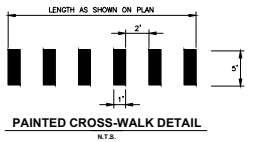


PERPENDICULAR MID-BLOCK CURB RAMP (OPTION 2)



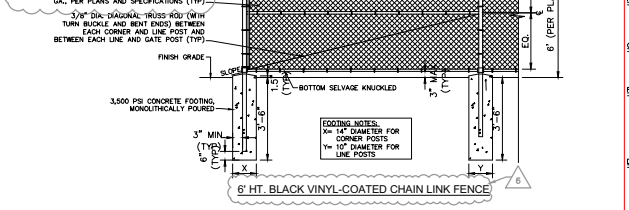
RAMPS ADJACENT TO PAVEMENT

SIDEWALK AND SIDEWALK RAMPS N.T.S.



PAINTED CROSS-WALK DETAIL N.T.S.

Stormwater Detention Fence



A CHAINLINK FENCE

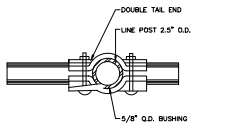
CHAIN-LINK-FENCE GENERAL NOTES:
1) THE CENTER LINE OF LINE POSTS IS THE LINE OF THE FENCE
2) ALL FENCE FASTENERS REQUIRING BOLTING SHALL HAVE THE NUTS SPOTWELDED TO PREVENT THEFT
3) ALL FENCE CAPS SHALL BE SPOTWELDED
4) SEE SPECS FOR MATERIAL REQUIREMENTS
5) INSTALL CHAIN LINK FABRIC ON THE BASEBALL PLAYING FIELD SIDE OF FENCE
6) INSTALL CHAIN LINK FABRIC ON PARK DISTRICT PROPERTY SIDE OF THE FENCE

PIPE NOTES:
4) ALL PIPE TO BE WROUGHT STEEL, FINISH TO BE HOT DIP GALVANIZED OR VINYL COATED PER PLANS
5) SIZE AS SHOWN ON DETAILS OF THIS SHEET

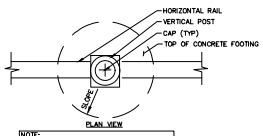
GATE NOTES:
6) ALL GATES SHALL BE PROPERLY BRACED AND SUPPORTED TO PREVENT SAGGING AND EQUIPPED WITH HEAVY DUTY HINGES TO MAINTAIN ALIGNMENT AND FREE SWING ACTION

FITTING NOTES:
7) ALL FITTINGS TO BE EQUIPPED WITH NUTS AND BOLTS AS REQUIRED FOR ERECTION, (ALL GALV. OR POWDER COATED BLACK). CLAMPS & CAPS TO BE MALLEABLE IRON, GALVANIZED OR POWDER COATED BLACK. BANDS TO BE WROUGHT STEEL, GALVANIZED. LOCKING DEVICE TO BE ADAPTABLE FOR PADLOCKING. CARRIAGE BOLTS & NUTS TO BE 3/8" DIA GALV. STEEL OF PROPER LENGTH

DESIGN INTENT:
8) THIS DETAIL IS PROVIDED FOR DESIGN INTENT ONLY. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

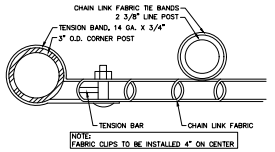


B MIDDLE AND BOTTOM RAIL TO POST ATTACHMENTS



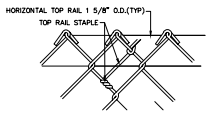
NOTE: END CAPS TO BE INSTALLED ON ALL OPEN END PIPES, POSTS, AND RAILS (TYP.)

E END CAP ATTACHMENTS

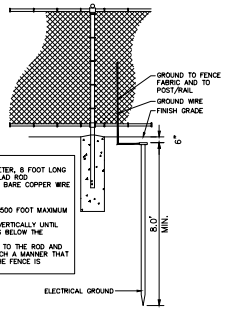


NOTE: FABRIC CLIPS TO BE INSTALLED 4" ON CENTER

C CHAIN LINK TO CORNER POST ATTACHMENTS



D CHAIN LINK TO TOP RAIL ATTACHMENTS



MATERIAL
GROUND ROD: 5/8" DIAMETER, 8 FOOT LONG COPPER-CLAD ROD
GROUND WIRE: NO. 6 AWG BARE COPPER WIRE

NOTES:
1. INSTALL GROUND AT 500 FOOT MAXIMUM INTERVALS.
2. DRIVE GROUND ROD VERTICALLY UNTIL THE TOP IS 6 INCHES BELOW THE GROUND SURFACE.
3. CLAMP GROUND WIRE TO THE ROD AND TO THE FENCE IN SUCH A MANNER THAT EACH ELEMENT OF THE FENCE IS GROUNDED.

F ELECTRICAL GROUND

NO.	DATE	DESCRIPTION
3	3/31/22	VILLAGE ENGINEERING COMMENTS
2	2/3/23	VILLAGE ENGINEERING COMMENTS
1	1/6/23	DD ISSUANCE
9	9/30/22	PROGRESS CD'S
8	8/22/22	50% CD'S
7	6/23/22	DD ISSUANCE
6	6/10/22	DD ISSUANCE
5	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK

2625 TECHNY RD, NORTHBROOK, IL 60062

Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
4201 WINFIELD ROAD, SUITE 600
WARRENVILLE, IL 60555
PHONE: 630-487-5550
WWW.KIMLEY-HORN.COM

THW DESIGN

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FAX: 770 916 2299
www.thw.com

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

CONSTRUCTION DETAILS

Sheet No.: C6.0

K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\PlanSheets\C6.0 CONSTRUCTION DETAILS.dwg

EXHIBIT C

SITE PLAN

BULK, SPACE AND YARD REQUIREMENTS	R-8	PROPOSED DEVELOPMENT
A. MAXIMUM HEIGHT (WHICHEVER IS LESS)		
1. FEET	65	52'7"
2. STORIES	5	3
B. MINIMUM LOT AREA AND DIMENSIONS		
1. TOTAL LOT AREA (SQUARE FEET)		
A. PLANNED DEVELOPMENT	150,000	51.2 AC
B. INDEPENDENT SENIOR LIVING FACILITY	100,000	51.2 AC
2. GROSS LOT AREA PER DWELLING UNIT (SQUARE FEET) [SEC. 6-110H.3.]		
A. INDEPENDENT SENIOR LIVING FACILITY	1,750	
B. ASSISTED LIVING FACILITY	1,750	
C. NURSING HOME FACILITY	1,750	
3. LOT WIDTH (FEET)		
ALL USES	60	2,033
C. MINIMUM YARDS & SETBACKS		
1. CORNER SIDE (FEET) ALL USES (TECHNY) [NEW CONSTRUCTION]		
A. YARD	25	10
B. SETBACK	25	70
2. FRONT (FEET) ALL USES (PFINGSTEN) [EXISTING CONDITIONS]		
YARD	25	18
SETBACK	25	30
3. INTERIOR SIDE (FEET) - SOUTH PROPERTY LINE		
YARD	6	190
SETBACK	6	188
4. REAR (FEET) - EAST PROPERTY LINE		
YARD	30	144
SETBACK	30	32
D. MINIMUM DWELLING UNIT SIZE		
1. INDEPENDENT SENIOR LIVING FACILITY	625	1,244 SF
E. MAXIMUM FLOOR AREA RATIO		
	0.6	0.32
F. MAXIMUM LOT COVERAGE		
	70	30

SITE LEGEND

- PUD BOUNDARY
- SETBACK LINE
- PROPOSED REDEVELOPMENT WITHIN PLANNED DEVELOPMENT AREA
- PROPOSED REDEVELOPMENT OUTSIDE OF PLANNED DEVELOPMENT AREA

GRAPHIC SCALE IN FEET
0 40 80 160

NORTH

BP: 10+00.00

EP: 22+60.71

EXISTING ENTRANCE TO REMAIN

EXISTING SIDEWALK TO REMAIN

375 LF OF STREAM IMPACTED

8'x4' BOX CULVERT

PROPOSED 5.0' SIDEWALK

4' EXISTING BLACK METAL FENCE

EX. HOUSE, TYP.

2535 TECHNY ROAD

2525 TECHNY ROAD

PROPOSED RELOCATED STREAM

6' EXISTING FLAT WOOD FENCE

8' PROPOSED TREX HORIZONS FENCE

REALIGNMENT OF MAYAPPLE LANE

2044 GREENVIEW RD

2050 GREENVIEW RD

2074 GREENVIEW RD

2090 GREENVIEW RD

2104 GREENVIEW RD

HOMES TO REMAIN

EXISTING STREAM

DETENTION AREA

VOLUME CONTROL AREA

PEDESTRIAN BRIDGE

STREAM TO REMAIN

8' TREX HORIZONS FENCE

MOVE-IN MOVE-OUT ENTRY

TOWN CENTER EXPANSION

PROPOSED SITE LIGHTING, TYP.

LOT WIDTH 2022.6'

4.5' EXISTING ROUNDED WOOD FENCE

6' PROPOSED BLACK CHAINLINK FENCE

PROPOSED SIDEWALK PATH

EXISTING 6' FLAT WOOD FENCE

PROPOSED EXPANDED PAVED LOT

PROPOSED MAINTENANCE GARAGE EXPANSION SLAB SIZE: 80'-0" X 40'-0"

PROPOSED PARKING GARAGE SLAB SIZE: 82'-0" X 27'-0"

PROPOSED PARKING STALLS

25.0' FRONT YARD/SETBACK

17.7' FRONT YARD

29.6' FRONT SETBACK

30.0' REAR YARD/SETBACK

32.9' REAR YARD SETBACK

574.60'

1364.55'

624.60'

348.85'

460.00'

689.60'

619.55'

N00°27'57"E 150.00'

HERETOFORE DEDICATED PER DOC. 27315702

HERETOFORE DEDICATED PER DOC. 16778498

MON AT CORNER

30' BUILDING LINE

35' BUILDING LINE

10' PUBLIC UTILITY EASEMENT

NO.	DATE	DESCRIPTION
6	6/29/23	MWRD REVIEW #1
5	6/2/23	DETENTION REVISION
4	5/9/23	WATERMAIN REROUTE
3	3/31/23	VILLAGE ENGINEERING COMMENTS
2	2/3/23	VILLAGE ENGINEERING COMMENTS
1	1/6/23	DD ISSUANCE
0	9/30/22	PROGRESS CD'S
B	8/22/22	50% CD'S
A	6/23/22	DD ISSUANCE
A	6/10/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK

2625 TECHNY RD, NORTHBROOK, IL 60062

Kimley»Horn

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THW DESIGN

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PRELIMINARY DRAWINGS. NOT TO BE USED FOR RECORDING, IMPLEMENTATION, REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

OVERALL EXHIBIT

Sheet No.: C-100

K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\Exhibits\2022-0111 Overall Site Plan.dwg

EXHIBIT D

DEVELOPMENT AGREEMENT

THIS DOCUMENT PREPARED BY AND AFTER RECORDING RETURN TO:

Steven M. Elrod
Elrod Friedman LLP
325 N. LaSalle Street, Suite 450
Chicago, Illinois 60654

DEVELOPMENT AGREEMENT

BY AND BETWEEN

THE VILLAGE OF NORTHBROOK

AND

COVENANT HOME D/B/A COVENANT LIVING OF NORTHBROOK

(2625 TECHNY ROAD, 2539 TECHNY ROAD,

2074 GREENVIEW ROAD, AND 2090 GREENVIEW ROAD)

DATED AS OF SEPTEMBER__, 2023

DEVELOPMENT AGREEMENT
BY AND BETWEEN THE VILLAGE OF NORTHBROOK
AND COVENANT HOME D/B/A COVENANT LIVING OF NORTHBROOK
(2625 Techny Road; 2539 Techny Road; 2074 Greenview Road;
and 2090 Greenview Road)

THIS DEVELOPMENT AGREEMENT ("***Agreement***") is dated as of the __ day of September, 2023 and is by and between the **VILLAGE OF NORTHBROOK,** an Illinois home rule municipal corporation ("***Village***"), and **COVENANT HOME D/B/A COVENANT LIVING OF NORTHBROOK**, an Illinois not-for-profit corporation ("***Developer***").

IN CONSIDERATION OF the agreements set forth in this Agreement, the receipt and sufficiency of which are mutually acknowledged, and pursuant to the Village's statutory and home rule powers, the parties agree as follows:

SECTION 1. RECITALS.*

A. Developer is the legal owner of that parcel commonly known as 2625 Techny Road ("***Existing Property***") upon which it operates an independent senior living community known as Covenant Living of Northbrook ("***Existing Planned Development***"). The Existing Planned Development is subject to Ordinance No. 63-14, which grants "Community Unit Plan" approval, now referred to as a "Planned Development", to the Existing Property ("***Approved Plan***"). Amendments, variations, alterations, and adjustments to the Approved Plan have been approved by the Village from time to time.

B. Developer has acquired title to three residential lots located immediately to the east of the Existing Property commonly known as 2539 Techny Road ("***Techny Road Residential Parcel***"); 2074 Greenview Road; and 2090 Greenview Road (collectively, the "***Greenview Road Properties***"). The Existing Property and Techny Road Residential Parcel are collectively referred to as the "***Combined Property***." The Greenview Road Properties will remain in the R-3 zoning district and will not be incorporated into the Existing Planned Development.

C. Developer is proposing to construct three, three-story senior independent living apartment buildings with a total of 36 units ("***New Apartment Buildings***") on the Existing Property and install certain stormwater drainage and detention improvements including the relocation of the Techny Creek and a large stormwater detention basin on portions of the Combined Property to serve the Existing Planned Development as modified by the addition of the New Apartment Buildings (collectively the "***New Development***"). The Existing Planned Development and the New Development are collectively referred to as the "***Covenant Living Planned Development***."

D. In order to develop the Combined Property as proposed, Developer has requested relief from, and approvals under, the Village's Zoning Code and the Subdivision Code.

E. On May 16, 2023, June 20, 2023 and July 18, 2023, the Plan Commission held a public hearing to consider Developer's request for the following zoning approvals: (i) an amendment to the Village's Comprehensive Plan to move from Single Family to Senior or Special Residential for three single family residential parcels; (ii) approval of a minor subdivision of three

*All capitalized words and phrases throughout this Agreement have the meanings set forth in the preamble above and in Section 2 of this Agreement, or as elsewhere specifically defined in this Agreement. If a word or phrase is not specifically defined in this Agreement, it has the meaning ascribed to it in the Village Code, Zoning Code, or Subdivision Code.

residential parcels; (iii) rezoning three R-3 Single Family Residential lots to R-8 Multi Family Residential (and adding the three lots into the Existing Planned Development); (iv) rezoning one R-2 Single Family Residential lot to R-8 Multi Family Residential (within Covenant Living Planned Development for existing conditions); (v) an amendment to an existing special permit for a planned development (Ordinance No. 63-14) in the R-8 Multi-Family Residential District to add three residential buildings with a total of 36 units, and to include three additional parcels into the planned development site plan; (vi) a Special Permit to allow for an Independent Senior Living Facility (SIC No. 9867.00) in the R-8 zoning district; (vii) variation to reduce the required corner side (Techny) yard from 25' to 10' and required front (Pfingsten) yard from 25' to 17; (viii) Site Plan approval for the New Development; and (ix) other variations, exceptions and relief as may be necessary based on the final plan (collectively, ***"Requested Relief***").

F. The Corporate Authorities, after due and careful consideration, have concluded that the development and use of the Combined Property pursuant to and in accordance with this Agreement would further enable the Village to control the development of the area and would serve the best interests of the Village.

G. The Village and Developer desire that the Combined Property be developed, used, operated, and maintained only in compliance with this Agreement.

SECTION 2. DEFINITIONS; RULES OF CONSTRUCTION.

A. Definitions. Whenever used in this Agreement, the following terms have the following meanings unless a different meaning is required by the context. All capitalized words and phrases throughout this Agreement have the meanings set forth in the preamble above and in this Section and the other provisions of this Agreement. If a word or phrase is not specifically defined in this Agreement, it has the meaning ascribed to it in the Village Code, Zoning Code, or Subdivision Code.

Affordable Housing Requirements: The affordable housing development standards adopted by the Village and set forth in Part III of Article IX of the Zoning Code.

Building Code: Chapter 6 of the Village Code.

Business Day: Any calendar day other than a Saturday, Sunday or legal holiday under the laws of the State of Illinois.

Combined Property: That certain tract of land, consisting of approximately 52.38 acres, located at the address commonly known as 2625 Techny Road; 2539 Techny Road; 2074 Greenview Road; and 2090 Greenview Road, in Northbrook, Illinois and legally described in **Exhibit A** attached to this Agreement.

Comprehensive Plan: Village of Northbrook Comprehensive Plan (2010), as amended.

Corporate Authorities: The President and Board of Trustees of the Village of Northbrook, Illinois.

Developer*:* Covenant Home d/b/a Covenant Living of Northbrook.

Development Approvals: Collectively, all ordinances, resolution, permits, and administrative approvals listed in Section 3 of this Agreement.

Effective Date: The date of execution of this Agreement by all of the Parties as set forth in the first paragraph of page one of this Agreement.

Events of Default: Defined in Section 16.A of this Agreement with respect to Developer and in Section 16.B of this Agreement with respect to the Village.

Final Development Plan: Collectively, those plans and specifications for the New Development to be approved by the Corporate Authorities pursuant to the Development Approvals, in accordance with Section 3.A of this Agreement and the Requirements of Law. Upon the date that all components of the Final Development Plan are approved, the Final Development Plan will, automatically and without further action by the Corporate Authorities or the Parties, be deemed to be incorporated in, and made a part of, this Agreement.

Final Engineering Plan: The engineering plan that receives the approval of the Corporate Authorities in accordance with and pursuant to Section 3.A of this Agreement and in accordance with the Requirements of Law. Upon such approval, the Final Engineering Plan will, automatically and without further action by the Corporate Authorities or the Parties, be deemed to be incorporated in, and made a part of, the Final Development Plan, and by extension, this Agreement.

Final Landscape Plan: The landscape plan that receives the approval of the Corporate Authorities in accordance with and pursuant to Section 3.A of this Agreement and in accordance with the Requirements of Law. Upon such approval, the Final Landscape Plan will, automatically and without further action by the Corporate Authorities or the Parties, be deemed to be incorporated in, and made a part of, the Final Development Plan, and by extension, this Agreement.

Final Plat: The plat that receives the approval of the Corporate Authorities in accordance with and pursuant to Section 3.A of this Agreement and in accordance with the Requirements of Law. Upon such approval, the Final Landscape Plan will, automatically and without further action by the Corporate Authorities or the Parties, be deemed to be incorporated in, and made a part of, the Final Development Plan, and by extension, this Agreement.

Final Site Plan: The site plan that receives the approval of the Village Engineer in accordance with and pursuant to Section 3.A of this Agreement and in accordance with the Requirements of Law. Upon such approval, the Final Site Plan will, automatically and without further action by the Corporate Authorities or the Parties, be deemed to be incorporated in, and made a part of, the Final Development Plan, and by extension, this Agreement.

Greenview Road Properties: The residential lots located immediately to the east of the Existing Property commonly known as 2074 Greenview Road; and 2090 Greenview Road.

Improvements: Except as specifically excepted in this definition, all of the public and private improvements and facilities necessary to serve the Combined Property, including, without limitation, the improvements specifically listed in Section 6 of this Agreement, all other storm water detention facilities, water mains, storm sewers, sanitary sewers, parking areas, lighting, sidewalks, access driveways, parkways, rough and final grading, trees, sod, seeding, and other landscaping, and all other improvements required pursuant to this Agreement and the Final Engineering Plan, the Final Landscape Plan and the Requirements of Law. The definition of "Improvements" does not include the New Apartment Buildings to be constructed on the Combined Property.

***Maintenance Guarantee*:** Defined in Section 12.D of this Agreement.

Municipal Code: The Northbrook Municipal Code (1988), as the same has been and may, from time to time hereafter, be amended.

OREA: That certain Operations and Reciprocal Easement Agreement that will be recorded against the Combined Property pursuant to Section 7 of this Agreement.

Parties: Developer and the Village, collectively.

Person: Any corporation, partnership, individual, joint venture, limited liability company, trust, estate, association, business, enterprise, proprietorship, governmental body or any bureau, department or agency thereof, or other legal entity of any kind, either public or private, and any legal successor, agent, representative, authorized assign, or fiduciary acting on behalf of any of the above.

Plan Commission: The Plan Commission of the Village, established by Section 2-551 of the Village Code.

***Public Improvements**:* Those Improvements that will be dedicated to, and accepted by, the Village.

Public Improvements Standards Manual: The Village of Northbrook Standards and Specifications for Public and Private Improvements, as amended.

Requirements of Law: All applicable laws, statutes, codes, ordinances, resolutions, rules, regulations, and policies of the Village and any federal, state, local government, or governmental agency with jurisdiction over the Combined Property.

***Site Restoration*:** Restoration work that may be required to be conducted on the Combined Property subject to the conditions of Section 5.G. of this Agreement.

Special Permit Ordinance: Ordinance No. 2023-____ An Ordinance Further Amending the Special Permit for a Planned Development and Final Plan Approval Granted by Ordinance No. 63-14 and Granting Approval of a Special Permit, Variations, and Site Plan Approval for Independent Living Senior Living Expansion.

Stormwater Detention Area: That portion of the Combined Property designed on the Final Plat for the construction, maintenance, and operation of stormwater detention facilities and subject to those covenants and easements set forth in the Declaration of Covenants.

***Stormwater Improvements*:** Those stormwater Improvements depicted on the Final Plat and Final Engineering Plans, and private storm sewers, related equipment, appurtenances, swales, mains, service lines, and storm drainage areas (including specifically, but without limitation, the Stormwater Detention Area) installed and maintained on the Combined Property to ensure adequate Stormwater drainage and management and to collect and direct Stormwater into the Village's or Cook County's storm sewer system, including, without limitation, the relocated above-ground stream.

***Structure*:** Anything constructed or erected, the use of which requires more or less permanent location on the ground, or anything attached to something having a permanent location

on the ground, but not including paving or surfacing of the ground. Structure shall in all cases be deemed to refer to both Structures and buildings, including, without limitation, the New Apartment Buildings.

Subdivision Code: The "Village of Northbrook Subdivision and Development Code," as amended.

Techny Road Residential Parcel: The residential lot located immediately to the east of the Existing Property commonly known as 2539 Techny Road.

Transferee Assumption Agreement: Defined in Section 14.B.4 of this Agreement.

Uncontrollable Circumstance: Any of the following events and circumstances that materially change the costs or ability of Developer to carry out its obligations under this Agreement:

a. a change in the Requirements of Law;

b. insurrection, riot, civil disturbance, sabotage, act of public enemy, explosion, nuclear incident, war, or naval blockade;

c. pandemic, epidemic, hurricane, tornado, landslide, earthquake, lightning, fire, windstorm, other extraordinary weather conditions preventing performance of work, or other similar act of God;

d. governmental condemnation or taking other than by the Village;

e. strikes or labor disputes, other than those caused by the unlawful acts of Developer, its partners, or affiliated entities;

f. delays caused by the breach of this Agreement or default under this Agreement by the Village;

g. governmental moratoriums;

h. inability to obtain any material or service due to shortages or supply chain disruption.

Uncontrollable Circumstance does not include: (i) delays caused by weather conditions, unless the weather conditions are unusually severe or abnormal considering the time of year and the particular location involved; (ii) economic hardship or economic conditions; or (iii) a failure of performance by a contractor (except as caused by events that are Uncontrollable Circumstances as to such contractor).

Vertical Construction**:** The construction of any portion of a Structure above grade level.

Village*:* The Village of Northbrook.

Village Attorney: The duly appointed Village Attorney of the Village.

Village Clerk: The duly elected Village Clerk of the Village.

Village Code: The "Village of Northbrook Code of Ordinances," as amended.

Village Engineer: The duly appointed Village Engineer of the Village.

Village Manager: The duly appointed Village Manager of the Village.

Zoning Code: The "Village of Northbrook Zoning Code," as amended.

B. Rules of Construction.

1. **Grammatical Usage and Construction.** In construing this Agreement, plural terms are to be substituted for singular and singular for plural, in any place in which the context so requires.

2. **Headings.** The headings, titles, and captions in this Agreement have been inserted only for convenience and in no way define, limit, extend, or describe the scope or intent of this Agreement.

3. **Calendar Days; Calculation of Time Periods.** Unless otherwise specified in this Agreement, any reference to days in this Agreement will be construed to be calendar days. Unless otherwise specified, in computing any period of time described in this Agreement, the day of the act or event on which the designated period of time begins to run is not to be included and the last day of the period so computed is to be included, unless the last day is a Saturday, Sunday or legal holiday under the laws of the State in which the Combined Property is located, in which event the period shall run until the end of the next day which is neither a Saturday, Sunday, or legal holiday. The final day of any period will be deemed to end at 5:00 p.m., Central prevailing time.

4. **Compliance and Conflict with Other Requirements.** Unless otherwise provided in this Agreement either specifically or in context, in the event of a conflict between or among this Agreement and any plan, document, or Requirement of Law referenced in this Agreement, the plan, document, or Requirement of Law that provides the greatest control and protection for the Village, as determined by the Village Manager, will control. All of the provisions set forth in this Agreement, and all referenced plans, documents, and Requirements of Law are to be interpreted so that the duties and requirements imposed by any one of them are cumulative among all of them, unless otherwise provided in this Agreement either specifically or in context.

SECTION 3. APPROVAL OF NEW DEVELOPMENT.

A. Prior Approvals. Immediately prior to the approval and execution of this Agreement, the Corporate Authorities adopted the following ordinances in connection with the New Development (collectively, the "***Prior Approvals***"):

1. Ordinance No. 2023-____ An Ordinance Amending the Comprehensive Plan of the Village of Northbrook;

2. Ordinance No. 2023-____ An Ordinance Rezoning the Property at 2539 Techny Road; 2074 Greenview Road; 2090 Greenview Road; and a portion of 2625 Techny Road and Amending the District Zoning Map;

4. The Special Permit Ordinance; and

5. Resolution No. 2023-R-____ A Resolution Approving a Final Plat of Subdivision.

B. Final Engineering and Landscape Plan Modifications. All revisions to any portion of the Final Engineering Plan or the Final Landscape Plan that are reviewed, accepted, and approved by either the Village Engineer or the Village's Director of Development and Planning Services subsequent to the Effective Date shall be incorporated into, and made a part of this Agreement with no further action required by the Corporate Authorities.

SECTION 4. DEVELOPMENT, USE, AND OPERATION OF THE COMBINED PROPERTY.

Notwithstanding any use or development right that may be applicable or available pursuant to the provisions of the Village Code, the Zoning Code, the Subdivision Code, or any other rights Developer may have, during the term of this Agreement, the Combined Property may be developed, used, operated, and maintained only pursuant to, and in accordance with, the terms and provisions of this Agreement and its exhibits, including, without limitation, the following development conditions. Development, use, operation, and maintenance of the Combined Property in a manner materially deviating from these conditions will be deemed a violation of this Agreement and Developer's obligations hereunder, as the case may be, and an Event of Default pursuant to Section 16.A of this Agreement, subject to any applicable notice or cure period.

A. General Use and Development Restrictions: The development, construction, operation, and maintenance of the Combined Property, except for minor alterations due to final engineering and site work approved by the Village Engineer or the Director of Planning and Development Services, as appropriate, must comply, and be in accordance, with the following:

1. This Agreement;
2. The Development Approvals;
3. The Final Plat;
4. The Final Engineering Plan;
5. The Final Landscaping Plan;
6. The Zoning Code;
7. The Building Code;
8. The Subdivision Code;
9. The Public Improvements Standards Manual;
10. The OREA; and
11. The Requirements of Law.

Unless otherwise provided in this Agreement, in the event of a conflict between or among any of the above plans or documents, the plan or document that provides the greatest control and

protection for the Village, as determined by the Village Manager, shall control. All of the above plans and documents shall be interpreted so that the duties and requirements imposed by any one of them are cumulative among all of them, unless otherwise provided in this Agreement.

B. Specific Use and Development Restrictions Concerning Property on Greenview Road.

1. For so long as the Approved Plan, as amended by the Special Use Ordinance, remains in full force and effect, Developer agrees to comply with the restriction on the Use of the Greenview Road Parcels as set forth in Section 9.7 of the Special Use Ordinance.

2. For so long as the Approved Plan, as amended by the Special Use Ordinance, remains in full force and effect, Developer agrees to comply with the restriction on the purchase of properties on Greenview Road as set forth in Section 9.8 of the Special Use Ordinance.

C. Tree Preservation, Removal and Demolition. Developer shall comply with the Final Landscape Plan, and all Requirements of Law in the preservation and removal of all trees on the Combined Property, including, without limitation, the requirements of Chapter 25 of the Municipal Code and Subsection 4-103 D of the Subdivision Code.

SECTION 5. DEMOLITION AND CONSTRUCTION OF NEW DEVELOPMENT.

A. General Construction and Contracting Requirements.

1. **Compliance with Plans and Approvals.** The development of the Combined Property must be designed and constructed pursuant to and in accordance with the Final Development Plan and the Development Approvals. All work must be conducted in a good and workmanlike manner and with due dispatch, subject to Uncontrollable Circumstances. All materials used for construction on the Combined Property must be in accordance with the specifications for the work to be performed.

2. **Contracts for Work on Combined Property.** Developer must include in every contract for work on the Combined Property terms requiring the contractor and its subcontractors to prosecute the work diligently, and in full compliance with, and as required by or pursuant to, this Agreement, the Development Approvals, and the Requirements of Law, until the work is properly completed, subject to Uncontrollable Circumstances, and terms providing that Developer may take over and prosecute their respective work if the contractor fails to do so in a timely and proper manner.

3. **Village Inspections and Approvals.** All work on the Combined Property will be subject to inspection and approval by Village representatives at all times, subject to Section 6.A.6 above.

4. **Designation of Contact Person.** Developer will ensure construction oversight in a manner that includes public outreach to residents that live within and adjacent to the Combined Property. The public outreach component will be critical for helping notify the public regarding information and updates relating to the construction and development of the Combined Property. In addition, Developer will ensure that all construction information is contained on a dedicated webpage that will be linked to the Village's website. The dedicated webpage will clearly identify a single point of contact for imminent construction issues (e.g. dust control). Developer will additionally ensure a single point of emergency contact for the Village's first responders

throughout construction. Following the completion of construction of the New Development, Developer must continue to designate an individuation as the contact person and provide their contact information prominently on its website to respond to and address any complaints from internal residents of Covenant Living, owners of adjacent property, or Village resident regarding compliance with this Agreement, including without limitation, landscaping, exterior property/façade maintenance and stormwater detention.

B. Limits on Vertical Construction. In addition to any other applicable provision of this Agreement and the Requirements of Law, the Developer may not commence any Vertical Construction, and the Village will have the right to refuse to issue a building permit for any Vertical Construction, unless the Village Manager has determined that the construction of the following Improvements is complete as required by this Agreement and Requirements of Law, except as may be authorized in writing by the Village Manager in their sole discretion:

1. the Stormwater Improvements, including, without the limitation, the completion of the stream relocation and approval of said relocation by all necessary permitting and governing bodies.

C. Diligent Pursuit of Construction.

1. Once construction has commenced pursuant to this Agreement, Developer must pursue, or cause to be pursued, all required development, demolition, construction, and installation of structures, buildings, and Improvements on the Combined Property in a diligent and expeditious manner, and in strict compliance with the Village Code and the Requirements of Law. Developer will conduct all construction work on the Combined Property in full compliance with the Village's permitted construction work hours regulations.

2. Developer must complete and make ready the Improvements for inspection, approval and, where appropriate, acceptance by the Village pursuant to the Improvement Construction Schedule. Developer may be allowed extensions of time beyond the completion dates set forth in such construction schedule only for unavoidable delay caused by Uncontrollable Circumstances or as may be reasonably approved by the Village Manager.

D. Construction Traffic.

1. **Construction and Traffic Management Plan.** Developer must prepare and submit, for review and approval by the Village Director of Development and Planning Services and the Village Engineer, a Construction and Traffic Management Plan (**"*CTM Plan*"**) for the development of the Combined Property. The CTM Plan will govern (i) the location, storage, and traffic routes for construction equipment and construction vehicles, and (ii) the location of alternative off-street parking during the construction. The Village has no obligation to issue a building permit for any structure or Improvement, and no construction may be commenced with respect to the Structure or Improvement, unless and until the Village Engineer has approved, in writing, the CTM Plan, which approval shall not be unreasonably withheld, conditioned, or delayed. The Village agrees to cause the CTM Plan to be promptly and expeditiously reviewed by the Village Engineer; provided, however, that nothing in this Agreement is to be deemed or interpreted to require the Village to approve the CTM Plan. Developer must comply with the CTM Plan, and failure to do so continuing beyond any applicable notice and cure period is a Developer Event of Default. The CTM Plan must include, without limitation, the following:

a. The schedule and traffic routes for construction traffic accessing the Combined Property;

b. The designation of machinery and construction material storage areas on the Combined Property;

c. Provisions for the screening of construction areas within the Combined Property;

d. The hours of operation and schedule for construction on the Combined Property;

e. The location of areas on the Combined Property for the parking of construction vehicles and vehicles operated by construction employees;

f. The location of alternative off-street parking to replace any parking temporarily lost due to construction; and

g. The location of temporary and durable off-street parking on the Combined Property for construction employees.

2. **Designated Routes of Access.** The Village reserves the right to designate certain prescribed routes of access to the Combined Property for construction traffic to provide for the protection of pedestrians and to minimize disruption of traffic and damage to paved street surfaces, to the extent practicable; provided, however, that the designated routes must not: (a) be unreasonably or unduly circuitous; nor (b) unreasonably or unduly hinder or obstruct direct and efficient access to the Combined Property for construction traffic.

3. **Maintenance of Routes of Access.** At all times during the construction of the Structures and Improvements, Developer must: (a) keep all routes used for Developer's construction traffic free and clear of mud, dirt, debris, obstructions, and hazards; and (b) repair any damage caused by such Developer's construction traffic.

E. Stormwater Management and Erosion and Dust Control During Construction. During construction of any of the structures or Improvements on the Combined Property, Developer must:

1. Install and implement such measures as necessary to temporarily divert or control any accumulation of stormwater away from or through the Combined Property in a manner approved in advance by the Village Engineer, which approval shall not be unreasonably withheld, conditioned, or delayed, which method of diversion must include early installation of storm drains to collect water and convey it to a safe discharge point;

2. Install erosion control devices as necessary to prevent silt, dirt, snow, water, ice, and other materials from leaving the site and traveling onto other properties. All debris, spoils, materials, and waste generated by demolition, grading, construction, installation and paving on the Combined Property must be properly removed or disposed of in accordance with the Requirements of Law; and

3. Mitigate dust, smoke, and other particulates resulting from construction activities.

All installations made pursuant to this Section 5.E must be maintained by Developer until all final certificates of occupancy have been issued by the Village for the Development, except as otherwise may be approved by the Village Manager.

F. Issuance of Permits and Certificates.

1. **General Right to Withhold Permits and Certificates**. In addition to every other remedy permitted by law for the enforcement of this Agreement, the Village has the absolute right to withhold the issuance of any building permit or certificate of occupancy for the New Development, at any time when, subject to applicable notice and cure provisions, if Developer has failed or refused to meet fully any of its respective obligations under, or is in violation of, or is not in full compliance with, the terms of this Agreement, the Development Approvals, or the Requirements of Law.

2. **Completion of Public Roads, Private Driveways, and Parking Areas.** No final certificate of occupancy associated with any new structure to be located on the Combined Property will be issued until the final grading, application of final surface course, and, where applicable, striping of parking space for the roads, driveways, and parking areas serving the uses within such structure has been completed.

G. Completion of Construction; Site Restoration.

1. **Removal of Partially Constructed Structures and Improvements.** Subject to Uncontrollable Circumstances, if Developer fails to diligently pursue all demolition and construction as required in, or permitted by, this Agreement to completion within the time period prescribed in the building permit or permits issued by the Village, and if a perfected application to renew the building permit or permits is not filed within 30 days after the expiration of the permit or permits, Developer must, within 90 days after notice from the Village: (a) remove any partially constructed or partially completed structures or Improvements from the Combined Property; and (b) perform Site Restoration on that portion of the Combined Property in which Developer has failed to complete all such demolition and construction, all in accordance with plans approved by the Village.

2. **Removal and Restoration by Village.** In the event Developer fails or refuses to remove any partially completed buildings, structures, and Improvements, or to perform Site Restoration, as required pursuant to Section 5.G.1 of this Agreement, the Village will have, and is hereby granted the right, at its option, to: (a) demolish and/or remove any of the partially completed structures and Improvements from any and all portions of the Combined Property; (b) perform Site Restoration of the portions of the Combined Property; and/or (c) cause the structures or Improvements on the portions of the Combined Property to be completed in accordance with the plans submitted. Developer must fully reimburse the Village for all costs and expenses, including reasonable legal and administrative costs, actually incurred by the Village for such work. If Developer does not so fully reimburse the Village, the Village will have the right to draw from the Guarantee and the Maintenance Guarantee, as described in and provided pursuant to Section 12 of this Agreement, an amount of money sufficient to defray the entire cost of the work actually incurred by the Village, including reasonable legal fees and administrative expenses. If Developer does not so fully reimburse the Village, and the Guarantee and Maintenance Guarantee have no funds remaining in them or are otherwise unavailable to finance such work, then the Village will have the right to place a lien on the Combined Property for all such costs and expenses in the manner provided by law. The rights and remedies provided in this Section 5.G.2 are in addition to, and not in limitation of, any other rights and remedies otherwise available to the Village in this Agreement, at law, and/or in equity.

H. Damage to Public Property. Developer must maintain the Combined Property and all streets, sidewalks, and other public property in and adjacent to the Combined Property in a good and clean condition at all times during the development of the Combined Property and construction of the New Development. Further, Developer must: (1) promptly clean all mud, dirt, or debris deposited on any street, sidewalk, or other public property in or adjacent to the Combined Property by Developer or any agent of or contractor hired by, or on behalf of, Developer; and (2) repair all damage caused by the activities of Developer or any agent of or contractor hired by, or on behalf of, Developer.

I. Tree Preservation. Developer must comply with all applicable tree preservation regulations set forth in Chapter 25 of the Village Code.

J. Exterior Lighting. All exterior lighting on the Combined Property must comply at all times with the lighting requirements in the Village Code and conform to the Photometric Plan included as part of the Final Development Plan.

K. As-Built Plans. After completion of construction of any new structure or Improvement, Developer must submit to the Village Director of Development and Planning Services: (1) final "as-built" plans related to drainage, grading, storm sewer, sanitary sewer and water mains, and associated structures; and (2) other final construction documents (in paper and, for Improvements, electronic format) as required and approved by the Village Engineer and the Village Director of Development and Planning Services. The as-built plans must indicate, without limitation, the amount, in square feet, of impervious surface area on the Combined Property. A licensed Professional Engineer ("***PE***") and Professional Land Surveyor ("***PLS***") registered in the State of Illinois must stamp the as-built site construction plans. The PE and/or PLS must stamp and sign the final engineering pages of the site construction plans, and the PLS must stamp and sign the final site survey.

L. Climate Action Plan. In furtherance of the Village's Climate Action Plan, Developer will incorporate the elements set forth in ***Exhibit B*** attached to this Agreement in the construction, operation, and maintenance of the New Development.

SECTION 6. IMPROVEMENTS.

A. Design and Construction of the Improvements.

1. **Description of Improvements.** The Improvements will be depicted and described on the Final Engineering Plan and the other components of the Final Development Plan, and include, without limitation, the following:

a. The Stormwater Improvements;

b. Sanitary sewer mains and service lines;

c. Water mains and service lines;

d. Right-of-Way Improvements;

e. The landscaping, as depicted in the Final Landscape Plan; and

f. The Public Improvements, which include the Techny Road Sidewalk.

2. **General Standards.**

a. All Improvements must be designed and constructed pursuant to and in accordance with the Development Approvals, and will be subject to the reasonable written satisfaction of the Village Engineer in accordance with the Village Code, the Subdivision Code, and the Public Improvements Standards Manual. All work performed on the Improvements must be conducted in a good and workmanlike manner, with due dispatch, and in compliance with the Improvement Construction Schedule, as well as all permits issued by the Village for construction of the Improvements, subject to Uncontrollable Circumstances. All materials used for construction of the Improvements must be new and of first-rate quality.

b. If applicable, Developer shall comply with the requirements of the Illinois Prevailing Wage Act (820 ILCS 130/00.1 *et seq*.) for construction of the Public Improvements and any Improvements which will be conveyed to any unit of government.

3. **Construction Schedule.**

a. Developer must submit all necessary documents required for the issuance by the Village of building permits for the construction of the New Development no later than three months after the Effective Date of this Agreement.

b. Prior to commencing any construction of any Public Improvement, or of any part of the New Development that will affect existing utilities or roadways, Developer must meet with the Village Engineer, or their designee, to develop a mutually-agreeable plan and schedule for all such construction ("***Improvement Construction Schedule***"). The meeting must take place not less than one week prior to the commencement of any such construction. After the meeting, Developer must prepare and submit minutes of the meeting to the Village Engineer. No construction may occur prior to the approval by the Village Engineer of the meeting minutes and the Improvement Construction Schedule, which approval shall not be unreasonably withheld, conditioned, or delayed.

c. Developer must obtain all necessary permits and approvals for the stream relocation from all required third-party agencies, including without limitation USAE, MWRD, IEPA and NCCSWCD, before commencing any grading work on the Combined Property.

4. **Contract Terms; Prosecution of the Work.** Developer must include in every contract for work on the Improvements being constructed by such Developer, terms requiring the contractor to prosecute the work diligently and continuously, in full compliance with, and as required by or pursuant to, this Agreement, the Development Approvals, the Final Development Plan, the Improvement Construction Schedule, and the Requirements of Law, until the work is properly completed, subject to Uncontrollable Circumstances, and providing that Developer may take over and prosecute the work if the contractor fails to do so in a timely and proper manner pursuant to the terms of Developer's contract with such contractor.

5. **Engineering Services.** Developer must provide, at its sole cost and expense, all engineering services for the design and construction of the Improvements that are the responsibility of Developer, by a professional engineer responsible for overseeing the construction of the Improvements and by an environmental construction manager with respect to any and all site remediation. Developer must promptly provide the Village with the name of a local owner's representative and a telephone number or numbers at which the owner's representative can be reached.

6. **Village Inspections and Approvals.** All work on the Improvements is subject to reasonable inspection and approval by Village representatives at all reasonable times upon reasonable prior written notice. Developer will provide access to the Combined Property for the purpose of conducting these inspections during regular operating hours and within 12 hours outside of regular operating hours following reasonable prior written notice by the Village. Village representatives shall abide by the reasonable safety precautions established by Developer and/or Developer's contractor during any such access, and Village representatives shall access the Combined Property at their own risk.

7. **Other Approvals.** Where the construction and installation of any Improvement requires the consent, permission, or approval of any third-party public agency, utility, or private party, Developer must promptly file all applications, enter into all agreements, post all security, pay all fees and costs, and otherwise take all steps that may be reasonably required to obtain the consent, permission, or approval.

B. Utilities. Developer must, at its sole cost and expense, and in accordance with and pursuant to the Final Development Plan, upgrade the connection of all utilities to facilities located on the Combined Property. No utilities located on the Combined Property may be connected to the sewer and water utilities belonging to the Village except in accordance with the applicable provisions of the Village Code and upon payment all fees required pursuant to the Village Code.

C. Timing of Construction of the Improvements. The Village has the right, but not the obligation, to refuse to issue a final certificate of occupancy for any building or structure located on the Combined Property, as the case may be, until the Improvements that are the responsibility of Developer are completed and approved by the Village. The foregoing does not preclude the Village's issuance of temporary certificates of occupancy pursuant to the applicable provisions of the Village Code. The issuance of any certificate of occupancy by the Village at any time prior to completion of all of the Improvements by Developer and approval of the applicable Improvements by the Village will not constitute a waiver of the Village's right to withhold any certificate of occupancy and will not confer on Developer any right or entitlement to any other certificate of occupancy.

D. Right-of-Way Improvements.

1. **Grant of Temporary Construction License.** Subject to the terms and conditions set forth in this Agreement, the Village grants to Developer, and Developer accepts, a non-exclusive revocable license, for the construction, installation, and completion, at the sole effort , cost, and expense of Developer, of Improvements within Village-owned rights-of-way and, as necessary, within adjacent Village-owned parcels (collectively, the ***"Licensed Premises"***), all as depicted in the Final Engineering Plan, and pursuant to and in strict accordance with the terms and provisions of this Section 6.D and the other provisions of this Agreement (***"Improvement Construction License"***), including, without limitation:

a. a water main across Techny Raod, a box culvert for the Techny drain, grading for the stream, and modifications to the Combined Property's eastern entrance/curb cut; and

b. **Techny Road Sidewalk**. Installation of a public sidewalk on the south side of Techny Road adjacent to the Combined Property to be designed and built in accordance with the Public Improvements

Standard Manual and in the specific location designated by the Village Engineer.

2. **Limitation of Interest.** Except for the Improvement Construction License granted pursuant to this. Section 6.D, Developer does not and will not have any legal, beneficial, or equitable interest, whether by adverse possession or prescription or otherwise, in any portion of the Licensed Premises, or any other Village-owned property or right-of-way. Specifically, and without limitation of the foregoing, Developer acknowledges and agrees that nothing in this Agreement is to be interpreted to provide a license to Developer to alter any Village-owned right-of-way in any way other than for the installation of the Right-of-Way Improvements identified in this Section 6.D.

3. **Construction of the Right-of-Way Improvements.** Developer must construct the Right-of-Way Improvements in substantial accordance with and pursuant to the Final Development Plan and this Agreement, in a good and workmanlike manner, and subject to inspection and approval by the Village. Specifically, and without limitation of the foregoing, during the period of installation, Developer must: (a) construct all Right-of-Way Improvements in specific locations and of specific designs approved in advance by the Village Engineer, which approval shall not be unreasonably withheld, conditioned, or delayed, and, for landscaping improvements, by the Village Forester, which approval shall not be unreasonably withheld, conditioned, or delayed; and (b) maintain the Licensed Premises and all streets, sidewalks, and other public property in and adjacent to the Licensed Premises in a safe, good and clean condition at all times.

4. **Village's Reservation of Rights Over Licensed Premises.** The Village hereby reserves the right to use the Licensed Premises in any manner that will not prevent, impede, or interfere in any way with the exercise by Developer of the rights granted pursuant to this Section 6.D. The Village will have the right to grant other non-exclusive licenses or easements, including, without limitation, licenses or easements for utility purposes, over, along, upon, or across the Licensed Premises rights-of-way. The Village further reserves its right of full and normal access to the Licensed Premises for the maintenance of any existing or future utility located thereon. The foregoing notwithstanding, any delays in Developer's construction within the Licensed Premises caused by the Village's exercise of its reserved rights set forth herein shall be deemed delays arising from Uncontrollable Circumstances.

5. **Liens.** Developer must, at its sole cost and expense, take all necessary action to keep all portions of the Licensed Premises free and clear of all liens, claims, and demands, including without limitation mechanic's liens, in connection with any work performed by Developer or its agents.

6. **Maintenance of Right-of-Way by Village.** Without limitation of the provisions of Section 13 of this Agreement, the Village will not be liable for any damage that may occur to the Right-of-Way Improvements as a result of the Village's necessary maintenance responsibilities with regard to any right-of-way that is subject to the Improvements Construction License, except to the extent arising from the gross negligence or willful misconduct of the Village's representatives. Any maintenance, repair, or replacement of the Improvements necessary as a result of such Village maintenance or other work will be at the sole cost and

expense of Developer, through and including the date of expiration of the License, as set forth in Section 6.D.7 of this Agreement.

7. **Term.** The Improvements Construction License granted pursuant to this Section 6.D will expire upon the acceptance by the Village of all Right-of-Way Improvements pursuant to Section 6.E of this Agreement.

E. Dedication and Maintenance of the Improvements.

1. **Final Inspection and Approval of the Improvements.** Developer must notify the Village when it believes that any or all of the Improvements on the Combined Property have been fully and properly completed and must request final inspection and approval of the Improvement or Improvements by the Village. The notice and request must be given far enough in advance, and in no event with less than one week's advance notice, to allow the Village time to inspect the Improvements and to prepare a punch list of items requiring repair or correction and to allow Developer time to make all required repairs and corrections prior to the scheduled completion date (as may be established pursuant to this Agreement or in the permits issued by the Village for construction of the Improvements). Developer must promptly make all necessary repairs and corrections as specified on the punch list. The Village is not required to approve any portion of the Improvements until: (a) all of the Improvements as may be required pursuant to this Agreement, including all punch list items, have been fully and properly completed; and (b) the Village Director of Public Works has determined that the specific Improvement has been constructed to completion, in accordance with the Final Development Plan and Requirements of Law, which determination shall not be unreasonably withheld, conditioned, or delayed. Prior to the issuance by the Village of a final certificate of occupancy for any building or Structure on the Combined Property, Developer must install all landscaping on the Combined Property, as depicted on the Final Development Plan.

2. **Dedication and Acceptance of Public Improvements.** Neither the execution of this Agreement, nor the approval of the Development Approvals, nor the execution and recordation of the Final Plat constitutes acceptance by the Village of any Public Improvements that are depicted as "dedicated" on the Final Plat or on the Final Development Plan, if any. The acceptance of ownership of, and responsibility for, a specific approved Improvement as a Public Improvement may be made only by the Corporate Authorities, by adoption of a resolution as set forth in Section 3-506 of the Subdivision Code, and only in compliance with the requirements of the Subdivision Code. The Village is not obligated to accept dedication of any Public Improvement unless and until a temporary certificate of occupancy has been issued for the Combined Property.

3. **Transfer of Ownership of the Public Improvements and Easements to the Village.** Upon the approval of, and prior to acceptance of, the Public Improvements to be accepted by the Village pursuant to Section 3-506 of the Subdivision Code and Section 6.E of this Agreement, Developer must execute, or cause to be executed, all documents as the Village may request to transfer ownership of, or to provide easements in, the Public Improvements to, and to evidence ownership of the Public Improvements by, the Village, free and clear of all liens, claims, encumbrances, and restrictions, unless otherwise approved by the Village in writing, which instruments shall be subject to the review and approval of Developer, which approval shall not be unreasonably withheld, conditioned, or delayed. Developer must, at the same time (a) grant, or cause to be granted, to the Village all insured easements or other property rights as the Village may require to install, operate, maintain, service, repair, and replace the Public Improvements that have not previously been granted to the Village, free and clear of all liens, claims,

encumbrances, and restrictions, unless otherwise approved by the Village in writing, and (b) provide a written estimate of the monetary value of each Public Improvement to be accepted by the Village.

4. **Maintenance of Public Improvements.** For a period of three years following acceptance by the Village of the Public Improvements, Developer must, at its sole cost and expense, maintain the Public Improvements without any modification, except as specifically approved in writing by the Village Engineer, in a first-rate condition at all times. Developer hereby guarantees, on its behalf and on behalf of its successors, the prompt and satisfactory correction of all defects and deficiencies in any of the Public Improvements that occur or become evident within three years after acceptance of the Public Improvement by the Village pursuant to this Agreement. In the event the Village Engineer determines, in the Village Engineer's reasonable discretion, that Developer is not adequately maintaining, or has not adequately maintained, any Public Improvement, Developer must, after 15 days' prior written notice from the Village (subject to Uncontrollable Circumstances), correct it or cause it to be corrected, provided, however, if the nature of the corrective work is such that it cannot reasonably be completed within such time, then Developer shall have such additional time as is reasonably necessary to complete such corrections, provided Developer promptly commences such correction within such 15 days and thereafter diligently pursues same to completion. If Developer fails to correct the defect, commence the correction of the defect, or diligently pursue correction of the defect to completion following the expiration of the foregoing notice and cure period, then the Village, after ten days' prior written notice to Developer, may, but will not be obligated to, enter upon any or all of the Combined Property for the purpose of performing maintenance work on and to such Public Improvement. In the event that the Village causes to be performed any work pursuant to this Section 6.E.4, Developer must, within 15 days after written demand by the Village, pay the costs of the work to the Village. If Developer fails to pay the costs, the Village will have the right to file a lien against the Combined Property for the full cost of such repairs or to draw from the Maintenance Guarantee required pursuant to Section 12.D of this Agreement, based on costs actually incurred, including reasonable legal fees and administrative expenses.

F. Maintenance of the Stormwater Improvements. For a period of three years following acceptance by the Village of the Stormwater Improvements, Developer must, at its sole cost and expense, maintain the Stormwater Improvements without any modification, except as specifically approved in writing by the Village Engineer, in a first-rate condition at all times and in full compliance with all permits and requirements of any third-party permitting agency including without limitation the USAE, MWRD, IEPA, and NCCSWCD. Developer hereby guarantees, on its behalf and on behalf of its successors, the prompt and satisfactory correction of all defects and deficiencies in any of the Stormwater Improvements that occur or become evident. In the event the Village Engineer determines, in the Village Engineer's reasonable discretion, that Developer is not adequately maintaining, or has not adequately maintained, any Stormwater Improvements, Developer must, after 15 days' prior written notice from the Village (subject to Uncontrollable Circumstances), correct it or cause it to be corrected, provided, however, if the nature of the corrective work is such that it cannot reasonably be completed within such time, then Developer shall have such additional time as is reasonably necessary to complete such corrections, provided Developer promptly commences such correction within such 15 days and thereafter diligently pursues same to completion. If Developer fails to correct the defect, commence the correction of the defect, or diligently pursue correction of the defect to completion following the expiration of the foregoing notice and cure period, then the Village, after ten days' prior written notice to Developer, may, but will not be obligated to, enter upon any or all of the Combined Property for the purpose of performing maintenance work on and to such Stormwater Improvements. In the event that the Village causes to be performed any work pursuant to this Section 6.F, Developer

must, within 15 days after written demand by the Village, pay the costs of the work to the Village. If Developer fails to pay the costs, the Village will have the right to file a lien against the Combined Property for the full cost of such repairs or to draw from the Maintenance Guarantee required pursuant to Section 12.D of this Agreement, based on costs actually incurred, including reasonable legal fees and administrative expenses.

G. **Maintenance of Structures**. For so long as the Approved Plan, as amended by the Special Use Ordinance, remains in full force and effect, Developer must, at its sole cost and expense, maintain the exterior of all structures located on the Combined Property, including all single-family residential structures, in full compliance with the Village Code and Requirements of Law. In the event the Village Manager determines, in the Village Manager's reasonable discretion, that Developer is not adequately maintaining, or has not adequately maintained, any exterior structure, Developer must, after 15 days' prior written notice from the Village (subject to Uncontrollable Circumstances), correct it or cause it to be corrected, provided, however, if the nature of the corrective work is such that it cannot reasonably be completed within such time, then Developer shall have such additional time as is reasonably necessary to complete such corrections, provided Developer promptly commences such correction within such 15 days and thereafter diligently pursues same to completion. If Developer fails to correct the defect, commence the correction of the defect, or diligently pursue correction of the defect to completion following the expiration of the foregoing notice and cure period, then the Village, after ten days' prior written notice to Developer, may, but will not be obligated to, enter upon any or all of the Combined Property for the purpose of performing maintenance work on and to such exterior structure. In the event that the Village causes to be performed any work pursuant to this Section 6.G, Developer must, within 15 days after written demand by the Village, pay the costs of the work to the Village. If Developer fails to pay the costs, the Village will have the right to file a lien against the Combined Property for the full cost of such repairs or to draw from the Maintenance Guarantee required pursuant to Section 12.D of this Agreement, based on costs actually incurred, including reasonable legal fees and administrative expenses.

SECTION 7. OPERATION AND RECIPROCAL EASEMENT AGREEMENT.

Prior to the issuance of a final certificate of occupancy for any portion of the New Development, Developer must: (i) prepare and submit to the Village Manager and the Village Attorney, for their respective review and approval, an Operation and Reciprocal Easement Agreement (or similarly binding legal instrument) ("***OREA***"); and (ii) record the OREA against title to the Combined Property. The OREA will clearly define the rights and responsibilities of the owners and occupants of the various parcels that comprise the Combined Property and all of their respective successors and assigns, with regard to the following "***OREA Obligations***":

A. Maintenance of access drives, loading docks, private streets, alleys, roadways, and other commonly used features;

B. Maintenance, cleaning, and operation of any stormwater facilities and all other on-site Improvements serving the Combined Property;

C. Maintenance of, the landscaping in accordance with the Final Landscape Plan on public and private property;

D. Snow removal and storage on the Combined Property;

E. Easements to be created: (i) allowing cross-access between the parcels comprising the Combined Property; (ii) allowing access over, on, and above the Common Areas (other than the private amenities for each residential building) for the exclusive benefit of the owners, tenants, and guests of the parcels comprising the Combined Property and for the benefit of the Village, for stormwater drainage and detention, emergency response, utility maintenance and repair, and for the purpose of maintaining the Common Areas; (iii) for utilities of the Village and other governmental bodies and utility services over, on, and across the Combined Property and the Common Areas for the purposes of making repairs, installing and servicing utilities, and providing emergency services;

F. All easements for stormwater drainage and detention must remain unobstructed and the access to any retention and detention basins in containing stormwater detention and drainage facilities may not be blocked by a fence, landscaping, or any other Structure, or planting, of any kind or nature, erected within said easement without written approval of the Village Manager. In addition, no grade changes will be permitted in said easement without the prior written approval of the Village Engineer;

G. An easement for Village emergency and utility personnel and vehicles must include provision of necessary keys, codes, or equipment to open any private gates or access point needed to make use of the easement; and

H. The Village is an intended third-party beneficiary of the OREA, and, therefore, will have the right, but not the obligation, to enforce all covenants contained in the OREA. The Village must be given the right, after 15 days' written notice to the owner or owners of the applicable lot or lots within the Combined Property, as may be appropriate: (i) to perform any OREA Obligations that the owner(s) of the applicable lot(s) has neglected to perform (or to commence and diligently pursue completion of such maintenance work within such 15 day period if such maintenance work is not reasonably capable of being completed within such 15 day period); (ii) to assess the owner(s) of the applicable lot(s) for such work; and (iii) to have a lien placed against the affected lot(s) belonging to an owner(s) failing to pay such assessment if such assessment is not paid within thirty (30) days after written notice from the Village.

SECTION 8. PAYMENT OF FEES AND CONTRIBUTIONS.

A. **Impact Fees to Taxing Districts**. Developer will fully comply with, and cause to be paid, the fees in lieu of land contributions calculated pursuant to Article IV of the Subdivision Code for the following districts (collectively, *"**Impact Fees**"*):

a. Northbrook Park District;

b. Northbrook Public Library;

c. Northbrook School District 30; and

d. Glenbrook High School District 225.

The Impact Fees are based on a per unit basis and those Impact Fees applicable to the New Development must be paid prior to the issuance of a certificate of occupancy for any residential structure on the Combined Property, or portion thereof. Developer acknowledge that the payment of development impact fees imposed by Article IV of the Subdivision Code, as well as Chapter 19 of the Village Code, are reasonable and that Developer hereby hold harmless and release the

Village, the Northbrook Park District, the Northbrook Public Library, Northbrook School District 30, and Glenbrook High School District 225 (collectively, the ***"Districts"***) from any claim or other action Developer may have against either or both the Village or the Districts as a result of Article IV of the Subdivision Code, Chapter 19 of the Village Code, and the impact fees exacted thereunder for distribution to any District by the Village. Developer acknowledge and agree that, if Developer is entitled to any credit toward the Impact Fees as a result of development impact fees previously paid by third-parties with respect to other proposed developments of the Combined Property, and if such credit exceeds the Impact Fees otherwise due pursuant to this Section 8: (a) the Village will have no liability or responsibility whatsoever to pay to Developer the difference between the credit and the Impact Fees otherwise due; and (b) Developer must pursue any claim for any such payment with the affected Districts.

B. **Affordable Housing Contribution.** In order to comply with the Village's Affordable Housing Ordinance, Article IX, Part III of the Zoning Code, Developer has agreed to pay to the Village an Affordable Housing Contribution as set forth in Section 9.5 of the Special Use Ordinance.

SECTION 9. PUBLIC SAFETY IMPACT. The Parties acknowledge that the Covenant Living Planned Development has, and will continue to have a greater impact on the Village's public safety personnel and resources, specifically emergency medical services ("***EMS***"), than other similarly sized developments. Developer has agreed to certain EMS conditions, as set forth in Section 9.6 of the Special Use Ordinance, to be included as part of its general operating conditions.

SECTION 10. RESERVED.

SECTION 11. PAYMENT OF VILLAGE FEES AND COSTS. In addition to all other costs, payments, fees, charges, contributions, or dedications required by this Agreement or by the Requirements of Law, and in addition to all other agreements between Developer and the Village concerning the Covenant Living Planned Development, Developer must pay to the Village the following fees and costs:

A. All application, inspection, and permit fees, charges, and contributions, and all other fees, charges, and contributions pursuant to the Requirements of Law or otherwise due as a result of the Covenant Living Planned Development.

B. All reasonable third-party legal, engineering, and other consulting or administrative fees, costs, and expenses actually incurred in connection with: (1) the development of the Combined Property, including, without limitation, the preparation, review, and processing of plans, ordinances, resolutions, and other approvals therefor; and (2) the negotiation, preparation, consideration, and review of this Agreement and all exhibits and associated documents, including any amendments of this Agreement.

SECTION 12. PERFORMANCE SECURITY.

A. **General Requirements.** As security to the Village for the performance by Developer of its obligations pursuant to and in accordance with this Agreement, Developer will provide to the Village performance and payment security ("***Guarantee***") in the form of one or more letters of credit ("***Letter of Credit***") in the amount set forth in Section 3-501 of the Subdivision Code, and in accordance with the terms set forth in the Subdivision Code. The Letter of Credit must be in form and substance substantially conforming in all material respects with

Exhibit C to this Agreement and satisfactory to the Village Attorney. Specifically, and without limitation of the foregoing, the Letter of Credit must allow the Village to draw from the Letter of Credit in the event that Developer does not fully reimburse the Village for any costs and expenses incurred by the Village for work performed on the Combined Property pursuant to Section 5.G.2 of this Agreement. The Letter of Credit must be provided to the Village prior to the issuance of any permits for the New Development and must be maintained at all times until all Improvements have been approved for the New Development, and, as appropriate, accepted. The Guarantee will be administered pursuant to Sections 3-501 to 3-507 of the Subdivision Code.

B. Use of Guarantee Funds. If Developer fails or refuses to complete the Improvements in accordance with this Agreement, or fails or refuses to correct any defect or deficiency in the Improvements, or remove partially completed buildings or structures as required by this Agreement, or fails or refuses to perform Site Restoration in accordance with a demand made pursuant to this Agreement, or fails or refuses to pay any amount demanded by the Village as and when required pursuant to this Agreement, or in any other manner fails or refuses to meet fully any of its obligations under this Agreement, then the Village in its reasonable discretion may draw on and retain all or any of the funds remaining in the Guarantee. The Village thereafter shall have the right, subject to 30 days' notice and opportunity for cure, to exercise its rights under this Agreement, to take any other action it deems reasonable and appropriate to mitigate the effects of any failure or refusal, and to reimburse itself from the proceeds of the letter of credit for all of its costs and expenses, including legal fees and administrative expenses, resulting from or incurred as a result of Developer's failure or refusal to fully meet its obligations under this Agreement. If the funds remaining in the letter of credit are insufficient to repay fully the Village for all costs and expenses, then Developer shall upon demand of the Village therefor deposit with the Village any additional funds as the Village determines are necessary, within 30 days of a request therefor, to fully repay such costs and expenses.

C. Reductions in Guarantee. Concurrent with the approval and/or acceptance of Improvements in the manner provided in Section 6.E of this Agreement, the Guarantee may be reduced in a manner and in amounts authorized in Section 3-504 of the Subdivision Code.

D. Maintenance Guarantee. Immediately after any approval and, where appropriate, acceptance, by the Village of the Public Improvements pursuant to this Agreement, Developer must post a new guarantee in the amount of 10% of the actual total cost of the Improvements caused to be constructed or installed by Developer on the Combined Property provided as (i) all cash or (ii) a combination of cash and a letter of credit (with at least 10% cash), as security for Developer's maintenance of such Improvements (each, a "***Maintenance Guarantee***"). The Maintenance Guarantee will be held by the Village in escrow until the date that is two year after the approval of the Improvement and where appropriate, acceptance by the Village of the Public Improvement, secured by the Maintenance Guarantee pursuant to this Agreement. If the Village is required to draw on either Maintenance Guarantee by reason of Developer's failure to fulfill its maintenance obligations under this Section 12, then Developer, as the case may be, must within 10 days thereafter cause their respective Maintenance Guarantee to be increased to its full original amount.

SECTION 13. LIABILITY AND INDEMNITY OF VILLAGE.

A. Village Review. Developer acknowledges and agrees that the Village is not, and will not be, in any way liable for any damages or injuries that may be sustained as the result of the Village's review and approval of any plans for the Covenant Living Planned Development or

the Improvements, or the issuance of any approvals, permits, certificates, or acceptances, for the development or use of the Covenant Living Planned Development or the Improvements, and that the Village's review and approval of any such plans and the Improvements and issuance of any such approvals, permits, certificates, or acceptances does not, and will not, in any way, be deemed to insure Developer or any of its successors, assigns, tenants and licensees, or any third party, against damage or injury of any kind at any time.

B. Village Procedure. Developer acknowledges and agrees that all notices, meetings, and hearings have been properly given and held by the Village with respect to the approval of this Agreement and of the Development Approvals, and Developer agrees not to challenge such approvals on the grounds of any procedural infirmity or of any denial of any procedural right.

C. Indemnity. Developer agrees to, and does hereby, hold harmless, indemnify, and, at the election of the Village defend with counsel of the Village's choice, the Village and all Village elected or appointed officials, officers, employees, agents, representatives, engineers, and attorneys, from any and all claims that may be asserted at any time against any of those parties in connection with: (i) the Village's review and approval of any plans for the Covenant Living Planned Development or the Improvements; (ii) the issuance of any approval, permit, certificate, or acceptance for the Covenant Living Planned Development or the Improvements; and (iii) the development, construction, maintenance, or use of any portion of the Covenant Living Planned Development or the Improvements (collectively the ***"Indemnified Claims"***); provided, however, that this indemnity does not, and will not, apply to willful misconduct or gross negligence on the part of the Village.

D. Defense Expense. Developer, only as to its own acts or omissions, must, and does hereby agree to, pay all expenses, including legal fees and administrative expenses, incurred by the Village in defending itself with regard to any and all of the Indemnified Claims.

SECTION 14. NATURE, SURVIVAL AND TRANSFER OF OBLIGATIONS.

A. Binding Effect. The terms of this Agreement bind and inure to the benefit of the Parties and their agents, successors, and assigns. All obligations assumed by Developer under this Agreement are and will be binding upon Developer personally, upon any and all of its heirs, successors, and assigns, and upon any and all of the respective successor legal or beneficial owners of all or any portion of the Combined Property.

B. Successors and Transferees. To assure that all grantees, successors, assigns, and transferees of Developer, and all successor owners of all or any portion of the Combined Property have notice of this Agreement and the obligations created by it, Developer must, from and after the Effective Date:

1. Deposit with the Village Clerk, concurrent with the Village's approval of this Agreement, any consents or other documents necessary to authorize the Village to record this Agreement on title to the Combined Property in the office of the Cook County Clerk's Recording Division per Section 19.O;

2. Notify the Village in writing at least 30 days prior to any date on which Developer transfers (as that term is defined in Section 14.C of this Agreement) a legal or beneficial interest in any portion of the Combined Property to a third party with the exception of leases to residential or retail tenants of the Covenant Living Planned Development;

3. Incorporate this Agreement by reference into any and all real estate sales contracts for transfers, as that term is defined in Section 14.C of this Agreement, entered into for the sale of all or any portion of the Combined Property; and

4. Except as provided in Section 14.C of this Agreement, require, prior to the transfer of all or any portion of the Combined Property, or any legal or equitable interest therein, to any third party, the transferee of said portion or interest in the Combined Property, must: (a) obtain Corporate Authority approval of an enforceable written agreement, in substantially the form of **Exhibit D** to this Agreement, agreeing to be bound by the provisions of this Agreement (***"Transferee Assumption Agreement"***); (b) execute the Transferee Assumption Agreement; and (c) provide the Village, upon request, with such reasonable assurance of the financial ability of the transferee to meet those obligations as the Village may require. The Village agrees that upon a successor becoming bound to the obligation created in the manner provided in this Agreement, and providing the financial assurances required pursuant to this Agreement, and subsequent to discretionary approval of the Corporate Authorities, the liability of Developer will be released to the extent of the transferee's assumption of the liability. The failure of Developer to provide the Village with a copy of a Transferee Assumption Agreement fully executed by the transferee and, if requested by the Village, with the transferee's proposed assurances of financial capability before completing any transfer, will result in Developer remaining fully liable for all of its obligations under this Agreement but will not relieve the transferee of its liability for all such obligations as a successor to Developer.

C. Transfer Defined. For purposes of this Agreement, the term "transfer" includes, without limitation, any assignment, sale, transfer to a receiver or to a trustee in bankruptcy, transfer in trust, or other disposition of the Combined Property, or any beneficial interest in the Combined Property, in whole or in part, by voluntary or involuntary sale, foreclosure, merger, sale and leaseback, consolidation, or otherwise; provided, however, that the sale of an individual lot developed with a single-family home that has been issued a certificate of occupancy within the Covenant Living Planned Development does not constitute a "transfer" hereunder.

D. Mortgagees of Combined Property. This Agreement is and will be binding on all mortgagees of the Combined Property or other secured parties automatically upon such mortgagee assuming title to the Combined Property, in whole or in part, by a foreclosure or a deed in lieu of foreclosure without the necessity of entering into a Transferee Assumption Agreement. Until such time, however, a mortgagee or other secured party will have no personal liability hereunder.

SECTION 15. TERM. The provisions of this Agreement, unless terminated pursuant to the terms of this Agreement, run with and bind the Combined Property and inure to the benefit of, be enforceable by, and obligate the Parties, and any of their respective, grantees, successors, assigns, and transferees, including all successor legal or beneficial owners of all or any portion of the Combined Property from the date this Agreement is recorded and until the structures and Improvements are approved by the Village, and the Public Improvements, as required by this Agreement and the Subdivision Code, are accepted by the Village. Following such approval and acceptance, the Village agrees, upon written request of Developer, to execute appropriate and recordable evidence of the termination of this Agreement. Notwithstanding anything to the contrary in this Section 15, Developer's indemnity and defense obligations as set forth in Section 13 of this Agreement will survive the termination of this Agreement. Approval or acceptance pursuant to this Section 15 will not constitute a waiver of any rights or claims that the Village has,

before or after approval and acceptance, with respect to any breach of this Agreement by Developer or any right of indemnification of the Village by Developer.

SECTION 16. EVENTS OF DEFAULT.

A. Developer Events of Default. The following are Developer Events of Default:

1. If any representation made by Developer in this Agreement, or in any certificate, notice, demand or request made by Developer in writing and delivered to the Village pursuant to or in connection with this Agreement, proves to be untrue or incorrect in any material respect as of the date made.

2. Subject to cure as set forth in Section 16.C of this Agreement, failure by Developer in the performance or breach of any covenant contained in this Agreement concerning the existence, structure or financial condition of Developer.

3. Subject to cure as set forth in Section 16.C of this Agreement, failure by Developer in the performance or breach of any covenant, warranty or obligation contained in this Agreement.

4. Subject to cure as set forth in Section 16.C of this Agreement, construction by Developer of any Structure or Improvement that is not authorized by this Agreement or otherwise in a manner not permitted by law.

5. Subject to cure as set forth in Section 16.C of this Agreement, failure by Developer to commence construction of the New Development.

6. Subject to cure as set forth in Section 16.C of this Agreement, failure by Developer to complete construction or installation of any Structure or Improvement on the Combined Property or in connection with the New Development.

7. Subject to cure as set forth in Section 16.C of this Agreement, Developer causes any damage to real or public property that is not owner by Developer.

8. Subject to cure as set forth in Section 16.C of this Agreement, Developer is not, or ceases to be, a legal entity qualified to do business in the State of Illinois.

9. Developer permits, or does not take reasonable steps to prevent, criminal activity on the Combined Property.

10. The entry of a decree or order for relief by a court having jurisdiction in the premises in respect of Developer in an involuntary case under the federal bankruptcy laws, as now or hereafter constituted, or any other applicable federal or state bankruptcy, insolvency or other similar law, or appointing a receiver, liquidator, assignee, custodian, trustee, sequestrator (or similar official) of Developer for any substantial part of its property, or ordering the winding-up or liquidation of its affairs and the continuance of any such decree or order unstayed and in effect for a period of 60 consecutive days.

11. The commencement by Developer of a voluntary case under the federal bankruptcy laws, as now or hereafter constituted, or any other applicable federal or state bankruptcy, insolvency or other similar law, or the consent by Developer to the appointment of or

taking possession by a receiver, liquidator, assignee, trustee, custodian, sequestrator (or similar official) of Developer or of any substantial part of the Combined Property, or the making by any such entity of any assignment for the benefit of creditors or the failure of Developer generally to pay such entity's debts as such debts become due or the taking of action by Developer in furtherance of any of the foregoing, or a petition is filed in bankruptcy by others.

12. Subject to cure as set forth in Section 16.C of this Agreement, change in the organizational status of Developer except in accordance with the Transferee Assumption provisions in Section 12 of this Agreement.

13. Developer abandons the development of the Combined Property. Abandonment will be deemed to have occurred when work stops on the development of the Combined Property for more than 30 days for any reason other than Uncontrollable Circumstances, unless otherwise permitted by this Agreement. The failure of Developer to secure any approvals required for the development or construction of the Combined Property will not be a valid defense to abandonment.

14. Subject to cure as set forth in Section 16.C of this Agreement, Developer otherwise fails to comply with the Requirements of Law in connection with the Development or the Combined Property.

B. Events of Default by the Village. The following are Village Events of Default:

1. If any material representation made by the Village in this Agreement, or in any certificate, notice, demand or request made by the Village in writing and delivered to Developer pursuant to or in connection with any of said documents, proves to be untrue or incorrect in any material respect as of the date made.

2. Subject to Uncontrollable Circumstances, default by the Village for a period of 30 days after written notice thereof from Developer in the performance or breach of any covenant contained in this Agreement; provided, however, that such default will not constitute an Event of Default if such default cannot be cured within said 30 days and the Village, within said 30 days, initiates and diligently pursues appropriate measures to remedy the default and in any event cures such default within 90 days after such notice.

C. Cure Period. For all Events of Default identified in Section 16.A for which Developer has the right to cure, Developer must cure the Event of Default within 15 days after receipt of notice thereof, or, if the Event of Default cannot be cured within 15 days, Developer must initiate and diligently pursues appropriate measures to remedy the default within 15 days, and in any event must cure the default within 60 days after receipt of the notice.

SECTION 17. REMEDIES FOR DEFAULT AND ENFORCEMENT.

A. Remedies. In the case of an Event of Default:

1. Legal Procedures. Except as otherwise provided in this Agreement, the non-defaulting Party may institute such proceedings in law or in equity, or any other proceeding, as may be necessary or desirable at its option to cure or remedy the Event of Default, including, without limitation, proceedings to compel specific performance of the defaulting Party's obligations under this Agreement.

2. Removal and Restoration by Village. In the event Developer fails or refuses to remove any partially completed buildings, structures, and Improvements, or to perform Site Restoration, as required pursuant to Section 5.G of this Agreement or otherwise upon demand of the Village after the occurrence of a Developer Event of Default, the Village will have, and is hereby granted the right, at its option, to enter the Combined Property and: (a) demolish and/or remove any of the partially completed Structures and Improvements from any and all portions of the Combined Property; (b) perform Site Restoration; and/or (c) cause the Structures or Improvements to be completed in accordance with the plans submitted. Developer must fully reimburse the Village for all costs and expenses, including legal and administrative costs, incurred by the Village for such work. If Developer does not so fully reimburse the Village, the Village will have the right to draw from the Guarantee and the Maintenance Guarantee, as described in and provided pursuant to Section 12 of this Agreement, an amount of money sufficient to defray the entire cost of the work, including legal fees and administrative expenses. If Developer does not so fully reimburse the Village, and the Guarantee and Maintenance Guarantee have no funds remaining in them or are otherwise unavailable to finance such work, then the Village will have the right to place a lien on the Combined Property for all such costs and expenses in the manner provided by law. The rights and remedies provided in this Section 17.A.2 are in addition to, and not in limitation of, any other rights and remedies otherwise available to the Village in this Agreement, at law, and/or in equity.

3. Repeal of Development Approvals. The Village will have the absolute right to repeal the Development Approvals if a Developer Event of Default occurs under this Agreement, in accordance with the Requirements of Law, without protest or objection by Developer.

B. Limitation. Notwithstanding anything to the contrary contained in this Agreement, Developer may not seek, and does not have the right to seek, to recover a judgment for monetary damages against the Village or any elected or appointed officials, officers, employees, agents, representatives, engineers, or attorneys of the Village, on account of the negotiation, execution, performance, or breach of, or default under, this Agreement. The Parties acknowledge and agree that, except as expressly provided in this Agreement, the covenants and agreements set forth in this Agreement are those of the Parties, and are not the individual covenant or guarantee of any natural person.

C. Prevailing Party. In the event of a judicial proceeding brought by one Party against the other Party on account of the negotiation, execution, performance, or breach of, or default under, this Agreement, the prevailing Party in the judicial proceeding will be entitled to reimbursement from the unsuccessful Party of all costs and expenses, including reasonable attorneys' fees, incurred in connection with the judicial proceeding.

SECTION 18. WARRANTIES AND REPRESENTATIONS.

A. By the Village. The Village represents and warrants, as of the date of execution by the Village of this Agreement, that:

1. The Village is a home rule municipal corporation duly organized and validly existing under the law of the State of Illinois and has all requisite corporate power and authority to enter into this Agreement;

2. The execution and performance of this Agreement by the Village: (i) have been duly authorized by all necessary corporate action on the part of the Village; and (ii) do not,

for any reason, result in any breach of any agreement or other instrument to which the Village is subject;

3. The execution of this Agreement by the Village requires no other consents, approvals, or authorizations on the part of the Village; and

4. To the best of the knowledge of the person executing this Agreement on behalf of the Village there are no actions or proceedings by or before any court, governmental commission, board, bureau, or any other administrative agency pending, threatened, or affecting the Village or the Combined Property in any court or before any governmental authority that involve the possibility of materially or adversely affecting the ability of the Village to perform its obligations under this Agreement.

B. By Developer. Developer, and the person executing this Agreement on behalf of Developer, represent and warrant, as of the date of execution by Developer of this Agreement, that:

1. Developer is an Illinois not-for-profit corporation duly organized, validly existing, and qualified to do business in Illinois;

2. Developer has the authority to execute and perform this Agreement, and Developer is in compliance with all Requirements of Law, the failure to comply with which could affect the ability of Developer to perform its obligations under this Agreement;

3. The execution and performance by Developer of this Agreement has been duly authorized by all necessary corporate action, and does not violate its organizational documents, any of the applicable Requirements of Law, or constitute a breach of or default under, or require any consent under, any agreement, or instrument to which Developer is now a party or by which Developer is now bound including any mortgages, secured loans, or instruments granting another party a superior interest in the Combined Property or the Covenant Living Planned Development;

4. Developer has complied with Section 14 of this Agreement with respect to all mortgagees and second parties existing as of the Effective Date;

5. The applications, plans, materials, and other submissions Developer has provided to the Village: (i) accurately and truthfully represent Developer's capabilities, resources, and intentions for the construction of the New Development on the Combined Property; (ii) have induced the Village to enter into this Agreement; and (iii) any material misrepresentation contained in Developer's submissions will constitute an incurable Event of Default pursuant to Section 16 of this Agreement.

6. There are no actions or proceedings by or before any court, governmental commission, board, bureau, or any other administrative agency pending, threatened, or affecting Developer or the Combined Property that involve the possibility of materially or adversely affecting the ability of the Village to perform its obligations under this Agreement;

7. Developer has sufficient financial and economic resources to implement and complete its obligations under this Agreement;

8. Developer has no knowledge of any liabilities, contingent or otherwise, of Developer which might have a material adverse effect upon its ability to perform its obligations under this Agreement.

SECTION 19. GENERAL PROVISIONS.

A. Notices. Any notice required to be given under this Agreement must be in writing and must be delivered (i) personally, (ii) by a reputable overnight courier, (iii) by certified mail, return receipt requested, and deposited in the U.S. Mail, postage prepaid, or (iv) by email. Unless otherwise expressly provided in this Agreement, notices will be deemed received upon the earlier of: (a) actual receipt; (b) one business day after deposit with an overnight courier as evidenced by a receipt of deposit; or (c) three business days following deposit in the U.S. mail, as evidenced by a return receipt. Email notices will be deemed received by the addressee upon explicit or implicit acknowledgment of receipt by the addressee. By notice complying with the requirements of this Section, each Party will have the right to change its address or its addressee, or both, for all future notices to the other Party, but no notice of a change of addressee or address will be effective until actually received.

If to the Village: Village of Northbrook
1225 Cedar Lane
Northbrook, IL 60062
Attention: Village Manager
Email: Cara.Pavlicek@Northbrook.il.us

with a copy to: Elrod Friedman LLP
325 North LaSalle Street
Suite 450
Chicago, IL 60654
Attention: Steven M. Elrod, Village Attorney
Email: Steven.Elrod@ElrodFriedman.com

If to Developer: Covenant Home
_____
_____
Attention:
Email: _____

with a copy to:

B. Time of the Essence. Time is of the essence in the performance of this Agreement.

C. Rights Cumulative. Unless otherwise provided in this Agreement, all rights, remedies, and benefits provided by this Agreement are cumulative and are not exclusive of any other rights, remedies, and benefits allowed by law.

D. Non-Waiver. No waiver of any provision of this Agreement, and no delay in exercising or failure to exercise any right or authority set forth in this Agreement, will be deemed to or constitute a waiver of any other provision of this Agreement (whether or not similar) nor will any waiver be deemed to or constitute a continuing waiver unless otherwise expressly provided in this Agreement.

E. **Consents.** Unless otherwise provided in this Agreement, all required permissions, authorizations, approvals, acknowledgments, or similar indications of assent of any Party must be in writing.

F. **Governing Law.** This Agreement will be interpreted according to the internal laws, but not the conflict of laws rules, of the State of Illinois.

G. **Venue.** Exclusive jurisdiction with regard to the any actions or proceedings arising from, relating to, or in connection with this Agreement will be in the Illinois circuit court for Cook County, Illinois, or, where applicable, in the federal court for the Northern District of Illinois.

H. **Severability.** If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the Village will have the right, in its sole and absolute discretion, to determine if (i) the remainder of the provisions of this Agreement will remain in full force and effect and will in no way be affected, impaired, or invalidated; or (ii) the entire Agreement is invalid, void, and unenforceable.

I. **Entire Agreement.** This Agreement constitutes the entire agreement between the parties and supersedes any and all previous or contemporaneous oral or written agreements and negotiations between the parties with respect to the subject matter of this Agreement.

J. **Interpretation.** This Agreement will be construed without regard to the identity of the Party who drafted the various provisions of this Agreement. Every provision of this Agreement will be construed as though all Parties to this Agreement participated equally in the drafting of this Agreement. Any rule or construction that a document is to be construed against the drafting Party will not be applicable to this Agreement.

K. **Exhibits. Exhibits A** through **D** attached to this Agreement are incorporated in and made a part of this Agreement. In the event of a conflict between any Exhibit and the text of this Agreement, the text of this Agreement will control.

L. **Amendments and Modifications.**

1. No amendment to this Agreement will be effective unless and until the amendment is in writing, properly approved in accordance with applicable procedures, and executed.

2. Amendments or modifications to the Development Approvals can be considered and acted on by the Village without the same being deemed an amendment or modification to this Agreement provided that all applicable procedural requirements of the Zoning Code and Subdivision Code and the provisions of this Agreement are satisfied.

M. **Third Party Beneficiary.** The provisions of this Agreement are and will be for the benefit of Developer and Village only and are not for the benefit of any third party, and accordingly, no third party shall have the right to enforce the provisions of this Agreement. The Village will not be liable to any vendor or other third party for any agreements made by Developer, purportedly on behalf of the Village, without the knowledge and approval of the Corporate Authorities.

N. **Recording.** The Village is authorized to record this Agreement against title to the Combined Property, at the sole cost and expense of Developer, with the Cook County Clerk's Recording Division, promptly following the full execution of this Agreement by the Parties.

O. **Counterpart Execution.** This Agreement may be executed in several counterparts, each of which is deemed to be an original but all of which will constitute one and the same instrument.re

P. **Village Actions, Consents, and Approvals**. Unless otherwise provided in this Agreement, any action, consent, or approval needed to be taken or given under this Agreement by the Village may only be performed by the Village Manager/Administrator or their designee, to the extent provided for by law.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK – SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties have hereunto set their hands on the date first above written.

ATTEST:

_____
Village Clerk

VILLAGE OF NORTHBROOK, an Illinois home rule municipal corporation

By: _____
Cara Pavlicek
Its: Village Manager

COVENANT HOME D/B/A COVENANT LIVING OF NORTHBROOK, an Illinois not-for-profit corporation

By: _____

Its:

ACKNOWLEDGMENTS

STATE OF ILLINOIS)
) SS
COUNTY OF COOK)

This instrument was acknowledged before me on _____, 2023, by Cara Pavlicek, the Village Manager of the **VILLAGE OF NORTHBROOK**, an Illinois home rule municipal corporation, and by Debra J. Ford, the Village Clerk of said municipal corporation.

_____
Signature of Notary

SEAL

STATE OF _____)
) SS
COUNTY OF _____)

This instrument was acknowledged before me on _____, 2023, by _____ the _____ of **COVENANT HOME D/B/A COVENANT LIVING OF NORTHBROOK**, an Illinois not-for-profit corporation and by _____, the _____ of said corporation.

_____
Signature of Notary

SEAL

LIST OF EXHIBITS

Exhibit A	**Combined Property Legal Description**
Exhibit B	**Climate Action Plan**
Exhibit C	**Form Letter of Credit**
Exhibit D	**Transferee Assumption Agreement**

EXHIBIT A

LEGAL DESCRIPTION OF COMBINED PROPERTY

EXISTING PROPERTY

PARCEL 1:

THE WEST 1/2 OF LOT 11, EXCEPT THE NORTH 33 FEET AND EXCEPT THE SOUTH 27 FEET THEREOF; AND LOT 12, EXCEPT THE NORTH 33 FEETAND EXCEPT THE SOUTH 27 FEET AND EXCEPT THE WEST 50 FEET THEREOF AND EXCEPT THE FOLLOWING DESCRIBED PARCELS:

1. THE EAST 289.00 FEET OF THE WEST 339.00 FEET OF THE SOUTH 452.55 FEET OF THE NORTH 485.55 FEET THEREOF;

2. THE EAST 289.00 FEET OF THE WETS 816.00 FEET OF THE SOUTH 452.55 FEET OF THE NORTH 485.55 FEET THEREOF;

3. BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 12 AND RUNNING THENCE NORTH, ALONG THE WEST LINE OF SAID LOT 12, A DISTANCE OF 487.00 FEET; THENCE EAST, ALONG THE NORTH LINE OF THE SOUTH 487.00 FEET OF SAID LOT 12, A DISTANCE OF 687.60 FEET; THENCE SOUTH, ALONG A STRAIGHT LINE PARALLEL WITH SAID WEST LINE OF LOT 12, A DISTANCE OF 267.00 FEET; THENCE SOUTHWESTWARDLY, ALONG A STRAIGHT LINE, A DISTANCE OF 95.82 FEET TO AN INTERSECTION WITH THE EAST LINE OF THE WEST 624.60 FEET OF SAID LOT 12 AT A POINT 150.00 FEET NORTH FROM THE SOUTH LINE OF SAID LOT 12; THENCE SOUTH, ALONG SAID EAST LINE OF THE WEST 624.60 FEET OF LOT 12, A DISTANCE OF 150.00 FEET TO THE SOUTH LINE OF LOT 12; THENCE WEST, ALONG THE SOUTH LINE OF LOT 12, A DISTANCE OF 624.60 FEET TO THE POINT OF BEGINNING, ALL IN SCHOOL TRUSTEES' SUBDIVISION OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL 2:

THAT PART OF THE SOUTH 487.00 FEET OF LOT 12 IN SCHOOL TRUSTEES' SUBDIVISION OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, BOUNDED AND DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 12 AND RUNNING THENCE NORTH, ALONG THE WEST LINE OF SAID LOT 12, A DISTANCE OF 487.00 FEET; THENCE EAST, ALONG THE NORTH LINE OF THE SOUTH 487.00 FEET OF SAID LOT 12, A DISTANCE OF 689.60 FEET; THENCE SOUTH, ALONG A STRAIGHT LINE PARALLEL WITH SAID WEST LINE OF LOT 12, A DISTANCE OF 267.00 FEET; THENCE SOUTHWESTWARDLY, ALONG A STRAIGHT LINE, A DISTANCE OF 95.82 FEET TO AN INTERSECTION WITH THE EAST LINE OF THE WEST 624.60 FEET OF SAID LOT 12 AT A POINT 150.00 FEET NORTH FROM THE SOUTH LINE OF SAID LOT 12; THENCE SOUTH, ALONG SAID EAST LINE OF THE WEST 624.60 FEET OF LOT 12, A DISTANCE OF 150.00 FEET TO THE SOUTH LINE OF LOT 12; THENCE WEST, ALONG THE SOUTH LINE OF LOT 12, A DISTANCE OF 624.60 FEET TO THE POINT OF BEGINNING, EXCEPTING THEREFROM THE SOUTH 27 FEET THEREOF AND EXCEPTING THEREFROM THE WEST 50 FEET THEREOF TAKEN FOR PUBLIC ROAD, ALL IN COOK COUNTY, ILLINOIS.

PERMANENT INDEX NUMBER: 04-16-300-005-0000; 04-16-300-006-0000

Commonly known as 2625 Techny Road, Northbrook, Illinois.

TECHNY ROAD RESIDENTIAL PARCEL AND GREENVIEW ROAD PROPERTIES

PARCEL 1:

THE EAST 1/2 OF THAT PART OF THE NORTH 400 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, LYING WEST OF THE EAST 245 FEET OF SAID NORTH 400 FEET, (EXCEPT THEREFROM THE NORTH 33 FEET THEREOF), IN COOK COUNTY, ILLINOIS.

A NON-EXCLUSIVE EASEMENT AGREEMENT FOR THE BENEFIT OF PARCEL 1 AS CREATED BY THE VILLAGE OF NORTHBROOK DATED JULY 9, 2013 AND RECORDED SEPTEMBER 27, 2013 AS DOCUMENT NUMBER 1327013004 FOR THE PURPOSE OF PUBLIC SIDEWALK OVER THE FOLLOWING DESCRIBED LAND: THE SOUTH TWENTY FEET OF THE NORTH FIFTY FEET OF THE EAST HALF OF THAT PART OF THE NORTH 400 FEET OF THE WEST HALF OF THE EAST HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL, LYING WEST OF THE EAST 245 FEET THEREOF; IN COOK COUNTY, ILLINOIS.

PARCEL 2:

THE SOUTH 100 FEET OF THE NORTH 500 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL 3:

THE SOUTH 100 FEET OF THE NORTH 600 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PERMANENT INDEX NUMBER: 04-16-301-047-0000; 04-16-301-048-0000; 04-16-301-008-0000; 04-16-301-009-0000

Commonly known as 2539 Techny Road; 2074 Greenview Road; and 2090 Greenview Road, Northbrook, Illinois.

EXHIBIT B

CLIMATE ACTION PLAN

Developer comply with the action items of the Climate Action Plan that are applicable to the New Development, as follows:

1. Maintain five electric vehicles in employee fleet and four electric vehicle charging stations. Include additional EV-ready capabilities in additional proposed parking area.

2. All exterior lighting fixtures must be Dark Sky compliant.

3. Install EnergyStar rated windows and appliances.

4. Install rooftop PV array on the Town Center Addition, and all roof structures designed with solar-ready zones for potential future installations.

5. Meet Low-VOC Limits per Architectural Specifications (concrete sealers, adhesives, waterproofing, sealants, paints, and wallcoverings).

6. Install all-electric appliances, including water heaters.

7. The water fixtures should be WaterSense or meet 2018 IECC minimum standards.

8. The facility must offer recycling and composting (including food scraps) services.

9. Native species as noted on the Landscape Plans must be installed.

EXHIBIT C
FORM LETTER OF CREDIT

IRREVOCABLE STANDBY LETTER OF CREDIT

IRREVOCABLE LETTER OF CREDIT NO. _____ AMOUNT:_____

EXPIRATION DATE: _____ DATE OF ISSUE:_____

_____

[Name of Bank]

_____

[Address]

TO: Village of Northbrook
1225 Cedar Lane
Northbrook, Illinois 60062
Attention: Village Manager

WE HEREBY AUTHORIZE YOU TO DRAW AT SIGHT on this Irrevocable Standby Letter of Credit No. _____ UP TO AN AGGREGATE AMOUNT OF _____ United States Dollars ($_____) for account of _____ (the "***Customer***").

Drafts under this Letter of Credit shall bear upon their face the words:

"Drawn under _____
Irrevocable Standby Letter of Credit No. __ Dated: _____, _____"

Drafts may be for all or any portion of the amount of this Letter of Credit, and shall be in the form attached hereto as ***Exhibit 1*** and shall be accompanied by one of the following documents executed by the Village Manager or an individual designated as acting Village Manager:

(a) A written statement on the form attached hereto as ***Exhibit 2*** stating that, conditioned upon proper notice to the Village Manager, Letter of Credit No. _____ will expire within 35 days or less and that the Customer has failed to deliver to the Village Manager evidence of a renewal of Letter of Credit No. _____; or

(b) A written statement on the form attached hereto as ***Exhibit 3*** stating that all or any part of the improvements required to be constructed by the Customer at Covenant Living, Northbrook, Illinois (the "***Property***") pursuant to the Development Agreement dated September __, 2023 by and between the Village of Northbrook and Covenant Home d/b/a Covenant Living of Northbrook (the "***Agreement***") have not been constructed in accordance with the Agreement or the Village's general ordinances, codes, or regulations; or

(c) A written statement on the form attached hereto as ***Exhibit 4*** stating that all or any part of the costs, payments, permit fees or other fees required to be paid to the Village by the Customer in conjunction with the redevelopment of the Combined Property pursuant to the Agreement or the Village's general ordinances, codes, or regulations, have not been paid in the required time period; or

(d) A written statement on the form attached hereto as ***Exhibit 5*** stating that all or any portion of the maintenance, repair, or restoration of the property required to be performed by the Customer pursuant to and in accordance with the Agreement or the Village's general ordinances, codes, and regulations has not been performed; or

(e) A written statement on the form attached hereto as ***Exhibit 6*** stating that all or any portion of the Customer's undertakings pursuant to the Agreement have not been performed pursuant to and in accordance with the Agreement.

WE HEREBY AGREE with the beneficiary that:

1. Drafts drawn under and in compliance with this Letter of Credit shall be duly honored immediately upon presentation to us if presented on or before the above-stated Expiration Date or presented at our office together with the original of this Letter of Credit on or before that date. Further, one or more drafts may be presented at our office on or before the Expiration Date.

2. If, within three banking days after any draft drawn under this Letter of Credit is presented to us in conformance with the terms of this Letter of Credit, we fail to honor same, we agree to pay all attorneys' fees, court costs and other expenses incurred by the Village in enforcing the terms hereof.

3. This Letter of Credit shall expire on _____, 20___, as stated hereinabove; provided, however, that we shall send notice to the Village Manager by certified mail, return receipt requested, or hand-delivered courier at least 35 days prior to said Expiration Date, that this Letter of Credit is about to expire.

4. In no event shall this Letter of Credit or the obligations contained herein expire except upon the prior written notice required herein, it being expressly agreed that the above expiration date shall be extended as shall be required to comply with the prior written notice required herein.

5. No consent, acknowledgment, or approval of any kind from the Customer shall be necessary or required prior to honoring any draft presented in conformance with the terms of this Letter of Credit.

6. The aggregate amount of this Letter of Credit may be reduced only upon receipt by us of a document executed by the Village Manager stating that such aggregate amount shall be reduced in an amount permitted by the Village's subdivision regulations because of the satisfactory completion of all or part of the improvements required to be constructed pursuant to the Agreement or the Village's general ordinances, codes, or regulations.

7. This Letter of Credit is irrevocable.

This Letter of Credit shall be governed by and construed in accordance with the Uniform Customs and Practices for ISP 98 of the International Chamber of Commerce (the "***Uniform Customs***"). In the event of a conflict between this Letter of Credit and the Uniform Customs, this Letter of Credit shall control. This Letter of Credit shall be deemed to be a contract made under the laws of the State of Illinois, including, without limitation, Article 5 of the Uniform Commercial Code as in effect in the State of Illinois, and shall, as to matters not governed by the Uniform Customs, be governed by and construed in accordance with the laws of the State of Illinois, without regard to principles of conflicts of law.

AS USED HEREIN, THE TERM "BANKING DAY" MEANS ANY DAY OTHER THAN A SATURDAY, SUNDAY, OR A DAY ON WHICH BANKS IN THE STATE OF ILLINOIS ARE AUTHORIZED OR REQUIRED TO BE CLOSED, AND A DAY ON WHICH PAYMENTS CAN BE EFFECTED ON THE FEDWIRE SYSTEM.

_____	_____
[Signature of Bank Officer]	[Signature of Bank Officer]
_____	_____
[Officer's Title]	[Officer's Title]

EXHIBIT 1 TO FORM OF IRREVOCABLE STANDBY LETTER OF CREDIT

FORM OF DRAFT

[To Be Supplied/Revised by Issuing Bank]

To: [BANK NAME, ADDRESS, AND CONTACT PERSON]

Date:

Drawn under _____Irrevocable Standby Letter of Credit No. _____ Dated: _____, 202_.

Pursuant to the attached documentation, Village of Northbrook ("***Beneficiary***") hereby demands that _____ pay to the order of Beneficiary the amount of $_____, by wire transfer with the following instructions:

Bank Name:
Account Number:
ABA Routing Number:

By _____
Name: _____
Title: _____
Date: _____

EXHIBIT 2 TO FORM OF IRREVOCABLE STANDBY LETTER OF CREDIT

To:
Attn:

Re: Letter of Credit No. _____

Ladies and Gentlemen:

This is to advise you that Letter of Credit No. _____ dated _____, 202_ in the amount of $_____ will expire within 35 days or less and that _____ has failed to deliver to the Village Manager evidence of a renewal of Letter of Credit No. _____.

Very truly yours,

_____
Village Manager

EXHIBIT 3 TO FORM OF IRREVOCABLE STANDBY LETTER OF CREDIT

To:
Attn:

Re: Letter of Credit No. _____

Ladies and Gentlemen:

This is to advise you that all or any part of the improvements required to be constructed by the Customer (as that term is defined in the above-referenced Letter of Credit) pursuant to that certain Development Agreement dated September __, 2023 by and between the Village of Northbrook and Covenant Home d/b/a Covenant Living of Northbrook (the "***Agreement***") have not been constructed in accordance with the Agreement or the Village's general ordinances, codes, and regulations.

Very truly yours,

_____
Village Manager

EXHIBIT 4 TO FORM OF IRREVOCABLE STANDBY LETTER OF CREDIT

To:
Attn:

Re: Letter of Credit No. _____

Ladies and Gentlemen:

This is to advise you that all or any part of the costs, payments, permit fees or other fees required to be paid to the Village by the Customer (as that term is defined in the above-referenced Letter of Credit) in conjunction with the redevelopment of property pursuant to that certain Development Agreement dated September __, 2023 by and between the Village of Northbrook and Covenant Home d/b/a Covenant Living of Northbrook or the Village's general ordinances, codes, or regulations, have not been paid in the required time period.

Very truly yours,

_____
Village Manager

EXHIBIT 5 TO FORM OF IRREVOCABLE STANDBY LETTER OF CREDIT

To:
Attn:

Re: Letter of Credit No. _____

Ladies and Gentlemen:

This is to advise you that all or any part of the maintenance, repair or restoration required to be performed by the Customer (as that term is defined in the above-referenced Letter of Credit) pursuant to and in accordance with that certain Development Agreement dated September __, 2023 by and between the Village of Northbrook and Covenant Home d/b/a Covenant Living of Northbrook, or the Village's general ordinances, codes, and regulations, has not been performed.

Very truly yours,

_____
Village Manager

EXHIBIT 6 TO FORM OF IRREVOCABLE STANDBY LETTER OF CREDIT

To:
Attn:

Re: Letter of Credit No. _____

Ladies and Gentlemen:

This is to advise you that all or any part of the undertakings of the Customer (as that term is defined in the above-referenced Letter of Credit) pursuant to that certain Development Agreement dated September __, 2023 by and between the Village of Northbrook and Covenant Home d/b/a Covenant Living of Northbrook (the "***Agreement***") have not been performed pursuant to and in accordance with the Agreement.

Very truly yours,

_____
Village Manager

EXHIBIT D

TRANSFEREE ASSUMPTION AGREEMENT

THIS TRANSFEREE ASSUMPTION AGREEMENT is made as of this _____ day of _____, 20__, between the **VILLAGE OF NORTHBROOK**, an Illinois home rule municipal corporation (***"Village"***), **COVENANT HOME D/B/A COVENANT LIVING OF NORTHBROOK**, an Illinois not-for-profit corporation ("***Developer"***), and _____, a _____ (***"Transferee"***).

W I T N E S E T H:

WHEREAS, pursuant to that certain real estate sale contract dated _____, 20__, the Transferee agreed to purchase from Developer certain real property situated in Cook County, Illinois and legally described in **Exhibit 1** attached to and, by this reference, made a part of this Agreement (***"Property"***); and

WHEREAS, following the conveyance of the Property by Developer, the Transferee will be the legal owner of the Property; and

WHEREAS, as a condition to the conveyance of the Property by Developer, the Village and Developer require that the Transferee agree to comply with all the terms, requirements, and obligations set forth in that certain Development Agreement, dated as of September __, 2023, and recorded in the office of the Cook County Clerk's Recording Division on _____, 20__, as Document No. _____, by and between the Village and Developer (***"Development Agreement"***);

NOW, THEREFORE, in consideration of the agreement of Developer to convey the Property to the Transferee, and of the Village to accept the transfer of obligations as provided herein and to grant the releases granted herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, it is hereby agreed by, between, and among the Village, Developer, and the Transferee as follows:

1. **Recitals.** The foregoing recitals are by this reference incorporated herein and made a part hereof as substantive provisions of this Agreement.

2. **Assumption of Obligations.** The Transferee, on its behalf and on behalf of its successors, assigns, heirs, executors, and administrators, hereby agrees, at its sole cost and expense, to comply with all of the terms, requirements, and obligations of Developer in the Development Agreement, including all exhibits and attachments, regardless of whether such terms, requirements, and obligations are to be performed and provided by, or are imposed upon, Developer or the Property.

3. **Payment of Village Fees and Costs.** In addition to any other costs, payments, fees, charges, contributions, or dedications required by this Agreement, the Development Agreement or by applicable Village codes, ordinances, resolutions, rules, or regulations, the Transferee must pay to the Village, immediately upon presentation of a written demand or demands therefor, all legal, engineering, and other consulting or administrative fees, costs, and expenses incurred in connection with the negotiation, preparation, consideration, and review of this Agreement.

4. **Acknowledgment and Release of Developer.** The Village hereby acknowledges its agreement to the Transferee's assumption of the obligation to comply with the terms, requirements, and obligations of Developer in the Development Agreement, including all exhibits and attachments, and the Village hereby releases Developer from any personal liability for failure to comply with the terms, requirements, and obligations of Developer in the Development Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the day and year first written above.

ATTEST:

VILLAGE OF NORTHBROOK,
an Illinois home rule municipal corporation

_____

By:_____

Village Clerk

Its: Village Manager

ATTEST:

COVENANT HOME D/B/A COVENANT LIVING OF NORTHBROOK, an Illinois not-for-profit corporation

By:_____

By:_____

Its:_____

Its:_____

ATTEST:

[TRANSFEREE],
a _____

By:_____

By:_____

Its:_____

Its:_____

ACKNOWLEDGMENTS

STATE OF ILLINOIS)
) SS
COUNTY OF COOK)

This instrument was acknowledged before me on _____, 20__, by _____, the Village Manager of the **VILLAGE OF NORTHBROOK**, an Illinois home rule municipal corporation, and by _____, the Village Clerk of said municipal corporation.

_____
Signature of Notary

SEAL

STATE OF ILLINOIS)
) SS
COUNTY OF COOK)

This instrument was acknowledged before me on _____, 20__, by _____ the _____ of **COVENANT HOME D/B/A COVENANT LIVING OF NORTHBROOK**, an Illinois not-for-profit corporation and by _____, the _____ of said _____.

_____
Signature of Notary

SEAL

_____

STATE OF ILLINOIS)
) SS
COUNTY OF COOK)

This instrument was acknowledged before me on _____, 20__, by _____ the _____ of **TRANSFEREE**, and by _____, the _____ of said _____.

_____
Signature of Notary

SEAL

EXHIBIT 1 TO TRANSFEREE ASSUMPTION AGREEMENT

PROPERTY LEGAL DESCRIPTION

RESOLUTION NO. 2023-R-

BE IT RESOLVED by the President and the Board of Trustees of the Village of Northbrook, County of Cook, and State of Illinois, THAT:

A Resolution Approving a Final Plat of Subdivision (Covenant Living of Northbrook – Docket No. PCD-22-11)

is hereby adopted, as follows:

Section 1. RECITALS.

Covenant Home d/b/a Covenant Living of Northbrook (***"Applicant"***) is the owner of those parcels commonly known as 2539 Techny Road; 2074 Greenview Road; and 2090 Greenview Road (collectively, the ***"Property"***). The Applicant has submitted an application to redevelop a portion of the Property with additional residential buildings and new stormwater detention facilities (***"Development"***).

As part of the Development, Applicant seeks specifically to subdivide the Greenville Road parcel in order to divide the proposed detention areas from the single family homes on the parcel.

In order to develop the Property as proposed, the Applicant has requested relief from, and approvals under, the Zoning Code and the Village of Northbrook Subdivision and Development Code (1991), as amended (***"Subdivision Code"***).

On May 16, 2023, June 20, 2023, and July 18, 2023, the Plan Commission held a public hearing to consider Applicant's request for approval of requested zoning relief for the Property. On August 1, 2023, the Plan Commission recommended approval of the Final Plat of Subdivision in Resolution No. 2023-PC-09 (***"Requested Relief"***).

The President and Board of Trustees have determined that it is in the best interest of the Village and its residents to grant the Applicant's Requested Relief.

Section 2. APPROVAL, EXECUTION AND RECORDATION OF FINAL PLAT.

A. Approval of Final Plat. The "Final Plat of Greenview Road Subdivision," prepared by TFW, Surveying & Mapping, Inc, consisting of two sheets, with a latest revision date of September 18, 2023, shall be, and is hereby, approved. All revisions to the Final Plat that are reviewed, accepted, and approved by either the Village Engineer or the Village's Director of Development and Planning Services subsequent to the date of adoption of this Resolution shall be incorporated into, and made a part of, the Final Plat with no further action required by the Corporate Authorities.

B. Authorization. The Village President and Village Clerk are, subject to the satisfaction of the Effective Date conditions set forth in Section 3 below, hereby authorized and directed to execute and seal, on behalf of the Village, the Final Plat, following execution by the Applicant and any other party with an interest in the Property and subject to certification by the Office of the Cook County Clerk that there are no property tax delinquencies, as well as all other certifications as necessary.

C. Recordation. The Village Manager is hereby authorized and directed to record the Final Plat with the Office of the Cook County Clerk's Office upon satisfactory completion of all administrative details relating thereto.

Section 3. EFFECTIVE DATE.

This Resolution shall be in full force and effect only upon the occurrence of all of the following events:

A. Passage by the Board of Trustees of the Village of Northbrook by a majority vote in the manner required by law; and

B. The effective date of (i) the Resolution Approving the Development Agreement for Covenant Living of Northbrook (2625 Techny Road) (Docket No. PCD-22-11); (2) an Ordinance Amending the Comprehensive Plan of the Village of Northbrook (2625 Techny Road – Covenant Living of Northbrook) (Plan Commission Docket No. PCD-22-11); and (3) an Ordinance Rezoning the Property at 2539 Techny Road; 2074 Greenview Road; 2090 Greenview Road; and a portion of 2625 Techny Road and Amending the District Zoning Map (2625 Techny Road – Covenant Living of Northbrook) (Plan Commission Docket No. PCD-22-11) relating to the Property.

PASSED: This _____ day of _____, 2023.

AYES: ( )

NAYS: ( )

ABSENT: ( )

ABSTAIN: ( )

_____
Village President

ATTEST:

_____
Village Clerk

FINAL PLAT
OF
GREENVIEW ROAD SUBDIVISION

BEING A SUBDIVISION OF PART OF THE NORTH 600 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, ALL IN COOK COUNTY, ILLINOIS.

NO TITLE COMMITMENT PROVIDED TO THIS SURVEYOR TO AID IN THE PREPARATION OF THIS SUBDIVISION

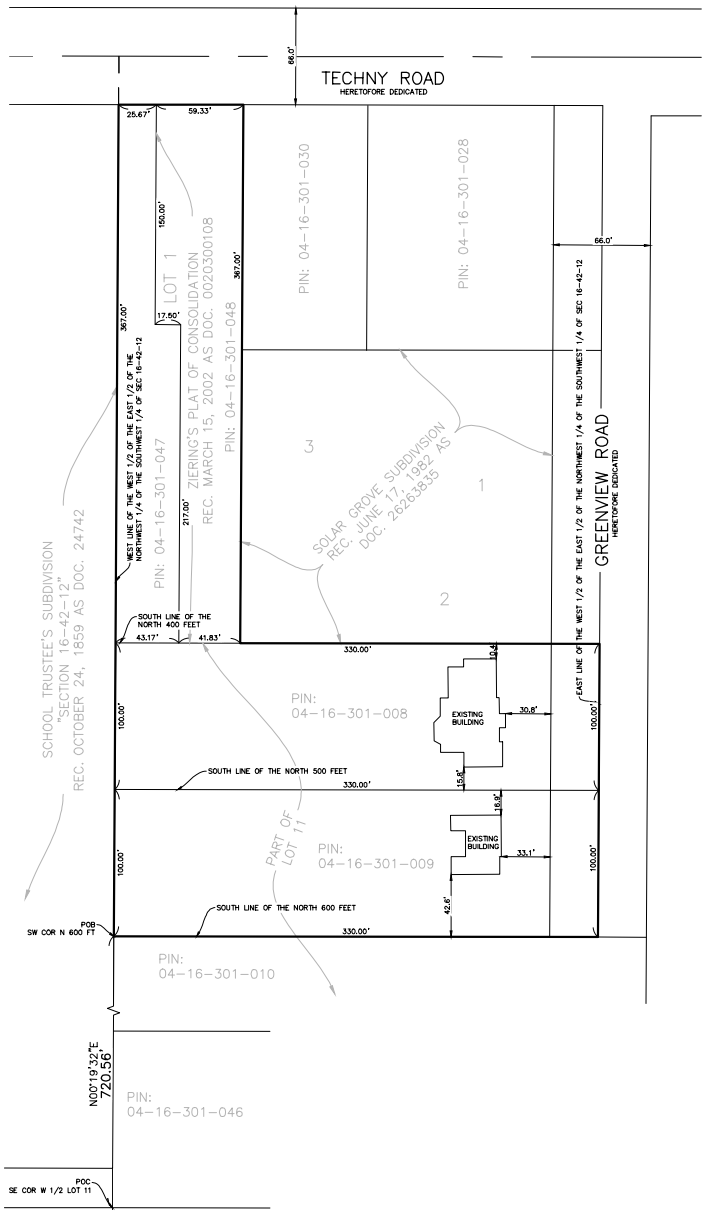
ADDRESSES (PER COOK COUNTY GIS):

2545 TECHNY ROAD
NORTHBROOK, IL 60062
PIN: 04-16-301-047

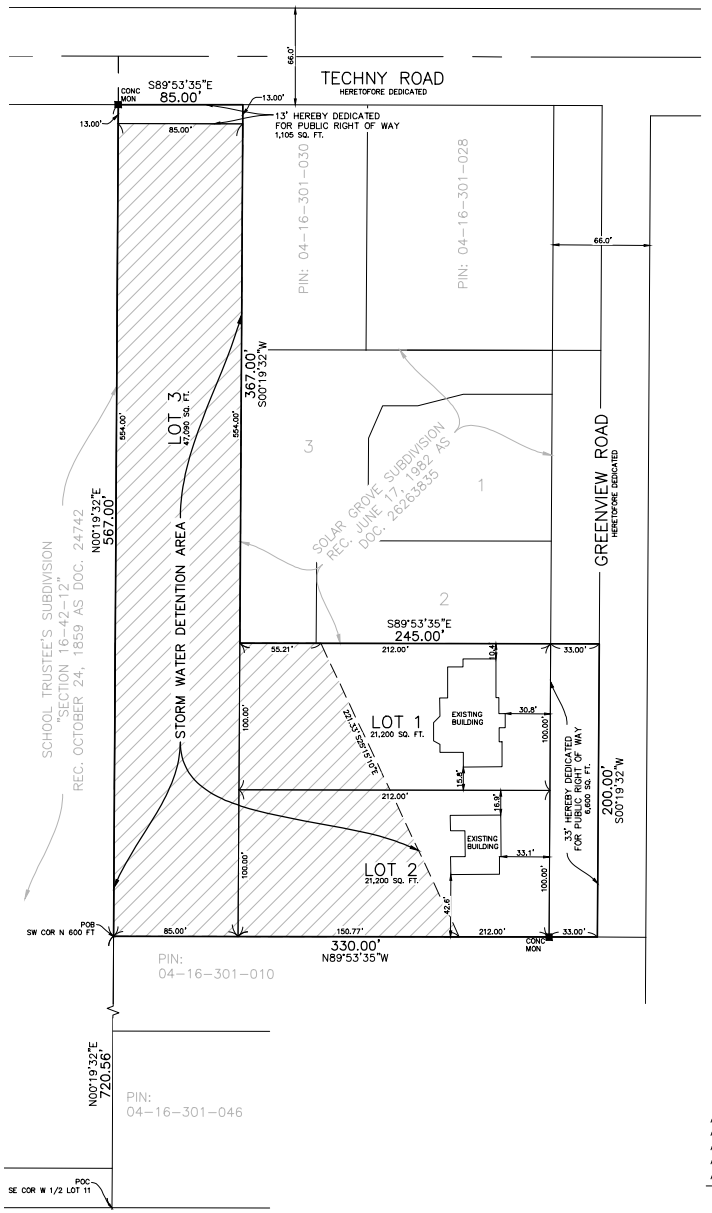
2539 TECHNY ROAD
NORTHBROOK, IL 60062
PIN: 04-16-301-048

2074 GREENVIEW ROAD
NORTHBROOK, IL 60062
PIN: 04-16-301-008

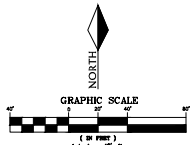
2090 GREENVIEW ROAD
NORTHBROOK, IL 60062
PIN: 04-16-301-009



LOTS BEFORE SUBDIVISION



LOTS AFTER SUBDIVISION



AREA SUMMARY PRIOR TO SUBDIVISION

AREA OF PIN 04-16-301-047	= 13,218 SQ.FT.	OR 0.3034 ACRES
AREA OF PIN 04-16-301-048	= 17,976 SQ.FT.	OR 0.4127 ACRES
AREA OF PIN 04-16-301-008	= 33,000 SQ.FT.	OR 0.7576 ACRES
AREA OF PIN 04-16-301-009	= 33,000 SQ.FT.	OR 0.7576 ACRES
TOTAL AREA	= 97,194 SQ.FT.	OR 2.2313 ACRES

REVISED DATE: SEPTEMBER 18, 2023 (REMOVE SCHOOL DISTRICT CERT)
REVISED DATE: SEPTEMBER 15, 2023 (230982-VILLAGE COMMENTS 08-31-2023)
DATE: JUNE 2, 2023 (230527)
ORDER NO: 230982
PROJ. NO: 1046
FOR: KIMLEY-HORN
PROJ. NAME: COVENANT VILLAGE OF NORTHBROOK

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Professional Design Firm Registration #184-002793.

TFW SURVEYING & MAPPING, INC.
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847-548-6600 FAX 548-6699
info@tfwsurvey.com www.tfwsurvey.com

FINAL PLAT
OF
GREENVIEW ROAD SUBDIVISION

BEING A SUBDIVISION OF PART OF THE NORTH 600 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, ALL IN COOK COUNTY, ILLINOIS.

NO TITLE COMMITMENT PROVIDED TO THIS SURVEYOR TO AID IN THE PREPARATION OF THIS SUBDIVISION

OWNER'S CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF _____) SS.

THIS IS TO CERTIFY THAT _____ IS THE OWNER OF THE PROPERTY DESCRIBED ABOVE AND HAS CAUSED THE SAME TO BE SURVEYED AND PLATTED AS SHOWN HEREON. FOR THE USES AND PURPOSES THEREIN SET FORTH AND AS ALLOWED AND PROVIDED BY STATUTES, DOES HEREBY ACKNOWLEDGE AND ADOPT THE SAME UNDER THE STYLE AND TITLE AFORESAID.

DATED AT _____, ILLINOIS, THIS _____ DAY OF _____, A.D., 20____.
CITY DATE MONTH

BY: _____ ATTEST: _____
SIGNATURE SIGNATURE

NOTARY CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF _____) SS.

I, _____, A NOTARY PUBLIC IN AND FOR THE SAID COUNTY IN THE STATE
PRINT NAME
AFORESAID, DO HEREBY CERTIFY THAT _____, _____, AND
PRINT NAME TITLE
_____, _____, OF SAID OWNER, WHO ARE PERSONALLY
PRINT NAME TITLE
KNOWN TO ME TO BE THE SAME PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT AS SUCH _____ AND _____ RESPECTFULLY,
TITLE TITLE
APPEARED BEFORE ME THIS DAY IN PERSON AND JOINTLY AND SEVERALLY ACKNOWLEDGED THAT THEY SIGNED AND DELIVERED THE SAID INSTRUMENT AS THEIR OWN FREE AND VOLUNTARY ACT AND AS THE FREE AND VOLUNTARY ACT OF SAID OWNER FOR THE USES AND PURPOSES THEREIN SET FORTH.

GIVEN UNDER MY HAND AND NOTARIAL SEAL

THIS _____ DAY OF _____, 20____.

_____ _____
NOTARY PUBLIC SIGNATURE PRINT NAME

MY COMMISSION EXPIRES ON _____ _____, 20____.

VILLAGE PRESIDENT CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF COOK) SS.

APPROVED THIS ____ DAY OF _____, A.D. 20___ BY THE VILLAGE PRESIDENT OF THE VILLAGE OF NORTHBROOK, COOK COUNTY, ILLINOIS.

_____
VILLAGE PRESIDENT

VILLAGE ENGINEER CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF COOK) SS.

APPROVED THIS ____ DAY OF _____, A.D. 20___ BY THE VILLAGE ENGINEER OF THE VILLAGE OF NORTHBROOK, COOK COUNTY, ILLINOIS.

_____
VILLAGE ENGINEER

VILLAGE COLLECTOR CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF COOK) SS.

I DO HEREBY CERTIFY THAT THERE ARE NO DEFERRED SPECIAL ASSESSMENTS OR UNPAID CURRENT ASSESSMENTS DUE AGAINST THE LAND INCLUDED IN THE ABOVE PLAT.

DATED THIS _____ DAY OF _____ 20____.

_____
VILLAGE COLLECTOR

DRAINAGE CERTIFICATE

TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF THIS SUBDIVISION OR ANY PART THEREOF, OR, IF SUCH SURFACE WATER DRAINAGE WILL BE CHANGED, REASONABLE PROVISION HAS BEEN MADE FOR COLLECTION AND DIVERSION OF SUCH SURFACE WATERS INTO PUBLIC AREAS, OR DRAINS WHICH THE OWNER 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 THIS SUBDIVISION.

_____ _____
OWNER

ITS MANAGER: _____ NAME: _____

SIGNED: _____ FIRM: _____

DATED: _____ DATED: _____

VILLAGE OF NORTHBROOK EASEMENT FOR STORM WATER DETENTION AREA PROVISIONS

1. THE AREA OF THE PROPERTY DESIGNATED ON THIS PLAT AS 'STORM WATER DETENTION AREA' SHALL BE CONTINUOUSLY MAINTAINED IN A FIRST RATE MANNER BY OWNER OF 2625 TECHNY ROAD (THE 'PLANNED DEVELOPMENT') AND AN EASEMENT ON, UNDER AND ABOVE THE STORM WATER DETENTION AREA IS HEREBY GRANTED TO, AND FOR THE USE AND BENEFIT OF, THE PLANNED DEVELOPMENT FOR THE SOLE PURPOSE OF STORM WATER DETENTION AND DRAINAGE.

2. NO CHANGE SHALL BE MADE IN THE FINISHED GRADE OF THE LAND WITHIN THE STORM WATER DETENTION AREA, NOR SHALL ANY CONSTRUCTION OF ANY KIND WHATSOEVER BE ERECTED OR PERMITTED TO EXIST WITHIN THE STORM WATER DETENTION AREA THAT MIGHT MATERIALLY IMPEDE STORM WATER DRAINAGE THEREIN OR MATERIALLY REDUCE THE STORM WATER DETENTION CAPACITY THEREOF. TREES, SHRUBS, FENCES AND NORMAL LANDSCAPE PLANTING SHALL BE PERMITTED WITHIN THE STORM WATER DETENTION AREA ONLY WITH THE PRIOR WRITTEN APPROVAL OF THE VILLAGE MANAGER OF THE VILLAGE OF NORTHBROOK, COOK COUNTY, ILLINOIS (THE 'VILLAGE'). THE OWNER OF THE PLANNED DEVELOPMENT SHALL MAINTAIN A GRASS COVER ON THE SURFACE OF THE STORM WATER DETENTION AREA AND SHALL KEEP SUCH GRASS IN A NEAT AND TRIMMED CONDITION.

3. IN THE EVENT THE VILLAGE DETERMINES, IN ITS SOLE AND ABSOLUTE DISCRETION, THAT PRIOR MAINTENANCE OF THE STORM WATER DETENTION AREA IS NOT PERFORMED AT ANY TIME, THE VILLAGE, AFTER TEN (10) DAYS PRIOR WRITTEN NOTICE TO THE OWNERS OF THE PLANNED DEVELOPMENT, MAY, BUT SHALL NOT BE OBLIGATED TO, ENTER UPON ANY OR ALL OF THE PLANNED DEVELOPMENT FOR THE PURPOSE OF PERFORMING MAINTENANCE WORK ON AND TO THE STORM WATER DETENTION AREA.

4. IN THE EVENT THAT THE VILLAGE SHALL CAUSE TO BE PERFORMED ANY WORK PURSUANT TO THESE PARAGRAPHS, THE VILLAGE SHALL HAVE THE RIGHT TO CHARGE THE OWNER OF THE PLANNED DEVELOPMENT AN AMOUNT SUFFICIENT TO DEFRAY THE ENTIRE COST OF SUCH WORK OR ACTION, INCLUDING ADMINISTRATIVE COSTS, EITHER BEFORE OR AFTER SUCH COST IS INCURRED. IF THE AMOUNT SO CHARGED IS NOT PAID BY THE OWNER OF THE PLANNED DEVELOPMENT WITHIN THIRTY (30) DAYS FOLLOWING A DEMAND IN WRITING BY THE VILLAGE FOR SUCH PAYMENT, SUCH CHARGE, TOGETHER WITH INTEREST AND COSTS OF COLLECTION, SHALL BECOME A LIEN UPON THE PLANNED DEVELOPMENT AND THE VILLAGE SHALL HAVE THE RIGHT TO COLLECT SUCH CHARGE, WITH INTEREST AND COSTS, AND TO ENFORCE SUCH LIEN AS IN FORECLOSURE PROCEEDINGS AS PERMITTED BY LAW.

5. NOTHING IN THESE PARAGRAPHS SHALL BE CONSTRUED TO CONSTITUTE A DEDICATION OF ANY PORTION OF THE STORM WATER DETENTION AREA OR OF THE PLANNED DEVELOPMENT TO, OR AN ACCEPTANCE THEREOF BY, THE VILLAGE.

6. THE VILLAGE SHALL BE UNDER NO OBLIGATION TO EXERCISE THE RIGHTS GRANTED IN THESE PARAGRAPHS EXCEPT AS IT SHALL DETERMINE TO BE IN ITS BEST INTEREST. NO FAILURE TO EXERCISE AT ANY TIME ANY RIGHT HEREIN GRANTED TO THE VILLAGE SHALL BE CONSTRUED AS A WAIVER OF THAT OR ANY OTHER RIGHTS.

7. THESE COVENANTS SHALL RUN WITH THE LAND IN THE PLANNED DEVELOPMENT, AND SHALL BE BINDING UPON AND INURE TO THE BENEFIT OF THE OWNER OF THE PLANNED DEVELOPMENT, THEIR RESPECTIVE SUCCESSORS, ASSIGNS AND GRANTEES AND ALL PARTIES CLAIMING BY, THROUGH AND UNDER THEM. ENFORCEMENT OF THESE COVENANTS MAY BE SOUGHT BY THE OWNER OF THE PLANNED DEVELOPMENT, ANY PERSON WITH AN INTEREST IN ANY OF SAID LOTS OF RECORD, OR THE VILLAGE OF NORTHBROOK BY ANY PROCEEDING AT LAW OR IN EQUITY AGAINST ANY PERSON OR PERSONS VIOLATING OR ATTEMPTING TO VIOLATE ANY COVENANT, EITHER TO RESTRAIN VIOLATION, TO COMPEL AFFIRMATIVE ACTION, OR TO RECOVER DAMAGES, AND AGAINST THE LAND TO ENFORCE ANY LIEN CREATED BY THESE COVENANTS.

NOTE: ADDITIONAL IMPROVEMENTS EXIST ON SITE BUT ARE NOT SHOWN AT REQUEST OF CLIENT.

NOTE: EACH LOT IS RESPONSIBLE FOR MAINTAINING THEIR DETENTION BASINS.

SURVEYOR'S NOTES

IRON PIPES ARE SET AT ALL LOT CORNERS UNLESS OTHERWISE NOTED.
ALL MEASUREMENTS AND DISTANCES ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF.
ALL EASEMENTS DEPICTED ON THE PLAT MAP ARE PUBLIC UTILITIES UNLESS OTHERWISE NOTED.
BEARINGS SHOWN HEREON ARE BASED ON AN STATE PLAIN COORDINATES SYSTEM AND ARE INTENDED ONLY TO SHOW THE ANGULAR RELATIONSHIP BETWEEN LINES.

SURVEYOR'S DESIGNATION OF RECORDING

STATE OF ILLINOIS)
COUNTY OF LAKE) SS

I, JAMES P. MEIER, A PROFESSIONAL LAND SURVEYOR IN THE STATE OF ILLINOIS, HEREBY DESIGNATE _____ TO RECORD THIS SUBDIVISION PLAT WITH THE COOK COUNTY CLERK RECORDING DIVISION. THIS DESIGNATION IS GRANTED UNDER THE RIGHT TO DESIGNATE SUCH RECORDING UNDER CHAPTER 109, SECTION 2 OF THE ILLINOIS REVISED STATUTES. AS A CONDITION OF THIS GRANT, SAID DESIGNEE IS HEREBY REQUIRED TO PROVIDE TO THIS SURVEYOR, A CERTIFIED COPY OF SAID PLAT, IMMEDIATELY UPON RECORDING OF SAME. RECEIPT OF SAID CERTIFIED COPY WILL SERVE AS NOTICE TO THE SURVEYOR THAT THE PLAT HEREON DRAWN HAS BEEN RECORDED.

DATED THIS 2nd DAY OF JUNE, A.D. 2023.

_____
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3295

SURVEYOR CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF LAKE) SS

I, JAMES P. MEIER, ILLINOIS PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT I HAVE SURVEYED AND SUBDIVIDED THE FOLLOWING DESCRIBED PROPERTY TO-WIT:

THAT PART OF THE NORTH 600 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF THE WEST HALF OF LOT 11 IN SCHOOL TRUSTEE'S SUBDIVISION OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN; THENCE NORTH 00 DEGREES 19 MINUTES 32 SECONDS EAST ALONG THE EAST LINE OF THE WEST HALF SAID LOT, 720.56 FEET TO THE POINT OF BEGINNING, ALSO BEING THE SOUTHWEST CORNER OF SAID NORTH 600 FEET; THENCE NORTH 00 DEGREES 19 MINUTES 32 SECONDS EAST ALONG THE WEST LINE OF SAID WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, 567.00 FEET; THENCE SOUTH 89 DEGREES 53 MINUTES 35 SECONDS EAST, 85.00 FEET; THENCE SOUTH 00 DEGREES 19 MINUTES 32 SECONDS WEST, 367.00 FEET TO THE SOUTH LINE OF THE NORTH 400 FEET OF SAID NORTH 600 FEET; THENCE SOUTH 89 DEGREES 53 MINUTES 35 SECONDS EAST ALONG SAID SOUTH LINE OF THE NORTH 400 FEET OF SAID NORTH 600 FEET, 245.00 FEET TO THE EAST LINE OF SAID WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16; THENCE SOUTH 00 DEGREES 19 MINUTES 32 SECONDS WEST ALONG SAID EAST LINE, 200.00 FEET TO THE SOUTHEAST CORNER OF SAID NORTH 600 FEET; THENCE NORTH 89 DEGREES 53 MINUTES 35 SECONDS WEST ALONG THE SOUTH LINE OF SAID NORTH 600 FEET, 330.00 FEET TO THE POINT OF BEGINNING, ALL IN COOK COUNTY, ILLINOIS.

AND THAT THE PLAT HEREON DRAWN IS A REPRESENTATION OF SAID SURVEY AND SUBDIVISION. DIMENSIONS ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF.
I FURTHER CERTIFY THAT THE LAND INCLUDED BY SAID SURVEY IS WITHIN THE CORPORATE LIMITS OF THE VILLAGE OF NORTHBROOK, ILLINOIS.

I FURTHER CERTIFY THAT PART OF THE PROPERTY SHOWN HEREON FALLS WITHIN ZONE "AE" (AREAS DETERMINED TO BE WITHIN THE 1.0% ANNUAL CHANCE FLOODPLAIN). AS DESIGNATED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, AS PER FIRM, MAP NUMBER 17031C0227J, REVISED AUGUST 19, 2008.

CERTIFIED AT GURNEE, ILLINOIS THIS 2nd DAY OF JUNE, A.D. 2023.

_____
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3295
LICENSE EXPIRES NOVEMBER 30, 2024

JAMES P. MEIER 035-3295 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS GURNEE, IL

PLAT SUBMITTAL AND RETURN TO ADDRESS:
THIS PLAT SUBMITTED FOR RECORDING BY, AND RETURN TO:

NAME: _____

ADDRESS: _____

CITY: _____

STATE: IL ZIP: _____

REVISED DATE: SEPTEMBER 18, 2023 (REMOVE SCHOOL DISTRICT CERT)
REVISED DATE: SEPTEMBER 15, 2023 (230982-VILLAGE COMMENTS 08-31-2023)
DATE: JUNE 2, 2023 (230527)
ORDER NO: 230982
PROJ. NO: 1046
FOR: KIMLEY-HORN
PROJ. NAME: COVENANT VILLAGE OF NORTHBROOK

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Professional Design Firm Registration #184-002793.

TFW SURVEYING & MAPPING, LLC
LAND SURVEYING • TOPOGRAPHIC MAPPING • CONSTRUCTION LAYOUT
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847-548-6600 FAX 548-6699
info@tfwsurvey.com www.tfwsurvey.com

RESOLUTION NO. 2023-R-

BE IT RESOLVED by the President and the Board of Trustees of the Village of Northbrook, County of Cook, and State of Illinois, THAT:

A Resolution Approving a Development Agreement for Covenant Living of Northbrook Redevelopment Plan

(2625 Techny Road – Covenant Living of Northbrook) (Docket No. PCD-22-11)

is hereby adopted, as follows:

Section 1. RECITALS.

Covenant Home d/b/a Covenant Living of Northbrook ("***Applicant***") is the owner of those parcels commonly known as 2625 Techny Road; 2539 Techny Road; 2074 Greenview Road; and 2090 Greenview Road (collectively, the "***Property***"). The Applicant has submitted an application to redevelop a portion of the Property with additional residential buildings and new stormwater detention facilities ("***Development***").

In order to develop the Property as proposed, the Applicant has requested relief from, and approvals under, the Zoning Code and the Village of Northbrook Subdivision and Development Code (1991), as amended (***"Subdivision Code"***).

On May 16, 2023, June 20, 2023 and July 18, 2023, the Plan Commission held a public hearings to consider Applicant's request for the following zoning approvals: (i) an amendment to the Village's Comprehensive Plan to re-designate three single family residential parcels as appropriate for Senior or Special Residential use; (ii) approval of a minor subdivision of three residential parcels; (iii) rezoning three R-3 Single Family Residential lots to R-8 Multi Family Residential (and adding the three lots into the existing Planned Development); (iv) rezoning one R-2 Single Family Residential lot to R-8 Multi Family Residential (within Covenant Living Planned Development for existing conditions); (v) an amendment to an existing special permit for a planned development (Ordinance No. 63-14) in the R-8 Multi-Family Residential District to add three residential buildings with a total of 36 units, and to include three additional parcels into the planned development site plan; (vi) a Special Permit to allow for an Independent Senior Living Facility (SIC No. 9867.00) in the R-8 zoning district; (vii) variation to reduce the required corner side (Techny) yard from 25' to 10' and required front (Pfingsten) yard from 25' to 17; (viii) Site Plan approval for the New Development; and (ix) other variations, exceptions and relief as may be necessary based on the final plan (collectively, "***Requested Relief***"). On August 1, 2023, the Plan Commission recommended approval of the Requested Relief.

After being duly noticed and a public hearing conducted by the Northbrook Plan Commission, the President and the Board of Trustees adopted: (i) Ordinance No. 23-__ to amend the Comprehensive Plan designation for portions of the Property from Single Family to Senior or Special Residential (ii) Ordinance No. 23-__ rezoning portion of the Property from the R-2 and R-3 Single Family Residential District to R-8 Multiple Family Residential District; (iii) Ordinance No. 23-___ granting a special permit to amend previously approved Planned Development and granting a special permit for an independent senior living facility.

The Village has negotiated a Development Agreement with the Applicant, pursuant to which the Property is to be redeveloped with the Development ("***Agreement***").

The President and Board of Trustees have considered the Agreement and find and determine that it is in the best interest of the Village and the public to approve the Agreement. These matters pertain to the Village's government and affairs and are approved pursuant to the Village's home rule powers under the Illinois Constitution of 1970.

Section 2. APPROVAL OF AGREEMENT.

The Agreement by and between the Village and Applicant shall be, and is hereby, approved in substantially the form attached hereto as ***Exhibit A***.

Section 3. EXECUTION OF AGREEMENT.

The Village President and Village Clerk are hereby authorized and directed to execute and seal, on behalf of the Village, the Agreement upon receipt of at least five copies fully executed by Applicant and any other person or entities whose consent is required; provided, however, that if such executed copies of the Agreement are not received by the Village Clerk within 30 days after the date of adoption of this Resolution, then this authority to execute and seal shall, at the option of the President and Board of Trustees, be null and void.

Section 4. RECORDATION OF AGREEMENT.

The Village Manager is hereby directed to record the Agreement with the Office of the Cook County Clerk's Office upon satisfactory completion of all administrative details relating thereto.

Section 5. EFFECTIVE DATE.

This Resolution shall be in full force and effect only upon the occurrence of all of the following events:

A. Passage by the Board of Trustees of the Village of Northbrook by a majority vote in the manner required by law; and

B. The effective date of a Resolution Approving a Final Plat of Subdivision (2625 Techny Road – Docket No. PCD-22-11) relating to the Property.

PASSED: This _____ day of _____, 2023.

AYES: ( )

NAYS: ( )

ABSENT: ( )

ABSTAIN: ( )

_____
Village President

ATTEST:

_____
Village Clerk

EXHIBIT A

AGREEMENT

THIS DOCUMENT PREPARED BY AND AFTER RECORDING RETURN TO:

Steven M. Elrod
Elrod Friedman LLP
325 N. LaSalle Street, Suite 450
Chicago, Illinois 60654

DEVELOPMENT AGREEMENT

BY AND BETWEEN

THE VILLAGE OF NORTHBROOK

AND

COVENANT HOME D/B/A COVENANT LIVING OF NORTHBROOK

(2625 TECHNY ROAD, 2539 TECHNY ROAD,

2074 GREENVIEW ROAD, AND 2090 GREENVIEW ROAD)

DATED AS OF SEPTEMBER__, 2023

DEVELOPMENT AGREEMENT
BY AND BETWEEN THE VILLAGE OF NORTHBROOK
AND COVENANT HOME D/B/A COVENANT LIVING OF NORTHBROOK
(2625 Techny Road; 2539 Techny Road; 2074 Greenview Road;
and 2090 Greenview Road)

THIS DEVELOPMENT AGREEMENT ("***Agreement***") is dated as of the __ day of September, 2023 and is by and between the **VILLAGE OF NORTHBROOK,** an Illinois home rule municipal corporation ("***Village***"), and **COVENANT HOME D/B/A COVENANT LIVING OF NORTHBROOK**, an Illinois not-for-profit corporation ("***Developer***").

IN CONSIDERATION OF the agreements set forth in this Agreement, the receipt and sufficiency of which are mutually acknowledged, and pursuant to the Village's statutory and home rule powers, the parties agree as follows:

SECTION 1. RECITALS.[*]

A. Developer is the legal owner of that parcel commonly known as 2625 Techny Road ("***Existing Property***") upon which it operates an independent senior living community known as Covenant Living of Northbrook ("***Existing Planned Development***"). The Existing Planned Development is subject to Ordinance No. 63-14, which grants "Community Unit Plan" approval, now referred to as a "Planned Development", to the Existing Property ("***Approved Plan***"). Amendments, variations, alterations, and adjustments to the Approved Plan have been approved by the Village from time to time.

B. Developer has acquired title to three residential lots located immediately to the east of the Existing Property commonly known as 2539 Techny Road ("***Techny Road Residential Parcel***"); 2074 Greenview Road; and 2090 Greenview Road (collectively, the "***Greenview Road Properties***"). The Existing Property and Techny Road Residential Parcel are collectively referred to as the "***Combined Property***." The Greenview Road Properties will remain in the R-3 zoning district and will not be incorporated into the Existing Planned Development.

C. Developer is proposing to construct three, three-story senior independent living apartment buildings with a total of 36 units ("***New Apartment Buildings***") on the Existing Property and install certain stormwater drainage and detention improvements including the relocation of the Techny Creek and a large stormwater detention basin on portions of the Combined Property to serve the Existing Planned Development as modified by the addition of the New Apartment Buildings (collectively the "***New Development***"). The Existing Planned Development and the New Development are collectively referred to as the "***Covenant Living Planned Development***."

D. In order to develop the Combined Property as proposed, Developer has requested relief from, and approvals under, the Village's Zoning Code and the Subdivision Code.

E. On May 16, 2023, June 20, 2023 and July 18, 2023, the Plan Commission held a public hearing to consider Developer's request for the following zoning approvals: (i) an amendment to the Village's Comprehensive Plan to move from Single Family to Senior or Special Residential for three single family residential parcels; (ii) approval of a minor subdivision of three

[*]All capitalized words and phrases throughout this Agreement have the meanings set forth in the preamble above and in Section 2 of this Agreement, or as elsewhere specifically defined in this Agreement. If a word or phrase is not specifically defined in this Agreement, it has the meaning ascribed to it in the Village Code, Zoning Code, or Subdivision Code.

residential parcels; (iii) rezoning three R-3 Single Family Residential lots to R-8 Multi Family Residential (and adding the three lots into the Existing Planned Development); (iv) rezoning one R-2 Single Family Residential lot to R-8 Multi Family Residential (within Covenant Living Planned Development for existing conditions); (v) an amendment to an existing special permit for a planned development (Ordinance No. 63-14) in the R-8 Multi-Family Residential District to add three residential buildings with a total of 36 units, and to include three additional parcels into the planned development site plan; (vi) a Special Permit to allow for an Independent Senior Living Facility (SIC No. 9867.00) in the R-8 zoning district; (vii) variation to reduce the required corner side (Techny) yard from 25' to 10' and required front (Pfingsten) yard from 25' to 17; (viii) Site Plan approval for the New Development; and (ix) other variations, exceptions and relief as may be necessary based on the final plan (collectively, ***"Requested Relief***").

F. The Corporate Authorities, after due and careful consideration, have concluded that the development and use of the Combined Property pursuant to and in accordance with this Agreement would further enable the Village to control the development of the area and would serve the best interests of the Village.

G. The Village and Developer desire that the Combined Property be developed, used, operated, and maintained only in compliance with this Agreement.

SECTION 2. DEFINITIONS; RULES OF CONSTRUCTION.

A. Definitions. Whenever used in this Agreement, the following terms have the following meanings unless a different meaning is required by the context. All capitalized words and phrases throughout this Agreement have the meanings set forth in the preamble above and in this Section and the other provisions of this Agreement. If a word or phrase is not specifically defined in this Agreement, it has the meaning ascribed to it in the Village Code, Zoning Code, or Subdivision Code.

Affordable Housing Requirements: The affordable housing development standards adopted by the Village and set forth in Part III of Article IX of the Zoning Code.

Building Code: Chapter 6 of the Village Code.

Business Day: Any calendar day other than a Saturday, Sunday or legal holiday under the laws of the State of Illinois.

Combined Property: That certain tract of land, consisting of approximately 52.38 acres, located at the address commonly known as 2625 Techny Road; 2539 Techny Road; 2074 Greenview Road; and 2090 Greenview Road, in Northbrook, Illinois and legally described in **Exhibit A** attached to this Agreement.

Comprehensive Plan: Village of Northbrook Comprehensive Plan (2010), as amended.

Corporate Authorities: The President and Board of Trustees of the Village of Northbrook, Illinois.

Developer*:* Covenant Home d/b/a Covenant Living of Northbrook.

Development Approvals: Collectively, all ordinances, resolution, permits, and administrative approvals listed in Section 3 of this Agreement.

Effective Date: The date of execution of this Agreement by all of the Parties as set forth in the first paragraph of page one of this Agreement.

Events of Default: Defined in Section 16.A of this Agreement with respect to Developer and in Section 16.B of this Agreement with respect to the Village.

Final Development Plan: Collectively, those plans and specifications for the New Development to be approved by the Corporate Authorities pursuant to the Development Approvals, in accordance with Section 3.A of this Agreement and the Requirements of Law. Upon the date that all components of the Final Development Plan are approved, the Final Development Plan will, automatically and without further action by the Corporate Authorities or the Parties, be deemed to be incorporated in, and made a part of, this Agreement.

Final Engineering Plan: The engineering plan that receives the approval of the Corporate Authorities in accordance with and pursuant to Section 3.A of this Agreement and in accordance with the Requirements of Law. Upon such approval, the Final Engineering Plan will, automatically and without further action by the Corporate Authorities or the Parties, be deemed to be incorporated in, and made a part of, the Final Development Plan, and by extension, this Agreement.

Final Landscape Plan: The landscape plan that receives the approval of the Corporate Authorities in accordance with and pursuant to Section 3.A of this Agreement and in accordance with the Requirements of Law. Upon such approval, the Final Landscape Plan will, automatically and without further action by the Corporate Authorities or the Parties, be deemed to be incorporated in, and made a part of, the Final Development Plan, and by extension, this Agreement.

Final Plat: The plat that receives the approval of the Corporate Authorities in accordance with and pursuant to Section 3.A of this Agreement and in accordance with the Requirements of Law. Upon such approval, the Final Landscape Plan will, automatically and without further action by the Corporate Authorities or the Parties, be deemed to be incorporated in, and made a part of, the Final Development Plan, and by extension, this Agreement.

Final Site Plan: The site plan that receives the approval of the Village Engineer in accordance with and pursuant to Section 3.A of this Agreement and in accordance with the Requirements of Law. Upon such approval, the Final Site Plan will, automatically and without further action by the Corporate Authorities or the Parties, be deemed to be incorporated in, and made a part of, the Final Development Plan, and by extension, this Agreement.

Greenview Road Properties: The residential lots located immediately to the east of the Existing Property commonly known as 2074 Greenview Road; and 2090 Greenview Road.

Improvements: Except as specifically excepted in this definition, all of the public and private improvements and facilities necessary to serve the Combined Property, including, without limitation, the improvements specifically listed in Section 6 of this Agreement, all other storm water detention facilities, water mains, storm sewers, sanitary sewers, parking areas, lighting, sidewalks, access driveways, parkways, rough and final grading, trees, sod, seeding, and other landscaping, and all other improvements required pursuant to this Agreement and the Final Engineering Plan, the Final Landscape Plan and the Requirements of Law. The definition of "Improvements" does not include the New Apartment Buildings to be constructed on the Combined Property.

***Maintenance Guarantee*:** Defined in Section 12.D of this Agreement.

Municipal Code: The Northbrook Municipal Code (1988), as the same has been and may, from time to time hereafter, be amended.

OREA: That certain Operations and Reciprocal Easement Agreement that will be recorded against the Combined Property pursuant to Section 7 of this Agreement.

Parties: Developer and the Village, collectively.

Person: Any corporation, partnership, individual, joint venture, limited liability company, trust, estate, association, business, enterprise, proprietorship, governmental body or any bureau, department or agency thereof, or other legal entity of any kind, either public or private, and any legal successor, agent, representative, authorized assign, or fiduciary acting on behalf of any of the above.

Plan Commission: The Plan Commission of the Village, established by Section 2-551 of the Village Code.

***Public Improvements**:* Those Improvements that will be dedicated to, and accepted by, the Village.

Public Improvements Standards Manual: The Village of Northbrook Standards and Specifications for Public and Private Improvements, as amended.

Requirements of Law: All applicable laws, statutes, codes, ordinances, resolutions, rules, regulations, and policies of the Village and any federal, state, local government, or governmental agency with jurisdiction over the Combined Property.

***Site Restoration*:** Restoration work that may be required to be conducted on the Combined Property subject to the conditions of Section 5.G. of this Agreement.

Special Permit Ordinance: Ordinance No. 2023-____ An Ordinance Further Amending the Special Permit for a Planned Development and Final Plan Approval Granted by Ordinance No. 63-14 and Granting Approval of a Special Permit, Variations, and Site Plan Approval for Independent Living Senior Living Expansion.

Stormwater Detention Area: That portion of the Combined Property designed on the Final Plat for the construction, maintenance, and operation of stormwater detention facilities and subject to those covenants and easements set forth in the Declaration of Covenants.

***Stormwater Improvements*:** Those stormwater Improvements depicted on the Final Plat and Final Engineering Plans, and private storm sewers, related equipment, appurtenances, swales, mains, service lines, and storm drainage areas (including specifically, but without limitation, the Stormwater Detention Area) installed and maintained on the Combined Property to ensure adequate Stormwater drainage and management and to collect and direct Stormwater into the Village's or Cook County's storm sewer system, including, without limitation, the relocated above-ground stream.

***Structure*:** Anything constructed or erected, the use of which requires more or less permanent location on the ground, or anything attached to something having a permanent location

on the ground, but not including paving or surfacing of the ground. Structure shall in all cases be deemed to refer to both Structures and buildings, including, without limitation, the New Apartment Buildings.

Subdivision Code: The "Village of Northbrook Subdivision and Development Code," as amended.

Techny Road Residential Parcel: The residential lot located immediately to the east of the Existing Property commonly known as 2539 Techny Road.

Transferee Assumption Agreement: Defined in Section 14.B.4 of this Agreement.

Uncontrollable Circumstance: Any of the following events and circumstances that materially change the costs or ability of Developer to carry out its obligations under this Agreement:

a. a change in the Requirements of Law;

b. insurrection, riot, civil disturbance, sabotage, act of public enemy, explosion, nuclear incident, war, or naval blockade;

c. pandemic, epidemic, hurricane, tornado, landslide, earthquake, lightning, fire, windstorm, other extraordinary weather conditions preventing performance of work, or other similar act of God;

d. governmental condemnation or taking other than by the Village;

e. strikes or labor disputes, other than those caused by the unlawful acts of Developer, its partners, or affiliated entities;

f. delays caused by the breach of this Agreement or default under this Agreement by the Village;

g. governmental moratoriums;

h. inability to obtain any material or service due to shortages or supply chain disruption.

Uncontrollable Circumstance does not include: (i) delays caused by weather conditions, unless the weather conditions are unusually severe or abnormal considering the time of year and the particular location involved; (ii) economic hardship or economic conditions; or (iii) a failure of performance by a contractor (except as caused by events that are Uncontrollable Circumstances as to such contractor).

Vertical Construction**:** The construction of any portion of a Structure above grade level.

Village*:* The Village of Northbrook.

Village Attorney: The duly appointed Village Attorney of the Village.

Village Clerk: The duly elected Village Clerk of the Village.

Village Code: The "Village of Northbrook Code of Ordinances," as amended.

Village Engineer: The duly appointed Village Engineer of the Village.

Village Manager: The duly appointed Village Manager of the Village.

Zoning Code: The "Village of Northbrook Zoning Code," as amended.

B. Rules of Construction.

1. **Grammatical Usage and Construction.** In construing this Agreement, plural terms are to be substituted for singular and singular for plural, in any place in which the context so requires.

2. **Headings.** The headings, titles, and captions in this Agreement have been inserted only for convenience and in no way define, limit, extend, or describe the scope or intent of this Agreement.

3. **Calendar Days; Calculation of Time Periods.** Unless otherwise specified in this Agreement, any reference to days in this Agreement will be construed to be calendar days. Unless otherwise specified, in computing any period of time described in this Agreement, the day of the act or event on which the designated period of time begins to run is not to be included and the last day of the period so computed is to be included, unless the last day is a Saturday, Sunday or legal holiday under the laws of the State in which the Combined Property is located, in which event the period shall run until the end of the next day which is neither a Saturday, Sunday, or legal holiday. The final day of any period will be deemed to end at 5:00 p.m., Central prevailing time.

4. **Compliance and Conflict with Other Requirements.** Unless otherwise provided in this Agreement either specifically or in context, in the event of a conflict between or among this Agreement and any plan, document, or Requirement of Law referenced in this Agreement, the plan, document, or Requirement of Law that provides the greatest control and protection for the Village, as determined by the Village Manager, will control. All of the provisions set forth in this Agreement, and all referenced plans, documents, and Requirements of Law are to be interpreted so that the duties and requirements imposed by any one of them are cumulative among all of them, unless otherwise provided in this Agreement either specifically or in context.

SECTION 3. APPROVAL OF NEW DEVELOPMENT.

A. Prior Approvals. Immediately prior to the approval and execution of this Agreement, the Corporate Authorities adopted the following ordinances in connection with the New Development (collectively, the "***Prior Approvals***"):

1. Ordinance No. 2023-____ An Ordinance Amending the Comprehensive Plan of the Village of Northbrook;

2. Ordinance No. 2023-____ An Ordinance Rezoning the Property at 2539 Techny Road; 2074 Greenview Road; 2090 Greenview Road; and a portion of 2625 Techny Road and Amending the District Zoning Map;

4. The Special Permit Ordinance; and

5. Resolution No. 2023-R-____ A Resolution Approving a Final Plat of Subdivision.

B. Final Engineering and Landscape Plan Modifications. All revisions to any portion of the Final Engineering Plan or the Final Landscape Plan that are reviewed, accepted, and approved by either the Village Engineer or the Village's Director of Development and Planning Services subsequent to the Effective Date shall be incorporated into, and made a part of this Agreement with no further action required by the Corporate Authorities.

SECTION 4. DEVELOPMENT, USE, AND OPERATION OF THE COMBINED PROPERTY.

Notwithstanding any use or development right that may be applicable or available pursuant to the provisions of the Village Code, the Zoning Code, the Subdivision Code, or any other rights Developer may have, during the term of this Agreement, the Combined Property may be developed, used, operated, and maintained only pursuant to, and in accordance with, the terms and provisions of this Agreement and its exhibits, including, without limitation, the following development conditions. Development, use, operation, and maintenance of the Combined Property in a manner materially deviating from these conditions will be deemed a violation of this Agreement and Developer's obligations hereunder, as the case may be, and an Event of Default pursuant to Section 16.A of this Agreement, subject to any applicable notice or cure period.

A. General Use and Development Restrictions: The development, construction, operation, and maintenance of the Combined Property, except for minor alterations due to final engineering and site work approved by the Village Engineer or the Director of Planning and Development Services, as appropriate, must comply, and be in accordance, with the following:

1. This Agreement;
2. The Development Approvals;
3. The Final Plat;
4. The Final Engineering Plan;
5. The Final Landscaping Plan;
6. The Zoning Code;
7. The Building Code;
8. The Subdivision Code;
9. The Public Improvements Standards Manual;
10. The OREA; and
11. The Requirements of Law.

Unless otherwise provided in this Agreement, in the event of a conflict between or among any of the above plans or documents, the plan or document that provides the greatest control and

protection for the Village, as determined by the Village Manager, shall control. All of the above plans and documents shall be interpreted so that the duties and requirements imposed by any one of them are cumulative among all of them, unless otherwise provided in this Agreement.

B. Specific Use and Development Restrictions Concerning Property on Greenview Road.

1. For so long as the Approved Plan, as amended by the Special Use Ordinance, remains in full force and effect, Developer agrees to comply with the restriction on the Use of the Greenview Road Parcels as set forth in Section 9.7 of the Special Use Ordinance.

2. For so long as the Approved Plan, as amended by the Special Use Ordinance, remains in full force and effect, Developer agrees to comply with the restriction on the purchase of properties on Greenview Road as set forth in Section 9.8 of the Special Use Ordinance.

C. Tree Preservation, Removal and Demolition. Developer shall comply with the Final Landscape Plan, and all Requirements of Law in the preservation and removal of all trees on the Combined Property, including, without limitation, the requirements of Chapter 25 of the Municipal Code and Subsection 4-103 D of the Subdivision Code.

SECTION 5. DEMOLITION AND CONSTRUCTION OF NEW DEVELOPMENT.

A. General Construction and Contracting Requirements.

1. **Compliance with Plans and Approvals.** The development of the Combined Property must be designed and constructed pursuant to and in accordance with the Final Development Plan and the Development Approvals. All work must be conducted in a good and workmanlike manner and with due dispatch, subject to Uncontrollable Circumstances. All materials used for construction on the Combined Property must be in accordance with the specifications for the work to be performed.

2. **Contracts for Work on Combined Property.** Developer must include in every contract for work on the Combined Property terms requiring the contractor and its subcontractors to prosecute the work diligently, and in full compliance with, and as required by or pursuant to, this Agreement, the Development Approvals, and the Requirements of Law, until the work is properly completed, subject to Uncontrollable Circumstances, and terms providing that Developer may take over and prosecute their respective work if the contractor fails to do so in a timely and proper manner.

3. **Village Inspections and Approvals.** All work on the Combined Property will be subject to inspection and approval by Village representatives at all times, subject to Section 6.A.6 above.

4. **Designation of Contact Person.** Developer will ensure construction oversight in a manner that includes public outreach to residents that live within and adjacent to the Combined Property. The public outreach component will be critical for helping notify the public regarding information and updates relating to the construction and development of the Combined Property. In addition, Developer will ensure that all construction information is contained on a dedicated webpage that will be linked to the Village's website. The dedicated webpage will clearly identify a single point of contact for imminent construction issues (e.g. dust control). Developer will additionally ensure a single point of emergency contact for the Village's first responders

throughout construction. Following the completion of construction of the New Development, Developer must continue to designate an individuation as the contact person and provide their contact information prominently on its website to respond to and address any complaints from internal residents of Covenant Living, owners of adjacent property, or Village resident regarding compliance with this Agreement, including without limitation, landscaping, exterior property/façade maintenance and stormwater detention.

B. Limits on Vertical Construction. In addition to any other applicable provision of this Agreement and the Requirements of Law, the Developer may not commence any Vertical Construction, and the Village will have the right to refuse to issue a building permit for any Vertical Construction, unless the Village Manager has determined that the construction of the following Improvements is complete as required by this Agreement and Requirements of Law, except as may be authorized in writing by the Village Manager in their sole discretion:

1. the Stormwater Improvements, including, without the limitation, the completion of the stream relocation and approval of said relocation by all necessary permitting and governing bodies.

C. Diligent Pursuit of Construction.

1. Once construction has commenced pursuant to this Agreement, Developer must pursue, or cause to be pursued, all required development, demolition, construction, and installation of structures, buildings, and Improvements on the Combined Property in a diligent and expeditious manner, and in strict compliance with the Village Code and the Requirements of Law. Developer will conduct all construction work on the Combined Property in full compliance with the Village's permitted construction work hours regulations.

2. Developer must complete and make ready the Improvements for inspection, approval and, where appropriate, acceptance by the Village pursuant to the Improvement Construction Schedule. Developer may be allowed extensions of time beyond the completion dates set forth in such construction schedule only for unavoidable delay caused by Uncontrollable Circumstances or as may be reasonably approved by the Village Manager.

D. Construction Traffic.

1. **Construction and Traffic Management Plan.** Developer must prepare and submit, for review and approval by the Village Director of Development and Planning Services and the Village Engineer, a Construction and Traffic Management Plan (**"*CTM Plan*"**) for the development of the Combined Property. The CTM Plan will govern (i) the location, storage, and traffic routes for construction equipment and construction vehicles, and (ii) the location of alternative off-street parking during the construction. The Village has no obligation to issue a building permit for any structure or Improvement, and no construction may be commenced with respect to the Structure or Improvement, unless and until the Village Engineer has approved, in writing, the CTM Plan, which approval shall not be unreasonably withheld, conditioned, or delayed. The Village agrees to cause the CTM Plan to be promptly and expeditiously reviewed by the Village Engineer; provided, however, that nothing in this Agreement is to be deemed or interpreted to require the Village to approve the CTM Plan. Developer must comply with the CTM Plan, and failure to do so continuing beyond any applicable notice and cure period is a Developer Event of Default. The CTM Plan must include, without limitation, the following:

a. The schedule and traffic routes for construction traffic accessing the Combined Property;

b. The designation of machinery and construction material storage areas on the Combined Property;

c. Provisions for the screening of construction areas within the Combined Property;

d. The hours of operation and schedule for construction on the Combined Property;

e. The location of areas on the Combined Property for the parking of construction vehicles and vehicles operated by construction employees;

f. The location of alternative off-street parking to replace any parking temporarily lost due to construction; and

g. The location of temporary and durable off-street parking on the Combined Property for construction employees.

2. **Designated Routes of Access.** The Village reserves the right to designate certain prescribed routes of access to the Combined Property for construction traffic to provide for the protection of pedestrians and to minimize disruption of traffic and damage to paved street surfaces, to the extent practicable; provided, however, that the designated routes must not: (a) be unreasonably or unduly circuitous; nor (b) unreasonably or unduly hinder or obstruct direct and efficient access to the Combined Property for construction traffic.

3. **Maintenance of Routes of Access.** At all times during the construction of the Structures and Improvements, Developer must: (a) keep all routes used for Developer's construction traffic free and clear of mud, dirt, debris, obstructions, and hazards; and (b) repair any damage caused by such Developer's construction traffic.

E. Stormwater Management and Erosion and Dust Control During Construction. During construction of any of the structures or Improvements on the Combined Property, Developer must:

1. Install and implement such measures as necessary to temporarily divert or control any accumulation of stormwater away from or through the Combined Property in a manner approved in advance by the Village Engineer, which approval shall not be unreasonably withheld, conditioned, or delayed, which method of diversion must include early installation of storm drains to collect water and convey it to a safe discharge point;

2. Install erosion control devices as necessary to prevent silt, dirt, snow, water, ice, and other materials from leaving the site and traveling onto other properties. All debris, spoils, materials, and waste generated by demolition, grading, construction, installation and paving on the Combined Property must be properly removed or disposed of in accordance with the Requirements of Law; and

3. Mitigate dust, smoke, and other particulates resulting from construction activities.

All installations made pursuant to this Section 5.E must be maintained by Developer until all final certificates of occupancy have been issued by the Village for the Development, except as otherwise may be approved by the Village Manager.

F. Issuance of Permits and Certificates.

1. **General Right to Withhold Permits and Certificates**. In addition to every other remedy permitted by law for the enforcement of this Agreement, the Village has the absolute right to withhold the issuance of any building permit or certificate of occupancy for the New Development, at any time when, subject to applicable notice and cure provisions, if Developer has failed or refused to meet fully any of its respective obligations under, or is in violation of, or is not in full compliance with, the terms of this Agreement, the Development Approvals, or the Requirements of Law.

2. **Completion of Public Roads, Private Driveways, and Parking Areas.** No final certificate of occupancy associated with any new structure to be located on the Combined Property will be issued until the final grading, application of final surface course, and, where applicable, striping of parking space for the roads, driveways, and parking areas serving the uses within such structure has been completed.

G. Completion of Construction; Site Restoration.

1. **Removal of Partially Constructed Structures and Improvements.** Subject to Uncontrollable Circumstances, if Developer fails to diligently pursue all demolition and construction as required in, or permitted by, this Agreement to completion within the time period prescribed in the building permit or permits issued by the Village, and if a perfected application to renew the building permit or permits is not filed within 30 days after the expiration of the permit or permits, Developer must, within 90 days after notice from the Village: (a) remove any partially constructed or partially completed structures or Improvements from the Combined Property; and (b) perform Site Restoration on that portion of the Combined Property in which Developer has failed to complete all such demolition and construction, all in accordance with plans approved by the Village.

2. **Removal and Restoration by Village.** In the event Developer fails or refuses to remove any partially completed buildings, structures, and Improvements, or to perform Site Restoration, as required pursuant to Section 5.G.1 of this Agreement, the Village will have, and is hereby granted the right, at its option, to: (a) demolish and/or remove any of the partially completed structures and Improvements from any and all portions of the Combined Property; (b) perform Site Restoration of the portions of the Combined Property; and/or (c) cause the structures or Improvements on the portions of the Combined Property to be completed in accordance with the plans submitted. Developer must fully reimburse the Village for all costs and expenses, including reasonable legal and administrative costs, actually incurred by the Village for such work. If Developer does not so fully reimburse the Village, the Village will have the right to draw from the Guarantee and the Maintenance Guarantee, as described in and provided pursuant to Section 12 of this Agreement, an amount of money sufficient to defray the entire cost of the work actually incurred by the Village, including reasonable legal fees and administrative expenses. If Developer does not so fully reimburse the Village, and the Guarantee and Maintenance Guarantee have no funds remaining in them or are otherwise unavailable to finance such work, then the Village will have the right to place a lien on the Combined Property for all such costs and expenses in the manner provided by law. The rights and remedies provided in this Section 5.G.2 are in addition to, and not in limitation of, any other rights and remedies otherwise available to the Village in this Agreement, at law, and/or in equity.

H. Damage to Public Property. Developer must maintain the Combined Property and all streets, sidewalks, and other public property in and adjacent to the Combined Property in a good and clean condition at all times during the development of the Combined Property and construction of the New Development. Further, Developer must: (1) promptly clean all mud, dirt, or debris deposited on any street, sidewalk, or other public property in or adjacent to the Combined Property by Developer or any agent of or contractor hired by, or on behalf of, Developer; and (2) repair all damage caused by the activities of Developer or any agent of or contractor hired by, or on behalf of, Developer.

I. Tree Preservation. Developer must comply with all applicable tree preservation regulations set forth in Chapter 25 of the Village Code.

J. Exterior Lighting. All exterior lighting on the Combined Property must comply at all times with the lighting requirements in the Village Code and conform to the Photometric Plan included as part of the Final Development Plan.

K. As-Built Plans. After completion of construction of any new structure or Improvement, Developer must submit to the Village Director of Development and Planning Services: (1) final "as-built" plans related to drainage, grading, storm sewer, sanitary sewer and water mains, and associated structures; and (2) other final construction documents (in paper and, for Improvements, electronic format) as required and approved by the Village Engineer and the Village Director of Development and Planning Services. The as-built plans must indicate, without limitation, the amount, in square feet, of impervious surface area on the Combined Property. A licensed Professional Engineer ("***PE***") and Professional Land Surveyor ("***PLS***") registered in the State of Illinois must stamp the as-built site construction plans. The PE and/or PLS must stamp and sign the final engineering pages of the site construction plans, and the PLS must stamp and sign the final site survey.

L. Climate Action Plan. In furtherance of the Village's Climate Action Plan, Developer will incorporate the elements set forth in ***Exhibit B*** attached to this Agreement in the construction, operation, and maintenance of the New Development.

SECTION 6. IMPROVEMENTS.

A. Design and Construction of the Improvements.

1. **Description of Improvements.** The Improvements will be depicted and described on the Final Engineering Plan and the other components of the Final Development Plan, and include, without limitation, the following:

a. The Stormwater Improvements;

b. Sanitary sewer mains and service lines;

c. Water mains and service lines;

d. Right-of-Way Improvements;

e. The landscaping, as depicted in the Final Landscape Plan; and

f. The Public Improvements, which include the Techny Road Sidewalk.

2. **General Standards.**

a. All Improvements must be designed and constructed pursuant to and in accordance with the Development Approvals, and will be subject to the reasonable written satisfaction of the Village Engineer in accordance with the Village Code, the Subdivision Code, and the Public Improvements Standards Manual. All work performed on the Improvements must be conducted in a good and workmanlike manner, with due dispatch, and in compliance with the Improvement Construction Schedule, as well as all permits issued by the Village for construction of the Improvements, subject to Uncontrollable Circumstances. All materials used for construction of the Improvements must be new and of first-rate quality.

b. If applicable, Developer shall comply with the requirements of the Illinois Prevailing Wage Act (820 ILCS 130/00.1 *et seq*.) for construction of the Public Improvements and any Improvements which will be conveyed to any unit of government.

3. **Construction Schedule.**

a. Developer must submit all necessary documents required for the issuance by the Village of building permits for the construction of the New Development no later than three months after the Effective Date of this Agreement.

b. Prior to commencing any construction of any Public Improvement, or of any part of the New Development that will affect existing utilities or roadways, Developer must meet with the Village Engineer, or their designee, to develop a mutually-agreeable plan and schedule for all such construction ("***Improvement Construction Schedule***"). The meeting must take place not less than one week prior to the commencement of any such construction. After the meeting, Developer must prepare and submit minutes of the meeting to the Village Engineer. No construction may occur prior to the approval by the Village Engineer of the meeting minutes and the Improvement Construction Schedule, which approval shall not be unreasonably withheld, conditioned, or delayed.

c. Developer must obtain all necessary permits and approvals for the stream relocation from all required third-party agencies, including without limitation USAE, MWRD, IEPA and NCCSWCD, before commencing any grading work on the Combined Property.

4. **Contract Terms; Prosecution of the Work.** Developer must include in every contract for work on the Improvements being constructed by such Developer, terms requiring the contractor to prosecute the work diligently and continuously, in full compliance with, and as required by or pursuant to, this Agreement, the Development Approvals, the Final Development Plan, the Improvement Construction Schedule, and the Requirements of Law, until the work is properly completed, subject to Uncontrollable Circumstances, and providing that Developer may take over and prosecute the work if the contractor fails to do so in a timely and proper manner pursuant to the terms of Developer's contract with such contractor.

5. **Engineering Services.** Developer must provide, at its sole cost and expense, all engineering services for the design and construction of the Improvements that are the responsibility of Developer, by a professional engineer responsible for overseeing the construction of the Improvements and by an environmental construction manager with respect to any and all site remediation. Developer must promptly provide the Village with the name of a local owner's representative and a telephone number or numbers at which the owner's representative can be reached.

6. **Village Inspections and Approvals.** All work on the Improvements is subject to reasonable inspection and approval by Village representatives at all reasonable times upon reasonable prior written notice. Developer will provide access to the Combined Property for the purpose of conducting these inspections during regular operating hours and within 12 hours outside of regular operating hours following reasonable prior written notice by the Village. Village representatives shall abide by the reasonable safety precautions established by Developer and/or Developer's contractor during any such access, and Village representatives shall access the Combined Property at their own risk.

7. **Other Approvals.** Where the construction and installation of any Improvement requires the consent, permission, or approval of any third-party public agency, utility, or private party, Developer must promptly file all applications, enter into all agreements, post all security, pay all fees and costs, and otherwise take all steps that may be reasonably required to obtain the consent, permission, or approval.

B. Utilities. Developer must, at its sole cost and expense, and in accordance with and pursuant to the Final Development Plan, upgrade the connection of all utilities to facilities located on the Combined Property. No utilities located on the Combined Property may be connected to the sewer and water utilities belonging to the Village except in accordance with the applicable provisions of the Village Code and upon payment all fees required pursuant to the Village Code.

C. Timing of Construction of the Improvements. The Village has the right, but not the obligation, to refuse to issue a final certificate of occupancy for any building or structure located on the Combined Property, as the case may be, until the Improvements that are the responsibility of Developer are completed and approved by the Village. The foregoing does not preclude the Village's issuance of temporary certificates of occupancy pursuant to the applicable provisions of the Village Code. The issuance of any certificate of occupancy by the Village at any time prior to completion of all of the Improvements by Developer and approval of the applicable Improvements by the Village will not constitute a waiver of the Village's right to withhold any certificate of occupancy and will not confer on Developer any right or entitlement to any other certificate of occupancy.

D. Right-of-Way Improvements.

1. **Grant of Temporary Construction License.** Subject to the terms and conditions set forth in this Agreement, the Village grants to Developer, and Developer accepts, a non-exclusive revocable license, for the construction, installation, and completion, at the sole effort , cost, and expense of Developer, of Improvements within Village-owned rights-of-way and, as necessary, within adjacent Village-owned parcels (collectively, the ***"Licensed Premises"***), all as depicted in the Final Engineering Plan, and pursuant to and in strict accordance with the terms and provisions of this Section 6.D and the other provisions of this Agreement (***"Improvement Construction License"***), including, without limitation:

a. a water main across Techny Raod, a box culvert for the Techny drain, grading for the stream, and modifications to the Combined Property's eastern entrance/curb cut; and

b. **Techny Road Sidewalk**. Installation of a public sidewalk on the south side of Techny Road adjacent to the Combined Property to be designed and built in accordance with the Public Improvements

Standard Manual and in the specific location designated by the Village Engineer.

2. **Limitation of Interest.** Except for the Improvement Construction License granted pursuant to this. Section 6.D, Developer does not and will not have any legal, beneficial, or equitable interest, whether by adverse possession or prescription or otherwise, in any portion of the Licensed Premises, or any other Village-owned property or right-of-way. Specifically, and without limitation of the foregoing, Developer acknowledges and agrees that nothing in this Agreement is to be interpreted to provide a license to Developer to alter any Village-owned right-of-way in any way other than for the installation of the Right-of-Way Improvements identified in this Section 6.D.

3. **Construction of the Right-of-Way Improvements.** Developer must construct the Right-of-Way Improvements in substantial accordance with and pursuant to the Final Development Plan and this Agreement, in a good and workmanlike manner, and subject to inspection and approval by the Village. Specifically, and without limitation of the foregoing, during the period of installation, Developer must: (a) construct all Right-of-Way Improvements in specific locations and of specific designs approved in advance by the Village Engineer, which approval shall not be unreasonably withheld, conditioned, or delayed, and, for landscaping improvements, by the Village Forester, which approval shall not be unreasonably withheld, conditioned, or delayed; and (b) maintain the Licensed Premises and all streets, sidewalks, and other public property in and adjacent to the Licensed Premises in a safe, good and clean condition at all times.

4. **Village's Reservation of Rights Over Licensed Premises.** The Village hereby reserves the right to use the Licensed Premises in any manner that will not prevent, impede, or interfere in any way with the exercise by Developer of the rights granted pursuant to this Section 6.D. The Village will have the right to grant other non-exclusive licenses or easements, including, without limitation, licenses or easements for utility purposes, over, along, upon, or across the Licensed Premises rights-of-way. The Village further reserves its right of full and normal access to the Licensed Premises for the maintenance of any existing or future utility located thereon. The foregoing notwithstanding, any delays in Developer's construction within the Licensed Premises caused by the Village's exercise of its reserved rights set forth herein shall be deemed delays arising from Uncontrollable Circumstances.

5. **Liens.** Developer must, at its sole cost and expense, take all necessary action to keep all portions of the Licensed Premises free and clear of all liens, claims, and demands, including without limitation mechanic's liens, in connection with any work performed by Developer or its agents.

6. **Maintenance of Right-of-Way by Village.** Without limitation of the provisions of Section 13 of this Agreement, the Village will not be liable for any damage that may occur to the Right-of-Way Improvements as a result of the Village's necessary maintenance responsibilities with regard to any right-of-way that is subject to the Improvements Construction License, except to the extent arising from the gross negligence or willful misconduct of the Village's representatives. Any maintenance, repair, or replacement of the Improvements necessary as a result of such Village maintenance or other work will be at the sole cost and

expense of Developer, through and including the date of expiration of the License, as set forth in Section 6.D.7 of this Agreement.

7. **Term.** The Improvements Construction License granted pursuant to this Section 6.D will expire upon the acceptance by the Village of all Right-of-Way Improvements pursuant to Section 6.E of this Agreement.

E. Dedication and Maintenance of the Improvements.

1. **Final Inspection and Approval of the Improvements.** Developer must notify the Village when it believes that any or all of the Improvements on the Combined Property have been fully and properly completed and must request final inspection and approval of the Improvement or Improvements by the Village. The notice and request must be given far enough in advance, and in no event with less than one week's advance notice, to allow the Village time to inspect the Improvements and to prepare a punch list of items requiring repair or correction and to allow Developer time to make all required repairs and corrections prior to the scheduled completion date (as may be established pursuant to this Agreement or in the permits issued by the Village for construction of the Improvements). Developer must promptly make all necessary repairs and corrections as specified on the punch list. The Village is not required to approve any portion of the Improvements until: (a) all of the Improvements as may be required pursuant to this Agreement, including all punch list items, have been fully and properly completed; and (b) the Village Director of Public Works has determined that the specific Improvement has been constructed to completion, in accordance with the Final Development Plan and Requirements of Law, which determination shall not be unreasonably withheld, conditioned, or delayed. Prior to the issuance by the Village of a final certificate of occupancy for any building or Structure on the Combined Property, Developer must install all landscaping on the Combined Property, as depicted on the Final Development Plan.

2. **Dedication and Acceptance of Public Improvements.** Neither the execution of this Agreement, nor the approval of the Development Approvals, nor the execution and recordation of the Final Plat constitutes acceptance by the Village of any Public Improvements that are depicted as "dedicated" on the Final Plat or on the Final Development Plan, if any. The acceptance of ownership of, and responsibility for, a specific approved Improvement as a Public Improvement may be made only by the Corporate Authorities, by adoption of a resolution as set forth in Section 3-506 of the Subdivision Code, and only in compliance with the requirements of the Subdivision Code. The Village is not obligated to accept dedication of any Public Improvement unless and until a temporary certificate of occupancy has been issued for the Combined Property.

3. **Transfer of Ownership of the Public Improvements and Easements to the Village.** Upon the approval of, and prior to acceptance of, the Public Improvements to be accepted by the Village pursuant to Section 3-506 of the Subdivision Code and Section 6.E of this Agreement, Developer must execute, or cause to be executed, all documents as the Village may request to transfer ownership of, or to provide easements in, the Public Improvements to, and to evidence ownership of the Public Improvements by, the Village, free and clear of all liens, claims, encumbrances, and restrictions, unless otherwise approved by the Village in writing, which instruments shall be subject to the review and approval of Developer, which approval shall not be unreasonably withheld, conditioned, or delayed. Developer must, at the same time (a) grant, or cause to be granted, to the Village all insured easements or other property rights as the Village may require to install, operate, maintain, service, repair, and replace the Public Improvements that have not previously been granted to the Village, free and clear of all liens, claims,

encumbrances, and restrictions, unless otherwise approved by the Village in writing, and (b) provide a written estimate of the monetary value of each Public Improvement to be accepted by the Village.

4. **Maintenance of Public Improvements.** For a period of three years following acceptance by the Village of the Public Improvements, Developer must, at its sole cost and expense, maintain the Public Improvements without any modification, except as specifically approved in writing by the Village Engineer, in a first-rate condition at all times. Developer hereby guarantees, on its behalf and on behalf of its successors, the prompt and satisfactory correction of all defects and deficiencies in any of the Public Improvements that occur or become evident within three years after acceptance of the Public Improvement by the Village pursuant to this Agreement. In the event the Village Engineer determines, in the Village Engineer's reasonable discretion, that Developer is not adequately maintaining, or has not adequately maintained, any Public Improvement, Developer must, after 15 days' prior written notice from the Village (subject to Uncontrollable Circumstances), correct it or cause it to be corrected, provided, however, if the nature of the corrective work is such that it cannot reasonably be completed within such time, then Developer shall have such additional time as is reasonably necessary to complete such corrections, provided Developer promptly commences such correction within such 15 days and thereafter diligently pursues same to completion. If Developer fails to correct the defect, commence the correction of the defect, or diligently pursue correction of the defect to completion following the expiration of the foregoing notice and cure period, then the Village, after ten days' prior written notice to Developer, may, but will not be obligated to, enter upon any or all of the Combined Property for the purpose of performing maintenance work on and to such Public Improvement. In the event that the Village causes to be performed any work pursuant to this Section 6.E.4, Developer must, within 15 days after written demand by the Village, pay the costs of the work to the Village. If Developer fails to pay the costs, the Village will have the right to file a lien against the Combined Property for the full cost of such repairs or to draw from the Maintenance Guarantee required pursuant to Section 12.D of this Agreement, based on costs actually incurred, including reasonable legal fees and administrative expenses.

F. Maintenance of the Stormwater Improvements. For a period of three years following acceptance by the Village of the Stormwater Improvements, Developer must, at its sole cost and expense, maintain the Stormwater Improvements without any modification, except as specifically approved in writing by the Village Engineer, in a first-rate condition at all times and in full compliance with all permits and requirements of any third-party permitting agency including without limitation the USAE, MWRD, IEPA, and NCCSWCD. Developer hereby guarantees, on its behalf and on behalf of its successors, the prompt and satisfactory correction of all defects and deficiencies in any of the Stormwater Improvements that occur or become evident. In the event the Village Engineer determines, in the Village Engineer's reasonable discretion, that Developer is not adequately maintaining, or has not adequately maintained, any Stormwater Improvements, Developer must, after 15 days' prior written notice from the Village (subject to Uncontrollable Circumstances), correct it or cause it to be corrected, provided, however, if the nature of the corrective work is such that it cannot reasonably be completed within such time, then Developer shall have such additional time as is reasonably necessary to complete such corrections, provided Developer promptly commences such correction within such 15 days and thereafter diligently pursues same to completion. If Developer fails to correct the defect, commence the correction of the defect, or diligently pursue correction of the defect to completion following the expiration of the foregoing notice and cure period, then the Village, after ten days' prior written notice to Developer, may, but will not be obligated to, enter upon any or all of the Combined Property for the purpose of performing maintenance work on and to such Stormwater Improvements. In the event that the Village causes to be performed any work pursuant to this Section 6.F, Developer

must, within 15 days after written demand by the Village, pay the costs of the work to the Village. If Developer fails to pay the costs, the Village will have the right to file a lien against the Combined Property for the full cost of such repairs or to draw from the Maintenance Guarantee required pursuant to Section 12.D of this Agreement, based on costs actually incurred, including reasonable legal fees and administrative expenses.

G. **Maintenance of Structures**. For so long as the Approved Plan, as amended by the Special Use Ordinance, remains in full force and effect, Developer must, at its sole cost and expense, maintain the exterior of all structures located on the Combined Property, including all single-family residential structures, in full compliance with the Village Code and Requirements of Law. In the event the Village Manager determines, in the Village Manager's reasonable discretion, that Developer is not adequately maintaining, or has not adequately maintained, any exterior structure, Developer must, after 15 days' prior written notice from the Village (subject to Uncontrollable Circumstances), correct it or cause it to be corrected, provided, however, if the nature of the corrective work is such that it cannot reasonably be completed within such time, then Developer shall have such additional time as is reasonably necessary to complete such corrections, provided Developer promptly commences such correction within such 15 days and thereafter diligently pursues same to completion. If Developer fails to correct the defect, commence the correction of the defect, or diligently pursue correction of the defect to completion following the expiration of the foregoing notice and cure period, then the Village, after ten days' prior written notice to Developer, may, but will not be obligated to, enter upon any or all of the Combined Property for the purpose of performing maintenance work on and to such exterior structure. In the event that the Village causes to be performed any work pursuant to this Section 6.G, Developer must, within 15 days after written demand by the Village, pay the costs of the work to the Village. If Developer fails to pay the costs, the Village will have the right to file a lien against the Combined Property for the full cost of such repairs or to draw from the Maintenance Guarantee required pursuant to Section 12.D of this Agreement, based on costs actually incurred, including reasonable legal fees and administrative expenses.

SECTION 7. OPERATION AND RECIPROCAL EASEMENT AGREEMENT.

Prior to the issuance of a final certificate of occupancy for any portion of the New Development, Developer must: (i) prepare and submit to the Village Manager and the Village Attorney, for their respective review and approval, an Operation and Reciprocal Easement Agreement (or similarly binding legal instrument) ("***OREA***"); and (ii) record the OREA against title to the Combined Property. The OREA will clearly define the rights and responsibilities of the owners and occupants of the various parcels that comprise the Combined Property and all of their respective successors and assigns, with regard to the following "***OREA Obligations***":

A. Maintenance of access drives, loading docks, private streets, alleys, roadways, and other commonly used features;

B. Maintenance, cleaning, and operation of any stormwater facilities and all other on-site Improvements serving the Combined Property;

C. Maintenance of, the landscaping in accordance with the Final Landscape Plan on public and private property;

D. Snow removal and storage on the Combined Property;

E. Easements to be created: (i) allowing cross-access between the parcels comprising the Combined Property; (ii) allowing access over, on, and above the Common Areas (other than the private amenities for each residential building) for the exclusive benefit of the owners, tenants, and guests of the parcels comprising the Combined Property and for the benefit of the Village, for stormwater drainage and detention, emergency response, utility maintenance and repair, and for the purpose of maintaining the Common Areas; (iii) for utilities of the Village and other governmental bodies and utility services over, on, and across the Combined Property and the Common Areas for the purposes of making repairs, installing and servicing utilities, and providing emergency services;

F. All easements for stormwater drainage and detention must remain unobstructed and the access to any retention and detention basins in containing stormwater detention and drainage facilities may not be blocked by a fence, landscaping, or any other Structure, or planting, of any kind or nature, erected within said easement without written approval of the Village Manager. In addition, no grade changes will be permitted in said easement without the prior written approval of the Village Engineer;

G. An easement for Village emergency and utility personnel and vehicles must include provision of necessary keys, codes, or equipment to open any private gates or access point needed to make use of the easement; and

H. The Village is an intended third-party beneficiary of the OREA, and, therefore, will have the right, but not the obligation, to enforce all covenants contained in the OREA. The Village must be given the right, after 15 days' written notice to the owner or owners of the applicable lot or lots within the Combined Property, as may be appropriate: (i) to perform any OREA Obligations that the owner(s) of the applicable lot(s) has neglected to perform (or to commence and diligently pursue completion of such maintenance work within such 15 day period if such maintenance work is not reasonably capable of being completed within such 15 day period); (ii) to assess the owner(s) of the applicable lot(s) for such work; and (iii) to have a lien placed against the affected lot(s) belonging to an owner(s) failing to pay such assessment if such assessment is not paid within thirty (30) days after written notice from the Village.

SECTION 8. PAYMENT OF FEES AND CONTRIBUTIONS.

A. **Impact Fees to Taxing Districts**. Developer will fully comply with, and cause to be paid, the fees in lieu of land contributions calculated pursuant to Article IV of the Subdivision Code for the following districts (collectively, *"**Impact Fees**"*):

a. Northbrook Park District;

b. Northbrook Public Library;

c. Northbrook School District 30; and

d. Glenbrook High School District 225.

The Impact Fees are based on a per unit basis and those Impact Fees applicable to the New Development must be paid prior to the issuance of a certificate of occupancy for any residential structure on the Combined Property, or portion thereof. Developer acknowledge that the payment of development impact fees imposed by Article IV of the Subdivision Code, as well as Chapter 19 of the Village Code, are reasonable and that Developer hereby hold harmless and release the

Village, the Northbrook Park District, the Northbrook Public Library, Northbrook School District 30, and Glenbrook High School District 225 (collectively, the ***"Districts"***) from any claim or other action Developer may have against either or both the Village or the Districts as a result of Article IV of the Subdivision Code, Chapter 19 of the Village Code, and the impact fees exacted thereunder for distribution to any District by the Village. Developer acknowledge and agree that, if Developer is entitled to any credit toward the Impact Fees as a result of development impact fees previously paid by third-parties with respect to other proposed developments of the Combined Property, and if such credit exceeds the Impact Fees otherwise due pursuant to this Section 8: (a) the Village will have no liability or responsibility whatsoever to pay to Developer the difference between the credit and the Impact Fees otherwise due; and (b) Developer must pursue any claim for any such payment with the affected Districts.

B. Affordable Housing Contribution. In order to comply with the Village's Affordable Housing Ordinance, Article IX, Part III of the Zoning Code, Developer has agreed to pay to the Village an Affordable Housing Contribution as set forth in Section 9.5 of the Special Use Ordinance.

SECTION 9. PUBLIC SAFETY IMPACT. The Parties acknowledge that the Covenant Living Planned Development has, and will continue to have a greater impact on the Village's public safety personnel and resources, specifically emergency medical services ("***EMS***"), than other similarly sized developments. Developer has agreed to certain EMS conditions, as set forth in Section 9.6 of the Special Use Ordinance, to be included as part of its general operating conditions.

SECTION 10. RESERVED.

SECTION 11. PAYMENT OF VILLAGE FEES AND COSTS. In addition to all other costs, payments, fees, charges, contributions, or dedications required by this Agreement or by the Requirements of Law, and in addition to all other agreements between Developer and the Village concerning the Covenant Living Planned Development, Developer must pay to the Village the following fees and costs:

A. All application, inspection, and permit fees, charges, and contributions, and all other fees, charges, and contributions pursuant to the Requirements of Law or otherwise due as a result of the Covenant Living Planned Development.

B. All reasonable third-party legal, engineering, and other consulting or administrative fees, costs, and expenses actually incurred in connection with: (1) the development of the Combined Property, including, without limitation, the preparation, review, and processing of plans, ordinances, resolutions, and other approvals therefor; and (2) the negotiation, preparation, consideration, and review of this Agreement and all exhibits and associated documents, including any amendments of this Agreement.

SECTION 12. PERFORMANCE SECURITY.

A. General Requirements. As security to the Village for the performance by Developer of its obligations pursuant to and in accordance with this Agreement, Developer will provide to the Village performance and payment security ("***Guarantee***") in the form of one or more letters of credit ("***Letter of Credit***") in the amount set forth in Section 3-501 of the Subdivision Code, and in accordance with the terms set forth in the Subdivision Code. The Letter of Credit must be in form and substance substantially conforming in all material respects with

Exhibit C to this Agreement and satisfactory to the Village Attorney. Specifically, and without limitation of the foregoing, the Letter of Credit must allow the Village to draw from the Letter of Credit in the event that Developer does not fully reimburse the Village for any costs and expenses incurred by the Village for work performed on the Combined Property pursuant to Section 5.G.2 of this Agreement. The Letter of Credit must be provided to the Village prior to the issuance of any permits for the New Development and must be maintained at all times until all Improvements have been approved for the New Development, and, as appropriate, accepted. The Guarantee will be administered pursuant to Sections 3-501 to 3-507 of the Subdivision Code.

B. Use of Guarantee Funds. If Developer fails or refuses to complete the Improvements in accordance with this Agreement, or fails or refuses to correct any defect or deficiency in the Improvements, or remove partially completed buildings or structures as required by this Agreement, or fails or refuses to perform Site Restoration in accordance with a demand made pursuant to this Agreement, or fails or refuses to pay any amount demanded by the Village as and when required pursuant to this Agreement, or in any other manner fails or refuses to meet fully any of its obligations under this Agreement, then the Village in its reasonable discretion may draw on and retain all or any of the funds remaining in the Guarantee. The Village thereafter shall have the right, subject to 30 days' notice and opportunity for cure, to exercise its rights under this Agreement, to take any other action it deems reasonable and appropriate to mitigate the effects of any failure or refusal, and to reimburse itself from the proceeds of the letter of credit for all of its costs and expenses, including legal fees and administrative expenses, resulting from or incurred as a result of Developer's failure or refusal to fully meet its obligations under this Agreement. If the funds remaining in the letter of credit are insufficient to repay fully the Village for all costs and expenses, then Developer shall upon demand of the Village therefor deposit with the Village any additional funds as the Village determines are necessary, within 30 days of a request therefor, to fully repay such costs and expenses.

C. Reductions in Guarantee. Concurrent with the approval and/or acceptance of Improvements in the manner provided in Section 6.E of this Agreement, the Guarantee may be reduced in a manner and in amounts authorized in Section 3-504 of the Subdivision Code.

D. Maintenance Guarantee. Immediately after any approval and, where appropriate, acceptance, by the Village of the Public Improvements pursuant to this Agreement, Developer must post a new guarantee in the amount of 10% of the actual total cost of the Improvements caused to be constructed or installed by Developer on the Combined Property provided as (i) all cash or (ii) a combination of cash and a letter of credit (with at least 10% cash), as security for Developer's maintenance of such Improvements (each, a "***Maintenance Guarantee***"). The Maintenance Guarantee will be held by the Village in escrow until the date that is two year after the approval of the Improvement and where appropriate, acceptance by the Village of the Public Improvement, secured by the Maintenance Guarantee pursuant to this Agreement. If the Village is required to draw on either Maintenance Guarantee by reason of Developer's failure to fulfill its maintenance obligations under this Section 12, then Developer, as the case may be, must within 10 days thereafter cause their respective Maintenance Guarantee to be increased to its full original amount.

SECTION 13. LIABILITY AND INDEMNITY OF VILLAGE.

A. Village Review. Developer acknowledges and agrees that the Village is not, and will not be, in any way liable for any damages or injuries that may be sustained as the result of the Village's review and approval of any plans for the Covenant Living Planned Development or

the Improvements, or the issuance of any approvals, permits, certificates, or acceptances, for the development or use of the Covenant Living Planned Development or the Improvements, and that the Village's review and approval of any such plans and the Improvements and issuance of any such approvals, permits, certificates, or acceptances does not, and will not, in any way, be deemed to insure Developer or any of its successors, assigns, tenants and licensees, or any third party, against damage or injury of any kind at any time.

B. Village Procedure. Developer acknowledges and agrees that all notices, meetings, and hearings have been properly given and held by the Village with respect to the approval of this Agreement and of the Development Approvals, and Developer agrees not to challenge such approvals on the grounds of any procedural infirmity or of any denial of any procedural right.

C. Indemnity. Developer agrees to, and does hereby, hold harmless, indemnify, and, at the election of the Village defend with counsel of the Village's choice, the Village and all Village elected or appointed officials, officers, employees, agents, representatives, engineers, and attorneys, from any and all claims that may be asserted at any time against any of those parties in connection with: (i) the Village's review and approval of any plans for the Covenant Living Planned Development or the Improvements; (ii) the issuance of any approval, permit, certificate, or acceptance for the Covenant Living Planned Development or the Improvements; and (iii) the development, construction, maintenance, or use of any portion of the Covenant Living Planned Development or the Improvements (collectively the ***"Indemnified Claims"***); provided, however, that this indemnity does not, and will not, apply to willful misconduct or gross negligence on the part of the Village.

D. Defense Expense. Developer, only as to its own acts or omissions, must, and does hereby agree to, pay all expenses, including legal fees and administrative expenses, incurred by the Village in defending itself with regard to any and all of the Indemnified Claims.

SECTION 14. NATURE, SURVIVAL AND TRANSFER OF OBLIGATIONS.

A. Binding Effect. The terms of this Agreement bind and inure to the benefit of the Parties and their agents, successors, and assigns. All obligations assumed by Developer under this Agreement are and will be binding upon Developer personally, upon any and all of its heirs, successors, and assigns, and upon any and all of the respective successor legal or beneficial owners of all or any portion of the Combined Property.

B. Successors and Transferees. To assure that all grantees, successors, assigns, and transferees of Developer, and all successor owners of all or any portion of the Combined Property have notice of this Agreement and the obligations created by it, Developer must, from and after the Effective Date:

1. Deposit with the Village Clerk, concurrent with the Village's approval of this Agreement, any consents or other documents necessary to authorize the Village to record this Agreement on title to the Combined Property in the office of the Cook County Clerk's Recording Division per Section 19.O;

2. Notify the Village in writing at least 30 days prior to any date on which Developer transfers (as that term is defined in Section 14.C of this Agreement) a legal or beneficial interest in any portion of the Combined Property to a third party with the exception of leases to residential or retail tenants of the Covenant Living Planned Development;

3. Incorporate this Agreement by reference into any and all real estate sales contracts for transfers, as that term is defined in Section 14.C of this Agreement, entered into for the sale of all or any portion of the Combined Property; and

4. Except as provided in Section 14.C of this Agreement, require, prior to the transfer of all or any portion of the Combined Property, or any legal or equitable interest therein, to any third party, the transferee of said portion or interest in the Combined Property, must: (a) obtain Corporate Authority approval of an enforceable written agreement, in substantially the form of **Exhibit D** to this Agreement, agreeing to be bound by the provisions of this Agreement (***"Transferee Assumption Agreement"***); (b) execute the Transferee Assumption Agreement; and (c) provide the Village, upon request, with such reasonable assurance of the financial ability of the transferee to meet those obligations as the Village may require. The Village agrees that upon a successor becoming bound to the obligation created in the manner provided in this Agreement, and providing the financial assurances required pursuant to this Agreement, and subsequent to discretionary approval of the Corporate Authorities, the liability of Developer will be released to the extent of the transferee's assumption of the liability. The failure of Developer to provide the Village with a copy of a Transferee Assumption Agreement fully executed by the transferee and, if requested by the Village, with the transferee's proposed assurances of financial capability before completing any transfer, will result in Developer remaining fully liable for all of its obligations under this Agreement but will not relieve the transferee of its liability for all such obligations as a successor to Developer.

C. Transfer Defined. For purposes of this Agreement, the term "transfer" includes, without limitation, any assignment, sale, transfer to a receiver or to a trustee in bankruptcy, transfer in trust, or other disposition of the Combined Property, or any beneficial interest in the Combined Property, in whole or in part, by voluntary or involuntary sale, foreclosure, merger, sale and leaseback, consolidation, or otherwise; provided, however, that the sale of an individual lot developed with a single-family home that has been issued a certificate of occupancy within the Covenant Living Planned Development does not constitute a "transfer" hereunder.

D. Mortgagees of Combined Property. This Agreement is and will be binding on all mortgagees of the Combined Property or other secured parties automatically upon such mortgagee assuming title to the Combined Property, in whole or in part, by a foreclosure or a deed in lieu of foreclosure without the necessity of entering into a Transferee Assumption Agreement. Until such time, however, a mortgagee or other secured party will have no personal liability hereunder.

SECTION 15. TERM. The provisions of this Agreement, unless terminated pursuant to the terms of this Agreement, run with and bind the Combined Property and inure to the benefit of, be enforceable by, and obligate the Parties, and any of their respective, grantees, successors, assigns, and transferees, including all successor legal or beneficial owners of all or any portion of the Combined Property from the date this Agreement is recorded and until the structures and Improvements are approved by the Village, and the Public Improvements, as required by this Agreement and the Subdivision Code, are accepted by the Village. Following such approval and acceptance, the Village agrees, upon written request of Developer, to execute appropriate and recordable evidence of the termination of this Agreement. Notwithstanding anything to the contrary in this Section 15, Developer's indemnity and defense obligations as set forth in Section 13 of this Agreement will survive the termination of this Agreement. Approval or acceptance pursuant to this Section 15 will not constitute a waiver of any rights or claims that the Village has,

before or after approval and acceptance, with respect to any breach of this Agreement by Developer or any right of indemnification of the Village by Developer.

SECTION 16. EVENTS OF DEFAULT.

A. Developer Events of Default. The following are Developer Events of Default:

1. If any representation made by Developer in this Agreement, or in any certificate, notice, demand or request made by Developer in writing and delivered to the Village pursuant to or in connection with this Agreement, proves to be untrue or incorrect in any material respect as of the date made.

2. Subject to cure as set forth in Section 16.C of this Agreement, failure by Developer in the performance or breach of any covenant contained in this Agreement concerning the existence, structure or financial condition of Developer.

3. Subject to cure as set forth in Section 16.C of this Agreement, failure by Developer in the performance or breach of any covenant, warranty or obligation contained in this Agreement.

4. Subject to cure as set forth in Section 16.C of this Agreement, construction by Developer of any Structure or Improvement that is not authorized by this Agreement or otherwise in a manner not permitted by law.

5. Subject to cure as set forth in Section 16.C of this Agreement, failure by Developer to commence construction of the New Development.

6. Subject to cure as set forth in Section 16.C of this Agreement, failure by Developer to complete construction or installation of any Structure or Improvement on the Combined Property or in connection with the New Development.

7. Subject to cure as set forth in Section 16.C of this Agreement, Developer causes any damage to real or public property that is not owner by Developer.

8. Subject to cure as set forth in Section 16.C of this Agreement, Developer is not, or ceases to be, a legal entity qualified to do business in the State of Illinois.

9. Developer permits, or does not take reasonable steps to prevent, criminal activity on the Combined Property.

10. The entry of a decree or order for relief by a court having jurisdiction in the premises in respect of Developer in an involuntary case under the federal bankruptcy laws, as now or hereafter constituted, or any other applicable federal or state bankruptcy, insolvency or other similar law, or appointing a receiver, liquidator, assignee, custodian, trustee, sequestrator (or similar official) of Developer for any substantial part of its property, or ordering the winding-up or liquidation of its affairs and the continuance of any such decree or order unstayed and in effect for a period of 60 consecutive days.

11. The commencement by Developer of a voluntary case under the federal bankruptcy laws, as now or hereafter constituted, or any other applicable federal or state bankruptcy, insolvency or other similar law, or the consent by Developer to the appointment of or

taking possession by a receiver, liquidator, assignee, trustee, custodian, sequestrator (or similar official) of Developer or of any substantial part of the Combined Property, or the making by any such entity of any assignment for the benefit of creditors or the failure of Developer generally to pay such entity's debts as such debts become due or the taking of action by Developer in furtherance of any of the foregoing, or a petition is filed in bankruptcy by others.

12. Subject to cure as set forth in Section 16.C of this Agreement, change in the organizational status of Developer except in accordance with the Transferee Assumption provisions in Section 12 of this Agreement.

13. Developer abandons the development of the Combined Property. Abandonment will be deemed to have occurred when work stops on the development of the Combined Property for more than 30 days for any reason other than Uncontrollable Circumstances, unless otherwise permitted by this Agreement. The failure of Developer to secure any approvals required for the development or construction of the Combined Property will not be a valid defense to abandonment.

14. Subject to cure as set forth in Section 16.C of this Agreement, Developer otherwise fails to comply with the Requirements of Law in connection with the Development or the Combined Property.

B. Events of Default by the Village. The following are Village Events of Default:

1. If any material representation made by the Village in this Agreement, or in any certificate, notice, demand or request made by the Village in writing and delivered to Developer pursuant to or in connection with any of said documents, proves to be untrue or incorrect in any material respect as of the date made.

2. Subject to Uncontrollable Circumstances, default by the Village for a period of 30 days after written notice thereof from Developer in the performance or breach of any covenant contained in this Agreement; provided, however, that such default will not constitute an Event of Default if such default cannot be cured within said 30 days and the Village, within said 30 days, initiates and diligently pursues appropriate measures to remedy the default and in any event cures such default within 90 days after such notice.

C. Cure Period. For all Events of Default identified in Section 16.A for which Developer has the right to cure, Developer must cure the Event of Default within 15 days after receipt of notice thereof, or, if the Event of Default cannot be cured within 15 days, Developer must initiate and diligently pursues appropriate measures to remedy the default within 15 days, and in any event must cure the default within 60 days after receipt of the notice.

SECTION 17. REMEDIES FOR DEFAULT AND ENFORCEMENT.

A. Remedies. In the case of an Event of Default:

1. Legal Procedures. Except as otherwise provided in this Agreement, the non-defaulting Party may institute such proceedings in law or in equity, or any other proceeding, as may be necessary or desirable at its option to cure or remedy the Event of Default, including, without limitation, proceedings to compel specific performance of the defaulting Party's obligations under this Agreement.

2. Removal and Restoration by Village. In the event Developer fails or refuses to remove any partially completed buildings, structures, and Improvements, or to perform Site Restoration, as required pursuant to Section 5.G of this Agreement or otherwise upon demand of the Village after the occurrence of a Developer Event of Default, the Village will have, and is hereby granted the right, at its option, to enter the Combined Property and: (a) demolish and/or remove any of the partially completed Structures and Improvements from any and all portions of the Combined Property; (b) perform Site Restoration; and/or (c) cause the Structures or Improvements to be completed in accordance with the plans submitted. Developer must fully reimburse the Village for all costs and expenses, including legal and administrative costs, incurred by the Village for such work. If Developer does not so fully reimburse the Village, the Village will have the right to draw from the Guarantee and the Maintenance Guarantee, as described in and provided pursuant to Section 12 of this Agreement, an amount of money sufficient to defray the entire cost of the work, including legal fees and administrative expenses. If Developer does not so fully reimburse the Village, and the Guarantee and Maintenance Guarantee have no funds remaining in them or are otherwise unavailable to finance such work, then the Village will have the right to place a lien on the Combined Property for all such costs and expenses in the manner provided by law. The rights and remedies provided in this Section 17.A.2 are in addition to, and not in limitation of, any other rights and remedies otherwise available to the Village in this Agreement, at law, and/or in equity.

3. Repeal of Development Approvals. The Village will have the absolute right to repeal the Development Approvals if a Developer Event of Default occurs under this Agreement, in accordance with the Requirements of Law, without protest or objection by Developer.

B. Limitation. Notwithstanding anything to the contrary contained in this Agreement, Developer may not seek, and does not have the right to seek, to recover a judgment for monetary damages against the Village or any elected or appointed officials, officers, employees, agents, representatives, engineers, or attorneys of the Village, on account of the negotiation, execution, performance, or breach of, or default under, this Agreement. The Parties acknowledge and agree that, except as expressly provided in this Agreement, the covenants and agreements set forth in this Agreement are those of the Parties, and are not the individual covenant or guarantee of any natural person.

C. Prevailing Party. In the event of a judicial proceeding brought by one Party against the other Party on account of the negotiation, execution, performance, or breach of, or default under, this Agreement, the prevailing Party in the judicial proceeding will be entitled to reimbursement from the unsuccessful Party of all costs and expenses, including reasonable attorneys' fees, incurred in connection with the judicial proceeding.

SECTION 18. WARRANTIES AND REPRESENTATIONS.

A. By the Village. The Village represents and warrants, as of the date of execution by the Village of this Agreement, that:

1. The Village is a home rule municipal corporation duly organized and validly existing under the law of the State of Illinois and has all requisite corporate power and authority to enter into this Agreement;

2. The execution and performance of this Agreement by the Village: (i) have been duly authorized by all necessary corporate action on the part of the Village; and (ii) do not,

for any reason, result in any breach of any agreement or other instrument to which the Village is subject;

3. The execution of this Agreement by the Village requires no other consents, approvals, or authorizations on the part of the Village; and

4. To the best of the knowledge of the person executing this Agreement on behalf of the Village there are no actions or proceedings by or before any court, governmental commission, board, bureau, or any other administrative agency pending, threatened, or affecting the Village or the Combined Property in any court or before any governmental authority that involve the possibility of materially or adversely affecting the ability of the Village to perform its obligations under this Agreement.

B. By Developer. Developer, and the person executing this Agreement on behalf of Developer, represent and warrant, as of the date of execution by Developer of this Agreement, that:

1. Developer is an Illinois not-for-profit corporation duly organized, validly existing, and qualified to do business in Illinois;

2. Developer has the authority to execute and perform this Agreement, and Developer is in compliance with all Requirements of Law, the failure to comply with which could affect the ability of Developer to perform its obligations under this Agreement;

3. The execution and performance by Developer of this Agreement has been duly authorized by all necessary corporate action, and does not violate its organizational documents, any of the applicable Requirements of Law, or constitute a breach of or default under, or require any consent under, any agreement, or instrument to which Developer is now a party or by which Developer is now bound including any mortgages, secured loans, or instruments granting another party a superior interest in the Combined Property or the Covenant Living Planned Development;

4. Developer has complied with Section 14 of this Agreement with respect to all mortgagees and second parties existing as of the Effective Date;

5. The applications, plans, materials, and other submissions Developer has provided to the Village: (i) accurately and truthfully represent Developer's capabilities, resources, and intentions for the construction of the New Development on the Combined Property; (ii) have induced the Village to enter into this Agreement; and (iii) any material misrepresentation contained in Developer's submissions will constitute an incurable Event of Default pursuant to Section 16 of this Agreement.

6. There are no actions or proceedings by or before any court, governmental commission, board, bureau, or any other administrative agency pending, threatened, or affecting Developer or the Combined Property that involve the possibility of materially or adversely affecting the ability of the Village to perform its obligations under this Agreement;

7. Developer has sufficient financial and economic resources to implement and complete its obligations under this Agreement;

8. Developer has no knowledge of any liabilities, contingent or otherwise, of Developer which might have a material adverse effect upon its ability to perform its obligations under this Agreement.

SECTION 19. GENERAL PROVISIONS.

A. Notices. Any notice required to be given under this Agreement must be in writing and must be delivered (i) personally, (ii) by a reputable overnight courier, (iii) by certified mail, return receipt requested, and deposited in the U.S. Mail, postage prepaid, or (iv) by email. Unless otherwise expressly provided in this Agreement, notices will be deemed received upon the earlier of: (a) actual receipt; (b) one business day after deposit with an overnight courier as evidenced by a receipt of deposit; or (c) three business days following deposit in the U.S. mail, as evidenced by a return receipt. Email notices will be deemed received by the addressee upon explicit or implicit acknowledgment of receipt by the addressee. By notice complying with the requirements of this Section, each Party will have the right to change its address or its addressee, or both, for all future notices to the other Party, but no notice of a change of addressee or address will be effective until actually received.

If to the Village: Village of Northbrook
1225 Cedar Lane
Northbrook, IL 60062
Attention: Village Manager
Email: Cara.Pavlicek@Northbrook.il.us

with a copy to: Elrod Friedman LLP
325 North LaSalle Street
Suite 450
Chicago, IL 60654
Attention: Steven M. Elrod, Village Attorney
Email: Steven.Elrod@ElrodFriedman.com

If to Developer: Covenant Home
_____
_____
Attention:
Email: _____

with a copy to:

B. Time of the Essence. Time is of the essence in the performance of this Agreement.

C. Rights Cumulative. Unless otherwise provided in this Agreement, all rights, remedies, and benefits provided by this Agreement are cumulative and are not exclusive of any other rights, remedies, and benefits allowed by law.

D. Non-Waiver. No waiver of any provision of this Agreement, and no delay in exercising or failure to exercise any right or authority set forth in this Agreement, will be deemed to or constitute a waiver of any other provision of this Agreement (whether or not similar) nor will any waiver be deemed to or constitute a continuing waiver unless otherwise expressly provided in this Agreement.

E. Consents. Unless otherwise provided in this Agreement, all required permissions, authorizations, approvals, acknowledgments, or similar indications of assent of any Party must be in writing.

F. Governing Law. This Agreement will be interpreted according to the internal laws, but not the conflict of laws rules, of the State of Illinois.

G. Venue. Exclusive jurisdiction with regard to the any actions or proceedings arising from, relating to, or in connection with this Agreement will be in the Illinois circuit court for Cook County, Illinois, or, where applicable, in the federal court for the Northern District of Illinois.

H. Severability. If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the Village will have the right, in its sole and absolute discretion, to determine if (i) the remainder of the provisions of this Agreement will remain in full force and effect and will in no way be affected, impaired, or invalidated; or (ii) the entire Agreement is invalid, void, and unenforceable.

I. Entire Agreement. This Agreement constitutes the entire agreement between the parties and supersedes any and all previous or contemporaneous oral or written agreements and negotiations between the parties with respect to the subject matter of this Agreement.

J. Interpretation. This Agreement will be construed without regard to the identity of the Party who drafted the various provisions of this Agreement. Every provision of this Agreement will be construed as though all Parties to this Agreement participated equally in the drafting of this Agreement. Any rule or construction that a document is to be construed against the drafting Party will not be applicable to this Agreement.

K. Exhibits. Exhibits A through **D** attached to this Agreement are incorporated in and made a part of this Agreement. In the event of a conflict between any Exhibit and the text of this Agreement, the text of this Agreement will control.

L. Amendments and Modifications.

1. No amendment to this Agreement will be effective unless and until the amendment is in writing, properly approved in accordance with applicable procedures, and executed.

2. Amendments or modifications to the Development Approvals can be considered and acted on by the Village without the same being deemed an amendment or modification to this Agreement provided that all applicable procedural requirements of the Zoning Code and Subdivision Code and the provisions of this Agreement are satisfied.

M. Third Party Beneficiary. The provisions of this Agreement are and will be for the benefit of Developer and Village only and are not for the benefit of any third party, and accordingly, no third party shall have the right to enforce the provisions of this Agreement. The Village will not be liable to any vendor or other third party for any agreements made by Developer, purportedly on behalf of the Village, without the knowledge and approval of the Corporate Authorities.

N. Recording. The Village is authorized to record this Agreement against title to the Combined Property, at the sole cost and expense of Developer, with the Cook County Clerk's Recording Division, promptly following the full execution of this Agreement by the Parties.

O. **Counterpart Execution.** This Agreement may be executed in several counterparts, each of which is deemed to be an original but all of which will constitute one and the same instrument.re

P. **Village Actions, Consents, and Approvals**. Unless otherwise provided in this Agreement, any action, consent, or approval needed to be taken or given under this Agreement by the Village may only be performed by the Village Manager/Administrator or their designee, to the extent provided for by law.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK – SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties have hereunto set their hands on the date first above written.

ATTEST:

_____
Village Clerk

VILLAGE OF NORTHBROOK, an Illinois home rule municipal corporation

By: _____
Cara Pavlicek
Its: Village Manager

COVENANT HOME D/B/A COVENANT LIVING OF NORTHBROOK, an Illinois not-for-profit corporation

By: _____

Its:

ACKNOWLEDGMENTS

STATE OF ILLINOIS)
) SS
COUNTY OF COOK)

This instrument was acknowledged before me on _____, 2023, by Cara Pavlicek, the Village Manager of the **VILLAGE OF NORTHBROOK**, an Illinois home rule municipal corporation, and by Debra J. Ford, the Village Clerk of said municipal corporation.

_____
Signature of Notary

SEAL

STATE OF _____)
) SS
COUNTY OF _____)

This instrument was acknowledged before me on _____, 2023, by _____ the _____ of **COVENANT HOME D/B/A COVENANT LIVING OF NORTHBROOK**, an Illinois not-for-profit corporation and by _____, the _____ of said corporation.

_____
Signature of Notary

SEAL

LIST OF EXHIBITS

Exhibit A	**Combined Property Legal Description**
Exhibit B	**Climate Action Plan**
Exhibit C	**Form Letter of Credit**
Exhibit D	**Transferee Assumption Agreement**

EXHIBIT A

LEGAL DESCRIPTION OF COMBINED PROPERTY

EXISTING PROPERTY

PARCEL 1:

THE WEST 1/2 OF LOT 11, EXCEPT THE NORTH 33 FEET AND EXCEPT THE SOUTH 27 FEET THEREOF; AND LOT 12, EXCEPT THE NORTH 33 FEETAND EXCEPT THE SOUTH 27 FEET AND EXCEPT THE WEST 50 FEET THEREOF AND EXCEPT THE FOLLOWING DESCRIBED PARCELS:

1. THE EAST 289.00 FEET OF THE WEST 339.00 FEET OF THE SOUTH 452.55 FEET OF THE NORTH 485.55 FEET THEREOF;

2. THE EAST 289.00 FEET OF THE WETS 816.00 FEET OF THE SOUTH 452.55 FEET OF THE NORTH 485.55 FEET THEREOF;

3. BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 12 AND RUNNING THENCE NORTH, ALONG THE WEST LINE OF SAID LOT 12, A DISTANCE OF 487.00 FEET; THENCE EAST, ALONG THE NORTH LINE OF THE SOUTH 487.00 FEET OF SAID LOT 12, A DISTANCE OF 687.60 FEET; THENCE SOUTH, ALONG A STRAIGHT LINE PARALLEL WITH SAID WEST LINE OF LOT 12, A DISTANCE OF 267.00 FEET; THENCE SOUTHWESTWARDLY, ALONG A STRAIGHT LINE, A DISTANCE OF 95.82 FEET TO AN INTERSECTION WITH THE EAST LINE OF THE WEST 624.60 FEET OF SAID LOT 12 AT A POINT 150.00 FEET NORTH FROM THE SOUTH LINE OF SAID LOT 12; THENCE SOUTH, ALONG SAID EAST LINE OF THE WEST 624.60 FEET OF LOT 12, A DISTANCE OF 150.00 FEET TO THE SOUTH LINE OF LOT 12; THENCE WEST, ALONG THE SOUTH LINE OF LOT 12, A DISTANCE OF 624.60 FEET TO THE POINT OF BEGINNING, ALL IN SCHOOL TRUSTEES' SUBDIVISION OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL 2:

THAT PART OF THE SOUTH 487.00 FEET OF LOT 12 IN SCHOOL TRUSTEES' SUBDIVISION OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, BOUNDED AND DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 12 AND RUNNING THENCE NORTH, ALONG THE WEST LINE OF SAID LOT 12, A DISTANCE OF 487.00 FEET; THENCE EAST, ALONG THE NORTH LINE OF THE SOUTH 487.00 FEET OF SAID LOT 12, A DISTANCE OF 689.60 FEET; THENCE SOUTH, ALONG A STRAIGHT LINE PARALLEL WITH SAID WEST LINE OF LOT 12, A DISTANCE OF 267.00 FEET; THENCE SOUTHWESTWARDLY, ALONG A STRAIGHT LINE, A DISTANCE OF 95.82 FEET TO AN INTERSECTION WITH THE EAST LINE OF THE WEST 624.60 FEET OF SAID LOT 12 AT A POINT 150.00 FEET NORTH FROM THE SOUTH LINE OF SAID LOT 12; THENCE SOUTH, ALONG SAID EAST LINE OF THE WEST 624.60 FEET OF LOT 12, A DISTANCE OF 150.00 FEET TO THE SOUTH LINE OF LOT 12; THENCE WEST, ALONG THE SOUTH LINE OF LOT 12, A DISTANCE OF 624.60 FEET TO THE POINT OF BEGINNING, EXCEPTING THEREFROM THE SOUTH 27 FEET THEREOF AND EXCEPTING THEREFROM THE WEST 50 FEET THEREOF TAKEN FOR PUBLIC ROAD, ALL IN COOK COUNTY, ILLINOIS.

PERMANENT INDEX NUMBER: 04-16-300-005-0000; 04-16-300-006-0000

Commonly known as 2625 Techny Road, Northbrook, Illinois.

TECHNY ROAD RESIDENTIAL PARCEL AND GREENVIEW ROAD PROPERTIES

PARCEL 1:

THE EAST 1/2 OF THAT PART OF THE NORTH 400 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, LYING WEST OF THE EAST 245 FEET OF SAID NORTH 400 FEET, (EXCEPT THEREFROM THE NORTH 33 FEET THEREOF), IN COOK COUNTY, ILLINOIS.

A NON-EXCLUSIVE EASEMENT AGREEMENT FOR THE BENEFIT OF PARCEL 1 AS CREATED BY THE VILLAGE OF NORTHBROOK DATED JULY 9, 2013 AND RECORDED SEPTEMBER 27, 2013 AS DOCUMENT NUMBER 1327013004 FOR THE PURPOSE OF PUBLIC SIDEWALK OVER THE FOLLOWING DESCRIBED LAND: THE SOUTH TWENTY FEET OF THE NORTH FIFTY FEET OF THE EAST HALF OF THAT PART OF THE NORTH 400 FEET OF THE WEST HALF OF THE EAST HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL, LYING WEST OF THE EAST 245 FEET THEREOF; IN COOK COUNTY, ILLINOIS.

PARCEL 2:

THE SOUTH 100 FEET OF THE NORTH 500 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL 3:

THE SOUTH 100 FEET OF THE NORTH 600 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PERMANENT INDEX NUMBER: 04-16-301-047-0000; 04-16-301-048-0000; 04-16-301-008-0000; 04-16-301-009-0000

Commonly known as 2539 Techny Road; 2074 Greenview Road; and 2090 Greenview Road, Northbrook, Illinois.

EXHIBIT B

CLIMATE ACTION PLAN

Developer comply with the action items of the Climate Action Plan that are applicable to the New Development, as follows:

1. Maintain five electric vehicles in employee fleet and four electric vehicle charging stations. Include additional EV-ready capabilities in additional proposed parking area.

2. All exterior lighting fixtures must be Dark Sky compliant.

3. Install EnergyStar rated windows and appliances.

4. Install rooftop PV array on the Town Center Addition, and all roof structures designed with solar-ready zones for potential future installations.

5. Meet Low-VOC Limits per Architectural Specifications (concrete sealers, adhesives, waterproofing, sealants, paints, and wallcoverings).

6. Install all-electric appliances, including water heaters.

7. The water fixtures should be WaterSense or meet 2018 IECC minimum standards.

8. The facility must offer recycling and composting (including food scraps) services.

9. Native species as noted on the Landscape Plans must be installed.

EXHIBIT C
FORM LETTER OF CREDIT

IRREVOCABLE STANDBY LETTER OF CREDIT

IRREVOCABLE LETTER OF CREDIT NO. _____ AMOUNT:_____

EXPIRATION DATE: _____ DATE OF ISSUE:_____

_____

[Name of Bank]

_____

[Address]

TO: Village of Northbrook
1225 Cedar Lane
Northbrook, Illinois 60062
Attention: Village Manager

WE HEREBY AUTHORIZE YOU TO DRAW AT SIGHT on this Irrevocable Standby Letter of Credit No. _____ UP TO AN AGGREGATE AMOUNT OF _____ United States Dollars ($_____) for account of _____ (the "***Customer***").

Drafts under this Letter of Credit shall bear upon their face the words:

"Drawn under _____
Irrevocable Standby Letter of Credit No. __ Dated: _____, _____"

Drafts may be for all or any portion of the amount of this Letter of Credit, and shall be in the form attached hereto as ***Exhibit 1*** and shall be accompanied by one of the following documents executed by the Village Manager or an individual designated as acting Village Manager:

(a) A written statement on the form attached hereto as ***Exhibit 2*** stating that, conditioned upon proper notice to the Village Manager, Letter of Credit No. _____ will expire within 35 days or less and that the Customer has failed to deliver to the Village Manager evidence of a renewal of Letter of Credit No. _____; or

(b) A written statement on the form attached hereto as ***Exhibit 3*** stating that all or any part of the improvements required to be constructed by the Customer at Covenant Living, Northbrook, Illinois (the "***Property***") pursuant to the Development Agreement dated September __, 2023 by and between the Village of Northbrook and Covenant Home d/b/a Covenant Living of Northbrook (the "***Agreement***") have not been constructed in accordance with the Agreement or the Village's general ordinances, codes, or regulations; or

(c) A written statement on the form attached hereto as ***Exhibit 4*** stating that all or any part of the costs, payments, permit fees or other fees required to be paid to the Village by the Customer in conjunction with the redevelopment of the Combined Property pursuant to the Agreement or the Village's general ordinances, codes, or regulations, have not been paid in the required time period; or

(d) A written statement on the form attached hereto as ***Exhibit 5*** stating that all or any portion of the maintenance, repair, or restoration of the property required to be performed by the Customer pursuant to and in accordance with the Agreement or the Village's general ordinances, codes, and regulations has not been performed; or

(e) A written statement on the form attached hereto as ***Exhibit 6*** stating that all or any portion of the Customer's undertakings pursuant to the Agreement have not been performed pursuant to and in accordance with the Agreement.

WE HEREBY AGREE with the beneficiary that:

1. Drafts drawn under and in compliance with this Letter of Credit shall be duly honored immediately upon presentation to us if presented on or before the above-stated Expiration Date or presented at our office together with the original of this Letter of Credit on or before that date. Further, one or more drafts may be presented at our office on or before the Expiration Date.

2. If, within three banking days after any draft drawn under this Letter of Credit is presented to us in conformance with the terms of this Letter of Credit, we fail to honor same, we agree to pay all attorneys' fees, court costs and other expenses incurred by the Village in enforcing the terms hereof.

3. This Letter of Credit shall expire on _____, 20___, as stated hereinabove; provided, however, that we shall send notice to the Village Manager by certified mail, return receipt requested, or hand-delivered courier at least 35 days prior to said Expiration Date, that this Letter of Credit is about to expire.

4. In no event shall this Letter of Credit or the obligations contained herein expire except upon the prior written notice required herein, it being expressly agreed that the above expiration date shall be extended as shall be required to comply with the prior written notice required herein.

5. No consent, acknowledgment, or approval of any kind from the Customer shall be necessary or required prior to honoring any draft presented in conformance with the terms of this Letter of Credit.

6. The aggregate amount of this Letter of Credit may be reduced only upon receipt by us of a document executed by the Village Manager stating that such aggregate amount shall be reduced in an amount permitted by the Village's subdivision regulations because of the satisfactory completion of all or part of the improvements required to be constructed pursuant to the Agreement or the Village's general ordinances, codes, or regulations.

7. This Letter of Credit is irrevocable.

This Letter of Credit shall be governed by and construed in accordance with the Uniform Customs and Practices for ISP 98 of the International Chamber of Commerce (the "***Uniform Customs***"). In the event of a conflict between this Letter of Credit and the Uniform Customs, this Letter of Credit shall control. This Letter of Credit shall be deemed to be a contract made under the laws of the State of Illinois, including, without limitation, Article 5 of the Uniform Commercial Code as in effect in the State of Illinois, and shall, as to matters not governed by the Uniform Customs, be governed by and construed in accordance with the laws of the State of Illinois, without regard to principles of conflicts of law.

AS USED HEREIN, THE TERM "BANKING DAY" MEANS ANY DAY OTHER THAN A SATURDAY, SUNDAY, OR A DAY ON WHICH BANKS IN THE STATE OF ILLINOIS ARE AUTHORIZED OR REQUIRED TO BE CLOSED, AND A DAY ON WHICH PAYMENTS CAN BE EFFECTED ON THE FEDWIRE SYSTEM.

_____	_____
[Signature of Bank Officer]	[Signature of Bank Officer]
_____	_____
[Officer's Title]	[Officer's Title]

EXHIBIT 1 TO FORM OF IRREVOCABLE STANDBY LETTER OF CREDIT

FORM OF DRAFT

[To Be Supplied/Revised by Issuing Bank]

To: [BANK NAME, ADDRESS, AND CONTACT PERSON]

Date:

Drawn under _____Irrevocable Standby Letter of Credit No. _____ Dated: _____, 202_.

Pursuant to the attached documentation, Village of Northbrook ("***Beneficiary***") hereby demands that _____ pay to the order of Beneficiary the amount of $_____, by wire transfer with the following instructions:

Bank Name:
Account Number:
ABA Routing Number:

By _____
Name: _____
Title: _____
Date: _____

EXHIBIT 2 TO FORM OF IRREVOCABLE STANDBY LETTER OF CREDIT

To:
Attn:

Re: Letter of Credit No. _____

Ladies and Gentlemen:

This is to advise you that Letter of Credit No. _____ dated _____, 202_ in the amount of $_____ will expire within 35 days or less and that _____ has failed to deliver to the Village Manager evidence of a renewal of Letter of Credit No. _____.

Very truly yours,

_____
Village Manager

EXHIBIT 3 TO FORM OF IRREVOCABLE STANDBY LETTER OF CREDIT

To:
Attn:

Re: Letter of Credit No. _____

Ladies and Gentlemen:

This is to advise you that all or any part of the improvements required to be constructed by the Customer (as that term is defined in the above-referenced Letter of Credit) pursuant to that certain Development Agreement dated September __, 2023 by and between the Village of Northbrook and Covenant Home d/b/a Covenant Living of Northbrook (the "***Agreement***") have not been constructed in accordance with the Agreement or the Village's general ordinances, codes, and regulations.

Very truly yours,

_____
Village Manager

EXHIBIT 4 TO FORM OF IRREVOCABLE STANDBY LETTER OF CREDIT

To:
Attn:

Re: Letter of Credit No. _____

Ladies and Gentlemen:

This is to advise you that all or any part of the costs, payments, permit fees or other fees required to be paid to the Village by the Customer (as that term is defined in the above-referenced Letter of Credit) in conjunction with the redevelopment of property pursuant to that certain Development Agreement dated September __, 2023 by and between the Village of Northbrook and Covenant Home d/b/a Covenant Living of Northbrook or the Village's general ordinances, codes, or regulations, have not been paid in the required time period.

Very truly yours,

_____
Village Manager

EXHIBIT 5 TO FORM OF IRREVOCABLE STANDBY LETTER OF CREDIT

To:
Attn:

Re: Letter of Credit No. _____

Ladies and Gentlemen:

This is to advise you that all or any part of the maintenance, repair or restoration required to be performed by the Customer (as that term is defined in the above-referenced Letter of Credit) pursuant to and in accordance with that certain Development Agreement dated September __, 2023 by and between the Village of Northbrook and Covenant Home d/b/a Covenant Living of Northbrook, or the Village's general ordinances, codes, and regulations, has not been performed.

Very truly yours,

_____
Village Manager

EXHIBIT 6 TO FORM OF IRREVOCABLE STANDBY LETTER OF CREDIT

To:
Attn:

Re: Letter of Credit No. _____

Ladies and Gentlemen:

This is to advise you that all or any part of the undertakings of the Customer (as that term is defined in the above-referenced Letter of Credit) pursuant to that certain Development Agreement dated September __, 2023 by and between the Village of Northbrook and Covenant Home d/b/a Covenant Living of Northbrook (the "***Agreement***") have not been performed pursuant to and in accordance with the Agreement.

Very truly yours,

_____
Village Manager

EXHIBIT D

TRANSFEREE ASSUMPTION AGREEMENT

THIS TRANSFEREE ASSUMPTION AGREEMENT is made as of this _____ day of _____, 20__, between the **VILLAGE OF NORTHBROOK**, an Illinois home rule municipal corporation (***"Village"***), **COVENANT HOME D/B/A COVENANT LIVING OF NORTHBROOK**, an Illinois not-for-profit corporation ("***Developer"***), and _____, a _____ (***"Transferee"***).

W I T N E S E T H:

WHEREAS, pursuant to that certain real estate sale contract dated _____, 20__, the Transferee agreed to purchase from Developer certain real property situated in Cook County, Illinois and legally described in **Exhibit 1** attached to and, by this reference, made a part of this Agreement (***"Property"***); and

WHEREAS, following the conveyance of the Property by Developer, the Transferee will be the legal owner of the Property; and

WHEREAS, as a condition to the conveyance of the Property by Developer, the Village and Developer require that the Transferee agree to comply with all the terms, requirements, and obligations set forth in that certain Development Agreement, dated as of September __, 2023, and recorded in the office of the Cook County Clerk's Recording Division on _____, 20__, as Document No. _____, by and between the Village and Developer (***"Development Agreement"***);

NOW, THEREFORE, in consideration of the agreement of Developer to convey the Property to the Transferee, and of the Village to accept the transfer of obligations as provided herein and to grant the releases granted herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, it is hereby agreed by, between, and among the Village, Developer, and the Transferee as follows:

1. **Recitals.** The foregoing recitals are by this reference incorporated herein and made a part hereof as substantive provisions of this Agreement.

2. **Assumption of Obligations.** The Transferee, on its behalf and on behalf of its successors, assigns, heirs, executors, and administrators, hereby agrees, at its sole cost and expense, to comply with all of the terms, requirements, and obligations of Developer in the Development Agreement, including all exhibits and attachments, regardless of whether such terms, requirements, and obligations are to be performed and provided by, or are imposed upon, Developer or the Property.

3. **Payment of Village Fees and Costs.** In addition to any other costs, payments, fees, charges, contributions, or dedications required by this Agreement, the Development Agreement or by applicable Village codes, ordinances, resolutions, rules, or regulations, the Transferee must pay to the Village, immediately upon presentation of a written demand or demands therefor, all legal, engineering, and other consulting or administrative fees, costs, and expenses incurred in connection with the negotiation, preparation, consideration, and review of this Agreement.

4. **Acknowledgment and Release of Developer.** The Village hereby acknowledges its agreement to the Transferee's assumption of the obligation to comply with the terms, requirements, and obligations of Developer in the Development Agreement, including all exhibits and attachments, and the Village hereby releases Developer from any personal liability for failure to comply with the terms, requirements, and obligations of Developer in the Development Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the day and year first written above.

ATTEST:

VILLAGE OF NORTHBROOK,
an Illinois home rule municipal corporation

_____ By:_____

Village Clerk Its: Village Manager

ATTEST:

COVENANT HOME D/B/A COVENANT LIVING OF NORTHBROOK, an Illinois not-for-profit corporation

By:_____ By:_____

Its:_____ Its:_____

ATTEST:

[TRANSFEREE],
a _____

By:_____ By:_____

Its:_____ Its:_____

ACKNOWLEDGMENTS

STATE OF ILLINOIS)
) SS
COUNTY OF COOK)

This instrument was acknowledged before me on _____, 20__, by _____, the Village Manager of the **VILLAGE OF NORTHBROOK**, an Illinois home rule municipal corporation, and by _____, the Village Clerk of said municipal corporation.

_____
Signature of Notary

SEAL

STATE OF ILLINOIS)
) SS
COUNTY OF COOK)

This instrument was acknowledged before me on _____, 20__, by _____ the _____ of **COVENANT HOME D/B/A COVENANT LIVING OF NORTHBROOK**, an Illinois not-for-profit corporation and by _____, the _____ of said _____.

_____
Signature of Notary

SEAL

_____

STATE OF ILLINOIS)
) SS
COUNTY OF COOK)

This instrument was acknowledged before me on _____, 20__, by _____ the _____ of **TRANSFEREE**, and by _____, the _____ of said _____.

_____
Signature of Notary

SEAL

EXHIBIT 1 TO TRANSFEREE ASSUMPTION AGREEMENT

PROPERTY LEGAL DESCRIPTION

Archived: Monday, September 11, 2023 4:05:46 PM
From: Alan B. Patzik
Sent: Sunday, September 10, 2023 10:59:29 PM
To: Ciesla, Kathryn; Israel, Robert; Collison, Muriel; Ross, Heather; Hebl, Johannah K.; Pepoon, Dan; Ebhomielen, Joy; Pavlicek, Cara
Cc: Pandey, Swati
Subject: Covenant Village Proposal
Importance: Normal
Attachments:
Covenant Living Diagrams and Cover.9.10.23.PDF

Dear Trustees:
In advance of your upcoming meeting on September 12, I would like to share a few thoughts and concerns that my neighbors and I continue to have relating to the pending Covenant Living Proposal. Please feel free to reach out if you have questions or would like additional information.

1. Background. It is important to remember that the Greenview Neighbors bought homes in a residential community surrounded by lots with the current boundaries and dimensions. The Covenant Living campus was clearly defined as a 50 plus acre institutional use to the west. The neighborhood was defined by its large residential lots and the stream that ran behind them. When Covenant Living chose to purchase the lots on Techny and Greenview, its management know that the lots were zoned R-2 and R-3, and assumed the risk that the changes they propose would not be acceptable to the community.
2. Covenant Living is Unwilling to Provide Assurance Regarding its Future Activities on Greenview. Covenant Living refuses to provide the community with assurance that it will not seek to convert other lots that it owns, or may acquire, on Greenview to detention, retention or another similar use. It says that no such action is currently planned. This provides little comfort since, as you know, the Neighbors only found out about this current proposal to subdivide lots and increase the size of Covenant Living in May, 2023. We have no idea how long ago that was planned. Before making any decision regarding the subject Proposal, the Village should fully understand and evaluate the impact of the floodgates that it is being asked to open.
3. Overhang on the Greenview Neighborhood. Unless the Village makes it clear that Covenant Living will not be allowed to acquire and repurpose residential lots in an existing residential community to support its expansion, our neighbors will live in fear that Covenant Living will quietly acquire the home next to them and seek to convert that home or lot to a use designed solely to support its expansion. As long as that possibility exists, prospective purchasers of homes and lots on Greenview will be hesitant to make an investment in the neighborhood. Just imagine what a residential real estate broker is likely to tell his or her client who is considering purchasing a Greenview property if the Village allows this Proposal to proceed.
4. Mission Based Organizations Should Not Have Rights that are Senior to that of its Neighbors. Putting aside the question of whether the executives at Covenant Living have conducted themselves in a manner that is consistent with the integrity expected of a mission-based organization, the Greenview neighbors ask you take a step back and consider whether the latitude requested by Covenant Living would be extended to any other institutional, commercial or private landowner. Its mission does not give it the right to negatively impact the neighbors.

5. The Story does not Hold Together.. The Neighbors firmly recall, and ask that you also remember, that Covenant Living told the Plan Commission that it was taking down this Y Shaped building because its layout was no longer desirable to potential residents. However, in its most recent letter to the Village, it says that it intends to retain the other Y shaped buildings because they provide living options. Simply put, if it didn't intend to take down those other Y shaped buildings, then it would not need the other lots that it owns on Greenview. And if its real goal in buying and holding the other lots on Greenview was to provide housing for executives, pastors and others, it would not own a ¾ acre vacant lot on Greenview and it would actively explore the purchase of younger homes at more attractive prices in adjacent Sunset Fields. But to date, for some mysterious reason, Covenant Living's only interest has been in acquiring housing on the west side of Greenview Road.
6. Other Options Exist to Achieve it Goals. Without doubt, Covenant Living can find another way to provide retention and build the new manor homes that it desires if the Village denies the petition. It will just have to work a little harder on a plan, or settle on a plan that is a little less desirable for them (meaning it might cost them a little more money). There is no reason that Covenant Living cannot do this differently…it's management just does not want to do so.
7. Preliminary Support was by its terms Preliminary. Our Greenview Road neighbors recognize that the Village may not have fully appreciated the significant negative impact that Covenant Living's plan is likely to have on the Greenview neighborhood at the time that it provided its preliminary, non-binding, assessment of the Project over a year ago. But the Board provided that preliminary feedback without being made aware of Covenant Living's other holdings on Greenview or the Neighbors' concerns about the plan.

I have also attached, for your convenience, four slides that the Neighbors have been looking at to help us visualize the changes proposed for Greenview. I am hopeful that you will find them of assistance. Thank you for your time and concern.
Regards,

|P |F |S |

Alan B. Patzik
Direct. (312) 551.8308
email. apatzik@pfs-law.com

PATZIK, FRANK & SAMOTNY LTD.
200 South Wacker Drive - Suite 2700
Chicago, Illinois 60606
Tel. (312) 551.8300 Fax. (312) 551.1101
www.pfs-law.com

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this message.

Beware External Email - Think Before You Act

Re: Covenant Living Proposal

The attached charts and diagrams are intended to assist the Neighbors in understanding the proposed changes required by Covenant Living.

1. Appendix 1 includes a list of the properties that we believe have been acquired by Covenant Living, as well as a diagram showing where those properties exist on the street. We should certainly investigate whether it owns or controls other properties.
2. Appendix 2 shows the properties that are proposed to be subdivided by Covenant Living.
    a. The left diagram shows how the lots exist today. You will see that the lots at the bottom run all the way from Greenview on the east to the border with Covenant Living on the west.
    b. The right diagram shows the modifications being proposed by Covenant Living. It proposes the creation of "Lot 3", which is made up of (i) the two Techny properties (2539 Techny and 2535 Techny) acquired by Covenant Living, and (ii) the rear third of the bottom two lots (2074 Greenview and 2090 Greenview). These two Greenview lots were previously 330 feet deep and are proposed to be truncated to 212 feet in depth.
    c. The newly created Lot 3 is proposed to be rezoned as R-8 multifamily, modified to house the relocated creek and six-foot deep detention basins and incorporated into the Covenant Living campus. So when Covenant Living tells us that nothing is being rezoned, they are simply not telling the truth.
3. Appendix 3 (specifically the top right hand portion) shows the relocation of the creek and flood plain onto what was previously shown as Lot 3, as well as the creation of the detention basins (in blue) that are proposed to be dug in the back yard areas of 2074 Greenview and 2090 Greenview. These detention basins consume a significant portion of the back yards, impacting the potential to build on that portion of the property. It is unlikely that the owners of these properties would have agreed to give up their back yards to serve as detention for the adjoining use if they were not exiting the community.
4. Appendix 4 is an enlarged view showing the placement and depth of the detention areas. It appears that the detention closest to the homes is 3 feet deep and the detention furthest to the west is 6 feet deep.

APPENDIX 1

PROPERTIES ACQUIRED BY COVENANT LIVING IN THE GREENVIEW NEIGHBORHOOD

2539 Techny – to be razed and used for creek/floodplain relocation to the east

2074 Greenview Drive – to be subdivided and used for creek/floodplain relocation and detention

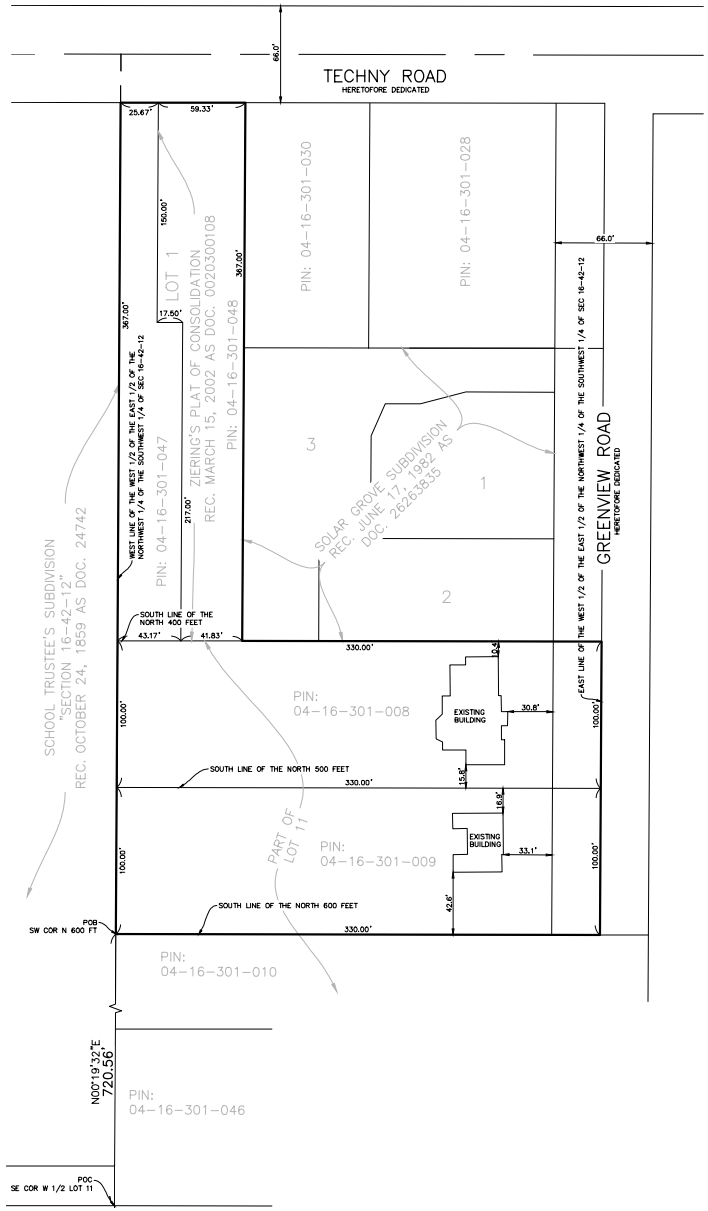
2090 Greenview Drive - to be subdivided and used for creek/floodplain relocation and detention

2164 Greenview Drive – Unknown Future Use

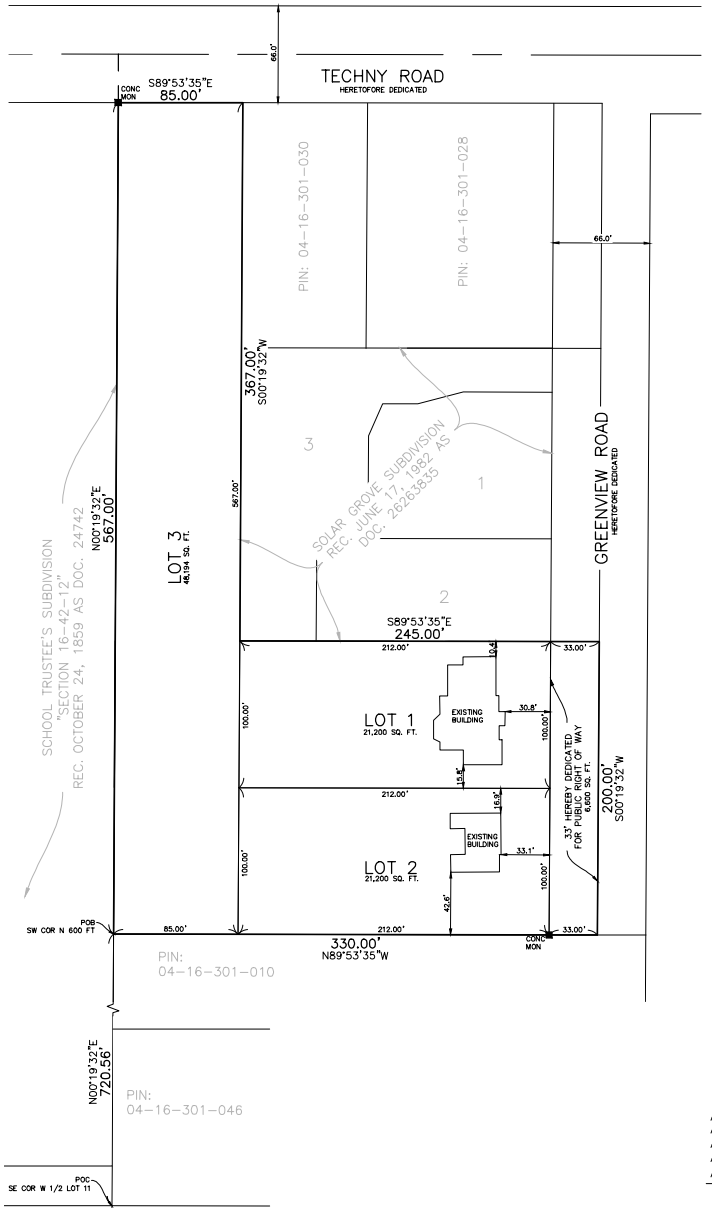
2180 Greenview Drive – Unknown Future Use

2535 Techny – Unknown Future Use

Exhibit A
VILLAGE OF NORTHBROOK
2625 Techny Road
Covenant Village
* Denotes other Lots Owned by CL
Date: 5/3/2022
0
270
540
810
Feet
N
WESTERN AVE
FIELDWOOD DR
TECHNY RD
WINTERCRESS CIR
FOXGLOVE DR
MAYAPPLE CT
MAYAPPLE LN
PFINGSTEN RD



LOTS BEFORE SUBDIVISION



LOTS AFTER SUBDIVISION

FINAL PLAT
OF
GREENVIEW ROAD SUBDIVISIOI

BEING A SUBDIVISION OF PART OF THE NORTH 600 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, ALL IN COOK COUNTY, ILLINOIS

NO TITLE COMMITMENT PROVIDED TO THIS SURVEYOR TO AID IN THE PREPARATION OF THIS SUBDIVISION

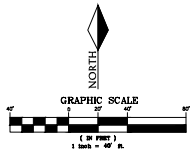
ADDRESSES (PER COOK COUNTY GIS):

2545 TECHNY ROAD
NORTHBROOK, IL 60062
PIN: 04-16-301-047

2539 TECHNY ROAD
NORTHBROOK, IL 60062
PIN: 04-16-301-048

2074 GREENVIEW ROAD
NORTHBROOK, IL 60062
PIN: 04-16-301-008

2090 GREENVIEW ROAD
NORTHBROOK, IL 60062
PIN: 04-16-301-009



AREA SUMMARY PRIOR TO SUBDIVISION

AREA OF PIN 04-16-301-047	= 13,218 SQ.FT. OR	0.3034 ACRES
AREA OF PIN 04-16-301-048	= 17,976 SQ.FT. OR	0.4127 ACRES
AREA OF PIN 04-16-301-008	= 33,000 SQ.FT. OR	0.7576 ACRES
AREA OF PIN 04-16-301-009	= 33,000 SQ.FT. OR	0.7576 ACRES
TOTAL AREA	= 97,194 SQ.FT. OR	2.2313 ACRES

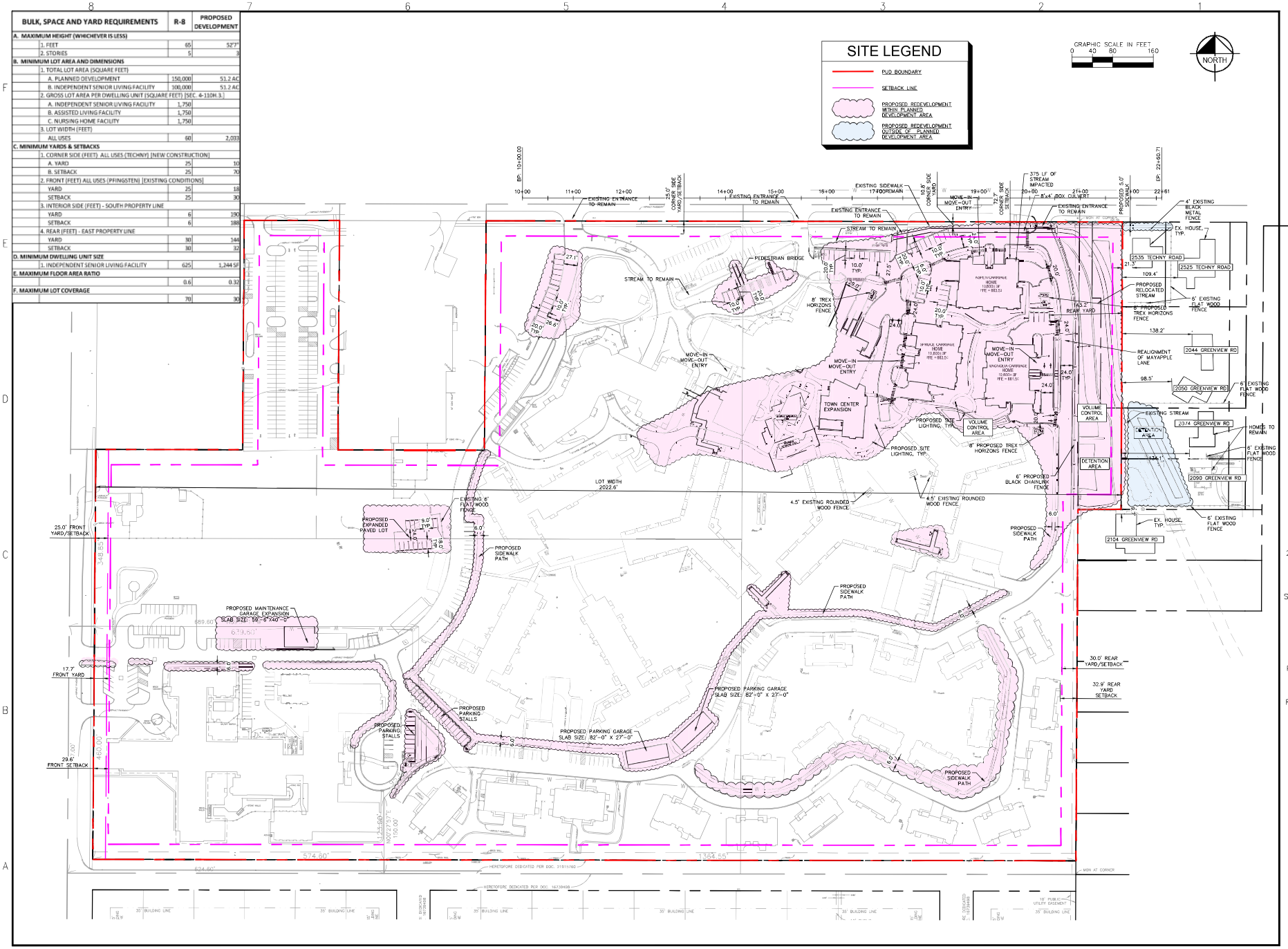
DATE: JUNE 2, 2023
ORDER NO: 230527
PROJ. NO: 1046
FOR: KIMLEY-HORN
PROJ. NAME: COVENANT VILLAGE OF NORTHBROOK
Copyright : TFW Surveying & Mapping, Inc., 2023. All rights reserved.
Professional Design Firm Registration #184-002793.

SHEET 1 OF 2

TFW SURVEYING & MAPPING INC
LAND SURVEYING • TOPOGRAPHIC MAPPING • CONSTRUCTION LAYOUT
1761 NORTH DILLEYS ROAD • SUITE 105 • GURNEE, ILLINOIS 60031
847-548-6600 FAX 548-6699
info@tfwsurvey.com www.tfwsurvey.com

Attachment: 2625 Techny - PC Resolution, Minutes, Staff Reports (6823 : Review of Docket No. PCD-22-

BULK, SPACE AND YARD REQUIREMENTS	R-8	PROPOSED DEVELOPMENT
A. MAXIMUM HEIGHT (WHICHEVER IS LESS)		
1. FEET	65	52'7"
2. STORIES	5	3
B. MINIMUM LOT AREA AND DIMENSIONS		
1. TOTAL LOT AREA (SQUARE FEET)		
A. PLANNED DEVELOPMENT	150,000	51.2 AC
B. INDEPENDENT SENIOR LIVING FACILITY	100,000	51.2 AC
2. GROSS LOT AREA PER DWELLING UNIT (SQUARE FEET) (SEC. 6-110H.3.)		
A. INDEPENDENT SENIOR LIVING FACILITY	1,750	
B. ASSISTED LIVING FACILITY	1,750	
C. NURSING HOME FACILITY	1,750	
3. LOT WIDTH (FEET)		
ALL USES	60	2,033
C. MINIMUM YARDS & SETBACKS		
1. CORNER SIDE (FEET) ALL USES (TECHNY) (NEW CONSTRUCTION)		
A. YARD	25	10
B. SETBACK	25	70
2. FRONT (FEET) ALL USES (PFINGSTEN) (EXISTING CONDITIONS)		
YARD	25	18
SETBACK	25	30
3. INTERIOR SIDE (FEET) - SOUTH PROPERTY LINE		
YARD	6	190
SETBACK	6	188
4. REAR (FEET) - EAST PROPERTY LINE		
YARD	30	144
SETBACK	30	32
D. MINIMUM DWELLING UNIT SIZE		
1. INDEPENDENT SENIOR LIVING FACILITY	625	1,244 SF
E. MAXIMUM FLOOR AREA RATIO		
	0.6	0.32
F. MAXIMUM LOT COVERAGE		
	70	30



COVENANT LIVING OF NORTHBROOK
NORTHBROOK, IL 60062
Kimley»Horn
© 2021 KIMLEY-HORN & ASSOCIATES, INC.
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PHONE: 630-487-9555
WWW.KIMLEY-HORN.COM
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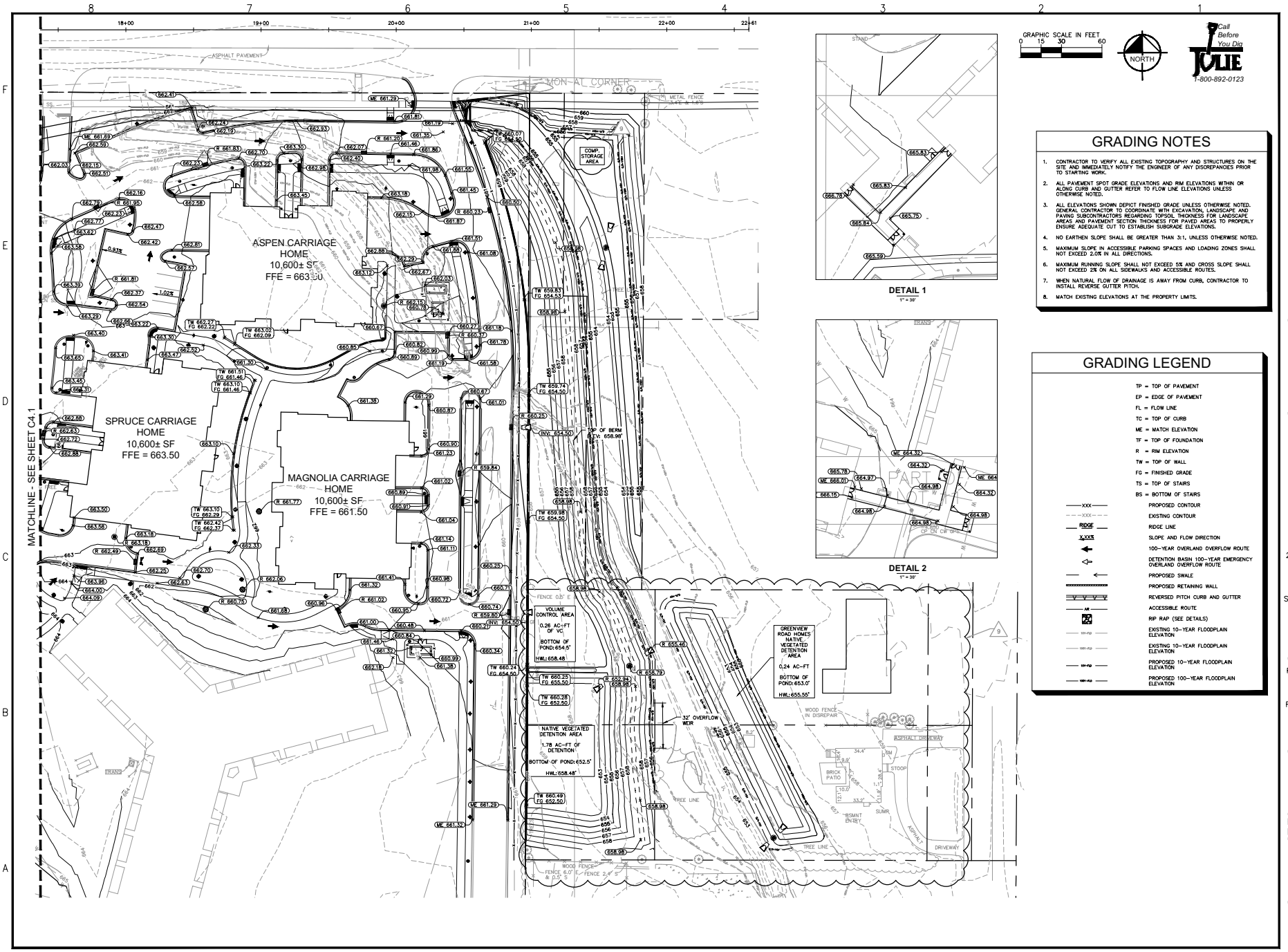
Atlanta, GA
2632 Broadway, Suite 201, South
San Antonio,
PH: 770 9
FAX: 770 9
www.thv
PRELIMINARY NOT TO BE USED FOR RECORD IMPLEMENTATION REGULATORY PERMITTING CONSTRUCTION
PROGRESS CONSTRUCTION DOCUMENTS
Project No.:
Date: 9
OVERALL
Sheet No.:

K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\Exhibits\2022-0111 Overall Site Plan.dwg



GRADING NOTES

1. CONTRACTOR TO VERIFY ALL EXISTING TOPOGRAPHY AND STRUCTURES ON THE SITE AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING WORK.
2. ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO FLOW LINE ELEVATIONS UNLESS OTHERWISE NOTED.
3. ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR TO COORDINATE WITH EXCAVATION, LANDSCAPE AND PAVING SUBCONTRACTORS REGARDING TOPSOIL THICKNESS FOR LANDSCAPE AREAS AND PAVEMENT SECTION THICKNESS FOR PAVED AREAS TO PROPERLY ENSURE ADEQUATE CUT TO ESTABLISH SUBGRADE ELEVATIONS.
4. NO EARTHEN SLOPE SHALL BE GREATER THAN 3:1, UNLESS OTHERWISE NOTED.
5. MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
6. MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES.
7. WHEN NATURAL FLOW OF DRAINAGE IS AWAY FROM CURB, CONTRACTOR TO INSTALL REVERSE GUTTER PITCH.
8. MATCH EXISTING ELEVATIONS AT THE PROPERTY LIMITS.

GRADING LEGEND

TP	TOP OF PAVEMENT
EP	EDGE OF PAVEMENT
FL	FLOW LINE
TC	TOP OF CURB
ME	MATCH ELEVATION
TF	TOP OF FOUNDATION
R	RIM ELEVATION
TW	TOP OF WALL
FG	FINISHED GRADE
TS	TOP OF STAIRS
BS	BOTTOM OF STAIRS
XXX	PROPOSED CONTOUR
XXX	EXISTING CONTOUR
RIDGE	RIDGE LINE
XX.XX%	SLOPE AND FLOW DIRECTION
	100-YEAR OVERLAND OVERFLOW ROUTE
	DETENTION BASIN 100-YEAR EMERGENCY OVERLAND OVERFLOW ROUTE
	PROPOSED SWALE
	PROPOSED RETAINING WALL
	REVERSED PITCH CURB AND GUTTER
AR	ACCESSIBLE ROUTE
	RIP RAP (SEE DETAILS)
	EXISTING 10-YEAR FLOODPLAIN ELEVATION
	EXISTING 10-YEAR FLOODPLAIN ELEVATION
	PROPOSED 10-YEAR FLOODPLAIN ELEVATION
	PROPOSED 100-YEAR FLOODPLAIN ELEVATION

Call Before You Dig JULIE 1-800-892-0123

NO.	DATE	
6	6/2/23	DE
5	5/9/23	MA
4	3/31/23	MO
3	2/3/23	MO
2	1/6/23	DI
1	9/30/22	PR
0	8/22/22	SU
	6/23/22	DI
	6/10/22	DI
	5/20/22	SE

COVENANT LIVING OF NORTHBROOK
NORTHBROOK, IL 60062

Kimley»Horn

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4201 WINFIELD ROAD, SUITE 600
WARRENVILLE, IL 60555
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PRELIMINARY NOT TO BE RECORD IMPLEMEN REGULATORY PERMITTIN CONSTRU

PROGR CONSTRU DOCUME

Project No.: Date:

GRADING DRAINAGE

Sheet No.

Attachment: 2625 Techny - PC Resolution, Minutes, Staff Reports (6823 : Review of Docket No. PCD-22-

K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\PlanSheets\C4.0 GRADING AND DRAINAGE PLAN.dwg

Archived: Tuesday, September 12, 2023 7:04:47 PM
From: Goldman, Adam S.
Sent: Tuesday, September 12, 2023 3:53:17 PM
To: Ciesla, Kathryn; Israel, Robert; Collison, Muriel; Ross, Heather; Hebl, Johannah K.; Pepoon, Dan; Ebhomielen, Joy; Pavlicek, Cara
Cc: Shelby Montgomery; Pandey, Swati
Subject: PCD-22-11: 2625 Techny Road – Covenant Living of Northbrook
Response requested: No
Importance: Normal
Attachments:
Letter to Board of Trustees - Village of Northbrook.docx

Trustees:

My wife Shelby (copied here) and I live at 2075 Greenview Road, directly across the street from one of the lots Covenant Living would like to split and rezone. We have attended each and every public hearing since we became aware of this proposal.

It has been disappointing not to hear our previous letter (attached) addressed in hearings, in particular because it brings up the very salient point of the items the board is required to consider when review zoning amendment applications. The Zoning Administration and Enforcement Code Paragraph 11-601.E addresses the standard for amending the Zoning Map of the Village of Northbrook. This paragraph of the Code implores the Board of Trustees to make such amendments "**only when the public good demands or requires the amendment to be made**.**\uf0a0** It goes on direct to the Board to weigh those factors set forth in Paragraph 11-301 E8 of the Code. These factors notably include: (i) The existing uses and zoning classifications of properties in the vicinity of the subject property, (ii) the trend of development in the vicinity of the subject property; and (iii) the extent, if any, to which the use, enjoyment and value of adjacent properties would be affected by the proposed amendment.

We request the following of the Trustees prior to making a decision on the Covenant rezoning proposal.

- **Confirmation that the Code sections noted above apply to the Covenant rezoning.**
- **Public considerations of the factors noted by the Code, and an explanation of how the "public good demands or requires the amendment to be made.\uf0a0**
- **Requiring Covenant to explore alternative plans which would allow them to complete the desired development without rezoning the subject properties, including a cost/benefit analysis.**

As a reminder, the neighborhood does not object to a thriving, modern Covenant campus. However, Northbrook can approve the project on the whole, but not the zoning relief. The neighbors needs to understand what alternative options exist for water management required by the project, whether they are viable, and the cost. Best we can tell, the rezoning is merely a cost-saving option for Covenant to the detriment of the neighbors, and the board should not be approve it.

Thank you,
Adam

Adam S. Goldman, Associate

VedderPrice

222 North LaSalle Street, Chicago, Illinois 60601

T +1 312 609 7731

web | email | offices | biography

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Archived: Tuesday, September 12, 2023 5:55:23 PM
From: L
Sent: Monday, September 11, 2023 6:18:13 PM
To: Pandey, Swati
Subject: Covenant village
Response requested: Yes
Importance: Normal

Good evening-
I hope again you can forward this to the committee-

My thoughts have not changed from last email- that is why I have continued this email- as all my concerns and viewpoint have not changed. Especially on the native plant basin from pfingsten to mallard being required and created and maintained by covenant or money provided to village to have this done-along with old cottonwoods spared…which goes for any other healthy trees also. Five years is a long time to wait for trees to get larger and new multi story building in view. Also a concern re-Culverts being replaced by village or thru covenant money for future assurance of preventing flooding.

There have been other letters written by neighbors that they have shared and I agree with a lot of the concerns. I think the most disconcerting thing was the meeting covenant invited greenview neighbors to-last week as they said they wanted to start a conversation with us. Was excited to go to this, but then came out very concerned- as they basically washed their hands and said they don't want to hear what we are asking - commenting on but what else do we want to talk about?

There are so many inconsistencies- in the meeting that were brought up and i think the most worrisome is that in the future there appears they will not change in that aspect- they were able to get this far and want what they have decided on- where this project seems to have been in place for more than a year to get new tenants in a building that is not even created -yet and old tenants already out of old building- but nothing said to greenview people until this summer. So that concern now gets focused in on for the future of greenview on what to expect from them.

Thank you for your time and hard work-

Rosemary Isberner

> On Aug 5, 2023, at 3:07 PM, L <loriisberner@yahoo.com> wrote:
>
> Thank you in advance as this is a long email-please share this with the commission as I did not speak in the meeting- or let me know what other option i have to voice my concerns along with requests
>
> I share the concerns brought up by the neighbors on greenview/ Mallard in the meeting and did not speak as it would just be redundant - all the points voiced were all valid concerns from Greenview residents on how the natural waterway being manipulated to a 90 degree angle and the added concrete / surface space this involves will create changes that will not be known until after the project is approved and completed - At that point then the greenview residents will have to deal with the unknown of flooding and natural barrier being destroyed.
>
> There are other points i would like to bring to the Villages attention to review as they are logical and important concerns if this project does go forward-
>
> One major concern as addressed in meeting is that area of land being manipulated and all the trees/ brush

for wildlife and neighbors privacy being torn down and replaced- the video did not reflect actual looks after project completion and during the process of construction - but possibly 5 years down the line- for the barrier and trees to be adequate-There are 60 year old cottonwoods which i feel should not be torn down and some of the older healthy trees. Covenant should have to work around those trees-Also there are huge great horned owls -and other animals that currently have depended on the trees and that natural space shouldn't Northbrook regulate which trees cannot be torn down?- Covenant should abide by laws of cutting down specific well established trees.
>
> As For the creek issue IF this does get passed- i think a big concern is more flooding even tho they say it will help it there is no responsibility on the covenant if they are approved for this project to ensure downstream changes will not make some issues worse- I feel they should show that they are a bit concerned by the waterway changes and do all they can to provide a safety feature - they are supposed to have a natural basin from what i heard in the meeting- on the lots effected. But i feel that should extend to effected areas on creek thru covenant upstream Pfingsten thru to downstream to greenview mallard with the major changes they are making.-I spoke to a few knowledgeable individuals who said to insist that on a natural native basin around the creek not just on lots effected by creek movement but -from pfingsten where Covenant village creek starts -all the way and thru to Mallard. To install and maintain-a native plant buffer on both sides of the creek with intense management for 3-5 years and then require them to set money aside to maintain thru to perpetuity. This would ease flooding concerns while also making a lovely environment around creek for covenant residences -and show that Covenant is willing to work with people down the stream that are still concerned about additional concrete footprint-and unnatural changes they are creating.
>
> About 5 months ago Covenant had a water issue- there were trucks out on mayapple at 11 pm -repairing issue next day i was out front by the creek and looked at level of creek - the water was low- in 10 minutes went by it and it was to the top flowing a chocolate milk heavy flow downstream- if covenant has an issue- what is guaranteed to greenview residents we will not have to suffer in the future for this?
>
> I would also hope that if northbrook village agrees to the creek being moved that northbrook or covenant or Northbrook should be responsible to upgrade culverts thru to mallard so they too are up to optimal coding. This way all areas that might be effected are updated and at high efficiency-
> Could the low income money that covenant was going to provide to northbrook-for low income be moved to these areas for funding? i think greenview residents would be less fearful of the future effects of this project.
>
> Thank you for your time- and hard work. Please let me know if i need to send this information to someone else- or if you need to forward this to the commission to review I would be grateful to you.
>
> Rosemary Isberner
> 2120 Greenview Rd

Beware External Email - Think Before You Act

ALAN B. PATZIK
2165 MALLARD DRIVE
NORTHBROOK, ILLINOIS 60062
August 17, 2023

Village of Northbrook Board of Trustees
Ms. Katherine Ciesla, Mr. Robert Israel, Ms. Muriel Collison,
Ms. Heather Ross, Ms. Johannah Hebl, Mr. Daniel Pepoon and
Ms. Joy Ebhomielen
1225 Cedar Lane
Northbrook, Illinois 60062

Re: Rezoning and Subdivision Requests by Covenant Living

Dear Members of the Village of Northbrook Board of Trustees:

Thank you for the time spent on August 1 listening to and considering the concerns of the Greenview Road neighbors relating to Covenant Living's request for zoning modifications and other accommodations to support demolition of an existing 24-unit structure and the proposed development of three new structures housing a total of 36 new units.

At the core of the neighbors' concerns and objections is our belief that:

(i) an adjoining commercial or institutional property owner should not be allowed to acquire residential properties in an established residential neighborhood and repurpose that residential use to facilitate their expansion, and

(ii) allowing Covenant Living to convert the back yards' of two adjacent residential parcels into retention basins[1] to support its expansion will create uncertainty regarding what the Village will allow Covenant Living to do in the future on the two other residential lots its owns on Greenview or on other lots that it might seek to acquire in the future, and that this uncertainty will create an overhang that discourages people from buying or improving properties on Greenview, and negatively impacting the value of the existing properties.

Attached for your convenience as Exhibit A is a map provided by the Plan Commission, which has been annotated to designate the lots which we understand are owned by Covenant Living. We ask that the Village request information about other lots in the area that might be owned or controlled by Covenant Living.

[1] We recognize the need for retention and detention in a neighborhood to manage water flow resulting from the homes being constructed. However, in the instant case, the detention is created to support an adjacent use. Further we worry that the presence of two adjacent retention basins, and the possibility of additional basins just down the block, will negatively impact the character and desirability of the neighborhood.

During a series of Plan Commission Meetings, and the most recent Board of Trustees meeting, several items were discussed that require clarification, correction or further comment. In this regard, please consider the following:

1. Despite Claims to the Contrary, Residential Property on Greenview is Being Rezoned.

    a. Covenant Living has repeatedly told the Plan Commission and the Village Board that it is not rezoning any property on Greenview. It suggests that it is merely subdividing the parcels, and incorporating the rear portions of the parcels into its existing 50-acre campus.
    b. Regardless of semantics, the result is that Covenant Living proposes to cause a portion of the existing lots to be subdivided and rezoned from R-3 to R-8.

2. Covenant Living is a Valued Member of the Community – But it has Neighbors.

    a. We heard several Village Trustees tell us that Covenant Living is a valued member of the Northbrook community. The Greenview Drive neighbors agree.
    b. But our community's regard for Covenant Living does not justify a decision to allow it to expand in a manner that negatively impacts its residential neighbors by creating instability in the neighborhood and negatively impacting the marketability and value of our properties. Remember, the Greenview neighbors are valued, tax paying members of the community as well, and it is Covenant Living, not the neighbors, that seek to change the current condition for its own benefit.
    c. By way of comparison, most would agree that Sunset Foods is also a valuable member of the Community. However, we cannot fathom a situation where Sunset Foods would be allowed to acquire and rezone two or more parcels on Lincoln Ave., to its immediate north, to support the expansion of its footprint. While such an expansion might make for a nicer, more profitable grocery, the Village Board would undoubtedly recognize the negative impact that such an intrusion would have on Lincoln Ave. and its neighbors, and direct Sunset Foods to find another way to achieve its goal.

3. Failure to Investigate other Options.

    a. During the Plan Commission hearing, members of the public asked Covenant Living to investigate other options, such as underground retention, as was done at Wescott School, or to increase the size or depth of its existing ponds or to create additional ponds or retention on its existing campus.
    b. In response, its engineer testified that there were too many underground utilities in place to make underground retention practical. No additional investigation was done or questions asked of Covenant Living.
    c. Covenant Living wants us to believe that the existing utilities are too abundant to allow for the construction of underground detention, but are perfectly located to enable Covenant Living to successfully relocate Mallard Creek and to excavate the property as necessary to construct foundations to support three new multi-story buildings that increases the impervious space by over 30%.

d. We ask that the Village challenge Covenant Living to find other options using the land on the current campus.

4. Preliminary Support is Preliminary.

a. The Greenview Road neighbors recognize that the Village may not have fully appreciated the significant negative impact that Covenant Living's plan is likely to have on the neighborhood at the time that it provided its preliminary, non-binding, assessment of the proposed project over a year ago. And we understand that the Village may be hesitant to require that Covenant Living modify its plans.
b. But this is the very reason that the notice and public hearing process exists – to create a process for investigation and public comment and to implement changes based on that input and new information.
c. We ask that the Board of Trustees remember that (i) the Village's preliminary assessment was by its nature non-binding, (ii) Covenant Living pursued the property acquisitions on Techny and Greenview knowing that the zoning changes required Village and community support, (iii) Covenant Living could have, but elected not to, engage with the Community early on to understand our concerns (to date, its total community engagement has consisted of a single 1-hour meeting conducted on 3-day notice); (iv) Covenant Living failed to advise the Plan Commission and the Village Board (until requested by the neighbors[2]) of its other holdings on Greenview Road and (v) Covenant Living has refused to be forthright with the Village or the neighbors about its plans for the other three-pronged buildings on its property and the lots that it owns on Greenview.

5. The Village Needs to Understand and Control What Comes Next.

a. Covenant Living has three other buildings on its property with the same configuration (24 units in each of the three-pronged buildings) as the one that it has told us is outdated and needs to be replaced.
b. When asked, Covenant Living told the Plan Commission that it had no plans for those buildings and no plans for the other residential lots that it has acquired on Greenview.
c. As is the case with other statements made by Covenant Village, this is simply not believable. To date, we still do not have information regarding its plans.

[2] Covenant Living's ownership of the other lots on Greenview came to light during the Plan Commission hearing when neighbors raised the issue and the Commission requested information from Covenant Living. Covenant Living then advised the Commission and the neighbors that it had acquired the lots but had no plan to use them. Covenant Living has since testified that it often acquires residential lots around its facilities to provide housing for its staff and seniors who cannot afford their facilities. Notably, Covenant Living has not acquired any residential properties on the east side of Greenview or in Sunset Fields, which is directly across from Covenant Living. For the Board's information, 2626 Mulberry Lane, 2601 Mulberry Lane and 2620 Mulberry Lane (all directly across Techny from Covenant Living) each sold in 2023 for less than the $1,050,000 paid by Covenant Living to acquire 2535 Techny.

d. The lack of a clear understanding of what it plans to do with these other buildings and the lots it owns on Greenview, and the creation of clear and enforceable limits on what Covenant Living will be allowed to do in the future with regard to residential parcels on Greenview creates a cloud over the neighborhood and negatively impacts its growth, property values and attractiveness to future neighbors.
e. The Village cannot, in good conscience, allow it to proceed without putting protections in place for the Greenview community and its neighbors.

6. Need for Village Approval for Future Zoning Relief.
    a. One of the Commissioners noted that Covenant Living would have to come back to the Village and seek its consent before it moves forward with plans to subdivide other parcels to support further expansion and the export of its additional detention and retention.
    b. While correct, the Commissioner's statement ignores the fact that decisions made today create precedent for later decisions, and the Village's willingness to allow Covenant Living to subdivide and rezone the two Greenview parcels, create retention and detention on both the portion of parcel incorporated into the Covenant Living property, and on the portion of the parcel that is to remain R-3 residential, will, at best, create uncertainty regarding whether other parcels will be similarly subdivided, rezoned and used for retention and detention.
    c. This uncertainty can only be addressed by avoiding a bad precedent now and setting clear limits for the future.

7. Village's Power to Limit Covenant Living's use of the Greenview Parcels.

    a. One of the Village Trustees questioned whether the Village had the power or authority to cause Covenant Living to find another solution to address its detention and retention needs, or whether it had the power or authority to require Covenant Living to divest of and agree not to acquire and repurpose other properties on Greenview.
    b. Just as the Village can, and likely will, withhold its consent to the requested zoning changes unless Covenant Living implements programs to reduce lift assists and other calls, and agrees to pay increased charges for excess calls, the Village can certainly condition its approval on Covenant Living's agreement to not subdivide or seek zoning relief in respect of other properties on Greenview.

Thank you for your consideration.

Regards,

Alan Patzik

Exhibit A
VILLAGE OF NORTHBROOK
* Denotes other Lots Owned by CL
Date: 5/3/2022
2625 Techny Road
Covenant Village
WESTERN AVE
FIELDWOOD DR
TECHNY RD
WINTERCRESS CIR
FOXGLOVE DR
MAYAPPLE CT
MAYAPPLE LN
PFINGSTEN RD
0
270
540
810
Feet
N

Butch, Judy

From: noreply@civicplus.com
Sent: Friday, August 18, 2023 11:35 PM
To: Managers Office Public Comments; Ford, Debbie
Subject: Online Form Submittal: Public Comment Form

Public Comment Form

The Village Board likes hearing from you and encourages you to provide our board, committees, and commissions with your thoughts and ideas. We make better decisions when you get involved.

Because we know you can't always get to a meeting, we've created a way for you to share your comments with us via this web form. Comments will be automatically submitted to the appropriate staff liaison and subsequently forwarded to all members of your selected board, committee, or commission if applicable.

Written comments will not be read aloud during a public meeting unless requested by the commenter. If you want to make a 'live' comment, you can do so by attending a meeting and asking to be heard during public comment time.

Thank you for providing your valuable feedback.

(Section Break)

Select the Board or Commission you wish to address:	Village Board of Trustees
Would you like your comment to be read aloud at the applicable meeting?	Yes
Name	Alexander Goldin
Email Address	alexdgoldin@gmail.com
Address	2374 Greenview Rd
City	Northbrook
State	IL

Zip Code	60062
Comment:	I strongly agree with letter dated August 17, 2023 from Alan Patzik to the Board of Trustees summarizing the Neighborhood's objections to the plan proposed by Covenant Village; and agree with the issues raised and points made by Alan Patzik. To expand on Alan's last point. Some on the plan commission members used the excuse that they cannot stop a billion dollar corporate entitiy from buying individual private properties and doing what they want with them as a reason not to oppose the Covenant Village plan. However, the whole point of having a plan commission and a Board of Trustees is although they cannot stop anyone from buying property which is correct, they definitely have the power to decline zoning change requests. The Board of Trustees definitely has the power to deny a corporation buying a residential property and rezoning it to completely different purposes. As Alan mentioned, if this was Sunset buying up houses around it to expand its store footprint and use the houses in the adjacent neighborhood as drainage ponds, that type of rezoning would never be allowed. Lastly, I hope the Board through asking for Covenant Village to clarify its intended use for the rest of the houses it owns on the street and future ones that it may buy up is really asking if this is just a first step for Covenant Village. Is Covenant Village going to go back in 5-7 years perhaps to different members of the Village Board of Trustees for its next phase of rezoning of our residential neighborhood. If the Village Board of Trustees approves this plan (which I sincerely hope it does not), at minimum the Village Board of Trustees can do is to force Covenant Village that there will be no other rezoning allowed on Greenview for their next round of construction and this is condition of their approval. Otherwise, our neighborhood will be bought up for water drainage storage. It will be a neighborhood of no neighbors and just a facade of old houses standing there.

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Beware External Email - Think Before You Act

Archived: Tuesday, August 22, 2023 9:02:27 AM
From: Alysa Fields
Sent: Tuesday, August 22, 2023 8:59:04 AM
To: Pandey, Swati
Subject: Covenant village
Importance: Normal

Dear, Village Board,

I would like you to please consider the following points. It costs approximately $1,500 for the Fire dept. to respond to a residential call. Covenant Village has called for emergency assistance over 500 times in the past year. The cost to taxpayers exceeds $786,000

To another point, the homes on Greenview Rd. are off of the tax rolls as they are tax exempt. If those homes were sold they would be replaced with new homes that would generate conservatively $30,000 in annual property tax per year per home That would not be counting the homes on Techny Road that do not generate any property tax as well.

In closing, I feel the village of Northbrook and the taxpayers are subsidizing Covenant Village at minimum of $876,000 per year.

Thanks you for reading this, Alysa Fields
2330 Greenview Rd. Northbrook
Beware External Email - Think Before You Act

Archived: Friday, September 8, 2023 12:10:40 PM
From: Fred Polito
Sent: Friday, September 8, 2023 12:06:44 PM
To: Pandey, Swati
Subject: Covenant Living 9/7/23 Meeting
Importance: Normal

Village Board Members

I attended the meeting last night held at Covenant Living as suggested by the Village Board. It was hoped by the Greenview neighbors, and I think hoped by the Village Board too, that some common ground could be found between the neighbors concerns and the proposed expansion. Unfortunately, none could be found.

At the meeting, 'Trust', that the Village Board so eloquently expressed, was further broken between the neighbors and those responsible for the proposed expansion. An example; those responsible for the expansion project flatly denied writing any letter blaming the Village for causing delays in the construction. Was the Village wrong? Did I misinterpret what the Village expressed? Are those responsible for the expansion again misleading the neighbors and their own residents?

As to the Board's crucial question, what are the future plans for all the properties currently owned by Covenant Living? Their answer - 'we can't see the future.'

The Village Board should have satisfactory answers before making a decision to grant or deny the requested zoning change. The neighbors are very willing to support the expansion but they have an idea of the plans. Your decision will be precedent setting.

Fred Polito
847.272.3625
https://sites.google.com/site/fredpolitoarch
Beware External Email - Think Before You Act

Archived: Monday, August 21, 2023 8:45:19 AM
From: Fred Polito
Sent: Friday, August 18, 2023 8:57:47 PM
To: Pandey, Swati
Subject: Covenant Living Expansion
Importance: Normal

August 18, 2023

Northbrook Board of Trustees

As a Northbrook resident for over 40 years, I wish to thank the Northbrook Board of Trustees for conducting the initial meeting on the review of Covenant Living (CL) Expansion in such a fair, civil and open manner. A difficult task to accomplish in these recent times.

The Boards' summary of concerns for the project were, except for one area, astute, poignant, critical and yet presented in a courteous fashion. The CL 'blame the Village' letter, the manner in which the project was presented destroying the trust in CL and, most importantly, the lack of transparency in CL intentions are examples of the Board's civil, yet accurate commentary.

In the one area of disagreement, the Board's' focus on CL over use of Village rescue services definitely needs to be dealt with, but, IMO, has no relation to the issue of the expansion of CL.

Because it seems obvious that the Board already understands the president that will be set in whatever way the Board rules and because of the manner in which the Board is going about the decision process, I'm confident that whatever the decision made, it will be in the best long term interests of Northbrook.

Fred Polito
2044 Greenview Road
847.272.3625
https://sites.google.com/site/fredpolitoarch

Beware External Email - Think Before You Act

Matthew R. Margolis
2050 Greenview Rd
Northbrook, IL 60062
August 18, 2023

Village of Northbrook Board of Trustees
Ms. Katherine Ciesla, Mr. Robert Israel, Ms. Muriel Collison,
Ms. Heather Ross, Ms. Johannah Hebl, Mr. Daniel Pepoon and
Ms. Joy Ebhomielen
1225 Cedar Lane
Northbrook, Illinois 60062

Re: Rezoning and Subdivision Requests by Petitioner Living

Dear Members of the Village of Northbrook Board of Trustees:

Thank you for the time spent on August 8th listening to and considering the concerns of me and my fellow neighbors relating to Covenant's request for zoning modifications and other accommodations to support its demolition of an existing 24-unit structure and the proposed development of three new structures housing a total of 36 units (a creation of an increase of only 12 total units).

I will begin by highlighting issues that my friend and neighbor, Alan Patzik, has shared as well and that we have discussed at the various Plan Commission meetings leading up to this point:

At the core of the neighbors' concerns and objections is our belief that:

(i) an adjoining commercial or institutional property owner should not be allowed to acquire residential properties in an established residential neighborhood and repurpose that residential use to facilitate their expansion, and

(ii) allowing Covenant to convert the back yards' of two adjacent residential parcels into retention basins to support its expansion will create uncertainty regarding what the Village will allow Covenant to do in the future on the two other residential lots its owns on Greenview or on other lots that it might seek to acquire in the future, and that this uncertainty will create an overhang that discourages people from buying or improving properties on Greenview, and negatively impacting the value of the existing properties.

What we know is that Covenant owns 6 lots on Techny and Greenview. Two of these are on Techny. One of which they plan to raze and shift the creek onto and put detention onto; the other they just recently made the decision to rent. The other four are on Greenview. The one located immediately to the south of my family's home, 2074, sat vacant for 14 months before Covenant finally started to take care of the property and now they are allegedly going to rent it. The same is true for the property they own at 2090. It was in disrepair, uninhabited for over a year at least

(though they have owned it since we moved to the neighborhood in 2017), however, in the last month they just started to take care of it and are now allegedly going to rent it. We know they own two properties further south as well. One is rented and has been for the last few years to a lovely young family whose daughter goes to Wescott. The other property to the immediate south of that one is a vacant lot Covenant, to my knowledge, has owned for more than a few decades.

Our concern is TRUST. What will Covenant do with these properties they are allegedly renting now *if* you approve their plan. And how long are these leases? Is it a veil to show good faith until they get what they want and then once they do, they get their renters out of there and let the properties go into disrepair again? Letting them decay to the point of the one they own on Techny that they plan to raze and at that time, petition you or the next board to raze them in order to create more detention for the next project? What they are seeking and what you might approve is a very slippery slope.

We ask that the Village request information about other lots in the area that might be owned or controlled by Covenant.

During a series of Plan Commission Meetings, and the most recent Board of Trustees meeting, several items were discussed that require clarification, correction or further comment. In this regard, please consider the following:

1. Despite Claims to the Contrary, Residential Property on Greenview is Being Rezoned.

    a. Covenant has repeatedly told the Plan Commission and the Village Board that it is not rezoning any property on Greenview. It suggests that it is merely subdividing the parcels and incorporating the rear portions of the parcels into its existing 50-acre campus.
    b. Regardless of semantics, the result is that Covenant proposes to cause a portion of the existing lots to be subdivided and rezoned from R-3 to R-8.

2. Covenant is a Valued Member of the Community – But it has Neighbors.

    a. We heard several Village Trustees tell us that Covenant is a valued member of the Northbrook community. We wholeheartedly agree. None of us are saying that the residents of Covenant are any less valued than any of us.
    b. But our community's regard for Covenant does not justify a decision to allow it to expand in a manner that negatively impacts its residential neighbors by creating instability in the neighborhood and negatively impacting the marketability and value of our properties. Remember, the Greenview neighbors are valued, tax paying members of the community as well, and it is Covenant, not the neighbors, that seek to change the current condition for its own benefit.

3. Failure to Investigate other Options.

    a. During the Plan Commission hearing, members of the public asked Covenant to investigate other options, such as underground retention, as was done at Wescott School, or to increase the size or depth of its existing ponds or to create additional ponds or retention on its existing campus.

b. In response, its engineer testified that there were too many underground utilities in place to make underground retention practical. No additional investigation was done or questions asked of Covenant.
c. Covenant wants us to believe that the existing utilities are too abundant to allow for the construction of underground detention, but are perfectly located to enable Covenant to successfully relocate Mallard Creek and to excavate the property as necessary to construct foundations to support three new multi-story buildings that increases the impervious space by over 30%.
d. No member of the Plan Commission or Board has even asked Covenant about expanding their footprint onto other parts of its property that are currently uninhabited and ripe for building that would not impact our neighborhood or any other adjacent neighborhood.
e. We ask that the Village challenge Covenant to find other options using the land on the current campus.

4. Preliminary Support is Preliminary.

a. The Greenview Road neighbors recognize that the Village may not have fully appreciated the significant negative impact that Covenant's plan is likely to have on the neighborhood at the time that it provided its preliminary, non-binding, assessment of the proposed project over a year ago. We also understand that the Village may be hesitant to require that Covenant modify its plans.
b. But this is the very reason that the notice and public hearing process exists – to create a process for investigation and public comment and to implement changes based on that input and new information.
c. We ask that the Board of Trustees remember that (i) the Village's preliminary assessment was by its nature non-binding, (ii) Covenant pursued the property acquisitions on Techny and Greenview knowing that the zoning changes required Village and community support, (iii) Covenant could have, but elected not to, engage with the Community early on to understand our concerns (to date, its total community engagement has consisted of a single 1-hour meeting conducted on 3-day notice); (iv) Covenant failed to advise the Plan Commission and the Village Board (until requested by the neighbors) of its other holdings on Greenview Road and (v) Covenant has refused to be forthright with the Village or the neighbors about its plans for the other three-pronged buildings on its property and the lots that it owns on Greenview.

5. The Village Needs to Understand and Control What Comes Next.

a. Covenant has three other buildings on its property with the same configuration (24 units in each of the three-pronged buildings) as the one that it has told us is outdated and needs to be replaced.
b. When asked, Covenant told the Plan Commission that it had no plans for those buildings and no plans for the other residential lots that it has acquired on Greenview.
c. As is the case with other statements made by Covenant Village, this is simply not believable. To date, we still do not have information regarding its plans. For a billion dollar corporation to continue to buy up residential lots that are ONLY adjacent to its

property and not simply in the surrounding community, more information needs to be provided as to what the long term plan is.

d. The lack of a clear understanding of what it plans to do with these other buildings and the lots it owns on Greenview, and the creation of clear and enforceable limits on what Covenant will be allowed to do in the future with regard to residential parcels on Greenview creates a cloud over the neighborhood and negatively impacts its growth, property values and attractiveness to future neighbors.
e. The Village cannot, in good conscience, allow it to proceed without putting protections in place for the Greenview community and its neighbors.

6. Need for Village Approval for Future Zoning Relief.
    a. One of the Commissioners noted that Covenant would have to come back to the Village and seek its consent before it moves forward with plans to subdivide other parcels to support further expansion and the export of its additional detention and retention.
    b. While correct, the Commissioner's statement ignores the fact that decisions made today create precedent for later decisions. The Village's willingness to allow Covenant to subdivide and rezone the two Greenview parcels, create retention and detention on both the portion of parcel incorporated into the Covenant property, and on the portion of the parcels that are to remain R-3 residential, will, at best, create uncertainty regarding whether other parcels will be similarly subdivided, rezoned and used for retention and detention.
    c. This uncertainty can only be addressed by avoiding a bad precedent now and setting clear limits for the future. This is the purpose of zoning laws, to create guidelines and certainty for homeowners.

7. Village's Power to Limit Covenant's use of the Greenview Parcels.

    a. One of the Village Trustees questioned whether the Village had the power or authority to cause Covenant to find another solution to address its detention and retention needs, or whether it had the power or authority to require Covenant to divest of and agree not to acquire and repurpose other properties on Greenview.
    b. Just as the Village can, and likely will, withhold its consent to the requested zoning changes unless Covenant implements programs to reduce lift assists and other calls, and agrees to pay increased charges for excess calls, the Village can certainly condition its approval on Covenant's agreement to not subdivide or seek zoning relief in respect of other properties on Greenview.
    c. Further, it has been stated by both the Plan Commission and your Board that you cannot prevent Covenant from purchasing properties as they desire. This is true. However, you can prevent them from re-zoning the properties. This is very much within your control and something we are asking that you consider heavily.

While in no way am I or my fellow neighbors for the plan that Covenant is proposing (to clarify, in its current form), here is what my wife and I could agree to:

- Allow Covenant to proceed with the plan in its current form;

- Covenant then puts 2074, 2090, and the vacant lot on Greenview on the market to sell to the public;
- Covenant agrees to discontinue buying properties on Greenview on the West side of the street, adjacent to its campus;
- Covenant ensures that the landscaping that is done as part of this project insulates the houses on the West side of Greenview from their campus (as we are now);
- Covenant is forthright with all future plans and provides adequate notice to all residents on Greenview, both sides of the street, if any future work is done, not just a handful as it had 16 months ago.
    - Many of the "stories" Covenant told a few of my neighbors in 2022 (those whose properties were immediately adjacent to the work they are proposing to do) as far as the benefits of what they were doing to the neighbors were complete and utter lies. None of those plans have been a part of any plan of theirs since the first Plan Commission meeting. Again, it comes down to TRUST.

Thank you for your consideration.

Matthew Margolis

Michael I. and Tamara L. Lew
2121 Mallard Dr.
Northbrook, Illinois
60062-6600

August 18, 2023

To the Board of Trustees
Village of Northbrook
1225 Cedar Lane
Northbrook, IL 60062

Via E-mail

Dear President Ciesla and Members of the Board,

Re: Docket No. Pcd-22-11: 2625 Techny Road - Covenant Living Planned Development

To save your time, I have attached a copy of my letter of August 3, 2023, which describes my personal experience with Covenant Living ("CL") both decades ago, as a village trustee and member of the Plan Commission, and currently, as a neighbor living one block away from the area of proposed rezoning.

During the public hearing on this petition, I suggested that if the board should be inclined to approve the relocation of Mallard Creek, and to make certain zoning and other changes requested by petitioner, that it's approval should be conditioned upon an agreement by CL to divest itself of all its residential lots fronting on Greenview Road (the "Greenview Lots").

During the board's discussion, several trustees criticized CL's use of Northbrook Fire Department personnel to assist fallen residents and do other work that would typically be performed by nursing assistants in a retirement or convalescent home. It was stated that approval of the petition could be conditioned upon CL taking steps that would satisfy the concerns of the board in this regard.

In the same way, it would be perfectly reasonable for the board to require CL to dispose of the Greenview Lots. As stated in my earlier letter, the damage done by CL by discreetly purchasing and holding all these properties as part of its long-term expansion plans has already done significant damage to the community. By requiring the disposition of these properties, and an agreement not to purchase nearby residential properties in the future without the consent of the Village Board, in exchange for approval of the petition, the board can save the north half of Greenview Road from its current death spiral. It will also free up millions of dollars for the petitioner to use in its current expansion plans, and elsewhere. Lastly, it will also prevent the obvious next step from happening; CL did not purchase, and is not retaining, these lots because they enjoy tying up their money; you can be sure that they will be back in the future to request further expansion.

Indeed, one of the reasons for my interest in this petition is the fact that CL has had a history of coming back repeatedly to the Board of Trustees seeking some sort of expansion. And as a wealthy and powerful corporation they have the staying power to be patient and make their next request to to a future generation of trustees. By including the condition that I have suggested, you may bring this process to an end.

I don't think anyone on either side of this petition is against CL or the retirement village. However, as many of the trustees themselves stated in the meeting, the manner in which this expansion has been

developed, and the gross disregard CL has displayed for the interests of the larger community, has put this request in a class beyond what any of us have seen in the past. I, and my neighbors, are heartened by the fact that you are acting with caution in considering this petition. We hope that you will keep in mind the reasonable concerns of the citizens of Northbrook, and not simply those of the petitioner.

Yours very truly,

Michael I. Lew

Michael Lew

Michael I. and Tamara L. Lew
2121 Mallard Dr.
Northbrook, Illinois
60062-6600

August 3, 2023

To the Board of Trustees
Village of Northbrook
1225 Cedar Lane
Northbrook, IL 60062

Via E-mail

Dear President Ciesla and Members of the Board,

Re: Docket No. Pcd-22-11: 2625 Techny Road - Covenant Living Planned Development

As you can see from my address, I live a block to the east of the area of proposed rezoning, and I do not think that my family will be directly affected by the negative impact of the changes sought by Covenant Living ("CL") in the above referenced petition. Although I was active in village government for almost 25 years, as a Village Trustee and as a member of various village commissions (including terms as Chairman of the Plan Commission, the Architectural Control Commission, and the Board of Fire and Police Commissioners), I do not often comment on matters of village government. However, I feel compelled to speak because this petition presents some significant issues for the future and builds upon earlier actions of the village, some of which occurred during my tenure in office.

The petition seeks to expand an upscale retirement facility that has been in this community for over 60 years. During those years, CL has expanded significantly, but always on their existing campus. During my time as both a commissioner and trustee, I reviewed and approved CL's requests for expansion, which included some of the largest buildings that are now on their campus. To my recollection, we never turned them down.

But this proposal is different. The historical image of CL, as a local charitable organization providing retirement living accommodations, is out of date. Today. CL is a large multistate organization with assets of over $1.4 billion. Although it is exempt from paying federal income taxes, their public online information states that entrance fees are in the range of from $100,000-$450,000 and monthly rents are in the range of $5,000-$7,000. CL is today a very big corporation, which owns one of the largest parcels of land in our village, and which provides services to the very wealthy. The petition should be evaluated as the expansion of a large and profitable rental enterprise.

Over the years, CL has been discreetly buying up nearby lots, well aware that they were zoned only for single-family residences. In this petition they are asking the village to change the zoning, incorporate surrounding single family residential lots into their current campus, and take other related actions. Unlike the petitions of the past, the requested changes will allow them to expand beyond their current boundaries and, specifically, to move their stormwater and detention areas onto the surrounding residential lots.

As you can see from the record of the Plan Commission hearings on this issue, there is little community objection to CL increasing the number of rental units. The concerns of the community relate to three points:

1. Stormwater management and the fear of flooding as a result of relocating Mallard Creek;
2. Loss of the natural buffer area between the current facility and the adjoining single-family residential area, which has grown up over 60 years; and
3. The negative impact of the proposal upon the Greenview Road residential neighborhood.

I will limit my comments to only this third point.

By buying up many lots along Greenview Road, CL has already done substantial damage to the neighborhood. All you need to do is drive down Greenwood Road south of the lots abutting the CL property to see the beautiful normal development that has taken place over the past few decades. During the almost 45 years that my wife and I have lived on Mallard Drive, we have seen old houses on Greenview purchased by new families. These families have built beautiful homes on these grand R-3 zoning lots. That's what should have happened all along Greenview Road. But CL has offered premium prices (as I've been advised by people who have knowledge of some transactions) to prevent the sale of properties to families who might wish to build a new home and add something to the community. And CL has done nothing after purchase to improve these properties in fact, some have been neglected. We can now see that CL has been working toward a master plan to expand. Indeed, this petition originally proposed to move their stormwater detention area all the way to Greenview Road, but the almost unanimous rejection of that proposal by the Plan Commission caused CL to pull back.

The current proposal is to subdivide some of the lots fronting on Greenview Road and to keep them as a façade in their current state. Even this alternative will continue to have an adverse impact upon the neighborhood, and it received only four affirmative votes by the Plan Commission, one less than the five typically required for approval. The Village Board must now make the determination whether or not to approve the petition in its present form. In my opinion, if CL wants to expand, they should be required to show why they cannot do so on their existing campus. In any event, they should not be rewarded for the damage they have already done to the community by a zoning change that will give them an immediate benefit today, with the potential for doing even further damage in the future. There must be a way to provide some relief for them without permitting them to retain their "death grip" on the neighborhood.

There is nothing an individual, or even a group of citizens, can do to stop a huge corporation from buying property and destroying a neighborhood. But our zoning laws should apply to protect the community and the village. I and my predecessors in village government gave them essentially everything they requested. But I urge you to recognize that this is part of a long-term expansion plan that won't stop until you stop it. I urge you to reject the petition in its present form and ask that they come back with a proposal that will better protect the adjoining R-3 neighborhood.

Yours very truly,

Michael I. Lew

Michael Lew

Archived: Friday, September 8, 2023 10:13:53 AM
From: Sunil Pullukat
Sent: Friday, September 8, 2023 9:33:50 AM
To: Pandey, Swati
Subject: Letter to the board regarding CL
Importance: Normal

Can you pls pass this info to the board or tell me how I can send this to them.

Dear village Board members,
My name is Dr Sunil Pullukat. We were invited to attended a meeting with CL at the CL campus and I was disheartened by the way the meeting unfolded, with residents and Greenview neighbors at odds. There was misinformation circulating among the residents, and the CL executives appeared unwilling to consider the concerns of the Greenview neighbors. Randy Gross, one of the CL executives, displayed extreme rudeness during the meeting. While CL executives acknowledged shortcomings in communication, they still seemed reluctant to address the needs of the Greenview neighborhood. Randy, in particular, did not seem receptive to suggestions or concerns, making it feel as though he attended the meeting begrudgingly.

We inquired whether CL had plans to enhance the Greenview properties they currently hold to improve their appearance and increase property values. Or sell the properties in the future. Regrettably, they do not have any such plans and intend to let these properties deteriorate. Their lack of a ten-year plan for these properties, despite being a billion-dollar company, is perplexing.

We even asked them to put the detention underground so we don't have wetland that attract bugs all summer. And they didn't seem willing to do that. They have many options they can do to enhance the neighborhood and make people happy and they choose not to. This is not an example of a good neighbor. They can put detention underground, develop their empty lots, remodel or build on the deteriorating homes, sell the properties after zoning it. Finding another building they can renovate so they can use their own land for detention, building the detention in a different area. They can do any of these things and they choose not too.

It's difficult to fathom how allowing someone to rezone the area could negatively impact property values for all the homes on that block. CL has held some of these properties for 30 years without making any improvements. We believe it's important not to be misled in this matter. Please consider withholding approval for the zoning change until CL presents a comprehensive plan for these properties.

If CL desires a zoning change, it should come with benefits for the neighborhood. The most beneficial course of action would be for them to build a high-quality home on the vacant lot they own and either construct a new home or renovate the existing one at 2090 Greenview. Such actions would undoubtedly add more value to the neighborhood and create peace among the neighbors.

We implore you to deny the zoning change and encourage CL to explore alternative approaches or commit to remodeling and developing the neglected properties. Please safeguard the well-being of the Northbrook neighborhood from the potential negative consequences of hasty decisions.

Dr. Sunil Pullukat
773-852-8423
Beware External Email - Think Before You Act

Archived: Monday, August 21, 2023 8:33:32 AM
From: Sunil Pullukat
Sent: Friday, August 18, 2023 4:01:25 PM
To: Pandey, Swati
Subject: Letter to board
Importance: Normal

Pls pass this on to the board for review before the next meeting. Thank you very much.

Subject: Concerns and Considerations Regarding Covenant Living's Expansion Request

Dear Members of the Village of Northbrook Board of Trustees,

I hope this letter finds you well. I am writing to express my concerns and objections regarding Covenant Living's (CL) request for zoning modifications and other accommodations to support the demolition of an existing 24-unit structure and the proposed development of three new structures housing a total of 36 new units. I appreciate the time you spent on August 1st to listen to the concerns of Greenview Road neighbors, and I believe it is crucial to provide a comprehensive perspective on this matter.

At the heart of the neighbors' concerns lies the belief that CL's acquisition of residential properties within an established residential neighborhood, with the intention of repurposing them to facilitate its expansion, raises significant questions about the integrity and sustainability of our community. This issue can be divided into several key points that need careful consideration:

1. **Impact on Residential Properties**: The neighbors are concerned about the potential negative effects of commercial or institutional property owners acquiring and repurposing residential properties within established neighborhoods. We believe this sets a precedent that could compromise the character and identity of our community.

2. **Retention Basins and Uncertainty**: Converting backyards of adjacent residential parcels into retention basins to support CL's expansion has sparked worries about future implications. Especially when the basins are enormous. The size of the basins for the two lots on Greenview is as follows 2074 Greenview is 3,689 Square Feet from about 37 ft x 99 ft
2090 Greenview is 4,346 Square Feet from about 37 ft x 117 ft. These homes will have no backyards and again reducing the value of the properties. Why can't they put it underground? They should put the basins underground. This will make it more safe and preserve the value of these properties. The uncertainty surrounding CL's potential expansion plans on its other residential lots casts a shadow over property values and the overall desirability of the neighborhood.

3. **Exhibit A: Ownership and Control**: The attached map (Exhibit A) provided by the Plan Commission denotes the lots owned by CL. (Pls refer to Alan Patzik email)We urge the Village to gather information about other lots in the vicinity that might be under CL's ownership or control, as these holdings could significantly affect the trajectory of the neighborhood.

4. **Rezoning Confusion**: The semantics surrounding CL's proposed actions have led to confusion. While CL contends it is subdividing parcels and incorporating rear portions into its existing campus, the result is the rezoning of existing lots from R-3 to R-8. This discrepancy requires clarity and transparent communication.

5. **Neighborly Relations and CL's Intentions**: While we acknowledge CL as a valued member of the community, we maintain that the proposed expansion should not come at the expense of destabilizing the neighborhood. It is important to recognize the interests of all community members, including long-standing residents and taxpayers, who have a vested interest in preserving the neighborhood's character.

6. **Exploration of Alternatives**: During the Plan Commission hearings, the public suggested alternatives like underground retention or expanding existing ponds. The response from CL's engineer raised questions about feasibility. It's essential for CL to explore all viable options, considering the impact on the community.

7. **Precedent and Accountability**: The preliminary support given to CL's plan over a year ago must not discourage the Village from reevaluating the situation based on new information and community input. The decision-making process should uphold the principle of accountability and adaptability.

8. **Future Planning and Limitations**: CL's plans for its other buildings and residential lots on Greenview remain unclear. Ensuring that CL adheres to strict limits and shares its future intentions can prevent a sense of uncertainty and maintain the community's growth and attractiveness.

9. **Village's Authority and Power**: It is imperative to explore the extent of the Village's authority to influence CL's plans and to set boundaries that protect the community's interests. The community's wellbeing and future prospects are
paramount.

1. Divesting of their residential properties on Greenview. If we allow them to move forward can we have them divest the Greenview properties so other families can purchase and renovate the properties to bring the value up. This could be an option everybody would be happy with. CL gets what they want. Neighbors feel a sense of security with the future of Greenview and Northbrook doesn’t loose tax paying property taxes for these properties.

In conclusion, I urge the Board of Trustees to thoroughly deliberate on these concerns and consider the long-term impact of the decisions made. By setting clear limitations, fostering transparency, and prioritizing the interests of the community, we can ensure the sustainability and prosperity of Northbrook. Thank you for your time and consideration.

Sincerely,

Dr. Sunil Pullukat
2104 Greenview rd
Northbrook il 60062

Spullukat7@gmail.com
7738528423

Beware External Email - Think Before You Act

covenant living of NORTHBROOK

August 4, 2023

Dear President Ciesla and Northbrook Board of Trustees,

My name is Michelle Pardun, and I am the Executive Director of Covenant Living of Northbrook. I started working at this community in March 2019 as the Associate Executive Director. This past June I moved into the Executive Director role. I am writing this letter to share from my perspective the reasoning for proposing an expansion project.

In the past 4 + years I have been at Covenant Living of Northbrook, I cannot express how much the Village means to my residents and the sense of community everyone has who lives here. I have many residents who lived in Northbrook before moving to my campus and are very proud of their Village heritage, raising a family here in Northbrook, and now staying here in Northbrook in their retirement days. We look forward to the future so this tradition can continue – staying in the same zip code and just changing their street address.

Covenant Living of Northbrook is about to embark on our 60th anniversary in 2024. Many people have worked and lived on this campus and have brought so much to the Village of Northbrook in many ways. We are a business, but we are truly just another neighborhood within Northbrook who are very proud to call Northbrook home. Many young adults who live in Northbrook attend Glenbrook North and South High Schools. We welcome many of these students to work for our community as they begin their new journey to employment. Young adults are making a difference with our residents, and we want this to continue.

Our expansion project includes building more Carriage Homes and upgrading our Town Center with expanded dining venues. We are looking at our current population and what they want, and we are looking towards the future. We must continue to upgrade and enhance our community with the latest features, new buildings, and more services to offer. This is key to the livelihood of our Covenant Living of Northbrook as we must stay competitive and attractive.

We have been great neighbors for 60 years and we intend to stay great neighbors. My current residents want and need and support this project. We are people taking care of people. This is who we have been and this will never change.

I appreciate your support of Covenant Living of Northbrook and I urge you to consider voting in favor of our proposal.

Thank you,

Michelle Pardun
Executive Director

covenant living of NORTHBROOK

July 27, 2023

Dear President Ciesla and the Northbrook Board of Trustees,

This letter asks for your support and approval of the planned redevelopment and expansion at Covenant Living of Northbrook. We've been researching senior living options in the North Shore area for some time, but when we learned of what is planned for the senior living community in Northbrook, we knew that this is exactly what we were seeking in living out our retirement years in Northbrook. We've made a reservation deposit for one of the new planned apartment homes and really look forward to calling this community home in the near future.

A big factor in our decision about wanting to move to Covenant Living of Northbrook is its solid reputation, its 60-year history, and being a good community partner within the greater Northbrook community.

Your support and approval help in keeping Covenant Living of Northbrook a modern and viable option for older adults when determining where to move. We have followed the approval process with the plan commission and believe Covenant Living has been very diligent in accommodating all requests and concerns, not only that of the plan commission, but also those of nearby neighbors. No one wants the character of their neighborhood to change, and from everything we've heard and read, this planned redevelopment will in no way be doing that.

Please consider a yes vote on approving this planned redevelopment. Covenant Living of Northbrook and the Village of Northbrook is our future home and your favorable stance on this is an important part of this senior living community's future.

Sincerely,

Name (print): HENRY NOTHNAGEL

Address: 1781 Aberdeen Dr.

Glenview, IL 60025

Signature: Henry G. Nothnagel

Date: 8/6/23

covenant living
of NORTHBROOK

July 27, 2023

Dear President Ciesla and the Northbrook Board of Trustees,

This letter asks for your support and approval of the planned redevelopment and expansion at Covenant Living of Northbrook. We've been researching senior living options in the North Shore area for some time, but when we learned of what is planned for the senior living community in Northbrook, we knew that this is exactly what we were seeking in living out our retirement years in Northbrook. We've made a reservation deposit for one of the new planned apartment homes and really look forward to calling this community home in the near future.

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Sincerely,

Name (print): George K Metzger

Address: 2531 Crabtree Ln

Northbrook

Signature: George K Metzger

Date: 8/6/2023

August 1, 2023

Dear President Ciesla and Northbrook Board of Trustees:

I am writing to request your approval of the CLON redevelopment and expansion application. I am not a long-time resident; I have only had the privilege of living her for almost two years but even after such a short time, feel a strong sense of community I also am lucky enough to have been selected as a resident ambassador for our redevelopment plan so I feel I am very aware of the proposed expansion of the town center and the building of the carriage homes.

Prior to moving to Covenant I lived in the village of Lake Bluff for over 20 years where I was very active in the community as I feel I am here. I am active in both Axelson and Brandel being able to bring my therapy dog to both facilities for the benefit of the residents and myself. I continue to hope to find more opportunities for volunteerism both in the Northbrook community and at Covenant as the two communities go so hand in hand and work so well together. Having worked at the Chicago Symphony Orchestra in Marketing for 30 years and being an integral part of its community engagement program, I know how vital it is in having common interests.

CLON currently has 516 residents that can proudly call this community home! And what a home it is! We have everything here to make us feel welcome and well cared for. We have always had strong ties to the greater Northbrook community, considering most of the residents I have met are former Northbrook residents. We have closely watched the planning commission meetings over the past 3 months, and are pleased with the changes that have been made to the plan to accommodate our neighbor's concerns.

Covenant Living is a great organization, and this plan positions it as a very strong and desirable option for the residents from Northbrook well into the future. I greatly appreciate your support and the support of all the Northbrook Board of Trustees in approving this project. I urge you to consider voting in favor of this most worthy proposal.

Sincerely,

Marianne Lombard-Koy

Marianne Lombard-Koy

2145 Mayapple Lane

Northbrook, Il 60062

covenant living
of NORTHBROOK

July 27, 2023

Dear President Ciesla and the Northbrook Board of Trustees,

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Please consider a yes vote on approving this planned redevelopment. Covenant Living of Northbrook and the Village of Northbrook is our future home and your favorable stance on this is an important part of this senior living community's future.

Sincerely,

Name (print): KAREN H KRISBERG

Address: 15 PARKWAY NORTH BLVD APT. 247

DEERFIELD, IL. 60015

Signature: Karen H. Krisberg

Date: 8-9-2023

covenant living of NORTHBROOK

July 27, 2023

Dear President Ciesla and the Northbrook Board of Trustees,

This letter asks for your support and approval of the planned redevelopment and expansion at Covenant Living of Northbrook. We've been researching senior living options in the North Shore area for some time, but when we learned of what is planned for the senior living community in Northbrook, we knew that this is exactly what we were seeking in living out our retirement years in Northbrook. We've made a reservation deposit for one of the new planned apartment homes and really look forward to calling this community home in the near future.

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Please consider a yes vote on approving this planned redevelopment. Covenant Living of Northbrook and the Village of Northbrook is our future home and your favorable stance on this is an important part of this senior living community's future.

Sincerely,

Name (print): Joe and Kerstin Lane

Address: 1816 Waterbury Cir, Glenview, IL 60025

Signature: Joseph C Lane Kerstin D Lane

Date: 8/10/23

Bobbi & Ray Oschger
311 Root St.
Park Ridge, Il 60068

Dear President Ciesla and the Northbrook Board of Trustees,

In our opinion, Covenant Living will hands down be the most beautiful CCRC on the Northshore...drawing seniors to live in Northbrook.....once the proposed Carriage Homes and renovations of the common areas are completed. We've visited numerous CCRCs on the Northshore which is why we feel comfortable in making this statement.

Per the engineer hired by Covenant , it was our understaninding that the proposed Covenant dentention pond would actually decrease potential flooding in Covenant's neighbors yards. We've attended the Northbrook Planning Comission meetings on July 18 and July 25.

Furthermore, in our opinion, the proposed Carriage Homes buildings will be more pleasing to look at than the old / outdated single story building being torn down to make room for the Carriage Homes buildings.

We're eagerly looking forward to moving to Carriage Homes and going to stores and restaurants in Northbrook.

Sincerely,

Bobbi & Ray Oschger
311 Root St.
Park Ridge, Il 60068
(847) 698-6766
email: beadbobbi@gmail.com

covenant living
of NORTHBROOK

July 27, 2023

Dear President Ciesla and the Northbrook Board of Trustees,

This letter asks for your support and approval of the planned redevelopment and expansion at Covenant Living of Northbrook. We've been researching senior living options in the North Shore area for some time, but when we learned of what is planned for the senior living community in Northbrook, we knew that this is exactly what we were seeking in living out our retirement years in Northbrook. We've made a reservation deposit for one of the new planned apartment homes and really look forward to calling this community home in the near future.

A big factor in our decision about wanting to move to Covenant Living of Northbrook is its solid reputation, its 60-year history, and being a good community partner within the greater Northbrook community.

Your support and approval help in keeping Covenant Living of Northbrook a modern and viable option for older adults when determining where to move. We have followed the approval process with the plan commission and believe Covenant Living has been very diligent in accommodating all requests and concerns, not only that of the plan commission, but also those of nearby neighbors. No one wants the character of their neighborhood to change, and from everything we've heard and read, this planned redevelopment will in no way be doing that.

Please consider a yes vote on approving this planned redevelopment. Covenant Living of Northbrook and the Village of Northbrook is our future home and your favorable stance on this is an important part of this senior living community's future.

Sincerely,

Name (print): Dean A Lundgren

Address: P.O. Box 126

East Falmouth, MA. 02536

Signature: Dean A. Lundgren

Date: 8/1/2023

covenant living
of NORTHBROOK

July 27, 2023

Dear President Ciesla and the Northbrook Board of Trustees,

This letter asks for your support and approval of the planned redevelopment and expansion at Covenant Living of Northbrook. We've been researching senior living options in the North Shore area for some time, but when we learned of what is planned for the senior living community in Northbrook, we knew that this is exactly what we were seeking in living out our retirement years in Northbrook. We've made a reservation deposit for one of the new planned apartment homes and really look forward to calling this community home in the near future.

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Please consider a yes vote on approving this planned redevelopment. Covenant Living of Northbrook and the Village of Northbrook is our future home and your favorable stance on this is an important part of this senior living community's future.

Sincerely,

Name (print): Jill Lundgren

Address: P.O. 126
East Falmouth, MA 02536

Signature: Jill Lundgren

Date: 8/1/23

Dear President Ciesla and the Northbrook Board of Trustees:

I am writing to request your approval of the Covenant Living of Northbrook re-development and expansion application. My husband Bob and I are long-time residents of Northbrook like many other of our neighbors here at Covenant Living. Before our move to Covenant Living of Northbrook, we lived at 2880 Beckwith, where we bult our home in 1967. Covenant Living of Northbrook allows us to stay very engaged in the Northbrook community that we call home. The proposed expansion and renovation of the town center will benefit the residents of Covenant Living and allow it to continue offering new competitive living opportunities for future residents, many who will come from Northbrook.

Covenant Living, which currently has 516 residents that call it home, has proudly been a strong community partner for 60 years and has always maintained strong ties to the greater Northbrook community. Covenant Living of Northbrook residents support the Northbrook community in so many ways through fundraising and donations for our police and fire departments, library, and the Northfield Township Food Pantry. Residents also participate in mentoring and tutoring opportunities for our students at neighboring schools as well as providing graduating seniors employed at the community with scholarships. This project will result in Covenant Living remaining competitive among the growing number of senior living options and we want to see Covenant Living continue to be a strong community partner in the many years to come.

A large number of Covenant Living residents have watched the plan commission meetings over the last three months. We are pleased with the changes made to the plan which accommodate many of our neighbors' concerns on Greenview Avenue. It was also encouraging to hear Covenant Living's engineer opinion that the proposed detention along the creek will improve everyone's situation regarding flooding. We are also encouraged by the final plan which makes no zoning changes to Greenview Avenue nor any changes to its character. We believe these plan revisions go far in satisfying the neighbors' concerns.

Covenant Living is a great organization, and this plan positions it as a very strong and desirable option for residents like us from Northbrook well into the future. We greatly appreciate your support and the support of all the Northbrook Board of Trustees in approving this project. We urge you to consider voting in favor of this proposal.

Sincerely,

Carrie Martin

Dear President Ciesla and the Northbrook Board of Trustees: 7/29/23

I am writing to request your approval of the Covenant Living of Northbrook re-development and expansion application. I am a long-time resident of Northbrook like many other of my neighbors here at Covenant Living. Before my move to Covenant Living of Northbrook I lived at
333 Cedar Lane (2 yrs.) Illinois Road (2 yrs) 2815 Beckwith Court (49 yrs)

Covenant Living of Northbrook allows us to stay very engaged in the Northbrook community that we call home. The proposed expansion and renovation of the town center will benefit the residents of Covenant Living and allow it to continue offering new competitive living opportunities for future residents, many who will come from Northbrook.

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Sincerely,

Daryl J. Dyer, formerly Daryl J. Thomson

Daryl and Hal Dyer
2625 Techny Road, Apt 215
Northbrook, IL 60062

Dear President Ciesla and the Northbrook Board of Trustees:

I am writing to request your approval of the Covenant Living of Northbrook re-development and expansion application. I am a long-time resident of Northbrook like many other of my neighbors here at Covenant Living. Before my move to Covenant Living of Northbrook,e lived in Park RIdge for 36 years. Covenant Living of Northbrook allows me to stay very engaged in the Northbrook community that I now call home. The proposed expansion and renovation of the town center will benefit the residents of Covenant Living and allow it to continue offering new competitive living opportunities for future residents, many who will come from Northbrook.

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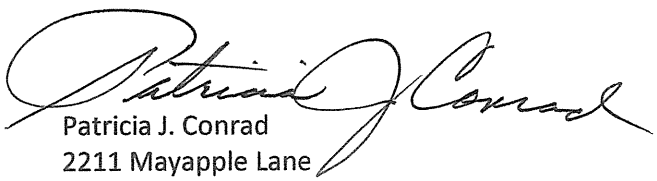
Covenant Living is a great organization, and this plan positions it as a very strong and desirable option for residents like me well into the future. We greatly appreciate your support and the support of all the Northbrook Board of Trustees in approving this project. We urge you to consider voting in favor of this proposal.

Sincerely,



Patricia J. Conrad
2211 Mayapple Lane
Northbrook, IL

covenant living
of NORTHBROOK

July 27, 2023

Dear President Ciesla and the Northbrook Board of Trustees,

This letter asks for your support and approval of the planned redevelopment and expansion at Covenant Living of Northbrook. We've been researching senior living options in the North Shore area for some time, but when we learned of what is planned for the senior living community in Northbrook, we knew that this is exactly what we were seeking in living out our retirement years in Northbrook. We've made a reservation deposit for one of the new planned apartment homes and really look forward to calling this community home in the near future.

A big factor in our decision about wanting to move to Covenant Living of Northbrook is its solid reputation, its 60-year history, and being a good community partner within the greater Northbrook community.

Your support and approval help in keeping Covenant Living of Northbrook a modern and viable option for older adults when determining where to move. We have followed the approval process with the plan commission and believe Covenant Living has been very diligent in accommodating all requests and concerns, not only that of the plan commission, but also those of nearby neighbors. No one wants the character of their neighborhood to change, and from everything we've heard and read, this planned redevelopment will in no way be doing that.

Please consider a yes vote on approving this planned redevelopment. Covenant Living of Northbrook and the Village of Northbrook is our future home and your favorable stance on this is an important part of this senior living community's future.

Sincerely,

Name (print): ELIZABETH FAGERMAN

Address: 9516 THOUSAND OAKS CIR.

SPRING GROVE, IL 60081

Signature: Elizabeth Fagerman

Date: 08/02/2023

Dear President Ciesla and the Northbrook Board of Trustees: 7/29/23

I am writing to request your approval of the Covenant Living of Northbrook re-development and expansion application. I am a long-time resident of Northbrook like many other of my neighbors here at Covenant Living. Before my move to Covenant Living of Northbrook I lived at
Fair Lane, Beckwith Court 2815, (49 years)

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Covenant Living is a great organization, and this plan positions it as a very strong and desirable option for residents like us from Northbrook well into the future. We greatly appreciate your support and the support of all the Northbrook Board of Trustees in approving this project. We urge you to consider voting in favor of this proposal.

Sincerely,

Hal Dyer

Daryl and Hal Dyer
2625 Techny Road, Apt 215
Northbrook, IL 60062

covenant living
of NORTHBROOK

July 27, 2023

Dear President Ciesla and the Northbrook Board of Trustees,

This letter asks for your support and approval of the planned redevelopment and expansion at Covenant Living of Northbrook. We've been researching senior living options in the North Shore area for some time, but when we learned of what is planned for the senior living community in Northbrook, we knew that this is exactly what we were seeking in living out our retirement years in Northbrook. We've made a reservation deposit for one of the new planned apartment homes and really look forward to calling this community home in the near future

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Sincerely,

Name (print): KAREN KRISBERG

Address: 15 PARKWAY NORTH BLVD. APT: 247
DEERFIELD, IL. 60015

Signature: Karen H Krisberg

Date: August 5th, 2023

Dear President Ciesla and the Northbrook Board of Trustees:

I am writing to request your approval of the Covenant Living of Northbrook redevelopment and expansion application. I am a long-time resident of Northbrook like many other of my neighbors here at Covenant Living. Before our move to Covenant Living of Northbrook, we lived at <<address>> for <<X>> years. Covenant Living of Northbrook allows us to stay very engaged in the Northbrook community that we call home. The proposed expansion and renovation of the town center will benefit the residents of Covenant Living and allow it to continue offering new competitive living opportunities for future residents, many of whom will come from Northbrook.

Covenant Living, which currently has 516 residents that call it home, has proudly been a strong community partner for 60 years and has always maintained strong ties to the greater Northbrook community. Covenant Living of Northbrook residents support the Northbrook community in so many ways through fundraising and donations for our police and fire departments, library, and the Northfield Township Food Pantry. Residents also participate in mentoring and tutoring opportunities for our students at neighboring schools as well as providing graduating seniors employed in the community with scholarships. This project will result in Covenant Living remaining competitive among the growing number of senior living options and we want to see Covenant Living continue to be a strong community partner in the many years to come.

A large number of Covenant Living residents have watched the plan commission meetings over the last three months. We are pleased with the changes made to the plan which accommodate many of our neighbors' concerns on Greenview Avenue. It was also encouraging to hear Covenant Living's engineer's opinion that the proposed detention along the creek will improve everyone's situation regarding flooding. We are also encouraged by the final plan which makes no zoning changes to Greenview Avenue nor any changes to its character. We believe these plan revisions go far in satisfying the neighbors' concerns.

Covenant Living is a great organization, and this plan positions it as a very strong and desirable option for residents like us from Northbrook well into the future. We greatly appreciate your support and the support of all the Northbrook Board of Trustees in approving this project. We urge you to consider voting in favor of this proposal.

Sincerely,

Carolyn Songer

Name

2518 Mayapple Court
Northbrook, Il 60062

August 7, 2023

President Ciesla and the Northbrook Board of Trustees
Village of Northbrook
1225 Cedar Lane
Northbrook, Il 60062

Dear President Ciesla and the Northbrook Board of Trustees:

I am writing to request your approval of the Covenant Living of Northbrook re-development and expansion application. Unlike many of my Covenant Living neighbors, I moved to Covenant Living from another community where I had lived for almost forty years. I immediately began to acquaint myself with Northbrook—both its government and what is available to residents. I have joined several organizations so that I may participate in and give back to the community. And, of course, I immediately registered to vote!

Covenant Living has been a strong member of the Northbrook community for 60 years. Most of the over 500 residents are permanent residents of Northbrook. Many residents participate in various aspects of the community and contribute to the community.

The re-development and expansion project will allow Covenant Living to remain competitive in the growing number of senior living options. This will allow Covenant Living to be a strong community partner in the future.

I am pleased to see the changes that have been made to accommodate the concerns of our neighbors on Greenview Avenue. I believe these plan revisions serve the needs of both Covenant Living and the concerned neighbors.

Covenant Living is a responsible, caring organization. This expansion will enable it to offer the needed services it provides to even more people—very likely many present residents of Northbrook who will have the opportunity to remain in Northbrook. I urge you to vote in favor of this proposal.

Sincerely,

Bonita L. Burnett

Bonita L. Burnett

August 3, 2024

Dear President Ciesla and the Northbrook Board of Trustees:

I am writing to request your approval of the Covenant Living of Northbrook re-development and expansion application. Before my move to Covenant Living of Northbrook, I lived in Chicago's North Park neighborhood. (My mother-in-law was a resident here for nineteen years). Covenant Living of Northbrook allows me to be engaged in the Northbrook community that I call home. The proposed expansion and renovation of the town center will benefit the residents of Covenant Living and allow it to continue offering new competitive living opportunities for future residents, many who will come from Northbrook. It is good that the administrators of Covenant Living are thinking ahead!

Covenant Living, which currently has 516 residents that call it home, has proudly been a strong community partner for 60 years and has always maintained strong ties to the greater Northbrook community. Covenant Living of Northbrook residents support the Northbrook community in so many ways through fundraising and donations for our police and fire departments, library, and the Northfield Township Food Pantry. Residents also participate in mentoring and tutoring opportunities for our students at neighboring schools as well as providing graduating seniors employed at the community with scholarships. This project will result in Covenant Living remaining competitive among the growing number of senior living options and we want to see Covenant Living continue to be a strong community partner in the many years to come.

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Covenant Living is a great organization, and this plan positions it as a very strong and desirable option for residents like us from Northbrook well into the future. We greatly appreciate your support and the support of all the Northbrook Board of Trustees in approving this project. We urge you to consider voting in favor of this proposal.

Sincerely,

Janice G. Kelly

Janice G Kelly

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W Higgins Road, Suite 600 Rosemont, Illinois 60018-4920 Tel (847) 823-0500 Fax (847) 823-0520

September 18, 2023

Village of Northbrook
1225 Cedar Lane
Northbrook, IL 60062

Attention: Jack Bielak, PE, Village Engineer
Department of Public Works

Subject: Covenant Living of Northbrook Development
8th Preliminary Stormwater/Floodplain Review & Approval
(CBBEL Project No. 06-0191.00R54)

Dear Mr. Bielak:

The purpose of this letter is to summarize a Christopher B. Burke Engineering, Ltd. (CBBEL) preliminary stormwater/floodplain review for the proposed Covenant Living of Northbrook Development located at 2625 Techny Road in the Village of Northbrook (Village).

We received the following stormwater related items for review:

- Preliminary engineering drawings for the Covenant Living of Northbrook Development, prepared by Kimley-Horn and Associates, Inc. (Kimley-Horn), revised September 14, 2023.

- Drainage Report for the Covenant Living of Northbrook Development, prepared by Kimley-Horn, revised September 14, 2023.

While CBBEL previously approved the preliminary stormwater for this development, we understand that the proposed detention basins have been reconfigured based on comments related to the single family home lots on the east side of the development. CBBEL has reviewed the above information with respect to the Village Ordinances, the Metropolitan Water Reclamation District of Greater Chicago (MWRD) Watershed Management Ordinance (WMO), and standard engineering methods. Based on our review of this information, all of our previous comments have been addressed and we recommend approval of this development.

Please feel free to contact me (lsherry@cbbel.com) at 847-714-5661 should you have any questions.

Sincerely,

Luke J. Sherry, PE, CFM
Senior Water Resources Engineer

Archived: Tuesday, September 12, 2023 6:59:13 PM
From: Randy Gross
Sent: Tuesday, September 12, 2023 8:16:38 AM
To: Ciesla, Kathryn; Israel, Robert; Ross, Heather; Collison, Muriel; Hebl, Johannah K.; Pepoon, Dan; Ebhomielen, Joy; Hebl, Johannah K.
Cc: Pandey, Swati; Mendel, Jonathan; Pavlicek, Cara
Subject: address Alan Patzik letter
Response requested: Yes
Importance: Normal
Attachments:
Alan Patzik 2.pdf

Village Board of Trustees.

I know this case is past public comment but I would like to address several points in response to Mr Patzik's 9.11.23 correspondence. Each area will be addressed by section.

Background. When Covenant purchased the properties, it did not intend to change the zoning. If it did, it would have sought to change the zoning 30 years ago.

Future Activity: Given the comments we received from the neighborhood; it is extremely unlikely we would attempt to rezone any properties on Greenview road. To be clear, we have no intentions on purchasing any more property on Greenview Road.

Other options: We have looked at several options in the design. The US Army Core of Engineers and Metropolitan Water Reclamation district prefer above ground retention.

Thanks for considering my responses.

Randy Gross
Vice President, Project Development
Tel: 773-878-4572 | Cell: 847-302-3976
Covenant Living Communities & Services
5700 Old Orchard Rd, Skokie IL 60077
regross@covliving.org
covliving.org
LinkedIn - Facebook - Twitter - Instagram

Beware External Email - Think Before You Act

Archived: Tuesday, September 12, 2023 6:59:52 PM
From: Randy Gross
Sent: Tuesday, September 12, 2023 8:20:26 AM
To: Ciesla, Kathryn; Israel, Robert; Ross, Heather; Collison, Muriel; Hebl, Johannah K.; Pepoon, Dan; Ebhomielen, Joy; Pavlicek, Cara
Cc: Pandey, Swati; Mendel, Jonathan
Subject: response to letters CL/Northbrook
Importance: Normal
Attachments:
Covenant Living Diagrams and Cover.9.10.23.PDF Covenant Village.msg Covenant Village.msg

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Board of Trustees.

I realize that the public hearing in this matter has been closed but I feel it is important to respond to the attached prior to tonight's meeting.

In response to the attachment Covenant Living Diagrams and Cover 9.10.23 PDF

Appendix # 1 – We provided the neighbors a list of the properties we owned on June 7th and again on September 7th . As we have stated before those are the only properties, we own adjacent to the campus.
Appendix # 2 b. The proposed subdivision requires reducing the depth of the parcels at 2074 and 2090. These parcels properties are compliant with the R3 zoning. These proposed lots are larger than many of the neighboring properties on Greenview road and other adjacent streets. Covenant is not asking for a size variance.
Appendix 2c. We are not rezoning any properties on Greenview Road. We are only rezoning a long narrow lot behind Greenview Rd. that faces Techny.
Appendix 3 – We are adding detention area to the rear of the lots of 2074 and 2090 because it is the required by the Village and the right thing to do. It is our responsibility to detain waters. We own both of those homes and feel that they do no take away from the properties.

In response to the letter from Alan Patzik.
The residents of Covenant Living of Northbrook wanted to come to the neighbors meeting. Their opinions are as valid as those from the surrounding neighborhood.
We have made modifications to the existing plan to accommodate the neighbors and the meeting was to attempt to build relationships for the future.

In response to the email from Henri Bucher.
Since leaving the homes we own vacant was a concern expressed by some of the neighbors, we signed an 18 month lease to a family for the house at 2535 Techny. The lease includes a provision to add two gates to the front of the property because they have a dog. We asked JULIE to mark adjacent utilities as they do for safety reasons. Mr Bucher was upset because he thought we were touching the fence, we are not. We permitted these gates and are not relocating the fence between our properties.

We appreciate your thoughtful consideration and will be available tonight to answer any questions you may have.

Randy Gross
Vice President, Project Development
Tel: 773-878-4572 | **Cell: 847-302-3976**
Covenant Living Communities & Services
5700 Old Orchard Rd, Skokie IL 60077
regross@covliving.org
covliving.org
LinkedIn - Facebook - Twitter - Instagram

Beware External Email - Think Before You Act

9/15/2023

Village of Northbrook
1225 Cedar Lane
Northbrook, IL 60062

RE: ***Covenant Living of Northbrook***
2625 Techny Road
Northbrook, IL

Dear Mr. Bielak,

We are in response of your review comments dated 9/7/2023, for the proposed Covenant Living Redevelopment located in Northbrook, IL. Below is a summary of the actions taken in response to these comments.

Stormwater Comments

1. The HydroCAD analysis contained in the drainage report indicates a 100-year HWL of 659.74 ft for the main detention basin but it is shown as 659.50 ft in the plans.

   Response: The bypass area has been removed from the HydroCAD model. It was shown for weir sizing purposes. The HWL as shown in the HydroCAD model for the proposed scope is 659.44'. There is an additional 0.06 ac-ft of storage that is utilized for additional storage as required by MWRD, setting the basin HWL at 659.50.'

2. The bottom of the main detention basin (652.0 ft) is below the elevation of the primary outlet (652.5 ft). This dead storage may be utilized for volume control (with the use of an underdrain) but cannot be counted as detention volume under the current configuration.

   Response: The outlet invert elevation has been lowered to the bottom of the pond at 652.0'.

3. The inlet/outlet piping for the Greenview Road Homes Detention Basin is "kinked" with a high point at the outlet control structure in the middle of the pipe. Revise for a smooth slope.

   Response: The slopes and creek invert have been revised for a smooth, continuous slope.

Plat Comments

1. The Drainage Easement for the two subdivided properties along with the main property needs to be shown on the plat.

   Response: The drainage easement has been revised on the plat of subdivision.

2. Village engineer signature should be on its own, remove plan commission but provide a place for village president, and remove Cook County Highway Department they do not need to sign off as this section of Techny is owned by the Village.

   Response: The signature blocks have been revised.

3. Identify all existing easement and documents on the Plat.

   Response: Existing easements as known have been added to the plat.

4. Verify and correct easements displayed for each property on Techny Road. The Village would like dedicated ROW for roadway and new sidewalk. Include document numbers that verify easements along Techny Road.

   Response: The ROW dedication along Techny Road has been added to the plat. The property depicted on the Plat of Subdivision matches the deed and we believe is an accurate representation of the ownership of the parcels. The Plat of Subdivision includes a dedication of the ROW for the lots on Techny which are currently within the PUD. Covenant owns an additional property to the east and intends to provide a dedication for the sidewalk under a separate document since that parcel is not part of the current PUD.

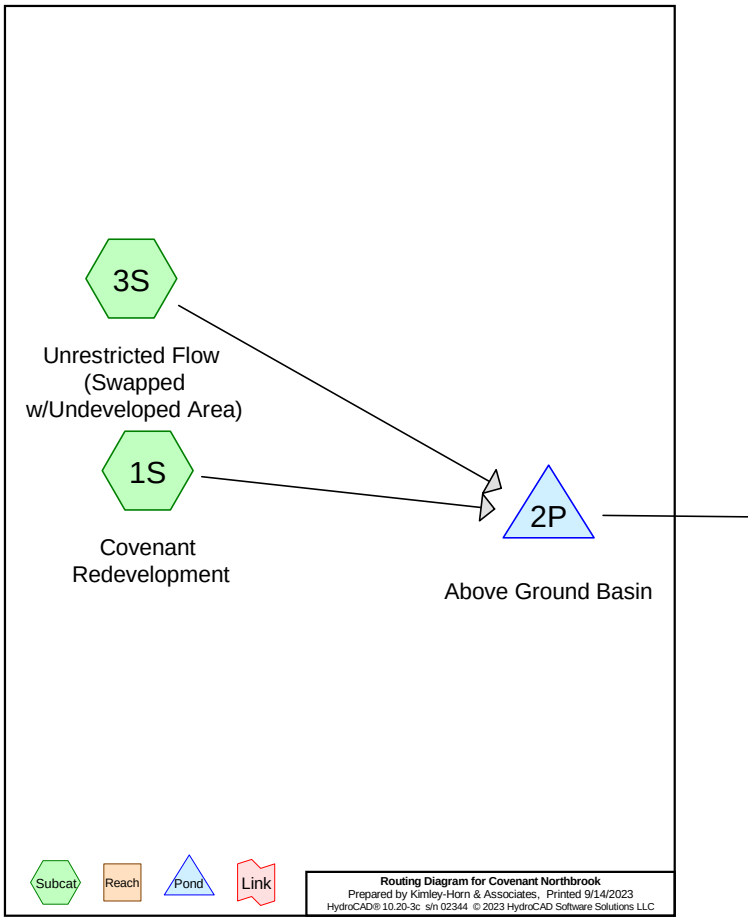
5. There needs to be language on the plat stating each lot is responsible for maintaining their detention basins.

   Response: Language has been added to the plat.

We trust these responses and the description of changes above adequately address your comments. If you have any questions or require any additional information, please contact me at (630) 487-5560.

Sincerely,

Eric Tracy, P.E.
Kimley-Horn and Associates, Inc.
Phone: (630) 487-5560
Email: eric.tracy@kimley-horn.com



Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	002YR-024.00HR	Huff 0-10sm	3Q	Scale	24.00	1	3.34	2
2	100YR-001.00HR	Huff 0-10sm	1Q	Scale	1.00	1	4.03	2
3	100YR-002.00HR	Huff 0-10sm	1Q	Scale	2.00	1	4.97	2
4	100YR-003.00HR	Huff 0-10sm	1Q	Scale	3.00	1	5.49	2
5	100YR-006.00HR	Huff 0-10sm	1Q	Scale	6.00	1	6.43	2
6	100YR-012.00HR	Huff 0-10sm	2Q	Scale	12.00	1	7.46	2
7	100YR-018.00HR	Huff 0-10sm	3Q	Scale	18.00	1	8.06	2
8	100YR-024.00HR	Huff 0-10sm	3Q	Scale	24.00	1	8.57	2
9	100YR-048.00HR	Huff 0-10sm	4Q	Scale	48.00	1	9.28	2
10	100YR-072.00HR	Huff 0-10sm	4Q	Scale	72.00	1	9.85	2
11	100YR-120.00HR	Huff 0-10sm	4Q	Scale	120.00	1	10.66	2

Summary for Subcatchment 1S: Covenant Redevelopment

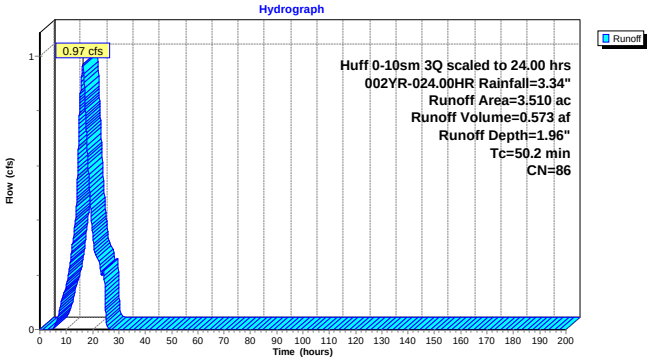
Runoff = 0.97 cfs @ 16.23 hrs, Volume= 0.573 af, Depth= 1.96"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 3Q scaled to 24.00 hrs 002YR-024.00HR Rainfall=3.34"

	Area (ac)	CN	Description
*	3.510	86	
	3.510		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
50.2					**Direct Entry,**

Subcatchment 1S: Covenant Redevelopment



Summary for Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)

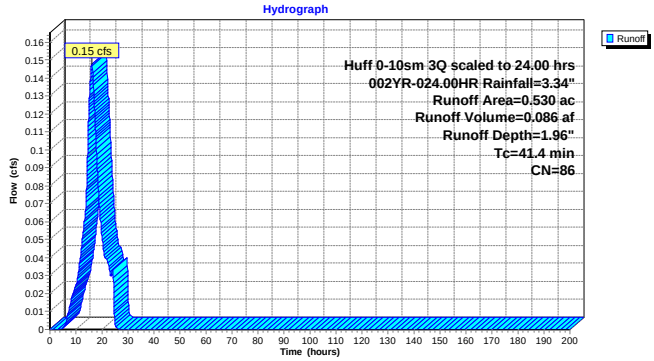
Runoff = 0.15 cfs @ 16.13 hrs, Volume= 0.086 af, Depth= 1.96"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 3Q scaled to 24.00 hrs 002YR-024.00HR Rainfall=3.34"

	Area (ac)	CN	Description
*	0.530	86	Paved parking, HSG C
	0.530		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
41.4					**Direct Entry,**

Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)



Summary for Pond 2P: Above Ground Basin

Inflow Area = 4.040 ac, 0.00% Impervious, Inflow Depth = 1.96" for 002YR-024.00HR event
Inflow = 1.12 cfs @ 16.23 hrs, Volume= 0.659 af
Outflow = 0.12 cfs @ 24.74 hrs, Volume= 0.070 af, Atten= 89%, Lag= 510.7 min
Primary = 0.12 cfs @ 24.74 hrs, Volume= 0.070 af
Routed to Link 5L : (new Link)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Peak Elev= 656.34' @ 24.74 hrs Surf.Area= 13,499 sf Storage= 27,507 cf

Plug-Flow detention time= 1,002.0 min calculated for 0.070 af (11% of inflow)
Center-of-Mass det. time= 593.1 min (1,580.7 - 987.6)

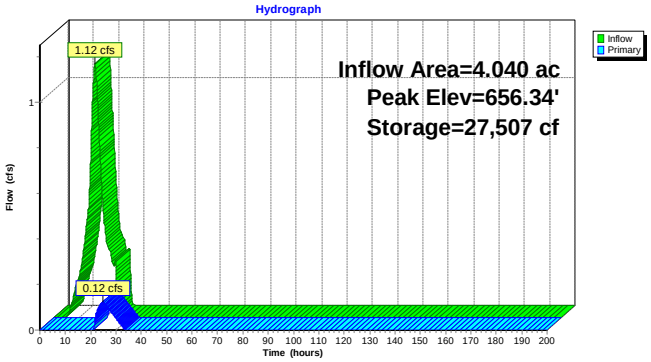
Volume	Invert	Avail.Storage	Storage Description
#1	652.00'	91,777 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
652.00	2,838	0	0
653.00	3,506	3,172	3,172
654.00	4,241	3,874	7,046
655.00	5,025	4,633	11,679
655.10	10,780	790	12,469
655.50	11,650	4,486	16,955
656.00	12,745	6,099	23,053
657.00	14,965	13,855	36,908
658.00	17,224	16,095	53,003
659.00	19,524	18,374	71,377
659.50	20,692	10,054	81,431
660.00	20,692	10,346	91,777

Device	Routing	Invert	Outlet Devices
#1	Primary	652.00'	**3.5" Vert. Orifice/Grate** C= 0.610 Limited to weir flow at low heads
#2	Primary	659.50'	**50.0' long + 4.0 '/' SideZ x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.12 cfs @ 24.74 hrs HW=656.34' TW=656.20' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.12 cfs @ 1.83 fps)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 2P: Above Ground Basin



Summary for Subcatchment 1S: Covenant Redevelopment

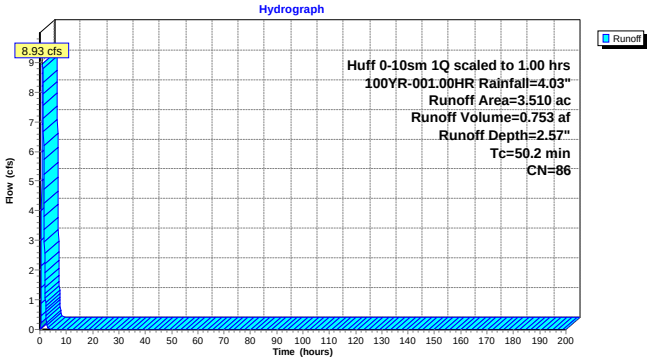
Runoff = 8.93 cfs @ 0.95 hrs, Volume= 0.753 af, Depth= 2.57"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 1Q scaled to 1.00 hrs 100YR-001.00HR Rainfall=4.03"

	Area (ac)	CN	Description
*	3.510	86	
	3.510		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
50.2					**Direct Entry,**

Subcatchment 1S: Covenant Redevelopment



Summary for Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)

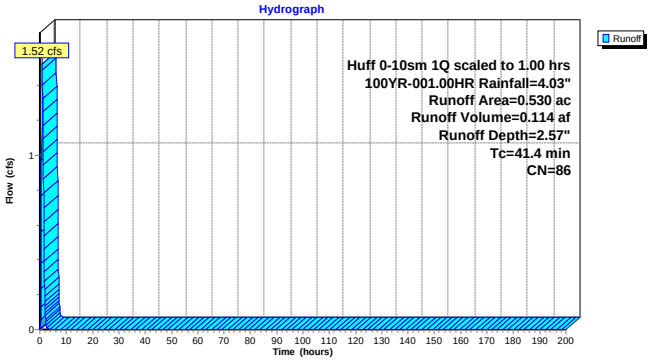
Runoff = 1.52 cfs @ 0.81 hrs, Volume= 0.114 af, Depth= 2.57"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 1Q scaled to 1.00 hrs 100YR-001.00HR Rainfall=4.03"

	Area (ac)	CN	Description
*	0.530	86	Paved parking, HSG C
	0.530		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
41.4					**Direct Entry,**

Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)



Summary for Pond 2P: Above Ground Basin

Inflow Area = 4.040 ac, 0.00% Impervious, Inflow Depth = 2.57" for 100YR-001.00HR event
Inflow = 10.34 cfs @ 0.93 hrs, Volume= 0.866 af
Outflow = 0.29 cfs @ 2.52 hrs, Volume= 0.278 af, Atten= 97%, Lag= 95.3 min
Primary = 0.29 cfs @ 2.52 hrs, Volume= 0.278 af
Routed to Link 5L : (new Link)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Peak Elev= 656.96' @ 2.52 hrs Surf.Area= 14,882 sf Storage= 36,348 cf

Plug-Flow detention time= 490.1 min calculated for 0.278 af (32% of inflow)
Center-of-Mass det. time= 463.1 min (530.7 - 67.6)

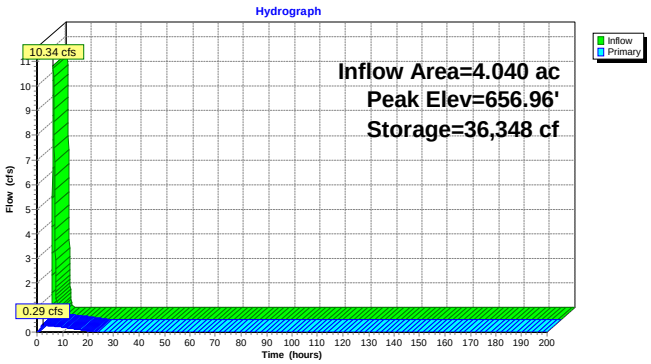
Volume	Invert	Avail.Storage	Storage Description
#1	652.00'	91,777 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
652.00	2,838	0	0
653.00	3,506	3,172	3,172
654.00	4,241	3,874	7,046
655.00	5,025	4,633	11,679
655.10	10,780	790	12,469
655.50	11,650	4,486	16,955
656.00	12,745	6,099	23,053
657.00	14,965	13,855	36,908
658.00	17,224	16,095	53,003
659.00	19,524	18,374	71,377
659.50	20,692	10,054	81,431
660.00	20,692	10,346	91,777

Device	Routing	Invert	Outlet Devices
#1	Primary	652.00'	**3.5" Vert. Orifice/Grate** C= 0.610 Limited to weir flow at low heads
#2	Primary	659.50'	**50.0' long + 4.0 '/' SideZ x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.29 cfs @ 2.52 hrs HW=656.96' TW=656.20' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.29 cfs @ 4.27 fps)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 2P: Above Ground Basin



Summary for Subcatchment 1S: Covenant Redevelopment

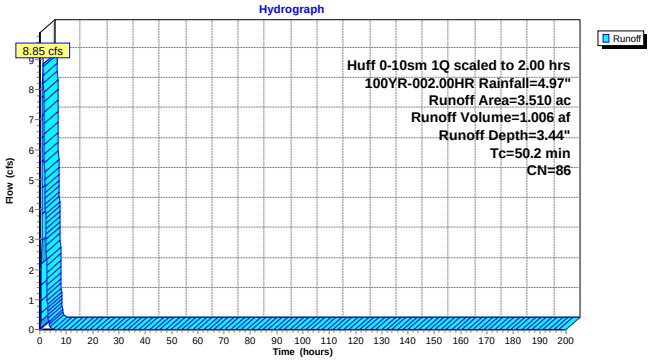
Runoff = 8.85 cfs @ 1.10 hrs, Volume= 1.006 af, Depth= 3.44"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 1Q scaled to 2.00 hrs 100YR-002.00HR Rainfall=4.97"

	Area (ac)	CN	Description
*	3.510	86	
	3.510		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
50.2					**Direct Entry,**

Subcatchment 1S: Covenant Redevelopment



Summary for Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)

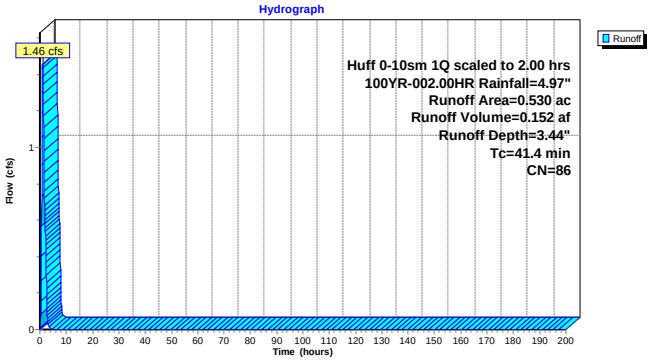
Runoff = 1.46 cfs @ 0.97 hrs, Volume= 0.152 af, Depth= 3.44"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 1Q scaled to 2.00 hrs 100YR-002.00HR Rainfall=4.97"

	Area (ac)	CN	Description
*	0.530	86	Paved parking, HSG C
	0.530		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
41.4					**Direct Entry,**

Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)



Summary for Pond 2P: Above Ground Basin

Inflow Area = 4.040 ac, 0.00% Impervious, Inflow Depth = 3.44" for 100YR-002.00HR event
Inflow = 10.24 cfs @ 1.09 hrs, Volume= 1.158 af
Outflow = 0.40 cfs @ 3.17 hrs, Volume= 0.569 af, Atten= 96%, Lag= 124.9 min
Primary = 0.40 cfs @ 3.17 hrs, Volume= 0.569 af
Routed to Link 5L : (new Link)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Peak Elev= 657.70' @ 3.17 hrs Surf.Area= 16,537 sf Storage= 47,867 cf

Plug-Flow detention time= 686.9 min calculated for 0.569 af (49% of inflow)
Center-of-Mass det. time= 656.9 min (745.5 - 88.6)

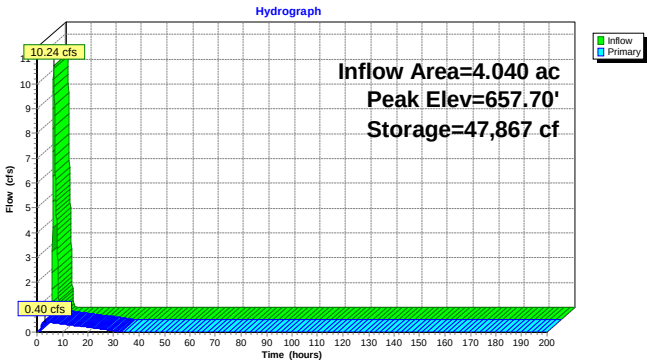
Volume	Invert	Avail.Storage	Storage Description
#1	652.00'	91,777 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
652.00	2,838	0	0
653.00	3,506	3,172	3,172
654.00	4,241	3,874	7,046
655.00	5,025	4,633	11,679
655.10	10,780	790	12,469
655.50	11,650	4,486	16,955
656.00	12,745	6,099	23,053
657.00	14,965	13,855	36,908
658.00	17,224	16,095	53,003
659.00	19,524	18,374	71,377
659.50	20,692	10,054	81,431
660.00	20,692	10,346	91,777

Device	Routing	Invert	Outlet Devices
#1	Primary	652.00'	**3.5" Vert. Orifice/Grate** C= 0.610 Limited to weir flow at low heads
#2	Primary	659.50'	**50.0' long + 4.0 '/' SideZ x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.40 cfs @ 3.17 hrs HW=657.70' TW=656.20' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.40 cfs @ 5.99 fps)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 2P: Above Ground Basin



Summary for Subcatchment 1S: Covenant Redevelopment

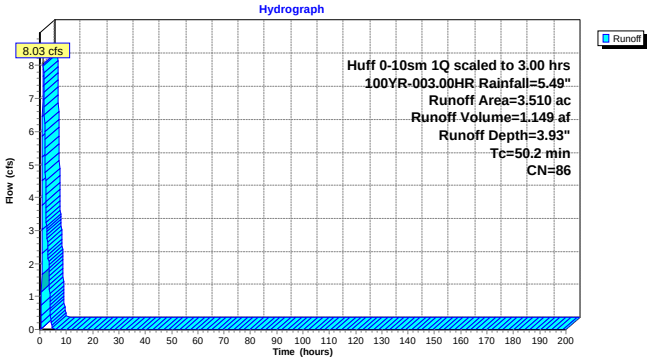
Runoff = 8.03 cfs @ 1.25 hrs, Volume= 1.149 af, Depth= 3.93"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 1Q scaled to 3.00 hrs 100YR-003.00HR Rainfall=5.49"

	Area (ac)	CN	Description
*	3.510	86	
	3.510		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
50.2					**Direct Entry,**

Subcatchment 1S: Covenant Redevelopment



Summary for Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)

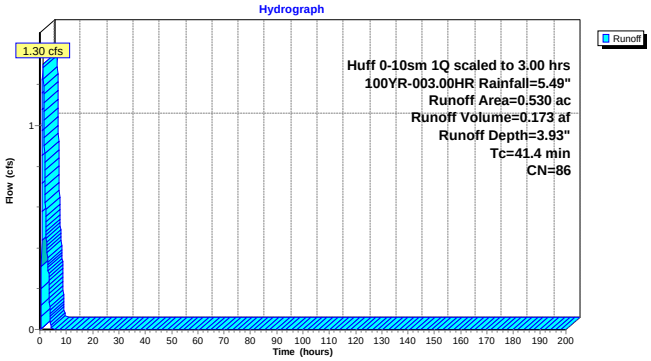
Runoff = 1.30 cfs @ 1.11 hrs, Volume= 0.173 af, Depth= 3.93"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 1Q scaled to 3.00 hrs 100YR-003.00HR Rainfall=5.49"

	Area (ac)	CN	Description
*	0.530	86	Paved parking, HSG C
	0.530		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
41.4					**Direct Entry,**

Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)



Summary for Pond 2P: Above Ground Basin

Inflow Area = 4.040 ac, 0.00% Impervious, Inflow Depth = 3.93" for 100YR-003.00HR event
Inflow = 9.29 cfs @ 1.23 hrs, Volume= 1.322 af
Outflow = 0.44 cfs @ 4.00 hrs, Volume= 0.733 af, Atten= 95%, Lag= 165.9 min
Primary = 0.44 cfs @ 4.00 hrs, Volume= 0.733 af
Routed to Link 5L : (new Link)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Peak Elev= 658.05' @ 4.00 hrs Surf.Area= 17,336 sf Storage= 53,842 cf

Plug-Flow detention time= 784.6 min calculated for 0.733 af (55% of inflow)
Center-of-Mass det. time= 747.9 min (857.2 - 109.2)

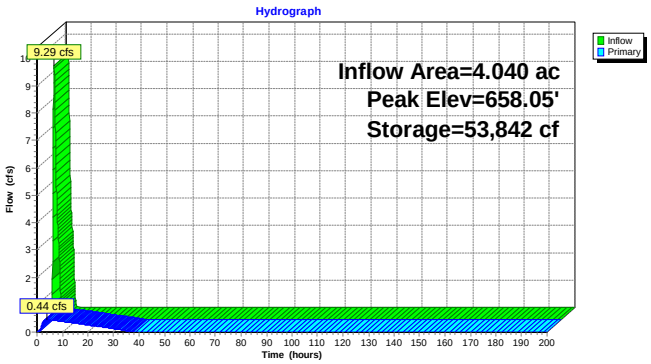
Volume	Invert	Avail.Storage	Storage Description
#1	652.00'	91,777 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
652.00	2,838	0	0
653.00	3,506	3,172	3,172
654.00	4,241	3,874	7,046
655.00	5,025	4,633	11,679
655.10	10,780	790	12,469
655.50	11,650	4,486	16,955
656.00	12,745	6,099	23,053
657.00	14,965	13,855	36,908
658.00	17,224	16,095	53,003
659.00	19,524	18,374	71,377
659.50	20,692	10,054	81,431
660.00	20,692	10,346	91,777

Device	Routing	Invert	Outlet Devices
#1	Primary	652.00'	**3.5" Vert. Orifice/Grate** C= 0.610 Limited to weir flow at low heads
#2	Primary	659.50'	**50.0' long + 4.0 '/' SideZ x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.44 cfs @ 4.00 hrs HW=658.05' TW=656.20' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.44 cfs @ 6.66 fps)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 2P: Above Ground Basin



Summary for Subcatchment 1S: Covenant Redevelopment

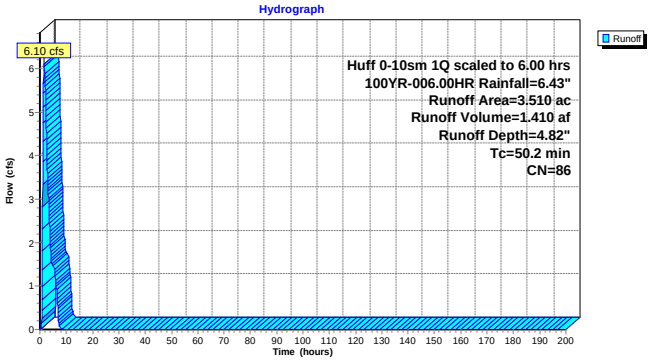
Runoff = 6.10 cfs @ 1.57 hrs, Volume= 1.410 af, Depth= 4.82"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 1Q scaled to 6.00 hrs 100YR-006.00HR Rainfall=6.43"

	Area (ac)	CN	Description
*	3.510	86	
	3.510		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
50.2					**Direct Entry,**

Subcatchment 1S: Covenant Redevelopment



Summary for Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)

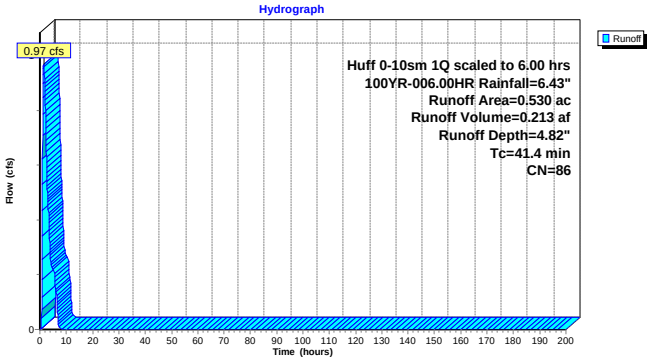
Runoff = 0.97 cfs @ 1.36 hrs, Volume= 0.213 af, Depth= 4.82"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 1Q scaled to 6.00 hrs 100YR-006.00HR Rainfall=6.43"

	Area (ac)	CN	Description
*	0.530	86	Paved parking, HSG C
	0.530		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
41.4					**Direct Entry,**

Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)



Summary for Pond 2P: Above Ground Basin

Inflow Area = 4.040 ac, 0.00% Impervious, Inflow Depth = 4.82" for 100YR-006.00HR event
Inflow = 7.04 cfs @ 1.53 hrs, Volume= 1.622 af
Outflow = 0.50 cfs @ 6.76 hrs, Volume= 1.034 af, Atten= 93%, Lag= 314.0 min
Primary = 0.50 cfs @ 6.76 hrs, Volume= 1.034 af
Routed to Link 5L : (new Link)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Peak Elev= 658.55' @ 6.76 hrs Surf.Area= 18,497 sf Storage= 62,890 cf

Plug-Flow detention time= 949.7 min calculated for 1.034 af (64% of inflow)
Center-of-Mass det. time= 892.6 min (1,063.1 - 170.5)

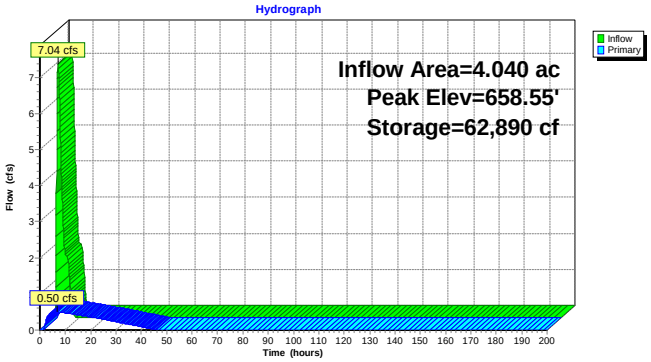
Volume	Invert	Avail.Storage	Storage Description
#1	652.00'	91,777 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
652.00	2,838	0	0
653.00	3,506	3,172	3,172
654.00	4,241	3,874	7,046
655.00	5,025	4,633	11,679
655.10	10,780	790	12,469
655.50	11,650	4,486	16,955
656.00	12,745	6,099	23,053
657.00	14,965	13,855	36,908
658.00	17,224	16,095	53,003
659.00	19,524	18,374	71,377
659.50	20,692	10,054	81,431
660.00	20,692	10,346	91,777

Device	Routing	Invert	Outlet Devices
#1	Primary	652.00'	**3.5" Vert. Orifice/Grate** C= 0.610 Limited to weir flow at low heads
#2	Primary	659.50'	**50.0' long + 4.0 '/' SideZ x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.50 cfs @ 6.76 hrs HW=658.55' TW=656.20' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.50 cfs @ 7.51 fps)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 2P: Above Ground Basin



Summary for Subcatchment 1S: Covenant Redevelopment

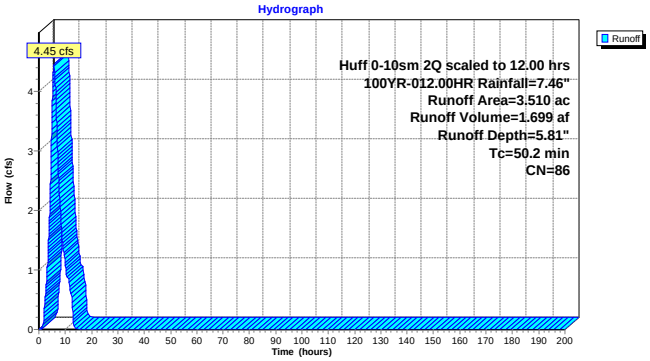
Runoff = 4.45 cfs @ 5.76 hrs, Volume= 1.699 af, Depth= 5.81"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 2Q scaled to 12.00 hrs 100YR-012.00HR Rainfall=7.46"

	Area (ac)	CN	Description
*	3.510	86	
	3.510		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
50.2					**Direct Entry,**

Subcatchment 1S: Covenant Redevelopment



Summary for Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)

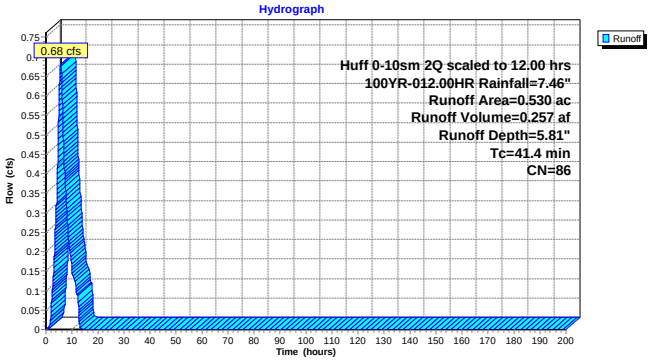
Runoff = 0.68 cfs @ 5.64 hrs, Volume= 0.257 af, Depth= 5.81"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 2Q scaled to 12.00 hrs 100YR-012.00HR Rainfall=7.46"

	Area (ac)	CN	Description
*	0.530	86	Paved parking, HSG C
	0.530		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
41.4					**Direct Entry,**

Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)



Summary for Pond 2P: Above Ground Basin

Inflow Area = 4.040 ac, 0.00% Impervious, Inflow Depth = 5.81" for 100YR-012.00HR event
Inflow = 5.13 cfs @ 5.75 hrs, Volume= 1.956 af
Outflow = 0.55 cfs @ 12.53 hrs, Volume= 1.367 af, Atten= 89%, Lag= 406.9 min
Primary = 0.55 cfs @ 12.53 hrs, Volume= 1.367 af
Routed to Link 5L : (new Link)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Peak Elev= 659.05' @ 12.53 hrs Surf.Area= 19,631 sf Storage= 72,272 cf

Plug-Flow detention time= 1,112.9 min calculated for 1.367 af (70% of inflow)
Center-of-Mass det. time= 1,039.1 min (1,439.3 - 400.2)

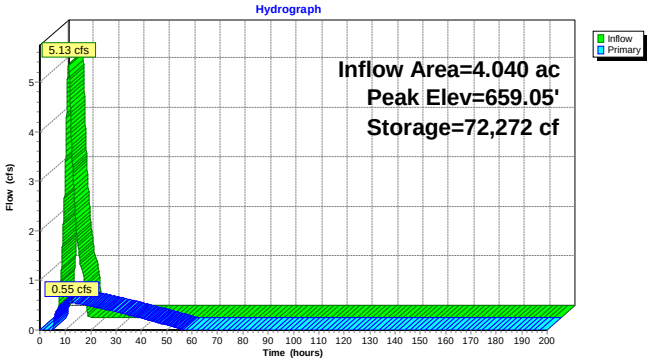
Volume	Invert	Avail.Storage	Storage Description
#1	652.00'	91,777 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
652.00	2,838	0	0
653.00	3,506	3,172	3,172
654.00	4,241	3,874	7,046
655.00	5,025	4,633	11,679
655.10	10,780	790	12,469
655.50	11,650	4,486	16,955
656.00	12,745	6,099	23,053
657.00	14,965	13,855	36,908
658.00	17,224	16,095	53,003
659.00	19,524	18,374	71,377
659.50	20,692	10,054	81,431
660.00	20,692	10,346	91,777

Device	Routing	Invert	Outlet Devices
#1	Primary	652.00'	**3.5" Vert. Orifice/Grate** C= 0.610 Limited to weir flow at low heads
#2	Primary	659.50'	**50.0' long + 4.0 '/' SideZ x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.55 cfs @ 12.53 hrs HW=659.05' TW=656.20' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.55 cfs @ 8.26 fps)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 2P: Above Ground Basin



Summary for Subcatchment 1S: Covenant Redevelopment

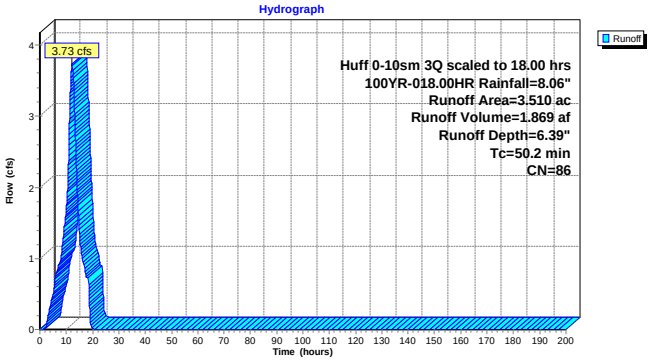
Runoff = 3.73 cfs @ 12.25 hrs, Volume= 1.869 af, Depth= 6.39"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 3Q scaled to 18.00 hrs 100YR-018.00HR Rainfall=8.06"

	Area (ac)	CN	Description
*	3.510	86	
	3.510		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
50.2					**Direct Entry,**

Subcatchment 1S: Covenant Redevelopment



Summary for Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)

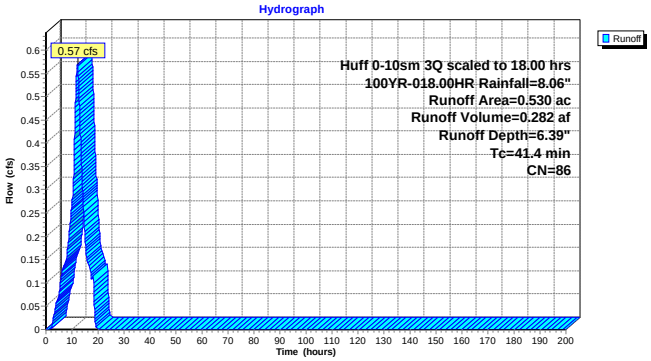
Runoff = 0.57 cfs @ 12.14 hrs, Volume= 0.282 af, Depth= 6.39"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 3Q scaled to 18.00 hrs 100YR-018.00HR Rainfall=8.06"

	Area (ac)	CN	Description
*	0.530	86	Paved parking, HSG C
	0.530		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
41.4					**Direct Entry,**

Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)



Summary for Pond 2P: Above Ground Basin

Inflow Area = 4.040 ac, 0.00% Impervious, Inflow Depth = 6.39" for 100YR-018.00HR event
Inflow = 4.30 cfs @ 12.22 hrs, Volume= 2.151 af
Outflow = 0.58 cfs @ 18.61 hrs, Volume= 1.562 af, Atten= 86%, Lag= 383.0 min
Primary = 0.58 cfs @ 18.61 hrs, Volume= 1.562 af
Routed to Link 5L : (new Link)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Peak Elev= 659.37' @ 18.61 hrs Surf.Area= 20,379 sf Storage= 78,677 cf

Plug-Flow detention time= 1,227.4 min calculated for 1.562 af (73% of inflow)
Center-of-Mass det. time= 1,139.7 min (1,845.6 - 706.0)

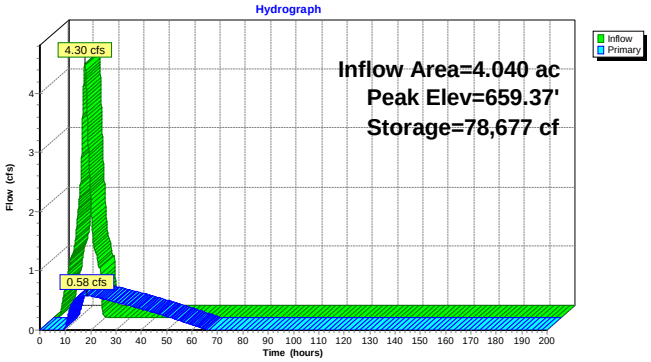
Volume	Invert	Avail.Storage	Storage Description
#1	652.00'	91,777 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
652.00	2,838	0	0
653.00	3,506	3,172	3,172
654.00	4,241	3,874	7,046
655.00	5,025	4,633	11,679
655.10	10,780	790	12,469
655.50	11,650	4,486	16,955
656.00	12,745	6,099	23,053
657.00	14,965	13,855	36,908
658.00	17,224	16,095	53,003
659.00	19,524	18,374	71,377
659.50	20,692	10,054	81,431
660.00	20,692	10,346	91,777

Device	Routing	Invert	Outlet Devices
#1	Primary	652.00'	**3.5" Vert. Orifice/Grate** C= 0.610 Limited to weir flow at low heads
#2	Primary	659.50'	**50.0' long + 4.0 '/' SideZ x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.58 cfs @ 18.61 hrs HW=659.37' TW=656.20' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 0.58 cfs @ 8.71 fps)
└─**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 2P: Above Ground Basin



Summary for Subcatchment 1S: Covenant Redevelopment

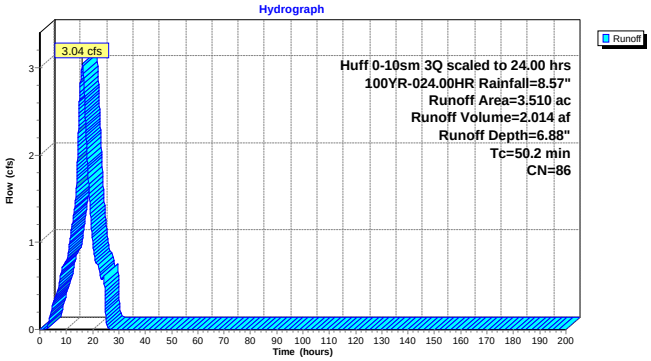
Runoff = 3.04 cfs @ 16.12 hrs, Volume= 2.014 af, Depth= 6.88"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 3Q scaled to 24.00 hrs 100YR-024.00HR Rainfall=8.57"

	Area (ac)	CN	Description
*	3.510	86	
	3.510		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
50.2					**Direct Entry,**

Subcatchment 1S: Covenant Redevelopment



Summary for Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)

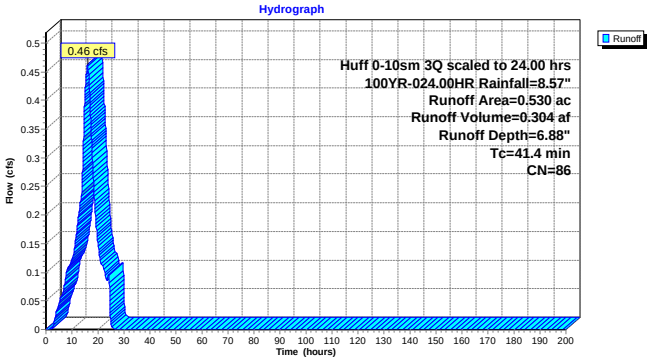
Runoff = 0.46 cfs @ 16.04 hrs, Volume= 0.304 af, Depth= 6.88"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 3Q scaled to 24.00 hrs 100YR-024.00HR Rainfall=8.57"

	Area (ac)	CN	Description
*	0.530	86	Paved parking, HSG C
	0.530		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
41.4					**Direct Entry,**

Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)



Summary for Pond 2P: Above Ground Basin

Inflow Area = 4.040 ac, 0.00% Impervious, Inflow Depth = 6.88" for 100YR-024.00HR event
Inflow = 3.50 cfs @ 16.12 hrs, Volume= 2.318 af
Outflow = 0.59 cfs @ 24.49 hrs, Volume= 1.729 af, Atten= 83%, Lag= 502.7 min
Primary = 0.59 cfs @ 24.49 hrs, Volume= 1.729 af
Routed to Link 5L : (new Link)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Peak Elev= 659.44' @ 24.49 hrs Surf.Area= 20,559 sf Storage= 80,255 cf

Plug-Flow detention time= 1,313.0 min calculated for 1.729 af (75% of inflow)
Center-of-Mass det. time= 1,202.9 min (2,125.4 - 922.5)

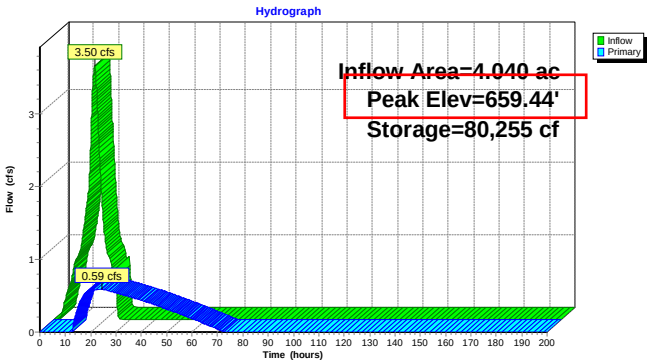
Volume	Invert	Avail.Storage	Storage Description
#1	652.00'	91,777 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
652.00	2,838	0	0
653.00	3,506	3,172	3,172
654.00	4,241	3,874	7,046
655.00	5,025	4,633	11,679
655.10	10,780	790	12,469
655.50	11,650	4,486	16,955
656.00	12,745	6,099	23,053
657.00	14,965	13,855	36,908
658.00	17,224	16,095	53,003
659.00	19,524	18,374	71,377
659.50	20,692	10,054	81,431
660.00	20,692	10,346	91,777

Device	Routing	Invert	Outlet Devices
#1	Primary	652.00'	**3.5" Vert. Orifice/Grate** C= 0.610 Limited to weir flow at low heads
#2	Primary	659.50'	**50.0' long + 4.0 '/' SideZ x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.59 cfs @ 24.49 hrs HW=659.44' TW=656.20' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.59 cfs @ 8.82 fps)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 2P: Above Ground Basin



Summary for Subcatchment 1S: Covenant Redevelopment

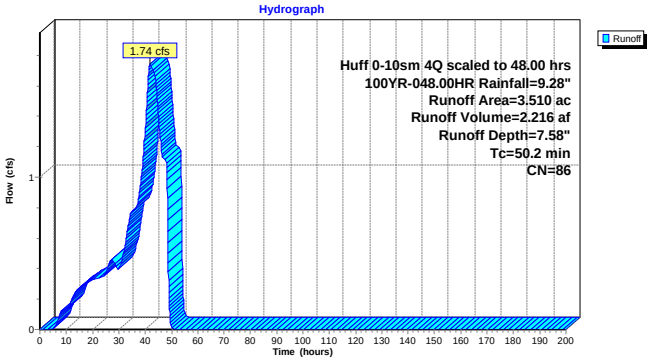
Runoff = 1.74 cfs @ 42.00 hrs, Volume= 2.216 af, Depth= 7.58"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 4Q scaled to 48.00 hrs 100YR-048.00HR Rainfall=9.28"

	Area (ac)	CN	Description
*	3.510	86	
	3.510		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
50.2					**Direct Entry,**

Subcatchment 1S: Covenant Redevelopment



Summary for Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)

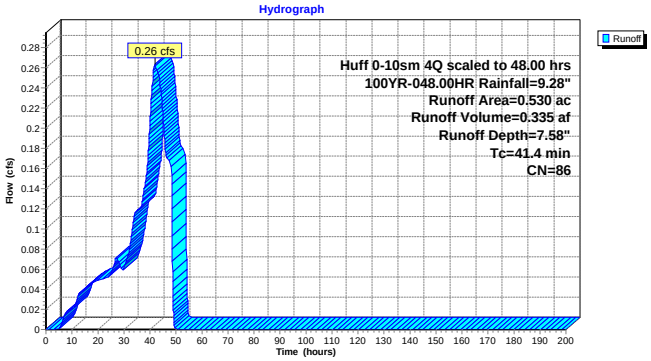
Runoff = 0.26 cfs @ 41.79 hrs, Volume= 0.335 af, Depth= 7.58"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 4Q scaled to 48.00 hrs 100YR-048.00HR Rainfall=9.28"

	Area (ac)	CN	Description
*	0.530	86	Paved parking, HSG C
	0.530		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
41.4					**Direct Entry,**

Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)



Summary for Pond 2P: Above Ground Basin

Inflow Area = 4.040 ac, 0.00% Impervious, Inflow Depth = 7.58" for 100YR-048.00HR event
Inflow = 2.00 cfs @ 41.90 hrs, Volume= 2.551 af
Outflow = 1.21 cfs @ 48.30 hrs, Volume= 1.962 af, Atten= 39%, Lag= 383.8 min
Primary = 1.21 cfs @ 48.30 hrs, Volume= 1.962 af
Routed to Link 5L : (new Link)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Peak Elev= 659.53' @ 48.30 hrs Surf.Area= 20,692 sf Storage= 82,039 cf

Plug-Flow detention time= 1,488.7 min calculated for 1.962 af (77% of inflow)
Center-of-Mass det. time= 1,302.1 min (3,449.3 - 2,147.2)

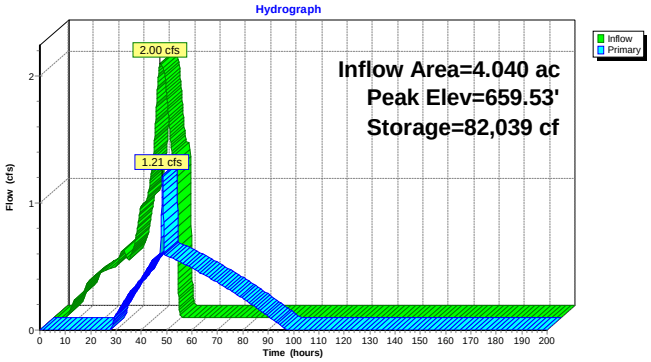
Volume	Invert	Avail.Storage	Storage Description
#1	652.00'	91,777 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
652.00	2,838	0	0
653.00	3,506	3,172	3,172
654.00	4,241	3,874	7,046
655.00	5,025	4,633	11,679
655.10	10,780	790	12,469
655.50	11,650	4,486	16,955
656.00	12,745	6,099	23,053
657.00	14,965	13,855	36,908
658.00	17,224	16,095	53,003
659.00	19,524	18,374	71,377
659.50	20,692	10,054	81,431
660.00	20,692	10,346	91,777

Device	Routing	Invert	Outlet Devices
#1	Primary	652.00'	**3.5" Vert. Orifice/Grate** C= 0.610 Limited to weir flow at low heads
#2	Primary	659.50'	**50.0' long + 4.0 '/' SideZ x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=1.21 cfs @ 48.30 hrs HW=659.53' TW=656.20' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.60 cfs @ 8.93 fps)
2=Broad-Crested Rectangular Weir (Weir Controls 0.62 cfs @ 0.42 fps)

Pond 2P: Above Ground Basin



Summary for Subcatchment 1S: Covenant Redevelopment

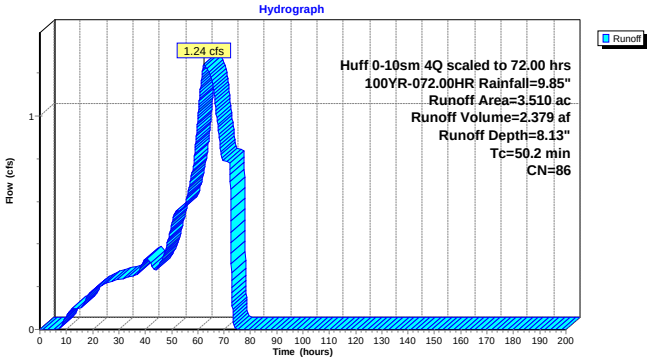
Runoff = 1.24 cfs @ 62.30 hrs, Volume= 2.379 af, Depth= 8.13"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 4Q scaled to 72.00 hrs 100YR-072.00HR Rainfall=9.85"

	Area (ac)	CN	Description
*	3.510	86	
	3.510		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
50.2					**Direct Entry,**

Subcatchment 1S: Covenant Redevelopment



Summary for Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)

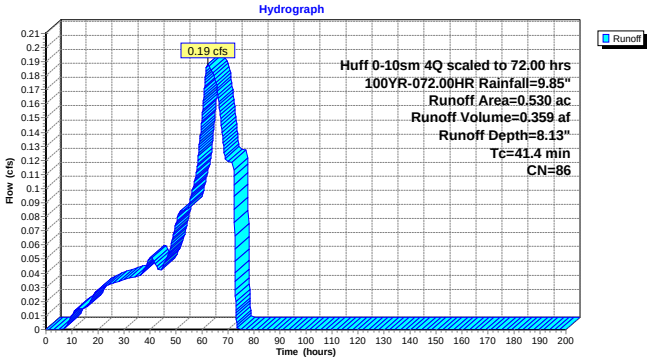
Runoff = 0.19 cfs @ 62.15 hrs, Volume= 0.359 af, Depth= 8.13"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 4Q scaled to 72.00 hrs 100YR-072.00HR Rainfall=9.85"

	Area (ac)	CN	Description
*	0.530	86	Paved parking, HSG C
	0.530		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
41.4					**Direct Entry,**

Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)



Summary for Pond 2P: Above Ground Basin

Inflow Area = 4.040 ac, 0.00% Impervious, Inflow Depth = 8.13" for 100YR-072.00HR event
Inflow = 1.43 cfs @ 62.30 hrs, Volume= 2.738 af
Outflow = 0.58 cfs @ 72.59 hrs, Volume= 2.150 af, Atten= 60%, Lag= 617.2 min
Primary = 0.58 cfs @ 72.59 hrs, Volume= 2.150 af
Routed to Link 5L : (new Link)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Peak Elev= 659.33' @ 72.59 hrs Surf.Area= 20,285 sf Storage= 77,858 cf

Plug-Flow detention time= 1,666.0 min calculated for 2.149 af (78% of inflow)
Center-of-Mass det. time= 1,405.4 min (4,591.4 - 3,186.0)

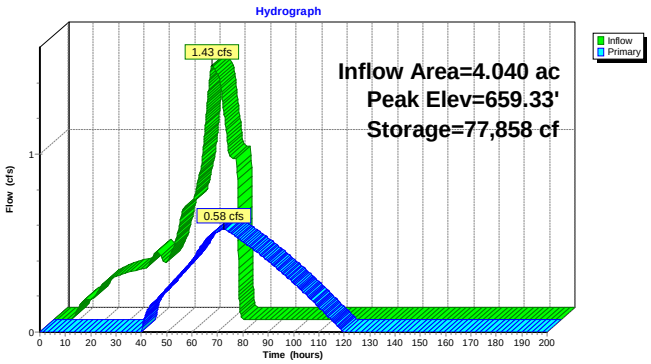
Volume	Invert	Avail.Storage	Storage Description
#1	652.00'	91,777 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
652.00	2,838	0	0
653.00	3,506	3,172	3,172
654.00	4,241	3,874	7,046
655.00	5,025	4,633	11,679
655.10	10,780	790	12,469
655.50	11,650	4,486	16,955
656.00	12,745	6,099	23,053
657.00	14,965	13,855	36,908
658.00	17,224	16,095	53,003
659.00	19,524	18,374	71,377
659.50	20,692	10,054	81,431
660.00	20,692	10,346	91,777

Device	Routing	Invert	Outlet Devices
#1	Primary	652.00'	**3.5" Vert. Orifice/Grate** C= 0.610 Limited to weir flow at low heads
#2	Primary	659.50'	**50.0' long + 4.0 '/' SideZ x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.58 cfs @ 72.59 hrs HW=659.33' TW=656.20' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.58 cfs @ 8.65 fps)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 2P: Above Ground Basin



Summary for Subcatchment 1S: Covenant Redevelopment

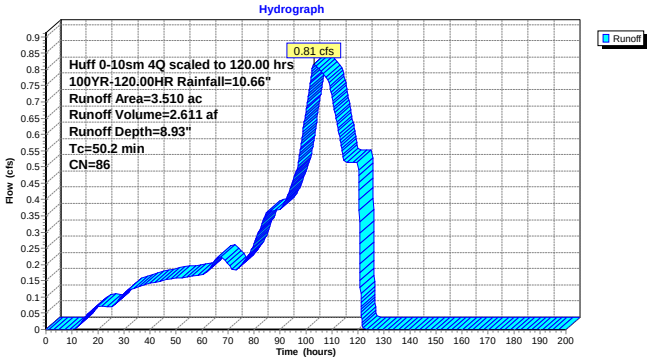
Runoff = 0.81 cfs @ 103.15 hrs, Volume= 2.611 af, Depth= 8.93"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 4Q scaled to 120.00 hrs 100YR-120.00HR Rainfall=10.66"

	Area (ac)	CN	Description
*	3.510	86	
	3.510		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
50.2					**Direct Entry,**

Subcatchment 1S: Covenant Redevelopment



Summary for Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)

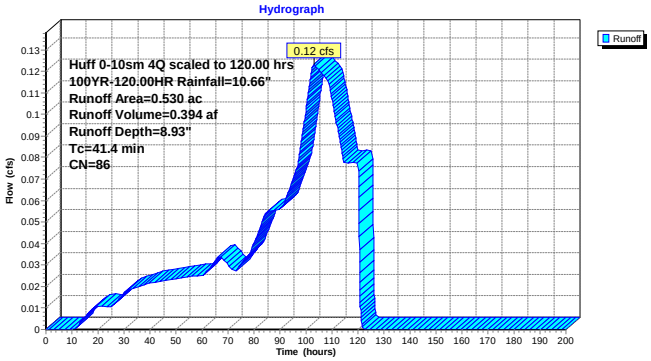
Runoff = 0.12 cfs @ 102.90 hrs, Volume= 0.394 af, Depth= 8.93"
Routed to Pond 2P : Above Ground Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Huff 0-10sm 4Q scaled to 120.00 hrs 100YR-120.00HR Rainfall=10.66"

	Area (ac)	CN	Description
*	0.530	86	Paved parking, HSG C
	0.530		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
41.4					**Direct Entry,**

Subcatchment 3S: Unrestricted Flow (Swapped w/Undeveloped Area)



Summary for Pond 2P: Above Ground Basin

Inflow Area = 4.040 ac, 0.00% Impervious, Inflow Depth = 8.93" for 100YR-120.00HR event
Inflow = 0.94 cfs @ 103.14 hrs, Volume= 3.006 af
Outflow = 0.52 cfs @ 120.39 hrs, Volume= 2.417 af, Atten= 45%, Lag= 1,034.9 min
Primary = 0.52 cfs @ 120.39 hrs, Volume= 2.417 af
Routed to Link 5L : (new Link)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.05 hrs
Peak Elev= 658.71' @ 120.39 hrs Surf.Area= 18,858 sf Storage= 65,823 cf

Plug-Flow detention time= 1,914.2 min calculated for 2.416 af (80% of inflow)
Center-of-Mass det. time= 1,515.0 min (6,768.8 - 5,253.8)

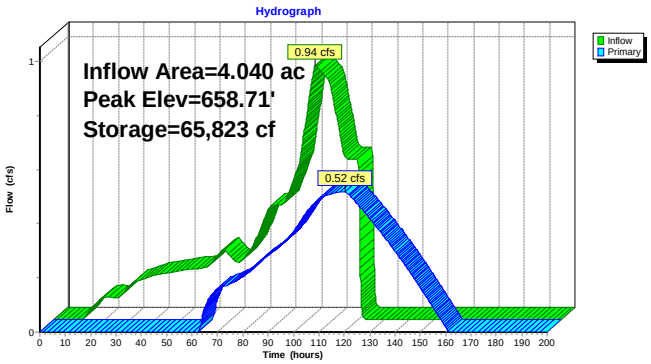
Volume	Invert	Avail.Storage	Storage Description
#1	652.00'	91,777 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
652.00	2,838	0	0
653.00	3,506	3,172	3,172
654.00	4,241	3,874	7,046
655.00	5,025	4,633	11,679
655.10	10,780	790	12,469
655.50	11,650	4,486	16,955
656.00	12,745	6,099	23,053
657.00	14,965	13,855	36,908
658.00	17,224	16,095	53,003
659.00	19,524	18,374	71,377
659.50	20,692	10,054	81,431
660.00	20,692	10,346	91,777

Device	Routing	Invert	Outlet Devices
#1	Primary	652.00'	**3.5" Vert. Orifice/Grate** C= 0.610 Limited to weir flow at low heads
#2	Primary	659.50'	**50.0' long + 4.0 '/' SideZ x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.52 cfs @ 120.39 hrs HW=658.71' TW=656.20' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.52 cfs @ 7.76 fps)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 2P: Above Ground Basin



FINAL PLAT
OF
GREENVIEW ROAD SUBDIVISION

BEING A SUBDIVISION OF PART OF THE NORTH 600 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, ALL IN COOK COUNTY, ILLINOIS.

NO TITLE COMMITMENT PROVIDED TO THIS SURVEYOR TO AID IN THE PREPARATION OF THIS SUBDIVISION

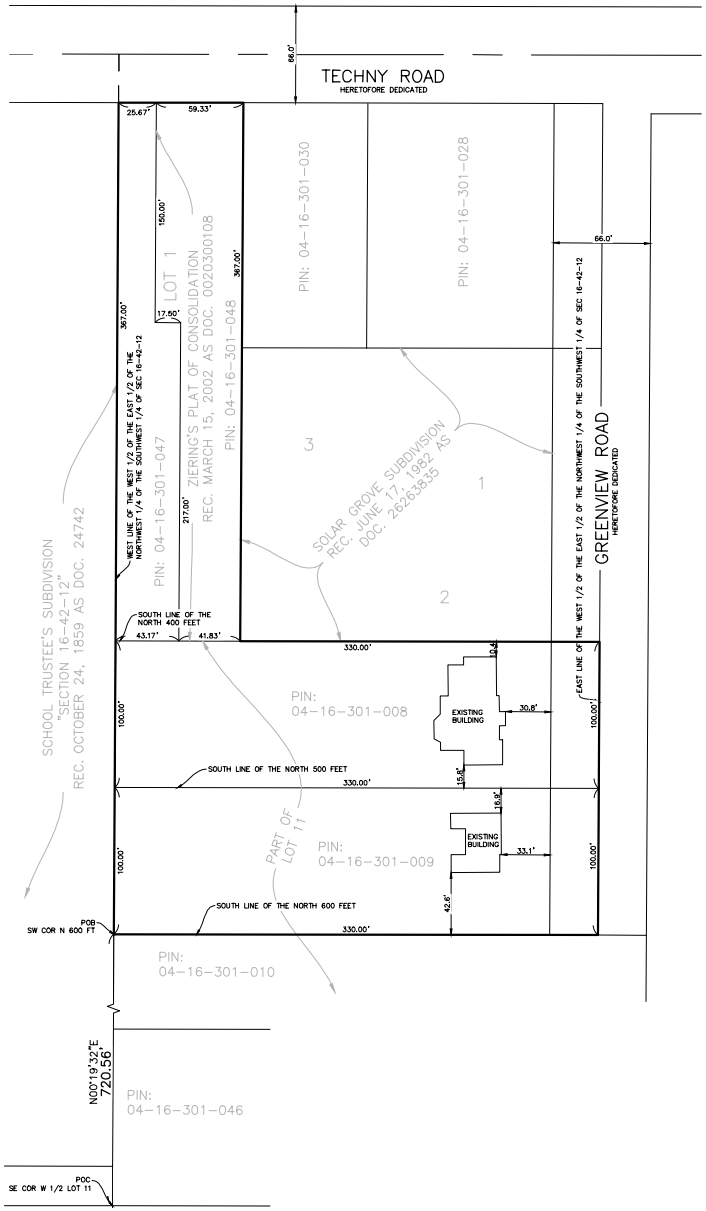
ADDRESSES (PER COOK COUNTY GIS):

2545 TECHNY ROAD
NORTHBROOK, IL 60062
PIN: 04-16-301-047

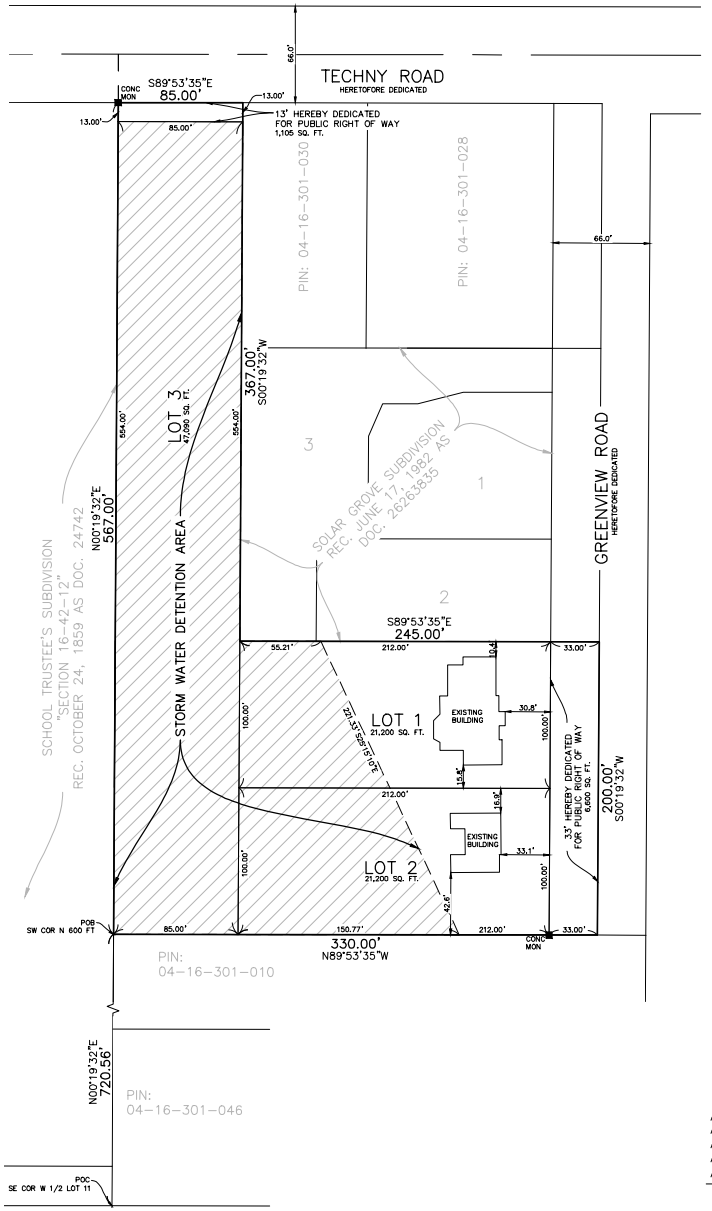
2539 TECHNY ROAD
NORTHBROOK, IL 60062
PIN: 04-16-301-048

2074 GREENVIEW ROAD
NORTHBROOK, IL 60062
PIN: 04-16-301-008

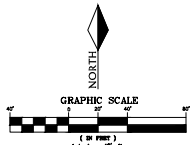
2090 GREENVIEW ROAD
NORTHBROOK, IL 60062
PIN: 04-16-301-009



LOTS BEFORE SUBDIVISION



LOTS AFTER SUBDIVISION



AREA SUMMARY PRIOR TO SUBDIVISION

AREA OF PIN 04-16-301-047	= 13,218 SQ.FT.	OR 0.3034 ACRES
AREA OF PIN 04-16-301-048	= 17,976 SQ.FT.	OR 0.4127 ACRES
AREA OF PIN 04-16-301-008	= 33,000 SQ.FT.	OR 0.7576 ACRES
AREA OF PIN 04-16-301-009	= 33,000 SQ.FT.	OR 0.7576 ACRES
TOTAL AREA	= 97,194 SQ.FT.	OR 2.2313 ACRES

REVISED DATE: SEPTEMBER 18, 2023 (REMOVE SCHOOL DISTRICT CERT)
REVISED DATE: SEPTEMBER 15, 2023 (230982-VILLAGE COMMENTS 08-31-2023)
DATE: JUNE 2, 2023 (230527)
ORDER NO: 230982
PROJ. NO: 1046
FOR: KIMLEY-HORN
PROJ. NAME: COVENANT VILLAGE OF NORTHBROOK

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847-548-6600 FAX 548-6699
info@tfwsurvey.com www.tfwsurvey.com

FINAL PLAT
OF
GREENVIEW ROAD SUBDIVISION

BEING A SUBDIVISION OF PART OF THE NORTH 600 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, ALL IN COOK COUNTY, ILLINOIS.

NO TITLE COMMITMENT PROVIDED TO THIS SURVEYOR TO AID IN THE PREPARATION OF THIS SUBDIVISION

OWNER'S CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF _____) SS.

THIS IS TO CERTIFY THAT _____ IS THE OWNER OF THE PROPERTY DESCRIBED ABOVE AND HAS CAUSED THE SAME TO BE SURVEYED AND PLATTED AS SHOWN HEREON. FOR THE USES AND PURPOSES THEREIN SET FORTH AND AS ALLOWED AND PROVIDED BY STATUTES, DOES HEREBY ACKNOWLEDGE AND ADOPT THE SAME UNDER THE STYLE AND TITLE AFORESAID.

DATED AT _____, ILLINOIS, THIS _____ DAY OF _____, A.D., 20____.
CITY DATE MONTH

BY: _____ ATTEST: _____
SIGNATURE SIGNATURE

NOTARY CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF _____) SS.

I, _____, A NOTARY PUBLIC IN AND FOR THE SAID COUNTY IN THE STATE
PRINT NAME
AFORESAID, DO HEREBY CERTIFY THAT _____, _____, AND
PRINT NAME TITLE
_____, _____, OF SAID OWNER, WHO ARE PERSONALLY
PRINT NAME TITLE
KNOWN TO ME TO BE THE SAME PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT AS SUCH _____ AND _____ RESPECTFULLY,
TITLE TITLE
APPEARED BEFORE ME THIS DAY IN PERSON AND JOINTLY AND SEVERALLY ACKNOWLEDGED THAT THEY SIGNED AND DELIVERED THE SAID INSTRUMENT AS THEIR OWN FREE AND VOLUNTARY ACT AND AS THE FREE AND VOLUNTARY ACT OF SAID OWNER FOR THE USES AND PURPOSES THEREIN SET FORTH.

GIVEN UNDER MY HAND AND NOTARIAL SEAL

THIS _____ DAY OF _____, 20____.

_____ _____
NOTARY PUBLIC SIGNATURE PRINT NAME

MY COMMISSION EXPIRES ON _____ _____, 20____.

VILLAGE PRESIDENT CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF COOK) SS.

APPROVED THIS ____ DAY OF _____, A.D. 20___ BY THE VILLAGE PRESIDENT OF THE VILLAGE OF NORTHBROOK, COOK COUNTY, ILLINOIS.

_____
VILLAGE PRESIDENT

VILLAGE ENGINEER CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF COOK) SS.

APPROVED THIS ____ DAY OF _____, A.D. 20___ BY THE VILLAGE ENGINEER OF THE VILLAGE OF NORTHBROOK, COOK COUNTY, ILLINOIS.

_____
VILLAGE ENGINEER

VILLAGE COLLECTOR CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF COOK) SS.

I DO HEREBY CERTIFY THAT THERE ARE NO DEFERRED SPECIAL ASSESSMENTS OR UNPAID CURRENT ASSESSMENTS DUE AGAINST THE LAND INCLUDED IN THE ABOVE PLAT.

DATED THIS _____ DAY OF _____ 20____.

_____
VILLAGE COLLECTOR

DRAINAGE CERTIFICATE

TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF THIS SUBDIVISION OR ANY PART THEREOF, OR, IF SUCH SURFACE WATER DRAINAGE WILL BE CHANGED, REASONABLE PROVISION HAS BEEN MADE FOR COLLECTION AND DIVERSION OF SUCH SURFACE WATERS INTO PUBLIC AREAS, OR DRAINS WHICH THE OWNER 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 THIS SUBDIVISION.

_____ _____
OWNER

ITS MANAGER: _____ NAME: _____

SIGNED: _____ FIRM: _____

DATED: _____ DATED: _____

VILLAGE OF NORTHBROOK EASEMENT FOR STORM WATER DETENTION AREA PROVISIONS

1. THE AREA OF THE PROPERTY DESIGNATED ON THIS PLAT AS 'STORM WATER DETENTION AREA' SHALL BE CONTINUOUSLY MAINTAINED IN A FIRST RATE MANNER BY OWNER OF 2625 TECHNY ROAD (THE 'PLANNED DEVELOPMENT') AND AN EASEMENT ON, UNDER AND ABOVE THE STORM WATER DETENTION AREA IS HEREBY GRANTED TO, AND FOR THE USE AND BENEFIT OF, THE PLANNED DEVELOPMENT FOR THE SOLE PURPOSE OF STORM WATER DETENTION AND DRAINAGE.

2. NO CHANGE SHALL BE MADE IN THE FINISHED GRADE OF THE LAND WITHIN THE STORM WATER DETENTION AREA, NOR SHALL ANY CONSTRUCTION OF ANY KIND WHATSOEVER BE ERECTED OR PERMITTED TO EXIST WITHIN THE STORM WATER DETENTION AREA THAT MIGHT MATERIALLY IMPEDE STORM WATER DRAINAGE THEREIN OR MATERIALLY REDUCE THE STORM WATER DETENTION CAPACITY THEREOF. TREES, SHRUBS, FENCES AND NORMAL LANDSCAPE PLANTING SHALL BE PERMITTED WITHIN THE STORM WATER DETENTION AREA ONLY WITH THE PRIOR WRITTEN APPROVAL OF THE VILLAGE MANAGER OF THE VILLAGE OF NORTHBROOK, COOK COUNTY, ILLINOIS (THE 'VILLAGE'). THE OWNER OF THE PLANNED DEVELOPMENT SHALL MAINTAIN A GRASS COVER ON THE SURFACE OF THE STORM WATER DETENTION AREA AND SHALL KEEP SUCH GRASS IN A NEAT AND TRIMMED CONDITION.

3. IN THE EVENT THE VILLAGE DETERMINES, IN ITS SOLE AND ABSOLUTE DISCRETION, THAT PRIOR MAINTENANCE OF THE STORM WATER DETENTION AREA IS NOT PERFORMED AT ANY TIME, THE VILLAGE, AFTER TEN (10) DAYS PRIOR WRITTEN NOTICE TO THE OWNERS OF THE PLANNED DEVELOPMENT, MAY, BUT SHALL NOT BE OBLIGATED TO, ENTER UPON ANY OR ALL OF THE PLANNED DEVELOPMENT FOR THE PURPOSE OF PERFORMING MAINTENANCE WORK ON AND TO THE STORM WATER DETENTION AREA.

4. IN THE EVENT THAT THE VILLAGE SHALL CAUSE TO BE PERFORMED ANY WORK PURSUANT TO THESE PARAGRAPHS, THE VILLAGE SHALL HAVE THE RIGHT TO CHARGE THE OWNER OF THE PLANNED DEVELOPMENT AN AMOUNT SUFFICIENT TO DEFRAY THE ENTIRE COST OF SUCH WORK OR ACTION, INCLUDING ADMINISTRATIVE COSTS, EITHER BEFORE OR AFTER SUCH COST IS INCURRED. IF THE AMOUNT SO CHARGED IS NOT PAID BY THE OWNER OF THE PLANNED DEVELOPMENT WITHIN THIRTY (30) DAYS FOLLOWING A DEMAND IN WRITING BY THE VILLAGE FOR SUCH PAYMENT, SUCH CHARGE, TOGETHER WITH INTEREST AND COSTS OF COLLECTION, SHALL BECOME A LIEN UPON THE PLANNED DEVELOPMENT AND THE VILLAGE SHALL HAVE THE RIGHT TO COLLECT SUCH CHARGE, WITH INTEREST AND COSTS, AND TO ENFORCE SUCH LIEN AS IN FORECLOSURE PROCEEDINGS AS PERMITTED BY LAW.

5. NOTHING IN THESE PARAGRAPHS SHALL BE CONSTRUED TO CONSTITUTE A DEDICATION OF ANY PORTION OF THE STORM WATER DETENTION AREA OR OF THE PLANNED DEVELOPMENT TO, OR AN ACCEPTANCE THEREOF BY, THE VILLAGE.

6. THE VILLAGE SHALL BE UNDER NO OBLIGATION TO EXERCISE THE RIGHTS GRANTED IN THESE PARAGRAPHS EXCEPT AS IT SHALL DETERMINE TO BE IN ITS BEST INTEREST. NO FAILURE TO EXERCISE AT ANY TIME ANY RIGHT HEREIN GRANTED TO THE VILLAGE SHALL BE CONSTRUED AS A WAIVER OF THAT OR ANY OTHER RIGHTS.

7. THESE COVENANTS SHALL RUN WITH THE LAND IN THE PLANNED DEVELOPMENT, AND SHALL BE BINDING UPON AND INURE TO THE BENEFIT OF THE OWNER OF THE PLANNED DEVELOPMENT, THEIR RESPECTIVE SUCCESSORS, ASSIGNS AND GRANTEES AND ALL PARTIES CLAIMING BY, THROUGH AND UNDER THEM. ENFORCEMENT OF THESE COVENANTS MAY BE SOUGHT BY THE OWNER OF THE PLANNED DEVELOPMENT, ANY PERSON WITH AN INTEREST IN ANY OF SAID LOTS OF RECORD, OR THE VILLAGE OF NORTHBROOK BY ANY PROCEEDING AT LAW OR IN EQUITY AGAINST ANY PERSON OR PERSONS VIOLATING OR ATTEMPTING TO VIOLATE ANY COVENANT, EITHER TO RESTRAIN VIOLATION, TO COMPEL AFFIRMATIVE ACTION, OR TO RECOVER DAMAGES, AND AGAINST THE LAND TO ENFORCE ANY LIEN CREATED BY THESE COVENANTS.

NOTE: ADDITIONAL IMPROVEMENTS EXIST ON SITE BUT ARE NOT SHOWN AT REQUEST OF CLIENT.

NOTE: EACH LOT IS RESPONSIBLE FOR MAINTAINING THEIR DETENTION BASINS.

SURVEYOR'S NOTES

IRON PIPES ARE SET AT ALL LOT CORNERS UNLESS OTHERWISE NOTED.
ALL MEASUREMENTS AND DISTANCES ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF.
ALL EASEMENTS DEPICTED ON THE PLAT MAP ARE PUBLIC UTILITIES UNLESS OTHERWISE NOTED.
BEARINGS SHOWN HEREON ARE BASED ON AN STATE PLAIN COORDINATES SYSTEM AND ARE INTENDED ONLY TO SHOW THE ANGULAR RELATIONSHIP BETWEEN LINES.

SURVEYOR'S DESIGNATION OF RECORDING

STATE OF ILLINOIS)
COUNTY OF LAKE) SS

I, JAMES P. MEIER, A PROFESSIONAL LAND SURVEYOR IN THE STATE OF ILLINOIS, HEREBY DESIGNATE _____ TO RECORD THIS SUBDIVISION PLAT WITH THE COOK COUNTY CLERK RECORDING DIVISION. THIS DESIGNATION IS GRANTED UNDER THE RIGHT TO DESIGNATE SUCH RECORDING UNDER CHAPTER 109, SECTION 2 OF THE ILLINOIS REVISED STATUTES. AS A CONDITION OF THIS GRANT, SAID DESIGNEE IS HEREBY REQUIRED TO PROVIDE TO THIS SURVEYOR, A CERTIFIED COPY OF SAID PLAT, IMMEDIATELY UPON RECORDING OF SAME. RECEIPT OF SAID CERTIFIED COPY WILL SERVE AS NOTICE TO THE SURVEYOR THAT THE PLAT HEREON DRAWN HAS BEEN RECORDED.

DATED THIS 2nd DAY OF JUNE, A.D. 2023.

_____
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3295

SURVEYOR CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF LAKE) SS

I, JAMES P. MEIER, ILLINOIS PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT I HAVE SURVEYED AND SUBDIVIDED THE FOLLOWING DESCRIBED PROPERTY TO-WIT:

THAT PART OF THE NORTH 600 FEET OF THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF THE WEST HALF OF LOT 11 IN SCHOOL TRUSTEE'S SUBDIVISION OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN; THENCE NORTH 00 DEGREES 19 MINUTES 32 SECONDS EAST ALONG THE EAST LINE OF THE WEST HALF SAID LOT, 720.56 FEET TO THE POINT OF BEGINNING, ALSO BEING THE SOUTHWEST CORNER OF SAID NORTH 600 FEET; THENCE NORTH 00 DEGREES 19 MINUTES 32 SECONDS EAST ALONG THE WEST LINE OF SAID WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, 567.00 FEET; THENCE SOUTH 89 DEGREES 53 MINUTES 35 SECONDS EAST, 85.00 FEET; THENCE SOUTH 00 DEGREES 19 MINUTES 32 SECONDS WEST, 367.00 FEET TO THE SOUTH LINE OF THE NORTH 400 FEET OF SAID NORTH 600 FEET; THENCE SOUTH 89 DEGREES 53 MINUTES 35 SECONDS EAST ALONG SAID SOUTH LINE OF THE NORTH 400 FEET OF SAID NORTH 600 FEET, 245.00 FEET TO THE EAST LINE OF SAID WEST 1/2 OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16; THENCE SOUTH 00 DEGREES 19 MINUTES 32 SECONDS WEST ALONG SAID EAST LINE, 200.00 FEET TO THE SOUTHEAST CORNER OF SAID NORTH 600 FEET; THENCE NORTH 89 DEGREES 53 MINUTES 35 SECONDS WEST ALONG THE SOUTH LINE OF SAID NORTH 600 FEET, 330.00 FEET TO THE POINT OF BEGINNING, ALL IN COOK COUNTY, ILLINOIS.

AND THAT THE PLAT HEREON DRAWN IS A REPRESENTATION OF SAID SURVEY AND SUBDIVISION. DIMENSIONS ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF.
I FURTHER CERTIFY THAT THE LAND INCLUDED BY SAID SURVEY IS WITHIN THE CORPORATE LIMITS OF THE VILLAGE OF NORTHBROOK, ILLINOIS.

I FURTHER CERTIFY THAT PART OF THE PROPERTY SHOWN HEREON FALLS WITHIN ZONE "AE" (AREAS DETERMINED TO BE WITHIN THE 1.0% ANNUAL CHANCE FLOODPLAIN). AS DESIGNATED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, AS PER FIRM, MAP NUMBER 17031C0227J, REVISED AUGUST 19, 2008.

CERTIFIED AT GURNEE, ILLINOIS THIS 2nd DAY OF JUNE, A.D. 2023.

_____
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3295
LICENSE EXPIRES NOVEMBER 30, 2024

JAMES P. MEIER 035-3295 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS GURNEE, IL

PLAT SUBMITTAL AND RETURN TO ADDRESS:
THIS PLAT SUBMITTED FOR RECORDING BY, AND RETURN TO:

NAME: _____

ADDRESS: _____

CITY: _____

STATE: IL ZIP: _____

REVISED DATE: SEPTEMBER 18, 2023 (REMOVE SCHOOL DISTRICT CERT)
REVISED DATE: SEPTEMBER 15, 2023 (230982-VILLAGE COMMENTS 08-31-2023)
DATE: JUNE 2, 2023 (230527)
ORDER NO: 230982
PROJ. NO: 1046
FOR: KIMLEY-HORN
PROJ. NAME: COVENANT VILLAGE OF NORTHBROOK

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LAND SURVEYING • TOPOGRAPHIC MAPPING • CONSTRUCTION LAYOUT
1761 NORTH DILLEYS ROAD • SUITE 105 • GURNEE, ILLINOIS 60031
847-548-6600 FAX 548-6699
info@tfwsurvey.com www.tfwsurvey.com

PRELIMINARY ENGINEERING PLANS

COVENANT LIVING OF NORTHBROOK

2625 TECHNY ROAD
NORTHBROOK, IL 60062

Contact the Metropolitan Water Reclamation District of Greater Chicago 2 days before starting work.
P (708) 588-4055
E WMOJobStart@mwrd.org

Call Before You Dig
JULIE 1-800-892-0123

UTILITY AND GOVERNING AGENCY CONTACTS

PLANNING/ZONING
1225 CEDAR LANE
NORTHBROOK, IL 60062
PHONE: (847) 664-4052
CONTACT: SWATI PANDEY, AICP
EMAIL: SWATI.PANDEY@NORTHBROOKIL.US

ENVIRONMENTAL & LAND DEVELOPMENT REVIEW
655 HUEHL ROAD
NORTHBROOK, IL 60062
PHONE: (847) 664-4119
CONTACT: JACK BIELAK, P.E.
EMAIL: JACK.BIELAK@NORTHBROOK.US

STORMWATER REVIEW
9575 W. HIGGINS ROAD, SUITE 600
ROSEMONT, IL 60018
PHONE: (847) 714-3569
CONTACT: LUKE SHERRY, P.E., C.F.M.
EMAIL: LSHERRY@GBBEL.COM

PUBLIC UTILITIES
655 HUEHL ROAD
NORTHBROOK, IL 60062
PHONE: (847) 664-4119
CONTACT: JIM BAXA
EMAIL: JIM.BAXA@NORTHBROOKIL.US

BUILDING INSPECTIONS
1225 CEDAR LANE
NORTHBROOK, IL 60062
PHONE: (847) 664-4030
CONTACT: JACKIE CLAWSON
EMAIL: JACKIE.CLAWSON@NORTHBROOKIL.US

PROJECT TEAM

PROJECT MANAGER
WITZ COMPANY
1625 SOUTH FISH HATCHERY ROAD
MADISON, WI 53711
TEL: (608) 347-4732
CONTACT: CRAIG WITZ

CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
4201 WINFIELD RD, SUITE 600
WARRENVILLE, IL 60555
TEL: (630) 487-5500
EMAIL: ERIC.TRACY@KIMLEY-HORN.COM
CONTACT: ERIC TRACY, P.E.

SURVEYOR
TFH SURVEY AND MAPPING, INC
1701 N. DIETZEY RD
CURLEE, IL 60007
TEL: (847) 548-6600

ARCHITECT
THW DESIGN
2100 RIVEREDGE PARKWAY, SUITE 900
ATLANTA, GA 30328
TEL: (770) 916-2220
CONTACT: NICOLE CONGER

PERMITTING AGENCIES

FEMA
CONTACT: LADONNA YOUNG
PHONE: (217) 782-4836
EMAIL: LADONNA.YOUNG@ILLINOIS.GOV
PERMIT#: PENDING

FEMA-SANITARY
CONTACT: BARB LIEBEROFF
PHONE: (217) 524-7028
EMAIL: BARB.LIEBEROFF@ILLINOIS.GOV
PERMIT#: PENDING

IDNR Eco-Cat
CONTACT: ADAM RAWE
PHONE: (217) 785-5500
EMAIL: ADAM.RAWE@ILLINOIS.GOV
PERMIT#: PENDING

IDOT
CONTACT: TBD
PHONE: TBD
EMAIL: TBD
PERMIT#: PENDING

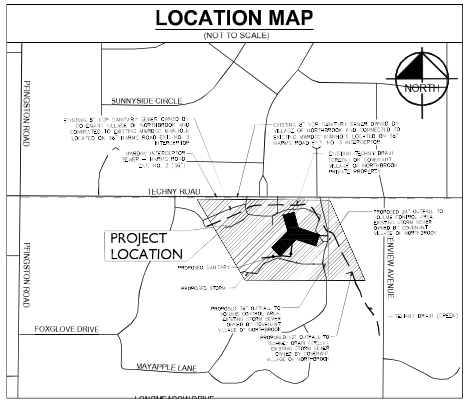
IEPA-NOI
CONTACT: MELISSA PARROTT
PHONE: (217) 785-0810
EMAIL: MELISSA.PARROTT@ILLINOIS.GOV
PERMIT#: PENDING

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD)
CONTACT: TBD
PHONE: TBD
EMAIL: TBD
PERMIT#: PENDING

IEPA-WATERMAIN
CONTACT: BARB LIEBEROFF
PHONE: (217) 524-3018
EMAIL: BARB.LIEBEROFF@ILLINOIS.GOV
PERMIT#: PENDING

LOCATION MAP

(NOT TO SCALE)



MWRD LEGEND
- EX. SANITARY SEWER
- PR. SANITARY SEWER
- MWRD INTERCEPTOR
- MWRD SANITARY INTERCEPTOR
- EX. STORM SEWER
- PR. STORM SEWER

LEGAL DESCRIPTION

PARCEL 1: (TITLE COMMITMENT #1000 0005785ZE STG)
THE WEST 1/2 OF LOT 11, EXCEPT THE NORTH 165 FEET AND EXCEPT THE SOUTH 77 FEET THEREOF; AND LOT 12, EXCEPT THE NORTH 33 FEET AND EXCEPT THE SOUTH 27 FEET AND EXCEPT THE WEST 30 FEET THEREOF AND EXCEPT THE FOLLOWING DESCRIBED PARCELS:
1. THE EAST 339.00 FEET OF THE WEST 339.00 FEET OF THE SOUTH 462.50 FEET OF THE NORTH 495.00 FEET THEREOF;
2. THE EAST 89.00 FEET OF THE WEST 816.00 FEET OF THE SOUTH 425.50 FEET OF THE NORTH 495.00 FEET THEREOF;
3. BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 12 AND RUNNING THENCE NORTH, ALONG THE WEST LINE OF SAID LOT 12, A DISTANCE OF 48.00 FEET; THENCE EAST, ALONG THE NORTH LINE OF THE SOUTH 48.00 FEET OF SAID LOT 12, A DISTANCE OF 689.60 FEET; THENCE SOUTH, ALONG A STRAIGHT LINE PARALLEL WITH SAID WEST LINE OF LOT 12, A DISTANCE OF 267.00 FEET; THENCE SOUTHEASTERLY, ALONG A STRAIGHT LINE, A DISTANCE OF 95.84 FEET TO AN INTERSECTION WITH THE EAST LINE OF THE WEST 624.60 FEET OF SAID LOT 12 AT A POINT 150.00 FEET NORTH FROM THE SOUTH LINE OF SAID LOT 12; THENCE SOUTH, ALONG SAID EAST LINE OF THE WEST 624.60 FEET OF LOT 12, A DISTANCE OF 150.00 FEET TO THE SOUTH LINE OF LOT 12; THENCE WEST, ALONG THE SOUTH LINE OF LOT 12, A DISTANCE OF 624.60 FEET TO THE POINT OF BEGINNING, ALL IN SCHOOL TRUSTEES' SUBDIVISION OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL 2: (TITLE COMMITMENT #2000 0006386Z4 STG)
THAT PART OF THE SOUTH 48.00 FEET OF LOT 12 IN SCHOOL TRUSTEES' SUBDIVISION OF SECTION 16, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, BOUNDED AND DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 12 AND RUNNING THENCE NORTH, ALONG THE WEST LINE OF SAID LOT 12, A DISTANCE OF 48.00 FEET; THENCE EAST, ALONG THE NORTH LINE OF THE SOUTH 48.00 FEET OF SAID LOT 12, A DISTANCE OF 689.60 FEET; THENCE SOUTH, ALONG A STRAIGHT LINE PARALLEL WITH SAID WEST LINE OF LOT 12, A DISTANCE OF 267.00 FEET; THENCE SOUTHEASTERLY, ALONG A STRAIGHT LINE, A DISTANCE OF 95.84 FEET TO AN INTERSECTION WITH THE EAST LINE OF THE WEST 624.60 FEET OF SAID LOT 12 AT A POINT 150.00 FEET NORTH FROM THE SOUTH LINE OF SAID LOT 12; THENCE SOUTH, ALONG SAID EAST LINE OF THE WEST 624.60 FEET OF LOT 12, A DISTANCE OF 150.00 FEET TO THE SOUTH LINE OF LOT 12; THENCE WEST, ALONG THE SOUTH LINE OF LOT 12, A DISTANCE OF 624.60 FEET TO THE POINT OF BEGINNING; EXCEPTING THEREFROM THE SOUTH 27 FEET THEREOF AND EXCEPTING THEREFROM THE WEST 30 FEET THEREOF TAKEN FOR PUBLIC ROAD, ALL IN COOK COUNTY, ILLINOIS.

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DRAINAGE CERTIFICATION

TO THE BEST OF OUR KNOWLEDGE AND BELIEF THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF SUCH SUBDIVISION OR ANY PART THEREOF, OR THAT IS SUCH SURFACE WATER DRAINAGE WILL BE CHANGED, ADEQUATE PROVISION HAS BEEN MADE FOR THE DIRECTION AND DIVERSION OF SUCH SURFACE WATERS INTO PUBLIC AREAS OR DRAINS WHICH THE SUBDIVIDER HAS A RIGHT TO USE, AND THAT SUCH SURFACE WATERS WILL NOT BE DEPOSITED ON THE PROPERTY OF ADJOINING LAND OWNERS IN SUCH CONCENTRATIONS AS MAY CAUSE DAMAGE TO THE ADJOINING PROPERTY BECAUSE OF THE CONSTRUCTION OF THE SUBDIVISION.

DATED THIS THIRD DAY OF FEBRUARY, A.D., 2023.

ILLINOIS PROFESSIONAL ENGINEER ERIC J. TRACY 062 067482 STATE OF ILLINOIS

IL LICENSED PROFESSIONAL ENGINEER 062067482
MY LICENSE EXPIRES ON NOVEMBER 30, 2023

Date of Expiration: 11-30-23

PROFESSIONAL ENGINEER'S CERTIFICATION

I, ERIC J. TRACY, A LICENSED PROFESSIONAL ENGINEER OF IL, HEREBY CERTIFY THAT THIS SUBMISSION, PERTAINING ONLY TO THE TCT SERIES SHEETS LISTED ABOVE, BUT EXCLUDING DETAILS PREPARED BY OTHERS, WAS PREPARED ON BEHALF OF THM BY KIMLEY-HORN AND ASSOCIATES, INC. UNDER MY PERSONAL DIRECTION. THIS TECHNICAL SUBMISSION IS INTENDED TO BE USED AS AN INTEGRAL PART OF AND IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS.

DATED THIS THIRD DAY OF FEBRUARY, A.D., 2023.

ILLINOIS PROFESSIONAL ENGINEER ERIC J. TRACY 062 067482 STATE OF ILLINOIS

IL LICENSED PROFESSIONAL ENGINEER 062067482
MY LICENSE EXPIRES ON NOVEMBER 30, 2023
DESIGN FIRM REGISTRATION NUMBER: 184.002.012-0006

Date of Expiration: 11-30-23

PROJECT NOTES

ALL DETENTION AND BEST MANAGEMENT PRACTICES SHALL BE COMPLETE AND OPERATIONAL PRIOR TO CONSTRUCTION OF THE BUILDINGS OR OTHER IMPERVIOUS SURFACE.

BENCHMARKS

PROJECT BENCHMARK
SUBMERGED VERTICAL AND HORIZONTAL CONTROL MARKERS, STATION NUMBER 15, MONUMENT IN A "PK" MONUMENT IN THE PARKWAY OF QUAIL LANE, BETWEEN THE SIDEWALK AND THE BACK OF CURB, NORTH OF THE DRIVEWAY TO 2750 QUAIL LANE (NORTHBROOK), 15.41' SOUTHWESTERLY OF A "+" CUT IN THE SOUTHEAST CORNER OF A DROP INLET, 14.05' EASTERLY OF A "+" CUT IN THE HYDRANT ON THE SOUTH SIDE OF THE ISLAND, AND 20.90' NORTHWESTERLY OF A PK NAIL IN THE CENTERLINE OF QUAIL LANE.
ELEVATION = 210.60 (NAVD 88).

NO.	DATE	DESCRIPTION
9	8/14/23	VILLAGE REVIEW
8	8/30/23	MWRD REVIEW #3
7	7/31/23	MWRD REVIEW #2
6	7/21/23	QA/QC - THW
5	6/29/23	MWRD REVIEW #1
4	6/2/23	DETENTION REVISION
3	5/9/23	WATERMAIN REROUTE
2	5/3/23	VILLAGE ENGINEERING COMMENTS
1	2/3/23	WILDLIFE ENGINEERING COMMENTS
0	1/6/23	DD ISSUANCE
9	9/30/22	PROGRESS CD'S
8	8/22/22	50% CDS
7	6/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK
2625 TECHNY RD, NORTHBROOK, IL 60062

Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
4201 WINFIELD ROAD, SUITE 600
WARRENVILLE, IL 60555
PHONE: 630-487-5550
WWW.KIMLEY-HORN.COM

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Suite 900
Atlanta, GA 30328

2632 Broadway Street
Suite 201, South Building
San Antonio, TX 78215

PH: 770 916 2220
FAX: 770 916 2299
www.thw.com

PRELIMINARY DRAWINGS. NOT TO BE USED FOR RECORDING, IMPLEMENTATION, REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

Title Sheet

Sheet No.: C0.0

K:\DHS_IDEV\268004000_Covenant_Northbrook_IL\2_Design\CAD\PlanSheets\C0.0 TITLE SHEET.dwg

GENERAL NOTES

CONFLICT BETWEEN COMPONENT PARTS OF SPECIFICATIONS:

IN THE EVENT THAT ANY PROVISION IN ANY OF THE FOLLOWING COMPONENT PARTS OF THESE SPECIFICATIONS CONFLICT WITH ANY PROVISION IN ANY OTHER OF THE COMPONENT PARTS, THE PROVISION IN THE COMPONENT PART FIRST ENUMERATED BELOW SHALL GOVERN OVER AND OTHER COMPONENT PART WHICH FOLLOWS IT NUMERICALLY, EXCEPT AS MAY OTHERWISE SPECIFICALLY BE STATED. SAID COMPONENT PARTS ARE THE FOLLOWING:
1. VILLAGE OF NORTHBROOK STANDARD DETAILS
2. NORTHBROOK STANDARD SPECIFICATIONS FOR PUBLIC AND PRIVATE IMPROVEMENTS
3. PLANS
4. ADDENDUM TO SPECIFICATIONS
5. SPECIAL PROVISIONS

---

1. EXISTING SITE TOPOGRAPHY, UTILITIES, RIGHT-OF-WAY AND HORIZONTAL CONTROL SHOWN ON THE DRAWINGS WERE OBTAINED FROM A SURVEY PREPARED BY:

   TFW SURVEYING AND MAPPING INC.
   1761 N DILLEYS RD
   GURNEE, IL 60031
   TEL: (847)-548-6600

   COPIES OF THE SURVEY ARE AVAILABLE FROM THE ENGINEER. SITE CONDITIONS MAY HAVE CHANGED SINCE THE SURVEY WAS PREPARED. CONTRACTORS TO VISIT SITE TO FAMILIARIZE THEMSELVES WITH THE CURRENT CONDITIONS.

2. COPIES OF SOILS INVESTIGATION REPORTS MAY BE OBTAINED FROM THE OWNER. ANY BRACING, SHEETING OR SPECIAL CONSTRUCTION METHODS DEEMED NECESSARY BY THE CONTRACTOR IN ORDER TO INSTALL THE PROPOSED IMPROVEMENTS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PROJECT. ANY ADDITIONAL SOILS DATA NEEDED TO CONFIRM THE CONTRACTOR'S OPINIONS OF THE SUBSOIL CONDITIONS SHALL BE DONE AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL OBTAIN THE OWNER'S WRITTEN AUTHORIZATION TO ACCESS THE SITE TO CONDUCT A SUPPLEMENTAL SOILS INVESTIGATION

3. THE DEVELOPER SHALL PROVIDE A SITE ENGINEER TO MONITOR THE INSTALLATION OF UNDERGROUND UTILITIES, ROADWAY, CURB/GUTTER, SIDEWALK, WITNESS SEWER AND WATER MAIN PRESSURE TESTS, ETC. INCLUDING CREATION OF DAILY REPORTS AND VERIFY INSTALLATION REQUIREMENTS HAVE BEEN MET. THE SITE ENGINEER WILL BE ONSITE FULL TIME WHILE THESE WORK ITEMS ARE TAKING PLACE. THE DEVELOPER SHALL ALSO PROVIDE A GEOTECHNICAL ENGINEER ONSITE FOR THE ROADWAY PROOF ROLL. NUCLEAR DENSITY TESTS SHALL BE PERFORMED DURING THE HMA WORK.

4. THE CONTRACTOR SHALL PHOTOGRAPH THE WORK AREA PRIOR TO CONSTRUCTION FOR THE PURPOSE OF DOCUMENTING EXISTING CONDITIONS.

5. EXCEPT WHERE MODIFIED BY THE CONTRACT DOCUMENTS, ALL PROPOSED WORK SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS WHICH ARE HEREBY MADE A PART HEREOF:

   A. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS," AS PREPARED BY IDOT, LATEST EDITION.

   B. "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" AS PUBLISHED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA), LATEST EDITION.

   C. "ILLINOIS RECOMMENDED STANDARDS FOR SEWAGE WORKS," AS PUBLISHED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA), LATEST EDITION.

   D. REGULATIONS, STANDARDS AND GENERAL REQUIREMENTS SET FORTH BY THE VILLAGE OF NORTHBROOK, UNLESS OTHERWISE NOTED ON THE PLANS.

   E. THE NATIONAL ELECTRIC CODE.

   F. ALL APPLICABLE PROVISIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT ARE HEREIN INCORPORATED BY REFERENCE.

5. STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, AND RECURRING SPECIAL PROVISIONS, CONSTRUCTION PLANS, AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THE CONTRACTOR'S WORK MAY NOT BE SPECIFICALLY NOTED, BUT ARE CONSIDERED A PART OF THE CONTRACTOR'S CONTRACT.

6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL ITEMS REQUIRED FOR CONSTRUCTION OF THE PROJECT, AS SHOWN ON THE PLANS, ARE INCLUDED IN THE CONTRACT. ANY ITEM NOT SPECIFICALLY INCLUDED IN THE CONTRACT, BUT SHOWN ON THE PLANS, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IN THE EVENT OF A DISCREPANCY WITH THE PLANS AND QUANTITIES.

7. THE CONTRACTOR IS RESPONSIBLE FOR HAVING A SET OF "APPROVED" ENGINEERING PLANS WITH THE LATEST REVISION DATE ON THE JOB SITE PRIOR TO THE START OF CONSTRUCTION. IF THERE ARE ANY DISCREPANCIES WITH WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT THEM TO THE SURVEYOR OR ENGINEER BEFORE DOING ANY WORK. OTHERWISE, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, SPECIFICATIONS, AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT THE CONTRACTOR'S OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTIONS ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.

8. THE CONTRACTOR SHALL SUBSCRIBE TO ALL GOVERNING REGULATIONS AND SHALL OBTAIN ALL NECESSARY PUBLIC AGENCY PERMITS PRIOR TO STARTING WORK. THE CONTRACTOR, BY USING THESE PLANS FOR THEIR WORK, AGREE TO HOLD HARMLESS KIMLEY-HORN AND ASSOCIATES, INC, THE MUNICIPALITY, THEIR EMPLOYEES AND AGENTS AND THE OWNER FROM AND AGAINST ANY AND ALL LIABILITY, CLAIMS, DAMAGES, AND THE COST OF DEFENSE ARISING OUT OF CONTRACTOR(S) PERFORMANCE OF THE WORK DESCRIBED HEREIN.

9. THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS.

10. CONSTRUCTION MATERIALS AND/OR EQUIPMENT MAY NOT BE STORED IN THE RIGHT-OF-WAY, AS DIRECTED BY THE OWNER.

11. EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHT-OF-WAYS ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH LOCATIONS OF THE NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.

12. OWNER SHALL OBTAIN EASEMENTS AND APPROVAL OF PERMITS NECESSARY TO FACILITATE CONSTRUCTION OF THE PROPOSED UTILITIES. THE CONTRACTOR, HOWEVER, SHALL FURNISH ALL REQUIRED BONDS AND EVIDENCE OF INSURANCE NECESSARY TO SECURE THESE PERMITS AND EASEMENTS.

13. THE CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES UNTIL THEY ARE NO LONGER NEEDED. ANY STAKES DESTROYED OR DISTURBED BY THE CONTRACTOR PRIOR TO THEIR USE SHALL BE RESET BY THE SURVEYOR AT THE CONTRACTOR'S EXPENSE.

14. NOTIFICATION OF COMMENCING CONSTRUCTION:

    14.A. THE CONTRACTOR SHALL NOTIFY AFFECTED GOVERNMENTAL AGENCIES IN WRITING AT LEAST THREE FULL WORKING DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL NOTIFY, AS NECESSARY, ALL TESTING AGENCIES, THE VILLAGE OF NORTHBROOK, AND THE OWNER 48-HOURS IN ADVANCE OF CONSTRUCTION.

    14.B. FAILURE OF THE CONTRACTOR TO ALLOW PROPER NOTIFICATION TIME WHICH RESULTS IN THE TESTING COMPANIES TO BE UNABLE TO VISIT THE SITE AND PERFORM TESTING WILL CAUSE THE CONTRACTOR TO SUSPEND THE OPERATION TO BE TESTED UNTIL THE TESTING AGENCY CAN SCHEDULE TESTING OPERATIONS. COST OF SUSPENSION OF WORK SHALL BE BORNE BY THE CONTRACTOR.

15. ALL CONTRACTORS SHALL KEEP ACCESS AVAILABLE AT ALL TIMES FOR ALL EMERGENCY TRAFFIC, AS DIRECTED BY THE MUNICIPALITY.

16. VILLAGE HOURS OF CONSTRUCTION SHALL BE STRICTLY ENFORCED ACCORDING TO THE MUNICIPAL CODE (SECTION 16- 52). NO OPERATIONS SHALL TAKE PLACE ON THE PROPERTY THAT CREATE NOISE OUTSIDE OF ALLOWABLE HOURS. THIS INCLUDES STARTING DIESEL ENGINES OR DUMP TRUCKS ARRIVING PRIOR TO THE DESIGNATED TIME.

17. ANY EXISTING SIGNS, LIGHT STANDARDS, AND UTILITY POLES THAT INTERFERE WITH CONSTRUCTION OPERATIONS AND ARE NOT NOTED ON THE PLANS FOR DISPOSAL SHALL BE REMOVED AND RESET BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE, AS DIRECTED BY THE ENGINEER. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE TO THE SATISFACTION OF THE OWNER. ANY SIGNS NOT REQUIRED TO BE RESET SHALL BE DELIVERED TO THE RESPECTIVE OWNERS.

18. ALL TREES TO BE SAVED SHALL BE IDENTIFIED PRIOR TO CONSTRUCTION BY THE LANDSCAPE ARCHITECT AND SHALL BE PROTECTED PER IDOT SECTION 201.05. THE RIGHT-OF-WAY LINE AND LIMITS OF THE CONTRACTOR'S OPERATIONS SHALL BE CLEARLY DEFINED THROUGHOUT THE CONSTRUCTION PERIOD. ALL TREES NOTED TO REMAIN SHALL BE PROTECTED FROM DAMAGE TO TRUNKS, BRANCHES AND ROOTS. NO EXCAVATING, FILLING OR GRADING IS TO BE DONE INSIDE THE DRIP LINE OF TREES UNLESS OTHERWISE INDICATED.

19. LIMB PRUNING SHALL BE PERFORMED UNDER THE SUPERVISION OF AN APPROVED LANDSCAPE ARCHITECT, FORESTER, OR ARBORIST AND SHALL BE UNDERTAKEN IN A TIMELY FASHION SO AS NOT TO INTERFERE WITH CONSTRUCTION. ALL LIMBS, BRANCHES, AND OTHER DEBRIS RESULTING FROM THE CONTRACTOR'S WORK SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. ALL CUTS OVER ONE (1) INCH IN DIAMETER SHALL BE PAINTED WITH AN APPROVED TREE PAINT.

20. ALL EXISTING PAVEMENT OR CONCRETE TO BE REMOVED SHALL BE SAWCUT ALONG LIMITS OF PROPOSED REMOVAL BEFORE COMMENCEMENT OF PAVEMENT REMOVAL.

21. ALL EXISTING UTILITIES OR IMPROVEMENTS, INCLUDING WALKS, CURBS, PAVEMENT, AND PARKWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE PROMPTLY RESTORED TO THEIR RESPECTIVE ORIGINAL CONDITION. THE CONTRACTOR'S WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNLESS A PAY ITEM IS LISTED ON THE BID LIST.

22. REMOVAL OF SPECIFIED ITEMS, INCLUDING BUT NOT LIMITED TO, PAVEMENT, SIDEWALK, CURB, CURB AND GUTTER, CULVERTS, ETC., SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR ANY PERMITS REQUIRED FOR SUCH DISPOSAL.

23. THE CONTRACTOR SHALL COLLECT AND REMOVE ALL CONSTRUCTION DEBRIS, EXCESS MATERIALS, TRASH, OIL AND GREASE RESIDUE, MACHINERY, TOOLS, AND OTHER MISCELLANEOUS ITEMS WHICH WERE NOT PRESENT PRIOR TO PROJECT COMMENCEMENT AT NO ADDITIONAL EXPENSE TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY AND ALL PERMITS NECESSARY FOR THE HAULING AND DISPOSAL REQUIRED FOR CLEANUP, AS DIRECTED BY THE ENGINEER OR OWNER. BURNING ON THE SITE IS NOT PERMITTED.

24. NO UNDERGROUND WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE COVERED UNTIL IT HAS BEEN APPROVED BY THE VILLAGE OF NORTHBROOK. APPROVAL TO PROCEED MUST BE OBTAINED FROM THE VILLAGE OF NORTHBROOK PRIOR TO INSTALLING PAVEMENT BASE, BINDER, AND SURFACE, AND PRIOR TO POURING ANY CONCRETE AFTER FORMS HAVE BEEN SET, AS NECESSARY.

25. WHERE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER, EXISTING DRAINAGE STRUCTURES AND PIPE SHALL BE CLEANED OF DEBRIS AND PATCHED AS NECESSARY TO ASSURE INTEGRITY OF THE STRUCTURE. THE CONTRACTOR'S WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE MERGED INTO THE CONTRACT UNIT PRICE EACH FOR STRUCTURES AND CONTRACT UNIT PRICE PER LINEAL FOOT FOR STORM SEWERS, WHICH SHALL BE PAYMENT IN FULL FOR CLEANING, PATCHING, REMOVAL, AND DISPOSAL OF DEBRIS AND DIRT. DRAINAGE STRUCTURES AND STORM SEWERS CONSTRUCTED AS PART OF THE CONTRACTOR'S PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. NO EXTRA PAYMENT WILL BE MADE FOR CLEANING STRUCTURES OR STORM SEWERS CONSTRUCTED AS PART OF THE CONTRACTOR'S PROJECT.

26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. THE ENGINEER DOES NOT WARRANT THE LOCATION OF ANY EXISTING UTILITIES SHOWN ON THE PLANS. THE CONTRACTOR SHALL CALL J.U.L.I.E. (1-800-892-0123) AND THE VILLAGE OF NORTHBROOK FOR UTILITY LOCATIONS.

27. THE GENERAL CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO PROVIDE CABLE TV, PHONE, ELECTRIC, GAS AND IRRIGATION SERVICES. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING SITE LAYOUTS FOR THESE UTILITIES AND SHALL COORDINATE AND PROVIDE CONDUIT CROSSINGS AS REQUIRED. THIS COORDINATION SHALL BE CONSIDERED INCIDENTAL TO GENERAL CONTRACTOR AGREEMENT WITH THE OWNER. ANY CONFLICTS IN UTILITIES SHALL BE CORRECTED BY THE GENERAL CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

28. CONTRACTOR IS TO VERIFY ALL EXISTING STRUCTURES AND FACILITIES AT ALL PROPOSED UTILITY CONNECTION LOCATIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL AND STARTING WORK.

29. ANY FIELD TILES ENCOUNTERED SHALL BE INSPECTED BY THE ENGINEER. THE DRAIN TILE SHALL BE CONNECTED TO THE STORM SEWER SYSTEM AND A RECORD KEPT BY THE CONTRACTOR OF THE LOCATIONS AND TURNED OVER TO THE ENGINEER UPON COMPLETION OF THE PROJECT. THE COST OF THE CONTRACTOR'S WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT, AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

30. ALL FRAMES AND LIDS FOR STORM AND SANITARY SEWERS, VALVE VAULT COVERS, FIRE HYDRANTS, AND B-BOXES ARE TO BE ADJUSTED TO MEET FINISHED GRADE. THE CONTRACTOR'S ADJUSTMENT IS TO BE MADE BY THE SEWER AND WATER CONTRACTOR, AND THE COST IS TO BE CONSIDERED INCIDENTAL. THESE ADJUSTMENTS TO FINISHED GRADE WILL NOT ALLEVIATE THE CONTRACTOR FROM ANY ADDITIONAL ADJUSTMENTS AS REQUIRED BY THE MUNICIPALITY UPON FINAL INSPECTION OF THE PROJECT.

31. HYDRANTS SHALL NOT BE FLUSHED DIRECTLY ONTO THE ROAD SUBGRADES. WHENEVER POSSIBLE, HOSES SHALL BE USED TO DIRECT THE WATER INTO LOT AREAS OR THE STORM SEWER SYSTEM, IF AVAILABLE. DAMAGE TO THE ROAD SUBGRADE OR LOT GRADING DUE TO EXCESSIVE WATER SATURATION AND/OR EROSION FROM HYDRANT FLUSHING, OR FROM LEAKS IN THE WATER DISTRIBUTION SYSTEM, WILL BE REPAIRED BY THE CONTRACTOR FLUSHING OR USING THE HYDRANT AT THE CONTRACTOR'S OWN EXPENSE. LEAKS IN THE WATER DISTRIBUTION SYSTEM SHALL BE THE RESPONSIBILITY OF THE WATER MAIN CONTRACTOR AND SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

32. TRENCH BACKFILL WILL BE REQUIRED TO THE FULL DEPTH ABOVE SEWERS AND WATERMAIN WITHIN TWO (2) FEET HORIZONTAL OF PROPOSED OR EXISTING PAVEMENT.

33. IF SOFT, SPONGY, OR OTHER UNSUITABLE SOILS WITH UNCONFINED COMPRESSIVE STRENGTH LESS THAN 0.5 TSF ARE ENCOUNTERED AT THE BOTTOM OF THE TRENCH, ALL SUCH MATERIAL SHALL BE REMOVED AND REPLACED WITH WELL-COMPACTED, CRUSHED LIMESTONE BEDDING MATERIAL. IF ROCK IS ENCOUNTERED, IT SHALL BE REMOVED TO AT LEAST SIX (6) INCHES BELOW THE BOTTOM OF THE PIPE TO ALLOW PROPER THICKNESS OF BEDDING. ANY UNDERCUTS OF TWO (2) FEET OR LESS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. DEPTHS GREATER THAN TWO (2) FEET SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PROCEEDING.

34. THE TRENCHES FOR PIPE INSTALLATION SHALL BE KEPT DRY AT ALL TIMES DURING PIPE PLACEMENT. APPROPRIATE FACILITIES TO MAINTAIN THE DRY TRENCH SHALL BE PROVIDED BY THE CONTRACTOR, AND THE COST OF SUCH SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE ITEM. PLANS FOR THE SITE DEWATERING, IF EMPLOYED, SHALL BE SUBMITTED TO AND APPROVED BY THE OWNER PRIOR TO IMPLEMENTATION. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR DEWATERING DURING CONSTRUCTION UNLESS APPROVED IN WRITING BY THE OWNER.

35. AFTER THE STORM SEWER SYSTEM HAS BEEN CONSTRUCTED, THE CONTRACTOR SHALL PLACE PROPER INLET PROTECTION EROSION CONTROL AT LOCATIONS INDICATED BY THE ENGINEER. THE PURPOSE OF THE INLET PROTECTION WILL BE TO MINIMIZE THE AMOUNT OF SILTATION THAT NORMALLY WOULD ENTER THE STORM SEWER SYSTEM FROM ADJACENT AND/OR UPSTREAM DRAINAGE AREAS.

36. AT THE CLOSE OF EACH WORKING DAY AND AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS.

37. EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH IEPA REGULATIONS AND IDOT STANDARDS FOR SOIL EROSION AND SEDIMENTATION CONTROL AND SHALL BE MAINTAINED BY THE CONTRACTOR AND REMAIN IN PLACE UNTIL A SUITABLE GROWTH OF GRASS, ACCEPTABLE TO THE ENGINEER, HAS DEVELOPED.

38. THE CONTRACTOR SHALL CONFORM TO ALL EROSION CONTROL REQUIREMENTS AS SET FORTH BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY THROUGH THE NPDES PHASE II PERMIT PROGRAM REQUIREMENTS AND GOVERNING MUNICIPALITY. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL MEASURES AS INDICATED ON THE EROSION CONTROL DRAWINGS AND SPECIFICATIONS AS WELL AS THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED BY KIMLEY-HORN AND ASSOCIATES, INC AND IDOT SEDIMENT CONTROL FIELD GUIDE FOR CONSTRUCTION INSPECTION. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THE PROVISIONS INDICATED IN THE SWPPP AT A MINIMUM, INCLUDING EROSION CONTROL MEASURES AND INSPECTION FREQUENCY, AS REQUIRED BY THE IEPA NPDES PHASE II PERMIT PROGRAM REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL SWPPP DOCUMENTATION CURRENT AND READILY AVAILABLE ON THE PROJECT SITE AT ALL TIMES FOR REVIEW BY THE OWNER, ENGINEER, AND REGULATORY AGENCIES. KIMLEY-HORN AND ASSOCIATES, INC. IS NOT RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS OR SUPPLIERS, WHICH CONTRIBUTE TO DEFICIENCIES IN THE SWPPP OR ANY VIOLATIONS RESULTING FROM INADEQUATE EROSION CONTROL PROTECTION AND/OR DOCUMENTATION.

39. THE PAVEMENT SHALL BE KEPT FREE OF MUD AND DEBRIS AT ALL TIMES. IT MAY BE NECESSARY TO KEEP A SWEEPER ON-SITE AT ALL TIMES.

40. ALL DISTURBED AREAS OF THE RIGHT-OF-WAY SHALL BE FULLY RESTORED TO PRE-CONSTRUCTION CONDITIONS WITH A MINIMUM OF SIX (6) INCHES OF TOPSOIL, SEEDING, AND MULCH AS PER IDOT STANDARDS.

41. ALL PROPOSED GRADES SHOWN ON PLANS ARE FINISHED SURFACE ELEVATIONS, UNLESS NOTED OTHERWISE.

42. ALL TESTING SHALL BE THE RESPONSIBILITY AND EXPENSE OF THE CONTRACTOR. IF REQUESTED BY THE MUNICIPALITY OR ENGINEER, COPIES OF ALL TEST RESULTS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW AND APPROVAL.

43. PROVIDE SMOOTH VERTICAL CURVES THROUGH HIGH AND LOW POINTS INDICATED BY SPOT ELEVATIONS. PROVIDE UNIFORM SLOPES BETWEEN NEW AND EXISTING GRADES. AVOID RIDGES AND DEPRESSIONS.

44. WHEN REQUIRED, THE CONTRACTOR SHALL NOTIFY THE OWNER WHEN RECORD DRAWINGS CAN BE PREPARED. RECORD DRAWINGS SHALL INDICATE THE FINAL LOCATION AND LAYOUT OF ALL IMPROVEMENTS, INCLUDING VERIFICATION OF ALL CONCRETE PADS, INVERT, RIM, AND SPOT GRADE ELEVATIONS, AND INCORPORATE ALL FIELD DESIGN CHANGES APPROVED BY THE OWNER.

45. BEFORE ACCEPTANCE, ALL WORK SHALL BE INSPECTED BY THE VILLAGE OF NORTHBROOK, AS NECESSARY.

EARTHWORK NOTES

IF ANY ITEMS BELOW ARE FOUND TO BE IN CONFLICT WITH VILLAGE REQUIREMENTS, REFER TO "CONFLICTS BETWEEN COMPONENT, PARTS OR SPECIFICATIONS" UNDER THE GENERAL NOTES.

1. GENERAL

1.1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE SOIL AND GROUNDWATER CONDITIONS AT THE SITE.

1.2. ANY QUANTITIES IN THE BID PROPOSAL ARE INTENDED AS A GUIDE FOR THE CONTRACTOR'S USE IN DETERMINING THE SCOPE OF THE COMPLETED PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALL MATERIAL QUANTITIES AND BE KNOWLEDGEABLE OF ALL SITE CONDITIONS.

1.3. THE CONTRACTOR WILL NOTE THAT THE ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS ARE FINISHED GRADE AND THAT PAVEMENT THICKNESS, TOPSOIL, ETC., MUST BE ACCOUNTED FOR.

1.4. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION AND PREVENT STORMWATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS. THE FAILURE TO PROVIDE PROPER DRAINAGE WILL NEGATE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION, AND TRAFFIC.

1.5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE INITIAL ESTABLISHMENT OF EROSION CONTROL PROCEDURES AND THE PLACEMENT OF SILT AND FILTER FENCING, ETC., TO PROTECT ADJACENT PROPERTY, WETLANDS, ETC., SHALL OCCUR BEFORE GRADING BEGINS.

1.6. PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES, THE CONTRACTOR SHALL ERECT A CONSTRUCTION FENCE AROUND ANY TREE DESIGNATED TO BE PRESERVED. SAID FENCE SHALL BE PLACED IN A CIRCLE CENTERED AROUND THE TREE, THE DIAMETER OF WHICH SHALL BE SUCH THAT THE ENTIRE DRIP ZONE (EXTENT OF FURTHEST EXTENDING BRANCHES) SHALL BE WITHIN THE FENCE LIMITS. THE EXISTING GRADE WITHIN THE FENCED AREA SHALL NOT BE DISTURBED.

1.7. EXISTING SUBSURFACE CONDITIONS WERE OBTAINED FROM A GEOTECHNICAL PREPARED BY:

   ECS MIDWEST, LLC
   1575 BARCLAY BOULEVARD
   BUFFALO GROVE, IL 60089
   TEL: (847) 279-0366

2. TOPSOIL EXCAVATION INCLUDES:

2.1. EXCAVATION OF TOPSOIL AND OTHER STRUCTURALLY UNSUITABLE MATERIALS WITHIN THOSE AREAS THAT WILL REQUIRE EARTH EXCAVATION OR COMPACTED EARTH FILL MATERIAL. EXISTING VEGETATION SHALL BE REMOVED PRIOR TO STRIPPING TOPSOIL OR FILLING AREAS.

2.2. PLACEMENT OF EXCAVATED MATERIAL IN OWNER-DESIGNATED AREAS FOR FUTURE USE WITHIN AREAS TO BE LANDSCAPED AND THOSE AREAS NOT REQUIRING STRUCTURAL FILL MATERIAL. PROVIDE NECESSARY EROSION CONTROL MEASURES FOR STOCKPILE.

2.3. TOPSOIL STOCKPILED FOR RESPREAD SHALL BE FREE OF CLAY AND SHALL NOT CONTAIN ANY OF THE TRANSITIONAL MATERIAL BETWEEN THE TOPSOIL AND CLAY. THE TRANSITIONAL MATERIAL SHALL BE USED IN NON-STRUCTURAL FILL AREAS OR DISPOSED OF OFF-SITE.

2.4. TOPSOIL RESPREAD SHALL INCLUDE HAULING AND SPREADING SIX (6) INCHES OF TOPSOIL DIRECTLY OVER AREAS TO BE LANDSCAPED WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE OWNER.

2.5. MODERATE COMPACTION IS REQUIRED IN NON-STRUCTURAL FILL AREAS.

3. EARTH EXCAVATION INCLUDES:

3.1. EXCAVATION OF SUBSURFACE MATERIALS WHICH ARE SUITABLE FOR USE AS STRUCTURAL FILL. THE EXCAVATION SHALL BE TO WITHIN A TOLERANCE OF 0.1 FEET OF THE PLAN SUBGRADE ELEVATIONS WHILE MAINTAINING PROPER DRAINAGE. THE TOLERANCE WITHIN PAVEMENT AREAS SHALL BE SUCH THAT THE EARTH MATERIALS SHALL "BALANCE" DURING THE FINE GRADING OPERATION.

3.2. PLACEMENT OF SUITABLE MATERIALS SHALL BE WITHIN THOSE AREAS REQUIRING STRUCTURAL FILL IN ORDER TO ACHIEVE THE PLAN SUBGRADE ELEVATIONS TO WITHIN A TOLERANCE OF 0.1 FEET. THE FILL MATERIALS SHALL BE PLACED IN LOOSE LIFTS THAT SHALL NOT EXCEED EIGHT (8) INCHES IN THICKNESS, AND THE WATER CONTENT SHALL BE ADJUSTED IN ORDER TO ACHIEVE REQUIRED COMPACTION.

3.3. STRUCTURAL FILL MATERIAL MAY BE PLACED WITHIN THOSE PORTIONS OF THE SITE NOT REQUIRING STRUCTURAL FILL, WITHIN SIX (6) INCHES OF THE PLAN FINISHED GRADE ELEVATION. IN AREAS REQUIRING STRUCTURAL FILL, HOWEVER, THIS MATERIAL SHALL NOT BE PLACED OVER TOPSOIL OR OTHER UNSUITABLE MATERIALS UNLESS SPECIFICALLY DIRECTED BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.

3.4. COMPACTION OF SUITABLE MATERIALS SHALL BE TO AT LEAST 93% OF THE MODIFIED PROCTOR DRY DENSITY WITHIN PROPOSED PAVEMENT AREAS, SIDEWALK, ETC. COMPACTION SHALL BE AT LEAST 95% OF THE MODIFIED PROCTOR WITHIN PROPOSED BUILDING PAD AREAS.

4. UNSUITABLE MATERIAL: UNSUITABLE MATERIALS SHALL BE CONSIDERED MATERIAL THAT IS NOT SUITABLE FOR THE SUPPORT OF PAVEMENT AND BUILDING CONSTRUCTION, AND IS ENCOUNTERED BELOW NORMAL TOPSOIL DEPTHS AND THE PROPOSED SUBGRADE ELEVATION. THE DECISION TO REMOVE SAID MATERIAL AND TO WHAT EXTENT SHALL BE MADE BY THE ENGINEER WITH THE CONCURRENCE OF THE OWNER.

5. MISCELLANEOUS. THE CONTRACTOR SHALL:

5.1. SPREAD AND COMPACT UNIFORMLY TO THE DEGREE SPECIFIED ALL EXCESS TRENCH SPOIL AFTER COMPLETION OF THE UNDERGROUND IMPROVEMENTS.

5.2. SCARIFY, DISC, AERATE, AND COMPACT, TO THE DEGREE SPECIFIED, THE UPPER TWELVE (12) INCHES OF THE SUITABLE SUBGRADE MATERIAL IN ALL AREAS THAT MAY BE SOFT DUE TO EXCESS MOISTURE CONTENT. THIS APPLIES TO CUT AREAS AS WELL AS FILL AREAS.

5.3. ADD WATER TO DRY MATERIAL IN ORDER TO ADJUST THE MOISTURE CONTENT FOR THE PURPOSE OF ACHIEVING THE SPECIFIED COMPACTION.

5.4. BACKFILL THE CURB AND GUTTER AFTER ITS CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE MATERIAL.

6. TESTING AND FINAL ACCEPTANCE

6.1. THE CONTRACTOR SHALL PROVIDE AS A MINIMUM A FULLY LOADED SIX-WHEEL TANDEM AXLE TRUCK FOR PROOF ROLLING THE PAVEMENT SUBGRADE PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND THE BASE MATERIAL. THIS SHALL BE WITNESSED BY THE TESTING ENGINEER AND THE OWNER. (SEE PAVING SPECIFICATION.)

6.2. ANY UNSUITABLE AREA ENCOUNTERED AS A RESULT OF PROOF ROLLING SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL OR OTHERWISE CORRECTED AND APPROVED BY THE ENGINEER.

PAVING NOTES

IF ANY ITEMS BELOW ARE FOUND TO BE IN CONFLICT WITH VILLAGE REQUIREMENTS, REFER TO "CONFLICTS BETWEEN COMPONENT, PARTS OR SPECIFICATIONS" UNDER THE GENERAL NOTES.

1. GENERAL

1.1. PAVING WORK INCLUDES FINAL SUBGRADE SHAPING, PREPARATION, AND COMPACTION; PLACEMENT OF SUBBASE OR BASE COURSE MATERIALS; BITUMINOUS BINDER AND/OR SURFACE COURSES; FORMING, FINISHING, AND CURING CONCRETE PAVEMENT, CURBS, AND WALKS; AND FINAL CLEAN-UP AND ALL RELATED WORK.

1.2. COMPACTION REQUIREMENTS [REFERENCE ASTM D-1557 (MODIFIED PROCTOR)] FOR SUBGRADE, SUBBASE, AGGREGATE BASE COURSE, AND BITUMINOUS COURSES SHALL MEET ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) HIGHWAY STANDARDS.

1.3. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE PROPER BARRICADING WARNING DEVICES, AND THE SAFE MANAGEMENT OF TRAFFIC WITHIN THE AREA OF CONSTRUCTION. ALL SUCH DEVICES AND THEIR INSTALLATION SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, AND IN ACCORDANCE WITH THE VILLAGE OF NORTHBROOK CODE.

2. SUBGRADE PREPARATION

2.1. EARTHWORK FOR PROPOSED PAVEMENT SUBGRADE SHALL BE FINISHED TO WITHIN 0.1 FOOT, PLUS OR MINUS, OF PLAN ELEVATION. THE CONTRACTOR SHALL CONFIRM THAT THE SUBGRADE HAS BEEN PROPERLY PREPARED AND THAT THE FINISHED TOP SUBGRADE ELEVATION HAS BEEN GRADED WITHIN TOLERANCES ALLOWED IN THESE SPECIFICATIONS, UNLESS THE CONTRACTOR ADVISES THE ENGINEER IN WRITING PRIOR TO FINE GRADING FOR BASE COURSE CONSTRUCTION. IT IS UNDERSTOOD THAT THE CONTRACTOR HAS APPROVED AND ACCEPTS THE RESPONSIBILITY FOR THE SUBGRADE.

2.2. PRIOR TO THE PLACEMENT OF THE BASE COURSE, THE SUBGRADE MUST BE PROOF-ROLLED AND INSPECTED FOR UNSUITABLE MATERIALS AND/OR EXCESSIVE MOVEMENT. IF UNSUITABLE SUBGRADE IS ENCOUNTERED, IT SHALL BE CORRECTED. THIS MAY INCLUDE ONE OR MORE OF THE FOLLOWING METHODS:

2.2.1. SCARIFY, DISC, AND AERATE.

2.2.2. REMOVE AND REPLACE WITH STRUCTURAL CLAY FILL.

2.2.3. REMOVE AND REPLACE WITH GRANULAR MATERIAL.

2.2.4. USE OF GEOTEXTILE FABRIC.

MAXIMUM DEFLECTION ALLOWED IN ISOLATED AREAS MAY BE ONE-QUARTER (1/4) INCH TO ONE-HALF (1/2) INCH IF NO DEFLECTION OCCURS OVER THE MAJORITY OF THE AREA.

2.3. PRIOR TO THE CONSTRUCTION OF THE CURB AND GUTTER AND THE PLACEMENT OF THE BASE MATERIAL, THE PAVEMENT AREA SHALL BE FINE-GRADED TO WITHIN 0.04 FEET (1/2 INCH) OF FINAL SUBGRADE ELEVATION, TO A POINT TWO (2) FEET BEYOND THE BACK OF THE CURB, SO AS TO ENSURE THE PROPER THICKNESS OF PAVEMENT COURSES. NO CLAIMS FOR EXCESS QUANTITY OF BASE MATERIALS DUE TO IMPROPER SUBGRADE PREPARATION WILL BE HONORED.

2.4. PRIOR TO PLACEMENT OF THE BASE COURSE, THE SUBGRADE SHALL BE APPROVED BY THE TESTING ENGINEER.

3. CONCRETE WORK

3.1. ALL EXTERIOR CONCRETE SHALL BE PORTLAND CEMENT CONCRETE WITH AIR ENTRAINMENT OF NOT LESS THAN FIVE (5%) OR MORE THAN EIGHT (8%) PERCENT. CONCRETE SHALL BE A MINIMUM OF SIX (6) BAG MIX AND SHALL DEVELOP A MINIMUM OF 4,000 PSI COMPRESSIVE STRENGTH AT TWENTY-EIGHT (28) DAYS. ALL CONCRETE SHALL BE BROOM-FINISHED PERPENDICULAR TO THE DIRECTION OF TRAVEL.

3.2. CONCRETE CURB AND/OR COMBINATION CURB AND GUTTER SHALL BE OF THE TYPE SHOWN ON THE PLANS. THE CONTRACTOR IS CAUTIONED TO REFER TO THE CONSTRUCTION STANDARDS AND THE PAVEMENT CROSS SECTION TO DETERMINE THE GUTTER FLAG THICKNESS AND THE AGGREGATE BASE COURSE THICKNESS BENEATH THE CURB AND GUTTER. PRE-MOLDED FIBER EXPANSION JOINTS, WITH TWO 3/4-INCH BY 18-INCH EPOXY-COATED STEEL DOWEL BARS, SHALL BE GREASED AND FITTED WITH METAL EXPANSION TUBES

3.3. CURBS SHALL BE DEPRESSED AND MEET THE SLOPE REQUIREMENTS OF THE ILLINOIS ACCESSIBILITY CODE AT LOCATIONS WHERE PUBLIC WALKS INTERSECT CURB LINES AND OTHER LOCATIONS, AS DIRECTED, FOR THE PURPOSE OF PROVIDING ACCESSIBILITY.

3.4. THE CURBS SHALL BE BACKFILLED AFTER THEIR CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE.

3.5. CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS. PROVIDE SCORED JOINTS AT 5-FOOT INTERVALS AND 1/2-INCH PRE-MOLDED FIBER EXPANSION JOINTS AT 20-FOOT INTERVALS AND ADJACENT TO CONCRETE CURBS, DRIVEWAYS, FOUNDATIONS, AND OTHER STRUCTURES.

3.6. CONCRETE CURING AND PROTECTION SHALL BE PER IDOT STANDARDS. TWO (2) COATS OF IDOT APPROVED CURING AGENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES.

3.7. THE COST OF AGGREGATE BASE OR SUBBASE UNDER CONCRETE WORK SHALL BE INCLUDED IN THE COST OF THE RESPECTIVE CONCRETE ITEM.

4. FLEXIBLE PAVEMENT

4.1. THE PAVEMENT MATERIALS FOR BITUMINOUS STREETS, PARKING LOTS, AND DRIVE AISLES SHALL BE AS DETAILED ON THE PLANS. UNLESS OTHERWISE SHOWN ON THE PLANS, THE FLEXIBLE PAVEMENTS SHALL CONSIST OF AGGREGATE BASE COURSE, TYPE B, HMA BINDER COURSE, IL-19, N50; AND HMA SURFACE COURSE, MIX N50, OF THE THICKNESS AND MATERIALS SPECIFIED ON THE PLANS. THICKNESSES SPECIFIED SHALL BE CONSIDERED TO BE THE MINIMUM COMPACTED THICKNESS.

4.2. ALL TRAFFIC SHALL BE KEPT OFF THE COMPLETED AGGREGATE BASE UNTIL THE BINDER COURSE IS LAID. THE AGGREGATE BASE SHALL BE UNIFORMLY PRIME COATED AT A RATE OF 0.4 TO 0.5 GALLONS PER SQUARE YARD PRIOR TO PLACING THE BINDER COURSE. PRIME COAT MATERIALS SHALL BE IDOT APPROVED.

4.3. PRIOR TO PLACEMENT OF THE SURFACE COURSE, THE BINDER COURSE SHALL BE CLEANED AND TACK-COATED IF DUSTY OR DIRTY. ALL DAMAGED AREAS IN THE BINDER, BASE, OR CURB SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER PRIOR TO LAYING THE SURFACE COURSE. THE CONTRACTOR SHALL PROVIDE WHATEVER EQUIPMENT AND STAFF NECESSARY, INCLUDING THE USE OF POWER BROOMS IF REQUIRED BY THE OWNER, TO PREPARE THE PAVEMENT FOR APPLICATION OF THE SURFACE COURSE. THE TACK COAT SHALL BE UNIFORMLY APPLIED TO THE BINDER COURSE AT A RATE OF 0.05 TO 0.10 GALLONS PER SQUARE YARD. TACK COAT SHALL BE AS PER IDOT STANDARDS.

4.4. SEAMS IN BAM, BINDER, AND SURFACE COURSE SHALL BE STAGGERED A MINIMUM OF 6 INCHES.

5. TESTING AND FINAL ACCEPTANCE.

5.1. THE CONTRACTOR SHALL FOLLOW THE QUALITY CONTROL TESTING PROGRAM FOR CONCRETE AND PAVEMENT MATERIALS ESTABLISHED BY THE MATERIALS/TESTING ENGINEER.

5.2. PRIOR TO PLACEMENT OF THE BITUMINOUS CONCRETE SURFACE COURSE, THE CONTRACTOR, WHEN REQUIRED BY THE VILLAGE OF NORTHBROOK, SHALL OBTAIN SPECIMENS OF THE BINDER COURSE WITH A CORE DRILL WHERE DIRECTED, FOR THE PURPOSE OF THICKNESS VERIFICATION.

5.3. WHEN REQUIRED BY THE VILLAGE OF NORTHBROOK, THE CONTRACTOR SHALL OBTAIN SPECIMENS OF THE FULL DEPTH BITUMINOUS CONCRETE PAVEMENT STRUCTURE WITH A CORE DRILL WHERE DIRECTED IN ORDER TO CONFIRM THE PLAN THICKNESS. DEFICIENCIES IN THICKNESS SHALL BE ADJUSTED FOR BY THE METHOD REQUIRED BY IDOT STANDARDS.

5.4. FINAL ACCEPTANCE OF THE TOTAL PAVEMENT INSTALLATION SHALL BE SUBJECT TO THE TESTING AND CHECKING REQUIREMENTS CITED ABOVE.

6. ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE VILLAGE OF NORTHBROOK CODE. WHEN CONFLICTS ARISE BETWEEN MUNICIPAL CODE, GENERAL NOTES AND SPECIFICATIONS, THE MORE STRINGENT SHALL TAKE PRECEDENCE.

SIGNAGE AND PAVEMENT MARKING NOTES

IF ANY ITEMS BELOW ARE FOUND TO BE IN CONFLICT WITH VILLAGE REQUIREMENTS, REFER TO "CONFLICTS BETWEEN COMPONENT, PARTS OR SPECIFICATIONS" UNDER THE GENERAL NOTES.

1. ALL SIGNING AND PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) STANDARDS.

2. SIGNS: SIGNS SHALL BE CONSTRUCTED OF 0.080-INCH THICK FLAT ALUMINUM PANELS WITH REFLECTORIZED LEGEND ON THE FACE. LEGEND SHALL BE IN ACCORDANCE WITH THE MUTCD.

3. POSTS: SIGN POSTS SHALL BE A HEAVY-DUTY STEEL "U" SHAPED CHANNEL WEIGHING 3.0 POUNDS/FOOT, SUCH AS A TYPE B METAL POST, AS PER THE IDOT STANDARDS (OR 2-INCH PERFORATED STEEL TUBE).

4. SIGNS AND POSTS SHALL BE INSTALLED IN ACCORDANCE WITH IDOT STANDARDS.

5. PAVEMENT MARKINGS: ALL PAVEMENT MARKINGS IN THE PUBLIC RIGHT-OF-WAY, SUCH AS STOP LINES, CENTERLINES, CROSSWALKS, AND DIRECTIONAL ARROWS, SHALL BE REFLECTORIZED THERMOPLASTIC ON ASPHALT AND MODIFIED URETHANE ON CONCRETE OR AS APPROVED BY IDOT.

6. PAVEMENT MARKINGS ON BIKE PATHS, PARKING LOT STALLS, AND SIMILAR "LOW-WEAR" APPLICATIONS, SHALL BE PAINT IN ACCORDANCE WITH IDOT STANDARDS.

7. COLOR, WIDTH, STYLE, AND SIZE OF ALL MARKINGS SHALL BE IN ACCORDANCE WITH THE MUTCD AND LOCAL CODE. STANDARD PARKING SPACES SHALL BE PAINTED WHITE OR YELLOW PER LOCAL CODE.

8. THERMOPLASTIC MARKINGS SHALL BE INSTALLED WHEN THE PAVEMENT TEMPERATURE IS 55 DEGREES FAHRENHEIT AND RISING. PAINT MARKINGS MAY BE INSTALLED WHEN THE AIR TEMPERATURE IS 50 DEGREES FAHRENHEIT AND RISING.MODIFIED URETHANE MARKINGS SHALL BE INSTALLED DURING CONDITIONS OF DRY WEATHER AND WHEN THE PAVEMENT TEMPERATURE IS 40 DEGREES FARENHEIT AND RISING.

SANITARY SEWER NOTES

IF ANY ITEMS BELOW ARE FOUND TO BE IN CONFLICT WITH VILLAGE REQUIREMENTS, REFER TO "CONFLICTS BETWEEN COMPONENT, PARTS OR SPECIFICATIONS" UNDER THE GENERAL NOTES.

1. SANITARY SEWER PIPE: ALL SANITARY SEWER PIPE MATERIAL, SIZE AND TYPE SHALL BE INSTALLED AS INDICATED ON THE UTILITY PLAN. UNLESS OTHERWISE NOTED ON THE PLANS, ALL SANITARY SEWER PIPE SHALL BE POLYVINYL CHLORIDE PLASTIC PIPE (PVC SDR-26), CONFORMING TO ASTM D3034 AND D2241 WITH ELASTOMERIC GASKET JOINTS CONFORMING TO ASTM D3139 AND D3212. ANY CHANGES TO THE PIPE MATERIAL, SIZE AND TYPE MUST BE APPROVED BY THE OWNER, ENGINEER AND VILLAGE OF NORTHBROOK PRIOR TO ORDERING MATERIALS OR INSTALLING THE PIPE. ALL SANITARY SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING:

PIPE SIZE	CODE	PIPE MATERIAL
4" - 12"	PVC	POLYVINYL CHLORIDE PLASTIC PIPE SDR-26 (ASTM D3034 AND D2241)
4"-48"	DIP	DUCTILE IRON PIPE, CLASS 52 (ANSI 21.51 AND AWWA C151)

2. BAND-SEAL OR SIMILAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED WHEN CONNECTING SEWER PIPES OF DISSIMILAR MATERIALS. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE ¼" TO 1" IN SIZE WITH MINIMUM BEDDING THICKNESS EQUAL TO ¼ THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NO LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. AS A MINIMUM, THE MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF THE STATE OF ILLINOIS OR ASTM C-33. THE GRADATION SHALL CONFORM TO GRADATION CA-11 OF THE ILLINOIS STANDARD SPECIFICATIONS AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.

3. ALL UNSUITABLE MATERIALS SHALL BE REMOVED BELOW THE PROPOSED SANITARY SEWER AND REPLACED WITH COMPACTED CRUSHED GRAVEL OR STONE PER IDOT STANDARDS AND AS DIRECTED BY THE GEOTECHNICAL ENGINEER.

4. ALL TRENCHES BENEATH PROPOSED OR EXISTING UTILITIES, PAVEMENTS, ROADWAYS, SIDEWALKS, AND FOR A DISTANCE OF TWO (2) FEET ON EITHER SIDE OF SAME, AND/OR WHERE SHOWN ON THE PLANS, SHALL BE BACKFILLED WITH SELECT GRANULAR BACKFILL PER IDOT STANDARDS AND THOROUGHLY MECHANICALLY COMPACTED IN 6-INCH THICK (LOOSE MEASUREMENT) LAYERS. JETTING WITH WATER IS NOT PERMITTED.

5. ALL SANITARY SEWERS ARE TO BE CONSTRUCTED USING A LASER INSTRUMENT TO MAINTAIN LINE AND GRADE.

6. CONNECTIONS TO EXISTING SANITARY SEWER SYSTEM SHALL NOT BE DONE UNTIL AUTHORIZED BY THE VILLAGE OF NORTHBROOK.

7. WATERMAINS SHALL BE SEPARATED FROM SANITARY SEWERS AND STORM SEWERS IN ACCORDANCE WITH ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA) REQUIREMENTS, AS SPECIFIED IN THE STANDARDS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS.

8. NO WATER LINE SHALL BE PLACED IN THE SAME TRENCH AS A SEWER LINE, EXCEPT UNDER SPECIAL CIRCUMSTANCES AND THEN ONLY UNDER THE FOLLOWING RULES:

   A. IF NECESSARY PERMISSION SHALL BE OBTAINED FROM THE VILLAGE OF NORTHBROOK IN WRITING PRIOR TO BEGINNING CONSTRUCTION.

   B. THE BOTTOM OF A WATER LINE SHALL BE INSTALLED ON A SHELF A MINIMUM OF 18 INCHES ABOVE THE TOP OF THE SEWER AND 18 INCHES HORIZONTALLY AWAY FROM THE EDGE OF THE SEWER.

9. ALL SANITARY MANHOLES (AND STORM MANHOLES IN COMBINED SEWER AREAS) SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE. A WATERTIGHT BOOT, CONFORMING TO ASTM C-923, SHALL BE USED AT THE PIPE-STRUCTURE CONNECTION.

10. ALL PIPE CONNECTION OPENINGS SHALL BE PRECAST WITH RESILIENT RUBBER WATER-TIGHT SLEEVES. THE BOTTOM OF THE MANHOLE SHALL HAVE A CONCRETE BENCH POURED TO FACILITATE SMOOTH FLOWS.

11. FRAMES AND LIDS: SEE DETAILS FOR ALL SANITARY SEWER MANHOLE FRAMES AND LIDS. THE LIDS SHALL HAVE RECESSED (CONCEALED) PICK HOLE AND BE SELF-SEALING WITH AN "O" RING GASKET. THE LIDS SHALL HAVE THE WORD "SANITARY" EMBOSSED ON THE SURFACE. THE JOINTS BETWEEN THE FRAME AND CONCRETE SECTION SHALL BE SEALED WITH A BUTYL ROPE.

12. A MAXIMUM OF TWELVE (12) INCHES OF CONCRETE-ADJUSTING RINGS SHALL BE USED TO ADJUST FRAME ELEVATIONS. RINGS SHALL BE SEALED TOGETHER WITH BUTYL ROPE.

13. CLEANING: ALL MANHOLES AND PIPES SHALL BE THOROUGHLY CLEANED OF DIRT AND DEBRIS, AND ALL VISIBLE LEAKAGE ELIMINATED, BEFORE FINAL INSPECTION AND ACCEPTANCE.

14. TESTING: DEFLECTION, AIR, AND LEAKAGE TESTING WILL BE REQUIRED. THE PROCEDURE AND ALLOWABLE TESTING LIMITS SHALL BE IN ACCORDANCE WITH THE STANDARDS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS.

15. TESTING THE ALIGNMENT/STRAIGHTNESS SHALL BE IN ACCORDANCE WITH THE VILLAGE OF NORTHBROOK CODE.

16. TELEVISING: IF REQUIRED BY THE MUNICIPALITY, ALL SANITARY SEWERS SHALL BE TELEVISED, AND A COPY OF THE TAPE AND A WRITTEN REPORT SHALL BE SUBMITTED AND REVIEWED BY THE VILLAGE OF NORTHBROOK BEFORE FINAL ACCEPTANCE. THE REPORT SHALL INCLUDE STUB LOCATION AS WELL AS A DESCRIPTION OF ALL DEFECTS, WATER LEVEL, LEAKS, AND LENGTHS. IDENTIFY MANHOLE TO MANHOLE BOTH VERBALLY AND ON-SCREEN USING MANHOLE NUMBERS FROM APPROVED PLANS. ORDER OF WRITTEN REPORT SHALL BE THE SAME AS THE VIDEOTAPES.

17. TEST RESULTS: IF THE SANITARY SEWER INSTALLATION FAILS TO MEET THE TEST REQUIREMENTS SPECIFIED, THE CONTRACTOR SHALL DETERMINE THE CAUSE OR CAUSES OF THE DEFECT AND REPAIR, OR REPLACE ALL MATERIALS AND WORKMANSHIP, AS MAY BE NECESSARY TO COMPLY WITH THE TEST REQUIREMENTS.

18. CERTIFICATION: CONTRACTOR SHALL SUBMIT CERTIFIED COPIES OF ALL REPORTS OF TESTS CONDUCTED BY AN INDEPENDENT LABORATORY BEFORE INSTALLATION OF PVC PLASTIC PIPE. TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH STANDARD METHOD OF TEST FOR "EXTERNAL LOADING PROPERTIES OF PLASTIC PIPE BY PARALLEL PLATE LOADING." ASTM STANDARDS D-2241, AS APPROPRIATE FOR THE PIPE, TO BE USED. TESTS SHALL ALSO BE CONDUCTED TO DEMONSTRATE JOINT PERFORMANCE AT FIVE (5) PERCENT MAXIMUM DIAMETRIC DEFLECTION OF THE SPIGOT.

19. CONTRACTOR SHALL VERIFY THAT THE TESTING METHODS DESIGNATED HEREIN ARE ACCEPTABLE TO THE LOCAL AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT.

STORM SEWER NOTES

IF ANY ITEMS BELOW ARE FOUND TO BE IN CONFLICT WITH VILLAGE REQUIREMENTS, REFER TO "CONFLICTS BETWEEN COMPONENT, PARTS OR SPECIFICATIONS" UNDER THE GENERAL NOTES.

1. STORM SEWER PIPE: ALL STORM SEWER PIPE MATERIAL, SIZE AND TYPE SHALL BE INSTALLED AS INDICATED ON THE UTILITY PLAN. UNLESS OTHERWISE NOTED ON THE PLANS, ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE, IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR DETERMINING PIPE CLASS AND CONFORMING TO ASTM C76. ANY CHANGES TO THE PIPE MATERIAL, SIZE AND TYPE MUST BE APPROVED BY THE OWNER, ENGINEER AND VILLAGE OF NORTHBROOK PRIOR TO ORDERING MATERIALS OR INSTALLING THE PIPE. ALL STORM SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING:

PIPE SIZE	CODE	PIPE MATERIAL
12"-60"	RCP	REINFORCED CONCRETE PIPE (ASTM C76); SEE IDOT SPECS FOR PIPE CLASS
3"-12"	PVC	POLYVINYL CHLORIDE PLASTIC PIPE SDR-26 (ASTM D3034 AND D2241)
3"-48"	HDPE	HIGH DENSITY POLYETHYLENE PIPE
3"-48"	DIP	DUCTILE IRON PIPE, CLASS 52 (ANSI 21.51 AND AWWA C151)

2. BAND-SEAL OR SIMILAR COUPLING SHALL BE USED WHEN JOINING SEWER PIPES OF DISSIMILAR MATERIALS.

3. ALL FOOTING DRAIN DISCHARGE PIPES AND DOWN SPOUTS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.

4. CONSTRUCTION: ALL STORM SEWERS ARE TO BE CONSTRUCTED USING A LASER INSTRUMENT TO MAINTAIN LINE AND GRADE.

5. COVER: THE CONTRACTOR SHALL MAINTAIN AT LEAST TWO (2) FEET OF COVER OVER THE TOP OF SHALLOW PIPES AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL MOUND OVER ANY PIPES THAT HAVE LESS THAN TWO (2) FEET OF COVER DURING CONSTRUCTION UNTIL THE AREA IS FINAL GRADED OR PAVED.

6. STRUCTURES: MANHOLE, CATCH BASIN, AND INLET BOTTOMS SHALL BE PRECAST CONCRETE SECTIONAL UNITS OR MONOLITHIC CONCRETE. MANHOLES AND CATCH BASINS SHALL BE A MINIMUM OF FOUR (4) FEET IN DIAMETER UNLESS OTHERWISE SPECIFIED ON THE PLANS. STRUCTURE JOINTS SHALL BE SEALED WITH "O" RING OR BUTYL ROPE. A MAXIMUM OF TWELVE (12) INCHES OF ADJUSTING RINGS SHALL BE USED.

7. A CONCRETE BENCH TO DIRECT FLOWS SHALL BE CONSTRUCTED IN THE BOTTOM OF ALL INLETS AND MANHOLES.

8. THE FRAME, GATE, AND/OR CLOSED LID SHALL BE CAST IRON OF THE STYLE SHOWN ON THE PLANS.

9. CLEANING: THE STORM SEWER SYSTEM SHALL BE THOROUGHLY CLEANED PRIOR TO FINAL INSPECTION AND TESTING.

10. THE STORM SEWER SHALL BE TELEVISED IF REQUIRED BY THE VILLAGE OF NORTHBROOK.

11. MANHOLES, CATCH BASINS, INLETS, FRAMES, GRATES, AND OTHER STRUCTURES SHALL BE CONSTRUCTED OF THE TYPE, STYLE, AND SIZE AS SET FORTH WITH THE ORDINANCES AND STANDARDS OF THE VILLAGE OF NORTHBROOK.

12. ALL PVC PIPES CONNECTED TO REINFORCED CONCRETE PIPE SHALL BE CORED AND BOOTED PER THE VILLAGE OF NORTHBROOK REQUIREMENTS.

WATERMAIN NOTES

IF ANY ITEMS BELOW ARE FOUND TO BE IN CONFLICT WITH VILLAGE REQUIREMENTS, REFER TO "CONFLICTS BETWEEN COMPONENT, PARTS OR SPECIFICATIONS" UNDER THE GENERAL NOTES.

1. WATERMAIN PIPE: ALL WATERMAIN PIPE MATERIAL, SIZE AND TYPE SHALL BE INSTALLED AS INDICATED ON THE UTILITY PLAN. UNLESS OTHERWISE NOTED ON THE PLANS, ALL WATERMAIN PIPE SHALL BE CONSTRUCTED OF BITUMINOUS-COATED CEMENT-LINED DUCTILE IRON PIPE, CLASS 52, CONFORMING TO ANSI A21.51 (AWWA C151). CEMENT MORTAR LINING SHALL CONFORM TO ANSI A21.4 (AWWA C104). THE JOINTS SHALL BE PUSH-ON COMPRESSION GASKET JOINTS CONFORMING TO ANSI A21.11 (AWWA C111). ANY CHANGES TO THE PIPE MATERIAL, SIZE AND TYPE MUST BE APPROVED BY THE OWNER, ENGINEER AND VILLAGE OF NORTHBROOK PRIOR TO ORDERING MATERIALS OR INSTALLING THE PIPE. ALL WATERMAIN PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING:

PIPE SIZE	CODE	PIPE MATERIAL
3"-48"	DIP	DUCTILE IRON PIPE, CLASS 52 (ANSI 21.51 AND AWWA C151)
< 3"		TYPE "K" COPPER PIPE

2. FITTINGS: ALL FITTINGS SHALL BE OF DUCTILE IRON WITH CEMENT MORTAR LINING AND MECHANICAL JOINTS CONFORMING TO ANSI AS21.10 (AWWA C110).

3. VALVES: GATE VALVES SHALL BE USED ON ALL WATERMAINS. ALL VALVES SHALL TURN COUNTER-CLOCKWISE TO OPEN. VALVES SHALL BE IRON BODY RESILIENT WEDGE GATE VALVES WITH BRONZE-MOUNTED SEATS AND NON-RISING STEMS CONFORMING TO AWWA C-509 OR C-515. THE VALVES SHALL HAVE MECHANICAL JOINTS.

4. THE MECHANICAL JOINTS AND ALL FASTENERS ON THE VALVE BODY SHALL HAVE STAINLESS STEEL NUTS AND BOLTS.

5. VALVE VAULTS: VALVE VAULTS SHALL BE PRECAST CONCRETE STRUCTURES FIVE (5) FEET IN DIAMETER, AS NOTED ON THE PLANS. THE FRAME AND LID SHALL BE ACCORDING TO THE DETAIL ON THE PLANS, WITH "WATER" EMBOSSED ON THE LID.

6. FIRE HYDRANTS: SEE PLANS FOR APPROVED FIRE HYDRANT DETAIL. FIRE HYDRANTS SHALL BE INSTALLED WITH AN AUXILIARY VALVE AND CAST IRON VALVE BOX. FIRE HYDRANTS SHALL HAVE AUXILIARY VALVES WITH A HYDRANT BARREL TO VALVE BOX RESTRAINING DEVICE. THE PUMPER CONNECTION SHALL FACE THE ROADWAY.

7. PROVIDE AND INSTALL FOUR MEGALUG JOINT RESTRAINTS AT EACH JOINT FROM THE MAINLINE TEE TO THE AUXILIARY VALVE AND BETWEEN THE AUXILIARY VALVE AND THE HYDRANT BARREL.

8. THE BREAK FLANGE AND ALL BELOW-GRADE FITTING SHALL HAVE STAINLESS STEEL NUTS AND BOLTS.

9. CORPORATION STOPS: CORPORATION STOPS SHALL BE BRONZE BODY KEY STOPS CONFORMING TO AWWA C-800 AND SHALL INCLUDE "J" BEND, TAILPIECE, AND COMPRESSION FITTINGS. SIZE AND LOCATION AS SHOWN ON THE PLANS.

10. SERVICE BOX: PROVIDE CURB VALVE AND CURB BOX, AS INDICATED ON THE PLANS. BOX SHALL BE EXTENSION TYPE WITH FOOT PIECE AND STATIONARY RODS FOR SIX (6) FEET OF BURY.

11. MAXIMUM DEFLECTION AT PIPE JOINTS SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURER'S CURRENT RECOMMENDATIONS AND AWWA SPECIFICATIONS.

12. BEDDING: ALL WATERMAINS SHALL BE BEDDED ON FIRM GROUND, WITH BELLHOLES EXCAVATED SO THAT THE PIPE HAS AN EVEN BEDDING FOR ITS ENTIRE LENGTH.

13. GRANULAR BEDDING MATERIAL OR GRANULAR BACKFILL MATERIAL SHALL BE CAREFULLY PLACED TO TWELVE (12) INCHES OVER THE TOP OF THE PIPE BEFORE FINAL BACKFILLING AND COMPACTION.

14. A MINIMUM DEPTH OF COVER OF 5-FEET, 6-INCHES SHALL BE MAINTAINED OVER THE WATER LINES. THE MAXIMUM COVER SHALL BE EIGHT (8) FEET, EXCEPT AT SPECIAL CROSSINGS AND ONLY AS DESIGNATED ON THE PLANS.

15. "MEGA-LUG" RETAINER GLANDS AND THRUST BLOCKING SHALL BE INSTALLED ON WATERMAINS AT ALL BENDS, FITTINGS, TEES, ELBOWS, ETC. "MEGA-LUG" RESTRAINED JOINTS ARE REQUIRED ON ALL VALVES AND ALL FITTINGS. THE COST FOR THIS WORK SHALL BE INCIDENTAL TO THE UNIT PRICE FOR THE PIPE INSTALLED.

16. ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA) AND VILLAGE OF NORTHBROOK WATERMAIN PROTECTION:

16.1. HORIZONTAL SEPARATION

16.1.1. WATERMAINS SHALL BE LAID AT LEAST TEN (10) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER, OR SEWER SERVICES CONNECTION.

16.1.2. WATERMAINS MAY BE LAID CLOSER THAN TEN (10) FEET TO A SEWER LINE WHEN:

16.1.2.1. LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF TEN (10) FEET;

16.1.2.2. THE WATERMAIN INVERT IS AT LEAST EIGHTEEN (18) INCHES ABOVE THE CROWN OF THE SEWER;

16.1.2.3. THE WATERMAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER.

16.1.3. WHEN IT IS IMPOSSIBLE TO MEET (1) OR (2) ABOVE, BOTH THE WATERMAIN AND DRAIN OR SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, PRESTRESSED CONCRETE PIPE, OR PVC PIPE EQUIVALENT TO WATERMAIN STANDARDS OF CONSTRUCTION AND IN CONFORMANCE WITH THE ILLINOIS STANDARDS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS. THE DRAIN OR SEWER SHALL BE PRESSURE-TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD BEFORE BACKFILLING.

16.2. VERTICAL SEPARATION

16.2.1. A WATERMAIN SHALL BE LAID SO THAT ITS INVERT IS EIGHTEEN (18) INCHES ABOVE THE CROWN OF THE DRAIN OR SEWER WHENEVER WATERMAINS CROSS STORM SEWERS, SANITARY SEWERS, OR SEWER SERVICE CONNECTIONS. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF THE WATERMAIN LOCATED WITHIN TEN (10) FEET HORIZONTALLY OF ANY SEWER OR DRAIN CROSSED. A LENGTH OF WATERMAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER OR DRAIN.

16.2.2. BOTH THE STORM SEWER AND SANITARY SEWER SHALL BE CONSTRUCTED WITH PIPE EQUIVALENT TO WATERMAIN STANDARDS OF CONSTRUCTION OR THE STORM SEWER SHALL BE CONSTRUCTED USING "O" RING GASKET JOINTS, PER ASTM C-443, OR THE WATERMAIN MAY BE IN ENCASED IN A WATERTIGHT CASING PIPE WHEN:

16.2.2.1. IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION, AS DESCRIBED ABOVE; OR

16.2.2.2. THE WATERMAIN PASSES UNDER A SEWER OR DRAIN.

16.2.3. A VERTICAL SEPARATION OF EIGHTEEN (18) INCHES BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATERMAIN SHALL BE MAINTAINED WHERE A WATERMAIN CROSSES UNDER A SEWER. SUPPORT THE SEWER OR DRAIN LINES TO PREVENT SETTLING AND BREAKING OF THE WATERMAIN.

16.2.4. CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE NORMAL DISTANCE FROM THE WATERMAIN TO THE SEWER OR DRAIN LINE IS AT LEAST TEN (10) FEET.

17. ALL WATERMAINS SHALL BE PRESSURE-TESTED FOR A MIN. OF 2 HOURS AT 200 PSI, FLUSHED, AND DISINFECTED IN ACCORDANCE WITH AWWA AND VILLAGE OF NORTHBROOK SPECIFICATIONS. EACH VALVE SECTION SHALL BE PRESSURE-TESTED FOR A MINIMUM OF ONE (1) HOUR. ALLOWABLE LEAKAGE IS TO BE ONLY THAT WHICH IS PREDETERMINED BY THE VILLAGE OF NORTHBROOK. AT NO TIME IS THERE TO BE ANY VISIBLE LEAKAGE FROM THE MAIN.

ADA GENERAL NOTES

IF ANY ITEMS BELOW ARE FOUND TO BE IN CONFLICT WITH VILLAGE REQUIREMENTS, REFER TO "CONFLICTS BETWEEN COMPONENT, PARTS OR SPECIFICATIONS" UNDER THE GENERAL NOTES.

1. CURB RAMPS ALONG PUBLIC STREETS AND IN THE PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS OF THE AUTHORITY HAVING JURISDICTION.

2. ALL ACCESSIBLE ROUTES, GENERAL SITE AND BUILDING ELEMENTS, RAMPS, CURB RAMPS, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO ADA STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION.

3. ANY COMPONENTS OF THE PROJECT SERVING MULTI-FAMILY DWELLINGS IN BUILDINGS THAT HAVE (4) OR MORE UNITS PER DWELLING SHALL ALSO CONFORM TO THE FAIR HOUSING ACT (FHA), AND COMPLY WITH THE FAIR HOUSING ACT DESIGN MANUAL BY THE US DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.

4. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE ACCESSIBLE PEDESTRIAN ROUTES (PER ADA AND FHA) EXIST TO AND FROM EVERY DOOR AND ALONG SIDEWALKS, ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND ACCESSIBLE ROUTES. IN NO CASE SHALL AN ACCESSIBLE RAMP SLOPE EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2.0 PERCENT. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5.0 PERCENT. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 2.0 PERCENT SLOPE IN ANY DIRECTION.

5. CONTRACTOR SHALL TAKE FIELD SLOPE MEASUREMENTS ON FINISHED SUBGRADE AND FORM BOARDS PRIOR TO PLACING PAVEMENT TO VERIFY THAT ADA SLOPE REQUIREMENTS ARE PROVIDED. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR ADA SLOPE COMPLIANCE ISSUES.

VILLAGE OF NORTHBROOK NOTES

1. OWNER TO PROVIDE A FOUR WHEEL DRIVE CART (JOHN DEERE GATOR, GOLF CART, OR EQUIVALENT) FOR VILLAGE INSPECTIONS.

NO.	DATE	DESCRIPTION
△	9/14/23	VILLAGE REVIEW
△	8/30/23	MWRD REVIEW #3
△	7/31/23	MWRD REVIEW #2
△	7/21/23	QA/QC - THW
△	6/29/23	MWRD REVIEW #1
△	6/2/23	DETENTION REVISION
△	5/9/23	WATERMAIN REROUTE
△	3/31/23	VILLAGE ENGINEERING COMMENTS
△	2/3/23	VILLAGE ENGINEERING COMMENTS
△	1/6/23	DD ISSUANCE
△	9/30/22	PROGRESS CD'S
△	8/22/22	50% CD'S
△	6/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK
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THW DESIGN

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

GENERAL NOTES

Sheet No.: C0.1

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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 NORTHBROOK MUNICIPAL CODE;
   * THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL;
   * IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

B. NOTIFICATIONS

1. THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055 OR SEND EMAIL NOTIFICATION WITH PROJECT NAME, LOCATION AND PERMIT NUMBER TO WMOJOBSTART@MWRD.ORG).
2. THE VILLAGE OF NORTHBROOK ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.
3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

C. GENERAL NOTES

1. ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). CONVERSION FACTOR IS ________ FT.
2. MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.
3. THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.
4. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.
5. THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.
6. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
7. MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.
8. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.
9. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.
10. RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.

D. SANITARY SEWER

1. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.
2. A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.
3. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY OR MWRD.
4. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).
5. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.
6. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
7. ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
VITRIFIED CLAY PIPE	ASTM C-700	ASTM C-425
REINFORCED CONCRETE SEWER PIPE	ASTM C-76	ASTM C-443
CAST IRON SOIL PIPE	ASTM A-74	ASTM C-564
DUCTILE IRON PIPE	ANSI A21.51	ANSI A21.11
POLYVINYL CHLORIDE (PVC) PIPE		
6-INCH TO 15-INCH DIAMETER SDR 26	ASTM D-3034	ASTM D-3212
18-INCH TO 27-INCH DIAMETER F/DY=46	ASTM F-679	ASTM D-3212
HIGH DENSITY POLYETHYLENE (HDPE)	ASTM D-3350	ASTM D-3261,F-2620 (HEAT FUSION)
	ASTM D-3035	ASTM D-3212,F-477 (GASKETED)
WATER MAIN QUALITY PVC		
4-INCH TO 36-INCH	ASTM D-2241	ASTM D-3139
4-INCH TO 12-INCH	AWWA C900	ASTM D-3139
14-INCH TO 48-INCH	AWWA C905	ASTM D-3139

THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE.

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
POLYPROPYLENE (PP) PIPE		
12-INCH TO 24-INCH DOUBLE WALL	ASTM F-2736	D-3212, F-477
30-INCH TO 60-INCH TRIPLE WALL	ASTM F-2764	D3212, F-477

8. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE ¼ " TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO ¼ THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.
9. NON-SHEAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS.
10. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICKHOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID.
11. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:
    a) A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SHEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUBWYE SADDLE OR HUB-TEE SADDLE.
    b) REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION.
    c) WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.
12. WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.
13. ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.
14. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE.
15. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRECAST "RUBBER BOOTS" THAT CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRECAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS.
16. ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG.
17. EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES ASSOCIATED WITH VOLUME CONTROL FACILITIES, DRAIN TILES/FIELD TILES/UNDERDRAINS/PERFORATED PIPES ARE NOT ALLOWED TO BE CONNECTED TO OR TRIBUTARY TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS IN COMBINED SEWER AREAS. CONSTRUCTION OF NEW FACILITIES OF THIS TYPE IS PROHIBITED; AND ALL EXISTING DRAIN TILES AND PERFORATED PIPES ENCOUNTERED WITHIN THE PROJECT AREA SHALL BE PLUGGED OR REMOVED, AND SHALL NOT BE CONNECTED TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS.
18. A BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

E. EROSION AND SEDIMENT CONTROL

1. THE CONTRACTOR SHALL INSTALL THE EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
2. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE.
3. ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.
4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
5. INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:
   a) UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE.
   b) ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.
6. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE CO-PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
7. A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
8. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE.
9. MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION TO CONCRETE WASHOUT FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONSTRUCTION ACTIVITIES.
10. TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN. VOLUME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.
11. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.
12. ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT).
13. VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
14. SOIL STOCKPILES SHALL, AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS.
15. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL BLANKET.
16. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.
17. THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COMBINED SEWER AREA FOR GREEN INFRASTRUCTURE PRACTICES.
18. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.
19. THE CONTRCTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMAINS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATERS SHALL NOT BE DISCHARGE TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.
20. ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.
21. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIODS OF CONSTRUCTION SHUTDOWN UNTIL PERMANENT STABILIZATION IS ACHIEVED.
22. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.
23. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, SITE INSPECTOR, OR MWRD.

TECHNICAL GUIDANCE MANUAL

MWRD GENERAL NOTES

10/13/2022

STD. DWG. NO.18

PAGE NO. 19

NO.	DATE	DESCRIPTION
⚠	9/14/23	VILLAGE REVIEW
⚠	8/30/23	MWRD REVIEW #3
⚠	7/31/23	MWRD REVIEW #2
⚠	7/21/23	QA/QC - THW
⚠	6/29/23	MWRD REVIEW #1
⚠	6/2/23	DETENTION REVISION
⚠	5/9/23	WATERMAIN REROUTE
⚠	3/31/23	VILLAGE ENGINEERING COMMENTS
⚠	2/3/23	VILLAGE ENGINEERING COMMENTS
⚠	1/6/23	DD ISSUANCE
⚠	9/30/22	PROGRESS CD'S
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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

MWRD GENERAL NOTES

Sheet No.: C0.2

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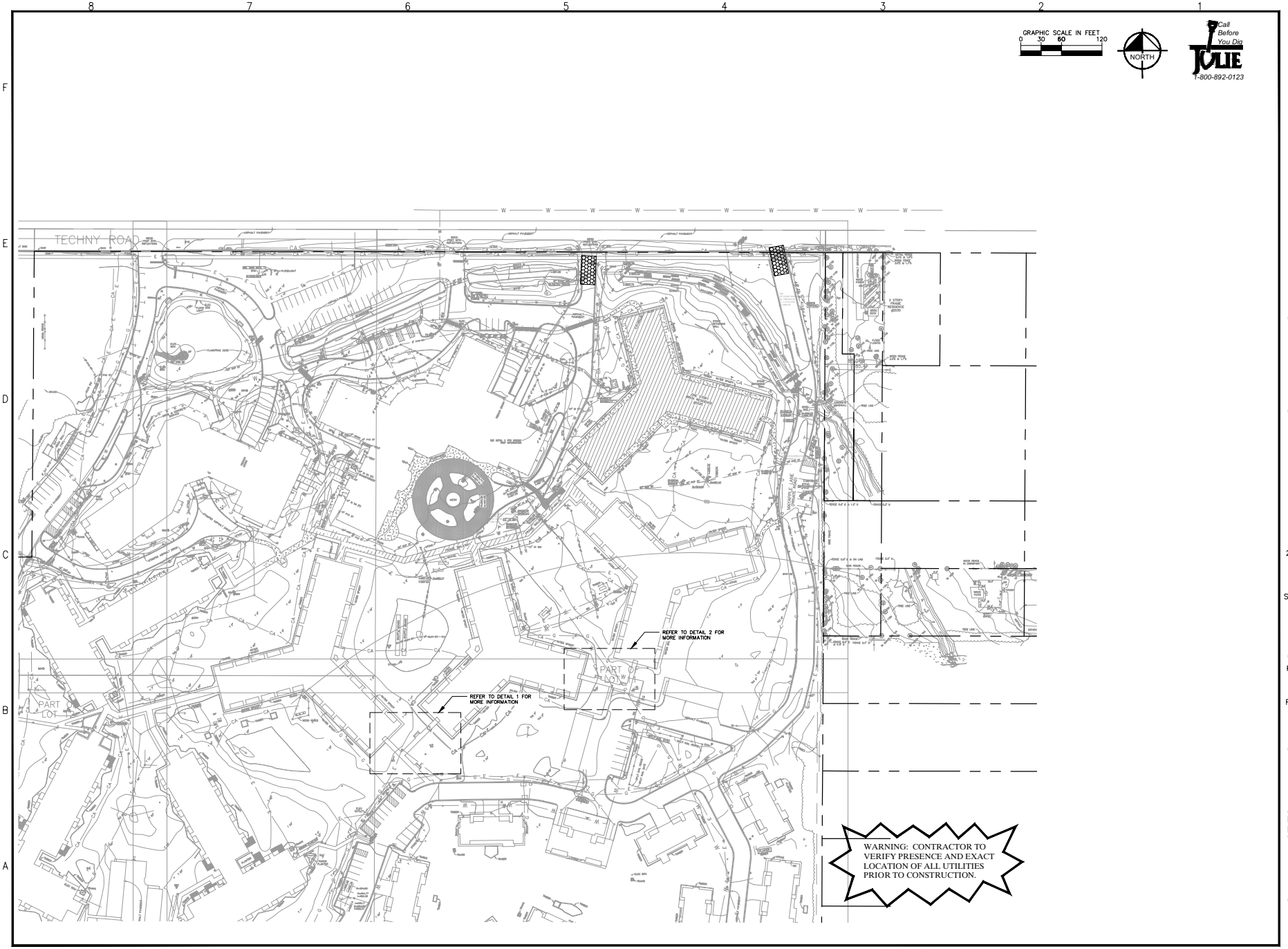

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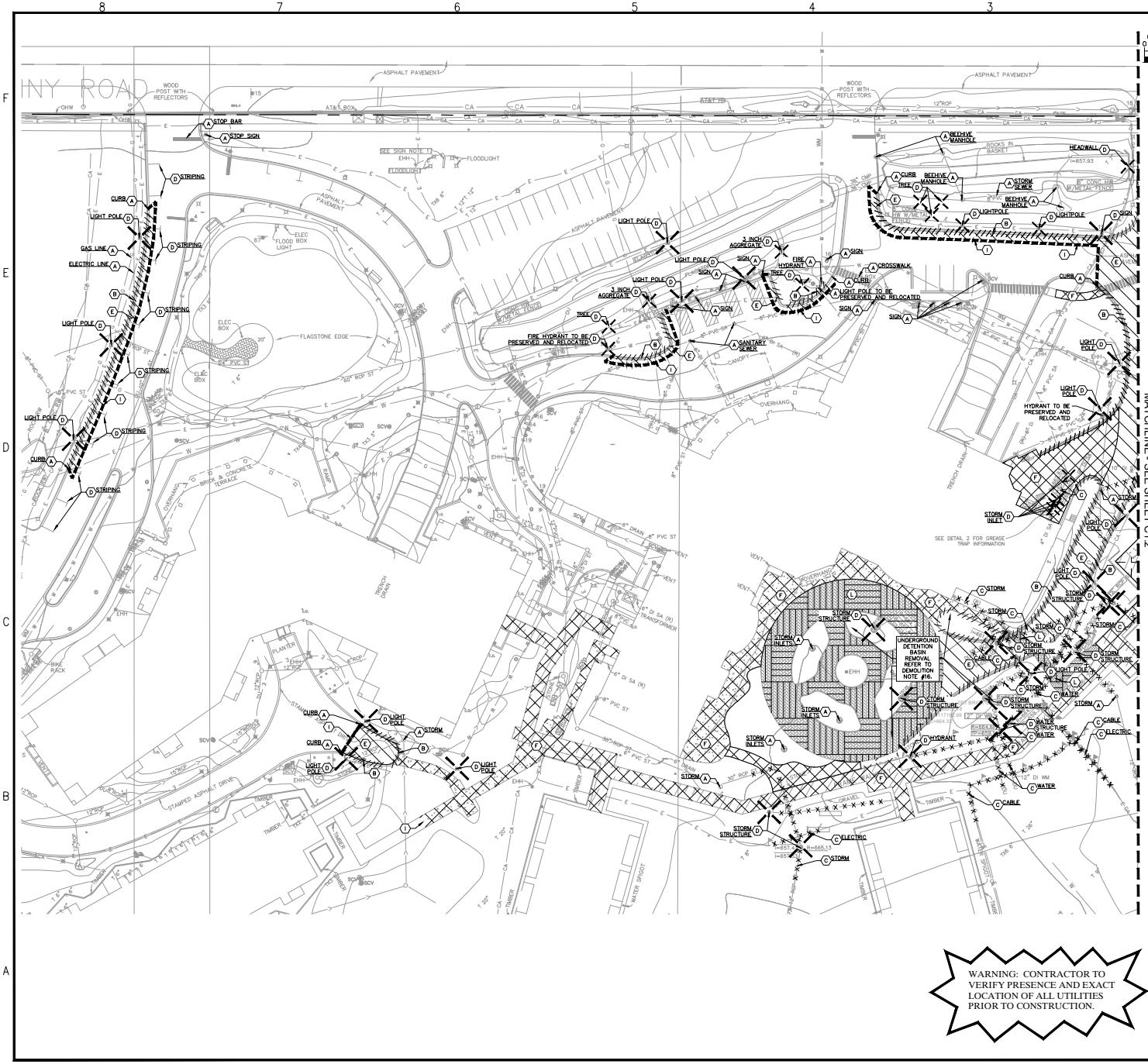
Project No.: 268004000
Date: 9/30/2022

EXISTING CONDITIONS PLAN

Sheet No.: C1.0

K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\PlanSheets\C1.0 DEMOLITION PLAN.dwg



DEMOLITION NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF THE EXISTING STRUCTURES, RELATED UTILITIES, PAVING, AND ANY OTHER EXISTING IMPROVEMENTS AS NOTED.
2. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.
3. THE GENERAL CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT. CONTRACTOR SHALL NOT DEMOLISH ANYTHING OUTSIDE THE OWNERS LEASE/PROPERTY LINE UNLESS SPECIFICALLY MENTIONED ON THIS SHEET.
4. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
5. IF DEMOLITION OR CONSTRUCTION ON SITE WILL INTERFERE WITH THE ADJACENT PROPERTY OWNER'S TRAFFIC FLOW, THE CONTRACTOR SHALL COORDINATE WITH ADJACENT PROPERTY OWNER, TO MINIMIZE THE IMPACT ON TRAFFIC FLOW. TEMPORARY RE-ROUTING OF TRAFFIC IS TO BE ACCOMPLISHED BY USING IDOT APPROVED TRAFFIC BARRICADES, BARRELS, AND/OR CONES. TEMPORARY SIGNAGE AND FLAGMEN MAY BE ALSO NECESSARY.
6. QUANTITIES DEPICTED ON THIS SHEET SHALL SERVE AS A GUIDE ONLY. CONTRACTOR TO VERIFY ALL DEMOLITION QUANTITIES.
7. REFER TO GEOTECHNICAL REPORT PROVIDED BY OTHERS FOR ALL SUBSURFACE INFORMATION.
8. CONTRACTOR SHALL BEGIN CONSTRUCTION OF ANY LIGHT POLE BASES FOR RELOCATED LIGHT FIXTURES AND RELOCATION OF ELECTRICAL SYSTEM AS SOON AS DEMOLITION BEGINS. CONTRACTOR SHALL BE AWARE THAT INTERRUPTION OF POWER TO ANY LIGHT POLES OR SIGNS SHALL NOT EXCEED 24 HOURS.
9. EROSION CONTROL MUST BE ESTABLISHED PRIOR TO ANY WORK ON SITE INCLUDING DEMOLITION.
10. THE EXTENT OF SITE DEMOLITION WORK IS AS SHOWN ON THE CONTRACT DOCUMENTS AND AS SPECIFIED HEREIN.
11. CONTRACTOR MUST RECEIVE APPROVAL FROM CIVIL ENGINEER AND GEOTECHNICAL ENGINEER FOR THE MATERIAL TYPE AND USE IF CONTRACTOR DESIRES TO REUSE DEMOLISHED SITE PAVEMENT AS STRUCTURAL FILL.
12. EXISTING UTILITIES, WHICH DO NOT SERVICE STRUCTURES BEING DEMOLISHED, ARE TO BE KEPT IN SERVICE AND PROTECTED AGAINST DAMAGE DURING DEMOLITION OPERATIONS. CONTRACTOR SHALL ARRANGE FOR SHUT-OFF OF UTILITIES SERVING STRUCTURES TO BE DEMOLISHED. CONTRACTOR IS RESPONSIBLE FOR TURNING OFF, DISCONNECTING, AND SEALING INDICATED UTILITIES BEFORE STARTING DEMOLITION OPERATIONS. EXISTING UTILITIES TO BE ABANDONED ARE TO BE CAPPED AT BOTH ENDS AND FILLED WITH FA-1 OR APPROVED EQUAL. ALL UNDERGROUND UTILITIES TO BE REMOVED ARE TO BE BACKFILLED WITH ENGINEERED FILL OR SELECT EXCAVATED MATERIAL, AS APPROVED BY THE GEOTECHNICAL ENGINEER, TO 95% OF MODIFIED PROCTOR DENSITY WITHIN PAVED AREAS AND TO 90% OF MODIFIED PROCTOR DENSITY FOR GREEN SPACE AREAS, IN ACCORDANCE WITH THE EARTHWORK SPECIFICATIONS. ALL PRIVATE UTILITIES (ELECTRIC, CABLE, TELEPHONE, FIBER OPTIC, GAS) SHALL BE REMOVED AND RELOCATED PER THE UTILITY OWNER AND THE LOCAL MUNICIPALITY'S REQUIREMENTS.
13. UNDERGROUND UTILITIES SHOWN ARE BASED ON ATLASES AND AVAILABLE INFORMATION PRESENTED AT THE TIME OF SURVEY. CONTRACTOR SHOULD CALL 'JULIE' (1-800-892-0123) TO COORDINATE FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE ORDERING MATERIALS OR COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY. CONTRACTOR SHALL LOCATE AND PROTECT EXISTING UNDERGROUND AND OVERHEAD UTILITIES DURING CONSTRUCTION. UTILITY PROTECTION SHALL BE COORDINATED WITH THE RESPECTIVE UTILITY OWNER AND AS DIRECTED BY THE GOVERNING MUNICIPALITY. DAMAGED CABLES/CONDUITS SHALL BE REPLACED IMMEDIATELY. ALL EXISTING STRUCTURES TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PROCESS. ALL DAMAGED STRUCTURES SHALL BE REPLACED IN-KIND AND THEIR REPLACEMENT COST SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. PROPER NOTIFICATION TO THE OWNERS OF THE EXISTING UTILITIES SHALL BE MADE AT LEAST 48 HOURS BEFORE CONSTRUCTION COMMENCES.
14. USE WATER SPRINKLING, TEMPORARY ENCLOSURES, AND OTHER SUITABLE METHODS TO LIMIT DUST AND DIRT RISING AND SCATTERING IN THE AIR TO THE LOWEST LEVEL. COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION. SEE EROSION CONTROL SHEETS FOR FURTHER EROSION CONTROL REQUIREMENTS.
15. COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM DEMOLITION OF STRUCTURES TO THE FINAL LINES AND GRADES SHOWN ON THE CONTRACT DOCUMENTS. BACKFILL MATERIAL SHALL BE IDOT APPROVED CRUSHED LIMESTONE (CA-6) OR APPROVED EQUAL. USE SATISFACTORY SOIL MATERIALS CONSISTING OF STONE, GRAVEL AND SAND, FREE FROM DEBRIS, TRASH, FROZEN MATERIALS, ROOTS AND OTHER ORGANIC MATTER. PRIOR TO PLACEMENT OF FILL MATERIALS, ENSURE THAT AREAS TO BE FILLED ARE FREE OF STANDING WATER, FROST, FROZEN MATERIAL, TRASH AND DEBRIS. PLACE FILL MATERIALS IN HORIZONTAL LAYERS NOT EXCEEDING 9" IN LOOSE DEPTH, COMPACT EACH LAYER AT OPTIMUM MOISTURE CONTENT OF FILL MATERIAL TO 95% OF MODIFIED PROCTOR DENSITY UNLESS SUBSEQUENT EXCAVATION FOR NEW WORK IS REQUIRED.
16. EXISTING STORMTRAP MODULES ARE PROPOSED TO BE "REUSED" IN THIS MODIFIED LAYOUT. STORMTRAP WILL NOT BE LIABLE FOR DAMAGE TO MODULES OCCURRED DURING REMOVAL, TRANSPORT, STAGING, INSTALLATION, OR ANY OTHER TIME DURING THE HANDLING OF THE MODULES. CONTACT STORMTRAP SHOULD DAMAGED MODULES BE DISCOVERED.
17. DEMOLISHED AGGREGATE MATERIAL TO BE HAULED OFFSITE.

DEMOLITION LEGEND

- (A) ITEM TO REMAIN, PROTECT DURING CONSTRUCTION
- (B) CURB REMOVAL
- (C) UTILITY REMOVAL
- (D) ITEM TO BE REMOVED
- (E) FULL-DEPTH ASPHALT PAVEMENT REMOVAL
- (F) CONCRETE REMOVAL
- (G) BUILDING REMOVAL
- (H) ASPHALT 1.5" MILL
- (I) SAWCUT LINE
- (J) FENCE/WALL REMOVAL
- (K) CREEK REMOVAL
- (L) PAVER REMOVAL
- (M) CONSTRUCTION ENTRANCE

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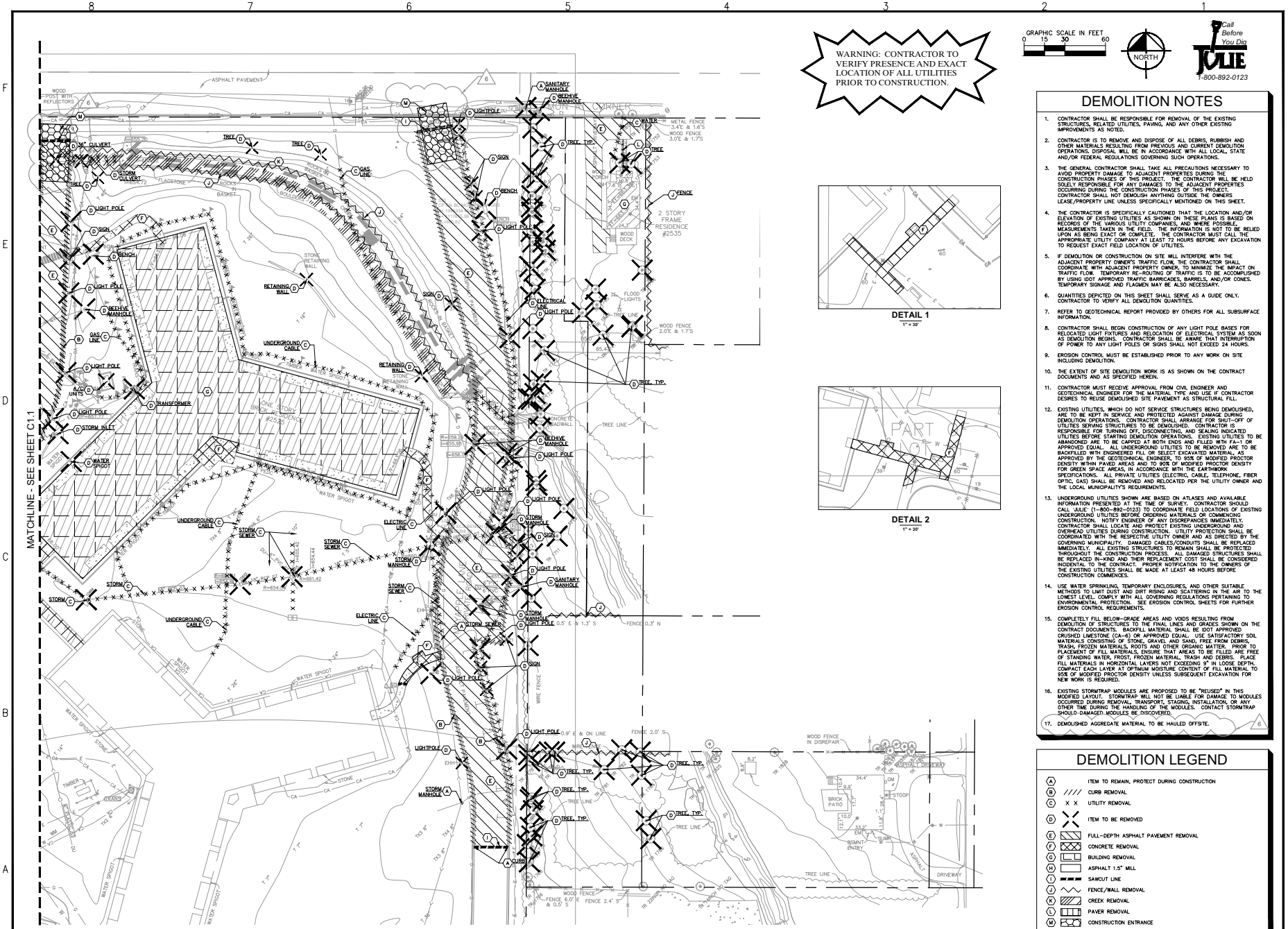
PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

DEMOLITION PLAN

Sheet No.: C1.1

K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\PlanSheets\C1.0 DEMOLITION PLAN.dwg



DEMOLITION NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF THE EXISTING STRUCTURES, RELATED UTILITIES, PAVING, AND ANY OTHER EXISTING IMPROVEMENTS AS NOTED.
2. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.
3. THE GENERAL CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT. CONTRACTOR SHALL NOT DEMOLISH ANYTHING OUTSIDE THE OWNERS LEASE/PROPERTY LINE UNLESS SPECIFICALLY MENTIONED ON THIS SHEET.
4. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
5. IF DEMOLITION OR CONSTRUCTION ON SITE WILL INTERFERE WITH THE ADJACENT PROPERTY OWNER'S TRAFFIC FLOW, THE CONTRACTOR SHALL COORDINATE WITH ADJACENT PROPERTY OWNER, TO MINIMIZE THE IMPACT ON TRAFFIC FLOW. TEMPORARY RE-ROUTING OF TRAFFIC IS TO BE ACCOMPLISHED BY USING IDOT APPROVED TRAFFIC BARRICADES, BARRELS, AND/OR CONES. TEMPORARY SIGNAGE AND FLAGMEN MAY BE ALSO NECESSARY.
6. QUANTITIES DEPICTED ON THIS SHEET SHALL SERVE AS A GUIDE ONLY. CONTRACTOR TO VERIFY ALL DEMOLITION QUANTITIES.
7. REFER TO GEOTECHNICAL REPORT PROVIDED BY OTHERS FOR ALL SUBSURFACE INFORMATION.
8. CONTRACTOR SHALL BEGIN CONSTRUCTION OF ANY LIGHT POLE BASES FOR RELOCATED LIGHT FIXTURES AND RELOCATION OF ELECTRICAL SYSTEM AS SOON AS DEMOLITION BEGINS. CONTRACTOR SHALL BE AWARE THAT INTERRUPTION OF POWER TO ANY LIGHT POLES OR SIGNS SHALL NOT EXCEED 24 HOURS.
9. EROSION CONTROL MUST BE ESTABLISHED PRIOR TO ANY WORK ON SITE INCLUDING DEMOLITION.
10. THE EXTENT OF SITE DEMOLITION WORK IS AS SHOWN ON THE CONTRACT DOCUMENTS AND AS SPECIFIED HEREIN.
11. CONTRACTOR MUST RECEIVE APPROVAL FROM CIVIL ENGINEER AND GEOTECHNICAL ENGINEER FOR THE MATERIAL TYPE AND USE IF CONTRACTOR DESIRES TO REUSE DEMOLISHED SITE PAVEMENT AS STRUCTURAL FILL.
12. EXISTING UTILITIES, WHICH DO NOT SERVICE STRUCTURES BEING DEMOLISHED, ARE TO BE KEPT IN SERVICE AND PROTECTED AGAINST DAMAGE DURING DEMOLITION OPERATIONS. CONTRACTOR SHALL ARRANGE FOR SHUT-OFF OF UTILITIES SERVING STRUCTURES TO BE DEMOLISHED. CONTRACTOR IS RESPONSIBLE FOR TURNING OFF, DISCONNECTING, AND SEALING INDICATED UTILITIES BEFORE STARTING DEMOLITION OPERATIONS. EXISTING UTILITIES TO BE ABANDONED ARE TO BE CAPPED AT BOTH ENDS AND FILLED WITH FA-1 OR APPROVED EQUAL. ALL UNDERGROUND UTILITIES TO BE REMOVED ARE TO BE BACKFILLED WITH ENGINEERED FILL OR SELECT EXCAVATED MATERIAL, AS APPROVED BY THE GEOTECHNICAL ENGINEER, TO 95% OF MODIFIED PROCTOR DENSITY WITHIN PAVED AREAS AND TO 90% OF MODIFIED PROCTOR DENSITY FOR GREEN SPACE AREAS, IN ACCORDANCE WITH THE EARTHWORK SPECIFICATIONS. ALL PRIVATE UTILITIES (ELECTRIC, CABLE, TELEPHONE, FIBER OPTIC, GAS) SHALL BE REMOVED AND RELOCATED PER THE UTILITY OWNER AND THE LOCAL MUNICIPALITY'S REQUIREMENTS.
13. UNDERGROUND UTILITIES SHOWN ARE BASED ON ATLASES AND AVAILABLE INFORMATION PRESENTED AT THE TIME OF SURVEY. CONTRACTOR SHOULD CALL 'JULIE' (1-800-892-0123) TO COORDINATE FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE ORDERING MATERIALS OR COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY. CONTRACTOR SHALL LOCATE AND PROTECT EXISTING UNDERGROUND AND OVERHEAD UTILITIES DURING CONSTRUCTION. UTILITY PROTECTION SHALL BE COORDINATED WITH THE RESPECTIVE UTILITY OWNER AND AS DIRECTED BY THE GOVERNING MUNICIPALITY. DAMAGED CABLES/CONDUITS SHALL BE REPLACED IMMEDIATELY. ALL EXISTING STRUCTURES TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PROCESS. ALL DAMAGED STRUCTURES SHALL BE REPLACED IN-KIND AND THEIR REPLACEMENT COST SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. PROPER NOTIFICATION TO THE OWNERS OF THE EXISTING UTILITIES SHALL BE MADE AT LEAST 48 HOURS BEFORE CONSTRUCTION COMMENCES.
14. USE WATER SPRINKLING, TEMPORARY ENCLOSURES, AND OTHER SUITABLE METHODS TO LIMIT DUST AND DIRT RISING AND SCATTERING IN THE AIR TO THE LOWEST LEVEL. COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION. SEE EROSION CONTROL SHEETS FOR FURTHER EROSION CONTROL REQUIREMENTS.
15. COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM DEMOLITION OF STRUCTURES TO THE FINAL LINES AND GRADES SHOWN ON THE CONTRACT DOCUMENTS. BACKFILL MATERIAL SHALL BE IDOT APPROVED CRUSHED LIMESTONE (CA-6) OR APPROVED EQUAL. USE SATISFACTORY SOIL MATERIALS CONSISTING OF STONE, GRAVEL AND SAND, FREE FROM DEBRIS, TRASH, FROZEN MATERIALS, ROOTS AND OTHER ORGANIC MATTER. PRIOR TO PLACEMENT OF FILL MATERIALS, ENSURE THAT AREAS TO BE FILLED ARE FREE OF STANDING WATER, FROST, FROZEN MATERIAL, TRASH AND DEBRIS. PLACE FILL MATERIALS IN HORIZONTAL LAYERS NOT EXCEEDING 9" IN LOOSE DEPTH, COMPACT EACH LAYER AT OPTIMUM MOISTURE CONTENT OF FILL MATERIAL TO 95% OF MODIFIED PROCTOR DENSITY UNLESS SUBSEQUENT EXCAVATION FOR NEW WORK IS REQUIRED.
16. EXISTING STORMTRAP MODULES ARE PROPOSED TO BE "REUSED" IN THIS MODIFIED LAYOUT. STORMTRAP WILL NOT BE LIABLE FOR DAMAGE TO MODULES OCCURRED DURING REMOVAL, TRANSPORT, STAGING, INSTALLATION, OR ANY OTHER TIME DURING THE HANDLING OF THE MODULES. CONTACT STORMTRAP SHOULD DAMAGED MODULES BE DISCOVERED.
17. DEMOLISHED AGGREGATE MATERIAL TO BE HAULED OFFSITE.

DEMOLITION LEGEND

- (A) ITEM TO REMAIN, PROTECT DURING CONSTRUCTION
- (B) CURB REMOVAL
- (C) UTILITY REMOVAL
- (D) ITEM TO BE REMOVED
- (E) FULL-DEPTH ASPHALT PAVEMENT REMOVAL
- (F) CONCRETE REMOVAL
- (G) BUILDING REMOVAL
- (H) ASPHALT 1.5" MILL
- (I) SAWCUT LINE
- (J) FENCE/WALL REMOVAL
- (K) CREEK REMOVAL
- (L) PAVER REMOVAL
- (M) CONSTRUCTION ENTRANCE

NO.	DATE	DESCRIPTION
6	9/14/23	VILLAGE REVIEW
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2	6/29/23	MWRD REVIEW #1
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0	5/9/23	WATERMAIN REROUTE
3	3/31/23	VILLAGE ENGINEERING COMMENTS
2	2/3/23	VILLAGE ENGINEERING COMMENTS
1	1/6/23	DD ISSUANCE
0	9/30/22	PROGRESS CD'S
	8/22/22	50% CD'S
	6/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
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DEMOLITION PLAN

Sheet No.: C1.2

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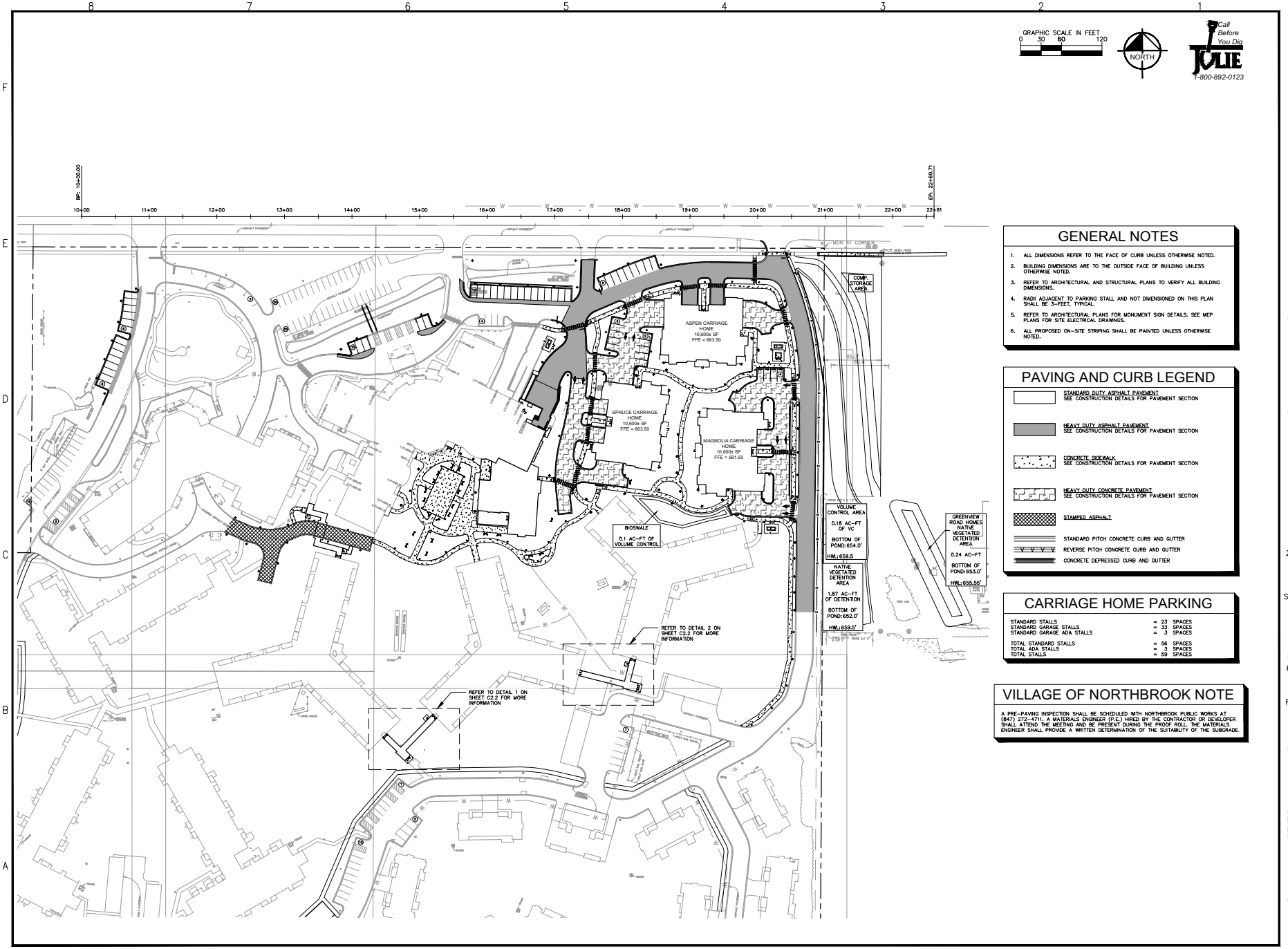

GENERAL NOTES

1. ALL DIMENSIONS REFER TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
3. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
4. RADII ADJACENT TO PARKING STALL AND NOT DIMENSIONED ON THIS PLAN SHALL BE 3-FEET, TYPICAL.
5. REFER TO ARCHITECTURAL PLANS FOR MONUMENT SIGN DETAILS. SEE MEP PLANS FOR SITE ELECTRICAL DRAWINGS.
6. ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.

PAVING AND CURB LEGEND

- STANDARD DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- CONCRETE SIDEWALK — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY CONCRETE PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- STAMPED ASPHALT
- STANDARD PITCH CONCRETE CURB AND GUTTER
- REVERSE PITCH CONCRETE CURB AND GUTTER
- CONCRETE DEPRESSED CURB AND GUTTER

CARRIAGE HOME PARKING

STANDARD STALLS	= 23 SPACES
STANDARD GARAGE STALLS	= 33 SPACES
STANDARD GARAGE ADA STALLS	= 3 SPACES
TOTAL STANDARD STALLS	= 56 SPACES
TOTAL ADA STALLS	= 3 SPACES
TOTAL STALLS	= 59 SPACES

VILLAGE OF NORTHBROOK NOTE

A PRE-PAVING INSPECTION SHALL BE SCHEDULED WITH NORTHBROOK PUBLIC WORKS AT (847) 272-4711. A MATERIALS ENGINEER (P.E.) HIRED BY THE CONTRACTOR OR DEVELOPER SHALL ATTEND THE MEETING AND BE PRESENT DURING THE PROOF ROLL. THE MATERIALS ENGINEER SHALL PROVIDE A WRITTEN DETERMINATION OF THE SUITABILITY OF THE SUBGRADE.

NO.	DATE	DESCRIPTION
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SITE PLAN

Sheet No.: C2.0

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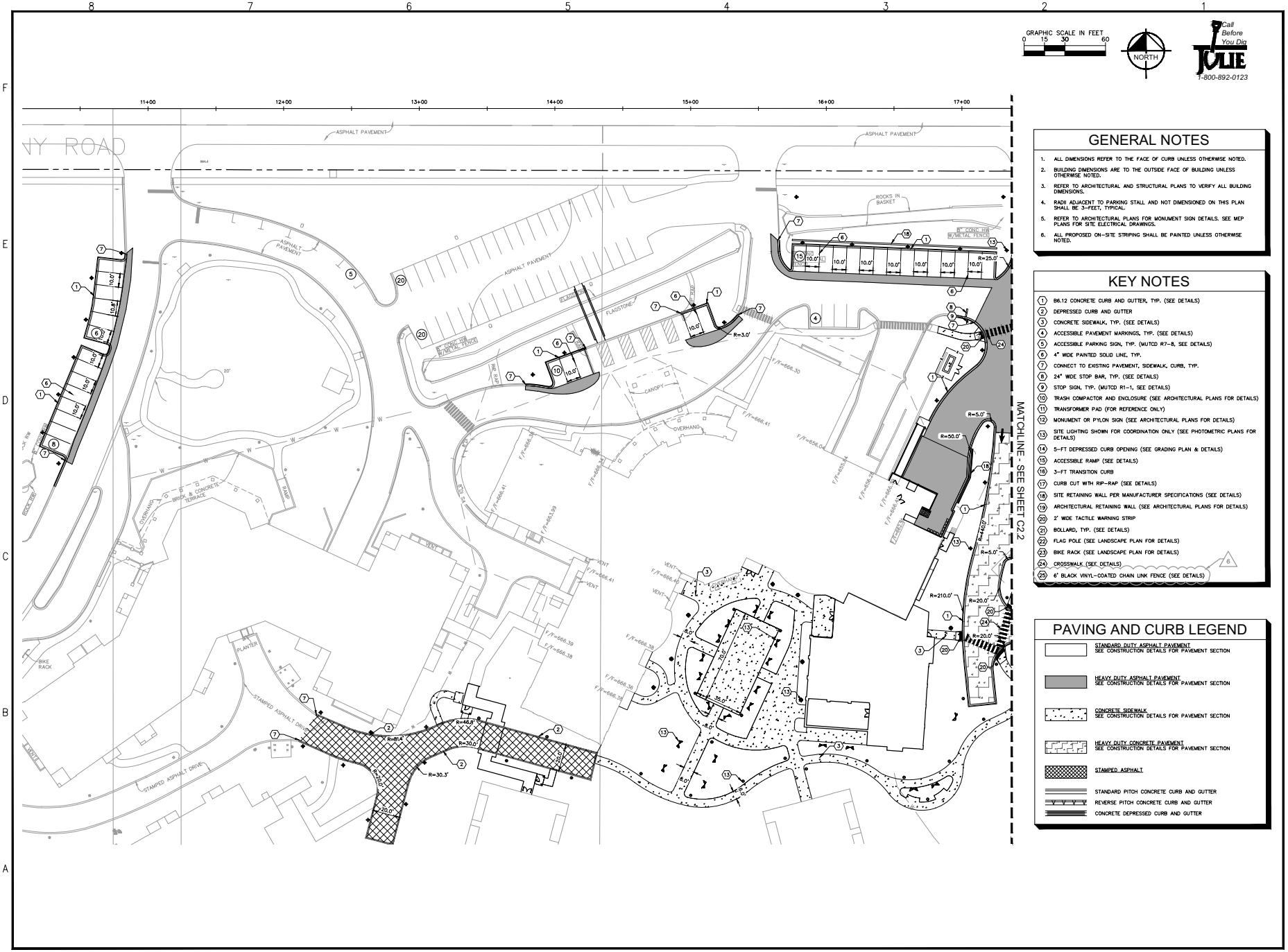

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KEY NOTES

1. B6.12 CONCRETE CURB AND GUTTER, TYP. (SEE DETAILS)
2. DEPRESSED CURB AND GUTTER
3. CONCRETE SIDEWALK, TYP. (SEE DETAILS)
4. ACCESSIBLE PAVEMENT MARKINGS, TYP. (SEE DETAILS)
5. ACCESSIBLE PARKING SIGN, TYP. (MUTCD R7-8, SEE DETAILS)
6. 4" WIDE PAINTED SOLID LINE, TYP.
7. CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
8. 24" WIDE STOP BAR, TYP. (SEE DETAILS)
9. STOP SIGN, TYP. (MUTCD R1-1, SEE DETAILS)
10. TRASH COMPACTOR AND ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAILS)
11. TRANSFORMER PAD (FOR REFERENCE ONLY)
12. MONUMENT OR PYLON SIGN (SEE ARCHITECTURAL PLANS FOR DETAILS)
13. SITE LIGHTING SHOWN FOR COORDINATION ONLY (SEE PHOTOMETRIC PLANS FOR DETAILS)
14. 5'-FT DEPRESSED CURB OPENING (SEE GRADING PLAN & DETAILS)
15. ACCESSIBLE RAMP (SEE DETAILS)
16. 3'-FT TRANSITION CURB
17. CURB CUT WITH RIP-RAP (SEE DETAILS)
18. SITE RETAINING WALL PER MANUFACTURER SPECIFICATIONS (SEE DETAILS)
19. ARCHITECTURAL RETAINING WALL (SEE ARCHITECTURAL PLANS FOR DETAILS)
20. 2' WIDE TACTILE WARNING STRIP
21. BOLLARD, TYP. (SEE DETAILS)
22. FLAG POLE (SEE LANDSCAPE PLAN FOR DETAILS)
23. BIKE RACK (SEE LANDSCAPE PLAN FOR DETAILS)
24. CROSSWALK (SEE DETAILS)
25. 6' BLACK VINYL-COATED CHAIN LINK FENCE (SEE DETAILS)

PAVING AND CURB LEGEND

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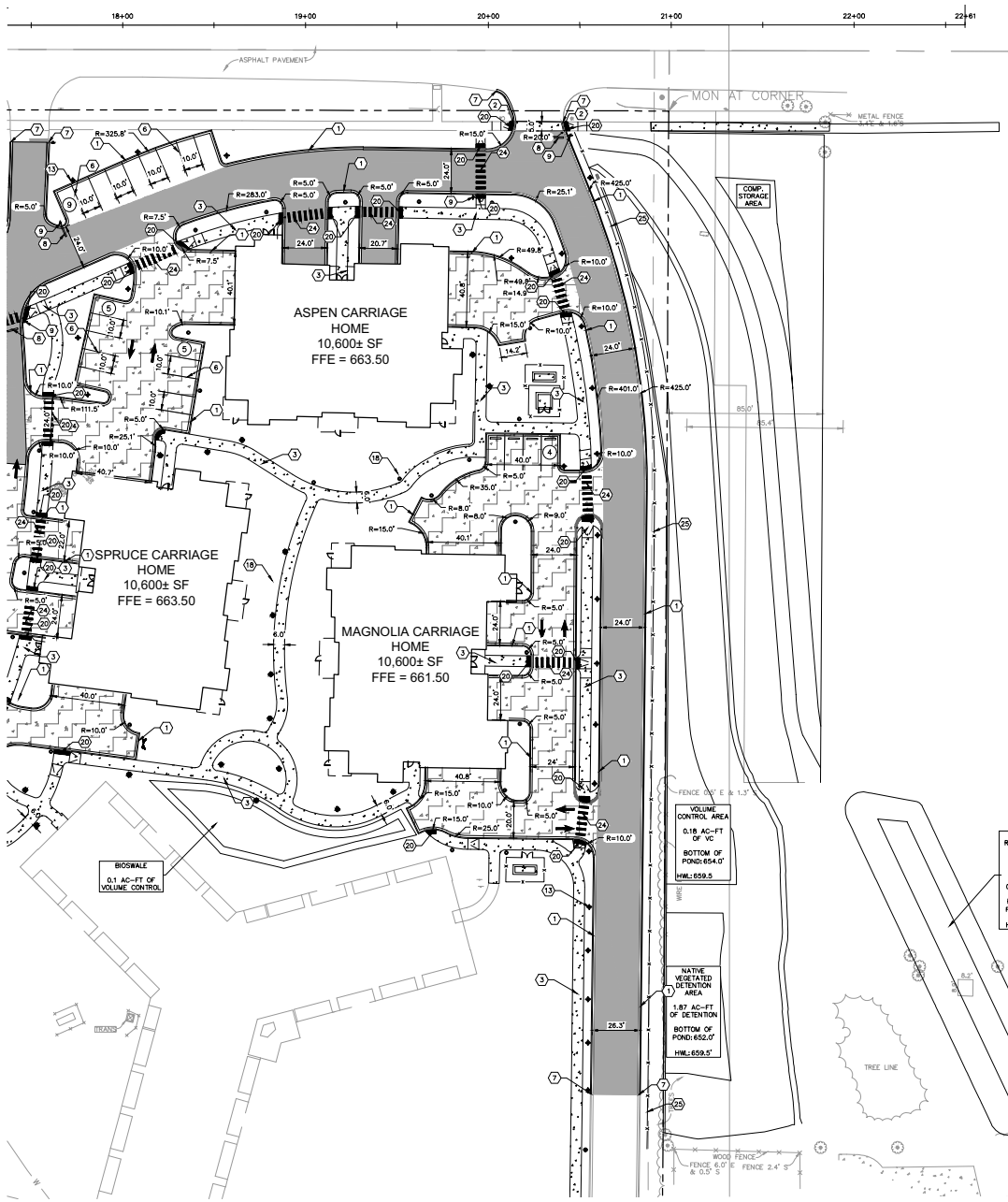

GRAPHIC SCALE IN FEET
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NORTH

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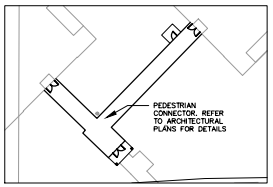
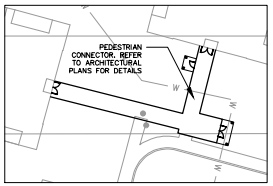


DETAIL 1
1" = 30'



DETAIL 2
1" = 30'

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5. REFER TO ARCHITECTURAL PLANS FOR MONUMENT SIGN DETAILS. SEE MEP PLANS FOR SITE ELECTRICAL DRAWINGS.
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KEY NOTES

1. B6.12 CONCRETE CURB AND GUTTER, TYP. (SEE DETAILS)
2. DEPRESSED CURB AND GUTTER
3. CONCRETE SIDEWALK, TYP. (SEE DETAILS)
4. ACCESSIBLE PAVEMENT MARKINGS, TYP. (SEE DETAILS)
5. ACCESSIBLE PARKING SIGN, TYP. (MUTCD R7-8, SEE DETAILS)
6. 4" WIDE PAINTED SOLID LINE, TYP.
7. CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
8. 24" WIDE STOP BAR, TYP. (SEE DETAILS)
9. STOP SIGN, TYP. (MUTCD R1-1, SEE DETAILS)
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NORTHBROOK SEDIMENT AND EROSION CONTROL REQUIREMENTS

1. ALL EROSION AND SEDIMENT CONTROL (ESC) MEASURES WILL BE MAINTAINED IN ACCORDANCE WITH THE SWPPP AND IDOT EROSION AND SEDIMENT CONTROL FIELD GUIDE FOR CONSTRUCTION INSPECTION. THE GUIDE CAN BE FOUND ON THE IDOT WEBSITE.
2. THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR MAINTENANCE OF ALL SOIL EROSION CONTROL DURING CONSTRUCTION.
3. THE CONTRACTOR SHALL CHECK ALL ESC MEASURES WEEKLY AND AFTER EACH RAINFALL 0.5 INCHES OR GREATER IN A 24 HOUR PERIOD, OR EQUIVALENT SNOWFALL. ADDITIONALLY DURING WINTER MONTHS, ALL MEASURES SHALL BE CHECKED BY THE CONTRACTOR AFTER EACH SIGNIFICANT SNOWMELT. THESE REPORTS SHALL BE PROVIDED TO THE VILLAGE EACH WEEK.
4. THE CONTRACTOR SHALL PROVIDE THE VILLAGE ENGINEER A PLAN TO ENSURE THAT A STABILIZED FLOW LINE WILL BE PROVIDED DURING THE STORM SEWER CONSTRUCTION. THE USE OF A STABILIZED FLOW LINE BETWEEN INSTALLED STORM SEWER AND OPEN DISTURBANCE WILL REDUCE THE POTENTIAL FOR OFFSITE DISCHARGE OF SEDIMENT-BEARING WATERS, ESPECIALLY WHEN RAIN IS FORECASTED, SO THAT FLOW WILL NOT ERODE.
5. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER, SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS.
6. TEMPORARY OR PERMANENT STABILIZATION SHALL BE ENACTED IMMEDIATELY UPON COMPLETION OF DISTURBANCE OR IF THE WORK AREA IS TO BE LEFT UNDISTURBED FOR 7 DAYS OR MORE.
7. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR PROLONG FINAL GRADING AND SHAPING SO THAT THE ENTIRE PROJECT CAN BE PERMANENTLY SEEDED AT ONE TIME.
8. THE IEPA NPDES PERMIT AND STORM WATER POLLUTION PREVENTION PLAN SHALL BE MAINTAINED AT THE PROJECT FIELD OFFICE AND AVAILABLE FOR VIEWING BY ANY VILLAGE OF NORTHBROOK EMPLOYEE UPON REQUEST.
9. SILT FENCE LOGS ARE TO BE AVAILABLE ON-SITE IN CASE OF SILT FENCE DAMAGE AND INSTALLED WHEN SECTIONS OF THE SILT FENCE ARE DOWN. SILT FENCE SHALL BE REPAIRED WITH-IN 7 DAYS OF DAMAGE.
10. DEWATERING OPERATIONS FOR STORM SEWER SHALL BE THROUGH A SILTATION BAG OF THE APPROPRIATE SIZE FOR THE PUMP.
11. SHOULD THESE REQUIREMENTS ABOVE NOT BE ADHERED TO, REQUESTS FOR INSPECTION (WATER MAIN, DRIVEWAY, STORM SEWER, ETC.) BY THE CONTRACTOR SHALL BE DENIED

GRAPHIC SCALE IN FEET
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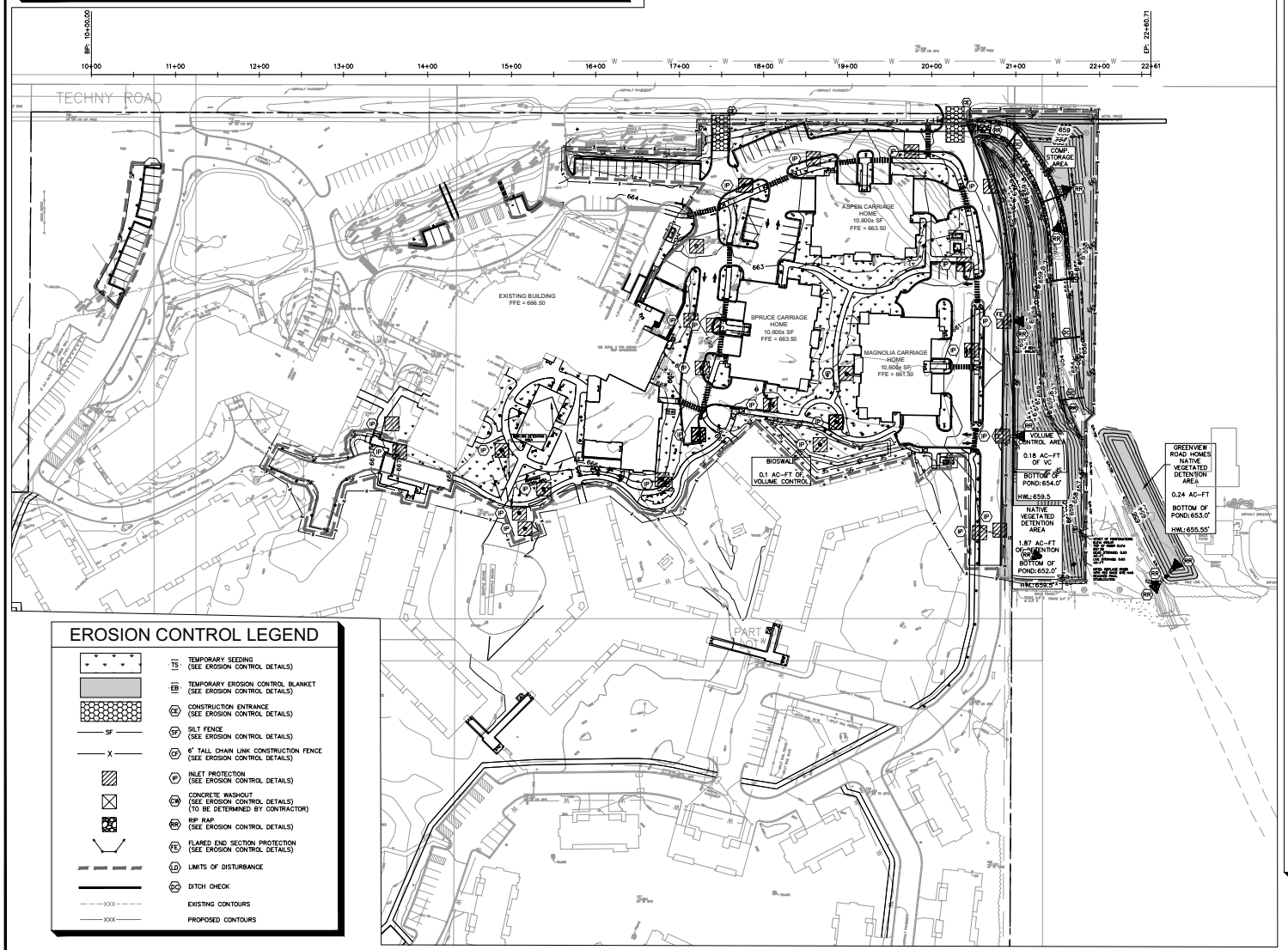

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COVENANT LIVING OF NORTHBROOK

2625 TECHNY RD, NORTHBROOK, IL 60062

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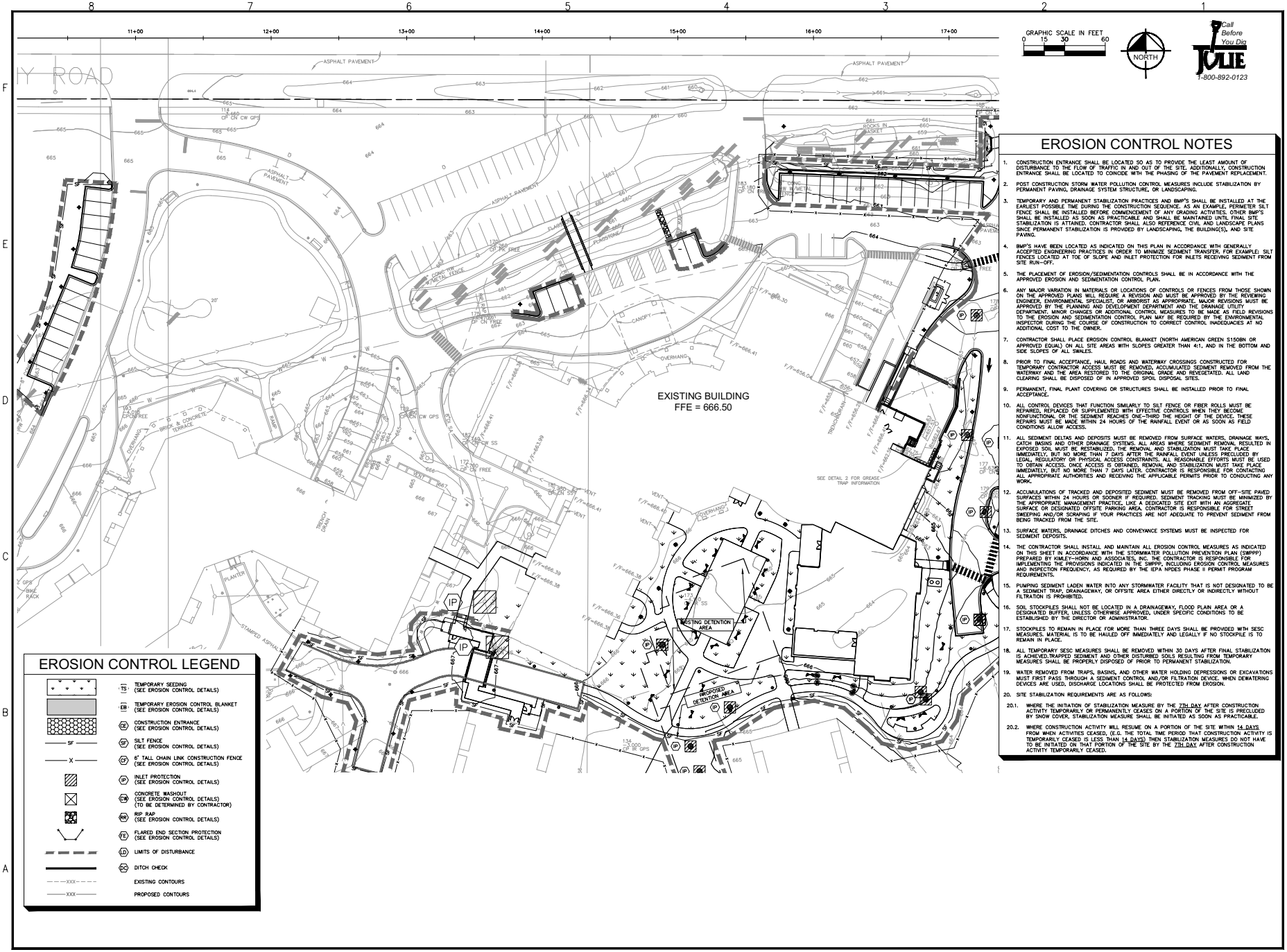
PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

EROSION CONTROL PLAN

Sheet No.: C3.0

K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\PlanSheets\C3.0 EROSION CONTROL PLAN.dwg



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COVENANT LIVING OF NORTHBROOK

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Project No.: 268004000
Date: 9/30/2022

EROSION CONTROL PLAN

Sheet No.: C3.1

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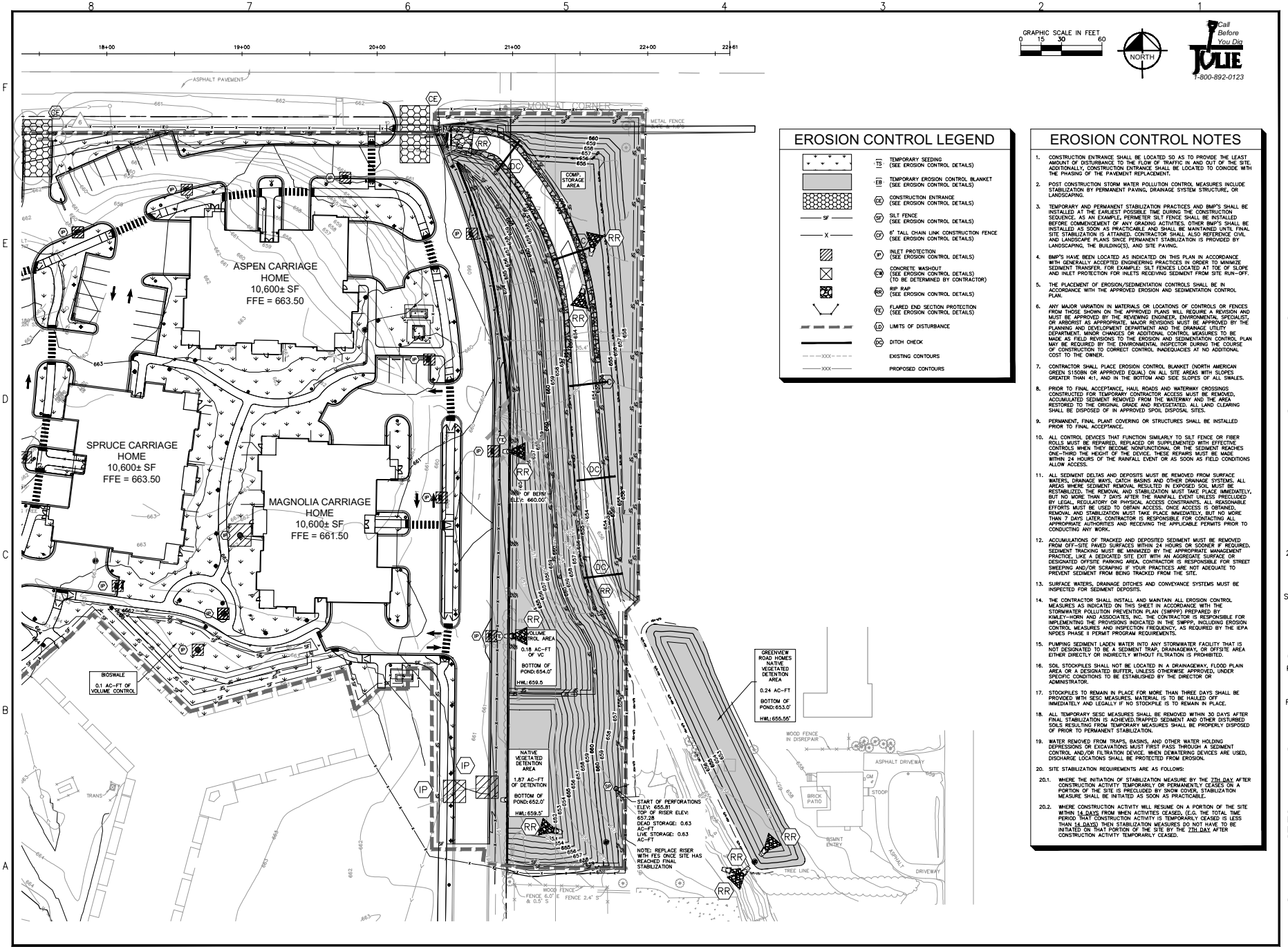

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5. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN.
6. ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE REVIEWING ENGINEER, ENVIRONMENTAL SPECIALIST, OR ARBORIST AS APPROPRIATE. MAJOR REVISIONS MUST BE APPROVED BY THE PLANNING AND DEVELOPMENT DEPARTMENT AND THE DRAINAGE UTILITY DEPARTMENT. MINOR CHANGES OR ADDITIONAL CONTROL MEASURES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENVIRONMENTAL INSPECTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES AT NO ADDITIONAL COST TO THE OWNER.
7. CONTRACTOR SHALL PLACE EROSION CONTROL BLANKET (NORTH AMERICAN GREEN S150BN OR APPROVED EQUAL) ON ALL SITE AREAS WITH SLOPES GREATER THAN 4:1, AND THE BOTTOM AND SIDE SLOPES OF ALL SWALES.
8. PRIOR TO FINAL ACCEPTANCE, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING SHALL BE DISPOSED OF IN APPROVED SPOIL DISPOSAL SITES.
9. PERMANENT, FINAL PLANT COVERING OR STRUCTURES SHALL BE INSTALLED PRIOR TO FINAL ACCEPTANCE.
10. ALL CONTROL DEVICES THAT FUNCTION SIMILARLY TO SILT FENCE OR FIBER ROLLS MUST BE REPAIRED, REPLACED OR SUPPLEMENTED WITH EFFECTIVE CONTROLS WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES ONE-THIRD THE HEIGHT OF THE DEVICE. THESE REPAIRS MUST BE MADE WITHIN 24 HOURS OF THE RAINFALL EVENT OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
11. ALL SEDIMENT DELTAS AND DEPOSITS MUST BE REMOVED FROM SURFACE WATERS, DRAINAGE WAYS, CATCH BASINS AND OTHER DRAINAGE SYSTEMS. ALL AREAS WHERE SEDIMENT REMOVAL RESULTED IN EXPOSED SOIL MUST BE RESTABILIZED. THE REMOVAL AND STABILIZATION MUST TAKE PLACE IMMEDIATELY, BUT NO MORE THAN 7 DAYS AFTER THE RAINFALL EVENT UNLESS PRECLUDED BY LEGAL, REGULATORY OR PHYSICAL ACCESS CONSTRAINTS. ALL REASONABLE EFFORTS MUST BE USED TO OBTAIN ACCESS. ONCE ACCESS IS OBTAINED, REMOVAL AND STABILIZATION MUST TAKE PLACE IMMEDIATELY, BUT NO MORE THAN 7 DAYS LATER. CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL APPROPRIATE AUTHORITIES AND RECEIVING THE APPLICABLE PERMITS PRIOR TO CONDUCTING ANY WORK.
12. ACCUMULATIONS OF TRACKED AND DEPOSITED SEDIMENT MUST BE REMOVED FROM OFF-SITE PAVED SURFACES WITHIN 24 HOURS OR SOONER IF REQUIRED. SEDIMENT TRACKING MUST BE MINIMIZED BY THE APPROPRIATE MANAGEMENT PRACTICE, LIKE A DEDICATED SITE EXIT WITH AN AGGREGATE SURFACE OR DESIGNATED OFFSITE PARKING AREA. CONTRACTOR IS RESPONSIBLE FOR STREET SWEEPING AND/OR SCRAPING IF YOUR PRACTICES ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED FROM THE SITE.
13. SURFACE WATERS, DRAINAGE DITCHES AND CONVEYANCE SYSTEMS MUST BE INSPECTED FOR SEDIMENT DEPOSITS.
14. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL MEASURES AS INDICATED ON THIS SHEET IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED BY KIMLEY-HORN AND ASSOCIATES, INC. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THE PROVISIONS INDICATED IN THE SWPPP, INCLUDING EROSION CONTROL MEASURES AND INSPECTION FREQUENCY, AS REQUIRED BY THE IEPA NPDES PHASE II PERMIT PROGRAM REQUIREMENTS.
15. PUMPING SEDIMENT LADEN WATER INTO ANY STORMWATER FACILITY THAT IS NOT DESIGNATED TO BE A SEDIMENT TRAP, DRAINAGEWAY OR OFFSITE AREA EITHER DIRECTLY OR INDIRECTLY WITHOUT FILTRATION IS PROHIBITED.
16. SOIL STOCKPILES SHALL NOT BE LOCATED IN A DRAINAGEWAY, FLOOD PLAIN AREA OR A DESIGNATED BUFFER, UNLESS OTHERWISE APPROVED, UNDER SPECIFIC CONDITIONS TO BE ESTABLISHED BY THE DIRECTOR OR ADMINISTRATOR.
17. STOCKPILES TO REMAIN IN PLACE FOR MORE THAN THREE DAYS SHALL BE PROVIDED WITH SESC MEASURES. MATERIAL THAT IS TO BE HAULED OFF IMMEDIATELY AND LEGALLY IF NO STOCKPILE IS TO REMAIN IN PLACE.
18. ALL TEMPORARY SESC MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED.TRAPPED SEDIMENT AND OTHER DISTURBED SOILS RESULTING FROM TEMPORARY MEASURES SHALL BE PROPERLY DISPOSED OF PRIOR TO PERMANENT STABILIZATION.
19. WATER REMOVED FROM TRAPS, BASINS, AND OTHER WATER HOLDING DEPRESSIONS OR EXCAVATIONS MUST FIRST PASS THROUGH A SEDIMENT CONTROL AND/OR FILTRATION DEVICE. WHEN DEWATERING DEVICES ARE USED, DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION.
20. SITE STABILIZATION REQUIREMENTS ARE AS FOLLOWS:
    - 20.1. WHERE THE INITIATION OF STABILIZATION MEASURE BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES ON A PORTION OF THE SITE IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURE SHALL BE INITIATED AS SOON AS PRACTICABLE.
    - 20.2. WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 14 DAYS FROM WHEN ACTIVITIES CEASED, (E.G. THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN 14 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASED.

GRAPHIC SCALE IN FEET 0 15 30 60

NORTH

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NO.	DATE	DESCRIPTION
1	6/20/22	SD ISSUANCE
2	6/23/22	DD ISSUANCE
3	8/22/22	50% CD'S
4	9/30/22	PROGRESS CD'S
5	1/6/23	DD ISSUANCE
6	2/3/23	VILLAGE ENGINEERING COMMENTS
7	3/31/23	VILLAGE ENGINEERING COMMENTS
8	5/9/23	WATERMAIN REROUTE
9	6/2/23	DETENTION REVISION
10	6/29/23	MWRD REVIEW #1
11	7/21/23	QA/QC - THW
12	7/31/23	MWRD REVIEW #2
13	8/30/23	MWRD REVIEW #3
14	8/14/23	VILLAGE REVIEW

COVENANT LIVING OF NORTHBROOK

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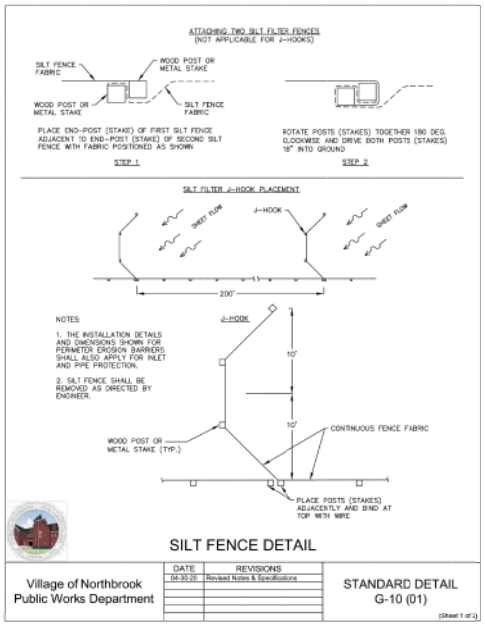
PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

EROSION CONTROL PLAN

Sheet No.: C3.2

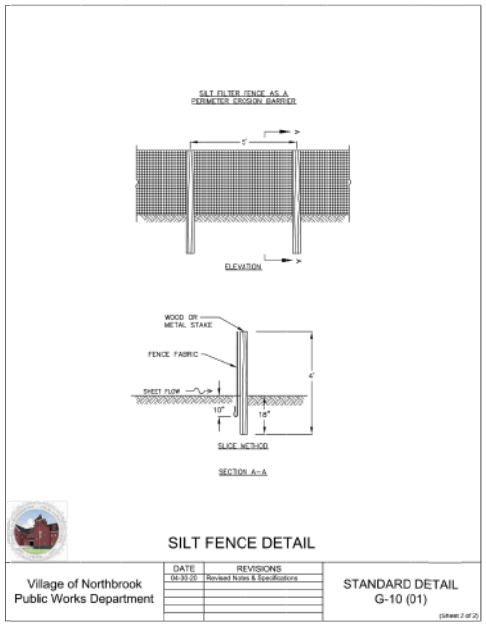
K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\Cad\PlanSheets\C3.0 EROSION CONTROL PLAN.dwg



SILT FENCE DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL G-10 (01)
	04-30-20	Revised Notes & Specifications	

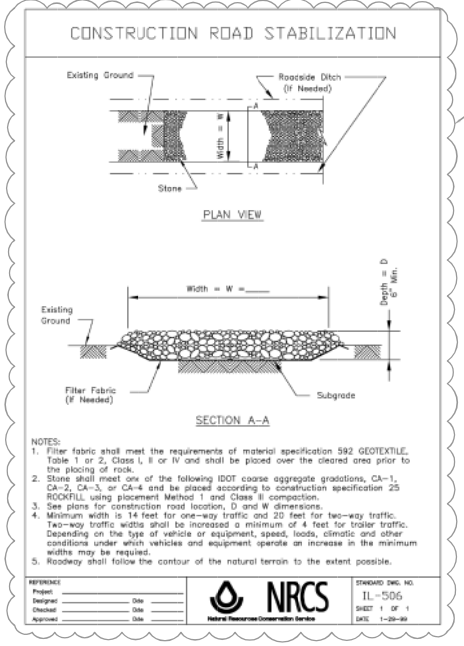
(Sheet 1 of 2)

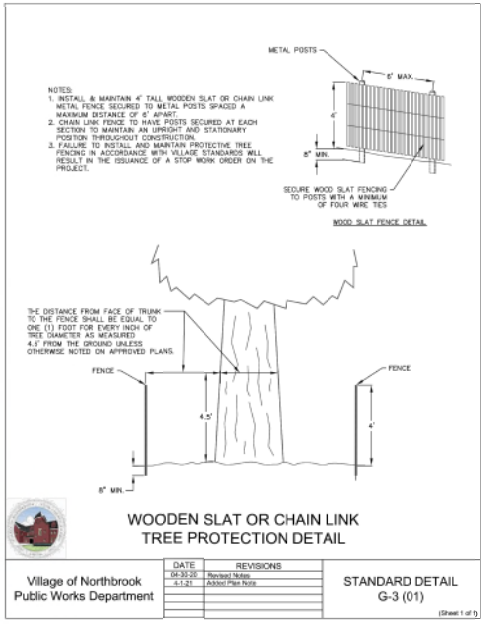


SILT FENCE DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL G-10 (01)
	04-30-20	Revised Notes & Specifications	

(Sheet 2 of 2)

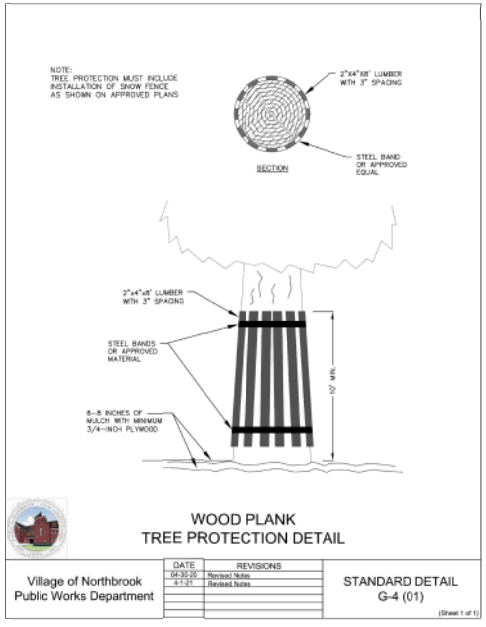




WOODEN SLAT OR CHAIN LINK TREE PROTECTION DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL G-3 (01)
	04-30-20	Revised Notes	
	4-1-21	Added Plan Note	

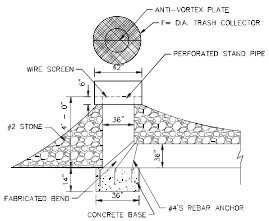
(Sheet 1 of 1)



WOOD PLANK TREE PROTECTION DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL G-4 (01)
	04-30-20	Revised Notes	
	4-1-21	Revised Notes	

(Sheet 1 of 1)



TEMPORARY STANDPIPE DETAIL
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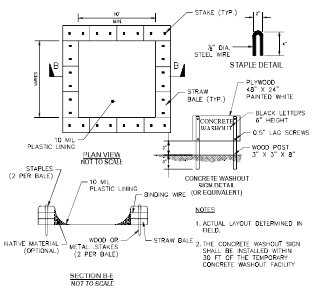

CONCRETE WASHOUT CW
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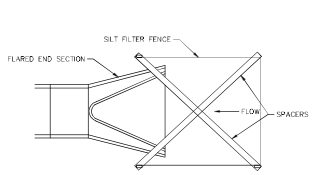

CULVERT INLET PROTECTION FE
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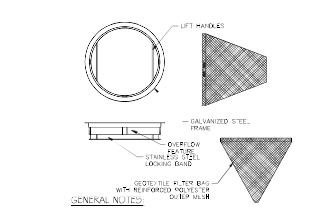

GENERAL NOTES:

ALL PRODUCTS MANUFACTURED BY INLET AND PIPE PROTECTION, INC OR APPROVED EQUAL

NOTE: INLET FILTERS ARE SLIGHTLY SMALLER THAN THE INLET GRATE SIZES. WHEN IDENTIFYING OR SPECIFYING FILTERS/CASTINGS PLEASE REFER TO THE DIAMETER "D" OR WIDTH "W" AND HEIGHT "H" OF FILTER FRAMES OR CASTING GRATES. YOU MAY ALSO REFER TO OUR CASTING CROSS REFERENCE GUIDE FOR IDOT STANDARDS

IDOT TYPE 1 ROUND INLET FILTER DEPICTED

NOTE: ROUND AND SQUARE INLET FILTERS AVAILABLE FOR MOST NEENAH AND EAST JORDAN BEEHIVE, ROLL CURB AND CURB BOX FRAME TYPES

ALL IPP INLET FILTERS TO CONFORM TO IDOT SPECIFICATIONS AS OUTLINED IN ARTICLE 108.15 OF IDOT'S STANDARD SPECIFICATIONS GUIDE.

INLET PROTECTION IP
N.T.S.

NO.	DATE	DESCRIPTION
8	8/14/23	VILLAGE REVIEW
7	8/30/23	MWRD REVIEW #3
6	7/31/23	MWRD REVIEW #2
5	7/21/23	DA/DC - THW
4	6/29/23	MWRD REVIEW #1
3	6/2/23	DETENTION REVISION
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9	9/30/22	PROGRESS CD'S
8	8/22/22	50% CD'S
7	8/23/22	DD ISSUANCE
6	7/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK

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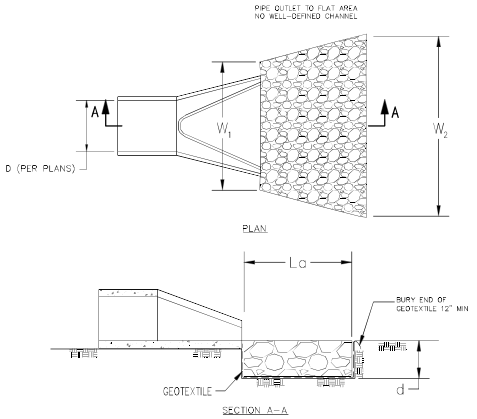
PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

EROSION CONTROL NOTES & DETAILS

Sheet No.: C3.3

K:\IHS_IDEV\268004000_Covenant_Northbrook_IL\2_Design\CAD\PlanSheets\C3.3 EROSION CONTROL PLAN.dwg



NOTES:
1. THE ROCK RIPRAP SHALL MEET IDOT REQUIREMENTS FOR GRADATION NO. RR-3 & RR-4 , QUALITY DESIGNATION "A".

2. GEOTEXTILE (NON-WOVEN), MINIMUM CRITERIA:

2.1.	WEIGHT OF GEOTEXTILE (OZ/SQ.YD.)	6
2.2.	TENSILE STRENGTH (LB) ASTM D 4632	180
2.3.	ELONGATION AT FAILURE (%) ASTM D 4632	≥ 50
2.4.	PUNCTURE (LB) ASTM D 4833	80
2.5.	ULTRAVIOLET LIGHT (% RESIDUAL TENSILE STRENGTH) ASTM D 4355	MIN 70
2.6.	APPARENT OPENING SIZE (AOS) ASTM D 4751	MAX 40 SIEVE
2.7.	PERMITTIVITY SEC-1 ASTM D 4491	MIN 0.70

3. ANY GEOTEXTILE SPLICES SHALL OVERLAP A MINIMUM OF 18 INCHES, WITH UPSTREAM OR UPSLOPE GEOTEXTILE OVERLAPPING THE ABUTTING DOWNSLOPE GEOTEXTILE.

4. APRON WIDTH W_1 SHALL BE 3 TIMES THE CULVERT PIPE DIAMETER. APRON WIDTH W_2 SHALL BE EQUAL TO L_a PLUS THE PIPE DIAMETER.

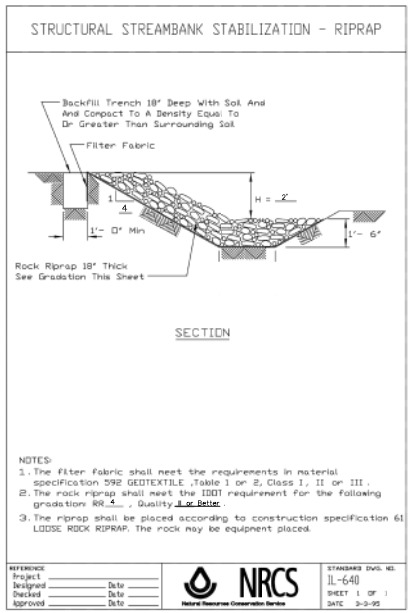
5. ROCK THICKNESS D SHALL BE AT LEAST 1.5 TIMES THE RIPRAP D_{100} SIZE.

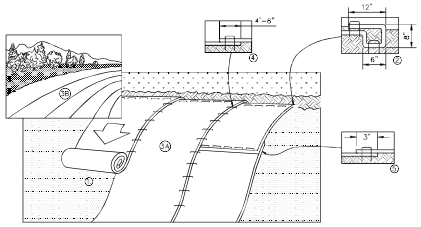
6. APRON LENGTH L_a AND ROCK RIPRAP HAS BEEN SIZED ACCORDING TO ILLINOIS URBAN MANUAL ROCK OUTLET PROTECTION STANDARD 910 BASED CALCULATED VELOCITY FOR THIS PROJECT SITE. PLEASE SEE TABLE 1 FOR DETAILS.

RIPRAP DIMENSION TABLE

INLET PIPE SIZE d (IN)	LENGTH OF APRON L_a (FT)	ROCK GRADATION (IDOT)	WIDTH OF APRON L_a/3 FACE W1 (FT)	WIDTH OF APRON L_a/3 FACE W2 (FT)	DEPTH OF RIPRAP d (IN)
12	12	RR-3	3.00	13.00	15
15	12	RR-3	3.75	13.25	15
18	16	RR-4	4.50	17.50	20
21	18	RR-4	5.25	17.75	20
24	20	RR-4	6.00	22.00	20
27	20	RR-4	6.75	22.50	20
30	22	RR-4	7.50	24.50	20
36	24	RR-5	9.00	27.00	28
42	24	RR-5	10.50	27.50	32
48	28	RR-6	12.00	32.00	32
54	28	RR-6	13.50	32.50	32
60	36	RR-6	15.00	41.00	32
72	44	RR-6	18.00	50.00	32

RIP RAP DETAIL OUTLET PROTECTION (RR)
N.T.S.





1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH. WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH, AS SHOWN IN ANCHOR DETAIL. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS PER MANUFACTURES RECOMMENDATION.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH MINIMUM 6" OVERLAP. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.
6. PLACE STAPLES/STAKES PER MANUFACTURER'S RECOMMENDATION FOR THE APPROPRIATE SLOPE BEING APPLIED.

NOTES:
1. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
2. FOLLOW EROSION CONTROL TECHNOLOGY COUNCIL SPECIFICATION FOR PRODUCT SELECTION.
3. PERVIOUS LAND WITH SLOPES RUNNING GREATER THAN OR EQUAL TO 4:1 SHALL CONTAIN SLOPE STABILIZATION BLANKET

EROSION CONTROL BLANKET (SLOPE INSTALLATION) (EB)
N.T.S.

STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING			A			*	*					
DORMANT SEEDING	B										B	
TEMPORARY SEEDING			C			D						
SODDING			E	**								
MULCHING	F											

A KENTUCKY BLUEGRASS 90 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 30 LBS/ACRE

B KENTUCKY BLUEGRASS 135 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 45 LBS/ACRE + 2 TONS STRAW MULCH/ACRE

C SPRING OATS 100 LBS/ACRE

D WHEAT OR CEREAL RYE 150 LBS/ACRE

E SOD

F STRAW MULCH 2 TONS/ACRE

* WATERING NEEDED DURING JUNE AND JULY

** WATERING NEEDED FOR 2 TO 3 WEEKS AFTER APPLYING SOD

SEEDING CHART (TS)

NO.	DATE	DESCRIPTION
9	8/14/23	VILLAGE REVIEW
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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

EROSION CONTROL NOTES & DETAILS

Sheet No.: C3.4

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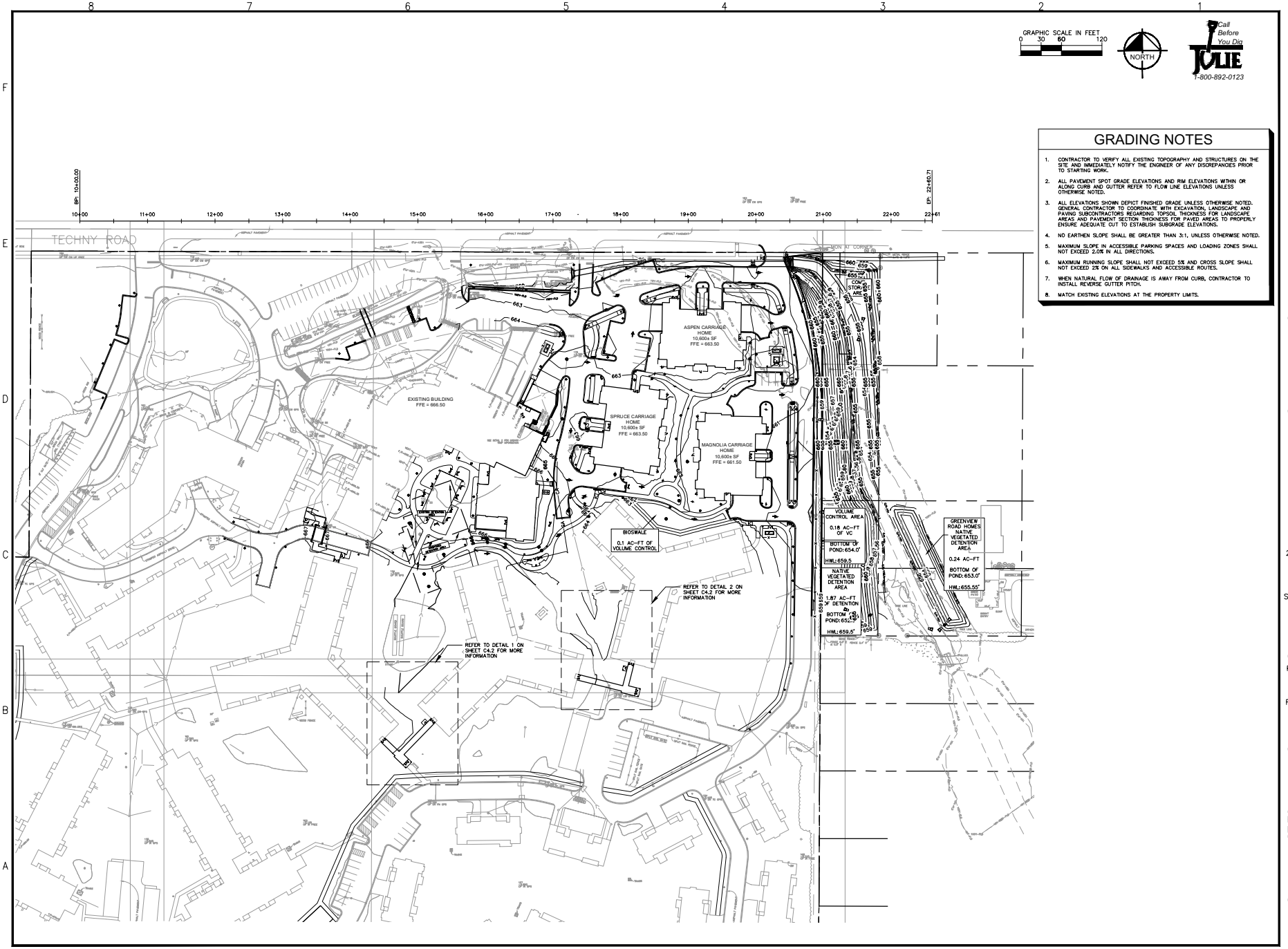

GRADING NOTES

1. CONTRACTOR TO VERIFY ALL EXISTING TOPOGRAPHY AND STRUCTURES ON THE SITE AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING WORK.
2. ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO FLOW LINE ELEVATIONS UNLESS OTHERWISE NOTED.
3. ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR TO COORDINATE WITH EXCAVATION, LANDSCAPE AND PAVING SUBCONTRACTORS REGARDING TOPSOIL THICKNESS FOR LANDSCAPE AREAS AND PAVEMENT SECTION THICKNESS FOR PAVED AREAS TO PROPERLY ENSURE ADEQUATE CUT TO ESTABLISH SUBGRADE ELEVATIONS.
4. NO EARTHEN SLOPE SHALL BE GREATER THAN 3:1, UNLESS OTHERWISE NOTED.
5. MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
6. MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES.
7. WHEN NATURAL FLOW OF DRAINAGE IS AWAY FROM CURB, CONTRACTOR TO INSTALL REVERSE GUTTER PITCH.
8. MATCH EXISTING ELEVATIONS AT THE PROPERTY LIMITS.

NO.	DATE	DESCRIPTION
1	8/14/23	VILLAGE REVIEW
2	8/30/23	MWRD REVIEW #3
3	7/31/23	MWRD REVIEW #2
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7	5/9/23	WATERMAIN REROUTE
8	3/31/23	VILLAGE ENGINEERING COMMENTS
9	2/3/23	VILLAGE ENGINEERING COMMENTS
10	1/6/23	DD ISSUANCE
11	9/30/22	PROGRESS CD'S
12	8/22/22	50% CD'S
13	6/23/22	DD ISSUANCE
14	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK

2625 TECHNY RD, NORTHBROOK, IL 60062

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

GRADING AND DRAINAGE PLAN

Sheet No.: C4.0

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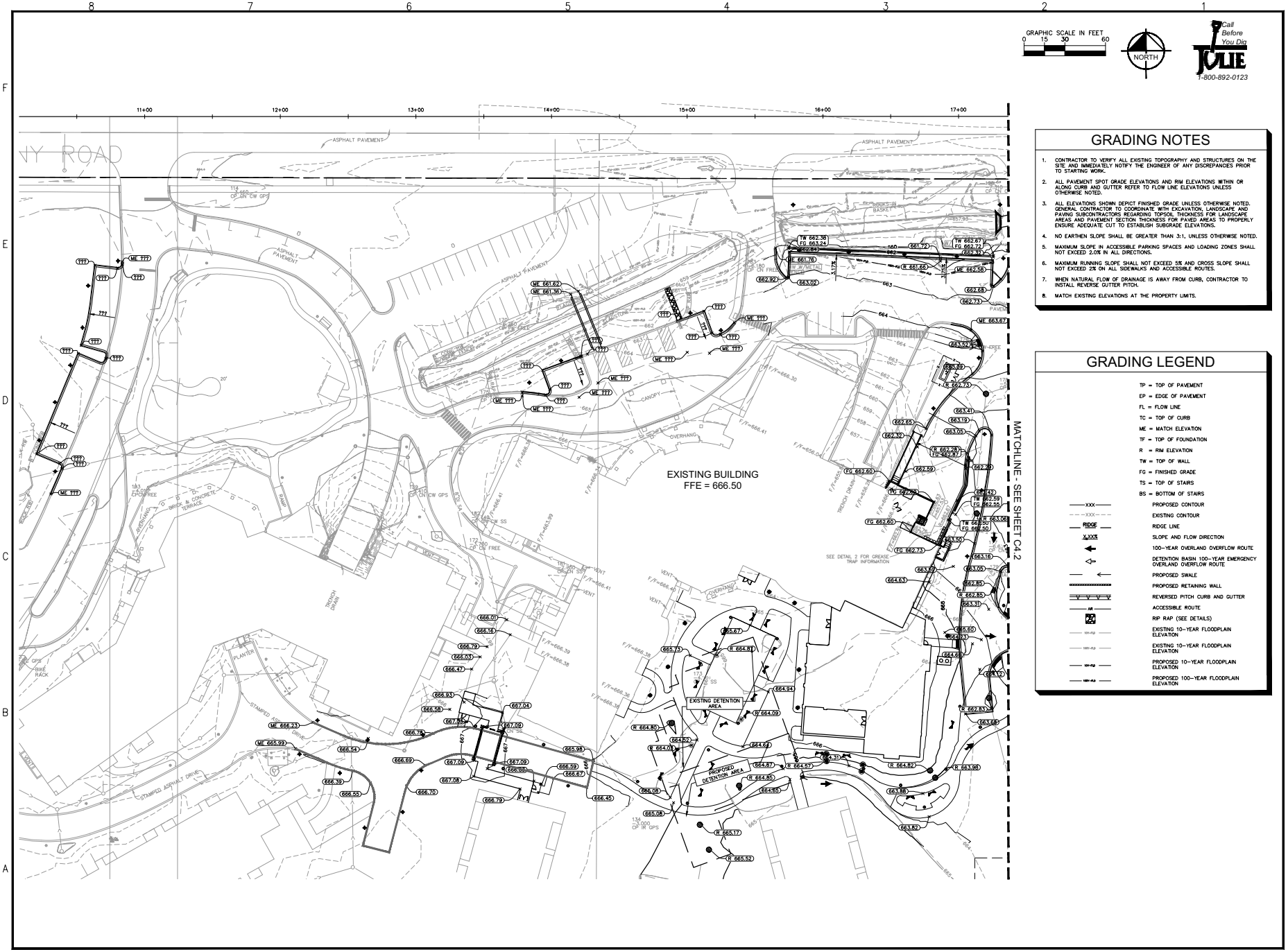

GRADING NOTES

1. CONTRACTOR TO VERIFY ALL EXISTING TOPOGRAPHY AND STRUCTURES ON THE SITE AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING WORK.
2. ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO FLOW LINE ELEVATIONS UNLESS OTHERWISE NOTED.
3. ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR TO COORDINATE WITH EXCAVATION, LANDSCAPE AND PAVING SUBCONTRACTORS REGARDING TOPSOIL THICKNESS FOR LANDSCAPE AREAS AND PAVEMENT SECTION THICKNESS FOR PAVED AREAS TO PROPERLY ENSURE ADEQUATE CUT TO ESTABLISH SUBGRADE ELEVATIONS.
4. NO EARTHEN SLOPE SHALL BE GREATER THAN 3:1, UNLESS OTHERWISE NOTED.
5. MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
6. MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES.
7. WHEN NATURAL FLOW OF DRAINAGE IS AWAY FROM CURB, CONTRACTOR TO INSTALL REVERSE GUTTER PITCH.
8. MATCH EXISTING ELEVATIONS AT THE PROPERTY LIMITS.

GRADING LEGEND

TP	TOP OF PAVEMENT
EP	EDGE OF PAVEMENT
FL	FLOW LINE
TC	TOP OF CURB
ME	MATCH ELEVATION
TF	TOP OF FOUNDATION
R	RIM ELEVATION
TW	TOP OF WALL
FG	FINISHED GRADE
TS	TOP OF STAIRS
BS	BOTTOM OF STAIRS
XXX	PROPOSED CONTOUR
XXX	EXISTING CONTOUR
RIDGE	RIDGE LINE
X.XX%	SLOPE AND FLOW DIRECTION
	100-YEAR OVERLAND OVERFLOW ROUTE
	DETENTION BASIN 100-YEAR EMERGENCY OVERLAND OVERFLOW ROUTE
	PROPOSED SWALE
	PROPOSED RETAINING WALL
	REVERSED PITCH CURB AND GUTTER
AR	ACCESSIBLE ROUTE
	RIP RAP (SEE DETAILS)
	EXISTING 10-YEAR FLOODPLAIN ELEVATION
	EXISTING 10-YEAR FLOODPLAIN ELEVATION
	PROPOSED 10-YEAR FLOODPLAIN ELEVATION
	PROPOSED 100-YEAR FLOODPLAIN ELEVATION

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

GRADING AND DRAINAGE PLAN

Sheet No.: C4.1

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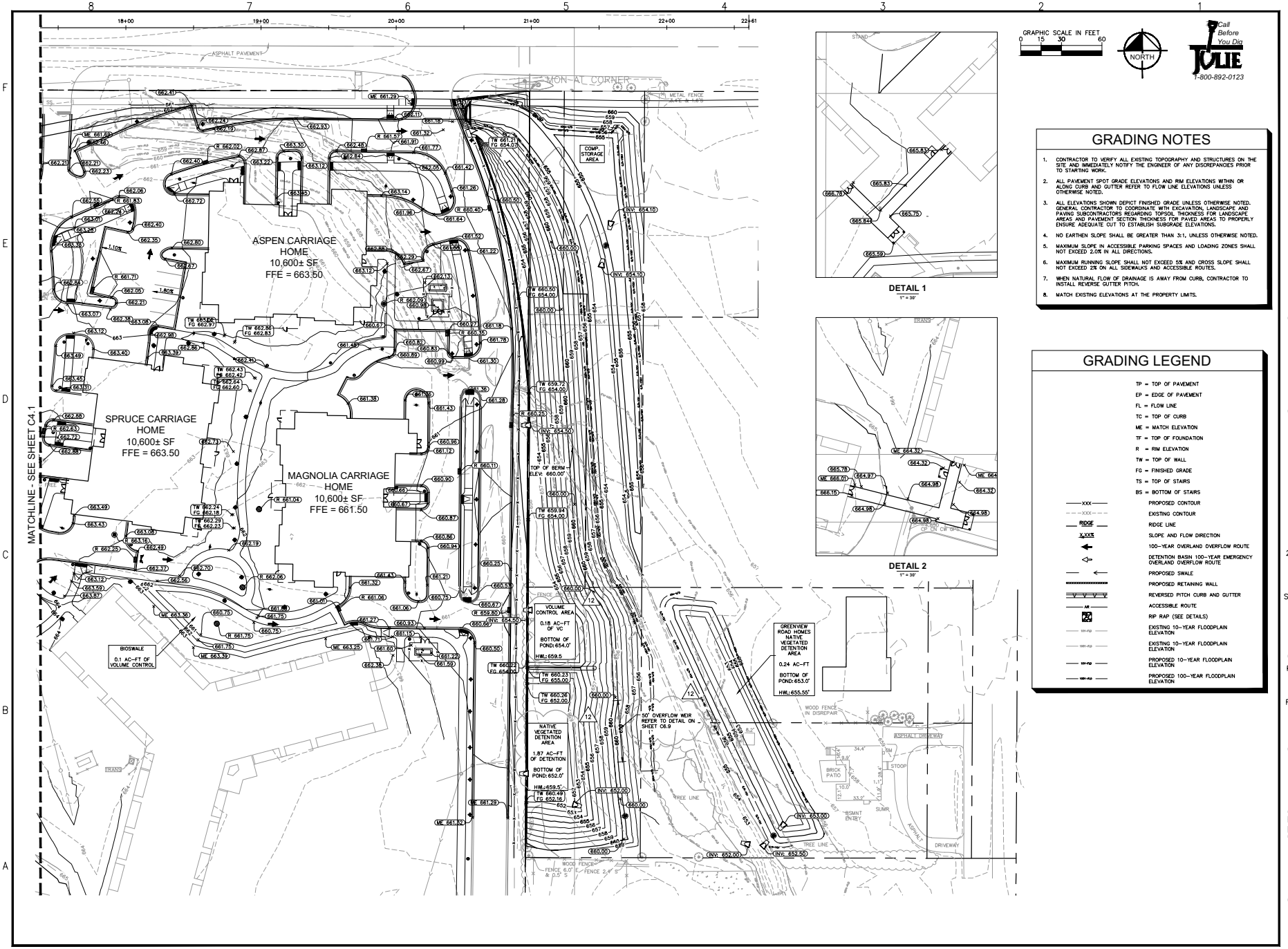

DETAIL 1
1" = 30'

DETAIL 2
1" = 30'

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ME	MATCH ELEVATION
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	100-YEAR OVERLAND OVERFLOW ROUTE
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	PROPOSED SWALE
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	EXISTING 10-YEAR FLOODPLAIN ELEVATION
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GRADING AND DRAINAGE PLAN

Sheet No.: C4.2

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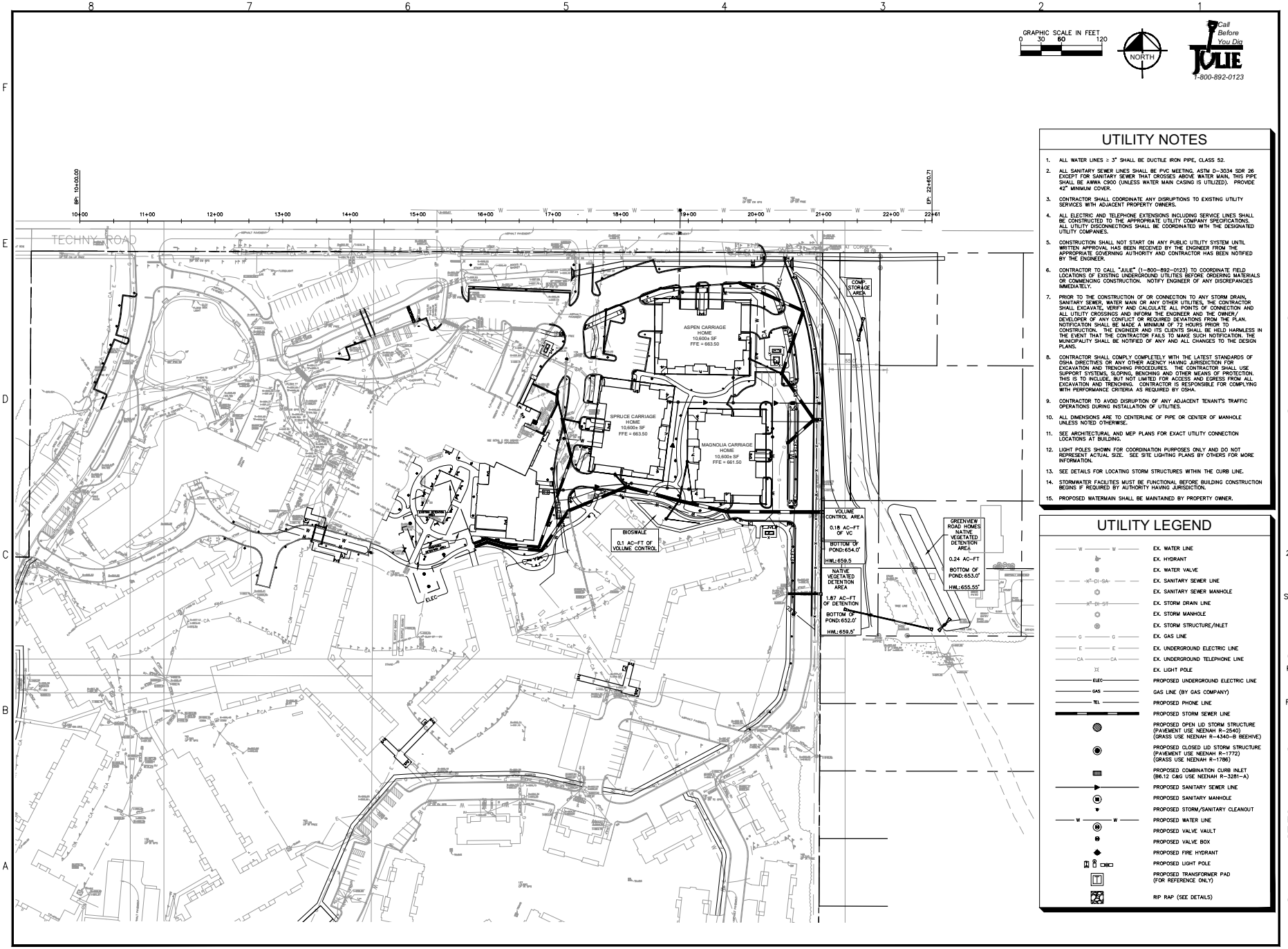

UTILITY NOTES

1. ALL WATER LINES ≥ 3" SHALL BE DUCTILE IRON PIPE, CLASS 52.
2. ALL SANITARY SEWER LINES SHALL BE PVC MEETING, ASTM D-3034 SDR 26 EXCEPT FOR SANITARY SEWER THAT CROSSES ABOVE WATER MAIN, THIS PIPE SHALL BE AWWA C900 (UNLESS WATER MAIN CASING IS UTILIZED). PROVIDE 42" MINIMUM COVER.
3. CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
4. ALL ELECTRIC AND TELEPHONE EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.
5. CONSTRUCTION SHALL NOT START ON ANY PUBLIC UTILITY SYSTEM UNTIL WRITTEN APPROVAL HAS BEEN RECEIVED BY THE ENGINEER FROM THE APPROPRIATE GOVERNING AUTHORITY AND CONTRACTOR HAS BEEN NOTIFIED BY THE ENGINEER.
6. CONTRACTOR TO CALL "JULIE" (1-800-892-0123) TO COORDINATE FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE ORDERING MATERIALS OR COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
7. PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OTHER UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM THE ENGINEER AND THE OWNER/DEVELOPER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. THE ENGINEER AND ITS CLIENTS SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION. THE MUNICIPALITY SHALL BE NOTIFIED OF ANY AND ALL CHANGES TO THE DESIGN PLANS.
8. CONTRACTOR SHALL COMPLY COMPLETELY WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH PERFORMANCE CRITERIA AS REQUIRED BY OSHA.
9. CONTRACTOR TO AVOID DISRUPTION OF ANY ADJACENT TENANT'S TRAFFIC OPERATIONS DURING INSTALLATION OF UTILITIES.
10. ALL DIMENSIONS ARE TO CENTERLINE OF PIPE OR CENTER OF MANHOLE UNLESS NOTED OTHERWISE.
11. SEE ARCHITECTURAL AND MEP PLANS FOR EXACT UTILITY CONNECTION LOCATIONS AT BUILDING.
12. LIGHT POLES SHOWN FOR COORDINATION PURPOSES ONLY AND DO NOT REPRESENT ACTUAL SIZE. SEE SITE LIGHTING PLANS BY OTHERS FOR MORE INFORMATION.
13. SEE DETAILS FOR LOCATING STORM STRUCTURES WITHIN THE CURB LINE.
14. STORMWATER FACILITIES MUST BE FUNCTIONAL BEFORE BUILDING CONSTRUCTION BEGINS IF REQUIRED BY AUTHORITY HAVING JURISDICTION.
15. PROPOSED WATERMAIN SHALL BE MAINTAINED BY PROPERTY OWNER.

UTILITY LEGEND

- EX. WATER LINE
- EX. HYDRANT
- EX. WATER VALVE
- EX. SANITARY SEWER LINE
- EX. SANITARY SEWER MANHOLE
- EX. STORM DRAIN LINE
- EX. STORM MANHOLE
- EX. STORM STRUCTURE/INLET
- EX. GAS LINE
- EX. UNDERGROUND ELECTRIC LINE
- EX. UNDERGROUND TELEPHONE LINE
- EX. LIGHT POLE
- PROPOSED UNDERGROUND ELECTRIC LINE
- GAS LINE (BY GAS COMPANY)
- PROPOSED PHONE LINE
- PROPOSED STORM SEWER LINE
- PROPOSED OPEN LID STORM STRUCTURE (PAVEMENT USE NEENAH R-2540) (GRASS USE NEENAH R-4340-B BEEHIVE)
- PROPOSED CLOSED LID STORM STRUCTURE (PAVEMENT USE NEENAH R-1772) (GRASS USE NEENAH R-1786)
- PROPOSED COMBINATION CURB INLET (B6.12 C&G USE NEENAH R-3281-A)
- PROPOSED SANITARY SEWER LINE
- PROPOSED SANITARY MANHOLE
- PROPOSED STORM/SANITARY CLEANOUT
- PROPOSED WATER LINE
- PROPOSED VALVE VAULT
- PROPOSED VALVE BOX
- PROPOSED FIRE HYDRANT
- PROPOSED LIGHT POLE
- PROPOSED TRANSFORMER PAD (FOR REFERENCE ONLY)
- RIP RAP (SEE DETAILS)

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

UTILITY PLAN

Sheet No.: C5.0

K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\PlanSheets\C5.0 UTILITY PLAN.dwg

UTILITY CROSSING LEGEND

X1	30" STORM 8" WATER	B/P = 658.89 T/P = 657.39	X4	6" SAN. 8" WATER	B/P = 660.86 T/P = 657.38
X2	6" SAN. 8" WATER	B/P = 660.07 T/P = 657.38	X5	6" SAN. 30" STORM	B/P = 660.07 T/P = 657.38
X3	6" SAN. 30" STORM	B/P = 660.43 T/P = 659.43	X6	30" STORM 8" WATER	B/P = 657.58 T/P = 655.58

NOTE: WHERE THERE IS LESS THAN 10 FT HORIZONTAL OR 18-IN VERTICAL SEPARATION BETWEEN A SEWER AND WATER MAIN, OR IF WATER MAIN CROSSES UNDER A SEWER, WATER MAIN QUALITY PIPE IS TO BE USED TO CONSTRUCT THE SEWER OR EITHER PIPE IS TO BE ENCASED. THE PROTECTION MUST EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE DISTANCE BETWEEN THE WATER MAIN AND SEWER IS AT LEAST 10 FT. ACCEPTABLE WATER MAIN QUALITY PIPE INCLUDES PVC SDR/WMQ MEETING ASTM D2241 WITH JOINTS MEETING ASTM D3139 OR DUCTILE IRON PIPE. RCP STORM SEWER WITH FLEXIBLE GASKET JOINTS MEETING ASTM C361 OR ASTM C443 IS ALSO ACCEPTABLE AT CROSSINGS.

GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

Call Before You Dig
JULIE
1-800-892-0123

UTILITY LEGEND

- EX. WATER LINE
- EX. HYDRANT
- EX. WATER VALVE
- EX. SANITARY SEWER LINE
- EX. SANITARY SEWER MANHOLE
- EX. STORM DRAIN LINE
- EX. STORM MANHOLE
- EX. STORM STRUCTURE/INLET
- EX. GAS LINE
- EX. UNDERGROUND ELECTRIC LINE
- EX. UNDERGROUND TELEPHONE LINE
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- PROPOSED WATER LINE
- PROPOSED VALVE VAULT
- PROPOSED VALVE BOX
- PROPOSED FIRE HYDRANT
- PROPOSED LIGHT POLE
- PROPOSED TRANSFORMER PAD (FOR REFERENCE ONLY)
- RIP RAP (SEE DETAILS)

MATCHLINE - SEE SHEET C5.2

SEE DETAIL 2 FOR GREASE TRAP INFORMATION

REFER TO UTILITY DETAIL FOR MORE INFORMATION

EXISTING DETENTION AREA

PROPOSED DETENTION AREA

CONNECT TO EXISTING STRUCTURE

6" TRENCH DRAIN

38 LF OF 12" RCP @ 1.00%
36 LF OF 12" RCP @ 1.00%
27 LF OF 12" RCP @ 3.25%
58 LF OF 30" RCP @ 0.74%
141 LF OF 30" RCP @ 0.08%
21 LF OF 30" RCP @ 0.02%
28 LF OF 30" RCP @ 0.19%
50 LF OF 30" RCP @ 0.00%
54 LF OF 36" RCP @ 0.30%
19 LF OF 36" RCP @ 0.12%
27 LF OF 36" RCP @ 0.68%

UTILITY DETAIL
1" = 10'

35 LF OF 6" C900 @ 1.00%
10 LF OF 6" PVC @ 1.00%
10 LF OF 6" C900 @ 1.00%
16 LF OF 6" C900 @ 1.00%

STORM STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
D1	CONNECT TO EXIST STORM RIM: 664.65 INV OUT: 657.80 (E, 36")
D2	5' MH – CLOSED LID RIM: 664.57 INV IN: 657.78 (W, 36") INV OUT: 657.78 (E, 36")
D3	5' MH CLOSED LID RIM: 664.19 INV IN: 657.59 (N, 36") INV OUT: 657.59 (E, 36")
D4	5' MH – OPEN LID RIM: 663.98 INV IN: 657.43 (N, 36") INV OUT: 657.43 (NE, 36")
D5	8' MH – OUTLET CONTROL STRUCTURE RIM: 662.83 INV IN: 657.22 (SW, 36") INV IN: 657.92 (S, 12") INV OUT: 657.22 (E, 36")
D6	CONNECT TO EXIST STORM RIM: 664.72 INV IN: 657.71 (E, 30")
D7	5' MH CLOSED LID RIM: 665.42 INV IN: 657.72 (E, 30") INV OUT: 657.72 (W, 30")
D8	5' MH CLOSED LID RIM: 664.98 INV IN: 657.77 (E, 30") INV OUT: 657.77 (W, 30")
D9	6' MH – OPEN LID RIM: 664.82 INV IN: 657.81 (N, 30") INV OUT: 657.81 (W, 30")
D10	5' CURB INLET RIM: 662.85 INV IN: 657.92 (N, 30") INV OUT: 657.92 (S, 30")

STORM STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
D11	TRENCH DRAIN CONNECTION RIM: 662.28 INV OUT: 659.09 (SE, 12")
D33	STRUCTURE TO SIT ON UNDERGROUND DETENTION RIM: 664.80
D34	TRENCH DRAIN CONNECTION RIM: 662.28 INV IN: 658.71 (NW, 12") INV OUT: 658.71 (S, 12")
D35	INLET CONNECTION TO STORMTRAP RIM: 664.85
D36	INLET CONNECTION TO STORMTRAP RIM: 665.17
D37	INLET CONNECTION TO STORMTRAP RIM: 665.52
ED1	ADJUST RIM TO FINISH GRADE RIM: 662.73 INV OUT: 658.78 (S, 12")
ED2	CONTRACTOR TO CONFIRM SIZE AND INTACTNESS OF MH. MH TO BE 6' DIA. ADJUST RIM TO FINISHED GRADE RIM: 663.06 INV IN: 658.35 (N, 12") INV IN: 658.35 (N, 12") INV IN: 658.35 (E, 12") INV OUT: 658.35 (S, 30")

WATER STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
W1	VALVE VAULT FG ELEV: 664.46
W3	VALVE VAULT FG ELEV: 663.45
W27	FH FG ELEV: 663.63
W28	FH FG ELEV: 666.17

MISCELLANEOUS WATER STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
W2	TEE
W31	PRESSURE CONNECT TO EXISTING WATERMAIN
W32	PRESSURE CONNECT TO EXISTING WATERMAIN
W33	TEE
W34	TEE
W35	TEE
W36	TEE

SANITARY STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
S1	SANITARY BUILDING CONNECTION RIM: 666.29 INV OUT: 660.30 (E, 6")
S2	MANHOLE RIM: 664.48 INV IN: 660.74 (W, 6") INV IN: 659.95 (W, 6") INV OUT: 659.75 (E, 6")
S13	SEWER STUB RIM: 666.29 INV OUT: 661.50 (E, 6")
S14	GREASE TRAP RIM: 665.67 INV IN: 661.40 (W, 6") INV OUT: 661.20 (E, 6")
S15	6" CLEANOUT RIM: 665.07 INV IN: 661.10 (W, 6") INV OUT: 660.90 (E, 6")

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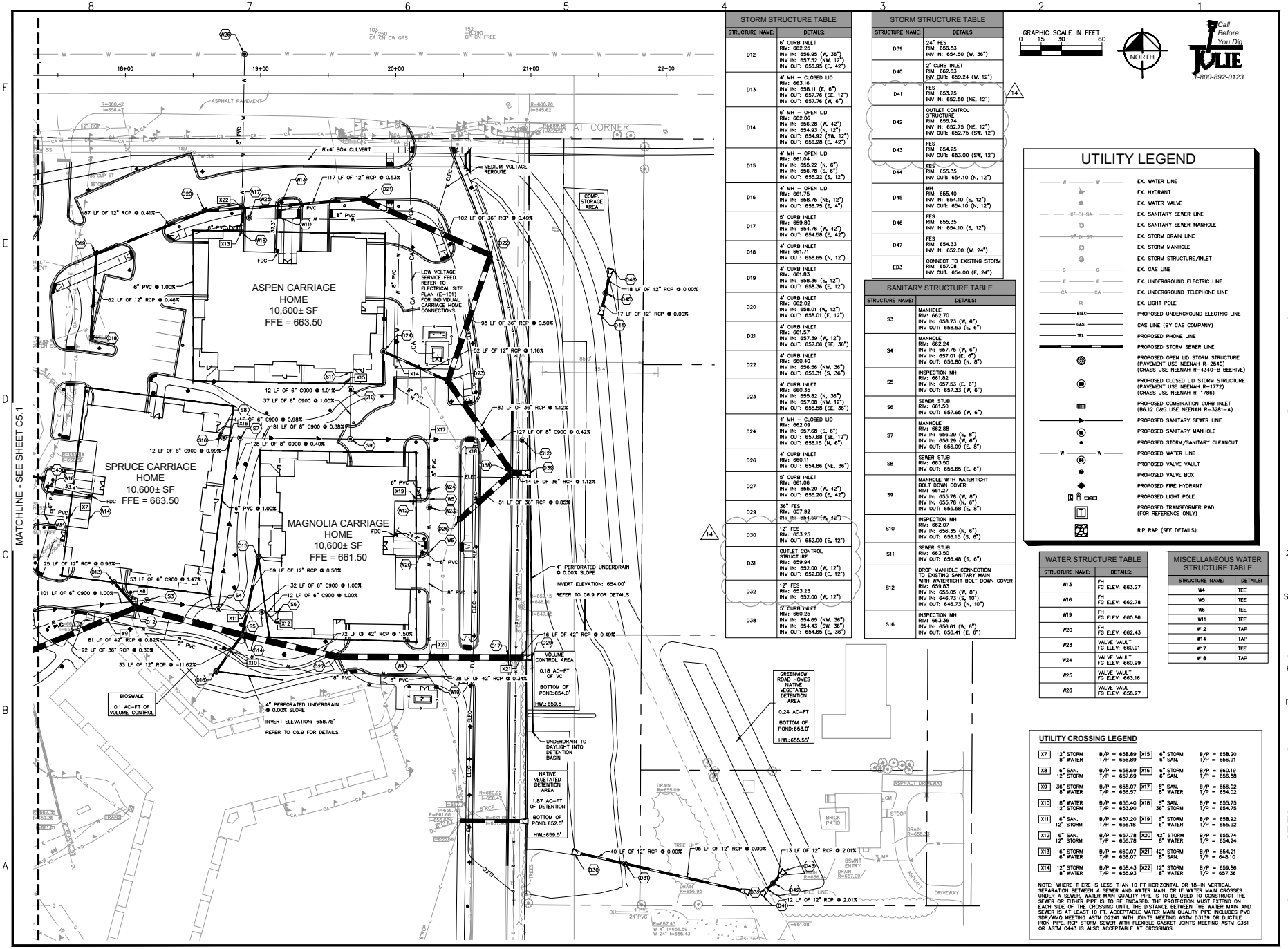
PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

UTILITY PLAN

Sheet No.: C5.1

K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\PlanSheets\C5.0 UTILITY PLAN.dwg



STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D12	6' CURB INLET RIM: 662.25 INV IN: 656.95 (W, 36") INV IN: 657.52 (NW, 12") INV OUT: 656.95 (E, 42")
D13	4' MH – CLOSED LID RIM: 663.16 INV IN: 658.11 (E, 6") INV OUT: 657.76 (SE, 12") INV OUT: 657.76 (W, 6")
D14	6' MH – OPEN LID RIM: 662.06 INV IN: 656.28 (W, 42") INV IN: 654.93 (N, 12") INV OUT: 654.92 (SW, 12") INV OUT: 656.28 (E, 42")
D15	4' MH – OPEN LID RIM: 661.04 INV IN: 655.22 (N, 6") INV IN: 656.78 (S, 6") INV OUT: 655.22 (S, 12")
D16	4' MH – OPEN LID RIM: 661.75 INV IN: 658.75 (NE, 12") INV OUT: 658.75 (E, 4")
D17	5' CURB INLET RIM: 659.80 INV IN: 654.76 (W, 42") INV OUT: 654.58 (E, 42")
D18	4' CURB INLET RIM: 661.71 INV OUT: 658.65 (N, 12")
D19	4' CURB INLET RIM: 661.83 INV IN: 658.36 (S, 12") INV OUT: 658.36 (E, 12")
D20	4' CURB INLET RIM: 662.02 INV IN: 658.01 (W, 12") INV OUT: 658.01 (E, 12")
D21	4' CURB INLET RIM: 661.57 INV IN: 657.39 (W, 12") INV OUT: 657.06 (SE, 36")
D22	4' CURB INLET RIM: 660.40 INV IN: 656.56 (NW, 36") INV OUT: 656.31 (S, 36")
D23	4' CURB INLET RIM: 660.35 INV IN: 655.82 (N, 36") INV IN: 657.08 (NW, 12") INV OUT: 655.58 (SE, 36")
D24	4' MH – CLOSED LID RIM: 662.09 INV IN: 657.68 (S, 6") INV OUT: 657.68 (SE, 12") INV OUT: 658.15 (N, 6")
D26	4' CURB INLET RIM: 660.11 INV OUT: 654.86 (NE, 36")
D27	5' CURB INLET RIM: 661.06 INV IN: 655.20 (W, 42") INV OUT: 655.20 (E, 42")
D29	36" FES RIM: 657.92 INV IN: 654.50 (W, 42")
D30	12" FES RIM: 653.25 INV OUT: 652.00 (E, 12")
D31	OUTLET CONTROL STRUCTURE RIM: 659.94 INV IN: 652.00 (W, 12") INV OUT: 652.00 (E, 12")
D32	12" FES RIM: 653.25 INV IN: 652.00 (W, 12")
D38	5' CURB INLET RIM: 660.25 INV IN: 654.65 (NW, 36") INV IN: 654.43 (SW, 36") INV OUT: 654.65 (E, 36")

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D39	24" FES RIM: 656.83 INV IN: 654.50 (W, 36")
D40	2' CURB INLET RIM: 662.63 INV OUT: 659.24 (W, 12")
D41	FES RIM: 653.75 INV IN: 652.50 (NE, 12")
D42	OUTLET CONTROL STRUCTURE RIM: 655.74 INV IN: 652.75 (NE, 12") INV OUT: 652.75 (SW, 12")
D43	FES RIM: 654.25 INV OUT: 653.00 (SW, 12")
D44	FES RIM: 655.35 INV OUT: 654.10 (N, 12")
D45	MH RIM: 655.40 INV IN: 654.10 (S, 12") INV OUT: 654.10 (N, 12")
D46	FES RIM: 655.35 INV IN: 654.10 (S, 12")
D47	FES RIM: 654.33 INV IN: 652.00 (W, 24")
ED3	CONNECT TO EXISTING STORM RIM: 657.08 INV OUT: 654.00 (E, 24")

SANITARY STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
S3	MANHOLE RIM: 662.70 INV IN: 658.73 (W, 6") INV OUT: 658.53 (E, 6")
S4	MANHOLE RIM: 662.24 INV IN: 657.75 (W, 6") INV IN: 657.01 (E, 6") INV OUT: 656.80 (N, 8")
S5	INSPECTION MH RIM: 661.62 INV IN: 657.53 (E, 6") INV OUT: 657.33 (W, 6")
S6	SEWER STUB RIM: 661.50 INV OUT: 657.65 (W, 6")
S7	MANHOLE RIM: 662.88 INV IN: 656.29 (S, 8") INV IN: 656.29 (W, 6") INV OUT: 656.09 (E, 8")
S8	SEWER STUB RIM: 663.50 INV OUT: 656.65 (E, 6")
S9	MANHOLE WITH WATERTIGHT BOLT DOWN COVER RIM: 661.27 INV IN: 655.78 (W, 8") INV IN: 655.78 (N, 6") INV OUT: 655.58 (E, 8")
S10	INSPECTION MH RIM: 662.07 INV IN: 656.35 (N, 6") INV OUT: 656.15 (S, 6")
S11	SEWER STUB RIM: 663.50 INV OUT: 656.48 (S, 6")
S12	DROP MANHOLE CONNECTION TO EXISTING SANITARY MAIN WITH WATERTIGHT BOLT DOWN COVER RIM: 659.93 INV IN: 655.05 (W, 8") INV IN: 646.73 (S, 10") INV OUT: 646.73 (N, 10")
S16	INSPECTION MH RIM: 663.36 INV IN: 656.61 (W, 6") INV OUT: 656.41 (E, 6")

GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

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UTILITY LEGEND

- EX. WATER LINE
- EX. HYDRANT
- EX. WATER VALVE
- EX. SANITARY SEWER LINE
- EX. SANITARY SEWER MANHOLE
- EX. STORM DRAIN LINE
- EX. STORM MANHOLE
- EX. STORM STRUCTURE/INLET
- EX. GAS LINE
- EX. UNDERGROUND ELECTRIC LINE
- EX. UNDERGROUND TELEPHONE LINE
- EX. LIGHT POLE
- PROPOSED UNDERGROUND ELECTRIC LINE
- GAS LINE (BY GAS COMPANY)
- PROPOSED PHONE LINE
- PROPOSED STORM SEWER LINE
- PROPOSED OPEN LID STORM STRUCTURE (PAVEMENT USE NEENAH R-2540) (GRASS USE NEENAH R-4340-B BEEHIVE)
- PROPOSED CLOSED LID STORM STRUCTURE (PAVEMENT USE NEENAH R-1772) (GRASS USE NEENAH R-1786)
- PROPOSED COMBINATION CURB INLET (86.12 C&G USE NEENAH R-3281-A)
- PROPOSED SANITARY SEWER LINE
- PROPOSED SANITARY MANHOLE
- PROPOSED STORM/SANITARY CLEANOUT
- PROPOSED WATER LINE
- PROPOSED VALVE VAULT
- PROPOSED VALVE BOX
- PROPOSED FIRE HYDRANT
- PROPOSED LIGHT POLE
- PROPOSED TRANSFORMER PAD (FOR REFERENCE ONLY)
- RIP RAP (SEE DETAILS)

WATER STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
W13	FH FG ELEV: 663.27
W16	FH FG ELEV: 662.78
W19	FH FG ELEV: 660.86
W20	FH FG ELEV: 662.43
W23	VALVE VAULT FG ELEV: 660.91
W24	VALVE VAULT FG ELEV: 660.99
W25	VALVE VAULT FG ELEV: 663.16
W26	VALVE VAULT FG ELEV: 658.27

MISCELLANEOUS WATER STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
W4	TEE
W5	TEE
W6	TEE
W11	TEE
W12	TAP
W14	TAP
W17	TEE
W18	TAP

UTILITY CROSSING LEGEND

X7	12" STORM 8" WATER	B/P = 658.89 T/P = 656.89	X15	6" STORM 6" SAN.	B/P = 658.20 T/P = 656.91
X8	6" SAN. 12" STORM	B/P = 658.69 T/P = 657.69	X16	6" STORM 6" SAN.	B/P = 660.19 T/P = 656.88
X9	36" STORM 8" WATER	B/P = 658.07 T/P = 656.57	X17	8" SAN. 8" WATER	B/P = 656.02 T/P = 654.02
X10	8" WATER 12" STORM	B/P = 655.40 T/P = 653.90	X18	8" SAN. 36" STORM	B/P = 655.75 T/P = 654.75
X11	6" SAN. 12" STORM	B/P = 657.20 T/P = 656.18	X19	6" STORM 6" WATER	B/P = 658.92 T/P = 655.92
X12	6" SAN. 12" STORM	B/P = 657.78 T/P = 656.78	X20	42" STORM 8" WATER	B/P = 655.74 T/P = 654.24
X13	6" STORM 6" WATER	B/P = 660.07 T/P = 658.07	X21	42" STORM 8" SAN.	B/P = 654.21 T/P = 648.10
X14	12" STORM 8" WATER	B/P = 658.43 T/P = 655.93	X22	12" STORM 8" WATER	B/P = 659.86 T/P = 657.36

NOTE: WHERE THERE IS LESS THAN 10 FT HORIZONTAL OR 18-IN VERTICAL SEPARATION BETWEEN A SEWER AND WATER MAIN, OR IF WATER MAIN CROSSES UNDER A SEWER, WATER MAIN QUALITY PIPE IS TO BE USED TO CONSTRUCT THE SEWER OR EITHER PIPE IS TO BE ENCASED. THE PROTECTION MUST EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE DISTANCE BETWEEN THE WATER MAIN AND SEWER IS AT LEAST 10 FT. ACCEPTABLE WATER MAIN QUALITY PIPE INCLUDES PVC SDR/PWG MEETING ASTM D2241 WITH JOINTS MEETING ASTM D3139 OR DUCTILE IRON PIPE. RCP STORM SEWER WITH FLEXIBLE GASKET JOINTS MEETING ASTM C361 OR ASTM D443 IS ALSO ACCEPTABLE AT CROSSINGS.

NO.	DATE	DESCRIPTION
1	8/14/23	VILLAGE REVIEW
2	8/30/23	MWRD REVIEW #3
3	7/31/23	MWRD REVIEW #2
4	7/21/23	QA/QC – THW
5	6/29/23	MWRD REVIEW #1
6	6/2/23	DETENTION REVISION
7	5/9/23	WATERMAIN REROUTE
8	3/31/23	VILLAGE ENGINEERING COMMENTS
9	2/3/23	VILLAGE ENGINEERING COMMENTS
10	1/6/23	DD ISSUANCE
11	9/30/22	PROGRESS CD'S
12	8/22/22	50% CD'S
13	6/23/22	DD ISSUANCE
14	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK

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Kimley»Horn

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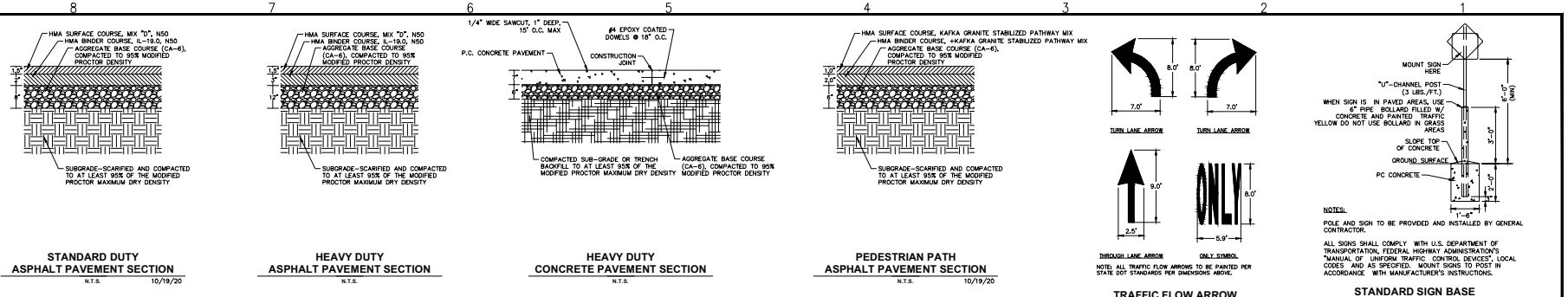
PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

UTILITY PLAN

Sheet No.: C5.2

K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\PlanSheets\C5.0 UTILITY PLAN.dwg



STANDARD DUTY ASPHALT PAVEMENT SECTION N.T.S. 10/19/20

HEAVY DUTY ASPHALT PAVEMENT SECTION N.T.S.

HEAVY DUTY CONCRETE PAVEMENT SECTION N.T.S.

PEDESTRIAN PATH ASPHALT PAVEMENT SECTION N.T.S. 10/19/20

NOTE: ALL TRAFFIC FLOW ARROWS TO BE PAINTED PER STATE DOT STANDARDS PER DIMENSIONS ABOVE.

TRAFFIC FLOW ARROW N.T.S.

NOTES:

POLE AND SIGN TO BE PROVIDED AND INSTALLED BY GENERAL CONTRACTOR.

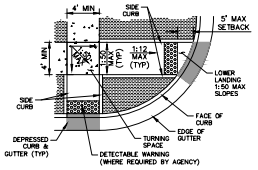
ALL SIGNS SHALL COMPLY WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED. MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

STANDARD SIGN BASE N.T.S.

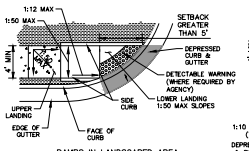
GENERAL NOTES:

1. THE MAXIMUM SLOPE OF THE SIDE FLARE FOR TYPE B RAMPS SHALL BE 1:10; HOWEVER, IF THE WIDTH OF THE LANDING AREA BETWEEN THE TOP OF THE RAMP AND AN OBSTRUCTION IS LESS TAN 1.2m (4'-0") THEN THE MAXIMUM SLOPE SHALL BE 1:12.
2. ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMNT (V:H).
3. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SHOWN.
4. RAMP DETAILS TO BE COORDINATED PER VILLAGE REQUIREMENTS.
5. DETECTABLE WARNINGS SHALL CONSIST OF TRUNCATED DOMES WHICH CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT.
6. CONTRACTOR TO SELECT ADA DETECTABLE WARNING PERMEABLE PAVERS OR CONCRETE WITH ADA DETECTABLE WARNING DOMES FOR RAMPS.

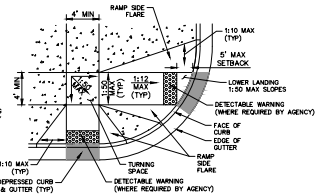
LEGEND
- SIDEWALK
- RAMP
- DETECTABLE WARNINGS
- NON WALKING AREA
- FACE OF BUILDING



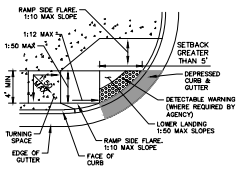
RAMPS IN LANDSCAPED AREA (SETBACK < 5')



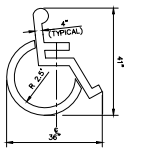
RAMPS IN LANDSCAPED AREA (SETBACK > 5')



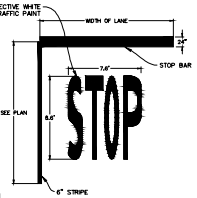
RAMPS IN PAVED AREA (SETBACK < 5')



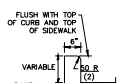
RAMPS IN PAVED AREA (SETBACK > 5')



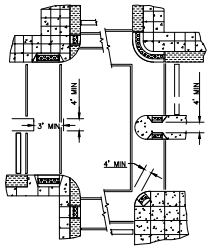
ACCESSIBLE PARKING SYMBOL N.T.S.



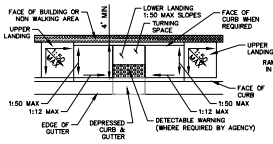
STOP BAR N.T.S.



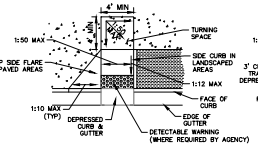
DETAIL OF SIDE CURB (SIDE CURB MAY BE CONSTRUCTED MONOLITHICALLY WITH RAMP)



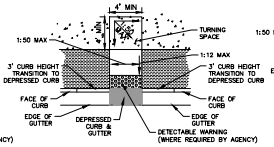
RECOMMENDED LOCATION OF RAMPS



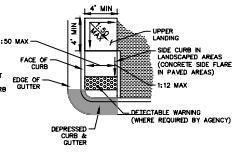
PARALLEL MID-BLOCK CURB RAMP



PERPENDICULAR MID-BLOCK CURB RAMP

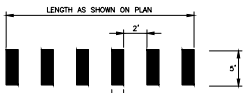


PERPENDICULAR MID-BLOCK CURB RAMP (OPTION 2)

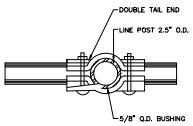


RAMPS ADJACENT TO PAVEMENT

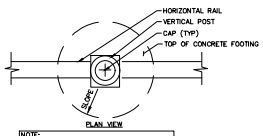
SIDEWALK AND SIDEWALK RAMPS N.T.S.



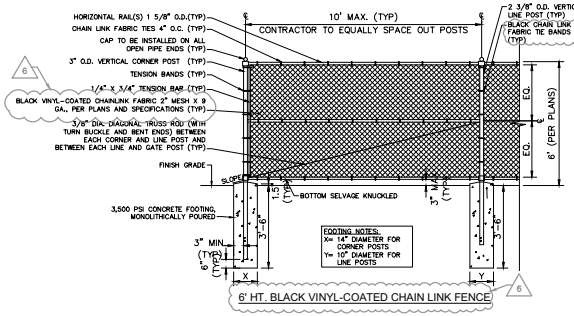
PAINTED CROSS-WALK DETAIL N.T.S.



B MIDDLE AND BOTTOM RAIL TO POST ATTACHMENTS NTS



E END CAP ATTACHMENTS NTS



A CHAINLINK FENCE NTS

CHAIN-LINK-FENCE GENERAL NOTES:

1) THE CENTER LINE OF LINE POSTS IS THE LINE OF THE FENCE
2) ALL FENCE FASTENERS REQUIRING BOLTING SHALL HAVE THE NUTS SPOTWELDED TO PREVENT THEFT
3) ALL FENCE CAPS SHALL BE SPOTWELDED
4) SEE SPECS FOR MATERIAL REQUIREMENTS
5) INSTALL CHAIN LINK FABRIC ON THE BASEBALL PLAYING FIELD SIDE OF FENCE
6) INSTALL CHAIN LINK FABRIC ON PARK DISTRICT PROPERTY SIDE OF THE FENCE

PIPE NOTES:

4) ALL PIPE TO BE WROUGHT STEEL, FINISH TO BE HOT DIP GALVANIZED OR VINYL COATED PER PLANS
5) SIZE AS SHOWN ON DETAILS OF THIS SHEET

GATE NOTES:

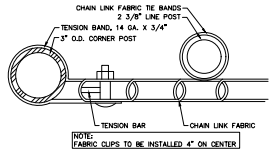
6) ALL GATES SHALL BE PROPERLY BRACED AND SUPPORTED TO PREVENT SAGGING AND EQUIPPED WITH HEAVY DUTY HINGES TO MAINTAIN ALIGNMENT AND FREE SWING ACTION

FITTING NOTES:

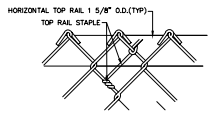
7) ALL FITTINGS TO BE EQUIPPED WITH NUTS AND BOLTS AS REQUIRED FOR ERECTION, (ALL GALV. OR POWDER COATED BLACK). CLAMPS & CAPS TO BE MALLEABLE IRON, GALVANIZED OR POWDER COATED BLACK. BANDS TO BE WROUGHT STEEL, GALVANIZED. LOCKING DEVICE TO BE ADAPTABLE FOR PADLOCKING. CARRIAGE BOLTS & NUTS TO BE 3/8" DIA GALV. STEEL OF PROPER LENGTH

DESIGN INTENT:

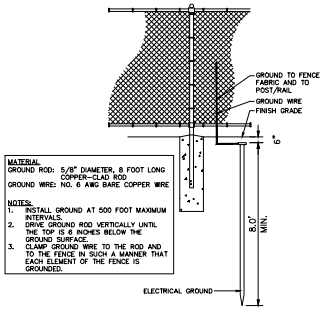
8) THIS DETAIL IS PROVIDED FOR DESIGN INTENT ONLY. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.



C CHAIN LINK TO CORNER POST ATTACHMENTS NTS



D CHAIN LINK TO TOP RAIL ATTACHMENTS NTS



MATERIAL
GROUND ROD: 5/8" DIAMETER, 8 FOOT LONG COPPER-CLAD ROD
GROUND WIRE: NO. 6 AWG BARE COPPER WIRE

NOTES:
1. INSTALL GROUND AT 500 FOOT MAXIMUM INTERVALS.
2. DRIVE GROUND ROD VERTICALLY UNTIL THE TOP IS 6 INCHES BELOW THE GROUND SURFACE.
3. CLAMP GROUND WIRE TO THE ROD AND TO THE FENCE IN SUCH A MANNER THAT EACH ELEMENT OF THE FENCE IS GROUNDED.

F ELECTRICAL GROUND NTS

NO.	DATE	DESCRIPTION
1	8/14/23	VILLAGE REVIEW
2	8/30/23	MWRD REVIEW #3
3	7/31/23	MWRD REVIEW #2
4	7/21/23	GA/GC - THW
5	6/29/23	MWRD REVIEW #1
6	6/2/23	DETENTION REVISION
7	5/9/23	WATERMAIN REROUTE
8	3/31/23	VILLAGE ENGINEERING COMMENTS
9	2/3/23	VILLAGE ENGINEERING COMMENTS
10	1/6/23	DD ISSUANCE
11	9/30/22	PROGRESS CD'S
12	8/22/22	50% CD'S
13	6/23/22	DD ISSUANCE
14	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK
2625 TECHNY RD, NORTHBROOK, IL 60062

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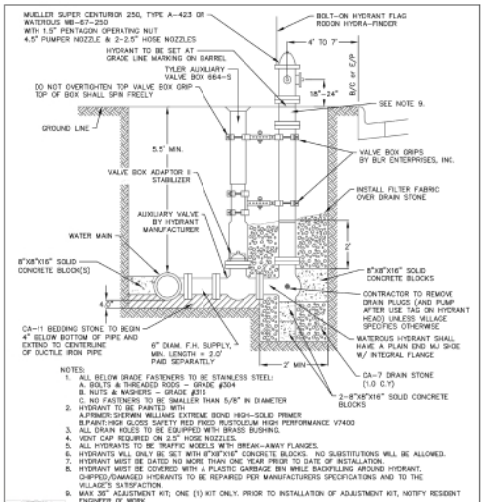
PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

CONSTRUCTION DETAILS

Sheet No.: C6.0

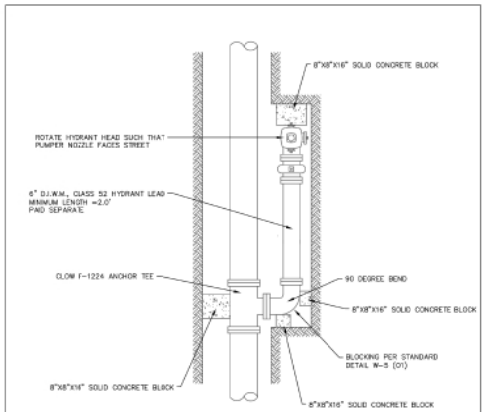
K:\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\PlanSheets\C6.0 CONSTRUCTION DETAILS.dwg



NORTHBROOK FIRE HYDRANT DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL W-1 (01)
	1-9-19	Revised Notes	
	4-1-21	Revised Notes	

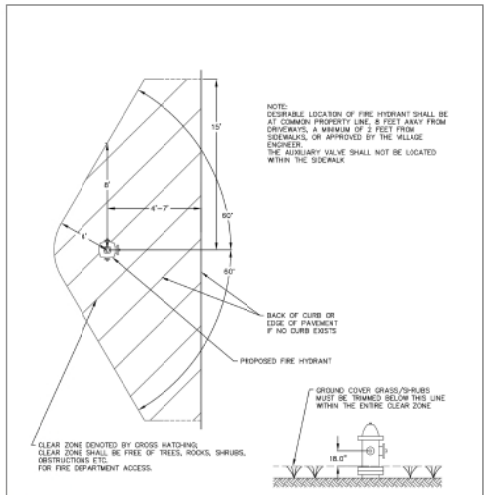
(Sheet 1 of 1)



NORTHBROOK FIRE HYDRANT DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL W-1 (02)
	1-9-19	Revised Notes	
	4-1-21	Revised Notes	

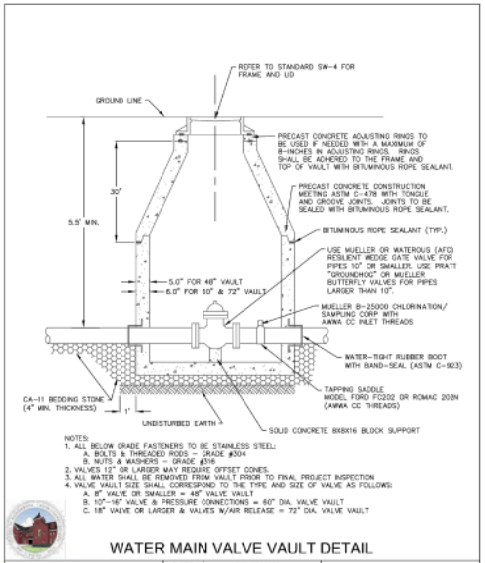
(Sheet 2 of 2)



FIRE HYDRANT CLEARANCE DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL W-2
	1-9-19	Revised Notes	
	4-1-21	Revised Notes	

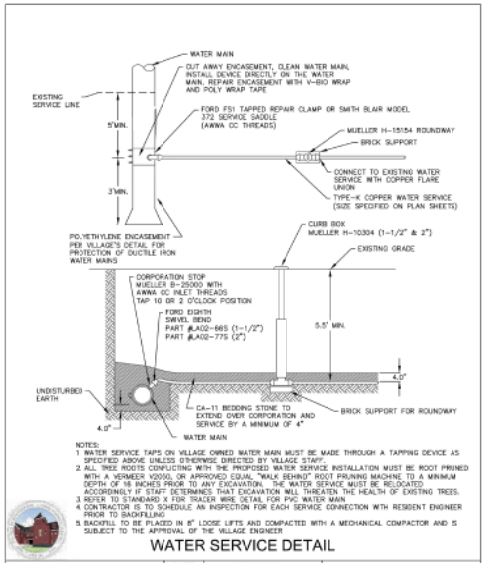
(Sheet 1 of 1)



WATER MAIN VALVE VAULT DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL W-3
	1-9-19	Revised Notes	

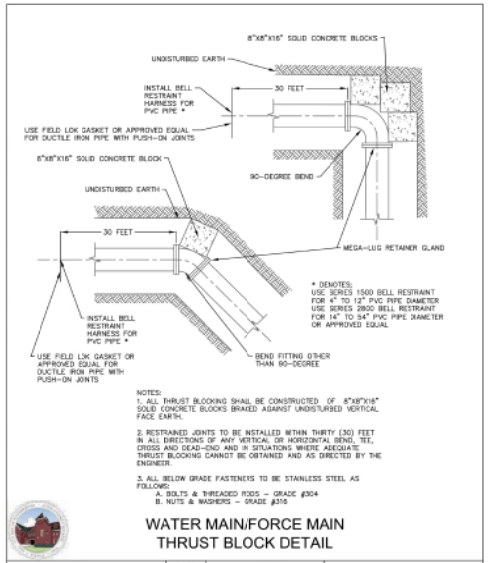
(Sheet 1 of 1)



WATER SERVICE DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL W-4
	1-9-19	Revised Notes	
	4-1-21	Revised Notes, Edited Picture	

(Sheet 1 of 1)



WATER MAIN/FORCE MAIN THRUST BLOCK DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL W-5 (01)
	1-9-19	Revised Notes	

(Sheet 1 of 1)

NO.	DATE	DESCRIPTION
8	8/14/23	VILLAGE REVIEW
7	8/30/23	MWRD REVIEW #3
6	7/31/23	MWRD REVIEW #2
5	7/21/23	QA/QC - THW
4	6/29/23	MWRD REVIEW #1
3	6/2/23	DETENTION REVISION
2	5/9/23	WATERMAIN REROUTE
1	3/31/23	VILLAGE ENGINEERING COMMENTS
2	2/1/23	VILLAGE ENGINEERING COMMENTS
1	1/6/23	DD ISSUANCE
9	9/30/22	PROGRESS CD'S
8	8/22/22	50% CD'S
7	8/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

CONSTRUCTION DETAILS

Sheet No.: C6.1

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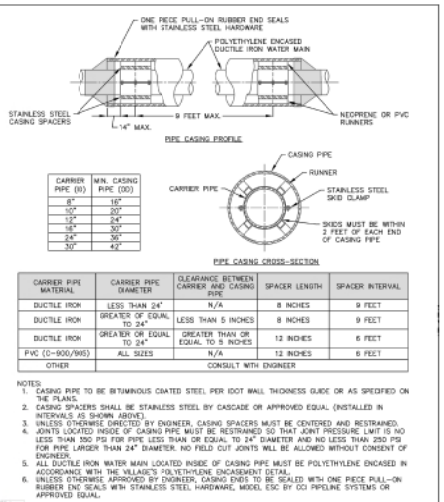


CARRIER PIPE (IN)	MIN. CASING PIPE (OD)
8"	16"
10"	20"
12"	24"
16"	30"
24"	36"
30"	42"

CARRIER PIPE MATERIAL	CARRIER PIPE DIAMETER	CLEARANCE BETWEEN CARRIER AND CASING PIPE	SPACER LENGTH	SPACER INTERVAL
DUCTILE IRON	LESS THAN 24"	N/A	8 INCHES	9 FEET
DUCTILE IRON	GREATER OF EQUAL TO 24"	LESS THAN 5 INCHES	8 INCHES	9 FEET
DUCTILE IRON	GREATER OR EQUAL TO 24"	GREATER THAN OR EQUAL TO 5 INCHES	12 INCHES	6 FEET
PVC (C-900/905)	ALL SIZES	N/A	12 INCHES	6 FEET
OTHER	CONSULT WITH ENGINEER			

NOTES:
1. CASING PIPE TO BE BITUMINOUS COATED STEEL PER IDOT MAIL THICKNESS GUIDE OR AS SPECIFIED ON THE PLANS.
2. CASING SPACERS SHALL BE STAINLESS STEEL BY CASCADE OR APPROVED EQUAL (INSTALLED IN INTERVALS AS SHOWN ABOVE).
3. UNLESS OTHERWISE DIRECTED BY ENGINEER, CASING SPACERS MUST BE CENTERED AND RESTRAINED.
4. JOINTS LOCATED INSIDE OF CASING PIPE MUST BE RESTRAINED SO THAT JOINT PRESSURE LIMIT IS NO LESS THAN 150 PSI FOR PIPE LESS THAN OR EQUAL TO 24" DIAMETER AND NO LESS THAN 250 PSI FOR PIPE LARGER THAN 24" DIAMETER. NO FIELD CUT JOINTS WILL BE ALLOWED WITHOUT CONSENT OF ENGINEER.
5. ALL DUCTILE IRON WATER MAIN LOCATED INSIDE OF CASING PIPE MUST BE POLYETHYLENE ENCASED IN ACCORDANCE WITH THE VILLAGE'S POLYETHYLENE ENCASEMENT DETAIL.
6. UNLESS OTHERWISE APPROVED BY ENGINEER, CASING ENDS TO BE SEALED WITH ONE PIECE PULL-ON RUBBER END SEALS WITH STAINLESS STEEL HARDWARE, MODEL CSC BY CCI PIPELINE SYSTEMS OR APPROVED EQUAL.

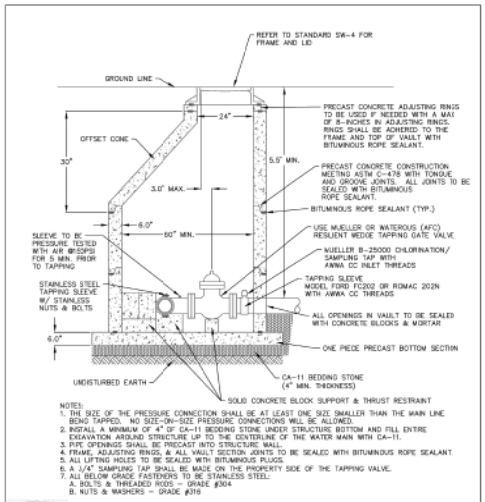
STEEL CASING PIPE DETAIL

Village of Northbrook
Public Works Department

DATE	REVISIONS
1-8-19	Revised Notes

STANDARD DETAIL
W-6 (01)

(Sheet 1 of 1)



NOTES:
1. THE SIZE OF THE PRESSURE CONNECTION SHALL BE AT LEAST ONE SIZE SMALLER THAN THE MAIN LINE BEING TAPPED. NO SIZE-ON-SIZE PRESSURE CONNECTIONS WILL BE ALLOWED.
2. INSTALL A MINIMUM OF 4" OF CA-11 BEDDING STONE UNDER STRUCTURE BOTTOM AND FILL ENTIRE EXCAVATION AROUND STRUCTURE UP TO THE CENTERLINE OF THE WATER MAIN WITH CA-11.
3. PIPE OPENINGS SHALL BE PRECAST INTO STRUCTURE WALL.
4. FRAME, ADJUSTING RINGS, & ALL VAULT SECTION JOINTS TO BE SEALED WITH BITUMINOUS ROPE SEALANT.
5. ALL LIFTING HOLES TO BE SEALED WITH BITUMINOUS PLUGS.
6. A 1/4" SAMPLING TAP SHALL BE MADE ON THE PROPERTY SIDE OF THE TAPPING VALVE.
7. ALL BELOW GRADE FASTENERS TO BE STAINLESS STEEL.
   A. BOLTS & THREADED RODS – GRADE 304
   B. NUTS & WASHERS – GRADE 316

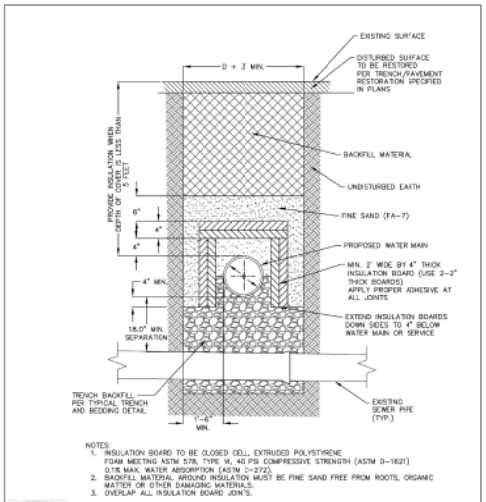
PRESSURE CONNECTION VAULT DETAIL

Village of Northbrook
Public Works Department

DATE	REVISIONS
1-8-19	Revised Notes
4-1-21	Revised Notes

STANDARD DETAIL
W-7 (01)

(Sheet 1 of 1)



NOTES:
1. INSULATION BOARD TO BE CLOSED CELL, EXTRUDED POLYSTYRENE FOAM MEETING ASTM C578, TYPE VI, 40 PSI COMPRESSIVE STRENGTH (ASTM D-1621) 0.1% MAX. WATER ABSORPTION (ASTM C-272).
2. BACKFILL MATERIAL AROUND INSULATION MUST BE FINE SAND FREE FROM ROOTS, ORGANIC MATTER OR OTHER DAMAGING MATERIALS.
3. OVERLAP ALL INSULATION BOARD JOIN'S.

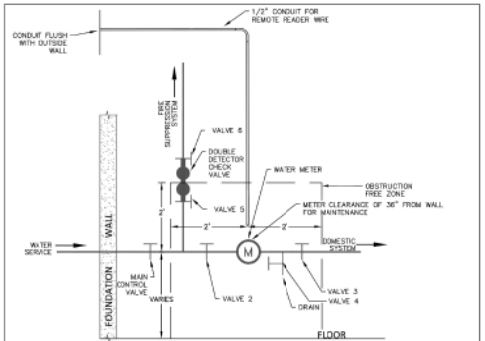
WATER MAIN TRENCH INSULATION DETAIL

Village of Northbrook
Public Works Department

DATE	REVISIONS
1-8-19	New Detail

STANDARD DETAIL
W-8 (01)

(Sheet 1 of 1)



NOTES:
1. 1"-2" METERS SHALL BE INSTALLED HORIZONTAL WITH A MINIMUM OF 24" CLEARANCE LEFT AND RIGHT FROM OTHER STRUCTURES OR EQUIPMENT. THERE SHALL BE A MINIMUM OF 36" CLEARANCE FROM THE FOUNDATION WALL FOR INSPECTION, REPLACEMENT, OR REPAIR.
2. CRAWLSPACE AND PIT-SET METER INSTALLATION SHALL ONLY BE ALLOWED BY WRITTEN AUTHORIZATION FROM THE DIRECTOR OF PUBLIC WORKS OR DESIGNEE.
3. A STOPCOCK OR VALVE SHALL BE PLACED ON EACH SIDE OF THE METER. NO OTHER CONNECTIONS OR VALVES ARE ALLOWED BEFORE THE METER WITH THE EXCEPTION OF THE FIRE SUPPRESSION SYSTEM CONNECTION. ONLY FULL PORT BALL OR GATE VALVES SHALL BE USED. THE DRAIN SHALL BE LOCATED BETWEEN THE WATER METER AND VALVE 3.
4. ALL WATER METER INSTALLATIONS SHALL INCLUDE 1" METALLIC TUBE RACEWAY (CONDUIT) TO BE INSTALLED WITHIN 12" OF WATER METER SETTING. THIS CONDUIT SHALL RUN AND TERMINATE OUTSIDE OF THE BUILDING AT 40" ABOVE FINISHED GRADE. THE CONDUIT SHALL BE TRIMMED FLUSH WITH THE OUTSIDE WALL FOR THE PURPOSE OF THE REMOTE READING DEVICE WIRING. REMOTE READERS SHALL BE LOCATED ON THE SIDE OF ALL SERVED BUILDINGS FIVE FEET FROM THE FRONT OF THE BUILDING OR AT A LOCATION APPROVED BY THE DIRECTOR OF PUBLIC WORKS OR DESIGNEE.
5. THIS RACEWAY SHALL BE INSTALLED IN ACCORDANCE WITH THE VILLAGE OF NORTHBROOK ELECTRICAL CODES.

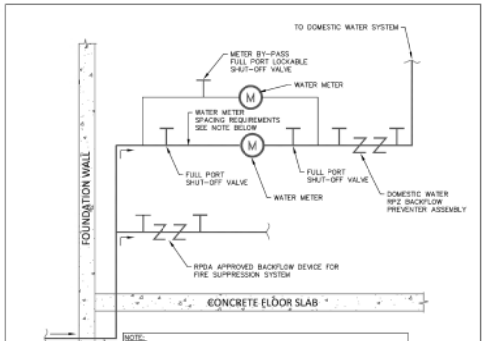
SINGLE FAMILY/MULTI-FAMILY WATER SUPPLY ARRANGEMENT DETAIL

Village of Northbrook
Public Works Department

DATE	REVISIONS
1-8-19	Added Drain Valve
4-1-21	Added Plan Notes & Details

STANDARD DETAIL
W-9 (01)

(Sheet 1 of 1)



NOTES:
1. 1"-8" METERS SHALL BE INSTALLED HORIZONTAL WITH A MINIMUM OF 24" CLEARANCE LEFT AND RIGHT FROM OTHER STRUCTURES OR EQUIPMENT. THERE SHALL BE A MINIMUM OF 36" CLEARANCE FROM THE FOUNDATION WALL FOR INSPECTION, REPLACEMENT, OR REPAIR.
2. ALL WATER METER INSTALLATIONS SHALL INCLUDE 1" METALLIC TUBE RACEWAY (CONDUIT) TO BE INSTALLED WITHIN 12" OF WATER METER SETTING. THIS CONDUIT SHALL RUN AND TERMINATE OUTSIDE OF THE BUILDING AT 40" ABOVE FINISHED GRADE. THE CONDUIT SHALL BE TRIMMED FLUSH WITH THE OUTSIDE WALL FOR THE PURPOSE OF THE REMOTE READING DEVICE WIRING. REMOTE READERS SHALL BE LOCATED ON THE SIDE OF ALL SERVED BUILDINGS FIVE FEET FROM THE FRONT OF THE BUILDING OR AT A LOCATION APPROVED BY THE DIRECTOR OF PUBLIC WORKS OR DESIGNEE.
3. THIS RACEWAY SHALL BE INSTALLED IN ACCORDANCE WITH THE VILLAGE OF NORTHBROOK ELECTRICAL CODES.

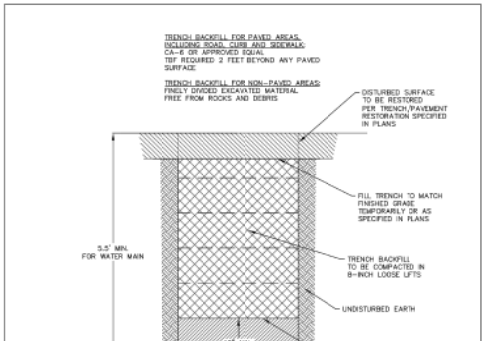
COMMERCIAL/BUSINESS WATER SUPPLY ARRANGEMENT DETAIL

Village of Northbrook
Public Works Department

DATE	REVISIONS
1-8-19	Moved Fire Suppression
4-1-21	Added Plan Notes & Details

STANDARD DETAIL
W-10 (01)

(Sheet 1 of 1)



TYPICAL TRENCH AND BEDDING DETAIL

Village of Northbrook
Public Works Department

DATE	REVISIONS
1-8-19	Consolidated Trench Details

STANDARD DETAIL
W-11 (01)

(Sheet 1 of 1)

NO.	DATE	DESCRIPTION
1	8/14/23	VILLAGE REVIEW
2	8/30/23	MWRD REVIEW #3
3	7/31/23	MWRD REVIEW #2
4	7/21/23	QA/QC - THW
5	6/29/23	MWRD REVIEW #1
6	6/2/23	DETENTION REVISION
7	5/9/23	WATERMAIN REROUTE
8	3/31/23	VILLAGE ENGINEERING COMMENTS
9	2/3/23	VILLAGE ENGINEERING COMMENTS
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12	8/22/22	50% CD'S
13	6/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

CONSTRUCTION DETAILS

Sheet No.: C6.2

K:\IHS_IDEV\268004000_Covenant_Northbrook_IL\2_Design\CAD\PlanSheets\C6.0 CONSTRUCTION DETAILS.dwg

SAMPLE

CERTIFIED MAIL

[Date]

[Name]
[Address]
[City]

Dear_____,

This letter serves as an initial NOTICE to you that in order for us to make a water service connection for (LOCATION OF PROJECT), we will need to disturb the public right-of-way and/or easement (list only one) at your address. As the project schedule develops, we will provide you with a reminder notice (a minimum of five (5) calendar days) prior to the commencement of the water service connection work. Upon the completion of the water service connection, the trench shall be immediately backfilled. The final restoration of this disturbed area shall be completed within five (5) calendar days, weather permitting.

Should you have any questions or concerns, we have provide below a list of contacts for your use.

Owner of project location: [Name] [Address] [Phone Number]

General Contractor for Project: [Name] [Address] [Phone Number]

Thank you for your understanding and cooperation.

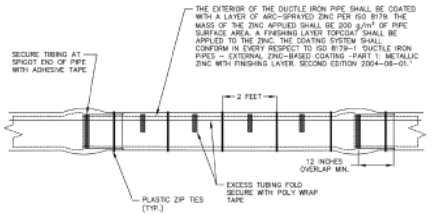
Sincerely,

_____

cc: Engineering Department – Village of Northbrook

SAMPLE OF WATER SERVICE NOTIFICATION

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL W-12 (01)
			(Sheet 1 of 1)

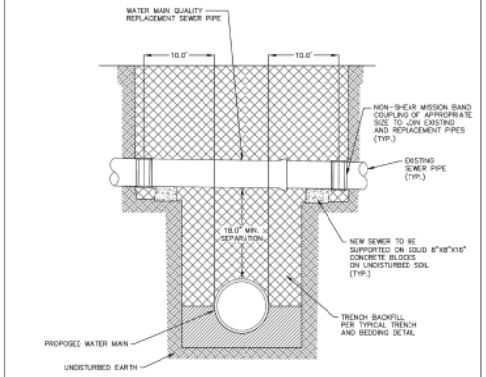


THE EXTERIOR OF THE DUCTILE IRON PIPE SHALL BE COATED WITH A LAYER OF ARC-SPRAYED ZINC PER ISO 8179. THE MASS OF THE ZINC APPLIED SHALL BE 200 g/m² OF PIPE SURFACE AREA. A FINISHING LAYER TOPCOAT SHALL BE APPLIED TO THE ZINC. THE COATING SYSTEM SHALL CONFORM IN EVERY RESPECT TO ISO 8179-1 "DUCTILE IRON PIPES – EXTERNAL ZINC-BASED COATING – PART 1: METALLIC ZINC WITH FINISHING LAYER. SECOND EDITION 2004-08-01."

NOTES:
1. DUCTILE IRON PIPE SHALL BE ENCASED BY POLYETHYLENE TUBING.
2. THE TUBE MUST BE VIRGIN MATERIAL, V-BIO, CONSISTING OF THREE (3) CO-EXTRUDED LAMINATIONS OF LINEAR LOW DENSITY POLYETHYLENE (LLDPE), FUSED INTO A SINGLE THICKNESS NOT LESS THAN EIGHT (8) MILS. THE INSIDE SURFACE OF THE V-BIO WRAP IN CONTACT WITH THE PIPE EXTERIOR SHALL BE INFUSED WITH A BLEND OF AN ANTIMICROBIAL BIOCIDE TO MITIGATE MICROBIOLOGICALLY INFLUENCED CORROSION AND A VOLATILE CORROSION INHIBITOR TO CONTROL GALVANIC CORROSION. THE MIDDLE LAMINATION SHALL BE OF A THICK, IMPERMEABLE MATERIAL DESIGNED TO PROTECT AND ENHANCE THE INNER LAMINATION. THE OUTER LAMINATION SHALL BE OF A LIGHT COLOR.
3. THE POLYETHYLENE ENCASEMENT MUST MEET ALL THE REQUIREMENTS OF ANSI A21.5 (AWWA C105).
4. CIRCUMFERENTIAL WRAPS OF PLASTIC ZIP TIES ARE TO BE PLACED AT TWO (2) FOOT INTERVALS ALONG THE BARREL OF THE PIPE TO MINIMIZE THE SPACE BETWEEN THE POLYETHYLENE WRAPPING AND THE PIPE.
5. COMPLETE THE INSTALLATION BY OVERLAPPING THE POLYETHYLENE TUBE WRAP AT EACH END AT LEAST TWELVE (12) INCHES AND SEAL THE ENDS WITH PLASTIC ZIP TIES.
6. ALL BAGS MUST BE A MINIMUM OF TWENTY-TWO (22) FEET IN LENGTH AND OVERSIZED IN DIAMETER TO FIT OVER FITTINGS.
7. INSTALLATION OF TUBING SHALL BE PER DIPRA – MODIFIED METHOD A.
8. THIS STANDARD APPLIES TO ALL DUCTILE IRON PIPE INSTALLATION METHODS INCLUDING OPEN CUT, DIRECTIONAL DRILLING AND PLACEMENT IN A CASING.

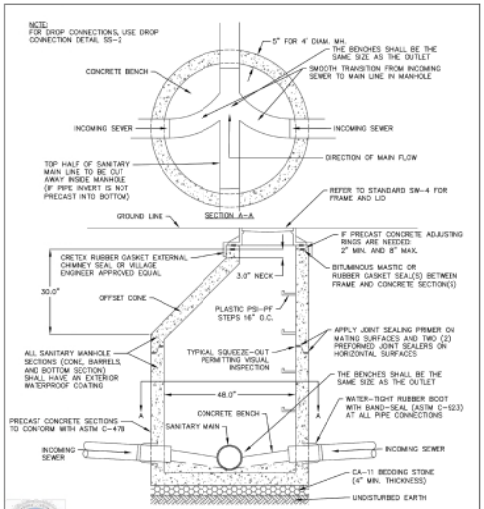
POLYETHYLENE TUBE WRAPPING DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL W-13 (01)
	1-9-19	Revised Notes	(Sheet 1 of 1)



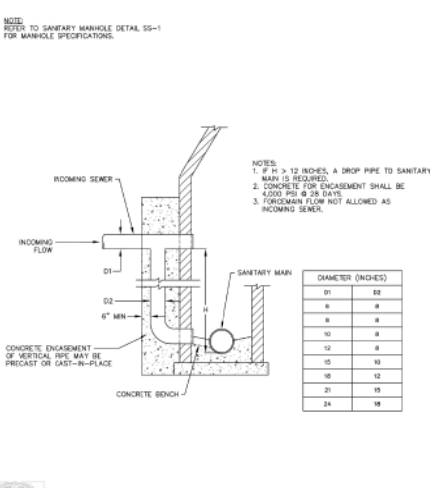
SEWER REPLACEMENT OVER WATER MAIN DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL W-14 (01)
	1-9-19	Revised Notes	(Sheet 1 of 1)



SANITARY MANHOLE DETAIL

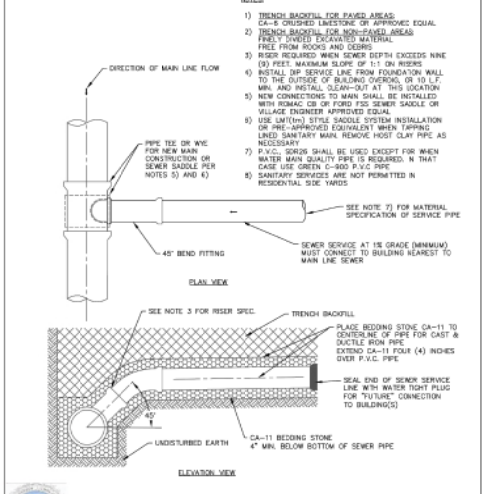
Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL SS-1 (01)
	4-30-20	Revised Notes	(Sheet 1 of 1)



DIAMETER (INCHES)	
D1	D2
6	8
8	8
10	8
12	8
15	10
18	12
21	15
24	18

SANITARY MANHOLE DROP CONNECTION DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL SS-2 (01)
	4-30-20	Deleted Riser Provisions, Revised Notes	(Sheet 1 of 1)



SEWER SERVICE DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL SS-3 (01)
	4-30-20	Revised Notes	(Sheet 1 of 1)

NO.	DATE	DESCRIPTION
1	8/14/23	VILLAGE REVIEW
2	8/30/23	MWRD REVIEW #3
3	7/31/23	MWRD REVIEW #2
4	7/21/23	DA/DC – THW
5	6/29/23	MWRD REVIEW #1
6	6/2/23	DETENTION REVISION
7	5/9/23	WATERMAIN REROUTE
8	3/31/23	VILLAGE ENGINEERING COMMENTS
9	2/3/23	VILLAGE ENGINEERING COMMENTS
10	1/6/23	DD ISSUANCE
11	9/30/22	PROGRESS CD'S
12	8/22/22	50% CD'S
13	6/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

CONSTRUCTION DETAILS

Sheet No.: C6.3

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Illinois Department of Transportation

STANDARD	DESCRIPTION	TOTAL PAGES	CHECK APPLICABILITY 'X'
602401	MANHOLE TYPE A, 4' DIAMETER	2	
602402	MANHOLE TYPE A, 5' DIAMETER	2	
602406	MANHOLE TYPE A, 6' DIAMETER	3	
602411	MANHOLE TYPE A, 7' DIAMETER	3	
602416	MANHOLE TYPE A, 8' DIAMETER	3	
602421	MANHOLE TYPE A, 9' DIAMETER	3	
602426	MANHOLE TYPE A, 10' DIAMETER	3	
602601	PRECAST REINFORCED CONCRETE FLAT SLAB TOP	2	

NOTES:
1. USE LATEST REVISION OF STANDARD
2. STANDARD CHECKED SHALL BE INCLUDED IN THE PLAN SET
3. CONCRETE FILL SHALL NOT BE INSTALLED UNTIL AFTER THE STORM SEWER PIPES HAVE BEEN INSTALLED

STORM MANHOLE STANDARD

Village of Northbrook
Public Works Department

DATE	REVISIONS
4-30-20	Adapted To IDOT Standards
4-1-21	Added Plan Notes

STANDARD
SW-1 (01)

(Sheet 1 of 1)

Illinois Department of Transportation

STANDARD	DESCRIPTION	TOTAL PAGES	CHECK APPLICABILITY 'X'
602001	CATCH BASIN TYPE A	1	
602011	CATCH BASIN TYPE C	1	
602601	PRECAST REINFORCED CONCRETE FLAT SLAB TOP	2	

NOTES:
1. USE LATEST REVISION OF STANDARD
2. STANDARD CHECKED SHALL BE INCLUDED IN THE PLAN SET

CATCH BASIN STANDARD

Village of Northbrook
Public Works Department

DATE	REVISIONS
4-30-20	Adapted To IDOT Standards
4-1-21	Edited Standard Detail Section

STANDARD
SW-2 (01)

(Sheet 1 of 1)

Illinois Department of Transportation

STANDARD	DESCRIPTION	TOTAL PAGES	CHECK APPLICABILITY 'X'
602301	INLET – TYPE A	1	
602601	PRECAST REINFORCED CONCRETE FLAT SLAB TOP	2	

NOTES:
1. USE LATEST REVISION OF STANDARD
2. STANDARD CHECKED SHALL BE INCLUDED IN THE PLAN SET

STORM INLET STANDARD

Village of Northbrook
Public Works Department

DATE	REVISIONS
4-30-20	Adapted To IDOT Standards

STANDARD
SW-3 (01)

(Sheet 1 of 1)

#	FRAME AND GRATE (OR PRE-APPROVED EQUAL)	COMPARABLE IDOT TYPE	DESCRIPTION	OPTIONS	CHECK APPLICABILITY 'X'
1	NEENAH R-1713	1	FLAT, ROUND, CLOSED LID	"SANITARY" LETTERING IMPRINTED ON UNBOLTED COVER. LID SHALL HAVE WATERTIGHT GASKET AND CONCEALED PICKHOLE.	
				"STORM" LETTERING IMPRINTED ON COVER	
				"WATER" LETTERING IMPRINTED ON COVER. LID SHALL HAVE CONCEALED PICKHOLE	
2	NEENAH R-1713	1	FLAT, ROUND, OPEN TYPE D GRATE	N/A	
3	NEENAH R-1713	1	FLAT, ROUND, OPEN TYPE D GRATE, FOR DEPRESSED CURB	"STORM" LETTERING IMPRINTED ON COVER	
4	NEENAH R-3278-A	3	INLET FRAME AND CURB BOX FOR BARRIER CURB, RECTANGULAR, OPEN GRATE	STANDARD GRATE	
5	NEENAH R-3278-AL	3V	INLET FRAME AND CURB BOX FOR BARRIER CURB, RECTANGULAR, OPEN GRATE WITH VANES	TYPE L VANE GRATE	
6	NEENAH R-3501-P	N/A	INLET FRAME FOR ROLL-TYPE CURB, RECTANGULAR, OPEN GRATE	N/A	
7	NEENAH R-4340-3	8	BEEHIVE TYPE INLET, ROUND, OPEN GRATE FOR LAWN AREAS	N/A	
8	EJIW 6212M	N/A	FLAT, ROUND, OPEN GRATE FOR YARD DRAIN	N/A	

NOTE: FRAMES #2 THROUGH #8 SHALL HAVE "DUMP NO WASTE" AND "DRAINS TO WATERWAYS" ,LETTERING AND/OR FISH SYMBOL.

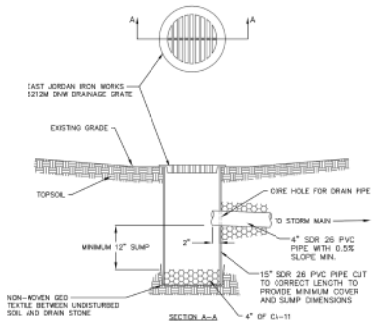
FRAME AND GRATE STANDARD

Village of Northbrook
Public Works Department

DATE	REVISIONS
4-30-20	Restructured Frame Specification Standard
4-1-21	Added Plan Notes

STANDARD
SW-4 (01)

(Sheet 1 of 1)



PVC YARD DRAIN DETAIL

Village of Northbrook
Public Works Department

DATE	REVISIONS
4-30-20	Revised Notes

STANDARD DETAIL
SW-8 (01)

(Sheet 1 of 1)

NO.	DATE	DESCRIPTION
9	8/14/23	VILLAGE REVIEW
8	8/30/23	MWRD REVIEW #3
7	7/31/23	MWRD REVIEW #2
6	7/21/23	QA/QC - THW
5	6/29/23	MWRD REVIEW #1
4	6/2/23	DETENTION REVISION
3	5/9/23	WATERMAIN REROUTE
2	3/31/23	VILLAGE ENGINEERING COMMENTS
1	2/3/23	VILLAGE ENGINEERING COMMENTS
0	1/6/23	DD ISSUANCE
	9/30/22	PROGRESS CD'S
	8/22/22	50% CD'S
	6/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

CONSTRUCTION DETAILS

Sheet No.: C6.4

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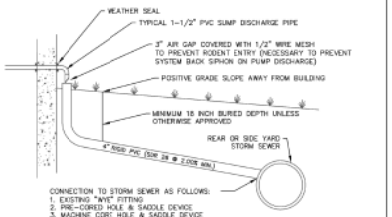
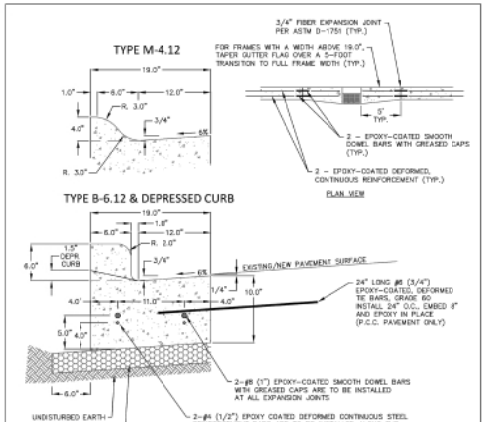


NOTES:
1. CONTRACTOR ASSUMES FULL RESPONSIBILITY AND LIABILITY FOR ANY DAMAGE TO UTILITIES.
2. IN NO EVENT SHALL THE SUMP PUMP DISCHARGE INTO THE SANITARY SEWER SYSTEM.
3. A PLUMBING PERMIT IS REQUIRED PRIOR TO ANY SEWER CONNECTION.

SUMP PUMP CONNECTION DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL SW-9 (01)
	4-30-20	Revised Notes And Graphics	
	4-1-21	Added Plan Note	

(Sheet 1 of 1)

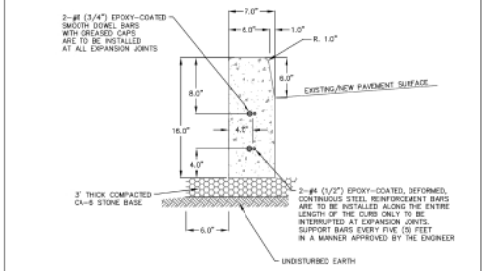


NOTES:
1. EXPANSION JOINTS ARE TO BE CONSTRUCTED AT 60' INTERVALS AND AT ADDITIONAL LOCATIONS AS SPECIFIED BY THE ENGINEER.
2. CONTRACTION JOINTS ARE TO BE CONSTRUCTED AT 15' INTERVALS AND AT ADDITIONAL LOCATIONS AS SPECIFIED BY THE ENGINEER
3. WITH NEW CURB REPLACEMENT NEXT TO HMA, CONTRACTOR IS REQUIRED TO PLACE 2' OF HMA FULL DEPTH PAID SEPARATELY TO MATCH EXISTING

COMBINATION CURB & GUTTER

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL P-1 (01)
	4-30-20	Consolidated Details, Revised Notes	
	4-1-21	Added Plan Note	

(Sheet 1 of 1)

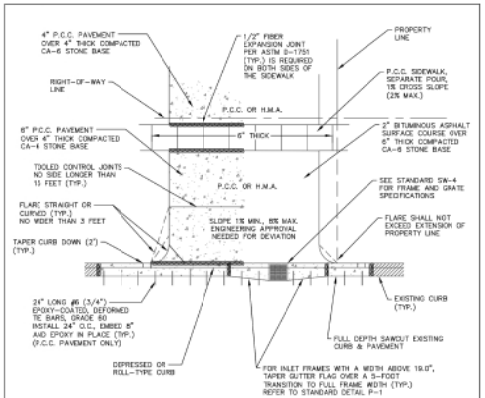


NOTES:
1. EXPANSION JOINTS ARE TO BE CONSTRUCTED AT 60' INTERVALS WITH 3/4" FIBER EXPANSION JOINT PER ASTM D-1751, AND AT ADDITIONAL LOCATIONS AS SPECIFIED BY THE ENGINEER.
2. CONTRACTION JOINTS ARE TO BE CONSTRUCTED AT 15' INTERVALS AND AT ADDITIONAL LOCATIONS AS SPECIFIED BY THE ENGINEER

TYPE B CURB DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL P-2 (01)
	4-30-20	Revised Notes	
	4-1-21	Changed Dowel Bar Size Required	

(Sheet 1 of 1)

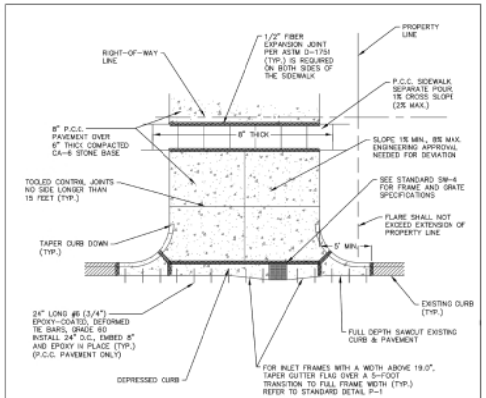


NOTES FOR CONCRETE DRIVEWAYS:
1. ALL EXISTING ABUTTING EXPANSION JOINT MATERIAL SHALL BE REMOVED AND REPLACED.
2. IF THE EXISTING CURB/PAVEMENT HAS REINFORCEMENT BARS, THEY SHALL NOT BE CUT OFF, UNLESS THEY ARE DEEMED UNUSABLE PER ENGINEER.
3. CONCRETE FOR APRON AND SIDEWALK SHALL BE IDOT CLASS SI OR PP-1.
4. ALL CONCRETE SHALL BE IN PLACE NO MORE THAN 1-1/2 HOURS AFTER TRUCK IS LOADED.
5. THE CONTRACTOR IS RESPONSIBLE FOR VIBRATING THE CONCRETE DURING PLACEMENT.
6. WHITE CURING COMPOUND, PER IDOT SECTION 1022.01(C), SHALL BE APPLIED TO THE CONCRETE IMMEDIATELY AFTER IT HAS BEEN FINISHED OR PER MANUFACTURER'S RECOMMENDATION.

STANDARD RESIDENTIAL DRIVEWAY DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL P-3 (01)
	4-30-20	New Detail	
	4-1-21	Added Plan Note	

(Sheet 1 of 1)

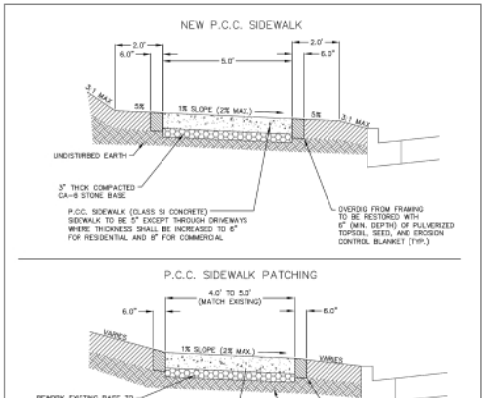


NOTES:
1. ALL EXISTING ABUTTING EXPANSION JOINT MATERIAL SHALL BE REMOVED AND REPLACED.
2. IF THE EXISTING CURB/PAVEMENT HAS REINFORCEMENT BARS, THEY SHALL NOT BE CUT OFF, UNLESS THEY ARE DEEMED UNUSABLE PER ENGINEER.
3. CONCRETE FOR APRON AND SIDEWALK SHALL BE IDOT CLASS SI OR PP-1.
4. ALL CONCRETE SHALL BE IN PLACE NO MORE THAN 1-1/2 HOURS AFTER TRUCK IS LOADED.
5. THE CONTRACTOR IS RESPONSIBLE FOR VIBRATING THE CONCRETE DURING PLACEMENT.
6. WHITE CURING COMPOUND, PER IDOT SECTION 1022.01(C), SHALL BE APPLIED TO THE CONCRETE IMMEDIATELY AFTER IT HAS BEEN FINISHED OR PER MANUFACTURER'S RECOMMENDATION.

STANDARD COMMERCIAL DRIVEWAY ENTRANCE DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL P-4 (01)
	4-30-20	Added and Revised Notes	
	4-1-21	Added Plan Note	

(Sheet 1 of 1)



NOTES:
1. WHEN CONSTRUCTING SIDEWALK WITHIN THE DRIPLINE OF A TREE, FOLLOW STANDARD DETAIL FOR "P.C.C. SIDEWALK IN DRIPLINE DETAIL" P-6
2. PROVIDE 1/2" THICK FIBER EXPANSION JOINT PER ASTM D-1751 EVERY 50 FEET

P.C.C. SIDEWALK DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL P-5 (01)
	4-30-20	Consolidated Sidewalk Details	

(Sheet 1 of 1)

NO.	DATE	DESCRIPTION
9	8/14/23	VILLAGE REVIEW
8	8/30/23	MWRD REVIEW #3
7	7/31/23	MWRD REVIEW #2
6	7/21/23	QA/QC - THW
5	6/29/23	MWRD REVIEW #1
4	6/2/23	DETENTION REVISION
3	5/9/23	WATERMAIN REROUTE
2	3/31/23	VILLAGE ENGINEERING COMMENTS
1	2/3/23	VILLAGE ENGINEERING COMMENTS
	1/6/23	DD ISSUANCE
	9/30/22	PROGRESS CD'S
	8/22/22	50% CD'S
	6/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

CONSTRUCTION DETAILS

Sheet No.: C6.5

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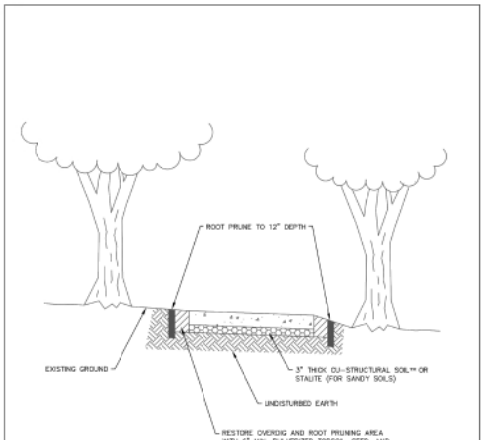
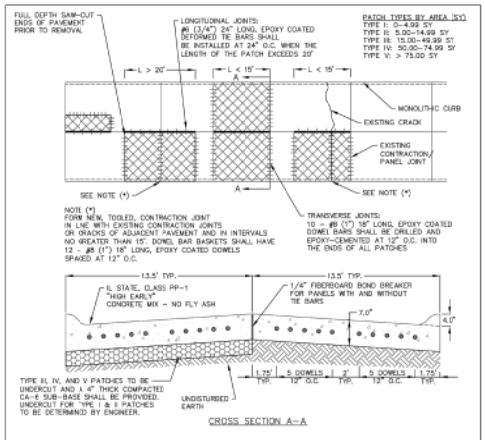


P.C.C. SIDEWALK IN DRIPLINE DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL P-6 (01)
	4-30-20	Revised Notes	

(Sheet 1 of 1)



NOTES:
1. ALL CONTRACTION JOINTS SHALL BE SAW-CUT TO A DEPTH OF 2" AT THE END OF EACH WORKING DAY OR SOONER IF PERMISSIBLE.
2. CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF PANELS THAT DEVELOP SHRINKAGE CRACKS THAT ARE NOT LOCATED AT THE SAWED CONTRACTION JOINT.
3. ALL JOINTS AND THE PERIMETER OF THE PATCH SHALL BE PREPARED, CLEANED AND SEALED WITH HOT MIX RUBBER ASPHALT JOINT SEALER.
4. WHITE CURING COMPOUND, PER IDOT SECTION 1022.01(C), SHALL BE APPLIED TO THE CONCRETE IMMEDIATELY AFTER IT HAS BEEN FINISHED OR PER MANUFACTURER'S RECOMMENDATION.

CONCRETE STREET PATCHING DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL P-7 (01)
	4-30-20	Revised Notes & Specifications	
	4-1-21	Added Plan Note & Revised Picture	

(Sheet 1 of 1)

Illinois Department of Transportation

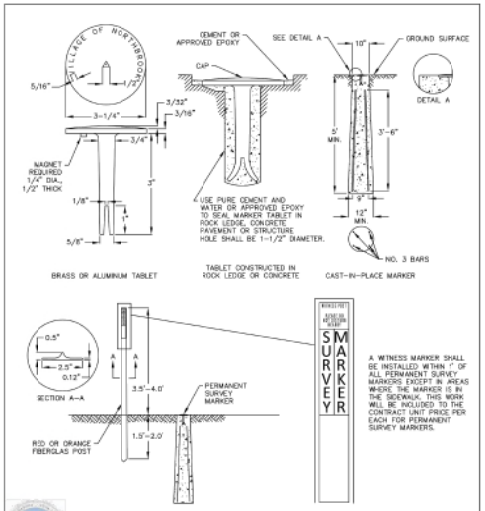
STANDARD	DESCRIPTION	CHECK APPLICABILITY 'X'
424001	PERPENDICULAR RAMPS FOR SIDEWALKS	
424006	DIAGONAL CURB RAMPS FOR SIDEWALKS	
424011	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS	
424016	MID-BLOCK CURB RAMPS FOR SIDEWALKS	
424021	DEPRESSED CORNER FOR SIDEWALKS	
424026	ENTRANCE/ALLEY PEDESTRIAN CROSSINGS	
424031	MEDIAN PEDESTRIAN CROSSINGS	

NOTES:
1. USE LATEST REVISION OF STANDARD
2. STANDARD CHECKED SHALL BE INCLUDED IN THE PLAN SET

CURB RAMPS FOR SIDEWALKS STANDARD

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD P-8 (02)
	07-05-19	Adopted To IDOT Standards	
	08-30-20	Added Notes	
	4-1-21	Edited Table	

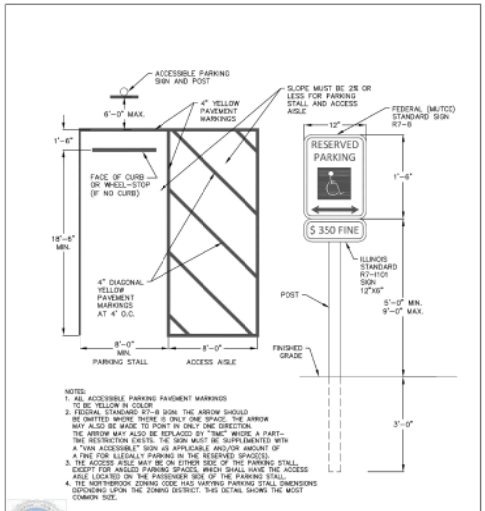
(Sheet 1 of 1)



PERMANENT SURVEY MARKERS

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL P-10 (01)
	4-30-20	New Detail	

(Sheet 1 of 1)

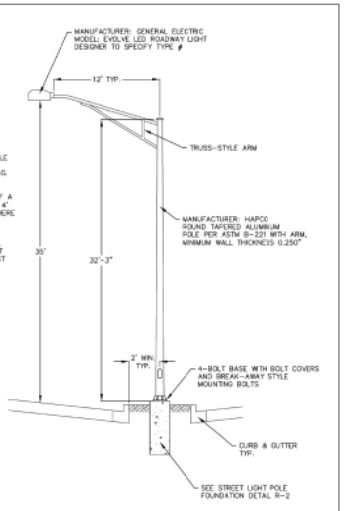


NOTES:
1. ALL ACCESSIBLE PARKING PAVEMENT MARKINGS TO BE YELLOW IN COLOR
2. FEDERAL STANDARD R7-8 SIGN. THE ARROW SHOULD BE OMITTED WHERE THERE IS ONLY ONE SPACE. THE ARROW MAY ALSO BE MADE TO POINT IN ONLY ONE DIRECTION. THE ARROW MAY ALSO BE REPLACED BY "TIME" WHERE A PART-TIME RESTRICTION EXISTS. THE SIGN MUST BE SUPPLEMENTED WITH A "VAN ACCESSIBLE" SIGN AS APPLICABLE AND/OR AMOUNT OF A FINE FOR ILLEGALLY PARKING IN THE RESERVED SPACE(S).
3. THE ACCESS AISLE MAY BE ON EITHER SIDE OF THE PARKING STALL, EXCEPT FOR ANGLED PARKING SPACES, WHICH SHALL HAVE THE ACCESS AISLE LOCATED ON THE PASSENGER SIDE OF THE PARKING STALL.
4. THE NORTHBROOK ZONING CODE HAS VARYING PARKING STALL DIMENSIONS DEPENDING UPON THE ZONING DISTRICT. THIS DETAIL SHOWS THE MOST COMMON SIZE.

ACCESSIBLE PARKING DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL P-11 (01)
	7-29-19	Dimensions, Notes	
	4-1-21	Added Plan Note	

(Sheet 1 of 1)



STREET LIGHT POLE DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL R-1 (01)
	04-30-20	Revised Notes & Specifications	

(Sheet 1 of 1)

NO.	DATE	DESCRIPTION
8	8/14/23	VILLAGE REVIEW
7	8/30/23	MWRD REVIEW #3
6	7/31/23	MWRD REVIEW #2
5	7/21/23	QA/QC - THW
4	6/29/23	MWRD REVIEW #1
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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

CONSTRUCTION DETAILS

Sheet No.: C6.6

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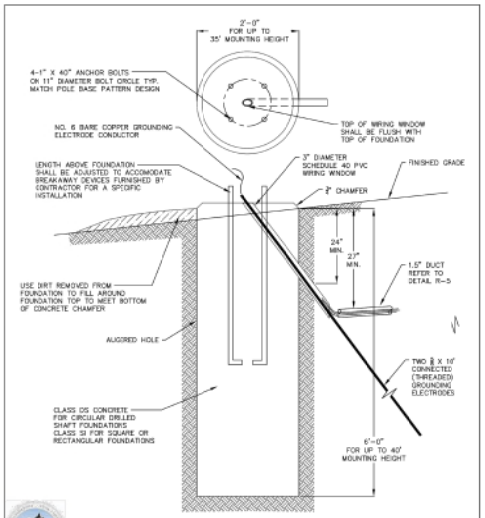
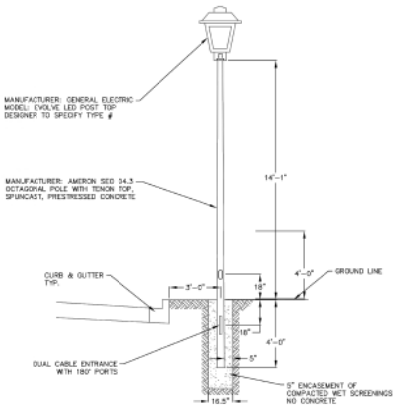


STREET LIGHT POLE FOUNDATION DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL R-2 (01)
	04-30-20	Revised Notes & Specifications	

(Sheet 1 of 1)



NOTES:
1. THE POLE SHALL HAVE GRAY NATURAL LIGHT POLISH FINISH AMERSHIELD COATING MODBH.
2. TENON TOP SHALL BE ALUMINUM 2.875" O.D. DIA. WITH 2.5" LG.
3. VERIFY FIXTURE AND POLE SPECIFICATIONS WITH THE VILLAGE PRIOR TO ORDERING.
4. SETBACK SHALL BE 3' FROM EDGE OF ROADWAY IF A CURB, SETBACK SHALL BE 4' FROM EDGE OF ROAD IF THERE IS NO CURB.

STREET LIGHT STANDARD DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL R-3 (01)
	04-30-20	Revised Notes & Specifications	

(Sheet 1 of 1)

Illinois Department of Transportation

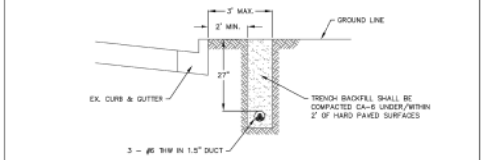
STANDARD	DESCRIPTION	TOTAL PAGES	CHECK APPLICABILITY 'X'
814001	HANDHOLES	1	

NOTES:
1. USE LATEST REVISION OF STANDARD.
2. STANDARD SHALL BE INCLUDED IN THE PLAN SET.
3. THE FOLLOWING MODIFICATION SHALL BE MADE TO IDOT STD. 814001:
   A. PORTLAND CEMENT CONCRETE HANDHOLES SHALL BE USED IN SIDEWALKS, DRIVEWAY AND ALL OTHER LIGHT DUTY PAVEMENTS.
   B. PORTLAND CEMENT HEAVY DUTY HANDHOLES SHALL BE USED IN ROADWAY PAVEMENTS.
   C. COMPOSITE CONCRETE HANDHOLES SHALL BE USED IN PARKWAYS, NON-LOAD AREAS.
4. LID SHALL BE NEENAH R-6685-D
5. LID IMPRINT SHALL READ "TRAFFIC SIGNAL" OR "STREET LIGHT" DEPENDING ON APPLICATION.

HANDHOLES

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL R-4 (01)
	04-30-20	Adapted To IDOT Standard	

(Sheet 1 of 1)



NOTES:
1. CABLE DUCT SHALL BE A MINIMUM OF 2" TO A MAXIMUM OF 3" BEHIND THE BACK OF CURB.
2. ALL SURFACES MUST BE RESTORD TO THEIR ORIGINAL CONDITION.
3. WIRING SHALL BE THERMOPLASTIC HIGH HEAT AND WATER RESISTANT TYPE (THW).

BURIED CABLE TRENCH DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL R-5 (01)
	04-30-20	Revised Notes & Specifications	

(Sheet 1 of 1)

To be incorporated into all construction documents for right-of-way improvements

The following specifications are guidelines to ensure that the parkway trees are not damaged during the proposed construction.

As with all guidelines, it will be in the contractor's best interest, to schedule a meeting prior to construction to ensure that all questions regarding proposed work and tree impacts are discussed and agreement reached with the Village Forester.

PROXIMITY TO TREES
- Any new sidewalk or street excavation to be made will require prior approval by the Village Forester.
- Site markings indicating proximity of proposed work shall be marked by each tree with paint prior to scheduling an inspection by the Village Forester.
- The permitted distance from the trunk of a tree to any proposed excavation is 6 feet or more.
- If the proposed improvement is within 6 feet or less of the tree, the tree may be required to be removed. (See Tree Removal).

TREE PRESERVATION FENCING
- Wooden slat snow fence will need to be erected from drip line to drip line of each tree within the construction zone.
- Enclosed Tree Protection Detail will be part of the construction documents.

TREE ROOT PRUNING
- Root pruning shall be performed on any tree that is more than 6 feet from the proposed construction zone.
- Root pruning will **not be permitted** on any tree that is less than 6 feet away from proposed construction zone.
- Root pruning equipment must be approved by the Village Forester prior to use.
- Hand root pruning will not be permitted unless approved by the Village Forester. All hand root pruning will require a Certified Arborist's supervision.

TREE REMOVAL
- Tree removal is recommended for trees closer than 6 feet to a construction zone.
- The use of structural soil and barrier fabric will be considered as an alternative to tree removal.
- All tree removals require a written permit from the Village Forester **prior** to removal.

TREE CANOPY PRUNING
- Tree branches hanging into the construction zone may be pruned by a Certified Tree Worker.
- All pruning cuts must meet ANSI A300-2001 Standards.
- No American Elms or Oaks may be pruned without written permission and instructions to Certified Arborist from the Village Forester between April 1st and October 31st.

DAMAGE TO TREES
- Failure to follow these specifications will result in the contractor requiring to post a cash bond, equivalent to the value of each damaged tree, for a period not to exceed 3 years.
- Bond value will be determined by the Village Forester.
- The Village Forester reserves the right to stop the job for unsupervised work that is determined to cause irreparable damage to any right-of-way tree. Stop work order will be enforced until the cash bond is paid as determined.

CONSTRUCTION AND TREE PRESERVATION SPECIFICATIONS FOR PARKWAY TREES

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL G-12 (01)
	4-30-20	No Changes	
	4-1-21	Changed Page Format	

(Sheet 1 of 1)

NO.	DATE	DESCRIPTION
A	8/14/23	VILLAGE REVIEW
A	8/30/23	MWRD REVIEW #3
A	7/31/23	MWRD REVIEW #2
A	7/21/23	DA/OC - THW
A	6/29/23	MWRD REVIEW #1
A	6/2/23	DETENTION REVISION
A	5/9/23	WATERMAIN REROUTE
A	3/31/23	VILLAGE ENGINEERING COMMENTS
A	2/3/23	VILLAGE ENGINEERING COMMENTS
A	1/6/23	DD ISSUANCE
A	9/30/22	PROGRESS CD'S
A	8/22/22	50% CD'S
A	6/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

CONSTRUCTION DETAILS

Sheet No.: C6.7

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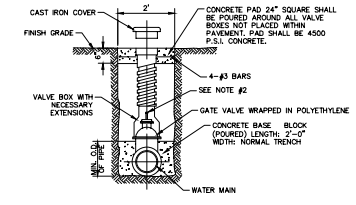
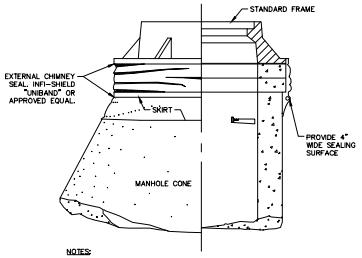


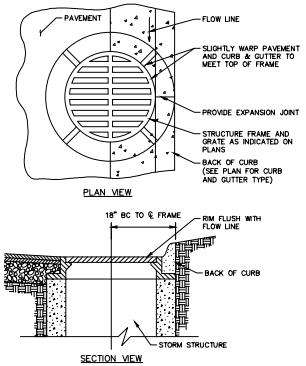
NOTES:
1. 4"-12" R.S. GATE VALVES SHALL BE IN ACCORDANCE WITH AWWA STANDARD C-509.
2. A PERMANENTLY ATTACHED VALVE EXTENSION STEM SHALL BE REQUIRED IF THE OPERATING NUT FOR ANY VALVE IS LOCATED IN EXCESS OF 4' BELOW THE TOP OF THE VALVE BOX. THIS EXTENSION SHALL BE SUFFICIENT LENGTH TO ENSURE THAT THE TOP IS WITHIN 4' OF THE VALVE BOX LID.
3. DUCTILE IRON OR C-900 PVC PIPE SHALL BE USED FOR VALVE STACKS WITH VALVE BOX CASTING.
4. PLACE A BLUE DOT (3") ON NEAREST CURB FACE TO VALVE.
5. FOR GATE VALVES < 16" (FOR GATE VALVES ≥ 16" USE HORIZONTAL GATE VALVE)

TYPICAL VALVE SETTING AND BOX
N.T.S.

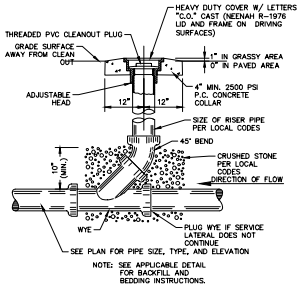


NOTES:
1. CHIMNEY SEALS SHALL BE INSTALLED ON ALL SANITARY SEWERAGE SYSTEM MANHOLES AND GREASE TRAP CATCH BASIN.
2. EXTERNAL CHIMNEY SEAL SHALL BE INFI-SHIELD "UNIBAND" BY SIMA ENVIRONMENTAL OR APPROVED EQUAL.
3. CHIMNEY SEALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

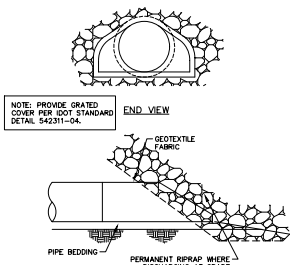
EXTERNAL CHIMNEY SEAL
N.T.S.

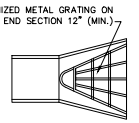


INLET AT CURB FRAME LOCATION
N.T.S.



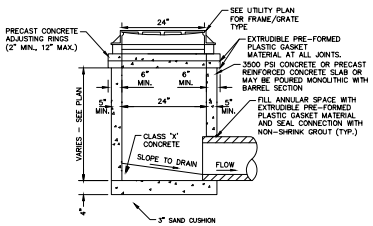
SANITARY CLEAN-OUT
N.T.S.



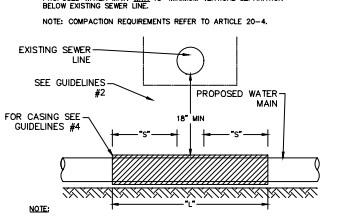


PLAN VIEW

FLARED END SECTION
N.T.S.



2' DIAMETER STORM INLET
N.T.S.



NOTE:
1. "S" THE LENGTH NECESSARY TO PROVIDE 10 FEET SEPARATION AS MEASURED PERPENDICULAR TO THE EXISTING SEWER LINE.

GUIDELINES:
1. OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF WATER MAIN AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L" FEET.
2. IF SELECT GRANULAR BACKFILL EXISTS: REMOVE WITHIN WIDTH OF EXISTING SEWER TRENCH AND REPLACE WITH SELECT EXCAVATED (CLASS IV) AND COMPACT.
3. PROVIDE ADEQUATE SUPPORT FOR EXISTING SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT.
4. USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED WATER MAIN AND SEAL ENDS OF CASING.

EXISTING SEWER OVER PROPOSED WATER MAIN CROSSING DETAIL
N.T.S.

NO.	DATE	DESCRIPTION
13	8/14/23	VILLAGE REVIEW
12	8/30/23	MWRD REVIEW #3
11	7/31/23	MWRD REVIEW #2
10	7/21/23	QA/QC - THW
9	6/29/23	MWRD REVIEW #1
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7	5/9/23	WATERMAIN REROUTE
6	3/31/23	VILLAGE ENGINEERING COMMENTS
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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

CONSTRUCTION DETAILS

Sheet No.: C6.8

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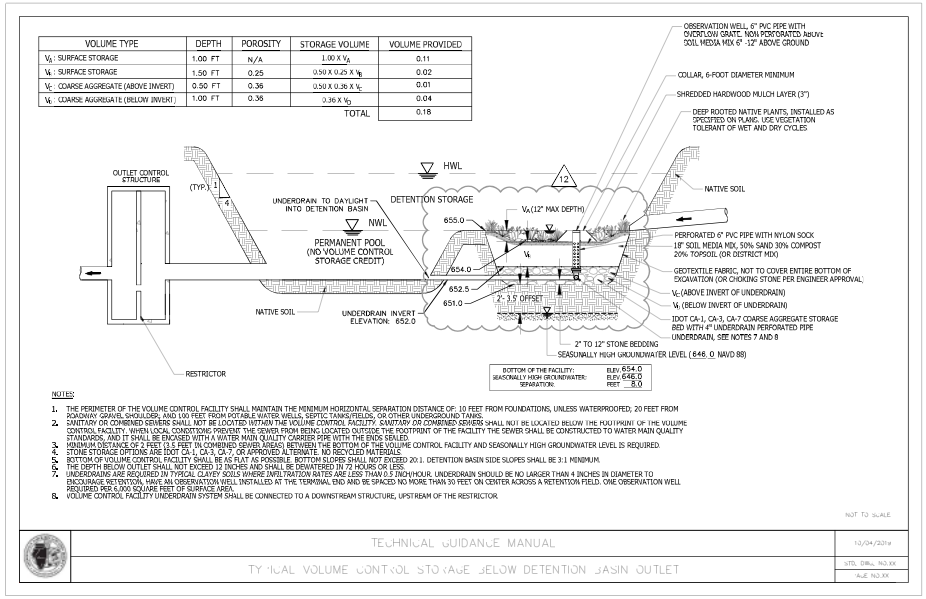


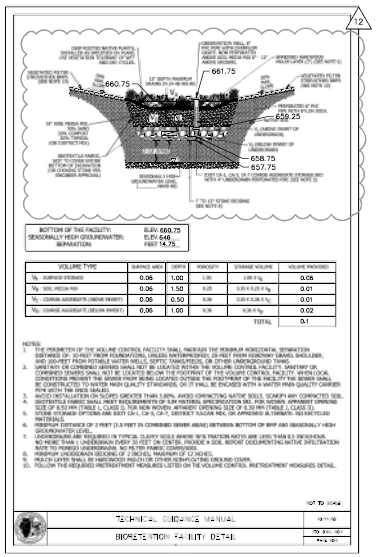
VOLUME TYPE	DEPTH	POROSITY	STORAGE VOLUME	VOLUME PROVIDED
V_A : SURFACE STORAGE	1.00 FT	N/A	1.00 X V_A	0.11
V_B : SURFACE STORAGE	1.50 FT	0.25	0.50 X 0.25 X V_B	0.02
V_C : COARSE AGGREGATE (ABOVE INVERT)	0.50 FT	0.36	0.50 X 0.36 X V_C	0.01
V_A : COARSE AGGREGATE (BELOW INVERT)	1.00 FT	0.36	0.36 X V_D	0.04
			TOTAL	0.18

BOTTOM OF THE FACILITY:	ELEV. 654.0
SEASONALLY HIGH GROUNDWATER:	ELEV. 646.0
SEPARATION:	FEET 8.0

NOTES:
1. THE PERIMETER OF THE VOLUME CONTROL FACILITY SHALL MAINTAIN THE MINIMUM HORIZONTAL SEPARATION DISTANCE OF: 10 FEET FROM FOUNDATIONS, UNLESS WATERPROOFED; 20 FEET FROM ROADWAY GRAVEL SHOULDER; AND 100 FEET FROM POTABLE WATER WELLS, SEPTIC TANKS/FIELDS, OR OTHER UNDERGROUND TANKS.
2. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED WITHIN THE VOLUME CONTROL FACILITY. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED BELOW THE FOOTPRINT OF THE VOLUME CONTROL FACILITY. WHEN LOCAL CONDITIONS PREVENT THE SEWER FROM BEING LOCATED OUTSIDE THE FOOTPRINT OF THE FACILITY THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN QUALITY STANDARDS, AND IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.
3. MINIMUM DISTANCE OF 2 FEET (3.5 FEET IN COMBINED SEWER AREAS) BETWEEN THE BOTTOM OF THE VOLUME CONTROL FACILITY AND SEASONALLY HIGH GROUNDWATER LEVEL IS REQUIRED.
4. STONE STORAGE OPTIONS ARE IDOT CA-1, CA-3, CA-7, OR APPROVED ALTERNATE. NO RECYCLED MATERIALS.
5. BOTTOM OF VOLUME CONTROL FACILITY SHALL BE AS FLAT AS POSSIBLE. BOTTOM SLOPES SHALL NOT EXCEED 20:1. DETENTION BASIN SIDE SLOPES SHALL BE 3:1 MINIMUM.
6. THE DEPTH BELOW OUTLET SHALL NOT EXCEED 12 INCHES AND SHALL BE DEWATERED IN 72 HOURS OR LESS.
7. UNDERDRAINS ARE REQUIRED IN TYPICAL CLAYEY SOILS WHERE INFILTRATION RATES ARE LESS THAN 0.5 INCH/HOUR. UNDERDRAIN SHOULD BE NO LARGER THAN 4 INCHES IN DIAMETER TO ENCOURAGE RETENTION. HAVE AN OBSERVATION WELL INSTALLED AT THE TERMINAL END AND BE SPACED NO MORE THAN 30 FEET ON CENTER ACROSS A RETENTION FIELD. ONE OBSERVATION WELL REQUIRED PER 6,000 SQUARE FEET OF SURFACE AREA.
8. VOLUME CONTROL FACILITY UNDERDRAIN SYSTEM SHALL BE CONNECTED TO A DOWNSTREAM STRUCTURE, UPSTREAM OF THE RESTRICTOR.

NOT TO SCALE

TECHNICAL GUIDANCE MANUAL — 10/04/2019
TYPICAL VOLUME CONTROL STORAGE BELOW DETENTION BASIN OUTLET — STD. DWG. NO.XX — PAGE NO.XX



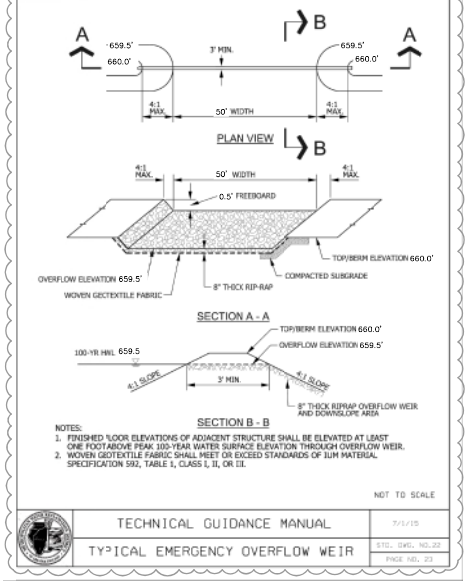
BOTTOM OF THE FACILITY:	ELEV. 660.75
SEASONALLY HIGH GROUNDWATER:	ELEV. 646
SEPARATION:	FEET 14.75

VOLUME TYPE	SURFACE AREA	DEPTH	POROSITY	STORAGE VOLUME	VOLUME PROVIDED
V_A : SURFACE STORAGE	0.06	1.00	1.00	1.00 X V_A	0.06
V_B : SOIL MEDIA MIX	0.06	1.50	0.25	0.50 X 0.25 X V_B	0.01
V_C : COARSE AGGREGATE (ABOVE INVERT)	0.06	0.50	0.36	0.50 X 0.36 X V_C	0.01
V_D : COARSE AGGREGATE (BELOW INVERT)	0.06	1.00	0.36	0.36 X V_D	0.02
				TOTAL	0.1

NOTES:
1. THE PERIMETER OF THE VOLUME CONTROL FACILITY SHALL MAINTAIN THE MINIMUM HORIZONTAL SEPARATION DISTANCE OF: 10 FEET FROM FOUNDATIONS, UNLESS WATERPROOFED; 20 FEET FROM ROADWAY GRAVEL SHOULDER; AND 100 FEET FROM POTABLE WATER WELLS, SEPTIC TANKS/FIELDS, OR OTHER UNDERGROUND TANKS.
2. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED WITHIN THE VOLUME CONTROL FACILITY. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED BELOW THE FOOTPRINT OF THE VOLUME CONTROL FACILITY. WHEN LOCAL CONDITIONS PREVENT THE SEWER FROM BEING LOCATED OUTSIDE THE FOOTPRINT OF THE FACILITY THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN QUALITY STANDARDS, OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.
3. MINIMUM DISTANCE OF 2 FEET (3.5 FEET IN COMBINED SEWER AREAS) BETWEEN BOTTOM OF BMP AND SEASONALLY HIGH GROUNDWATER LEVEL.
4. UNDERDRAINS ARE REQUIRED IN TYPICAL CLAYEY SOILS WHERE INFILTRATION RATES ARE LESS THAN 0.5 INCH/HOUR. NO MORE THAN 1 UNDERDRAIN EVERY 30 FEET ON CENTER. PROVIDE A SOIL REPORT DOCUMENTING NATIVE INFILTRATION RATES FOR ALL UNDERDRAINS. NO FILTER FABRIC COVERED PIPE.
5. BOTTOM UNDERDRAIN GRADING AT 2 INCHES MINIMUM UP TO INLETS.
6. MULCH LAYER SHALL BE HARDWOOD MULCH OR OTHER NON-FLOATING GROUND COVER.
7. FOLLOW THE REQUIRED PRETREATMENT MEASURES LISTED ON THE VOLUME CONTROL PRETREATMENT MEASURES DETAIL.

NOT TO SCALE

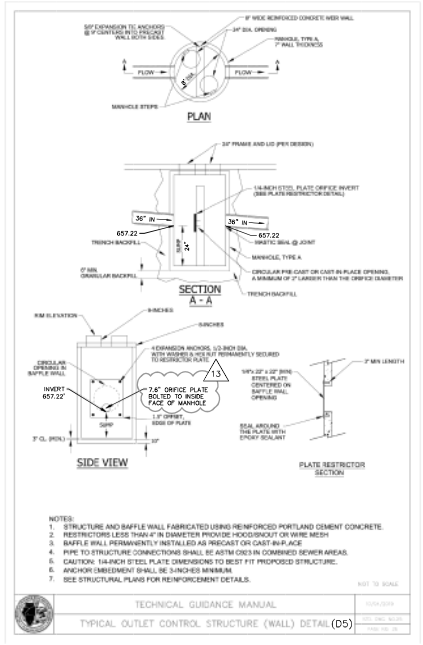
TECHNICAL GUIDANCE MANUAL — 10/04/19
BIORETENTION FACILITY DETAIL — STD. DWG. NO.XX — PAGE NO.XX



NOTES:
1. FINISHED FLOOR ELEVATIONS OF ADJACENT STRUCTURE SHALL BE ELEVATED AT LEAST ONE FOOTABOVE PEAK 100-YEAR WATER SURFACE ELEVATION THROUGH OVERFLOW WEIR.
2. WOVEN GEOTEXTILE FABRIC SHALL MEET OR EXCEED STANDARDS OF IUM MATERIAL SPECIFICATION 592, TABLE 1, CLASS I, II, OR III.

NOT TO SCALE

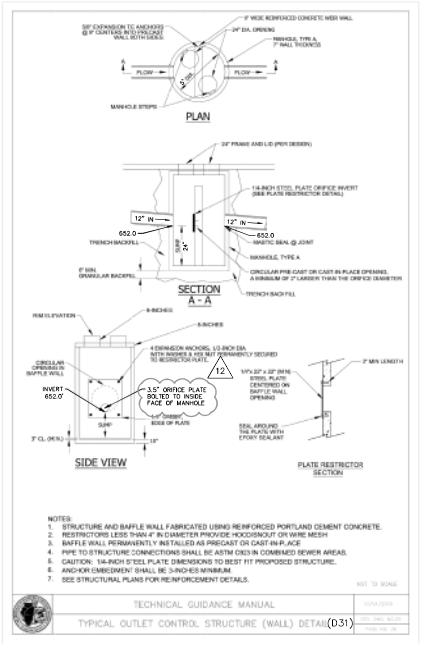
TECHNICAL GUIDANCE MANUAL — 7/1/15
TYPICAL EMERGENCY OVERFLOW WEIR — STD. DWG. NO.22 — PAGE NO. 23



NOTES:
1. STRUCTURE AND BAFFLE WALL FABRICATED USING REINFORCED PORTLAND CEMENT CONCRETE.
2. RESTRICTORS LESS THAN 4" IN DIAMETER PROVIDE HOOD/SNOUT OR WIRE MESH
3. BAFFLE WALL PERMANENTLY INSTALLED AS PRECAST OR CAST-IN-PLACE
4. PIPE TO STRUCTURE CONNECTIONS SHALL BE ASTM C923 IN COMBINED SEWER AREAS.
5. CAUTION: 1/4-INCH STEEL PLATE DIMENSIONS TO BEST FIT PROPOSED STRUCTURE.
6. ANCHOR EMBEDMENT SHALL BE 3-INCHES MINIMUM.
7. SEE STRUCTURAL PLANS FOR REINFORCEMENT DETAILS.

NOT TO SCALE

TECHNICAL GUIDANCE MANUAL — 10/04/2019
TYPICAL OUTLET CONTROL STRUCTURE (WALL) DETAIL (D5) — STD. DWG. NO.D5 — PAGE NO. 26



NOTES:
1. STRUCTURE AND BAFFLE WALL FABRICATED USING REINFORCED PORTLAND CEMENT CONCRETE.
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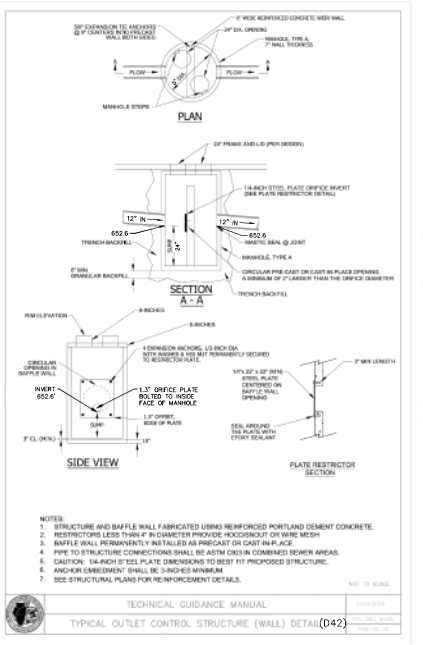
7. SEE STRUCTURAL PLANS FOR REINFORCEMENT DETAILS.

NOT TO SCALE

TECHNICAL GUIDANCE MANUAL — 10/04/2019
TYPICAL OUTLET CONTROL STRUCTURE (WALL) DETAIL (D31) — STD. DWG. NO.D31 — PAGE NO. 26



NOTES:
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2. RESTRICTORS LESS THAN 4" IN DIAMETER PROVIDE HOOD/SNOUT OR WIRE MESH
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5. CAUTION: 1/4-INCH STEEL PLATE DIMENSIONS TO BEST FIT PROPOSED STRUCTURE.
6. ANCHOR EMBEDMENT SHALL BE 3-INCHES MINIMUM.
7. SEE STRUCTURAL PLANS FOR REINFORCEMENT DETAILS.

NOT TO SCALE

TECHNICAL GUIDANCE MANUAL — 10/04/2019
TYPICAL OUTLET CONTROL STRUCTURE (WALL) DETAIL (D42) — STD. DWG. NO.D42 — PAGE NO. 26

NO.	DATE	DESCRIPTION
1	8/14/23	VILLAGE REVIEW
2	8/30/23	MWRD REVIEW #3
3	7/31/23	MWRD REVIEW #2
4	7/21/23	DA/DC – THW
5	6/29/23	MWRD REVIEW #1
6	6/2/23	DETENTION REVISION
7	5/9/23	WATERMAIN REROUTE
8	3/31/23	VILLAGE ENGINEERING COMMENTS
9	2/3/23	VILLAGE ENGINEERING COMMENTS
10	1/6/23	DD ISSUANCE
11	9/30/22	PROGRESS CD'S
12	8/22/22	50% CD'S
13	8/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK
2625 TECHNY RD, NORTHBROOK, IL 60062

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www.thw.com

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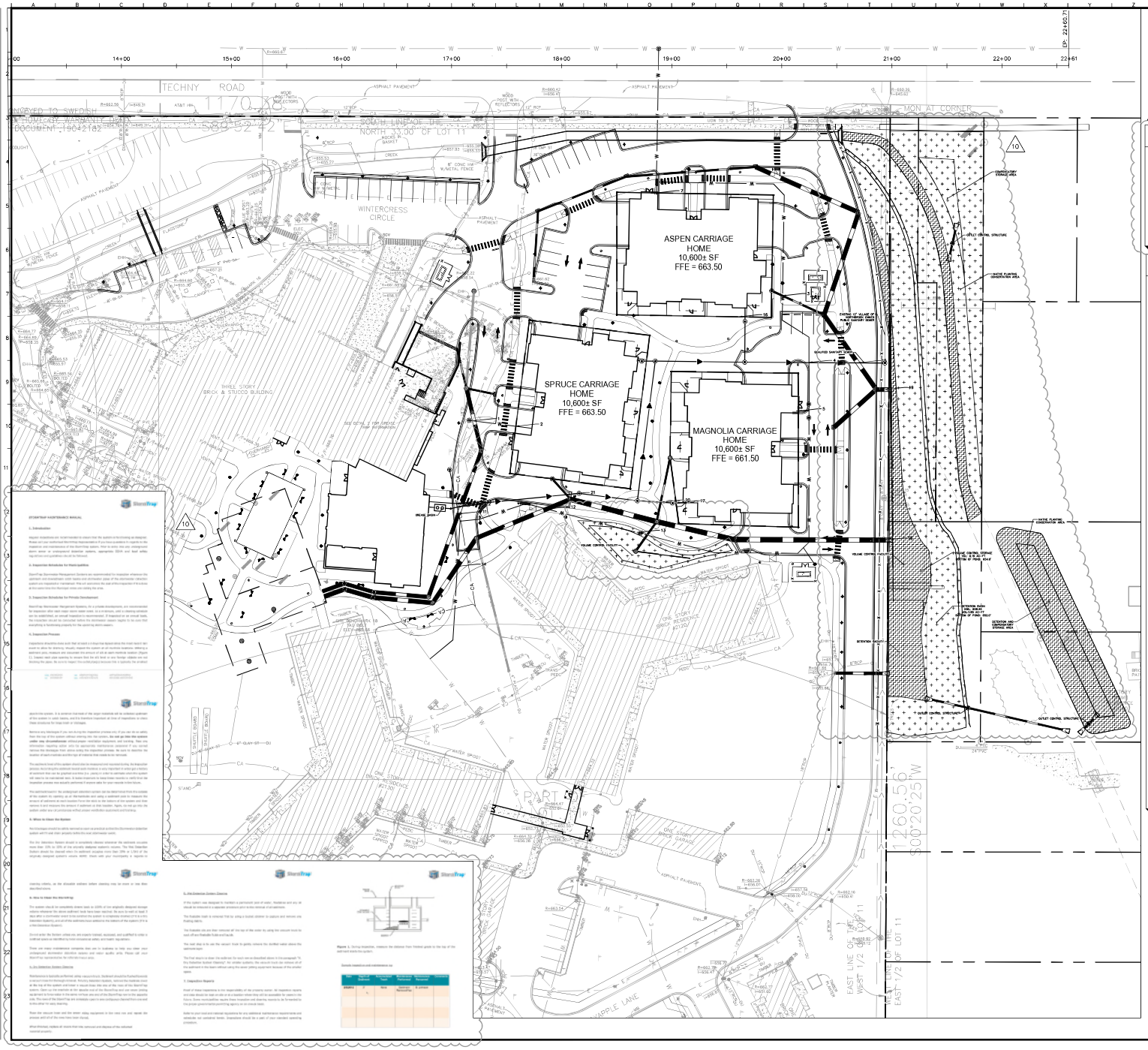
PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

CONSTRUCTION DETAILS

Sheet No.: C6.9

K:\CHS_LOCV\268004000_Covenant_Northbrook_IL\2_Design\CAD\PlanSheets\C6.0 CONSTRUCTION DETAILS.dwg



UTILITY LEGEND

- PROPOSED STORM SEWER LINE
- PROPOSED STORM STRUCTURE
- QUALIFIED SANITARY SEWER
- MESIC PRAIRIE SEED MIX
- EMERGENT SEED MIX & PLUGS

MAINTENANCE PLAN

GENERAL MAINTENANCE

REGULAR INSPECTIONS AND ROUTINE MAINTENANCE OF GENERAL AREAS SHALL BE PERFORMED ON A MONTHLY OR AS-NEEDED BASIS. SPECIFIC ITEMS OF CONCERN INCLUDE:

1. LITTER AND DEBRIS SHALL BE CONTROLLED.
2. LANDSCAPED AREAS SHALL BE MAINTAINED WITH REGULAR MOWING AND RESTORED WITH APPROPRIATE SEEDING/VEGETATION AS NECESSARY.
3. ACCUMULATED SEDIMENT SHALL BE DISPOSED OF PROPERLY, ALONG WITH ANY WASTES GENERATED DURING MAINTENANCE OPERATIONS.
4. RIPRAP AREAS SHALL BE REPAIRED WITH THE ADDITION OF NEW RIPRAP, AS NECESSARY OF SIMILAR SIZE AND SHAPE.
5. ROADS SHALL BE SEPT, VACUUMED AND OR WASHED ON A REGULAR BASIS.

STORMWATER COLLECTION SYSTEM

THE OWNER SHALL PERFORM MONTHLY INSPECTION OF ALL COMPONENTS OF THE COLLECTION SYSTEM. THE MONTHLY INSPECTION SHALL OCCUR BETWEEN MARCH AND NOVEMBER AND INCLUDE THE FOLLOWING SPECIFIC AREAS OF CONCERN:

STORM INLETS/MANHOLES

1. REMOVE ACCUMULATED LEAVES AND OTHER DEBRIS FROM GRATES.
2. RESET COVERS/LIDS ON AS-NEEDED BASIS.
3. REMOVE ACCUMULATED SEDIMENT FROM MANHOLE BOTTOM WHEN 50% OF SUMP IS FILLED.

STORM SEWERS/CULVERTS

1. VISUALLY INSPECT PIPES BY REMOVING MANHOLE LIDS, MAKE REPAIRS AS NECESSARY.
2. STORM SEWERS AND CULVERTS SHALL BE CHECKED FOR SILTATION DEPOSITS AT INLETS, OUTLETS, AND WITHIN THE CONDUIT, CLEAN OUT AS NECESSARY.
3. RESTORE RIPRAP AT OUTFALL IF EROSION IS OBSERVED.
4. REPLANT AND RESEED ANY ERODED AREAS.

OVERLAND FLOW ROUTES (DITCHES/SWALES)

1. ANNUAL VISUAL INSPECTION SHALL BE PERFORMED THAT VERIFY THE DESIGN CAPACITY OF THE OVERLAND FLOW ROUTES IS MAINTAINED. THE SLOPE AND CROSS-SECTIONAL ARE OF THE DITCH/SWALE SHALL BE VERIFIED DURING THIS INSPECTION.
2. REMOVE ANY OBSTRUCTIONS THAT HAVE BEEN PLACED IN THE DRAINAGE PATH.
3. SEED AND SOD ANY ERODED AREAS.
4. REGRADE TO PROVIDE POSITIVE DRAINAGE AS NECESSARY.
5. PROVIDE REGULAR MOWING TO CONTROL VEGETATION.

STORMWATER MANAGEMENT FACILITIES

ALL COMPONENTS OF THE STORMWATER MANAGEMENT FACILITIES SHALL BE CHECKED MONTHLY BETWEEN MARCH AND NOVEMBER AND MAINTAINED AS NECESSARY TO ENSURE PROPER PERFORMANCE. IT IS CRITICAL THAT ALL INFLOW AND OUTFLOW TO THE DETENTION FACILITY ARE CLEAN AND PERFORMING AS DESIGNED. IN ADDITION, THE DESIGN VOLUME OF THE DETENTION FACILITY SHALL ALSO BE MAINTAINED. INSPECTION FOR THE FOLLOWING SPECIFIC ITEMS SHOULD BE CONDUCTED MONTHLY BETWEEN MARCH AND NOVEMBER:

DETENTION FACILITY

1. INSPECT STORMWATER DETENTION FACILITY TO ENSURE THAT THE CONSTRUCTED VOLUME FOR DETENTION IS MAINTAINED.
2. NO SEDIMENT, TOPSOIL, OR OTHER DUMPING INTO THE FACILITY SHALL BE ALLOWED.

OUTLET CONTROL STRUCTURE

1. INSPECT RESTRICTOR AND REMOVE DEBRIS IF CLOGGED OR DISCHARGE IS REDUCED.
2. REMOVE ACCUMULATED SEDIMENT AT OUTLET.
3. REPAIR IF NECESSARY ANY ICE DAMAGE TO OUTLET OF PIPE.

QUALIFIED SEWER CONSTRUCTION

1. PERFORM MANHOLE INSPECTIONS ONCE EVERY FIVE YEARS, MAKE NECESSARY REPAIRS.
2. PERFORM SEWER INSPECTIONS ONCE EVERY FIVE YEARS, MAKE NECESSARY REPAIRS.
3. PERFORM REGULAR CLEANING SO THAT EACH SEWER SEGMENT IS CLEANED ONCE EVERY 5 YEARS.
4. REMOVE ANY OBSTRUCTIONS PLACED IN MAINTENANCE EASEMENT THAT MAY IMPEDE MAINTANANCE EQUIPMENT ACCESS.

VOLUME CONTROL FACILITY

ROUTINE INSPECTIONS AND MAINTENANCE OF VOLUME CONTROL FACILITIES SHALL BE PERFORMED BY THE OWNER ON A YEARLY OR AS-NEEDED BASIS. SPECIFIC ITEMS OF CONCERN INCLUDE:

1. FACILITY SHALL BE INSPECTED YEARLY USING THE STORM STRUCTURE TO VERIFY THE SYSTEM IS FUNCTIONING PROPERLY.
2. ACCUMULATED SEDIMENT FROM SURFACE SHALL BE VACUUMED OUT AND DISPOSED OF PROPERLY.
3. APPROPRIATE SIGNAGE SHALL BE REPAIRED IF DAMAGED OR ILLEGIBLE

SITE SUMMARY

PROPERTY ADDRESS:	2625 TECHNY ROAD NORTHBROOK, IL 60062
TOTAL OWNERSHIP:	51.2 ACRES
TOTAL PROJECT DEVELOPMENT:	4.04 ACRES
VOLUME CONTROL REQUIRED:	0.27 AC-FT
VOLUME CONTROL PROVIDED:	0.27 AC-FT
DETENTION VOLUME REQUIRED:	2.04 AC-FT
DETENTION VOLUME PROVIDED:	2.04 AC-FT
PROPERTY INDEX NUMBERS:	04-16-300-006-0000 04-16-301-047-0000 04-16-301-048-0000 04-16-301-047-0000 04-16-301-009-0000

RESPONSIBLE PARTY

COVENANT HOME
2625 TECHNY ROAD
NORTHBROOK, IL 60062
EMAIL: REGROSS@COVLIVING.ORG
CONTACT: RANDY GROSS

No.	REVISIONS	DATE	BY

Kimley»Horn
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PHONE: 651-645-0033
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: NAM
DRAWN BY: NAM
CHECKED BY: EJT

COVENANT LIVING OF NORTHBROOK

2625 TECHNY ROAD
NORTHBROOK, ILLINOIS 60062

MWRD EXHIBIT R

ORIGINAL ISSUE: 6/18/2021
KHA PROJECT NO. 268004000
SHEET NUMBER C6.10

Drawing name: K:\CHI_LDEV\268004000_Covenant_Northbrook_LV_2_Design\CAD\Exhibits\MWRD Exhibits\Schedule R Exhibit.dwg Layout1 Sep 14, 2023 - 1:09pm by: natalie.moore
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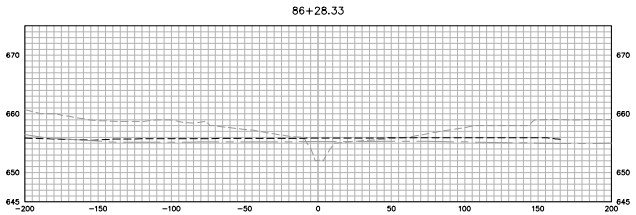

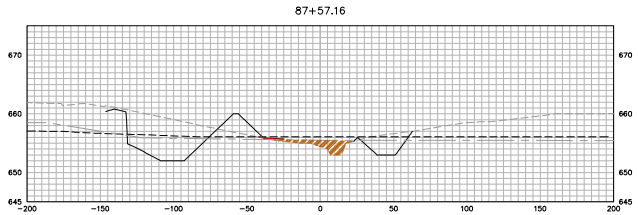

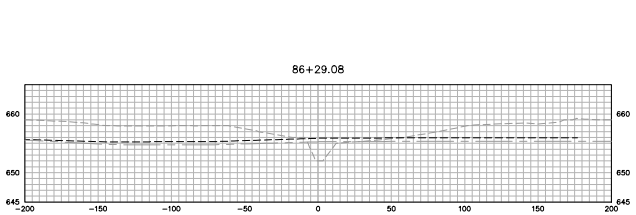

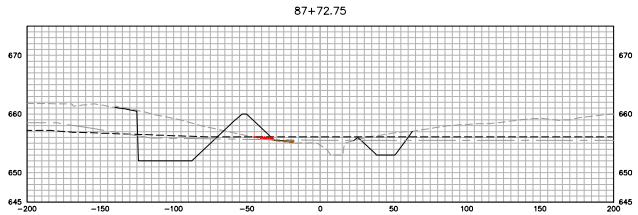

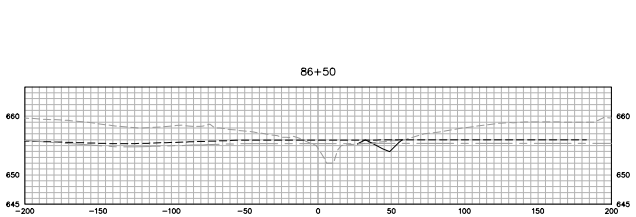

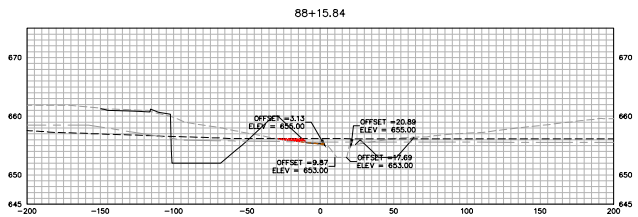

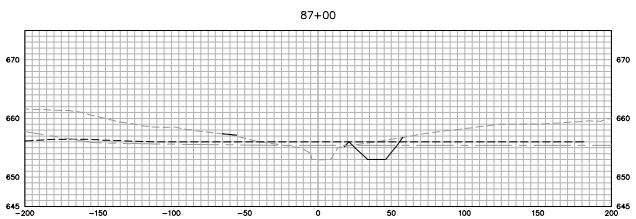

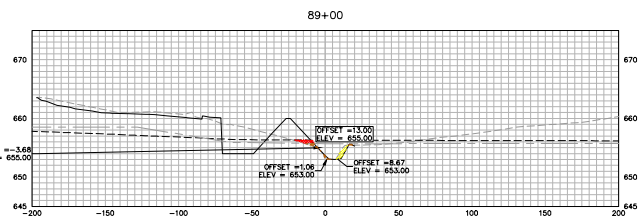

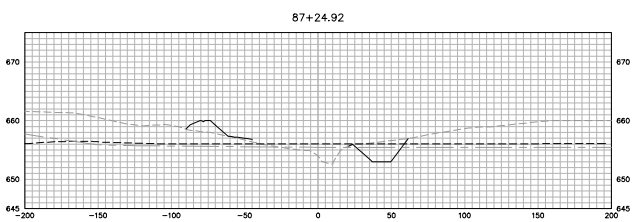

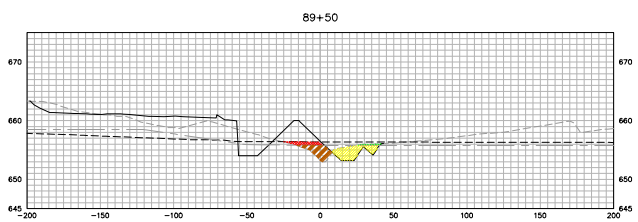

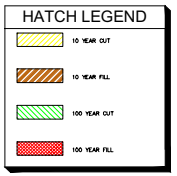

10-YR FILL			
STATION	AREA (SF)	VOLUME (CY)	CUMULATIVE VOLUME (CY)
86+28.33	0.00	0.00	0.00
86+29.08	0.00	0.00	0.00
86+50.00	0.00	0.00	0.00
87+00.00	0.00	0.00	0.00
87+24.92	0.00	0.00	0.00
87+57.16	48.25	28.39	28.39
87+72.75	2.68	14.70	43.09
88+15.84	1.82	3.62	46.71
89+00.00	4.76	10.28	56.99
89+50.00	31.73	33.63	90.62
90+00.00	33.21	60.13	150.75
90+52.00	0.00	33.87	184.62
91+00.00	48.69	43.50	228.12
91+50.00	51.64	92.96	321.08
91+87.12	63.67	79.26	400.34
92+27.47	54.30	88.21	488.55
93+00.00	50.22	140.60	629.14
93+50.00	37.78	81.92	711.07
94+00.00	35.01	67.53	778.60
94+50.00	0.00	32.42	811.01
95+00.00	0.01	0.01	811.02
95+50.00	1.32	1.21	812.24
96+00.00	0.03	1.24	813.47
96+50.00	0.00	0.03	813.50
97+00.00	0.00	0.00	813.50
97+50.00	0.00	0.00	813.50
98+00.00	0.00	0.00	813.50
98+50.00	0.00	0.00	813.50
99+00.00	0.00	0.00	813.50
99+50.00	0.00	0.00	813.50
100+00.00	0.00	0.00	813.50

10-YEAR CUT			
STATION	AREA (SF)	VOLUME (CY)	CUMULATIVE VOLUME (CY)
86+28.33	0.00	0.00	0.00
86+29.08	0.00	0.00	0.00
86+50.00	0.00	0.00	0.00
87+00.00	0.00	0.00	0.00
87+24.92	0.00	0.00	0.00
87+57.16	0.00	0.00	0.00
87+72.75	0.00	0.00	0.00
88+15.84	0.00	0.00	0.00
89+00.00	7.27	11.21	11.21
89+50.00	46.70	54.14	65.36
90+00.00	56.24	95.31	160.67
90+52.00	68.96	192.11	352.78
91+00.00	62.02	56.75	409.53
91+50.00	65.77	55.65	465.18
91+87.12	88.23	105.85	571.04
92+27.47	41.52	133.56	704.60
93+00.00	0.00	117.76	822.36
93+50.00	0.00	0.00	822.36
94+00.00	0.00	0.00	822.36
94+50.00	0.00	0.00	822.36
95+00.00	0.17	0.16	822.52
95+50.00	0.00	0.16	822.68
96+00.00	0.09	0.08	822.76
96+50.00	0.00	0.08	822.84
97+00.00	0.00	0.00	822.84
97+50.00	0.00	0.00	822.84
98+00.00	0.00	0.00	822.84
98+50.00	0.00	0.00	822.84
99+00.00	0.00	0.00	822.84
99+50.00	0.00	0.00	822.84
100+00.00	0.00	0.00	822.84

100-YR FILL			
STATION	AREA (SF)	VOLUME (CY)	CUMULATIVE VOLUME (CY)
86+28.33	0.00	0.00	0.00
86+29.08	0.00	0.00	0.00
86+50.00	0.00	0.00	0.00
87+00.00	0.00	0.00	0.00
87+24.92	0.00	0.00	0.00
87+57.16	2.34	1.62	1.62
87+72.75	4.44	1.96	3.58
88+15.84	6.84	9.12	12.70
89+00.00	5.62	19.69	32.39
89+50.00	12.24	15.80	48.19
90+00.00	19.47	29.36	77.55
90+52.00	0.00	20.36	97.92
91+00.00	17.12	15.35	113.26
91+50.00	33.27	46.83	160.09
91+87.12	42.92	52.37	212.47
92+27.47	41.42	62.39	274.86
93+00.00	41.64	106.72	381.58
93+50.00	20.88	57.58	439.15
94+00.00	24.72	42.43	481.59
94+50.00	2.81	25.49	507.07
95+00.00	0.00	2.60	509.67
95+50.00	1.85	1.67	511.34
96+00.00	1.82	3.34	514.69
96+50.00	0.00	1.71	516.39
97+00.00	0.00	0.00	516.39
97+50.00	0.00	0.00	516.39
98+00.00	0.00	0.00	516.39
98+50.00	0.00	0.00	516.39
99+00.00	0.00	0.00	516.39
99+50.00	0.00	0.00	516.39
100+00.00	0.00	0.00	516.39

100-YR CUT			
STATION	AREA (SF)	VOLUME (CY)	CUMULATIVE VOLUME (CY)
86+28.33	0.00	0.00	0.00
86+29.08	0.00	0.00	0.00
86+50.00	0.00	0.00	0.00
87+00.00	0.00	0.00	0.00
87+24.92	0.00	0.00	0.00
87+57.16	0.00	0.00	0.00
87+72.75	0.00	0.00	0.00
88+15.84	0.00	0.00	0.00
89+00.00	0.00	0.00	0.00
89+50.00	3.34	3.52	3.52
90+00.00	18.99	20.68	24.20
90+52.00	36.82	88.76	112.96
91+00.00	33.32	30.67	143.64
91+50.00	35.02	30.34	173.97
91+87.12	45.38	55.27	229.24
92+27.47	28.21	75.06	304.30
93+00.00	0.00	80.03	384.33
93+50.00	0.00	0.00	384.33
94+00.00	0.00	0.00	384.33
94+50.00	0.00	0.00	384.33
95+00.00	2.35	2.19	386.52
95+50.00	0.05	2.18	388.70
96+00.00	0.00	0.04	388.74
96+50.00	0.00	0.00	388.74
97+00.00	0.00	0.00	388.74
97+50.00	0.00	0.00	388.74
98+00.00	0.00	0.00	388.74
98+50.00	0.00	0.00	388.74
99+00.00	0.00	0.00	388.74
99+50.00	0.00	0.00	388.74
100+00.00	0.00	0.00	388.74

NO.	DATE	DESCRIPTION
8	8/14/23	VILLAGE REVIEW
7	8/30/23	MWRD REVIEW #3
6	7/31/23	MWRD REVIEW #2
5	7/21/23	QA/QC - THW
4	6/29/23	MWRD REVIEW #1
3	6/2/23	DETENTION REVISION
2	5/9/23	WATERMAIN REROUTE
1	3/31/23	VILLAGE ENGINEERING COMMENTS
0	2/3/23	VILLAGE ENGINEERING COMMENTS
1	1/6/23	DD ISSUANCE
9	9/30/22	PROGRESS CD'S
8	8/22/22	50% CD'S
6	6/23/22	DD ISSUANCE
5	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK

2625 TECHNY RD,
NORTHBROOK, IL 60062

Kimley»Horn

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FAX: 770 916 2299
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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

STREAM CROSS SECTIONS

Sheet No.: C7.0

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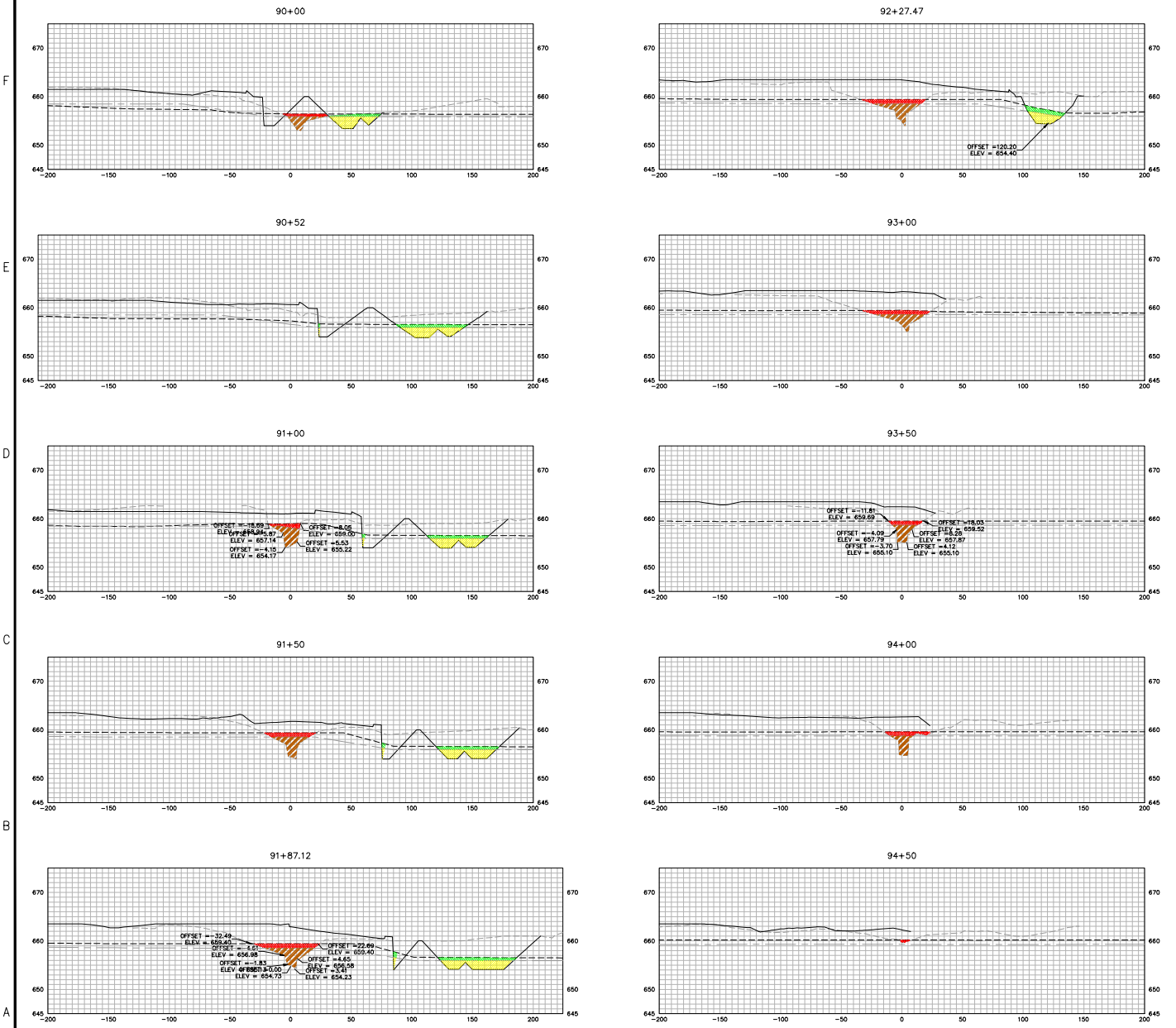

HATCH LEGEND

- 10 YEAR CUT
- 10 YEAR FILL
- 100 YEAR CUT
- 100 YEAR FILL

10-YR FILL

STATION	AREA (SF)	VOLUME (CY)	CUMULATIVE VOLUME (CY)
86+28.33	0.00	0.00	0.00
86+29.08	0.00	0.00	0.00
86+50.00	0.00	0.00	0.00
87+00.00	0.00	0.00	0.00
87+24.92	0.00	0.00	0.00
87+57.16	48.25	28.39	28.39
87+72.75	2.68	14.70	43.09
88+15.84	1.82	3.62	46.71
89+00.00	4.76	10.28	56.99
89+50.00	31.73	33.63	90.62
90+00.00	33.21	60.13	150.75
90+52.00	0.00	33.87	184.62
91+00.00	48.69	43.50	228.12
91+50.00	51.64	92.96	321.08
91+87.12	63.67	79.26	400.34
92+27.47	54.30	88.21	488.55
93+00.00	50.22	140.60	629.14
93+50.00	37.78	81.92	711.07
94+00.00	35.01	67.53	778.60
94+50.00	0.00	32.42	811.01
95+00.00	0.01	0.01	811.02
95+50.00	1.32	1.21	812.24
96+00.00	0.03	1.24	813.47
96+50.00	0.00	0.03	813.50
97+00.00	0.00	0.00	813.50
97+50.00	0.00	0.00	813.50
98+00.00	0.00	0.00	813.50
98+50.00	0.00	0.00	813.50
99+00.00	0.00	0.00	813.50
99+50.00	0.00	0.00	813.50
100+00.00	0.00	0.00	813.50

10-YEAR CUT

STATION	AREA (SF)	VOLUME (CY)	CUMULATIVE VOLUME (CY)
86+28.33	0.00	0.00	0.00
86+29.08	0.00	0.00	0.00
86+50.00	0.00	0.00	0.00
87+00.00	0.00	0.00	0.00
87+24.92	0.00	0.00	0.00
87+57.16	0.00	0.00	0.00
87+72.75	0.00	0.00	0.00
88+15.84	0.00	0.00	0.00
89+00.00	7.27	11.21	11.21
89+50.00	46.70	54.14	65.36
90+00.00	56.24	95.31	160.67
90+52.00	68.96	192.11	352.78
91+00.00	62.02	56.75	409.53
91+50.00	65.77	55.65	465.18
91+87.12	88.23	105.85	571.04
92+27.47	41.52	133.56	704.60
93+00.00	0.00	117.76	822.36
93+50.00	0.00	0.00	822.36
94+00.00	0.00	0.00	822.36
94+50.00	0.00	0.00	822.36
95+00.00	0.17	0.16	822.52
95+50.00	0.00	0.16	822.68
96+00.00	0.09	0.08	822.76
96+50.00	0.00	0.08	822.84
97+00.00	0.00	0.00	822.84
97+50.00	0.00	0.00	822.84
98+00.00	0.00	0.00	822.84
98+50.00	0.00	0.00	822.84
99+00.00	0.00	0.00	822.84
99+50.00	0.00	0.00	822.84
100+00.00	0.00	0.00	822.84

100-YR FILL

STATION	AREA (SF)	VOLUME (CY)	CUMULATIVE VOLUME (CY)
86+28.33	0.00	0.00	0.00
86+29.08	0.00	0.00	0.00
86+50.00	0.00	0.00	0.00
87+00.00	0.00	0.00	0.00
87+24.92	0.00	0.00	0.00
87+57.16	2.34	1.62	1.62
87+72.75	4.44	1.96	3.58
88+15.84	6.84	9.12	12.70
89+00.00	5.62	19.69	32.39
89+50.00	12.24	15.80	48.19
90+00.00	19.47	29.36	77.55
90+52.00	0.00	20.36	97.92
91+00.00	17.12	15.35	113.26
91+50.00	33.27	46.83	160.09
91+87.12	42.92	52.37	212.47
92+27.47	41.42	62.39	274.86
93+00.00	41.64	106.72	381.58
93+50.00	20.88	57.58	439.15
94+00.00	24.72	42.43	481.59
94+50.00	2.81	25.49	507.07
95+00.00	0.00	2.60	509.67
95+50.00	1.85	1.67	511.34
96+00.00	1.82	3.34	514.69
96+50.00	0.00	1.71	516.39
97+00.00	0.00	0.00	516.39
97+50.00	0.00	0.00	516.39
98+00.00	0.00	0.00	516.39
98+50.00	0.00	0.00	516.39
99+00.00	0.00	0.00	516.39
99+50.00	0.00	0.00	516.39
100+00.00	0.00	0.00	516.39

100-YR CUT

STATION	AREA (SF)	VOLUME (CY)	CUMULATIVE VOLUME (CY)
86+28.33	0.00	0.00	0.00
86+29.08	0.00	0.00	0.00
86+50.00	0.00	0.00	0.00
87+00.00	0.00	0.00	0.00
87+24.92	0.00	0.00	0.00
87+57.16	0.00	0.00	0.00
87+72.75	0.00	0.00	0.00
88+15.84	0.00	0.00	0.00
89+00.00	0.00	0.00	0.00
89+50.00	3.34	3.52	3.52
90+00.00	18.99	20.68	24.20
90+52.00	36.82	88.76	112.96
91+00.00	33.32	30.67	143.64
91+50.00	35.02	30.34	173.97
91+87.12	45.38	55.27	229.24
92+27.47	28.21	75.06	304.30
93+00.00	0.00	80.03	384.33
93+50.00	0.00	0.00	384.33
94+00.00	0.00	0.00	384.33
94+50.00	0.00	0.00	384.33
95+00.00	2.35	2.19	386.52
95+50.00	0.05	2.18	388.70
96+00.00	0.00	0.04	388.74
96+50.00	0.00	0.00	388.74
97+00.00	0.00	0.00	388.74
97+50.00	0.00	0.00	388.74
98+00.00	0.00	0.00	388.74
98+50.00	0.00	0.00	388.74
99+00.00	0.00	0.00	388.74
99+50.00	0.00	0.00	388.74
100+00.00	0.00	0.00	388.74

NO.	DATE	DESCRIPTION
8	8/14/23	VILLAGE REVIEW
7	8/30/23	MWRD REVIEW #3
6	7/31/23	MWRD REVIEW #2
5	7/21/23	QA/QC - THW
4	6/29/23	MWRD REVIEW #1
3	6/2/23	DETENTION REVISION
2	5/9/23	WATERMAIN REROUTE
1	3/31/23	VILLAGE ENGINEERING COMMENTS
0	2/3/23	VILLAGE ENGINEERING COMMENTS
1	1/6/23	DD ISSUANCE
9	9/30/22	PROGRESS CD'S
8	8/22/22	50% CD'S
6	6/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK

2625 TECHNY RD,
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Kimley»Horn

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

STREAM CROSS SECTIONS

Sheet No.: C7.1

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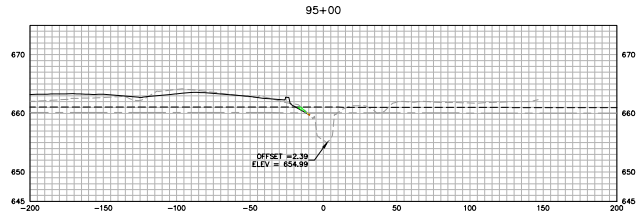

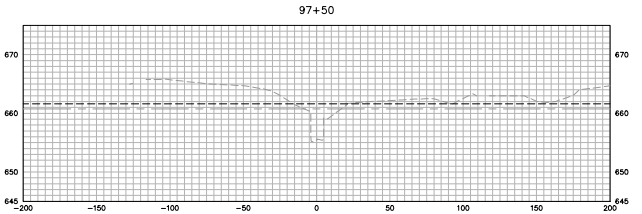

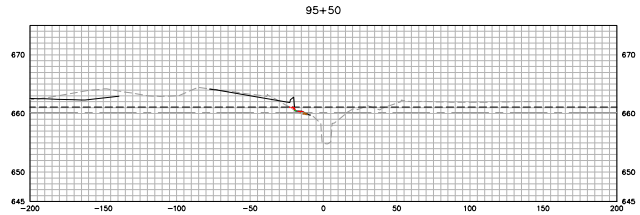

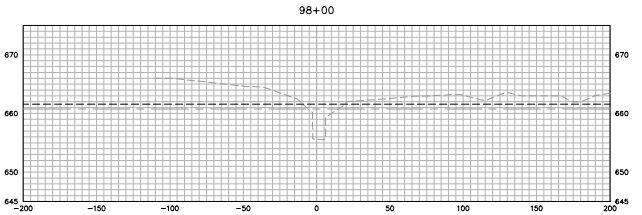

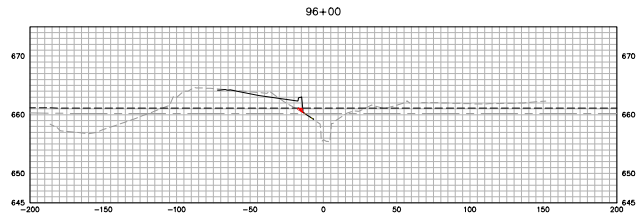

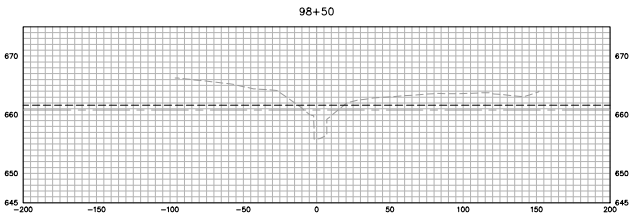

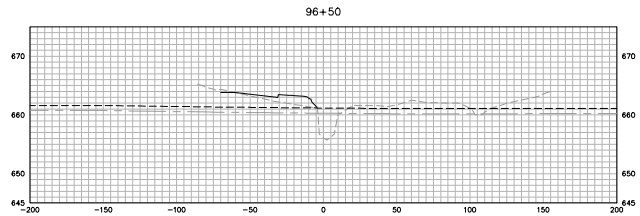

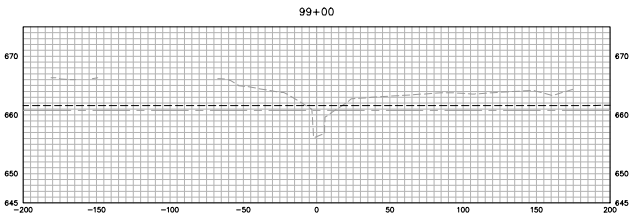

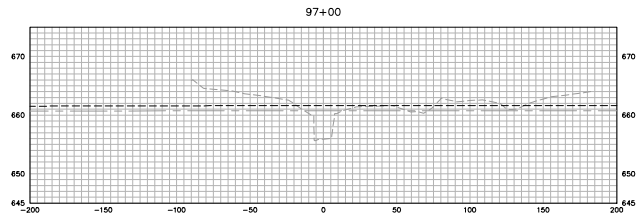

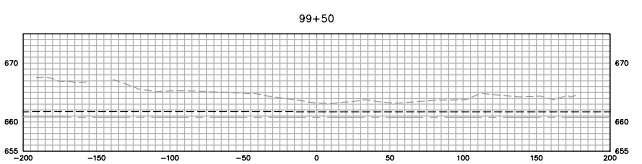

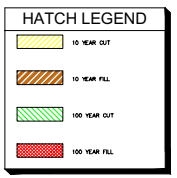

GRAPHIC SCALE IN FEET
0 20 40 80 HORIZONTAL
0 5 10 20 VERTICAL

10-YR FILL			
STATION	AREA (SF)	VOLUME (CY)	CUMULATIVE VOLUME (CY)
86+28.33	0.00	0.00	0.00
86+29.08	0.00	0.00	0.00
86+50.00	0.00	0.00	0.00
87+00.00	0.00	0.00	0.00
87+24.92	0.00	0.00	0.00
87+57.16	48.25	28.39	28.39
87+72.75	2.68	14.70	43.09
88+15.84	1.82	3.62	46.71
89+00.00	4.76	10.28	56.99
89+50.00	31.73	33.63	90.62
90+00.00	33.21	60.13	150.75
90+52.00	0.00	33.87	184.62
91+00.00	48.69	43.50	228.12
91+50.00	51.64	92.96	321.08
91+87.12	63.67	79.26	400.34
92+27.47	54.30	88.21	488.55
93+00.00	50.22	140.60	629.14
93+50.00	37.78	81.92	711.07
94+00.00	35.01	67.53	778.60
94+50.00	0.00	32.42	811.01
95+00.00	0.01	0.01	811.02
95+50.00	1.32	1.21	812.24
96+00.00	0.03	1.24	813.47
96+50.00	0.00	0.03	813.50
97+00.00	0.00	0.00	813.50
97+50.00	0.00	0.00	813.50
98+00.00	0.00	0.00	813.50
98+50.00	0.00	0.00	813.50
99+00.00	0.00	0.00	813.50
99+50.00	0.00	0.00	813.50
100+00.00	0.00	0.00	813.50

10-YEAR CUT			
STATION	AREA (SF)	VOLUME (CY)	CUMULATIVE VOLUME (CY)
86+28.33	0.00	0.00	0.00
86+29.08	0.00	0.00	0.00
86+50.00	0.00	0.00	0.00
87+00.00	0.00	0.00	0.00
87+24.92	0.00	0.00	0.00
87+57.16	0.00	0.00	0.00
87+72.75	0.00	0.00	0.00
88+15.84	0.00	0.00	0.00
89+00.00	7.27	11.21	11.21
89+50.00	46.70	54.14	65.36
90+00.00	56.24	95.31	160.67
90+52.00	68.96	192.11	352.78
91+00.00	62.02	56.75	409.53
91+50.00	65.77	55.65	465.18
91+87.12	88.23	105.85	571.04
92+27.47	41.52	133.56	704.60
93+00.00	0.00	117.76	822.36
93+50.00	0.00	0.00	822.36
94+00.00	0.00	0.00	822.36
94+50.00	0.00	0.00	822.36
95+00.00	0.17	0.16	822.52
95+50.00	0.00	0.16	822.68
96+00.00	0.09	0.08	822.76
96+50.00	0.00	0.08	822.84
97+00.00	0.00	0.00	822.84
97+50.00	0.00	0.00	822.84
98+00.00	0.00	0.00	822.84
98+50.00	0.00	0.00	822.84
99+00.00	0.00	0.00	822.84
99+50.00	0.00	0.00	822.84
100+00.00	0.00	0.00	822.84

100-YR FILL			
STATION	AREA (SF)	VOLUME (CY)	CUMULATIVE VOLUME (CY)
86+28.33	0.00	0.00	0.00
86+29.08	0.00	0.00	0.00
86+50.00	0.00	0.00	0.00
87+00.00	0.00	0.00	0.00
87+24.92	0.00	0.00	0.00
87+57.16	2.34	1.62	1.62
87+72.75	4.44	1.96	3.58
88+15.84	6.84	9.12	12.70
89+00.00	5.62	19.69	32.39
89+50.00	12.24	15.80	48.19
90+00.00	19.47	29.36	77.55
90+52.00	0.00	20.36	97.92
91+00.00	17.12	15.35	113.26
91+50.00	33.27	46.83	160.09
91+87.12	42.92	52.37	212.47
92+27.47	41.42	62.39	274.86
93+00.00	41.64	106.72	381.58
93+50.00	20.88	57.58	439.15
94+00.00	24.72	42.43	481.59
94+50.00	2.81	25.49	507.07
95+00.00	0.00	2.60	509.67
95+50.00	1.85	1.67	511.34
96+00.00	1.82	3.34	514.69
96+50.00	0.00	1.71	516.39
97+00.00	0.00	0.00	516.39
97+50.00	0.00	0.00	516.39
98+00.00	0.00	0.00	516.39
98+50.00	0.00	0.00	516.39
99+00.00	0.00	0.00	516.39
99+50.00	0.00	0.00	516.39
100+00.00	0.00	0.00	516.39

100-YR CUT			
STATION	AREA (SF)	VOLUME (CY)	CUMULATIVE VOLUME (CY)
86+28.33	0.00	0.00	0.00
86+29.08	0.00	0.00	0.00
86+50.00	0.00	0.00	0.00
87+00.00	0.00	0.00	0.00
87+24.92	0.00	0.00	0.00
87+57.16	0.00	0.00	0.00
87+72.75	0.00	0.00	0.00
88+15.84	0.00	0.00	0.00
89+00.00	0.00	0.00	0.00
89+50.00	3.34	3.52	3.52
90+00.00	18.99	20.68	24.20
90+52.00	36.82	88.76	112.96
91+00.00	33.32	30.67	143.64
91+50.00	35.02	30.34	173.97
91+87.12	45.38	55.27	229.24
92+27.47	28.21	75.06	304.30
93+00.00	0.00	80.03	384.33
93+50.00	0.00	0.00	384.33
94+00.00	0.00	0.00	384.33
94+50.00	0.00	0.00	384.33
95+00.00	2.35	2.19	386.52
95+50.00	0.05	2.18	388.70
96+00.00	0.00	0.04	388.74
96+50.00	0.00	0.00	388.74
97+00.00	0.00	0.00	388.74
97+50.00	0.00	0.00	388.74
98+00.00	0.00	0.00	388.74
98+50.00	0.00	0.00	388.74
99+00.00	0.00	0.00	388.74
99+50.00	0.00	0.00	388.74
100+00.00	0.00	0.00	388.74

NO.	DATE	DESCRIPTION
14	8/14/23	VILLAGE REVIEW
13	8/30/23	MWRD REVIEW #3
12	7/31/23	MWRD REVIEW #2
11	7/21/23	QA/QC - THW
10	6/29/23	MWRD REVIEW #1
9	6/2/23	DETENTION REVISION
8	5/9/23	WATERMAIN REROUTE
7	3/31/23	VILLAGE ENGINEERING COMMENTS
6	2/3/23	VILLAGE ENGINEERING COMMENTS
5	1/6/23	DD ISSUANCE
4	9/30/22	PROGRESS CD'S
3	8/22/22	50% CD'S
2	6/23/22	DD ISSUANCE
1	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK

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NORTHBROOK, IL 60062

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

STREAM CROSS SECTIONS

Sheet No.: C7.2

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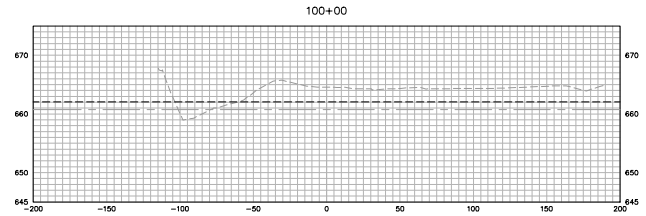

GRAPHIC SCALE IN FEET

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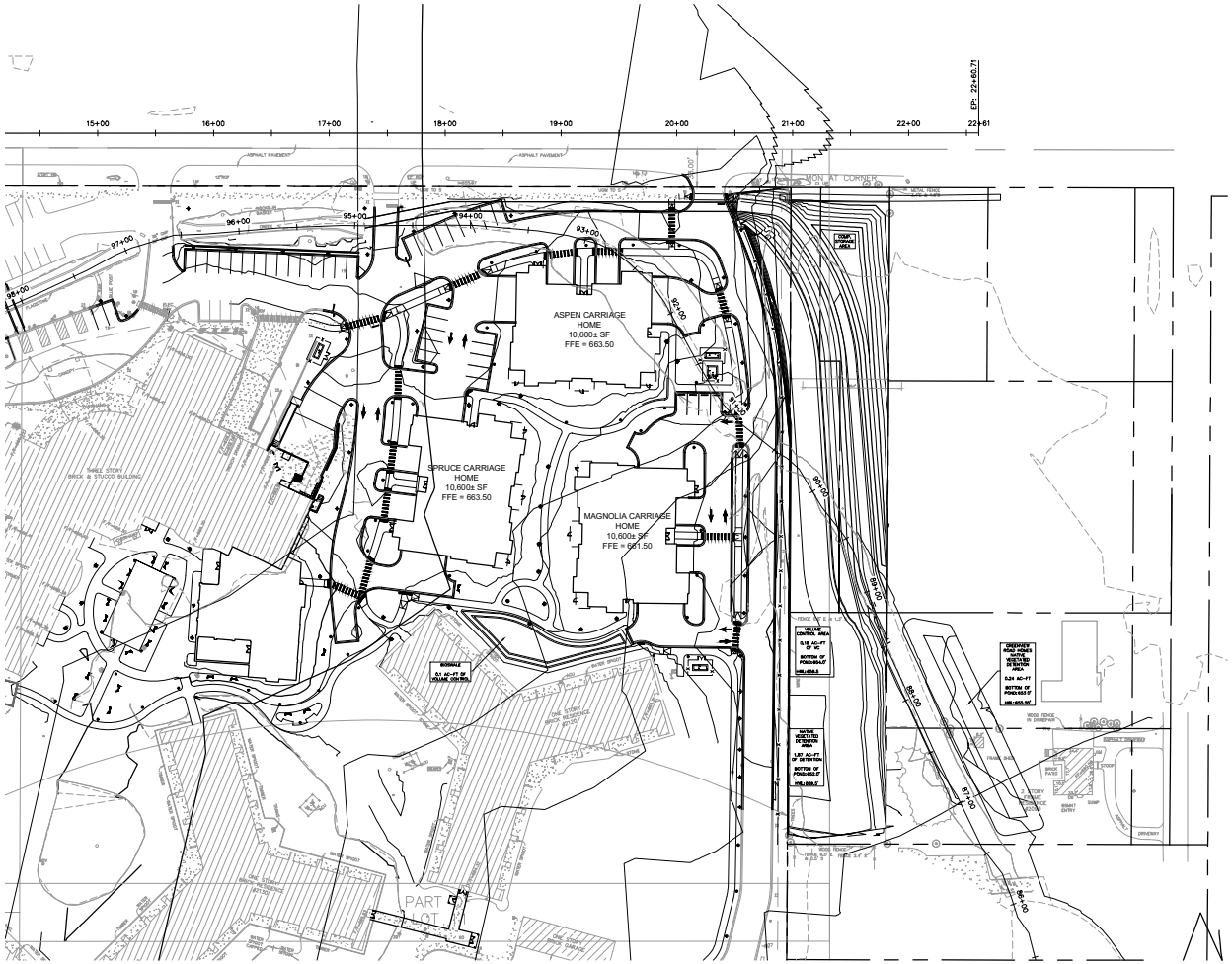

HATCH LEGEND

- 10 YEAR CUT
- 10 YEAR FILL
- 100 YEAR CUT
- 100 YEAR FILL

10-YR FILL			
STATION	AREA (SF)	VOLUME (CY)	CUMULATIVE VOLUME (CY)
86+28.33	0.00	0.00	0.00
86+29.08	0.00	0.00	0.00
86+50.00	0.00	0.00	0.00
87+00.00	0.00	0.00	0.00
87+24.92	0.00	0.00	0.00
87+57.16	48.25	28.39	28.39
87+72.75	2.68	14.70	43.09
88+15.84	1.82	3.62	46.71
89+00.00	4.76	10.28	56.99
89+50.00	31.73	33.63	90.62
90+00.00	33.21	60.13	150.75
90+52.00	0.00	33.87	184.62
91+00.00	48.69	43.50	228.12
91+50.00	51.64	92.96	321.08
91+87.12	63.67	79.26	400.34
92+27.47	54.30	88.21	488.55
93+00.00	50.22	140.60	629.14
93+50.00	37.78	81.92	711.07
94+00.00	35.01	67.53	778.60
94+50.00	0.00	32.42	811.01
95+00.00	0.01	0.01	811.02
95+50.00	1.32	1.21	812.24
96+00.00	0.03	1.24	813.47
96+50.00	0.00	0.03	813.50
97+00.00	0.00	0.00	813.50
97+50.00	0.00	0.00	813.50
98+00.00	0.00	0.00	813.50
98+50.00	0.00	0.00	813.50
99+00.00	0.00	0.00	813.50
99+50.00	0.00	0.00	813.50
100+00.00	0.00	0.00	813.50

10-YEAR CUT			
STATION	AREA (SF)	VOLUME (CY)	CUMULATIVE VOLUME (CY)
86+28.33	0.00	0.00	0.00
86+29.08	0.00	0.00	0.00
86+50.00	0.00	0.00	0.00
87+00.00	0.00	0.00	0.00
87+24.92	0.00	0.00	0.00
87+57.16	0.00	0.00	0.00
87+72.75	0.00	0.00	0.00
88+15.84	0.00	0.00	0.00
89+00.00	7.27	11.21	11.21
89+50.00	46.70	54.14	65.36
90+00.00	56.24	95.31	160.67
90+52.00	68.96	192.11	352.78
91+00.00	62.02	56.75	409.53
91+50.00	65.77	55.65	465.18
91+87.12	88.23	105.85	571.04
92+27.47	41.52	133.56	704.60
93+00.00	0.00	117.76	822.36
93+50.00	0.00	0.00	822.36
94+00.00	0.00	0.00	822.36
94+50.00	0.00	0.00	822.36
95+00.00	0.17	0.16	822.52
95+50.00	0.00	0.16	822.68
96+00.00	0.09	0.08	822.76
96+50.00	0.00	0.08	822.84
97+00.00	0.00	0.00	822.84
97+50.00	0.00	0.00	822.84
98+00.00	0.00	0.00	822.84
98+50.00	0.00	0.00	822.84
99+00.00	0.00	0.00	822.84
99+50.00	0.00	0.00	822.84
100+00.00	0.00	0.00	822.84

100-YR FILL			
STATION	AREA (SF)	VOLUME (CY)	CUMULATIVE VOLUME (CY)
86+28.33	0.00	0.00	0.00
86+29.08	0.00	0.00	0.00
86+50.00	0.00	0.00	0.00
87+00.00	0.00	0.00	0.00
87+24.92	0.00	0.00	0.00
87+57.16	2.34	1.62	1.62
87+72.75	4.44	1.96	3.58
88+15.84	6.84	9.12	12.70
89+00.00	5.62	19.69	32.39
89+50.00	12.24	15.80	48.19
90+00.00	19.47	29.36	77.55
90+52.00	0.00	20.36	97.92
91+00.00	17.12	15.35	113.26
91+50.00	33.27	46.83	160.09
91+87.12	42.92	52.37	212.47
92+27.47	41.42	62.39	274.86
93+00.00	41.64	106.72	381.58
93+50.00	20.88	57.58	439.15
94+00.00	24.72	42.43	481.59
94+50.00	2.81	25.49	507.07
95+00.00	0.00	2.60	509.67
95+50.00	1.85	1.67	511.34
96+00.00	1.82	3.34	514.69
96+50.00	0.00	1.71	516.39
97+00.00	0.00	0.00	516.39
97+50.00	0.00	0.00	516.39
98+00.00	0.00	0.00	516.39
98+50.00	0.00	0.00	516.39
99+00.00	0.00	0.00	516.39
99+50.00	0.00	0.00	516.39
100+00.00	0.00	0.00	516.39

100-YR CUT			
STATION	AREA (SF)	VOLUME (CY)	CUMULATIVE VOLUME (CY)
86+28.33	0.00	0.00	0.00
86+29.08	0.00	0.00	0.00
86+50.00	0.00	0.00	0.00
87+00.00	0.00	0.00	0.00
87+24.92	0.00	0.00	0.00
87+57.16	0.00	0.00	0.00
87+72.75	0.00	0.00	0.00
88+15.84	0.00	0.00	0.00
89+00.00	0.00	0.00	0.00
89+50.00	3.34	3.52	3.52
90+00.00	18.99	20.68	24.20
90+52.00	36.82	88.76	112.96
91+00.00	33.32	30.67	143.64
91+50.00	35.02	30.34	173.97
91+87.12	45.38	55.27	229.24
92+27.47	28.21	75.06	304.30
93+00.00	0.00	80.03	384.33
93+50.00	0.00	0.00	384.33
94+00.00	0.00	0.00	384.33
94+50.00	0.00	0.00	384.33
95+00.00	2.35	2.19	386.52
95+50.00	0.05	2.18	388.70
96+00.00	0.00	0.04	388.74
96+50.00	0.00	0.00	388.74
97+00.00	0.00	0.00	388.74
97+50.00	0.00	0.00	388.74
98+00.00	0.00	0.00	388.74
98+50.00	0.00	0.00	388.74
99+00.00	0.00	0.00	388.74
99+50.00	0.00	0.00	388.74
100+00.00	0.00	0.00	388.74

NO.	DATE	DESCRIPTION
8	8/14/23	VILLAGE REVIEW
7	8/30/23	MWRD REVIEW #3
6	7/31/23	MWRD REVIEW #2
5	7/21/23	QA/QC - THW
4	6/29/23	MWRD REVIEW #1
3	6/2/23	DETENTION REVISION
2	5/9/23	WATERMAIN REROUTE
1	3/31/23	VILLAGE ENGINEERING COMMENTS
0	2/3/23	VILLAGE ENGINEERING COMMENTS
1	1/6/23	DD ISSUANCE
9	9/30/22	PROGRESS CD'S
8	8/22/22	50% CD'S
6	6/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK

2625 TECHNY RD,
NORTHBROOK, IL 60062

Kimley»Horn

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

STREAM CROSS SECTIONS

Sheet No.: C7.3

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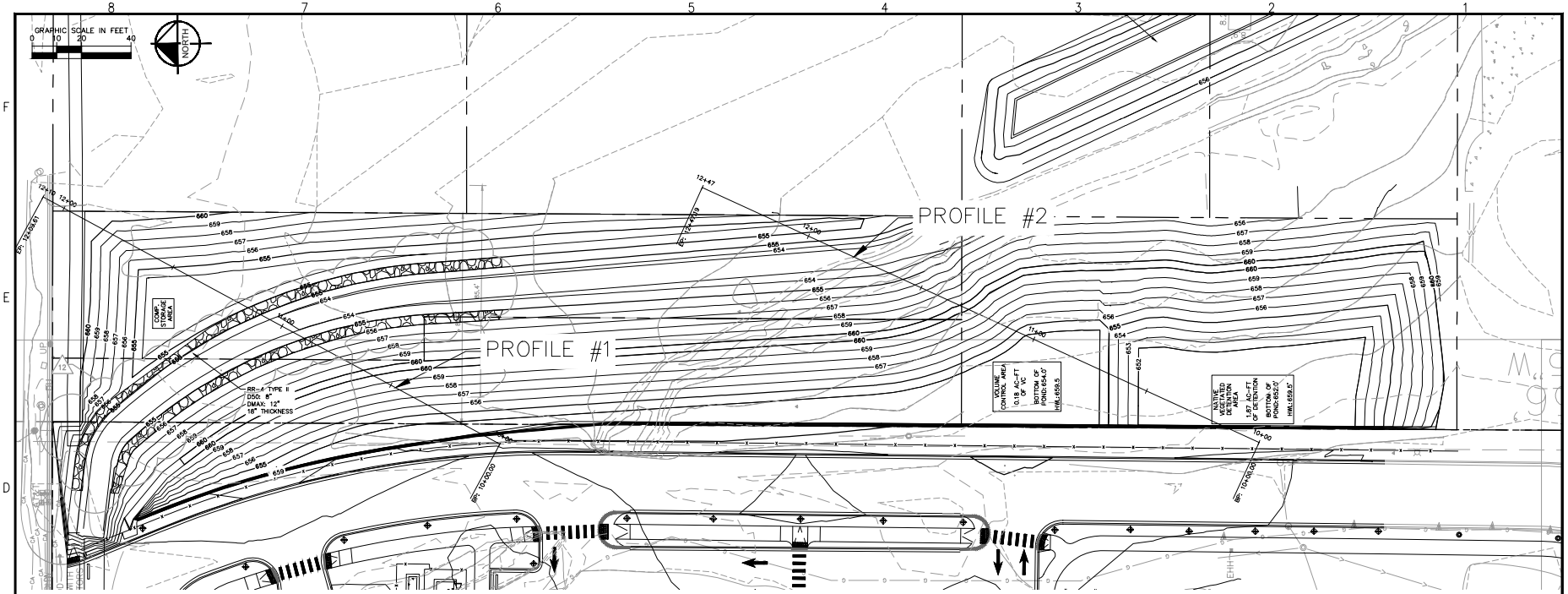
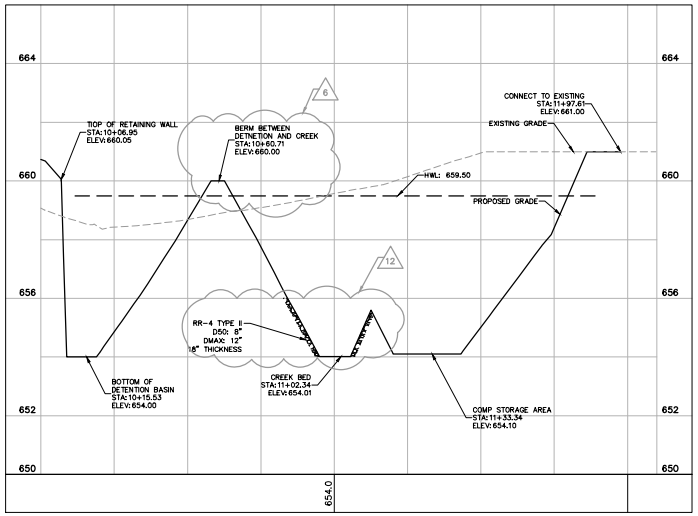
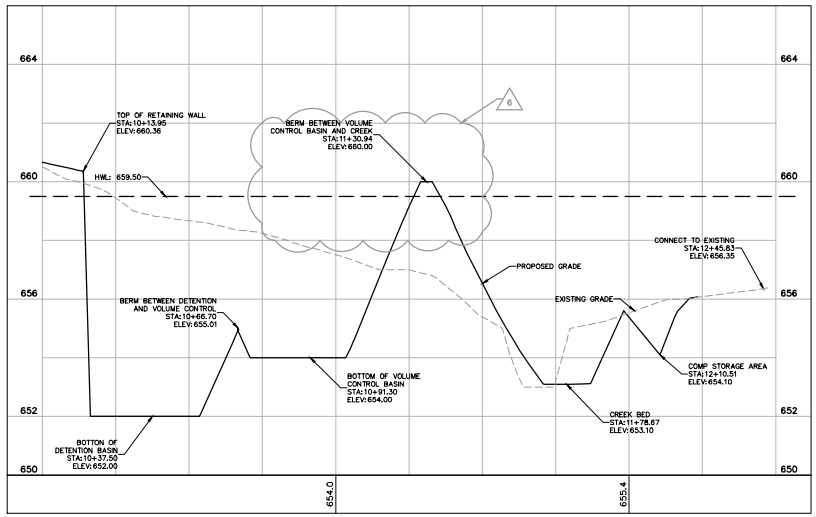




PROFILE #1
H: 1" = 20', V: 2" = 20'

GRAPHIC SCALE IN FEET
0 10 20 40
HORIZONTAL
0 1 2 4
VERTICAL



PROFILE #2
H: 1" = 20', V: 2" = 20'

GRAPHIC SCALE IN FEET
0 10 20 40
HORIZONTAL
0 1 2 4
VERTICAL

NO.	DATE	DESCRIPTION
9	8/14/23	VILLAGE REVIEW
8	8/30/23	MWRD REVIEW #3
7	7/31/23	MWRD REVIEW #2
6	7/21/23	QA/QC - THW
5	6/29/23	MWRD REVIEW #1
4	6/2/23	DETENTION REVISION
3	5/9/23	WATERMAIN REROUTE
2	3/31/23	VILLAGE ENGINEERING COMMENTS
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	1/6/23	DD ISSUANCE
	9/30/22	PROGRESS CD'S
	8/22/22	50% CD'S
	6/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK

2625 TECHNY RD,
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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

DETENTION CROSS SECTION

Sheet No.: C8.0

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StormTrap
MODULAR CONCRETE STORMWATER MANAGEMENT

THE STORMTRAP DRAWINGS SHALL NOT BE ALTERED OR MANIPULATED IN WHOLE OR IN PART WITHOUT WRITTEN CONSENT OF STORMTRAP. USE OF THESE DRAWINGS IS STRICTLY GRANTED TO YOU, OUR CLIENT, FOR THE SPECIFIED AND NAMED PROJECT ONLY.

COVENANT LIVING NORTHBROOK - EXISTING
NORTHBROOK, IL

SHEET INDEX

PAGE	DESCRIPTION
0.0	COVER SHEET
1.0	SINGLETRAP DESIGN CRITERIA
2.0	SINGLETRAP SYSTEM LAYOUT
2.09	SINGLETRAP SYSTEM LAYOUT
2.1	SINGLETRAP FOUNDATION LAYOUT
3.0	SINGLETRAP INSTALLATION SPECIFICATIONS
3.1	SINGLETRAP INSTALLATION SPECIFICATIONS
4.0	SINGLETRAP BACKFILL SPECIFICATIONS
5.0	RECOMMENDED PIPE/ACCESS PIPING SPECIFICATIONS
6.0	SINGLETRAP MODULE TYPES

STORMTRAP CONTACT INFORMATION

STORMTRAP SUPPLIER: STORMTRAP
CONTACT NAME: KATIE DAMES
CELL PHONE: 630-470-3014
SALES EMAIL: KDAMES@STORMTRAP.COM

STRUCTURAL DESIGN LOADING CRITERIA

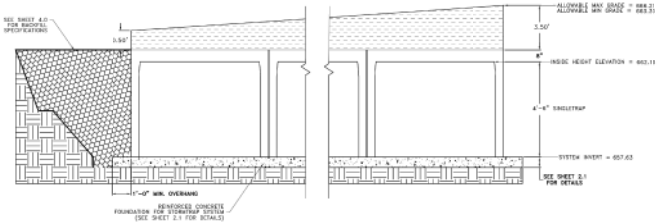
LIVE LOADING: **FIRE TRUCK OUTRIGGER LOADING 75 PSI ON A 3'x3' PAD**
GROUND WATER TABLE: BELOW INVERT OF SYSTEM
SOIL BEARING PRESSURE: 3000 PSF
SOIL DENSITY: 120 PCF
EQUIVALENT UNSATURATED
LATERAL ACTIVE EARTH PRESSURE: 35 PSF / FT.
EQUIVALENT SATURATED
LATERAL ACTIVE EARTH PRESSURE: 80 PSF/FT. OF WATER TABLE PRESENT)
APPLICABLE CODES: ASTM C857
ACI-318
BACKFILL TYPE: SEE SHEET 4.0 FOR BACKFILL OPTIONS

STORMTRAP SYSTEM INFORMATION

WATER STORAGE PROV: 43572.58 CUBIC FEET
UNIT HEADROOM: 4'-6" SINGLETRAP

SITE SPECIFIC DESIGN CRITERIA

1. STORMTRAP UNITS SHALL BE MANUFACTURED AND INSTALLED ACCORDING TO SHOP DRAWINGS APPROVED BY THE INSTALLING CONTRACTOR AND ENGINEER OF RECORD. THE SHOP DRAWINGS SHALL INDICATE SIZE AND LOCATION OF RISER OPENINGS AND INLET, OUTLET PIPE TYPES, SIZES, INVERT ELEVATIONS AND SIZE OF OPENINGS.
2. COVER RANGE: MIN. 0.50' MAX. 3.50'. CONSULT STORMTRAP FOR ADDITIONAL COVER OPTIONS.
3. ALL DIMENSIONS AND SOIL CONDITIONS, INCLUDING BUT NOT LIMITED TO GROUNDWATER AND SOIL BEARING CAPACITY ARE REQUIRED TO BE VERIFIED IN THE FIELD BY OTHERS PRIOR TO STORMTRAP INSTALLATION.
4. FOR STRUCTURAL CALCULATIONS THE GROUND WATER TABLE IS ASSUMED TO BE BELOW INVERT OF SYSTEM IF WATER TABLE IS DIFFERENT THAN ASSUMED, CONTACT STORMTRAP.
5. SYSTEM DESIGN MAY ALLOW FOR INCIDENTAL LEAKAGE AND WILL NOT BE SUBJECT TO LEAKAGE TESTING.



4'-10" SINGLETRAP

ENGINEER INFORMATION:
KIMLEY-HORN & ASSOCIATES
4201 WINFIELD RD
WARRENVILLE, IL 60555
630-487-5550

PROJECT INFORMATION:
COVENANT LIVING NORTHBROOK EXISTING
NORTHBROOK, IL

CURRENT ISSUE DATE: 12/15/2022
ISSUED FOR: PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
1	12/15/22	PRELIMINARY	JPH

SCALE: NTS
SHEET TITLE: COVER SHEET
SHEET NUMBER: 0.0

SHEET TITLE: SINGLETRAP DESIGN CRITERIA
SHEET NUMBER: 1.0

BILL OF MATERIALS

QTY.	UNIT TYPE	DESCRIPTION	WEIGHT
79	I	4'-6" SINGLETRAP	13365
12	II	4'-6" SINGLETRAP	8375
18	III	4'-6" SINGLETRAP	13485
6	IV	4'-6" SINGLETRAP	3450
6	V	4'-6" SINGLETRAP	3450
24	79 PANEL	8" THICK PANEL	2640
20	JOINTMAT	150' PER ROLL	
34	JOINTMAT	14.5' PER ROLL	
TOTAL PIECES = 121			
TOTAL PANELS = 24			
HEAVIEST PICK WEIGHT = 15,485			

LOADING DISCLAIMER:

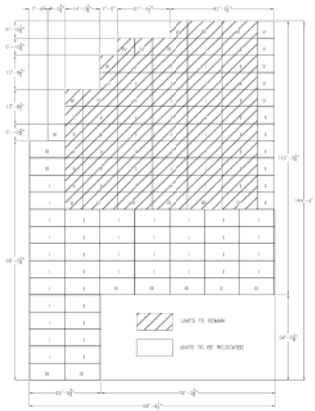
STORMTRAP IS NOT DESIGNED TO ACCEPT ANY ADDITIONAL LOADINGS FROM NEARBY STRUCTURES NEXT TO OR OVER THE TOP OF STORMTRAP. IF ADDITIONAL LOADING CONSIDERATIONS ARE REQUIRED FOR STRUCTURAL DESIGN OF STORMTRAP, PLEASE CONTACT STORMTRAP IMMEDIATELY.

TREE LIKING DISCLAIMER:

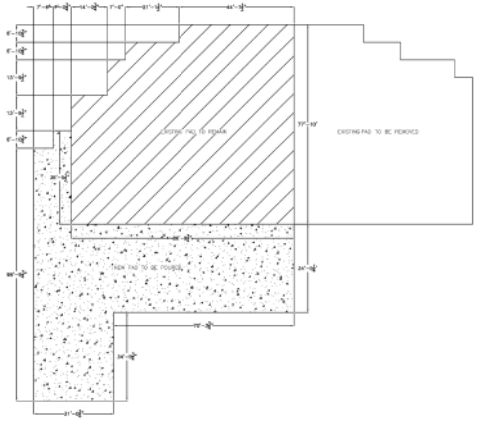
THE STORMTRAP SYSTEM HAS NOT BEEN DESIGNED TO SUPPORT THE ADDITIONAL WEIGHT OF ANY TREES. FURTHERMORE, THE ROOTS OF THE TREES MUST BE CONTAINED TO PREVENT FUTURE DAMAGE TO THE STORMTRAP SYSTEM. STORMTRAP ACCEPTS NO LIABILITY FOR DAMAGES CAUSED BY TREES OR OTHER VEGETATION PLACE AROUND OR ON TOP OF THE SYSTEM.

DESIGN CRITERIA
ALLOWABLE MAX GRADE = 668.21
ALLOWABLE MIN GRADE = 663.38
INSIDE HEIGHT ELEVATION = 662.13
SYSTEM INVERT = 657.63

NOTES:
1. OVERLANDING OF STORMTRAP SYSTEM SHOWN BELOW ALLOW FOR A 3/4" GAP BETWEEN EACH MODULE.
2. ALL DIMENSIONS TO BE VERIFIED IN THE FIELD BY OTHERS.
3. SEE SHEET 3.0 FOR INSTALLATION SPECIFICATIONS.
4. SP - INDICATES A MODULE WITH MODIFICATIONS
5. P - INDICATES A MODULE WITH A PANEL ATTACHMENT.
6. CONTRACTORS RESPONSIBILITY TO ENSURE CONSISTENCY/ACCURACY TO FINAL ENGINEER OF RECORD PLAN SET.



SHEET TITLE: SINGLETRAP SYSTEM LAYOUT
SHEET NUMBER: 2.0



CONCRETE FOUNDATION NOTES:
1. CONCRETE FOUNDATION TO BE SUPPLIED AND INSTALLED BY OTHERS.
2. CONCRETE STRENGTH @ 28 DAYS, 5%-8% ENTRAINED AIR, 4" MAX SLUMP.
3. NET ALLOWABLE SOIL PRESSURE AS INDICATED ON SHEET 1.1.
4. SOIL CONDITIONS TO BE VERIFIED ON SITE BY OTHERS.
5. REBAR: ASTM A615 GRADE 60, BLACK BAR.
6. DIMENSION OF FOUNDATION MUST HAVE 1'-0" OVERHANG BEYOND EXTERNAL FACE OF STORMTRAP.
7. DIMENSION OF STORMTRAP SYSTEM ALLOW FOR A 3/4" GAP BETWEEN EACH MODULE.
8. ALL DIMENSIONS TO BE VERIFIED IN THE FIELD BY OTHERS.
9. SEE SHEET 3.0 FOR INSTALLATION SPECIFICATIONS.

STORMTRAP FOUNDATION DETAIL

FIRETRUCK OUTRIGGER LOADING - (AO 318, ST2) 75 PSI ON 24"x24" PAD

MAXIMUM SYSTEM COVER	SLAB THICKNESS	CONCRETE STRENGTH	REINFORCEMENT (WIDTH DIRECTION)	REINFORCEMENT (LENGTH DIRECTION)	"A" CLEAR COVER
1'-6" - 2'-0"	8"	4000 PSI	#5 @ 12" O.C.	#5 @ 12" O.C.	3.5"
2'-1" - 3'-0"	8"	4000 PSI	#5 @ 12" O.C.	#5 @ 12" O.C.	3.5"
3'-1" - 4'-0"	8"	4000 PSI	#5 @ 18" O.C.	#5 @ 18" O.C.	3.375"
4'-1" - 5'-0"	8"	4000 PSI	#5 @ 18" O.C.	#5 @ 18" O.C.	3.375"
5'-1" - 6'-0"	8"	4000 PSI	#5 @ 18" O.C.	#5 @ 18" O.C.	3.375"
6'-1" - 7'-0"	8"	4000 PSI	#5 @ 18" O.C.	#5 @ 18" O.C.	3.375"
7'-1" - 8'-0"	9"	4000 PSI	#5 @ 12" O.C.	#5 @ 12" O.C.	3.875"
8'-1" - 9'-0"	9"	4000 PSI	#5 @ 12" O.C.	#5 @ 12" O.C.	3.875"
9'-1" - 10'-0"	9"	4000 PSI	#5 @ 12" O.C.	#5 @ 12" O.C.	3.875"

SHEET TITLE: SINGLETRAP FOUNDATION LAYOUT
SHEET NUMBER: 2.1

NO.	DATE	DESCRIPTION
1	8/14/23	VILLAGE REVIEW
2	8/30/23	MWRD REVIEW #2
3	7/31/23	MWRD REVIEW #2
4	7/21/23	QA/QC - THW
5	6/29/23	MWRD REVIEW #1
6	6/2/23	DETENTION REVISION
7	5/9/23	WATERMAIN REROUTE
8	5/3/23	VILLAGE ENGINEERING COMMENTS
9	2/3/23	VILLAGE ENGINEERING COMMENTS
10	1/6/23	DD ISSUANCE
11	9/30/22	PROGRESS CD'S
12	8/22/22	50% CD'S
13	8/23/22	DD ISSUANCE
	8/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK
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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

UNDERGROUND DETENTION DETAILS

Sheet No.: C8.1

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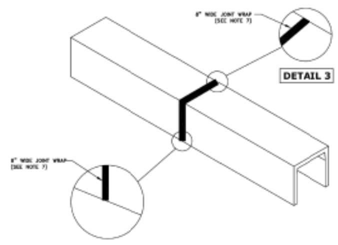
4403

8 7 6 5 4 3 2 1

STORMTRAP INSTALLATION SPECIFICATIONS

1. STORMTRAP SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C891, STANDARD FOR INSTALLATION OF UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES, THE FOLLOWING ADDITIONS AND/OR EXCEPTIONS SHALL APPLY:
2. IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO ENSURE THAT PROPER/ADEQUATE EQUIPMENT IS USED TO SET/INSTALL THE MODULES.
3. STORMTRAP MODULES SHALL BE PLACED ON A LEVEL CONCRETE FOUNDATION (SEE SHEET 2.1) WITH A 1'-0" OVERHANG ON ALL SIDES THAT SHALL BE POURED IN PLACE BY INSTALLING CONTRACTOR. A QUALIFIED GEOTECHNICAL ENGINEER WILL BE EMPLOYED, BY OWNER, TO PROVIDE ASSISTANCE IN EVALUATING THE EXISTING SOIL CONDITIONS TO ENSURE THAT THE SOIL BEARING PRESSURE MEETS OR EXCEEDS THE STRUCTURAL DESIGN LOADING CRITERIA AS SPECIFIED ON SHEET 1.0.
4. THE STORMTRAP MODULES SHALL BE PLACED SUCH THAT THE MAXIMUM SPACE BETWEEN ADJACENT MODULES DOES NOT EXCEED ¾" (SEE DETAIL 2). IF THE SPACE EXCEEDS ¾", THE MODULES SHALL BE RESET WITH APPROPRIATE ADJUSTMENT MADE TO LINE AND GRADE TO BRING THE SPACE INTO SPECIFICATION.
5. THE PERIMETER HORIZONTAL JOINT BETWEEN THE STORMTRAP MODULES AND THE CONCRETE FOUNDATION SHALL BE SEALED TO THE FOUNDATION WITH PRE-FORMED MASTIC JOINT SEALER ACCORDING TO ASTM C891, 8.8 AND 8.12 (SEE DETAIL 1). THE MASTIC JOINT TAPE DOES NOT PROVIDE A WATERTIGHT SEAL.
6. ALL EXTERIOR ROOF AND EXTERIOR VERTICAL WALL JOINTS BETWEEN ADJACENT STORMTRAP MODULES SHALL BE SEALED WITH 8" WIDE PRE-FORMED, COLD-APPLIED, SELF-ADHERING ELASTOMERIC RESIN, BONDED TO A WOVEN, HIGHLY PUNCTURE RESISTANT POLYMER WRAP, CONFORMING TO ASTM C891 AND SHALL BE INTEGRATED WITH PRIMER SEALANT AS APPROVED BY STORMTRAP (SEE DETAILS 2, 3, & 4). THE JOINT WRAP DOES NOT PROVIDE A WATERTIGHT SEAL. THE SOLE PURPOSE OF THE JOINT WRAP IS TO PROVIDE A SILT AND SOIL TIGHT SYSTEM. THE ADHESIVE EXTERIOR JOINT WRAP SHALL BE INSTALLED ACCORDING TO THE FOLLOWING INSTALLATION INSTRUCTIONS:
   6.1. USE A BRUSH OR WET CLOTH TO THOROUGHLY CLEAN THE OUTSIDE SURFACE AT THE POINT WHERE JOINT WRAP IS TO BE APPLIED.
   6.2. A RELEASE PAPER PROTECTS THE ADHESIVE SIDE OF THE JOINT WRAP. PLACE THE ADHESIVE TAPE (ADHESIVE SIDE DOWN) AROUND THE STRUCTURE, REMOVING THE RELEASE PAPER AS YOU GO. PRESS THE JOINT WRAP FIRMLY AGAINST THE STORMTRAP MODULE SURFACE WHEN APPLYING.
7. IF THE CONTRACTOR NEEDS TO CANCEL ANY SHIPMENTS, THEY MUST DO SO 48 HOURS PRIOR TO THEIR SCHEDULED ARRIVAL AT THE JOB SITE. IF CANCELED AFTER THAT TIME, PLEASE CONTACT THE PROJECT MANAGER.
8. IF THE STORMTRAP MODULE(S) IS DAMAGED IN ANY WAY PRIOR, DURING, OR AFTER INSTALL, STORMTRAP MUST BE CONTACTED IMMEDIATELY TO ASSESS THE DAMAGE AND DETERMINE WHETHER OR NOT THE MODULE(S) WILL NEED TO BE REPLACED. IF ANY MODULE ARRIVES AT THE JOBSITE DAMAGED DO NOT UNLOAD IT; CONTACT STORMTRAP IMMEDIATELY. ANY DAMAGE NOT REPORTED BEFORE THE TRUCK IS UNLOADED WILL BE THE CONTRACTOR'S RESPONSIBILITY.
9. STORMTRAP MODULES CANNOT BE ALTERED IN ANY WAY AFTER MANUFACTURING WITHOUT WRITTEN CONSENT FROM STORMTRAP.



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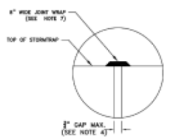

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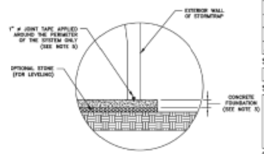

DETAIL 1

StormTrap®
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ENGINEER INFORMATION:	KIMLEY-HORN & ASSOCIATES 4201 WINFIELD RD WARRENVILLE, IL 60555 630-487-5550
PROJECT INFORMATION:	COVENANT LIVING NORTHBROOK EXISTING NORTHBROOK, IL
CURRENT ISSUE DATE:	12/15/2022
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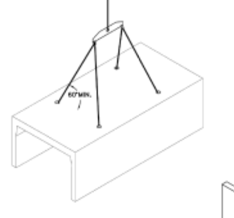
REV.	DATE:	ISSUED FOR:	DWN BY:
1	12/15/22	PRELIMINARY	JPH

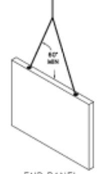
SCALE: NTS
SHEET TITLE: SINGLETRAP INSTALLATION SPECIFICATIONS
SHEET NUMBER: 3.0

STORMTRAP MODULE LIFTING INSTALLATION NOTES

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL (4) CHAINS/CABLES ARE SECURED PROPERLY TO THE LIFTING ANCHORS AND IN EQUAL TENSION WHEN LIFTING THE STORMTRAP MODULE (SEE RECOMMENDATIONS 2 & 3).
2. MINIMUM 7'-0" CHAIN/CABLE LENGTH TO BE USED TO LIFT STORMTRAP MODULES (SUPPLIED BY CONTRACTOR).
3. CONTRACTOR TO ENSURE MINIMUM LIFTING ANGLE IS 60° FROM TOP SURFACE OF STORMTRAP MODULE. SEE DETAIL.
4. IT IS UNDERSTOOD AND AGREED THAT AT ALL TIMES DURING WHICH HOISTING AND RIGGING EQUIPMENT IS BEING SUPPLIED TO THE PURCHASER, OPERATOR OF SUCH EQUIPMENT SHALL BE IN CHARGE OF HIS ENTIRE EQUIPMENT AND SHALL AT ALL TIMES BE THE JUDGE OF THE SAFETY AND PROPERTY OF ANY SUGGESTION TO HIM FROM THE SELLER, ITS AGENTS OR EMPLOYEES. PURCHASER AGREES TO SAVE, INDEMNIFY AND HOLD HARMLESS SELLER FROM ALL LOSS, CLAIMS, DEMANDS OR CAUSES OF ACTION, WHICH MAY ARISE FROM THE EXISTENCE OR OPERATION OF SAID EQUIPMENT.



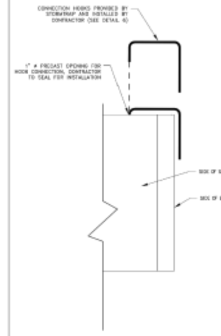
MODULE LIFTING DETAIL



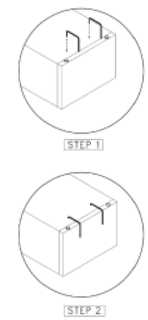
END PANEL LIFTING DETAIL

END PANEL ERECTION/INSTALLATION NOTES

1. END PANELS WILL BE SUPPLIED TO CLOSE OFF OPEN ENDS OF ROWS.
2. PANELS SHALL BE INSTALLED IN A TILT UP FASHION DIRECTLY ADJACENT TO OPEN END OF MODULE (REFER TO SHEET 2.0 FOR END PANEL LOCATIONS).
3. CONNECTION HOOKS WILL BE SUPPLIED WITH END PANELS TO SECURELY CONNECT PANEL TO ADJACENT STORMTRAP MODULE (SEE PANEL CONNECTION ELEVATION VIEW).
4. ONCE CONNECTION HOOK IS ATTACHED, LIFTING CLUTCHES MAY BE REMOVED.
5. JOINT WRAP SHALL BE PLACED AROUND PERIMETER JOINT PANEL (SEE SHEET 3.0).



PANEL CONNECTION ELEVATION VIEW



DETAIL 6

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ENGINEER INFORMATION:	KIMLEY-HORN & ASSOCIATES 4201 WINFIELD RD WARRENVILLE, IL 60555 630-487-5550
PROJECT INFORMATION:	COVENANT LIVING NORTHBROOK EXISTING NORTHBROOK, IL
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SHEET TITLE: SINGLETRAP INSTALLATION SPECIFICATIONS
SHEET NUMBER: 3.1

F E D C B A

ZONE CHART		
ZONES	ZONE DESCRIPTIONS	REMARKS
ZONE 1	FOUNDATION AGGREGATE	#5 (¾") STONE AGGREGATE (SEE NOTE 4 FOR DESCRIPTION)
ZONE 2	BACKFILL	UNIFIED SOILS CLASSIFICATION (GW, SP, SW, SP) OR SEE BELOW FOR APPROVED BACKFILL OPTIONS
ZONE 3	FINAL COVER OVERTOP	MATERIALS NOT TO EXCEED 120 PCF

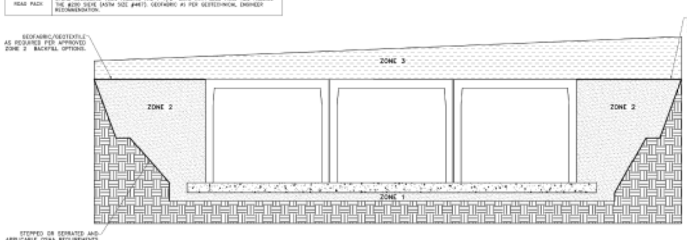
FILL DEPTH	TRACK WIDTH	MAX VEHICLE WEIGHT (KIPS)	MAX GROUND PRESSURE
12"	12"	51.8	1690 psf
	18"	56.1	1219 psf
	24"	68.1	1111 psf
	30"	75.7	1000 psf
	36"	85.0	924 psf

NOTE:
TRACK LENGTH NOT TO EXCEED 15'-4".
ONLY TWO TRACKS PER VEHICLE.

APPROVED ZONE 2 BACKFILL OPTIONS	
OPTION	REMARKS
¾" STONE AGGREGATE	THE STONE AGGREGATE SHALL CONSIST OF WASHED, CLEAN AND FREE DRAINING ANGULAR MATERIAL. THE SIZE OF THIS MATERIAL SHALL HAVE 100% PASSING THE 1" SIEVE WITH 0% TO 5% PASSING THE #8 SIEVE. THIS MATERIAL SHALL BE SEPARATED FROM NATIVE MATERIAL USING GEOFABRIC AROUND THE PERIMETER OF THE BACKFILL (ASTM SIZE #57) AS DETERMINED BY THE GEOTECHNICAL ENGINEER.
SAND	IMPORTED PURE SAND IS PERMITTED TO BE USED AS BACKFILL IF IT IS CLEAN AND FREE DRAINING. THE SAND USED FOR BACKFILLING SHALL HAVE LESS THAN 40% PASSING #40 SIEVE AND LESS THAN 5% PASSING #200 SIEVE. THIS MATERIAL SHALL BE SEPARATED FROM NATIVE MATERIAL USING GEOFABRIC AROUND THE PERIMETER OF THE SAND BACKFILL.
CRUSHED CONCRETE AGGREGATE	CLEAN, FREE DRAINING CRUSHED CONCRETE AGGREGATE MATERIAL CAN BE USED AS BACKFILL FOR STORMTRAP'S MODULES. THE SIZE OF THIS MATERIAL SHALL HAVE 100% PASSING THE 1" SIEVE WITH 0% TO 5% PASSING THE #8 SIEVE. THIS MATERIAL SHALL BE SEPARATED FROM NATIVE MATERIAL USING GEOFABRIC AROUND THE PERIMETER OF THE BACKFILL.
ROAD PACK	STONE AGGREGATE 100% PASSING THE 1-1/2" SIEVE WITH LESS THAN 12% PASSING THE #200 SIEVE (ASTM SIZE #467). GEOFABRIC #1 PER GEOTECHNICAL ENGINEER RECOMMENDATION.

STORMTRAP ZONE INSTALLATION SPECIFICATIONS/PROCEDURES

1. THE FILL PLACED AROUND THE STORMTRAP MODULES MUST DEPOSITED ON BOTH SIDES AT THE SAME TIME AND TO APPROXIMATELY THE SAME ELEVATION. AT NO TIME SHALL THE FILL BEHIND ONE SIDE WALL BE MORE THAN 2'-0" HIGHER THAN THE FILL ON THE OPPOSITE SIDE. BACKFILL SHALL EITHER BE COMPACTED AND/OR VIBRATED TO ENSURE THAT BACKFILL AGGREGATE/STONE MATERIAL IS WELL SEATED AND PROPERLY INTER LOCKED. CARE SHALL BE TAKEN TO PREVENT ANY WEDGING ACTION AGAINST THE STRUCTURE, AND ALL SLOPES WITHIN THE AREA TO BE BACKFILLED MUST BE STEPPED OR SERRATED TO PREVENT WEDGING ACTION. CARE SHALL ALSO BE TAKEN AS NOT TO DISRUPT THE JOINT WRAP FROM THE JOINT DURING THE BACKFILL PROCESS. BACKFILL MUST BE FREE-DRAINING MATERIAL. SEE ZONE 2 BACKFILL CHART ON THIS PAGE FOR APPROVED BACKFILL OPTIONS. IF NATIVE EARTH IS SUSCEPTIBLE TO MIGRATION, CONFIRM WITH GEOTECHNICAL ENGINEER AND PROVIDE PROTECTION AS REQUIRED (PROVIDED BY OTHERS).
2. DURING PLACEMENT OF MATERIAL OVERTOP THE SYSTEM, AT NO TIME SHALL MACHINERY BE USED OVERTOP THAT EXCEEDS THE DESIGN LIMITATIONS OF THE SYSTEM. WHEN PLACEMENT OF MATERIAL OVERTOP, MATERIAL SHALL BE PLACED SUCH THAT THE DIRECTION OF PLACEMENT IS PARALLEL WITH THE OVERALL LONGITUDINAL DIRECTION OF THE SYSTEM WHENEVER POSSIBLE.
3. THE FILL PLACED OVERTOP THE SYSTEM SHALL BE PLACED AT A MINIMUM OF 6" LIFTS. AT NO TIME SHALL MACHINERY OR VEHICLES GREATER THAN THE DESIGN HS-20 LOADING CRITERIA TRAVEL OVERTOP THE SYSTEM WITHOUT THE MINIMUM DESIGN COVERAGE. IF TRAVEL IS NECESSARY OVERTOP THE SYSTEM PRIOR TO ACHIEVING THE MINIMUM DESIGN COVER, IT MAY BE NECESSARY TO REDUCE THE ULTIMATE LOAD/BURDEN OF THE OPERATING MACHINERY SO AS TO NOT EXCEED THE DESIGN CAPACITY OF THE SYSTEM. IN SOME CASES, IN ORDER TO ACHIEVE REQUIRED COMPACTION, HAND COMPACTION MAY BE NECESSARY IN ORDER NOT TO EXCEED THE ALLOTTED DESIGN LOADING. SEE CHART FOR TRACKED VEHICLE WIDTH AND ALLOWABLE MAXIMUM PRESSURE PER TRACK.
4. STONE AGGREGATE FOUNDATION IN ZONE 1 IS RECOMMENDED FOR LEVELING PURPOSES ONLY (OPTIONAL).



BACKFILL DETAIL

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ENGINEER INFORMATION:	KIMLEY-HORN & ASSOCIATES 4201 WINFIELD RD WARRENVILLE, IL 60555 630-487-5550
PROJECT INFORMATION:	COVENANT LIVING NORTHBROOK EXISTING NORTHBROOK, IL
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1	12/15/22	PRELIMINARY	JPH

SCALE: NTS
SHEET TITLE: SINGLETRAP BACKFILL SPECIFICATIONS
SHEET NUMBER: 4.0

RECOMMENDED ACCESS OPENING SPECIFICATION

1. A TYPICAL ACCESS OPENING FOR THE STORMTRAP SYSTEM ARE 2'-0" IN DIAMETER. ACCESS OPENINGS LARGER THAN 3'-0" IN DIAMETER NEED TO BE APPROVED BY STORMTRAP. ALL OPENINGS MUST RETAIN AT LEAST 1'-0" OF CLEARANCE FROM THE END OF THE STORMTRAP MODULE UNLESS NOTED OTHERWISE. ALL ACCESS OPENINGS TO BE LOCATED ON INSIDE LEG UNLESS OTHERWISE SPECIFIED.
2. PLASTIC COATED STEEL STEPS PRODUCED BY M.A. INDUSTRIES PART #PS3-PFC OR APPROVED EQUAL (SEE STEP DETAIL) ARE PROVIDED INSIDE ANY MODULE WHERE DEEMED NECESSARY. THE HIGHEST STEP IN THE MODULE IS TO BE PLACED A DISTANCE OF 1'-0" FROM THE INSIDE EDGE OF THE STORMTRAP MODULES. ALL ENSUING STEPS SHALL BE PLACED AT A DISTANCE BETWEEN 10" MIN AND 14" MAX BETWEEN THEM. STEPS MAY BE MOVED OR ALTERED TO AVOID OPENINGS OR OTHER IRREGULARITIES IN THE MODULE.
3. STORMTRAP LIFTING INSERTS MAY BE RELOCATED TO AVOID INTERFERENCE WITH ACCESS OPENINGS OR THE CENTER OF GRAVITY OF THE MODULE AS NEEDED.
4. STORMTRAP ACCESS OPENINGS MAY BE RELOCATED TO AVOID INTERFERENCE WITH INLET AND/OR OUTLET PIPE OPENINGS SO PLACEMENT OF STEPS IS ATTAINABLE.
5. ACCESS OPENINGS SHOULD BE LOCATED IN ORDER TO MEET THE APPROPRIATE MUNICIPAL REQUIREMENTS. STORMTRAP RECOMMENDS AT LEAST TWO ACCESS OPENINGS PER SYSTEM FOR ACCESS AND INSPECTION.
6. USE PRECAST ADJUSTING RINGS AS NEEDED TO MEET GRADE. STORMTRAP RECOMMENDS FOR COVER OVER 2' TO USE PRECAST BARREL OR CONE SECTIONS. (PROVIDED BY OTHERS)

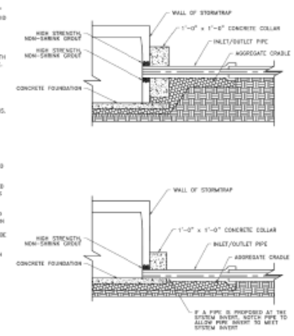
RECOMMENDED PIPE OPENING SPECIFICATION

1. MINIMUM EDGE DISTANCE FOR AN OPENING ON THE OUTSIDE WALL SHALL BE NO LESS THAN 1'-0".
2. MAXIMUM OPENING SIZE TO BE DETERMINED BY THE MODULE HEIGHT. PREFERRED OPENING SIZE ø 36" OR LESS. ANY OPENING NEEDED THAT DOES NOT FIT THIS CRITERIA SHALL BE BROUGHT TO THE ATTENTION OF STORMTRAP FOR REVIEW.
3. CONNECTING PIPES SHALL BE INSTALLED WITH A 1'-0" CONCRETE COLLAR, AND AN AGGREGATE CRADLE FOR AT LEAST ONE PIPE LENGTH (SEE PIPE CONNECTION DETAIL). A STRUCTURAL GRADE CONCRETE OR HIGH STRENGTH, NON-SHRINK GROUT WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI SHALL BE USED.
4. THE ANNULAR SPACE BETWEEN THE PIPE AND THE HOLE SHALL BE FILLED WITH HIGH STRENGTH NON-SHRINK GROUT.

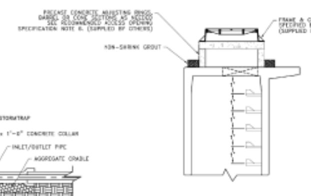
RECOMMENDED PIPE INSTALLATION INSTRUCTIONS

1. CLEAN AND LIGHTLY LUBRICATE ALL OF THE PIPE TO BE INSERTED INTO STORMTRAP.
2. IF PIPE IS CUT, CARE SHOULD BE TAKEN TO ALLOW NO SHARP EDGES. BEVEL AND LUBRICATE LEAD END OF PIPE.
3. ALIGN CENTER OF PIPE TO CORRECT ELEVATION AND INSERT INTO OPENING.

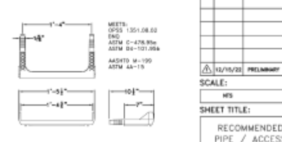
NOTE: ALL ANCILLARY PRODUCTS/SPECIFICATIONS RECOMMENDED AND SHOWN ON THIS SHEET ARE RECOMMENDATIONS ONLY AND SUBJECT TO CHANGE PER THE INSTALLING CONTRACTOR AND/OR PER LOCAL MUNICIPAL CODE/REQUIREMENTS.



PIPE CONNECTION DETAIL



RISER/STAIR DETAIL



STEP DETAIL

*** NOTICE *** 03-29-2022
DUE TO CURRENT INCONSISTENCIES IN THE 16" STEP SUPPLY, STORMTRAP MAY SUBSTITUTE THE 16" STEP WITH THE CLOSEST ALTERNATIVE LENGTH STEP UNTIL THE SUPPLY CHAIN ISSUE IS RESOLVED.

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PROJECT INFORMATION:	COVENANT LIVING NORTHBROOK EXISTING NORTHBROOK, IL
CURRENT ISSUE DATE:	12/15/2022
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SCALE: NTS
SHEET TITLE: RECOMMENDED PIPE / ACCESS OPENING SPECIFICATIONS
SHEET NUMBER: 5.0

NO.	DATE	DESCRIPTION
14	9/14/23	VILLAGE REVIEW
13	8/30/23	MWRD REVIEW #3
12	7/31/23	MWRD REVIEW #2
11	7/21/23	QA/QC - THW
10	6/29/23	MWRD REVIEW #1
9	6/2/23	DETENTION REVISION
8	5/9/23	WATERMAIN REROUTE
7	3/31/23	VILLAGE ENGINEERING COMMENTS
6	2/3/23	VILLAGE ENGINEERING COMMENTS
5	1/6/23	DD ISSUANCE
4	9/30/22	PROGRESS CD'S
3	8/22/22	50% CD'S
2	6/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK

2625 TECHNY RD, NORTHBROOK, IL 60062

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

UNDERGROUND DETENTION DETAILS

Sheet No.: C8.2

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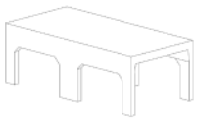

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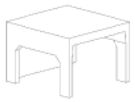

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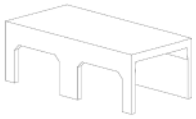

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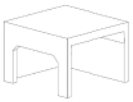

TYPE IV

TYPE V

VI PANEL

NOTES:
1. OPENING LOCATIONS AND SHAPES MAY VARY.
2. UP = INDICATES A MODULE WITH MODIFICATIONS.
3. T = INDICATES A MODULE WITH A PANEL ATTACHMENT.
4. POCKET WINDOW OPENINGS ARE OPTIONAL.

StormTrap

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WARRENVILLE, IL 60555
630-487-5550

PROJECT INFORMATION:

COVENANT LIVING
NORTHBROOK
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NORTHBROOK, IL

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NTS

SHEET TITLE:

SINGLETRAP MODULE TYPES

SHEET NUMBER:

6.0

NO.	DATE	DESCRIPTION
1	8/14/23	VILLAGE REVIEW
2	8/30/23	MWRD REVIEW #3
3	7/31/23	MWRD REVIEW #2
4	7/21/23	DA/DC - 11IW
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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

UNDERGROUND DETENTION DETAILS

Sheet No.: C8.3

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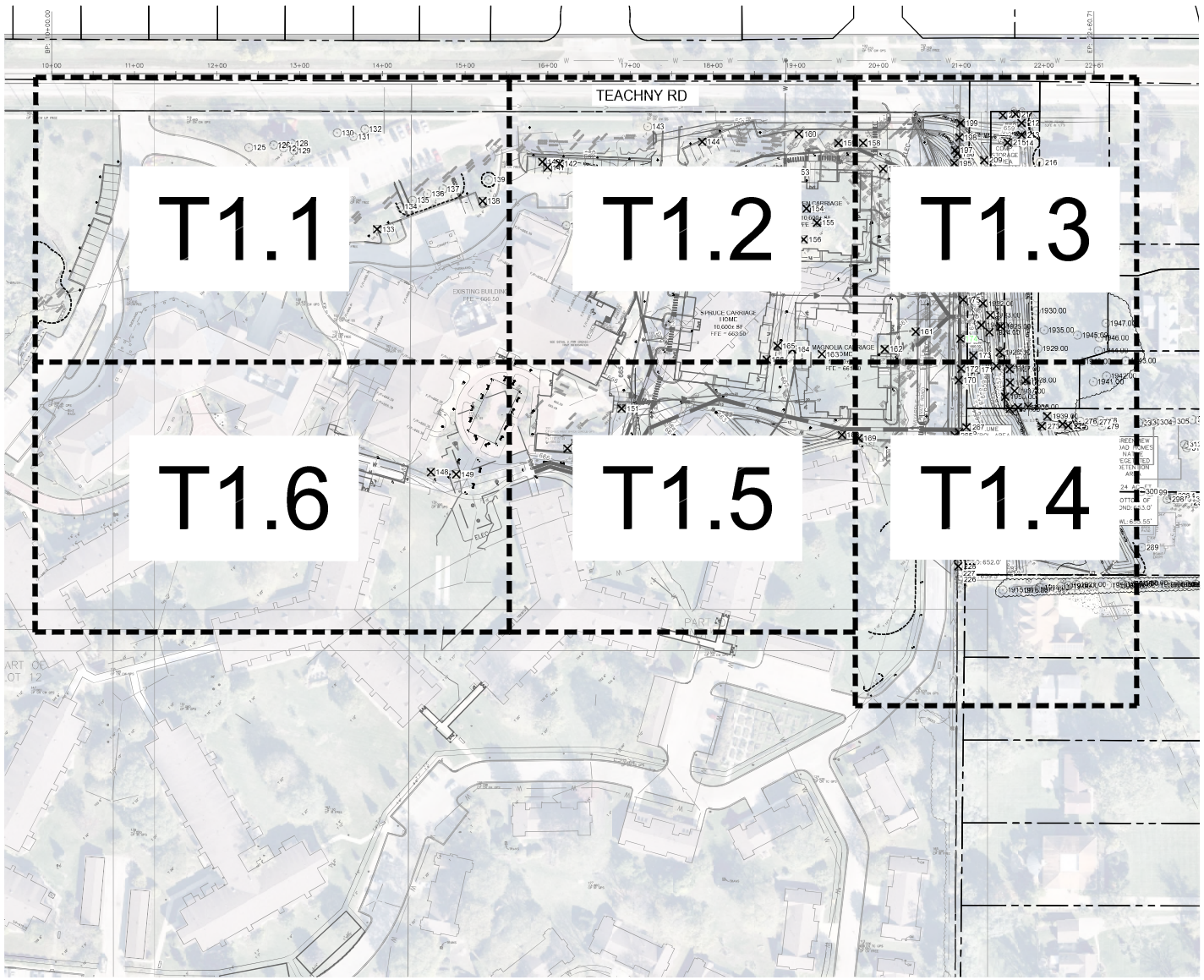

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NO.	DATE	DESCRIPTION
9	8/14/23	VILLAGE REVIEW
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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

OVERALL TREE PRESERVATION PLAN

Sheet No.: T1.0

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TREE PRESERVATION NOTES

1. ALL TREES ARE TO BE PRESERVED UNLESS OTHERWISE NOTED.
2. FINAL LAYOUT OF TREE PRESERVATION FENCING IS TO BE DETERMINED IN THE FIELD.
3. CONTRACTOR TO REPLACE ALL TREES SUCH THAT THE SUM OF THE DIAMETER AT BREAST HEIGHT (DBH) OF THE NEW TREE(S) IS EQUAL TO OR GREATER THAN THE SUM OF THE TOTAL PROTECTED, LANDMARK, OR HERITAGE TREES REMOVED.
4. REFER TO SHEET T2.0 FOR TREE TABULATION DATA.
5. REFER TO SHEET T2.0 FOR VILLAGE OF NORTHBROOK STANDARD TREE PROTECTION DETAIL AND REQUIREMENTS.

TREE PRESERVATION LEGEND

EXISTING TREE TO BE PRESERVED
SEE TREE PROTECTION DETAIL ON SHEET T2.0
ASSOCIATED TREE ID #

EXISTING TREE TO BE REMOVED
SEE TREE TABULATION DATA ON SHEET T2.0
ASSOCIATED TREE ID #

TREE PROTECTION FENCE
SEE TREE PROTECTION DETAIL ON SHEET T2.0

TREE PRESERVATION NOTES

1. CONTRACTOR TO FURNISH AND INSTALL TEMPRORARY TREE PROTECTION FENCE, TYP. SEE DETAIL ON SHEET T2.0
2. EXISTING TREE TO BE PRESERVED
3. EXISTING WOODLAND TO BE PRESERVED
4. EXISTING TREE TO BE REMOVED

GRAPHIC SCALE IN FEET
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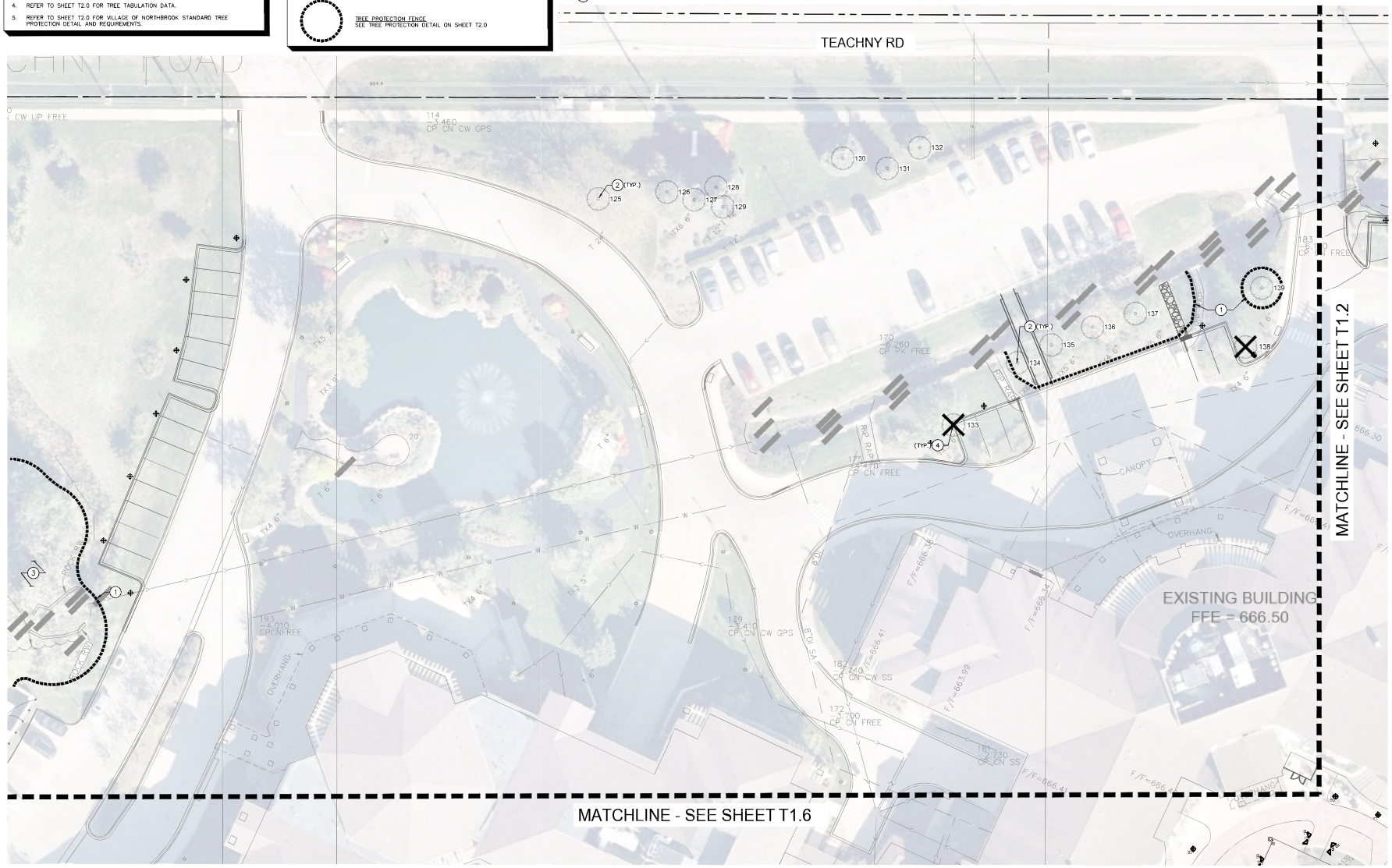

NO.	DATE	DESCRIPTION
1	8/14/23	VILLAGE REVIEW
2	8/30/23	MWRD REVIEW #3
3	7/31/23	MWRD REVIEW #2
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7	5/9/23	WATERMAIN REROUTE
8	5/31/23	VILLAGE OVERSIZING COMMENTS
9	2/21/23	VILLAGE ENGINEERING COMMENTS
10	1/6/23	DD ISSUANCE
11	9/30/22	PROGRESS CD'S
12	8/22/22	50% CD'S
13	8/23/22	DD ISSUANCE
	8/20/22	SD ISSUANCE

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

TREE PRESERVATION PLAN

Sheet No.: T1.1

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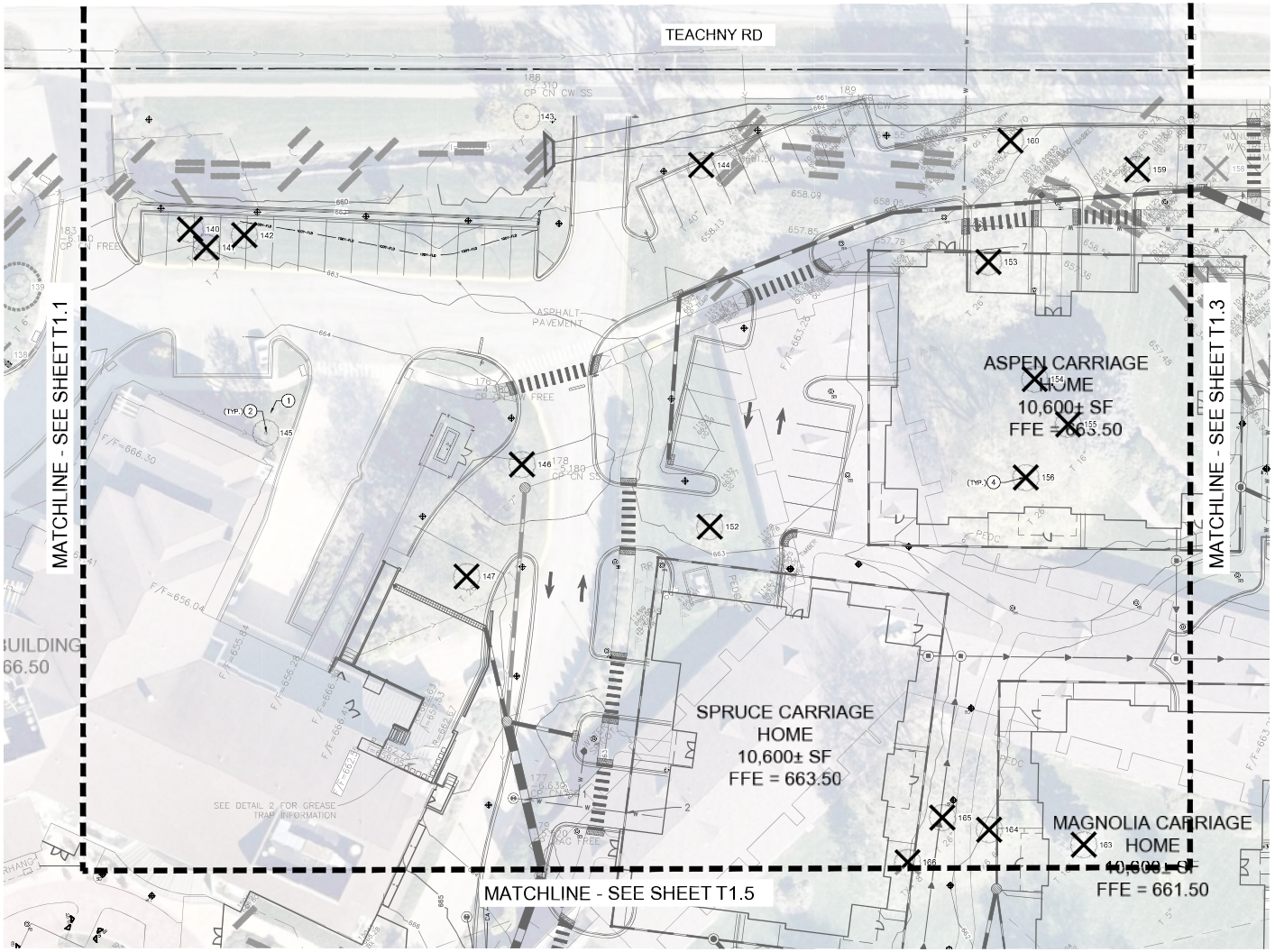

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TREE PRESERVATION LEGEND

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SEE TREE PROTECTION DETAIL ON SHEET T2.0
ASSOCIATED TREE ID #

EXISTING TREE TO BE REMOVED
SEE TREE TABULATION DATA ON SHEET T2.0
ASSOCIATED TREE ID #

TREE PROTECTION FENCE
SEE TREE PROTECTION DETAIL ON SHEET T2.0

TREE PRESERVATION NOTES

(2) EXISTING TREE TO BE PRESERVED
(4) EXISTING TREE TO BE REMOVED

NO.	DATE	DESCRIPTION
9	8/14/23	VILLAGE REVIEW
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2	3/31/23	VILLAGE ENGINEERING COMMENTS
1	2/3/23	VILLAGE ENGINEERING COMMENTS
	1/6/23	DD ISSUANCE
	9/30/22	PROGRESS CD'S
	8/22/22	50% CD'S
	6/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

TREE PRESERVATION PLAN

Sheet No.: T1.2

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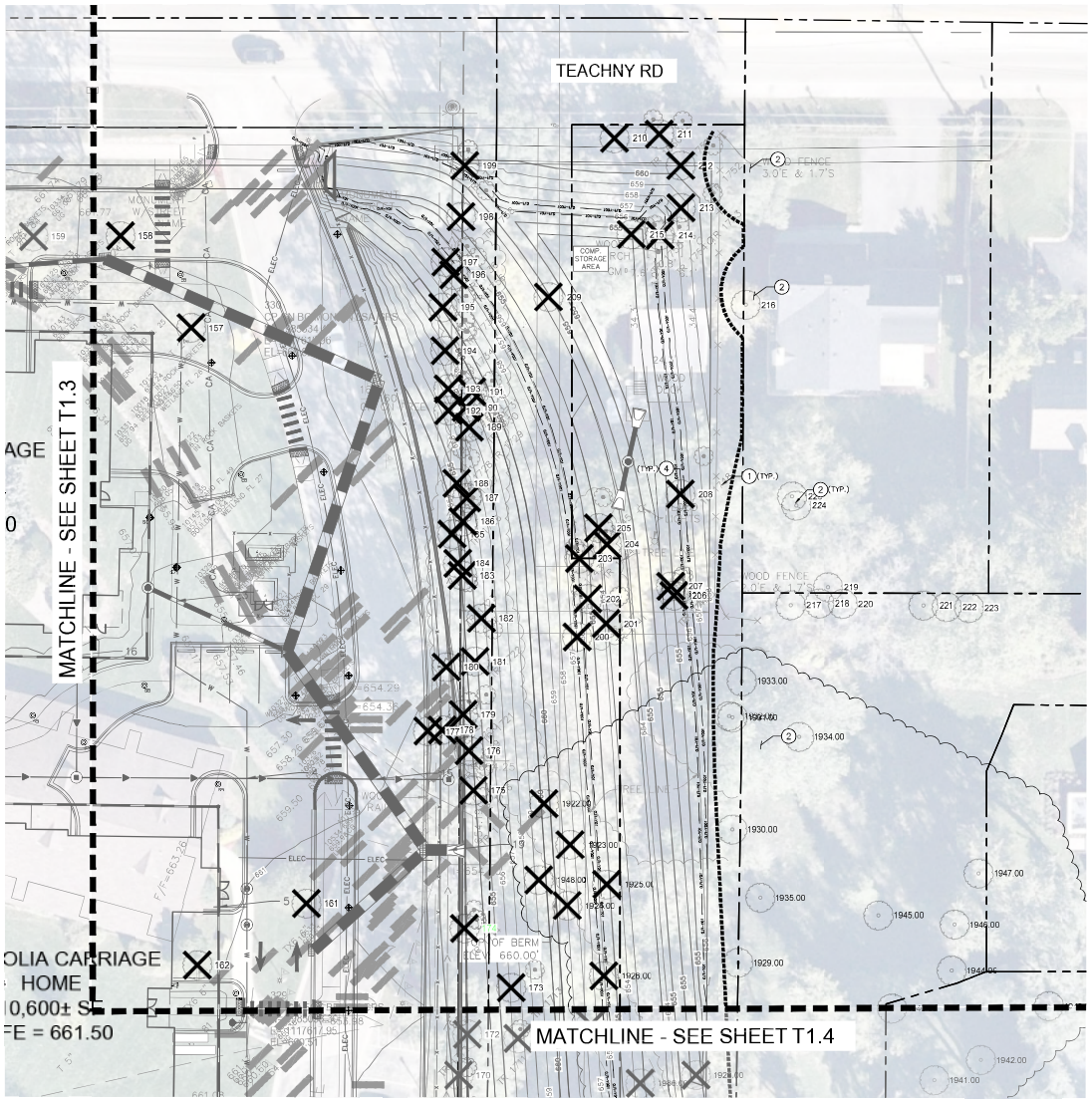

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TREE PRESERVATION LEGEND

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SEE TREE PROTECTION DETAIL ON SHEET T2.0
ASSOCIATED TREE ID #

EXISTING TREE TO BE REMOVED
SEE TREE TABULATION DATA ON SHEET T2.0
ASSOCIATED TREE ID #

TREE PROTECTION FENCE
SEE TREE PROTECTION DETAIL ON SHEET T2.0

TREE PRESERVATION NOTES

1. CONTRACTOR TO FURNISH AND INSTALL TEMPRORARY TREE PROTECTION FENCE, TYP. SEE DETAIL ON SHEET T2.0
2. EXISTING TREE TO BE PRESERVED
4. EXISTING TREE TO BE REMOVED

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Project No.: 268004000
Date: 9/30/2022

TREE PRESERVATION PLAN

Sheet No.: T1.3

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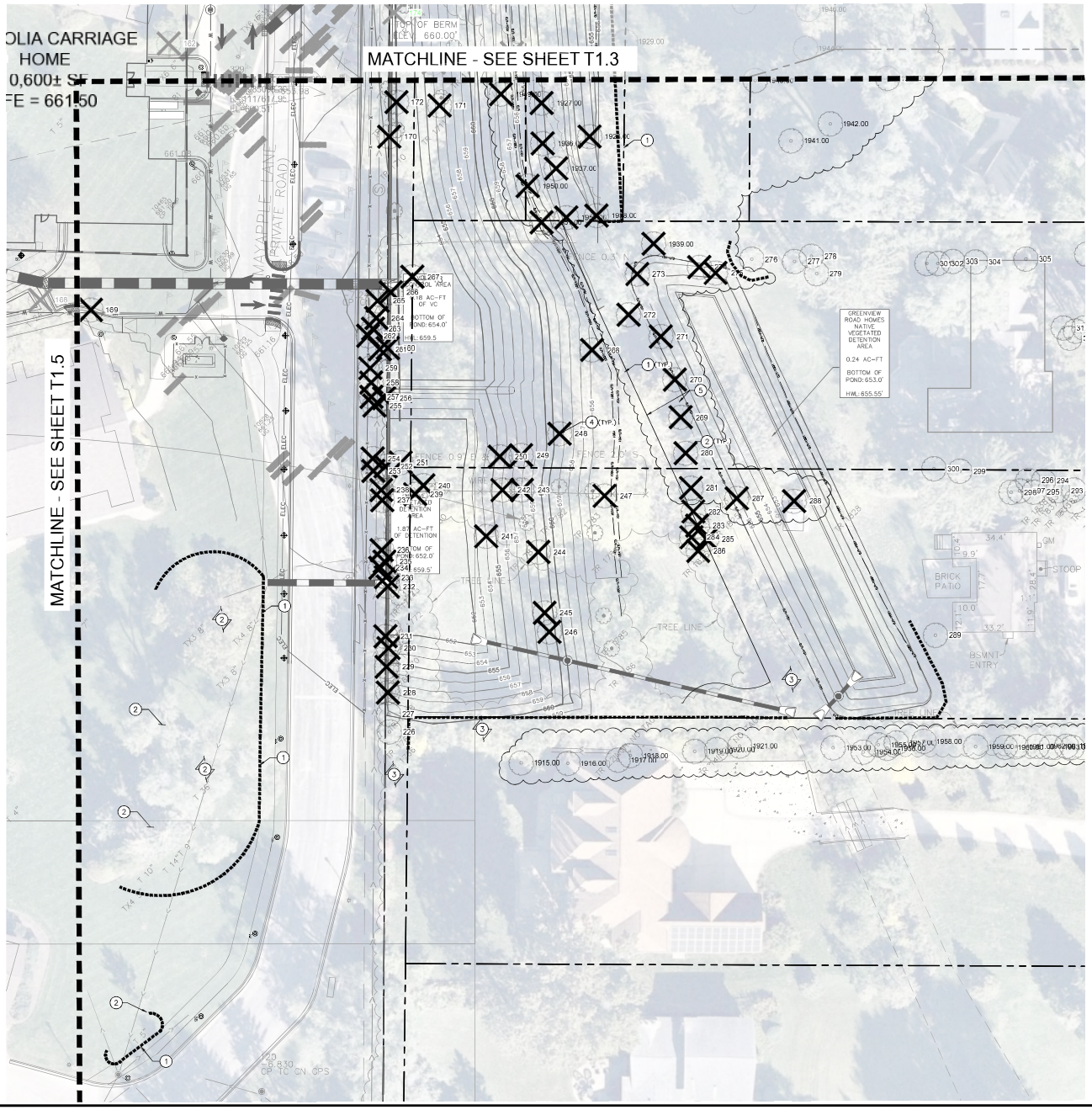

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ASSOCIATED TREE ID #

EXISTING TREE TO BE REMOVED
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ASSOCIATED TREE ID #

TREE PROTECTION FENCE
SEE TREE PROTECTION DETAIL ON SHEET T2.0

TREE PRESERVATION NOTES

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3. EXISTING WOODLAND TO BE PRESERVED
4. EXISTING TREE TO BE REMOVED
5. EXISTING CREEK

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Project No.: 268004000
Date: 9/30/2022

TREE PRESERVATION PLAN

Sheet No.: T1.4

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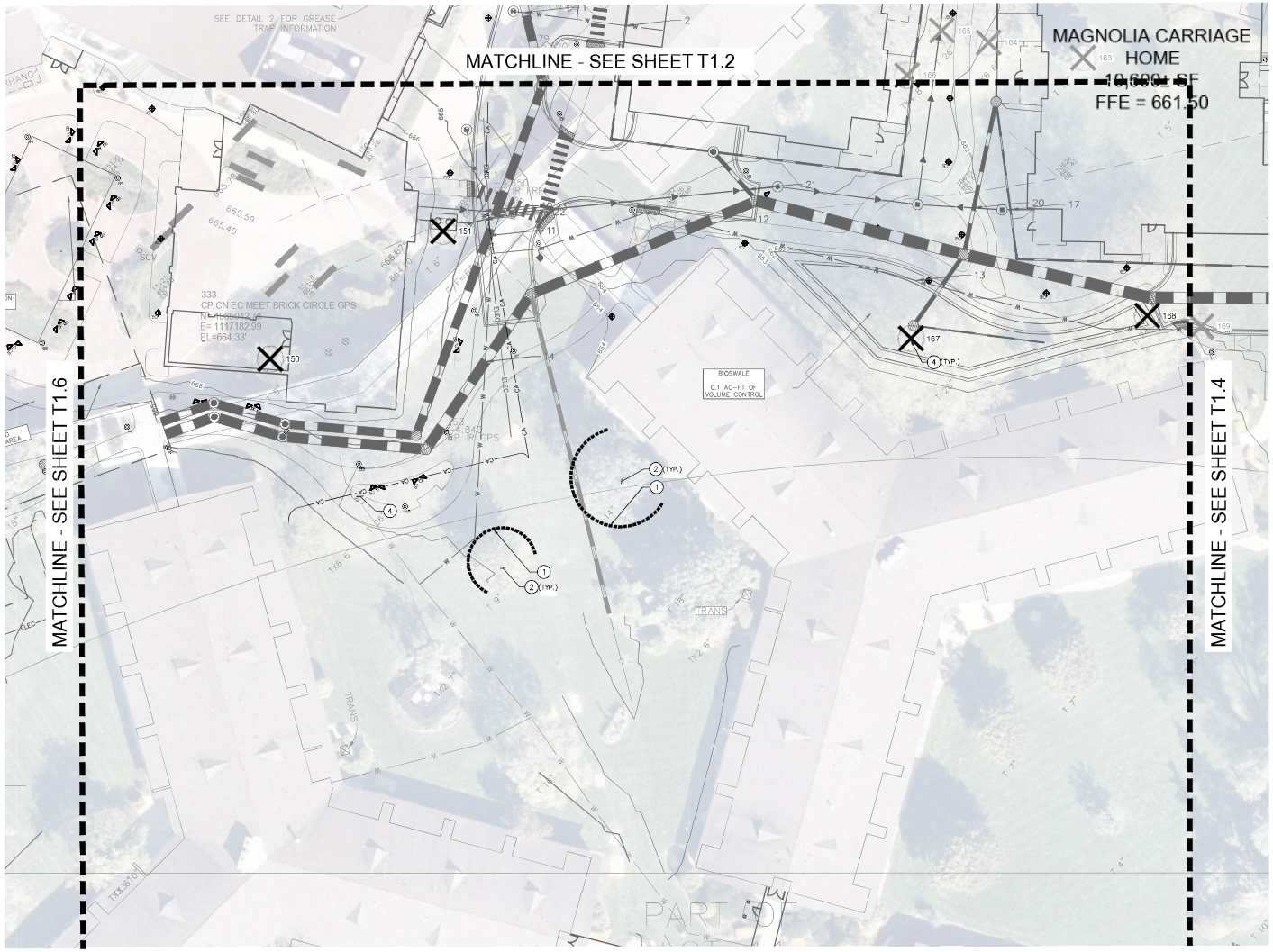

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TREE PRESERVATION LEGEND

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ASSOCIATED TREE ID #

EXISTING TREE TO BE REMOVED
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ASSOCIATED TREE ID #

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1	1/6/23	DD ISSUANCE
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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

TREE PRESERVATION PLAN

Sheet No.: T1.5

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TREE PRESERVATION LEGEND

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SEE TREE PROTECTION DETAIL ON SHEET T2.0
ASSOCIATED TREE ID #

EXISTING TREE TO BE REMOVED
SEE TREE TABULATION DATA ON SHEET T2.0
ASSOCIATED TREE ID #

TREE PROTECTION FENCE
SEE TREE PROTECTION DETAIL ON SHEET T2.0

TREE PRESERVATION NOTES

(2) EXISTING TREE TO BE PRESERVED

(4) EXISTING TREE TO BE REMOVED

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MATCHLINE - SEE SHEET T1.5

NO.	DATE	DESCRIPTION
1	8/14/23	VILLAGE REVIEW
2	8/30/23	MWRD REVIEW #2
3	7/31/23	MWRD REVIEW #2
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11	9/30/22	PROGRESS CD'S
12	8/22/22	50% CD'S
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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

TREE PRESERVATION PLAN

Sheet No.: T1.6

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TREE TABULATION

TREE NUMBER	SPECIES	LATIN	DBH	CONDITION	ACTION
125	HONEYLOCUST	Gleditsia triacanthos	22	3	PRESERVE
126	HAWTHORN-SPP	Crataegus spp	14	3	PRESERVE
127	SPRUCE-BLUE	Picea pungens	13	4	PRESERVE
128	SPRUCE-BLUE	Picea pungens	11	4	PRESERVE
129	SPRUCE-BLUE	Picea pungens	13	4	PRESERVE
130	SPRUCE-BLUE	Picea pungens	11	3	PRESERVE
131	SPRUCE-BLUE	Picea pungens	8	4	PRESERVE
132	SPRUCE-BLUE	Picea pungens	9	3	PRESERVE
133	BIRCH-RIVER	Betula nigra	13	2	REMOVE
134	BIRCH-RIVER	Betula nigra	10	3	PRESERVE
135	BIRCH-RIVER	Betula nigra	10	3	PRESERVE
136	BIRCH-RIVER	Betula nigra	10	3	PRESERVE
137	BIRCH-RIVER	Betula nigra	12	3	REMOVE
138	BIRCH-RIVER	Betula nigra	12	2	PRESERVE
139	BIRCH-RIVER	Betula nigra	7	3	PRESERVE
140	SPRUCE-BLUE	Picea pungens	8	3	REMOVE
141	SPRUCE-BLUE	Picea pungens	6	3	REMOVE
142	SPRUCE-BLUE	Picea pungens	9	3	REMOVE
143	MAPLE-AUTUMN BLAZE	Acer x freemanii	9	2	PRESERVE
144	COTTONWOOD	Populus deltoides	38	2	REMOVE
145	MAPLE-RED	Acer rubrum	6	3	PRESERVE
146	OAK-SWAMP WHITE	Quercus bicolor	7	3	REMOVE
147	HONEYLOCUST	Gleditsia triacanthos	30	2	REMOVE
148	MAPLE-RED	Acer rubrum	6	3	REMOVE
149	SERVICEBERRY-SPP	Amelanchier spp	7	3	REMOVE
150	MAPLE-RED	Acer rubrum	6	3	REMOVE
151	OAK-SWAMP WHITE	Quercus bicolor	8	3	REMOVE
152	MAPLE-RED	Acer rubrum	6	3	REMOVE
153	HONEYLOCUST	Gleditsia triacanthos	29	2	REMOVE
154	BOXELDER	Acer negundo	13	4	REMOVE
155	MAPLE-NORWAY	Acer platanoides	18	3	REMOVE
156	HONEYLOCUST	Gleditsia triacanthos	29	2	REMOVE
157	HONEYLOCUST	Gleditsia triacanthos	24	3	REMOVE
158	HONEYLOCUST	Gleditsia triacanthos	26	3	REMOVE
159	HONEYLOCUST	Gleditsia triacanthos	22	3	REMOVE
160	HONEYLOCUST	Gleditsia triacanthos	28	3	REMOVE
161	DOGWOOD-SPP	Cornus spp	13	3	REMOVE
162	MAGNOLIA-TREE	Magnolia spp	16	3	REMOVE
163	SPRUCE-BLUE	Picea pungens	12	3	REMOVE
164	MAGNOLIA-TREE	Magnolia spp	20	3	REMOVE
165	HONEYLOCUST	Gleditsia triacanthos	22	2	REMOVE
166	CHERRY-BLACK	Prunus serotina	15	3	REMOVE
167	HONEYLOCUST	Gleditsia triacanthos	31	2	REMOVE
168	HONEYLOCUST	Gleditsia triacanthos	29	2	REMOVE
169	EASTERN REDCEDAR	Juniperus virginiana	7	3	REMOVE
170	ELM-SIBERIAN	Ulmus pumila	24	3	REMOVE
171	APPLE-CRAB SPP	Malus spp	14	4	REMOVE
172	ELM-AMERICAN	Ulmus americana	40	4	REMOVE
173	ELM-AMERICAN	Ulmus americana	21	3	REMOVE
174	ELM-AMERICAN	Ulmus americana	36	5	REMOVE
175	COTTONWOOD	Populus deltoides	44	3	REMOVE
176	BUCKTHORN	Rhamnus cathartica	7	4	REMOVE
177	ELM-AMERICAN	Ulmus americana	8	4	REMOVE
178	ELM-AMERICAN	Ulmus americana	25	4	REMOVE
179	BOXELDER	Acer negundo	9	4	REMOVE
180	BOXELDER	Acer negundo	13	4	REMOVE
181	BUCKTHORN	Rhamnus cathartica	6	4	REMOVE
182	ELM-AMERICAN	Ulmus americana	29	2	REMOVE
183	ELM-AMERICAN	Ulmus americana	26	3	REMOVE
184	BUCKTHORN	Rhamnus cathartica	8	4	REMOVE
185	ELM-AMERICAN	Ulmus americana	16	3	REMOVE
186	BUCKTHORN	Rhamnus cathartica	21	4	REMOVE
187	BUCKTHORN	Rhamnus cathartica	7	4	REMOVE
188	ELM-AMERICAN	Ulmus americana	32	4	REMOVE
189	MULBERRY-SPP	Morus spp	6	3	REMOVE
190	MULBERRY-SPP	Morus spp	7	3	REMOVE
191	MULBERRY-SPP	Morus spp	7	3	REMOVE
192	SPRUCE-BLUE	Picea pungens	6	4	REMOVE
193	SPRUCE-BLUE	Picea pungens	7	4	REMOVE
194	ELM-AMERICAN	Ulmus americana	17	4	REMOVE
195	ELM-AMERICAN	Ulmus americana	33	4	REMOVE
196	SPRUCE-BLUE	Picea pungens	8	3	REMOVE
197	ELM-AMERICAN	Ulmus americana	23	3	REMOVE
198	CHERRY-SPP	Prunus spp	23	4	REMOVE
199	ELM-AMERICAN	Ulmus americana	29	4	REMOVE
200	BUCKTHORN	Rhamnus cathartica	6	4	REMOVE
201	ASH-GREEN	Fraxinus pennsylvanica	7	4	REMOVE
202	ASH-GREEN	Fraxinus pennsylvanica	6	4	REMOVE
203	MULBERRY-SPP	Morus spp	6	4	REMOVE
204	MULBERRY-SPP	Morus spp	6	4	REMOVE
205	MULBERRY-SPP	Morus spp	14	3	REMOVE
206	ELM-AMERICAN	Ulmus americana	6	3	REMOVE
207	ASH-GREEN	Fraxinus pennsylvanica	7	4	REMOVE
208	ASH-GREEN	Fraxinus pennsylvanica	7	4	REMOVE
209	ELM-SIBERIAN	Ulmus pumila	29	3	REMOVE
210	ELM-SIBERIAN	Ulmus pumila	20	4	REMOVE
211	ELM-SIBERIAN	Ulmus pumila	11	4	REMOVE
212	ELM-SIBERIAN	Ulmus pumila	17	4	REMOVE
213	ELM-SIBERIAN	Ulmus pumila	18	4	REMOVE
214	SPRUCE-NORWAY	Picea abies	18	3	REMOVE
215	SPRUCE-NORWAY	Picea abies	21	3	REMOVE
216	ASH-GREEN	Fraxinus pennsylvanica	9	4	REMOVE
217	BOXELDER	Acer negundo	11	4	PRESERVE
218	BOXELDER	Acer negundo	11	3	PRESERVE
219	BOXELDER	Acer negundo	18	3	PRESERVE
220	BOXELDER	Acer negundo	23	3	PRESERVE
221	BOXELDER	Acer negundo	10	3	PRESERVE
222	BOXELDER	Acer negundo	13	4	PRESERVE
223	ELM-AMERICAN	Ulmus americana	24	2	PRESERVE

TREE TABULATION (Cont.)

224	ELM-CHINESE	Ulmus parvifolia	20	5	PRESERVE
225	MULBERRY-SPP	Morus spp	25	4	PRESERVE
226	BUCKTHORN	Rhamnus cathartica	7	4	PRESERVE
227	BUCKTHORN	Rhamnus cathartica	6	4	PRESERVE
228	BUCKTHORN	Rhamnus cathartica	15	4	REMOVE
229	BOXELDER	Acer negundo	12	4	REMOVE
230	BUCKTHORN	Rhamnus cathartica	6	4	REMOVE
231	BUCKTHORN	Rhamnus cathartica	10	4	REMOVE
232	ELM-SIBERIAN	Ulmus pumila	13	4	REMOVE
233	BUCKTHORN	Rhamnus cathartica	7	4	REMOVE
234	EASTERN REDCEDAR	Juniperus virginiana	8	4	REMOVE
235	ELM-AMERICAN	Ulmus americana	14	4	REMOVE
236	BUCKTHORN	Rhamnus cathartica	9	4	REMOVE
237	ELM-AMERICAN	Ulmus americana	16	3	REMOVE
238	BOXELDER	Acer negundo	11	4	REMOVE
239	HACKBERRY	Celtis occidentalis	6	3	REMOVE
240	HACKBERRY	Celtis occidentalis	12	2	REMOVE
241	MULBERRY-SPP	Morus spp	11	3	REMOVE
242	LINDEN-AMERICAN	Tilia americana	28	4	REMOVE
243	ELM-AMERICAN	Ulmus americana	16	2	REMOVE
244	BUCKTHORN	Rhamnus cathartica	6	4	REMOVE
245	MULBERRY-SPP	Morus spp	42	4	REMOVE
246	BUCKTHORN	Rhamnus cathartica	7	4	REMOVE
247	BUCKTHORN	Rhamnus cathartica	9	4	REMOVE
248	BUCKTHORN	Rhamnus cathartica	7	4	REMOVE
249	COTTONWOOD	Populus deltoides	33	2	REMOVE
250	ASH-GREEN	Fraxinus pennsylvanica	14	5	REMOVE
251	WALNUT-BLACK	Juglans nigra	18	2	REMOVE
252	WALNUT-BLACK	Juglans nigra	9	3	REMOVE
253	BOXELDER	Acer negundo	6	4	REMOVE
254	BOXELDER	Acer negundo	17	4	REMOVE
255	BOXELDER	Acer negundo	7	4	REMOVE
256	MULBERRY-SPP	Morus spp	19	3	REMOVE
257	BOXELDER	Acer negundo	6	4	REMOVE
258	BOXELDER	Acer negundo	7	4	REMOVE
259	BOXELDER	Acer negundo	12	5	REMOVE
260	BOXELDER	Acer negundo	13	4	REMOVE
261	PINE-WHITE	Pinus strobus	11	5	REMOVE
262	BOXELDER	Acer negundo	10	4	REMOVE
263	HAWTHORN-SPP	Crataegus spp	6	5	REMOVE
264	MULBERRY-SPP	Morus spp	6	3	REMOVE
265	BOXELDER	Acer negundo	7	4	REMOVE
266	BUCKTHORN	Rhamnus cathartica	6	4	REMOVE
267	BUCKTHORN	Rhamnus cathartica	6	4	REMOVE
268	WILLOW-SPP	Salix spp	14	3	REMOVE
269	SPRUCE-NORWAY	Picea abies	20	2	REMOVE
270	SPRUCE-NORWAY	Picea abies	15	2	REMOVE
271	SPRUCE-NORWAY	Picea abies	20	2	REMOVE
272	MULBERRY-SPP	Morus spp	17	3	REMOVE
273	MULBERRY-SPP	Morus spp	19	4	REMOVE
274	ELM-AMERICAN	Ulmus americana	15	4	REMOVE
275	SPRUCE-NORWAY	Picea abies	18	3	REMOVE
276	SPRUCE-NORWAY	Picea abies	17	4	PRESERVE
277	SPRUCE-NORWAY	Picea abies	18	3	PRESERVE
278	SPRUCE-NORWAY	Picea abies	13	3	PRESERVE
279	SPRUCE-NORWAY	Picea abies	22	3	PRESERVE
280	SPRUCE-NORWAY	Picea abies	17	3	REMOVE
281	SPRUCE-NORWAY	Picea abies	18	3	REMOVE
282	SPRUCE-NORWAY	Picea abies	22	2	REMOVE
283	SPRUCE-NORWAY	Picea abies	8	5	REMOVE
284	MULBERRY-SPP	Morus spp	7	4	REMOVE
285	HACKBERRY	Celtis occidentalis	12	3	REMOVE
286	PINE-SCOTCH	Pinus sylvestris	12	5	REMOVE
287	SPRUCE-BLUE	Picea pungens	10	4	REMOVE
288	ELM-AMERICAN	Ulmus americana	11	3	REMOVE
289	YEW	Taxus spp	8	3	PRESERVE
290	EASTERN REDCEDAR	Juniperus virginiana	9	4	PRESERVE
291	BUCKTHORN	Rhamnus cathartica	8	4	PRESERVE
292	SPRUCE-NORWAY	Picea abies	19	3	PRESERVE
293	SPRUCE-NORWAY	Picea abies	13	5	PRESERVE
294	SPRUCE-NORWAY	Picea abies	12	3	PRESERVE
295	SPRUCE-NORWAY	Picea abies	13	3	PRESERVE
296	SPRUCE-NORWAY	Picea abies	15	3	PRESERVE
297	SPRUCE-NORWAY	Picea abies	19	3	PRESERVE
298	BUCKTHORN	Rhamnus cathartica	7	4	PRESERVE
299	SPRUCE-NORWAY	Picea abies	18	3	PRESERVE
300	SPRUCE-NORWAY	Picea abies	20	3	PRESERVE
301	ELM-SIBERIAN	Ulmus pumila	18	3	PRESERVE
302	ELM-SIBERIAN	Ulmus pumila	9	3	PRESERVE
303	ELM-SIBERIAN	Ulmus pumila	29	3	PRESERVE
304	ELM-SIBERIAN	Ulmus pumila	18	3	PRESERVE
305	ELM-SIBERIAN	Ulmus pumila	21	4	PRESERVE
306	ELM-SIBERIAN	Ulmus pumila	10	4	PRESERVE
307	ELM-SIBERIAN	Ulmus pumila	9	4	PRESERVE
308	ELM-SIBERIAN	Ulmus pumila	17	3	PRESERVE
309	SPRUCE-NORWAY	Picea abies	14	3	PRESERVE
310	SPRUCE-NORWAY	Picea abies	11	3	PRESERVE
311	SPRUCE-NORWAY	Picea abies	12	3	PRESERVE
312	SPRUCE-NORWAY	Picea abies	13	3	PRESERVE

TREE TABULATION (Cont.)

1915	BUCKTHORN	Rhamnus cathartica	9	4	PRESERVE
1916	BUCKTHORN	Rhamnus cathartica	6	4	PRESERVE
1917	BOXELDER	Acer negundo	23	3	PRESERVE
1918	BUCKTHORN	Rhamnus cathartica	7	4	PRESERVE
1919	BUCKTHORN	Rhamnus cathartica	9	4	PRESERVE
1920	MULBERRY-SPP	Morus spp	15	3	PRESERVE
1921	BOXELDER	Acer negundo	16	3	PRESERVE
1922	COTTONWOOD	Populus deltoides	29	2	REMOVE
1923	COTTONWOOD	Populus deltoides	10	4	REMOVE
1924	COTTONWOOD	Populus deltoides	12	5	REMOVE
1925	BUCKTHORN	Rhamnus cathartica	7	4	REMOVE
1926	WALNUT-BLACK	Juglans nigra	9	2	REMOVE
1927	BOXELDER	Acer negundo	11	5	REMOVE
1928	ASH-GREEN	Fraxinus pennsylvanica	24	5	REMOVE
1929	MULBERRY-SPP	Morus spp	12	3	PRESERVE
1930	HAWTHORN-SPP	Crataegus spp	16	4	PRESERVE
1931	BUCKTHORN	Rhamnus cathartica	7	4	PRESERVE
1932	BOXELDER	Acer negundo	6	4	PRESERVE
1933	MULBERRY-SPP	Morus spp	7	3	PRESERVE
1934	MAPLE-SILVER	Acer saccharinum	32	2	PRESERVE
1935	BOXELDER	Acer negundo	17	4	PRESERVE
1936	ELM-AMERICAN	Ulmus americana	6	4	REMOVE
1937	MULBERRY-SPP	Morus spp	14	3	REMOVE
1938	BOXELDER	Acer negundo	12	3	REMOVE
1939	ASH-GREEN	Fraxinus pennsylvanica	11	5	REMOVE
1940	BOXELDER	Acer negundo	21	4	PRESERVE
1941	CHERRY-BLACK	Prunus serotina	14	3	PRESERVE
1942	ELM-SIBERIAN	Ulmus pumila	23	3	PRESERVE
1943	ELM-SIBERIAN	Ulmus pumila	20	3	PRESERVE
1944	BUCKTHORN	Rhamnus cathartica	10	4	PRESERVE
1945	SPRUCE-SPP	Picea spp	7	3	PRESERVE
1946	PINE-WHITE	Pinus strobus	9	3	PRESERVE
1947	OTHER	OTHER	9	4	PRESERVE
1948	MAPLE-SILVER	Acer saccharinum	10	3	REMOVE
1949	BUCKTHORN	Rhamnus cathartica	6	4	REMOVE
1950	HACKBERRY	Celtis occidentalis	6	3	REMOVE
1951	WALNUT-BLACK	Juglans nigra	17	2	REMOVE
1952	BOXELDER	Acer negundo	7	3	REMOVE
1953	BOXELDER	Acer negundo	9	3	PRESERVE
1954	BOXELDER	Acer negundo	15	3	PRESERVE
1955	BOXELDER	Acer negundo	6	3	PRESERVE
1956	BOXELDER	Acer negundo	6	3	PRESERVE
1957	ELM-SIBERIAN	Ulmus pumila	18	3	PRESERVE
1958	BOXELDER	Acer negundo	20	4	PRESERVE
1959	ELM-SIBERIAN	Ulmus pumila	9	3	PRESERVE
1960	ELM-SIBERIAN	Ulmus pumila	24	4	PRESERVE
1961	ELM-SIBERIAN	Ulmus pumila	18	3	PRESERVE
1962	ELM-SIBERIAN	Ulmus pumila	6	3	PRESERVE
1963	ELM-SIBERIAN	Ulmus pumila	23	3	PRESERVE
1964	ELM-SIBERIAN	Ulmus pumila	7	3	PRESERVE
1965	ELM-SIBERIAN	Ulmus pumila	7	3	PRESERVE
1966	ELM-SIBERIAN	Ulmus pumila	22	4	PRESERVE
1967	ELM-SIBERIAN	Ulmus pumila	10	4	PRESERVE
1968	ELM-SIBERIAN	Ulmus pumila	8	3	PRESERVE

TREE PRESERVATION NOTES

FLORA AND ROOT PROTECTION:

1. EXISTING TREES NOT IN DIRECT CONFLICT WITH CONSTRUCTION SHALL BE SAVED AND PROTECTED, UNLESS SPECIFIED TO BE REMOVED. REMOVE TREES ONLY AFTER APPROVAL BY OWNER IN ACCORDANCE WITH LATEST EDITION OF ANSI A300 – TREE CARE OPERATIONS – TREE, SHRUB AND OTHER WOODY PLANT MAINTENANCE – STANDARD PRACTICES. PRUNE TREES ONLY AFTER APPROVAL BY OWNER IN ACCORDANCE WITH LATEST EDITION OF ANSI A300 – TREE CARE OPERATIONS – TREE, SHRUB AND OTHER WOODY PLANT MAINTENANCE – STANDARD PRACTICES WITH ADDITION OF VILLAGE OF NORTHBROOK ARBORICULTURAL STANDARDS.

PROTECTION DURING CONSTRUCTION ACTIVITIES:

1. TREE PROTECTION FENCE SHALL BE ERECTED AROUND, MINIMALLY, THE DISTANCE OF DRIPLINE OF THE TREE TO BE PROTECTED. TREE PROTECTION FENCE SHALL BE A MINIMUM OF FOUR FEET WOOD SLAT OR CHAINLINK FENCE ATTACHED TO 6' MINIMUM "T"– STEEL POSTS, DRIVEN AT LEAST 2' INTO GROUND AT 6' INTERVALS OR APPROVED EQUIVALENT.
2. TREE PROTECTION SIGNAGE SHALL BE LAMINATED OR OTHERWISE WEATHERPROOF AND PRINTED IN BOLD TEXT SO AS TO BE EASILY READ FROM A DISTANCE OF 20 FEET. WORDING ON SIGNAGE SHALL BE PROVIDED IN BOTH ENGLISH AND SPANISH. SIGNS SHALL BE PLACED EVERY 30' ALONG PROTECTION FENCE.
3. NO OTHER CONSTRUCTION ACTIVITY MAY OCCUR ON SITE UNTIL TREE PRESERVATION FENCING HAS BEEN INSTALLED AND APPROVED.
4. ALL CONSTRUCTION ACTIVITY WITHIN THE AREAS FENCED OFF AROUND THE TREES SHALL BE PROHIBITED. THIS SHALL INCLUDE , BUT NOT LIMITED TO, THE FOLLOWING ACTIVITIES:
   - 4.1. PARKING OR DRIVING EQUIPMENT, MACHINERY OR VEHICLES OF ANY TYPE.
   - 4.2. STORAGE OF ANY CONSTRUCTION MATERIALS, EQUIPMENT, STOCKPILING, EXCAVATION OR FILL, SOIL, GRAVEL, ETC.
   - 4.3. DUMPING OF ANY CHEMICALS, WASH–OUT MATERIALS FROM CLEANING EQUIPMENT, CONCRETE OR MORTAR REMAINDER, TRASH, GARBAGE, OR DEBRIS OF ANY KIND.
   - 4.4. TRENCHING, GRADING OR CONSTRUCTION IN THE ROOT AREA.
5. FENCING SHALL REMAIN IN PLACE AND BE CONTINUOUSLY MAINTAINED FOR DURATION OF CONSTRUCTION.
6. ROOT PRUNING SHALL BE PERFORMED WHENEVER GRADES OUTSIDE THE TREE PROTECTION AREA BUT WITHIN THE AN AREA TWICE THE HEIGHT OF THE TREE WILL BE LOWERED.

PROTECTION DURING REMOVAL OF EXISTING MATERIALS WITHIN THE DRIPLINE:

1. EXTRA CARE IS TO BE TAKEN DURING THE REMOVAL OF EXISTING MATERIALS WITHIN THE DRIPLINE TO PREVENT BREAKAGE OF ANY ROOTS WITHIN THE DRIPLINE (ROOT ZONE) OF ANY FLORA. VIOLATIONS OF THESE BASIC POLICIES AND PROCEDURES MAY RESULT IN FINES BEING LEVIED AGAINST THE OFFENDING PARTY. ADDITIONALLY, NEGLIGENT ACTS MAY RESULT IN THE POTENTIAL CATASTROPHIC FAILURE OF THE AFFECTED FLORA LEADING TO INJURY, PROPERTY DAMAGE OR LOSS OF LIFE FOR WHICH THE OFFENDING PARTY SHALL BE HELD RESPONSIBLE.
2. DRIPLINE (ROOT ZONE) DIMENSIONS ARE DEFINED BY SIZE CLASSIFICATION OF FLORA.
3. NO ROOTS ARE TO BE BROKEN WITH EQUIPMENT DURING REMOVAL OF EXISTING WALKS, CURBS OR ANY OTHER FACILITIES, UNLESS ROOTS ARE FIRST 'PRE-CUT"ON THE TREE SIDE OF THE EXCAVATION. ROOTS ARE TO BE CUT WITH SHARP TOOLS, SUCH AS, CHAIN SAWS, HANDSAWS, LOPPERS, OR OTHER. EQUIPMENT BREAKAGE OF ROOTS DAMAGES MORE OF THE ROOT THAN NECESSARY AND CREATES UNSEEN FRACTURES BEYOND THE SOIL WALL. SEE FIGURES–2A–2B.
4. PRE–CUTTING OF ROOTS WILL ONLY BE PERMISSIBLE IN SITUATIONS WHERE IT IS IMPOSSIBLE TO EITHER ELEVATE FINAL PAVED GRADE TO LAY ATOP ROOTS, REDUCE PAVED WIDTH TO ACCEPTABLE SPECIFICATIONS WHILE AVOIDING ROOT INTERFERENCE OR ADHERE TO DIRECTIONAL BORING SPECIFICATIONS.
5. ABOVE GROUND PORTIONS OF FLORA ARE TO BE PROTECTED FROM CONTACT WITH ANY EQUIPMENT OR MATERIALS. CONSTRUCTION FENCING SHOULD BE PLACED AT THE PERIMETER OF THE AREA TO BE PROTECTED TO HELP PREVENT UNNECESSARY DAMAGE
6. NO CONCRETE OR OTHER FOREIGN MATERIALS SHALL BE PLACED DIRECTLY AGAINST CUT PORTIONS OF ROOTS OR WITHIN 6"OF CUT PORTIONS.
7. THERE SHALL BE FOUR(4) CLASSIFICATIONS OF ROOT SIZES ACCORDING TO THE SIZE OF THE MAIN STEM OF ANY PARTICULAR FLORA.

   CLASS 1: ROOT DIAMETER = 20–25% OF MAIN STEM DIAMETER
   CLASS 2: ROOT DIAMETER = 15–20% OF MAIN STEM DIAMETER
   CLASS 3: ROOT DIAMETER = 10–15% OF MAIN STEM DIAMETER
   CLASS 4: ROOT DIAMETER = 1–10% OF MAIN STEM DIAMETER
   NO MORE THAN ONE (1) CLASS 1 ROOT MAY BE CUT FROM ANY GIVEN FLORA
   NO MORE THAN TWO (2) CLASS 2 ROOTS MAY BE CUT FROM ANY GIVEN FLORA
   NO MORE THAN FOUR (4) CLASS 3 ROOTS MAY BE CUT FROM ANY GIVEN FLORA
   NO LIMIT FOR CLASS 4 ROOTS

8. ROOT REMOVAL IN EXCESS OF THE ABOVE SPECIFICATIONS MAY RESULT IN THE REQUIRED REMOVAL AND REPLACEMENT OF THE AFFECTED FLORA BY THE OFFENDING PARTY.
9. NOT MORE THAN ONE SIDE OF ANY FLORA MAY SUFFER CUT ROOTS.
10. EXCAVATED SOIL SHALL BE PLACED ON THE SIDE OF THE CUT OPPOSITE THE TREE.
11. NO ROOTS GREATER THAN 25% OF THE TRUNK DIAMETER OF FLORA MAY BE CUT OR GROUND OFF AT THE TRUNK OF ANY FLORA.
12. NO ROOTS SHALL BE CUT WITHIN 24" OF THE TRUNK OF ANY FLORA OR WITHIN THE STRUCTURAL CRITICAL ROOTING DISTANCE, WHICHEVER IS LARGER.

CLEAN CUTTING AND BACKFILLING ROOTS:

1. ALL PRE–CUT AND/OR DAMAGED ROOTS SHALL BE CLEAN CUT WITH THE APPROPRIATE SHARP TOOL PRIOR TO BACK–FILLING OF SOIL.
2. ALL CUT ROOTS MUST BE CLEAN CUT PERPENDICULAR TO THE NATURAL DIRECTION OF ROOT GROWTH AT THE POINT WHERE THE CUT IS TO OCCUR.
3. ALL CLEAN CUTS SHALL OCCUR ON THE TREE SIDE OF THE ROOT BEYOND A POINT WHERE ALL ROOT TISSUES HAVE BEEN DAMAGED. SEE FIGURES 3A–3B.
4. ALL DAMAGED ROOTS SHALL BE BACK–FILLED WITH TOPSOIL WITHIN 60 MINUTES OF BEING CLEAN CUT.
5. ALL DAMAGED ROOTS MUST HAVE AT LEAST 6"CLEARANCE FROM ALL PERMANENT CONSTRUCTION MATERIALS EXCEPT TOPSOIL.
6. ALL ROOT DAMAGED FLORA MUST BE HEAVILY WATERED WITHIN 24 HOURS OF BACK–FILLING.

GRADE CHANGE SPECIFICATIONS:

1. ELEVATING THE FINAL GRADE SHOULD BE CONSIDERED IN ALL SITUATIONS WHERE THE DIAMETER OF THE TRUNK OF VALUABLE FLORA EXCEEDS 10"AND THE LOCATION OF THE WORK TO BE PERFORMED IS WITHIN THE DRIPLINE, AND/OR, THE TRUNK DIAMETER DOES NOT EXCEED THE WIDTH OF THE EXISTING TREE LAWN, AND/OR WHEN DIRECTIONAL BORING IS IMPRACTICAL OR IMPOSSIBLE.
2. WHEN FINAL GRADES ARE TO BE ELEVATED ABOVE EXISTING GRADES, EXTRA CARE IS TO BE TAKEN DURING REMOVAL OF EXISTING MATERIALS, I.E., BACKHOES SHOULD "SCRAPE"OR "LIFT"CONCRETE AWAY FROM ROOTS RATHER THAN "SCOOP UP"CONCRETE, OR CONCRETE SHOULD BE BROKEN WITH A JACKHAMMER AND REMOVED MANUALLY, ETC.
3. GRADE ELEVATIONS IN EXCESS OF 12"DEPTH SHALL REQUIRE ADHERENCE TO THE ATTACHED TREE WELL SPECIFICATIONS.
4. WHEN ELEVATING GRADE LESS THAN 12", NOT MORE THAN 20% OF THE SURFACE AREA WITHIN THE DRIPLINE OF ANY FLORA MAY BE PAVED OR COMPACTED WITH ANY MACHINERY.
5. UNDAMAGED ROOTS SHOULD BE COVERED WITH AT LEAST 2"OF SAND OR SOIL BASE PRIOR TO INSTALLATION OF A GRAVEL BASE OR THE POURING OF CONCRETE.
6. FORM STAKES SHOULD BE AT LEAST 10"FROM THE TRUNK OF FLORA.
7. ELEVATION SHOULD BE HIGH ENOUGH TO PREVENT ROOT CUTTING FOR INSTALLATION OF FORMS.

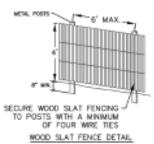
INSTALL & MAINTAIN 4' TALL WOODEN SLAT OR CHAIN LINK METAL FENCE SECURED TO METAL POSTS SPACED A MAXIMUM DISTANCE OF 6' APART.

FENCE TO BE LOCATED AT A DISTANCE FROM THE TRUNK OF THE TREE EQUAL TO 1 FOOT FOR EVERY INCH OF DIAMETER MEASURED AT BREAST HEIGHT WHICH IS MEASURED 4.5' ABOVE GROUND LEVEL.

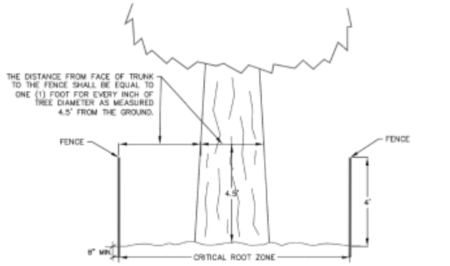
WOOD SLAT FENCE MUST BE SECURED TO THE METAL POSTS WITH A MINIMUM OF FOUR (4) WIRE TIES.

CHAIN LINK FENCE TO HAVE POSTS SECURED AT EACH SECTION TO MAINTAIN AN UPRIGHT AND STATIONARY POSITION THROUGHOUT CONSTRUCTION.

FAILURE TO INSTALL AND MAINTAIN PROTECTIVE TREE FENCING IN ACCORDANCE WITH VILLAGE STANDARDS WILL RESULT IN THE ISSUANCE OF A STOP WORK ORDER ON THE PROJECT.



WOOD SLAT FENCE DETAIL



TREE PROTECTION DETAIL

STANDARD DETAILS 2014

VILLAGE OF NORTHBROOK PUBLIC WORKS DEPARTMENT

NO.	DATE	DESCRIPTION
△	9/14/23	VILLAGE REVIEW
△	8/30/23	MWRD REVIEW #3
△	7/31/23	MWRD REVIEW #2
△	7/21/23	QA/QC – THW
△	6/29/23	MWRD REVIEW #1
△	6/2/23	DETENTION REVISION
△	5/9/23	WATERMAIN REROUTE
△	3/31/23	VILLAGE ENGINEERING COMMENTS
△	2/3/23	VILLAGE ENGINEERING COMMENTS
△	1/6/23	DD ISSUANCE
△	9/30/22	PROGRESS CD'S
△	8/22/22	50% CD'S
△	6/23/22	DD ISSUANCE
	5/20/22	SD ISSUANCE

COVENANT LIVING OF NORTHBROOK

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PRELIMINARY DRAWINGS. NOT TO BE USED FOR RECORDING, IMPLEMENTATION, REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 268004000
Date: 9/30/2022

TREE PRESERVATION TABLES & DETAILS

Sheet No.: T2.0

\\kimley-horn.com\MW_CHN\CHS_LDEV\268004000_Covenant_Northbrook_IL\2 Design\CAD\PlanSheets\T1.0 TREE PRESERVATION PLAN.dwg

DRAWING INDEX

NO.	TITLE	PROGRESS CDs: 09/30/22	01	02	03	04	05	06			
03 LAND PLANNING											
L-100	OVERALL SITE LAYOUT	•	•	•	•	•	•				
L-104	SITE LAYOUT	•	•	•	•	•	•				
L-104A	SITE LAYOUT										
L-105	SITE LAYOUT	•	•	•	•	•					
L-107	SITE LAYOUT	•	•	•	•	•					
L-108	SITE LAYOUT	•	•	•	•	•					
L-301	SITE DETAILS	•	•	•	•	•					
L-302	SITE DETAILS	•	•	•	•	•					
L-400	OVERALL LANDSCAPE PLAN	•	•	•	•	•					
L-404	LANDSCAPE PLAN	•	•	•	•	•	•				
L-404A	LANDSCAPE PLAN						•				
L-405	LANDSCAPE PLAN	•	•	•	•	•	•				
L-407	LANDSCAPE PLAN	•	•	•	•	•	•				
L-408	LANDSCAPE PLAN	•	•	•	•	•	•				
L-601	PLANTING DETAILS	•	•	•	•	•					
L-602	PLANTING DETAILS						•	•			

SCALE: 1" = 80'

NO.	DATE	DESCRIPTION
5	01/06/2023	PUD RESUB

COVENANT LIVING OF NORTHBROOK

2625 TECHNY ROAD, NORTHBROOK, IL 60062

THW DESIGN

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 2020066
Date: 09/30/2022

OVERALL SITE LAYOUT

L-100

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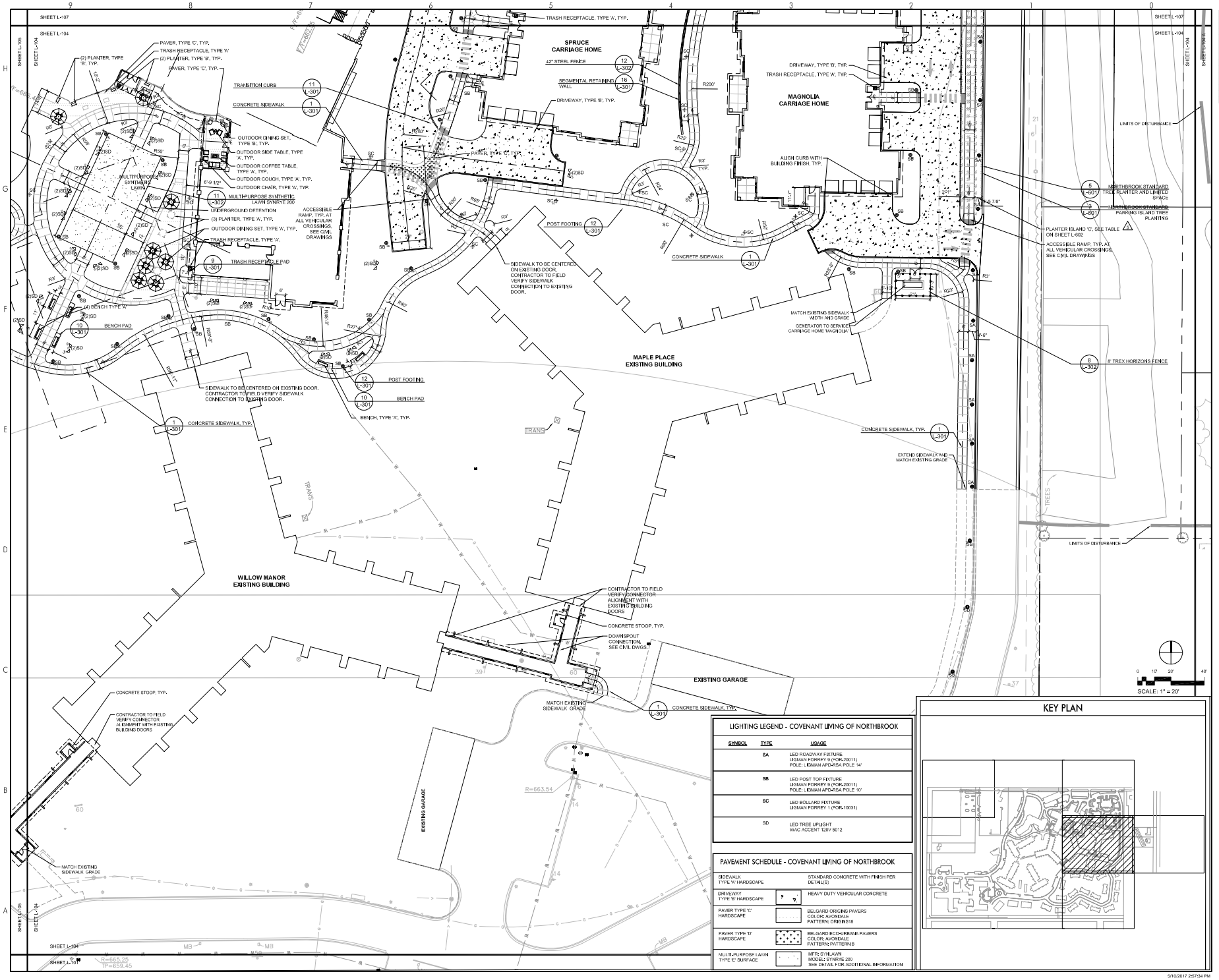
L:\2020\2020066 Covenant Living of Northbrook Expansion Suites\300 Design\335 CSD\Sheets\OVERALL SITE LAYOUT.dwg



LIGHTING LEGEND - COVENANT LIVING OF NORTHBROOK

SYMBOL	TYPE	USAGE
	SA	LED ROADWAY FIXTURE LIGMAN FORREY 9 (FOR-20011) POLE: LIGMAN APD-RSA POLE 14'
	SB	LED POST TOP FIXTURE LIGMAN FORREY 9 (FOR-20011) POLE: LIGMAN APD-RSA POLE 10'
	SC	LED BOLLARD FIXTURE LIGMAN FORREY 1 (FOR-10031)
	SD	LED TREE UPLIGHT WAC ACCENT 120V 5012

PAVEMENT SCHEDULE - COVENANT LIVING OF NORTHBROOK

SIDEWALK TYPE 'A' HARDSCAPE		STANDARD CONCRETE WITH FINISH PER DETAIL(S)
DRIVEWAY TYPE 'B' HARDSCAPE		HEAVY DUTY VEHICULAR CONCRETE
PAVER TYPE 'C' HARDSCAPE		BELGARD ORIGINS PAVERS COLOR: AVONDALE PATTERN: ORIGINS18
PAVER TYPE 'D' HARDSCAPE		BELGARD ECO-URBANA PAVERS COLOR: AVONDALE PATTERN: PATTERN B
MULTI-PURPOSE LAWN TYPE 'E' SURFACE		MFR: SYNLAWN MODEL: SYNRYE 200 SEE DETAIL FOR ADDITIONAL INFORMATION

KEY PLAN

NO.	DATE	DESCRIPTION
5	01/06/2023	PUD RESUB.

COVENANT LIVING OF NORTHBROOK

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 2020066
Date: 09/30/2022

SITE LAYOUT

L-104

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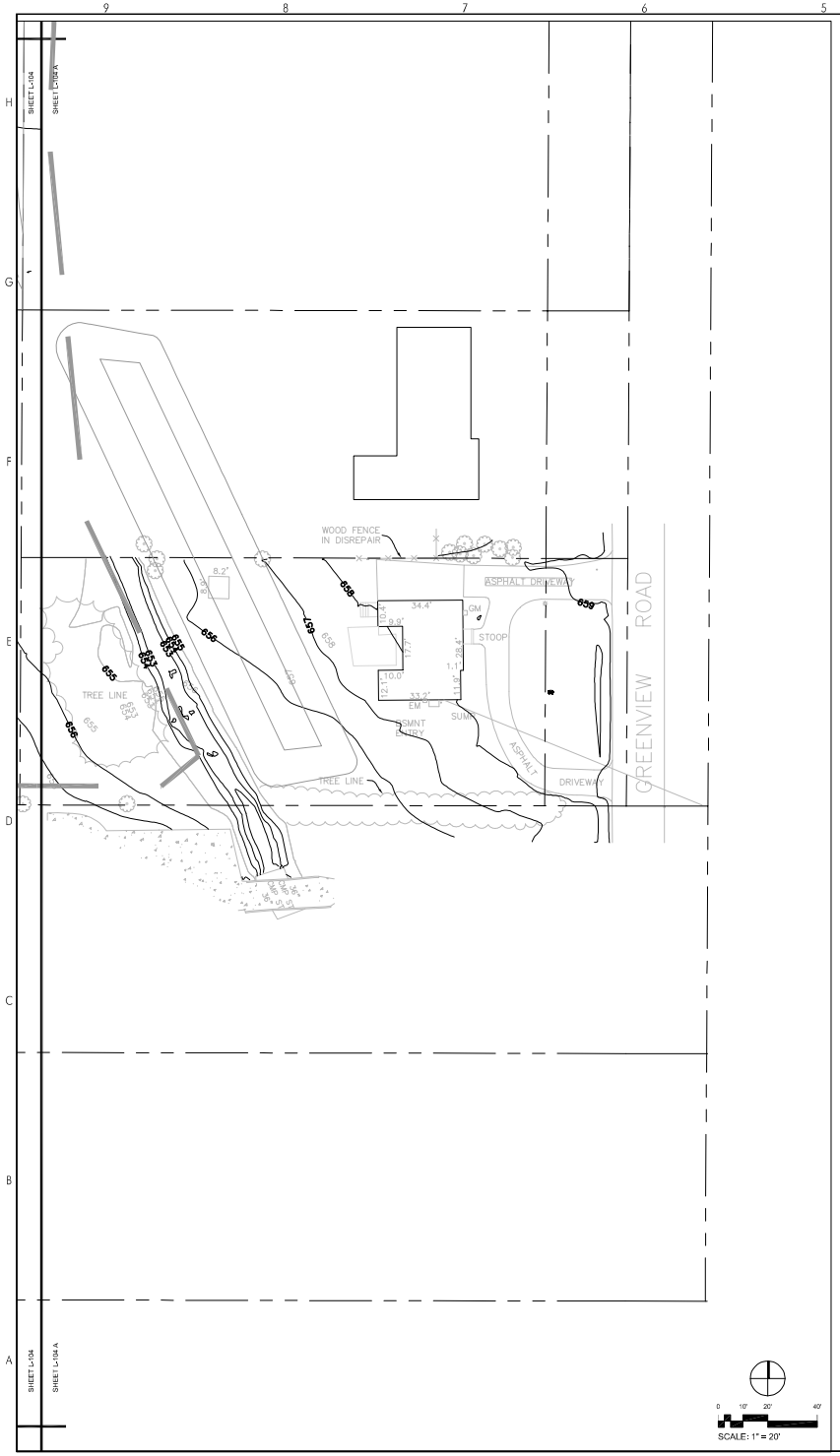
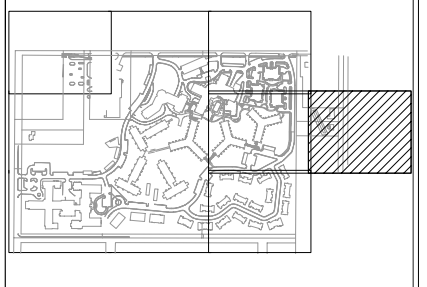


LIGHTING LEGEND - COVENANT LIVING OF NORTHBROOK		
SYMBOL	TYPE	USAGE
	SA	LED ROADWAY FIXTURE LIGMAN FORREY 9 (FOR-20011) POLE: LIGMAN APD-RSA POLE 14'
	SB	LED POST TOP FIXTURE LIGMAN FORREY 9 (FOR-20011) POLE: LIGMAN APD-RSA POLE 10'
	SC	LED BOLLARD FIXTURE LIGMAN FORREY 1 (FOR-10031)
	SD	LED TREE UPLIGHT WAC ACCENT 120V 5012

PAVEMENT SCHEDULE - COVENANT LIVING OF NORTHBROOK		
SIDEWALK TYPE 'A' HARDSCAPE		STANDARD CONCRETE WITH FINISH PER DETAIL(S)
DRIVEWAY TYPE 'B' HARDSCAPE		HEAVY DUTY VEHICULAR CONCRETE
PAVER TYPE 'C' HARDSCAPE		BELGARD ORIGINS PAVERS COLOR: AVONDALE PATTERN: ORIGINS18
PAVER TYPE 'D' HARDSCAPE		BELGARD ECO-URBANA PAVERS COLOR: AVONDALE PATTERN: PATTERN 8
MULTI-PURPOSE LAWN TYPE 'E' SURFACE		MFR: SYNLAWN MODEL: SYNRYE 200

KEY PLAN



NO.	DATE	DESCRIPTION

COVENANT LIVING OF NORTHBROOK

2625 TECHNY ROAD, NORTHBROOK, IL 60062

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ARCHITECT INFO
12345678

PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 2020066
Date: 09/30/2022

SITE LAYOUT

L-104A

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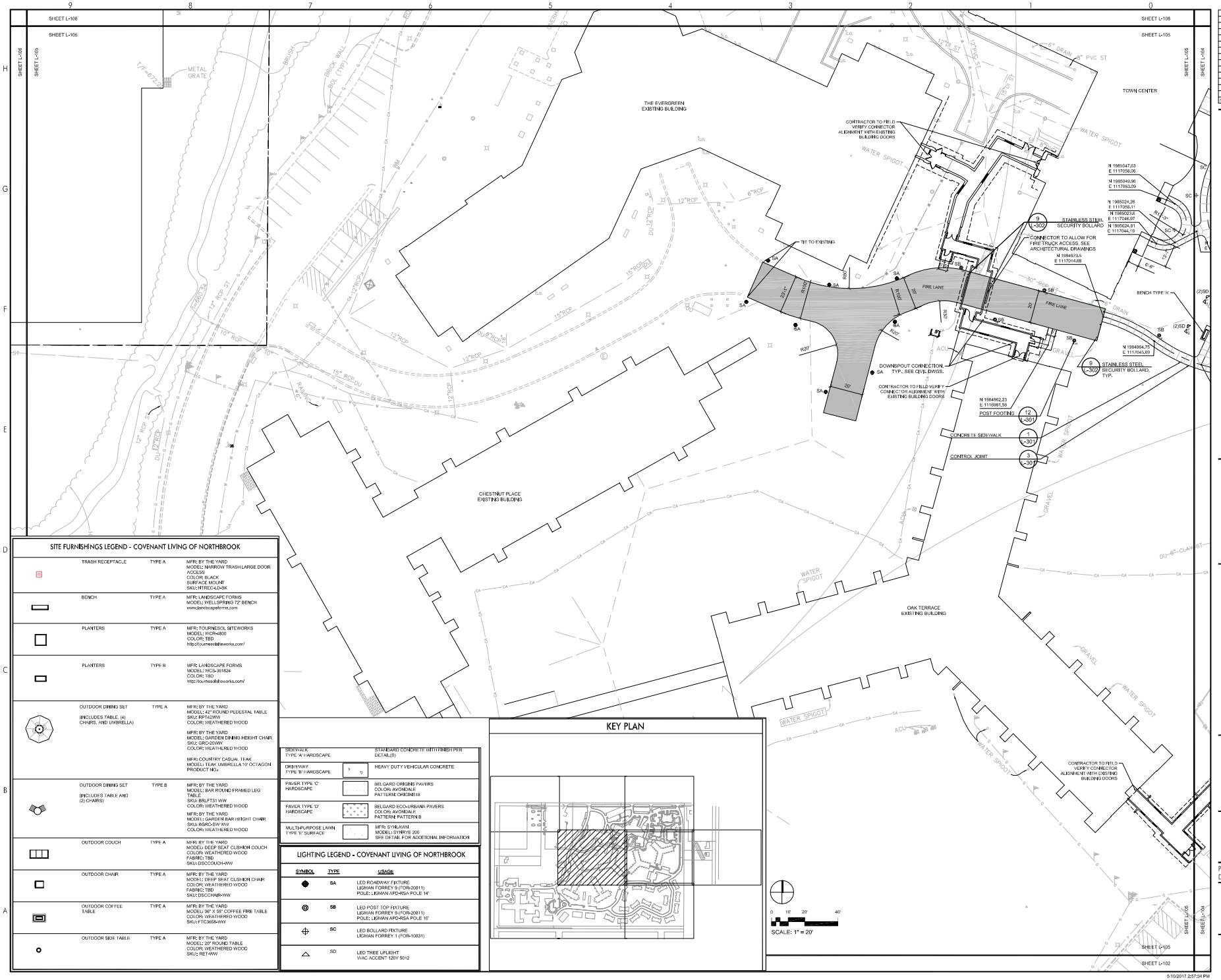

SITE FURNISHINGS LEGEND - COVENANT LIVING OF NORTHBROOK

	TRASH RECEPTACLE	TYPE A	MFR: BY THE YARD MODEL: NARROW TRASH LARGE DOOR ACCESS COLOR: BLACK SURFACE MOUNT SKU: NTRECLD-BK
	BENCH	TYPE A	MFR: LANDSCAPE FORMS MODEL: WELLSPRING 72" BENCH www.landscapeforms.com
	PLANTERS	TYPE A	MFR: TOURNESOL SITEWORKS MODEL: TWCR-4800 COLOR: TBD http://tournesolsiteworks.com/
	PLANTERS	TYPE B	MFR: LANDSCAPE FORMS MODEL: WCS-361824 COLOR: TBD http://tournesolsiteworks.com/
	OUTDOOR DINING SET (INCLUDES TABLE, (4) CHAIRS, AND UMBRELLA)	TYPE A	MFR: BY THE YARD MODEL: 42" ROUND PEDESTAL TABLE SKU: RPT42WW COLOR: WEATHERED WOOD MFR: BY THE YARD MODEL: GARDEN DINING HEIGHT CHAIR SKU: GRC-20WW COLOR: WEATHERED WOOD MFR: COUNTRY CASUAL TEAK MODEL: TEAK UMBRELLA 10' OCTAGON PRODUCT NO.:
	OUTDOOR DINING SET (INCLUDES TABLE AND (2) CHAIRS)	TYPE B	MFR: BY THE YARD MODEL: BAR ROUND FRAMED LEG TABLE SKU: BRLFT31 WW COLOR: WEATHERED WOOD MFR: BY THE YARD MODEL: GARDEN BAR HEIGHT CHAIR SKU: BGRC-SW WW COLOR: WEATHERED WOOD
	OUTDOOR COUCH	TYPE A	MFR: BY THE YARD MODEL: DEEP SEAT CUSHION COUCH COLOR: WEATHERED WOOD FABRIC: TBD SKU: DSCCOUCH-WW
	OUTDOOR CHAIR	TYPE A	MFR: BY THE YARD MODEL: DEEP SEAT CUSHION CHAIR COLOR: WEATHERED WOOD FABRIC: TBD SKU: DSCCHAIR-WW
	OUTDOOR COFFEE TABLE	TYPE A	MFR: BY THE YARD MODEL: 36" X 58" COFFEE FIRE TABLE COLOR: WEATHERED WOOD SKU: FTC3658-WW
	OUTDOOR SIDE TABLE	TYPE A	MFR: BY THE YARD MODEL: 20" ROUND TABLE COLOR: WEATHERED WOOD SKU: RET-WW

SIDEWALK TYPE 'A' HARDSCAPE		STANDARD CONCRETE WITH FINISH PER DETAIL(S)
DRIVEWAY TYPE 'B' HARDSCAPE		HEAVY DUTY VEHICULAR CONCRETE
PAVER TYPE 'C' HARDSCAPE		BELGARD ORIGINS PAVERS COLOR: AVONDALE PATTERN: ORIGINS18
PAVER TYPE 'D' HARDSCAPE		BELGARD ECO-URBANA PAVERS COLOR: AVONDALE PATTERN: PATTERN B
MULTI-PURPOSE LAWN TYPE 'E' SURFACE		MFR: SYNLAWN MODEL: SYNRYE 200 SEE DETAIL FOR ADDITIONAL INFORMATION

LIGHTING LEGEND - COVENANT LIVING OF NORTHBROOK

SYMBOL	TYPE	USAGE
	SA	LED ROADWAY FIXTURE LIGMAN FORREY 9 (FOR-20011) POLE: LIGMAN APD-RSA POLE 14'
	SB	LED POST TOP FIXTURE LIGMAN FORREY 9 (FOR-20011) POLE: LIGMAN APD-RSA POLE 10'
	SC	LED BOLLARD FIXTURE LIGMAN FORREY 1 (FOR-10031)
	SD	LED TREE UPLIGHT WAC ACCENT 120V 5012

KEY PLAN

NO.	DATE	DESCRIPTION
5	01/06/2023	PUD RESUB.

COVENANT LIVING OF NORTHBROOK

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THW DESIGN

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 2020066
Date: 09/30/2022

SITE LAYOUT

L-105

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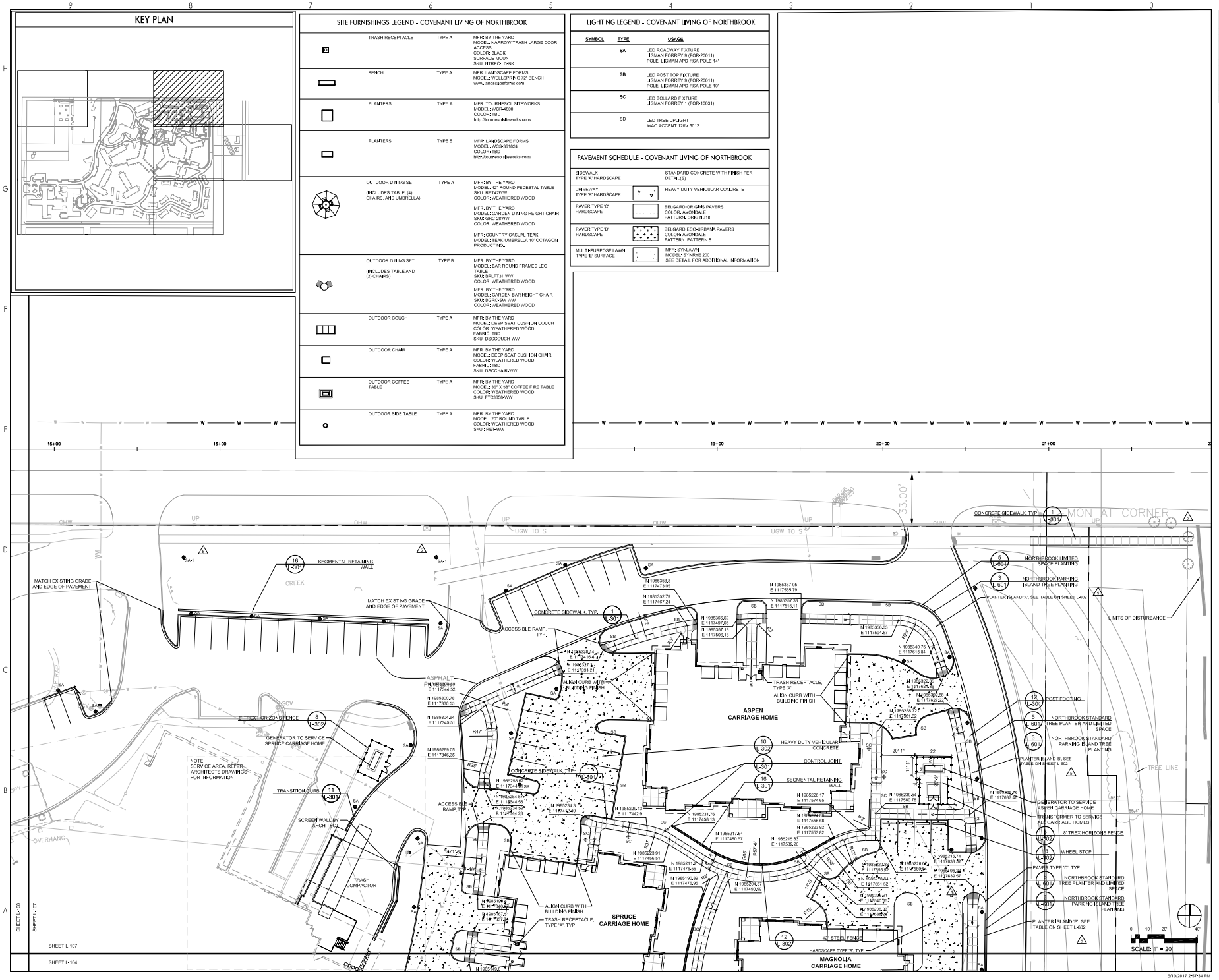

NO.	DATE	DESCRIPTION
5	01/06/2023	PUD RESUB.

COVENANT LIVING OF NORTHBROOK

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 2020066
Date: 09/30/2022

SITE LAYOUT

L-107

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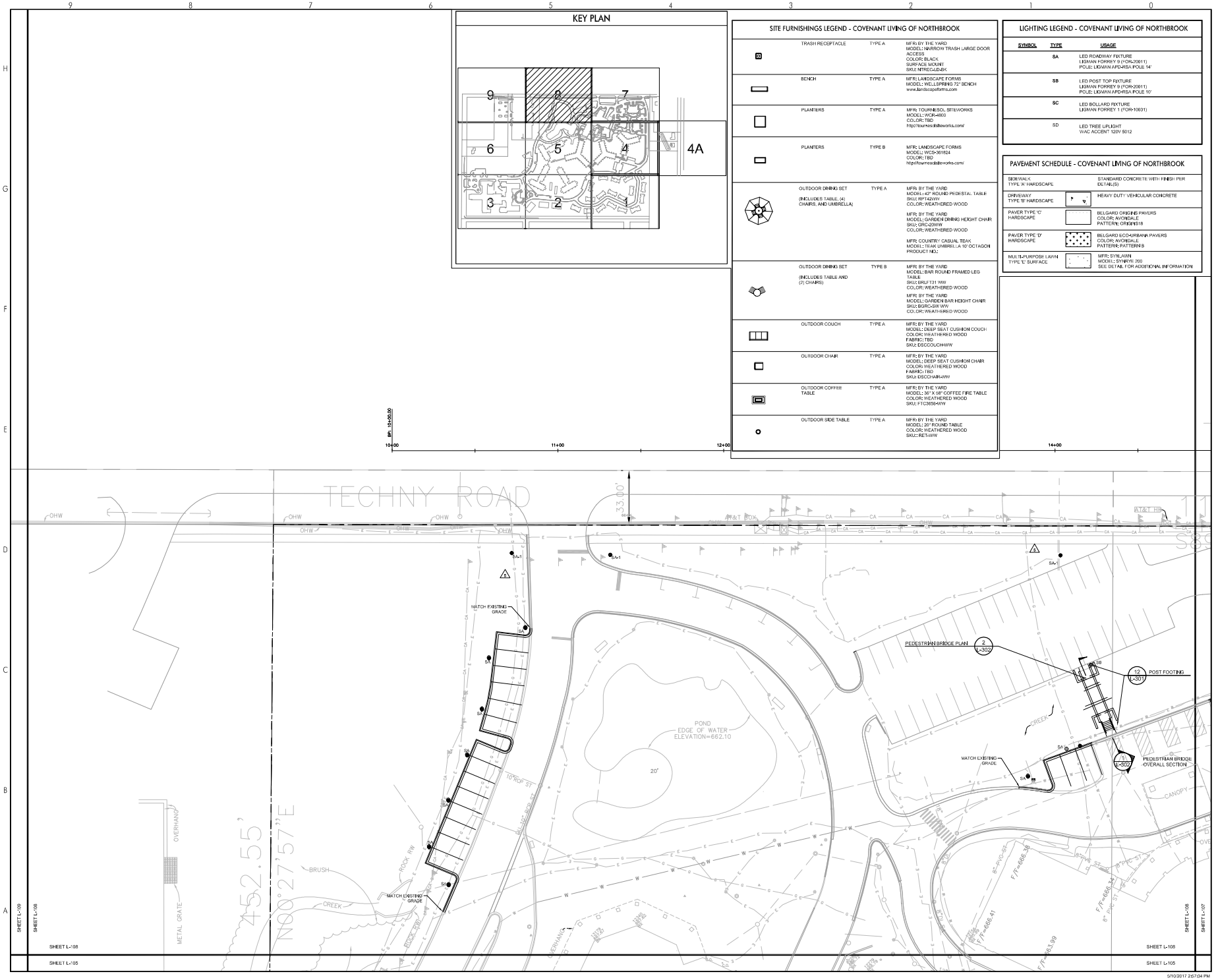

NO.	DATE	DESCRIPTION
5	01-06-2023	PUD RESUB.

COVENANT LIVING OF NORTHBROOK

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PERMIT

Project No.: 2020066
Date: 09/30/2022

SITE LAYOUT

L-108

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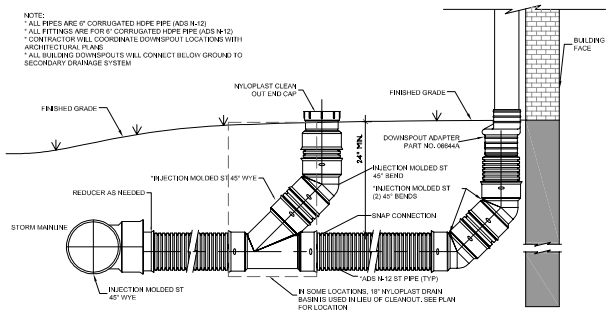
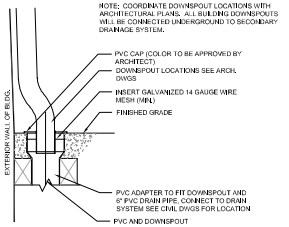
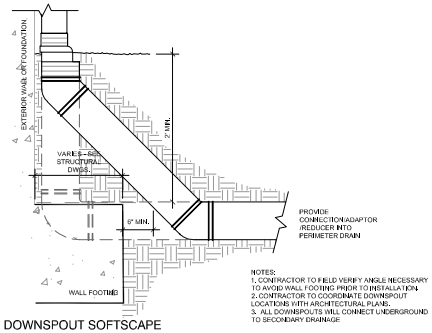


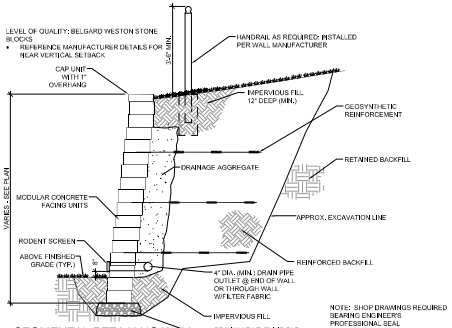
13 DOWNSPOUT CONNECTION
6" = 1'-0" 03-14



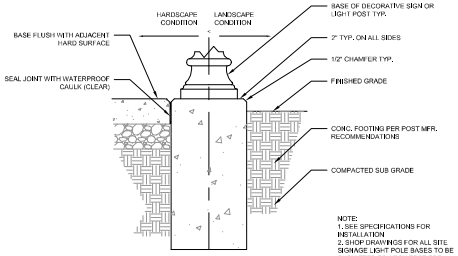
15 DOWNSPOUT HARDSCAPE
1 1/2" = 1'-0" 03-16



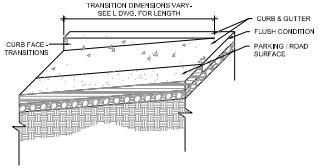
14 DOWNSPOUT SOFTSCAPE
1 1/2" = 1'-0" 03-15



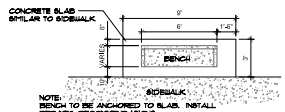
16 SEGMENTAL RETAINING WALL
1/2" = 1'-0" 03-11



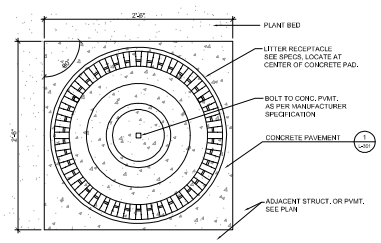
12 POST FOOTING
1 1/2" = 1'-0" 03-13



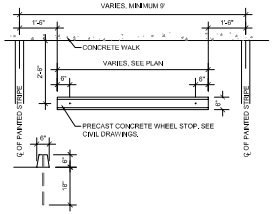
11 TRANSITION CURB
1/2" = 1'-0" 03-17



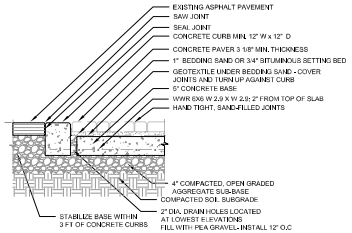
10 BENCH PAD
1/4" = 1'-0" 03-18



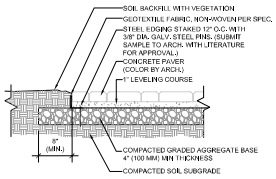
9 TRASH RECEPTACLE PAD
1 1/2" = 1'-0" 03-10



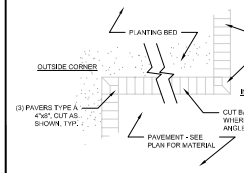
8 WHEEL STOP
1/2" = 1'-0" 03-09



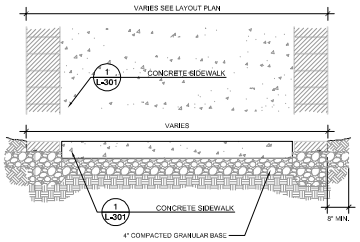
7 VEHICULAR PAVER
3/4" = 1'-0" 03-08



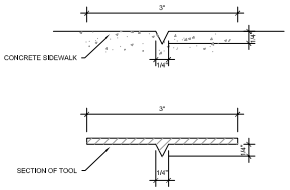
6 PEDESTRIAN PAVERS
1" = 1'-0" 03-06



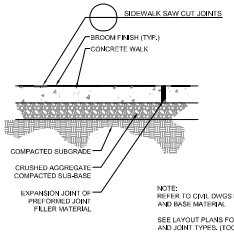
5 PAVER BANDING
1/2" = 1'-0" 03-07



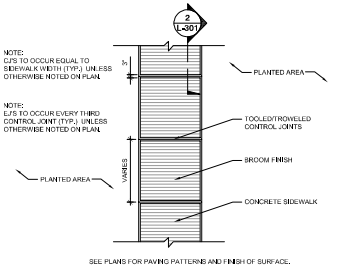
4 CONCRETE WALK WITH PAVER EDGE
1" = 1'-0" 03-03



3 CONTROL JOINT
1" = 1" 03-05



2 TYPICAL SIDEWALK SECTION
1" = 1'-0" 03-02



SEE PLANS FOR PAVING PATTERNS AND FINISH OF SURFACE.

1 CONCRETE SIDEWALK
1/4" = 1'-0" 03-01

NO.	DATE	DESCRIPTION

COVENANT LIVING OF NORTHBROOK
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THW DESIGN

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 2020066
Date: 09/30/2022

SITE DETAILS

L-301

5/10/2017 2:57:34 PM

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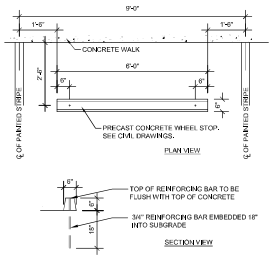
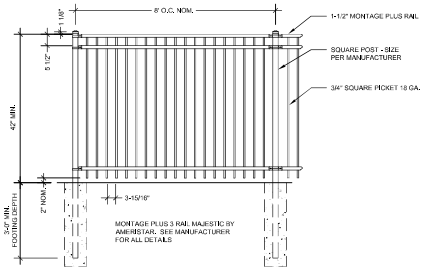


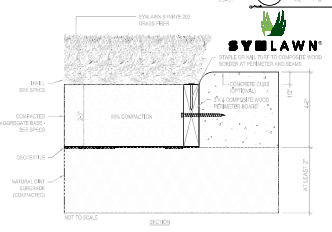
13 WHEEL STOP

1/2" = 1'-0" 03-31



12 42" STEEL FENCE

1/2" = 1'-0" 03-32



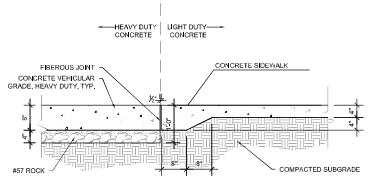
SYNRYE 200 - INSTALLED OVER AGGREGATE BASE W/ BENDER BOARD

MANUFACTURER NOTES:
1. THIS GRASS MUST BE INSTALLED AND SEAMED WITH ADJACENT PIECES RUNNING IN THE SAME DIRECTION. SEAMS SHOULD BE GLUED WITH SUITABLE SEAMING GLUE AND SEAMING CLOTH, NOT ADHESIVE TAPE.

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FAMILIAR WITH THE PROJECT. DRAWING ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION, DIMENSIONS, NOTES AND CONTENT AT THIS TIME OF DEVELOPMENT IS T MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR IS NOTED TO CONTACT AND OBTAIN INFORMATION VISIT www.CADdetails.com INFO AND ENTER REFERENCE NUMBER (###) HERE.

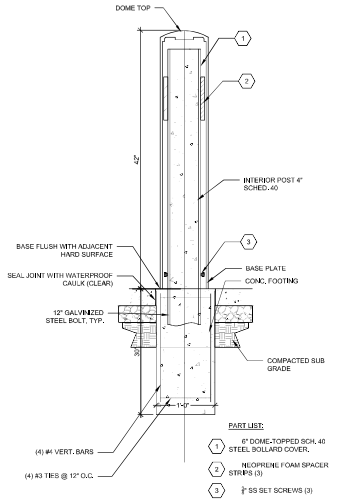
11 MULTI-PURPOSE SYNTHETIC LAWN SYNRYE 200

6" = 1'-0" 03-30



10 HEAVY DUTY VEHICULAR CONCRETE

3/4" = 1'-0" 03-29



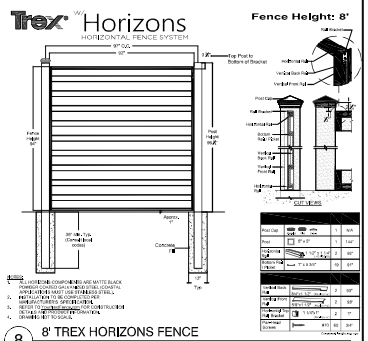
NOTE: FOOTER DETAILS FOR REFERENCE ONLY; PROPER FOOTER CONSTRUCTION DEPEND ON LOCAL SOIL CONDITIONS AND ENGINEERING REQUIREMENTS.

350 -SD - 6" DIA. BOLLARD * PIPE SLEEVE MOUNTING

STEEL BOLLARD SLEEVES COVER EXISTING INTERIOR CONCRETE EMBEDDED PIPE. BOLLARD IS FASTENED TO INTERIOR PIPE WITH S.S. SET SCEWS.

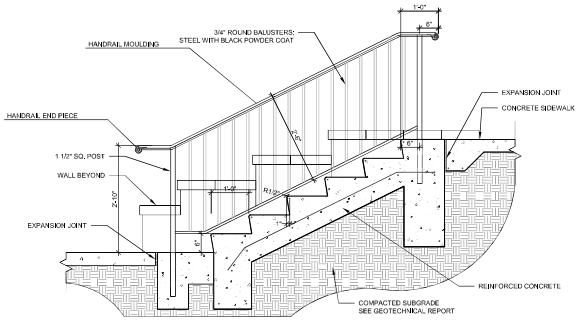
9 STAINLESS STEEL SECURITY BOLLARD

1" = 1" 03-27



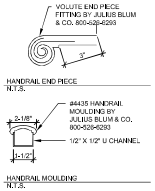
8 8' TREX HORIZONS FENCE

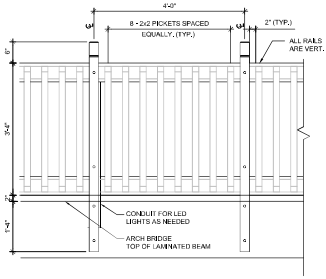
3/8" = 1'-0" 03-28



7 CONCRETE STAIRS

3/4" = 1'-0" 03-26

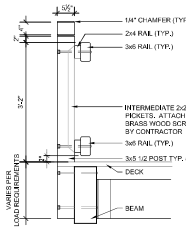




6 PEDESTRIAN BRIDGE ELEVATION

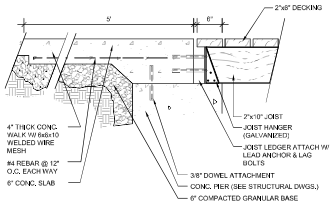
3/4" = 1'-0" 03-24

NOTE: THE FOLLOWING DETAILS ARE FOR DESIGN INTENT. BRIDGE MFG. WILL PROVIDE SHOP DRAWINGS FOR ALL ITEMS PER SPECIFICATIONS.



5 PEDESTRIAN BRIDGE SECTION

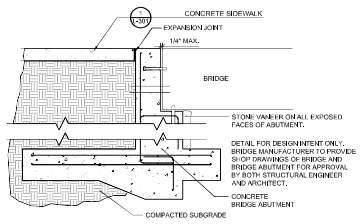
3/4" = 1'-0" 03-22



NOTES: FOR DECKING DETAILS / RAILS REFER TO ARCH. DWGS.

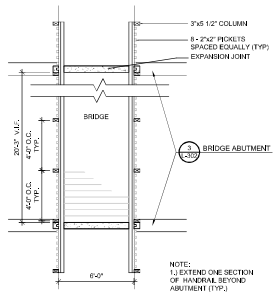
4 BRIDE TO SIDEWALK CONNECTION

1" = 1'-0" 03-23



3 BRIDGE ABUTMENT

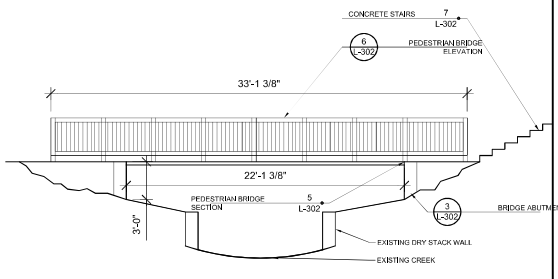
3/8" = 1'-0" 03-18



NOTE:
1) EXTEND ONE SECTION OF HANDRAIL BEYOND ABUTMENT (TYP.)

2 PEDESTRIAN BRIDGE PLAN

3/8" = 1'-0" 03-20



1 PEDESTRIAN BRIDGE OVERALL SECTION

1/4" = 1'-0" 03-33

NO.	DATE	DESCRIPTION

COVENANT LIVING OF NORTHBROOK

2625 TECHNY ROAD, NORTHBROOK, IL 60062

THW DESIGN

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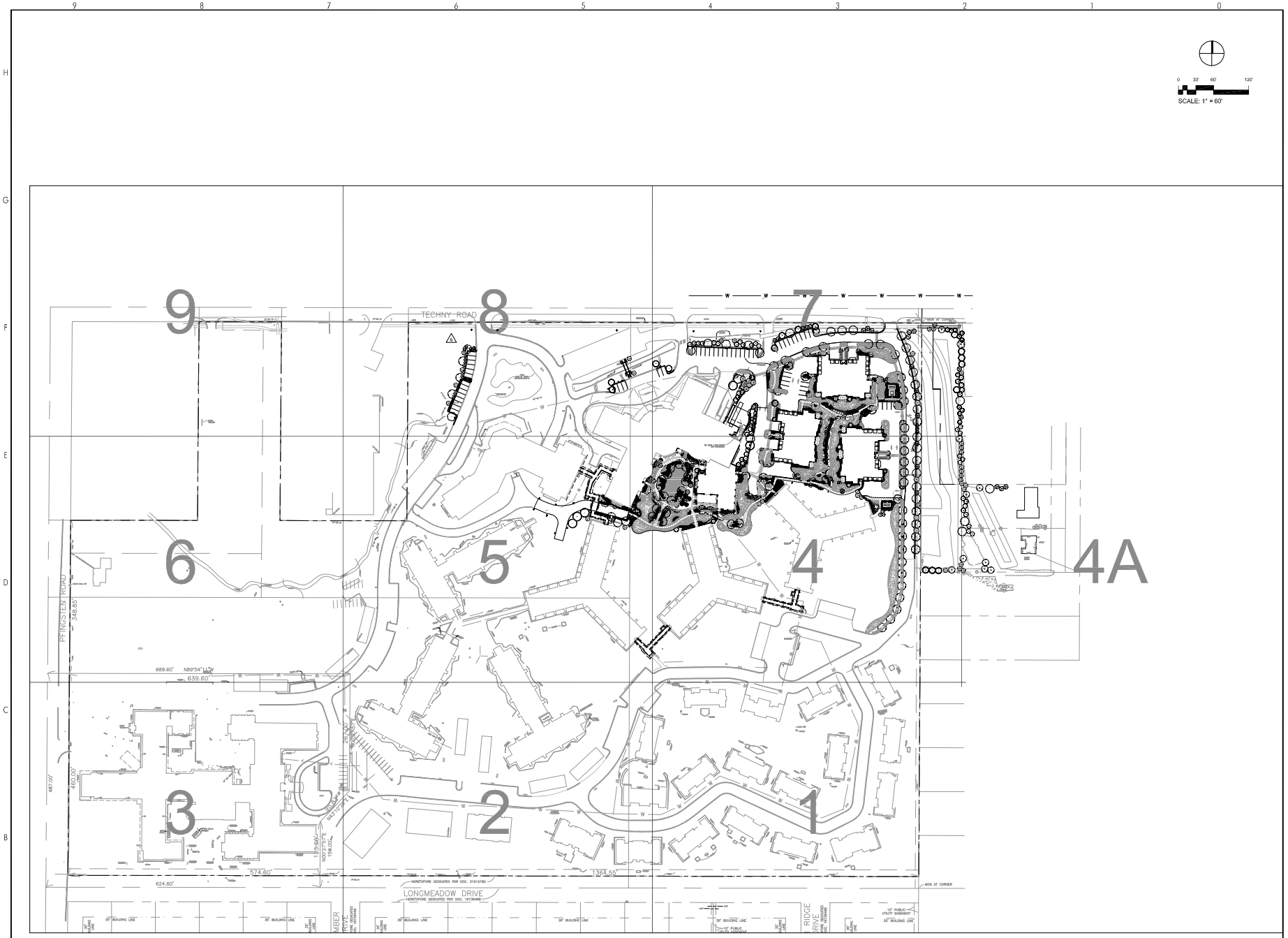
PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 2020066
Date: 09/30/2022

SITE DETAILS

L-302

5/10/2017 2:57:04 PM



NO.	DATE	DESCRIPTION
5	01/06/2023	PUD RESUB

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ARCHITECT INFO
12345678

PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 2020066
Date: 09/30/2022

OVERALL LANDSCAPE PLAN

L-400

5/10/2017 2:57:04 PM

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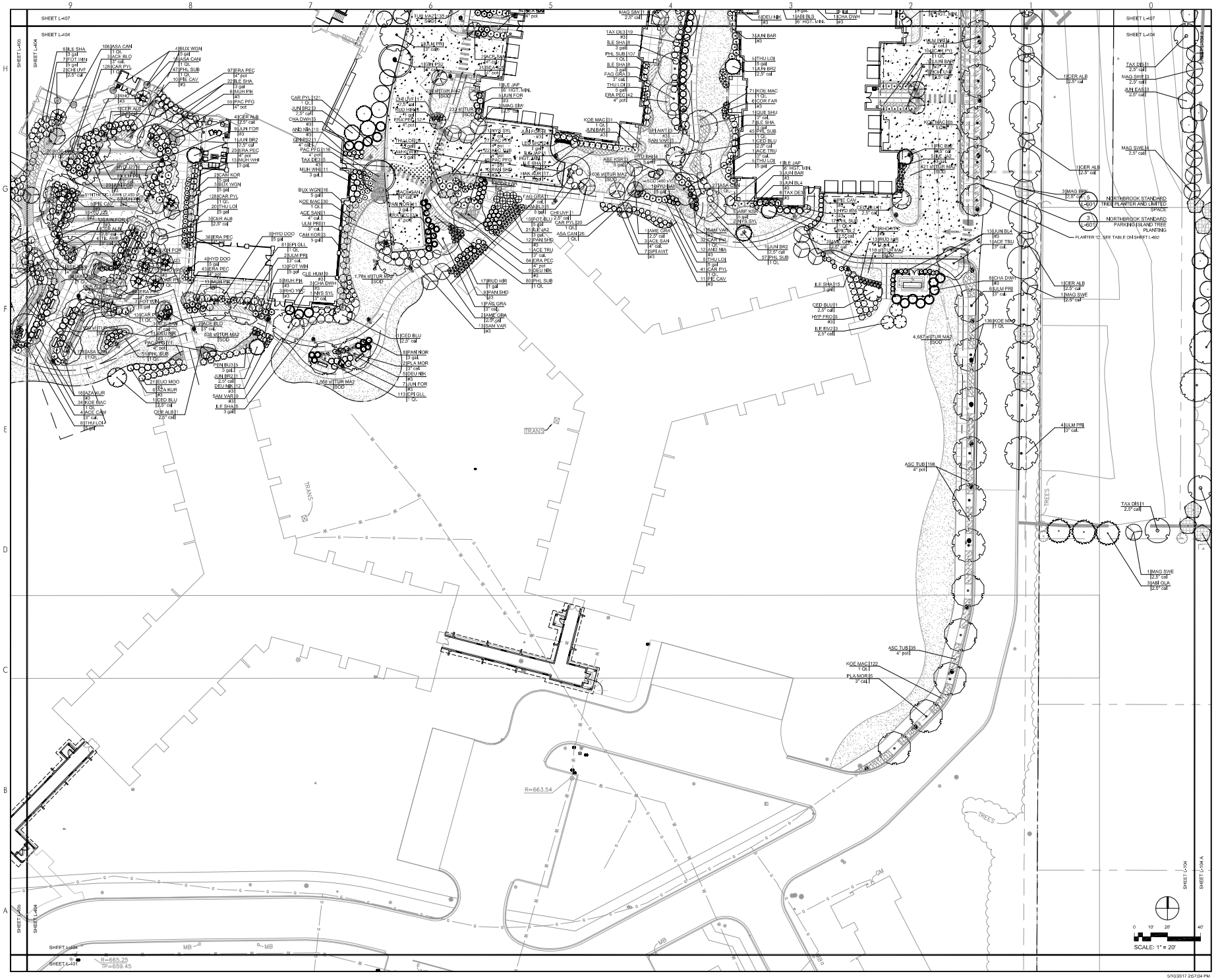

NO.	DATE	DESCRIPTION
6	10/20/2023	PUD RESUB
5	10/06/2023	PUD RESUB

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 2020066
Date: 09/30/2022

LANDSCAPE PLAN

L-404

5/10/2017 2:57:04 PM

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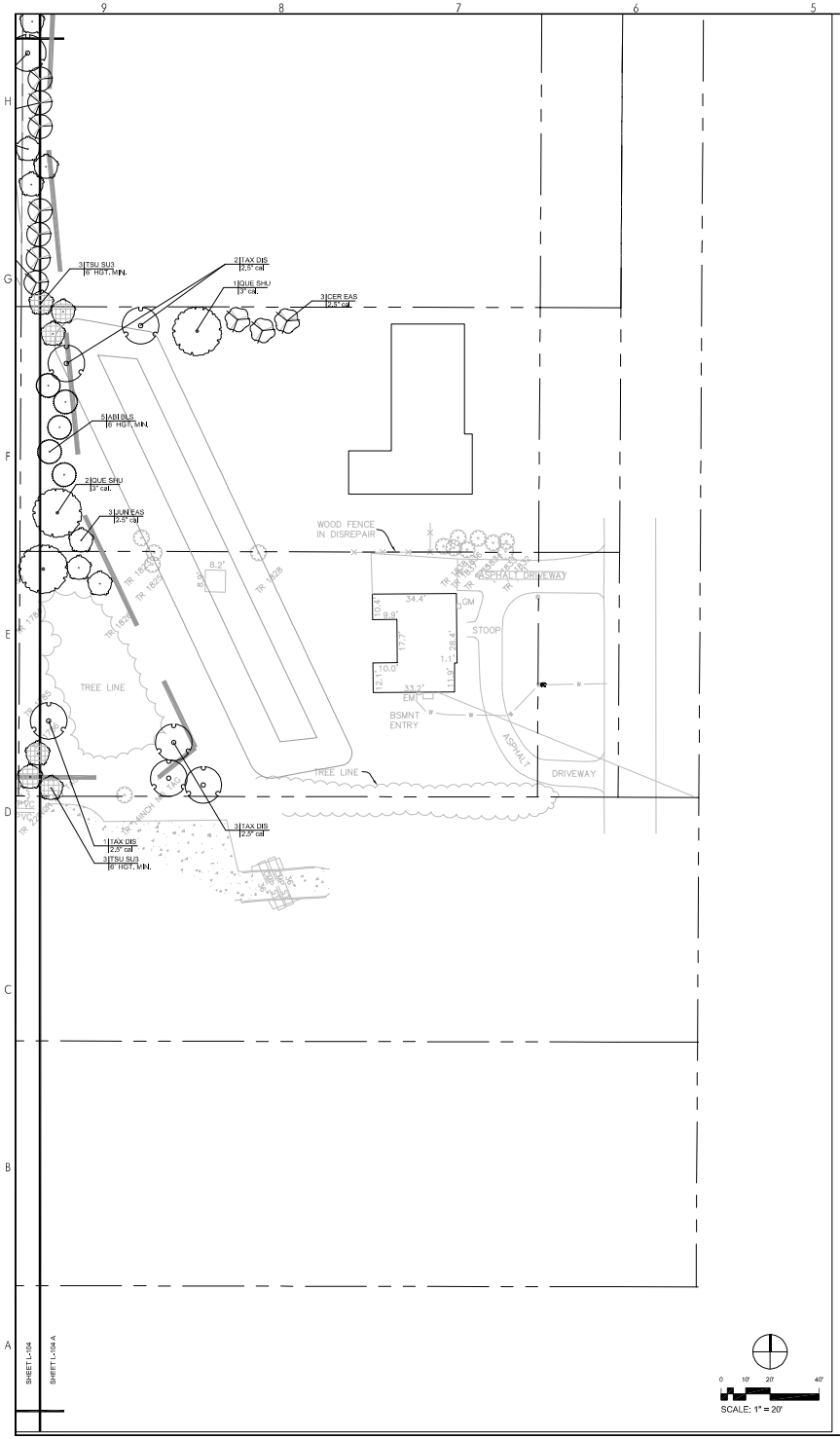

NO.	DATE	DESCRIPTION
6	02/20/2023	PUD RESUB

COVENANT LIVING OF NORTHBROOK

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PROGRESS
CONSTRUCTION
DOCUMENTS

Project No.: 2020066
Date: 09/30/2022

LANDSCAPE PLAN

L-404A

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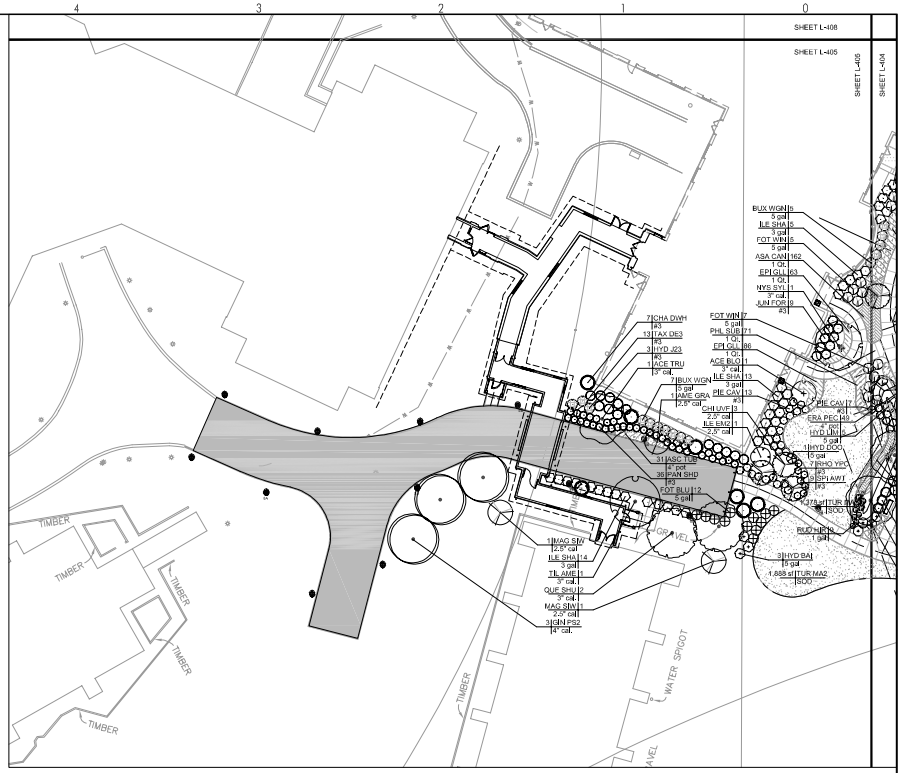

NO.	DATE	DESCRIPTION
6	02/20/2023	PUD RESUB
5	01/06/2023	PUD RESUB

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Project No.: 2020066
Date: 09/30/2022

LANDSCAPE PLAN

L-405

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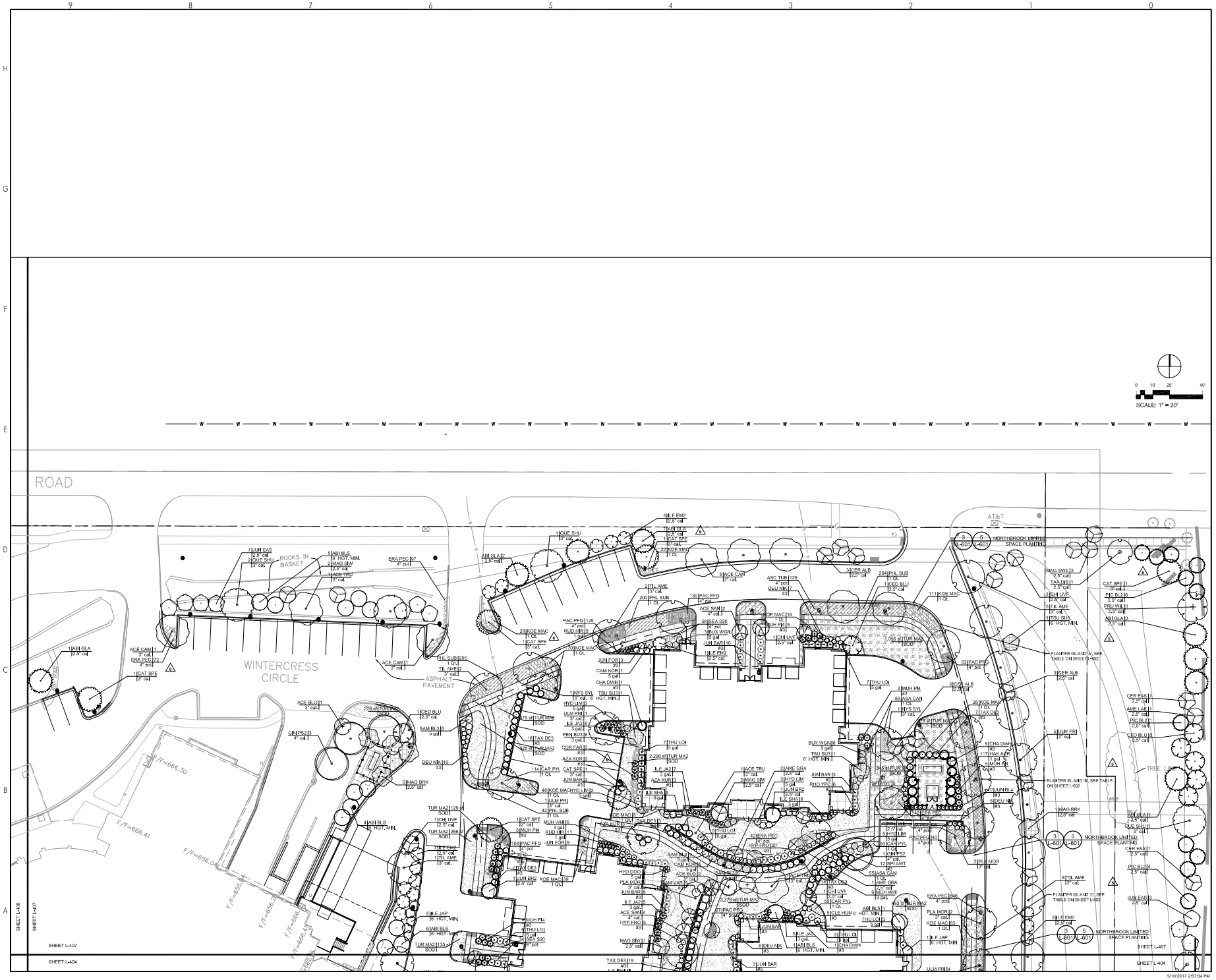

NO.	DATE	DESCRIPTION
6	02/20/2023	PUD RESUB
5	01/06/2023	PUD RESUB

COVENANT LIVING OF NORTHBROOK

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 2020066
Date: 09/30/2022

LANDSCAPE PLAN

L-407

5/10/2017 2:57:04 PM

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NO.	DATE	DESCRIPTION
6	02/20/2023	PUD RESUB
5	01/06/2023	PUD RESUB

COVENANT LIVING OF NORTHBROOK

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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 2020066
Date: 09/30/2022

LANDSCAPE PLAN

L-408

5/10/2017 2:57:04 PM

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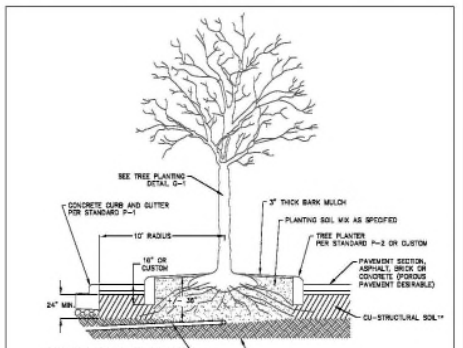
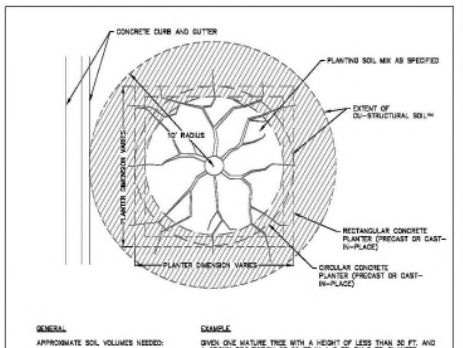


NOTES:
1. ALLOWABLE TREE SIZE AT MATURITY IS 30 FEET IN HEIGHT
2. STRUCTURAL SOIL MAY BE CU-STRUCTURAL SOIL™ OR STALITE (FOR SANDY SOILS). TRADITIONAL CRUSHED LIMESTONE IS NOT PERMITTED FOR USE IN TREE PLANTERS.
3. CU-STRUCTURAL SOIL SHALL BE OBTAINED FROM A LICENSED PRODUCER SUCH AS MIDWEST TRADING.
4. TREE SPECIES SHOULD BE CHOSEN THAT PREFER WELL DRAINED SOIL AND BE SUITABLE FOR THE EXPECTED SIZE OF THE CU-SOIL PROVIDED.
5. INITIAL WATERING SHOULD BE AT A RATE OF 20 GALLONS PER TREE, EVERY 5-7 DAYS.
6. SEE SHEET 2 FOR PLAN VIEW AND QUANTITIES.

TREE PLANTER AND LIMITED SPACE TREE PLANTING DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL G-9 (01)
	04.30.20	New Detail	(Sheet 1 of 2)

6 NORTHBROOK TREE PLANTER AND LIMITED SPACE TREE PLANTING



GENERAL
APPROXIMATE SOIL VOLUMES NEEDED:
2 CUBIC-FEET OF PLANTING SOIL FOR EVERY SQUARE-FOOT OF AREA ENCOMPASSED BY THE EXPECTED DRIP LINE AT TREE'S MATURITY (CROWN PROJECTION)

EXAMPLE
GIVEN ONE MATURE TREE WITH A HEIGHT OF LESS THAN 30 FT. AND A CROWN PROJECTION OF 20 FT IN A 9 FT. BY 9 FT. PLANTER.

CALCULATED CIRCULAR AREA FOR TREE = 314 S.F. (RADIUS = 10 FT.)
SOIL VOLUME NEEDED AT 24" DEPTH = 630 C.F.
OF WHICH PLANTING SOIL MIX VOLUME NEEDED = 80 C.F.
AND CU-SOIL™ NEEDED = 550 C.F.

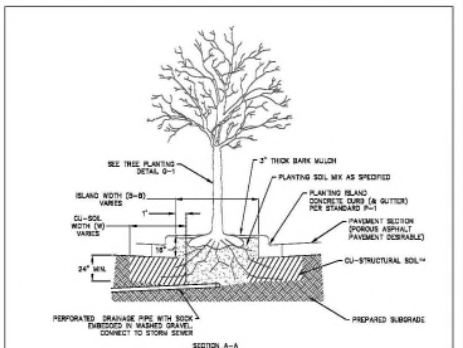
IF PLANTER IS LARGER THAN EXAMPLE ABOVE:

PLANTER DIMENSIONS	TOTAL SOIL VOLUME	PLANTING SOIL MIX VOLUME	CU-SOIL™ VOLUME
9 FT.X10 FT.	670 C.F.	150 C.F.	520 C.F.
10 FT.X10 FT.	710 C.F.	320 C.F.	410 C.F.

TREE PLANTER AND LIMITED SPACE TREE PLANTING DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL G-9 (01)
	04.30.20	New Detail	(Sheet 2 of 2)

5 NORTHBROOK STANDARD TREE PLANTER AND LIMITED SPACE

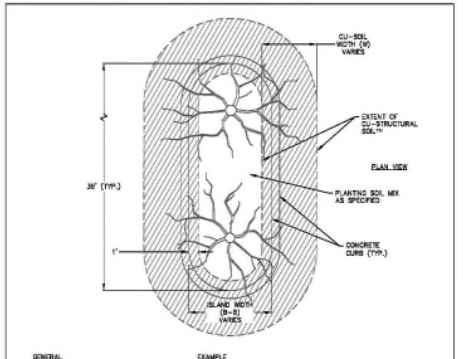


NOTES:
1. ALLOWABLE TREE SIZE AT MATURITY IS 30 FEET IN HEIGHT
2. STRUCTURAL SOIL MAY BE CU-STRUCTURAL SOIL™ OR STALITE (FOR SANDY SOILS). TRADITIONAL CRUSHED LIMESTONE IS NOT PERMITTED FOR USE IN PARKING LOT ISLANDS THAT HAVE TREES PLANTED.
3. CU-STRUCTURAL SOIL SHALL BE OBTAINED FROM A LICENSED PRODUCER SUCH AS MIDWEST TRADING.
4. TREE SPECIES SHOULD BE CHOSEN THAT PREFER WELL DRAINED SOIL AND BE SUITABLE FOR THE EXPECTED SIZE OF THE CU-SOIL PROVIDED.
5. INITIAL WATERING SHOULD BE AT A RATE OF 20 GALLONS PER TREE, EVERY 5-7 DAYS.
6. SEE SHEET 2 FOR PLAN VIEW AND QUANTITIES.

PARKING ISLAND TREE PLANTING DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL G-8 (01)
	04.30.20	New Detail	(Sheet 1 of 2)

4 NORTHBROOK STANDARD PARKING ISLAND TREE PLANTING



GENERAL
APPROXIMATE SOIL VOLUMES NEEDED:
2 CUBIC-FEET OF PLANTING SOIL FOR EVERY SQUARE-FOOT OF AREA ENCOMPASSED BY THE EXPECTED DRIP LINE AT TREE'S MATURITY (CROWN PROJECTION)

EXAMPLE
GIVEN TWO MATURE TREES WITH A HEIGHT OF LESS THAN 30 FT. AND A CROWN PROJECTION OF 20 FT IN A 9 FT. WIDE, 36 FT. LONG ISLAND:

CALCULATED AREA FOR TREE = 628 S.F.
SOIL VOLUME NEEDED AT 24" DEPTH = 1260 C.F.
OF WHICH PLANTING SOIL MIX VOLUME NEEDED = 300 C.F.
AND CU-SOIL™ NEEDED = 960 C.F.

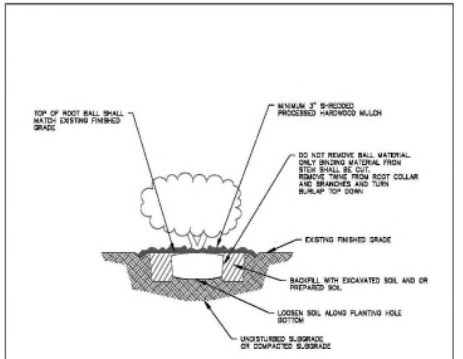
IF ISLAND IS WIDER THAN EXAMPLE ABOVE:

B-B	TOTAL SOIL VOLUME	PLANTING SOIL MIX VOLUME	CU-SOIL™ VOLUME	CU-SOIL™ WIDTH (W)
7.5 FT.	1260 C.F.	580 C.F.	720 C.F.	3.5 FT.
10.0 FT.	1260 C.F.	820 C.F.	440 C.F.	2 FT.

PARKING ISLAND TREE PLANTING DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL G-8 (01)
	04.30.20	New Detail	(Sheet 2 of 2)

3 NORTHBROOK STANDARD PARKING ISLAND TREE PLANTING

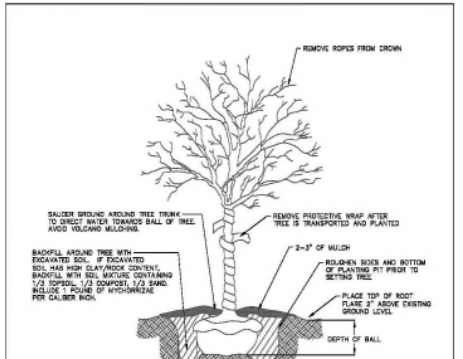


NOTES:
1. FINAL BALL ELEVATION AND PLANTER BED GRADING AS DIRECTED BY PLAN.
2. WHEN SOIL CONDITIONS WITH POOR DRAINAGE ARE DISCOVERED, NOTIFY VILLAGE REPRESENTATIVE.
3. LANDSCAPE CONTRACTOR SHALL SUGGEST SOLUTION FOR DRAINAGE IMPROVEMENTS

SHRUB PLANTING DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL G-2 (01)
	04.30.20	Revised Notes	(Sheet 1 of 1)
	6-1-21	Added Plan Note	

2 NORTHBROOK STANDARD SHRUB PLANTING DETAIL



NOTES:
1. CUT TWINE AT BASE OF TREE UPON PLANTING AND REMOVE ALL WIRES A MINIMUM OF 6" BELOW GRADE.
2. LOW PROFILE BASKETS ARE PREFERRED.
3. NYLON ROPE AND PLASTIC BURLAP ARE NOT PERMITTED.
4. NOT TO BE PLANTED IN SWALES OR OVERLAND DRAINAGE ROUTES

TREE PLANTING DETAIL

Village of Northbrook Public Works Department	DATE	REVISIONS	STANDARD DETAIL G-1 (01)
	04.30.20	Revised Notes	(Sheet 1 of 1)
	6-1-21	Added Plan Note	

1 NORTHBROOK STANDARD TREE PLANTING DETAIL

9/19/2017 2:57:34 PM

NO.	DATE	DESCRIPTION

COVENANT LIVING OF NORTHBROOK
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PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 2020066
Date: 09/30/2022

PLANTING DETAILS

L-601

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PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT	SIZE
	ACE CAM	11	Acer campestre / Hedge Maple (6) to be used as Replacement Trees	3" cal.	12' TO 14' MIN.
	ACE TRU	9	Acer truncatum / Shantung Maple (6) to be used as Replacement Landmark Trees	3" cal.	12' TO 14' MIN.
	CAT SPR	7	Catalpa speciosa / Northern Catalpa (2) to be used as Replacement Landmark Trees	3" cal.	12' TO 14' MIN.
	FAG GRA	5	Fagus grandifolia / American Beech (4) to be used as Replacement Landmark Trees	3" cal.	10' TO 12' HOT, MIN.
	GIN PS2	9	Ginkgo biloba 'Princeton Sentry' / Princeton Sentry Maidenhair Tree (6) to be used as Replacement Landmark Trees	4" cal.	14' TO 16' HOT, MIN.
	NYS SYL	9	Nyssa sylvatica / Tupelo (3) to be used as Replacement Landmark Trees	3" cal.	12' TO 14' MIN.
	PLA MOR	15	Platanus x acerifolia 'Morton Circle' / Exclaim™ London Plane Tree (5) to be used as Replacement Trees	3" cal.	12' TO 14' MIN.
	PRU WIL	7	Prunus serotina / Black Cherry (1) to be used as Replacement Tree	CAP cal.	10' TO 12' HOT, MIN.
	QUE SHU	10	Quercus shumardii / Shumard Oak (5) to be used as Replacement Landmark Trees	3" cal.	12' TO 14' MIN.
	TAX DIS	9	Taxodium distichum / Bald Cypress (1) to be used as Replacement Tree, 2.5" cal. code minimum	CAP cal.	10' TO 12' HOT, MIN.
	TIL AME	23	Tilia americana / American Linden Variety (6) to be used as Replacement Trees	3" cal.	12' TO 14' MIN.
	ULM PRE	32	Ulmus carpinifolia 'Prospector' / Prospector American Elm (12) to be used as Replacement Trees	3" cal.	12' TO 14' MIN.

ORNAMENTALS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	SIZE
	ABE BLS	33	Abies balsamea / Balsam Fir Planting Soil Blend: ____ 6' Typ. Code minimum	6' HOT, MIN.	
	ABE GLA	12	Abies glauca / White Spruce (3) to be used as Replacement Trees, 2.5" cal. code minimum	CAP cal.	8' TO 10' HOT, MIN.
	CED BLU	12	Cedrus atlantica 'Glauca' / Blue Atlas Cedar (3) to be used as Replacement Landmark Trees, 2.5" cal. code minimum	CAP cal.	8' TO 10' HOT, MIN.
	JUE JAP	14	Euonymus 'Green' / Green Japanese Holly 6' Typ. Code minimum	6' HOT, MIN.	
	JUE EMO	33	Juniperus 'Emerald' / Emerald Green Holly (1) to be used as Replacement Trees, 2.5" cal. code minimum	CAP cal.	8' TO 10' HOT, MIN.
	JUN EAS	16	Juniperus virginiana / Eastern Redcedar (3) to be used as Replacement Trees, 2.5" cal. code minimum	CAP cal.	8' TO 10' HOT, MIN.
	JUN BRZ	9	Juniperus virginiana 'Brodie' / Brodie Eastern Redcedar (3) to be used as Replacement Trees, 2.5" cal. code minimum	CAP cal.	8' TO 10' HOT, MIN.
	MAG BRK	9	Magnolia grandiflora 'Bracken's Brown Beauty' / Bracken's Beauty Southern Magnolia (3) to be used as Replacement Trees, 2.5" cal. code minimum	CAP cal.	8' TO 10' HOT, MIN.
	MAG SVK	14	Magnolia virginiana / Sweetbay Magnolia (4) to be used as Replacement Landmark Trees, 2.5" cal. code minimum	CAP cal.	8' TO 10' HOT, MIN.
	MAG STW	14	Magnolia virginiana 'Henry Shaw' / Sweetbay Magnolia (5) to be used as Replacement Trees, 2.5" cal. code minimum	CAP cal.	8' TO 10' HOT, MIN.
	PIC BLS	12	Picea pungens / Blue Spruce (3) to be used as Replacement Trees, 2.5" cal. code minimum	CAP cal.	8' TO 10' HOT, MIN.
	THU DIS	9	Thuja occidentalis 'Dark Green Spire' / Dark Green Spire Eastern Arborvitae Planting Soil Blend: ____ 6' Ht. Code Minimum	6' HOT, MIN.	

UNDERSTORY TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	SIZE
	ACE BLO	10	Acer palmatum 'Bloodgood' / Bloodgood Japanese Maple (5) to be used as Replacement Trees	3" cal.	8' TO 10' HOT, MIN.
	ACE SAN	19	Acer palmatum 'Sangokaku' / Coral Bark Japanese Maple (5) to be used as Replacement Trees	3" cal.	10' TO 12' HOT, MIN.
	AME LAE	1	Amelanchier laevis / Allegheny Serviceberry	CAP cal.	8' TO 10' HOT, MIN.
	AME GRA	12	Amelanchier x grandiflora 'Autumn Brilliance' / Autumn Brilliance Apple Serviceberry (4) to be used as Replacement Trees, 2.5" cal. code minimum	CAP cal.	8' TO 10' HOT, MIN.
	CER EAS	5	Cercis canadensis / Eastern Redbud Multi-stem (1) to be used as Replacement Tree, 2.5" cal. code minimum	CAP cal.	8' TO 10' HOT, MIN.
	CER ALB	23	Cercis canadensis 'Alba' / White Eastern Redbud (8) to be used as Replacement Trees, 2.5" cal. code minimum	CAP cal.	8' TO 10' HOT, MIN.
	CHI VAP	10	Chionanthus virginicus 'CVTIVAR' TM / Spreedy / White Fringetree (3) to be used as Replacement Trees, 2.5" cal. code minimum	CAP cal.	8' TO 10' HOT, MIN.

SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	ABE KSR	6	Abelia x grandiflora 'Kaleidoscope' TM / Ruby Anniversary Chinese Abelia	5 gal
	AZA KUR	33	Azalea x 'Coral Bells' / Coral Bells Kurume Azalea	#3
	BUX WGN	44	Buxus sinica var. insularis 'Wintergreen' / Wintergreen Korean Boxwood	5 gal
	CAM KOR	14	Camellia sasanqua 'Korean Fire' / Korean Fire Camellia	5 gal
	CHA EMN	34	Chamaecyparis thyoides 'Ericoides' PP# 6,811 TM / Soft Serve Elwoods Cypress	#3
	CLE HUM	14	Clethra alnifolia 'Humid Hybrid' / Humidscape Summersweet	#3
	COR FAR	14	Cornus sericea 'Farrow' TM / Arctic Fire Red Tidy Dogwood	#3
	DEU NIK	64	Deutzia gracilis 'Nikko' / Slender Deutzia	#3
	EUO MOO	24	Euonymus fortunei 'Moonshadow' TM / Moonshadow Wintercreeper	#3
	FOT BLU	23	Forsythia x intermedia 'Blue Hill' / Blue Hill Border Forsythia	5 gal
	FOT MIN	58	Forsythia x intermedia 'Minnesota Gold' / Minnesota Gold Forsythia	5 gal
	HYD QUE	1	Hydrangea arborescens 'Haas Halo' / Haas Halo Hydrangea	#3
	HYD OOO	10	Hydrangea macrophylla 'Oooh La La' / Oooh La La Hydrangea	5 gal
	HYD SMI	8	Hydrangea macrophylla 'Endless Summer' TM / Endless Summer Hydrangea	5 gal
	HYD J23	19	Hydrangea paniculata 'Jane' TM / Little Lime Panicle Hydrangea	#3
	HYD LIM	18	Hydrangea paniculata 'Limelight' / Limelight Panicle Hydrangea	5 gal
	HYP FRO	35	Hypericum frondosum 'Sunburst' / Sunburst Hypericum	#3
	JUE JAG	44	Euonymus 'Emerald' / Emerald Jadeshrub Holly	5 gal.
	JUE SHA	139	Euonymus 'Shamrock' / Shamrock Holly Holly	5 gal
	JUN FOR	33	Juniperus chinensis 'Sea Green' / Sea Green Juniper	#3
	JUN BAR	48	Juniperus horizontalis 'Bar Harbor' / Bar Harbor Creeping Juniper	#3
	JUN BLA	28	Juniperus virginiana 'Blue Arrow' / Blue Arrow Eastern Redcedar	#3
	LEU SWE	31	Leucothoe fontanesiana 'Scarletta Curly' / Scarletta Curly Doghobble	1 gal
	MYC SAV	98	Physocarpus opulifolius 'Seward' / Seward Ninebark	#3
	RHO YPC	58	Rhododendron x 'Yaku Princess' / Yaku Princess Rhododendron	#3
	RUD HIR	64	Rudbeckia hirta / Black-eyed Susan	1 gal
	SAM VIR	32	Sambucus nigra 'Viridigata' / Viridigata Elderberry	#3
	SAM BLS	22	Sambucus nigra 'Black Lace' / Black Lace Elderberry	5 gal

SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	SPI JAP	36	Spiraea x bumalda 'Anthony Waterer' / Anthony Waterer Bumald Spirea	#3
	TAX DEE	82	Taxus cuspidata 'Densa' / Dense Japanese Yew	#3
	THU LIT	82	Thuja occidentalis 'SMATSMART TM / Tyler Tot Arborvitae	5 gal

GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	AND NM	22	Andropogon gerardii 'Niagara' / Niagara Big Bluestem	#3
	MUH PM	35	Muhlenbergia capillaris 'Pink Cloud' / Pink Cloud Pink Muhly Grass	#3
	MUH WHI	35	Muhlenbergia capillaris 'White Cloud' / White Cloud Muhly Grass	3 gal.
	PAN SHE	67	Panicum virgatum 'Shenandoah' / Shenandoah Switch Grass	#3
	PAN NOR	19	Panicum virgatum 'Northwind' / Northwind Switch Grass	3 gal.
	PEN BLO	11	Pennisetum alopecuroides 'Burgundy Bunny' / Burgundy Bunny Dwarf Fountain Grass	3 gal.

GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	ASA CAN	697	Asarum canadense / Wild Ginger	1 Gl.	12" o.c.
	ASC TUB	415	Asclepias tuberosa / Butterfly Milkweed	4" pot	18" o.c.
	CAR PYL	828	Carex pensylvanica / Pennsylvania Sedge	1 Gl.	12" o.c.
	EPI CLL	343	Epimedium grandiflorum 'Lipstick' / Lipstick Bishop's Hat	1 Gl.	12" o.c.
	ERA PEC	1,583	Eragrostis spectabilis / Purple Tufted Lovegrass	4" pot	12" o.c.
	HAK AUR	734	Hakonechloa macra 'Aureola' / Golden Variegated Hakonechloa	1 gal	24" o.c.
	HOS MAC	1,193	Hosta fortunei 'Albopicta' / Albopicta Hosta	1 Gl.	18" o.c.
	PAC PRO	801	Pachysandra procumbens 'Forest Green' / Allegheny Spurge	4" pot	12" o.c.
	PHL SUB	1,216	Phlox subulata 'White Delight' / White Delight Creeping Phlox	1 Gl.	12" o.c.
	SEA SED	123	Seasonal Color x / Seasonal Color	4" pot	12" o.c.

COATINGS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	TUR MIX	29,189 sf	Turf Sod Variation III / Turfgrass Tall Fescue	SOD	

PLANTER ISLANDS SOIL

PLANTER ISLAND	SOIL AREA (*SF*)
PLANTER ISLAND 'A'	2,894 SF
PLANTER ISLAND 'B'	4,175 SF
PLANTER ISLAND 'C'	1,978 SF

TREE REPLACEMENT NOTES

Tree Replacement Requirements:

- **The total sum of protected, landmark, and heritage tree** diameter at breast height of trees being removed is = **81 diameter inches**
  - Village of Northbrook requires the sum of the diameter of protected, landmark, and heritage trees to be replaced equal to or greater than the sum of DBH of those trees being removed.
  - Village of Northbrook requires a 2.5" cal. Min. tree size to be installed.

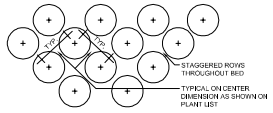
  The total quantity of non-landmark trees trees (> 6" DBH) being removed is = **89**
  - The Village of Northbrook requires tree replacements on a tree for tree basis (with a min. caliper of 2.5")

Proposed Tree Replacement:

The total sum of protected, landmark, and heritage tree diameter at breast height of trees being replaced is = **82 diameter inches***
- All trees proposed noted as shown: "To be used as Replacement Landmark Tree"*

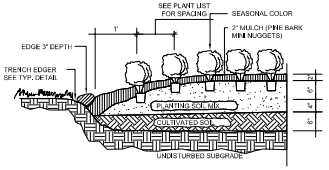
The total quantity of non-landmark trees (> 6" DBH) being replaced is = **89 trees***
- All trees proposed noted as shown: "To be used as Replacement Tree"*

*See tree remarks under tree names on plant schedule for designation



NOTE:
SEE PLANTING PLANS FOR SHRUB AND GROUNDCOVER BED AREAS. ROWS SHALL BE STRAIGHT AND PARALLEL.

? PLANT SPACING
SCALE: 1"=1'-0"



? PERENNIAL INSTALLATION
SCALE: 1"=1'-0"

NO.	DATE	DESCRIPTION
6	10/20/2023	PUD RESUB
5	01/06/2023	PUD RESUB

COVENANT LIVING OF NORTHBROOK

2625 TECHNY ROAD, NORTHBROOK, IL 60062

THW DESIGN

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THOMPSON HANCOCK WITTE & ASSOCIATES, INC.

2100 Riveridge Parkway
Suite 900
Atlanta, GA 30328

PH: 770 916 2220
FAX: 770 916 2299

www.thw.com

PROGRESS CONSTRUCTION DOCUMENTS

Project No.: 2020066
Date: 09/30/2022

PLANTING DETAILS

L-602

5/10/2017 2:57:34 PM

I:\2020\2020066 Covenant Living of Northbrook Expansion Studies\300 Design\335 CD\Sheets\PLANTING DETAILS.dwg

MEMORANDUM

To: Village Manager Cara Pavlicek
From: Director of Development and Planning Services Jonathan Mendel
Cc: Village Board of Trustees
Date: 2023-09-26
Subject: Preliminary Review of Zoning Request at 3100 Dundee Road

Overview/Synopsis.

This is a preliminary review of an application of an application for zoning relief at 3100 Dundee Road for a Zoning Code Text Amendment or Rezoning of a portion of the property to allow medical office uses as a permitted use instead of the current conditional/special permit use. The Preliminary Review by the Village Board is a high level review of the concept and provides for the Village Board to provide non-binding comments on a proposal prior to submitting to the Village a detailed application.

Fiscal Impact.

N/A.

Recommendation.

The Board is asked to comment on the proposal and approve a motion that the public hearing is conducted by the Plan Commission.

Background.

This is a preliminary review of an application filed by Korman Lederer Management Co. as agents for 3100 Dundee, LLC (the "Applicant") as owner of a property commonly known as 3100 Dundee Road (the "Subject Property"). The Applicant is requesting zoning relief which will make it possible to lease office space on the Subject Property to medical office tenants without requiring special permit approvals for each individual tenant.

The Subject Property:

- is located on north side of Dundee Road, east of Landwehr Road;
- is approximately 10.88 acres in size consisting of 115,866 square feet of office and warehouse spaces;
- is zoned I-1 Restricted Industrial District;
- is designated as Professional Office Uses by the Comprehensive Plan's Future Land Use Map;
- is not located within the 100-year flood plain; and
- is not located in proximity to any areas identified in the Master Stormwater Management

Plan.

The surrounding properties zoning and land uses are depicted on the attached Application Summary.

Additional Information

- The northern portion of the Subject Property consists of two buildings totaling approximately 38,866 square feet of warehouse flex units with large drive-in doors.
- The majority of the Subject Property located along Dundee Road consists of six single-story buildings totaling approximately 77,000 square feet of office space with business office tenants.
- In 2010 the Village adopted its current Comprehensive Plan which designates the northern portion of the Subject Property (as depicted in the attached Comprehensive Plan Map exhibit) as appropriate for General Industrial Uses, while the southern portion of the Subject Property was designated as appropriate for Professional Office Uses.
    - Professional Office Land Use is intended to provide areas to accommodate the needs of businesses with moderate pedestrian and vehicular traffic movements; and
    - Attached to this report is further information regarding the Professional Office Land Use Policies which is to be located along corporate corridors.
- In 2017 the Board of Trustees conducted a preliminary review on a request to rezone the Subject Property at that time, which the Board found to be appropriate; however, the Applicant never filed a formal application.
- The Applicant currently has an interested potential tenant of a medical office which would primarily see patients one-on-one, but there is an interest in being able to conduct group therapy sessions at some point as well. Currently, the Zoning Code requires a special permit for such request, but the special permit process has deterred past tenants due to the work and time involved in the process.

Zoning Relief

The Applicant is requesting one of the following two forms of relief:

1. Amend the Northbrook Zoning Code to allow SIC No. 8000.02 Health Services Except 8050 and 8060 as a Permitted use in the I-1 Restricted Industrial District.

- Currently, SIC No. 8000.02 is a permitted use in the following zoning districts:
    - C-5 Boulevard Commercial District
    - O-2 Limited Office District
    - O-3 General Office District
    - O-4 Boulevard Office District
- The use is conditionally permitted in the ICS and I-1 districts if the following condition is met (if unmet the use requires a special permit):
    - *The proposed use shall provide treatment sessions of generally one hour or more in which one health care provider meets with no more than two patients during any one hour time period. If a proposed use cannot meet this standard, a special*

permit shall be required.

- There are multiple locations in both the ICS and I-1 districts where older former industrial buildings are more suited for office uses and the Village is often contacted by medical offices interested in leasing spaces in those buildings; however, the special permit process has deterred some while majority have been able to work within the condition of treatment sessions noted above.

2. Rezone a portion of 3100 Dundee Road from the I-1 Restricted Industrial District to the O-2 Limited Office District (same district as the parcel to the east). This request would also require a minor lot line adjustment so that the zoning lots align with the final zoning districts.

- The northern section of the property, which includes some warehouse and "flex-space" uses, would continue to be zoned I-1, Restricted Industrial. This is also consistent with the Comprehensive Plan's Future Land Use Map, which shows the northern area as appropriate for General Industrial, Warehouse & Office use.
- The rezoning to the O-2 District will allow medical offices uses as a permitted use, while currently medical offices require a special use permit in the I-1 Restricted Industrial District unless the medical office can meet the required condition that a care provider meets with no more than two patients during any one hour time period which will then conditionally allow the use.

Either of the requested forms of relief will allow the Subject Property to be used for medical offices, of which there is significant interest in, once completed. It should be noted that the Zoning Code text amendment request could benefit numerous other properties within the Village, while the rezoning request would only benefit the Subject Property.

In reviewing the requested relief, the Board will want to keep in mind that the Comprehensive Plan has designated the Subject Property as appropriate for office uses, so either form of relief being requested is consistent with the Comprehensive Plan future land use map designation.

The Board will want to consider whether it is appropriate to allow the medical office uses being requested as permitted uses in all ICS and I-1 districts to assist the adaptive reuse of older industrial buildings with office spaces, or if it is more appropriate to rezone the Subject Property and allow the uses solely on the Subject Property. With the latter option, the Board will want to note that there may be future requests from other industrial properties that may have a request in the future to amend the code or rezone other properties due to the similar constraints being encountered when trying to lease spaces to new medical office businesses.

Lastly, as a reminder to the Board, the Northbrook Zoning Code was amended recently to reduce the parking requirement for medical offices to the same requirement as general offices. This means that the parking requirement on the Subject Property will not be of concern if additional medical offices wanted to locate on the property.

In its preliminary review of the appropriateness of this request we suggest the Board consider the following policy questions:

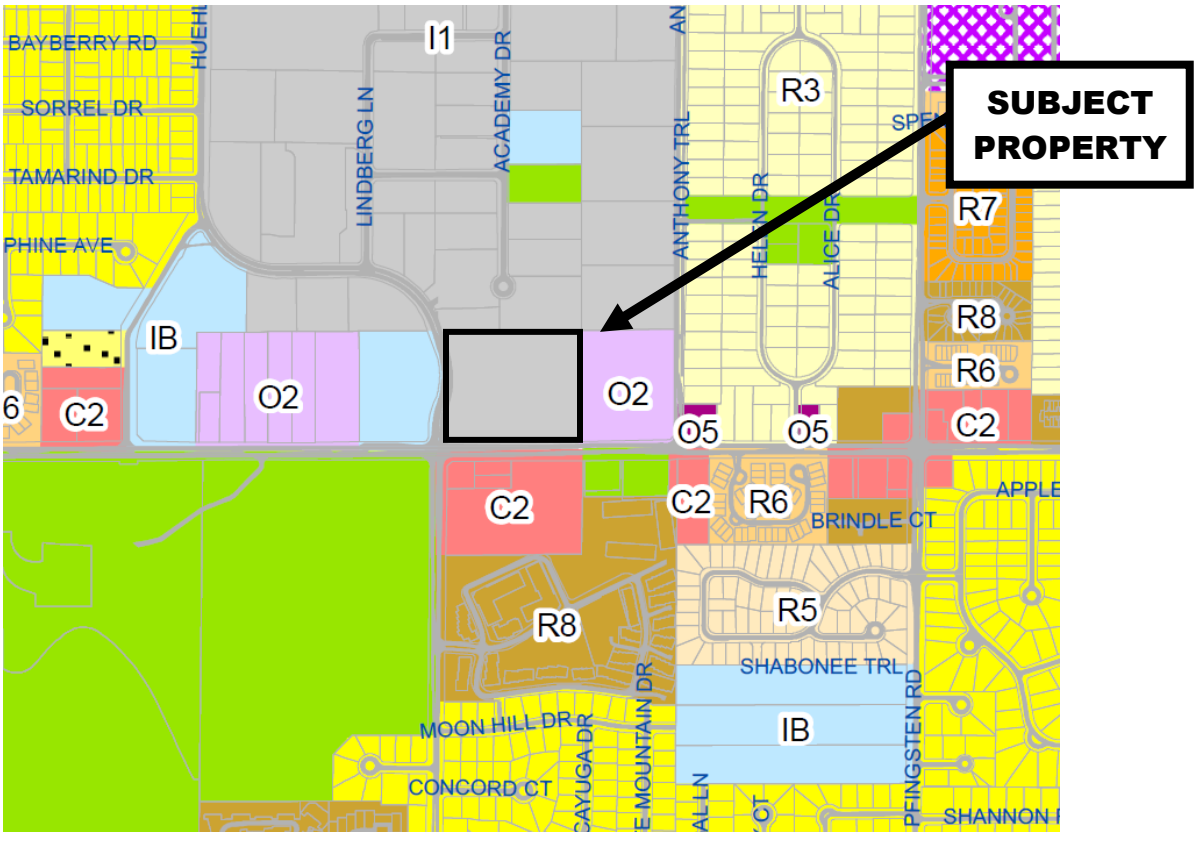
- Is it appropriate to amend the Zoning Code to allow medical offices as a permitted use in the I-1 Restricted Industrial District where the use is currently a conditional/special permit use?
    - If so, is it also appropriate to amend the use in the ICS district to also be permitted?
- If the Board does not find a code amendment appropriate, is it appropriate to create a minor subdivision and rezone the Subject Property to the O-2 district?

Exhibit A - 3100 Dundee - Coverpage, Aerials, Site Photos.pdf
Exhibit B - 3100 Dundee - Comp Plan Office Professional Description.pdf
Exhibit C - 3100 Dundee - Applicant Submittal.pdf
Exhibit D - Overview of Zoning Review Process

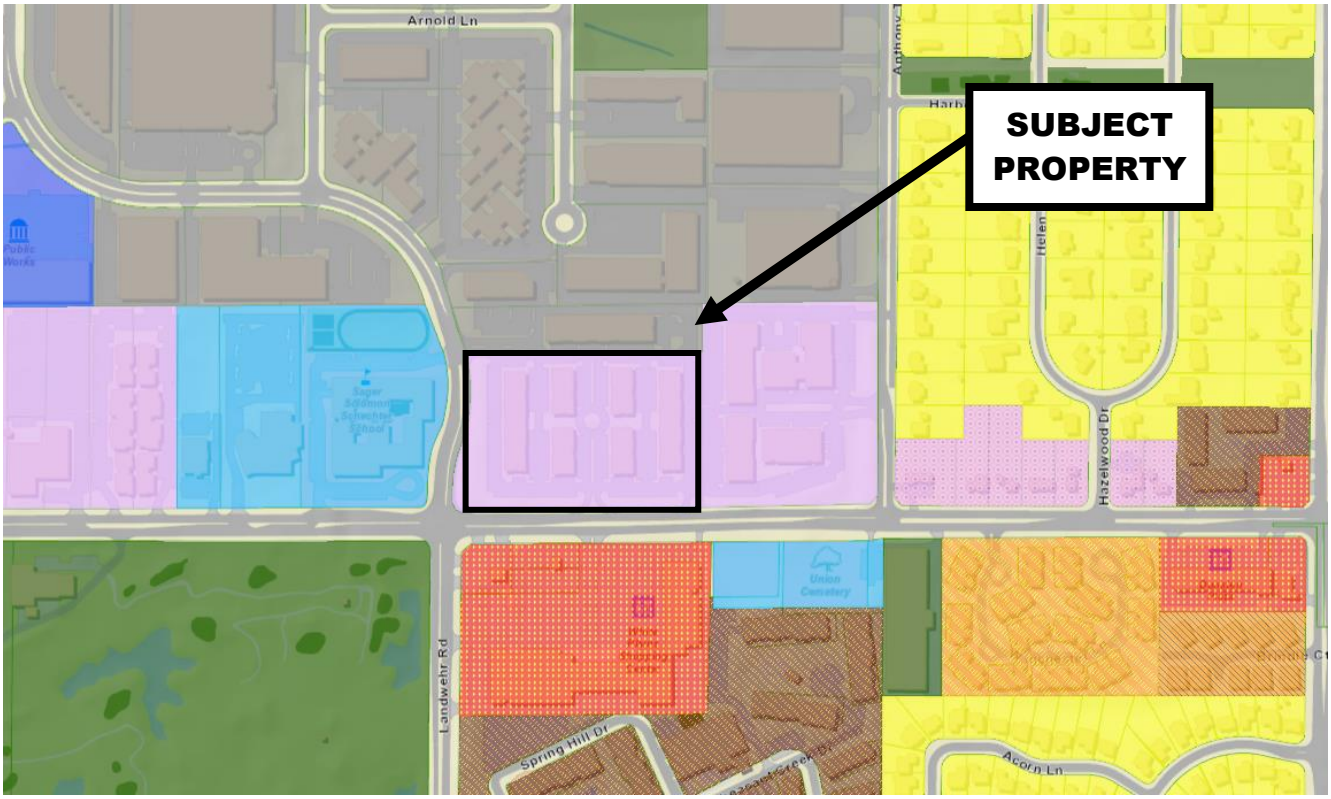
PRELIMINARY REVIEW
PRE-23-11: 3100 DUNDEE ROAD
APPLICATION SUMMARY

Applicant:	Korman Lederer Management Co.
Site Location:	3100 Dundee Road
Requested Action:	Amend the Northbrook Zoning Code to allow SIC No. 8000.02 Health Services Except 8050 and 8060 as a Permitted Use; **OR** Minor Subdivision and Rezoning from I-1 Restricted Industrial to O-2 Limited Office
Proposal:	To allow medical office uses on the property
Existing Zoning & Land Use:	I-1 Restricted Industrial District; multi-tenant office and warehouse facility
Surrounding Zoning & Land Use:	North: I-1 Restricted Industrial South: C-2 Neighborhood Commercial East: O-2 Limited Office West: IB Institutional Building
Comprehensive Plan Designation:	Professional Office

ZONING MAP



COMPREHENSIVE PLAN MAP



Legend

- Open Space & Outdoor Recreation
- Single Family
- Single Family Large Lot
- Multi-Family up to 6 DUA
- Multi-Family 6-9 DUA
- Multi-Family 9-15 DUA
- Multi-Family over 15 DUA
- Senior or Special Residential
- Government Facility
- Institutional Facility
- Neighborhood Office
- Neighborhood Edge 1
- Neighborhood Edge 2
- Office - Professional
- Office - Corporate/Corridor
- Community Retail
- Major Retail
- Industrial & Commercial Service
- General Industrial, Warehouse & Office
- Major Industrial/Distribution
- Transportation, Comm. & Utilities
- Village Center Mixed Use
- Techny Area Multi-Use
- Major Corridor Multi-Use
- Techny Area

N

0 70 140 280
Feet

3100 Dundee Road

N

0 37.5 75 150
Feet

3100 Dundee Road

Site Photos: 3100 Dundee

3100 Dundee – from Dundee Road

3100 Dundee – from Landwehr Road

Northbrook Comprehensive Plan

Land Use Policies

PROFESSIONAL OFFICE (OP)
Purpose: The Professional Office (OP) classification is intended to provide areas to accommodate the needs of business and professional offices requiring a limited amount of space and moderate intensity of pedestrian and vehicular traffic movements.
Principal Land Uses: The primary land uses in the OP classification will be business and professional offices. Subordinate uses in this classification may include business services, educational services, fitness facilities, religious and membership organizations, as well as limited retail uses and restaurants predominately serving the office uses.
Location Standards: The majority of the OP areas are located in specific areas generally along Dundee Road, Revere Drive, Skokie Boulevard, and Shermer Road between Waukegan and Techny Roads. OP Areas are also located in Sky Harbor Business Park.
Applicable Zoning District(s): O-2 Limited Office District, O-3 General Office District
Comments: The OP classification is differentiated from the Corporate Corridor Office classification due to its lower intensity and shorter building heights.

Village of
Northbrook

PRELIMINARY REVIEW APPLICATION – ZONING & SUBDIVISION RELIEF**

Prior to applying for preliminary review of requested zoning and/or subdivision relief by the Village Board, the Applicant should schedule a meeting with the Department of Development & Planning Services to discuss the requested relief. ***(**Note: Applications for zoning relief from the Zoning Board of Appeals must use a different application form.)***

The purpose of a preliminary review is to broadly acquaint the Village Board with the applicant's proposal and to provide the applicant with any preliminary views or concerns that members of the Board may have at a time in the process when positions are still flexible and adjustment is still possible. At the meeting at which the preliminary application is considered, any member of the Board of Trustees may make any comments, suggestions or recommendations regarding the preliminary application deemed necessary or appropriate by that member; provided, however, that no final or binding action shall be taken with respect to any preliminary application. Nothing said or done in the course of such review shall be deemed to create, or to prejudice, any rights of the applicant or to obligate the Village Board, or any member of it, to approve or deny any formal application following full consideration thereof as required by this Code.

The following materials are the minimum required for the processing of a preliminary review by the Village of Northbrook's Board of Trustees. There is no filing fee for the preliminary review; however, review of a submitted formal application will require payment of a filing fee(s). If you have questions regarding the completion of this process contact the Development & Planning Services Department at (847) 664-4050.

Current Property Owner Information

Legal Name: Korman/Lederer Management Co. as agents for 3100 Dundee Rd., LLC
Primary Contact: Harley Korman
Address 3100 Dundee Road, Suite 116
City, State, Zip Northbrook, IL 60062
Phone No. 847-498-1000
Email hkorman@kormanlederer.com

Applicant Information

Legal Name Korman/Lederer Management Co.
Primary Contact: Harley Korman
Company Korman/Lederer
Address 3100 Dundee Rd. Suite 116
City, State, Zip Northbrook, IL 60062
Phone No. 847-498-1000
Email hkorman@kormanlederer.com

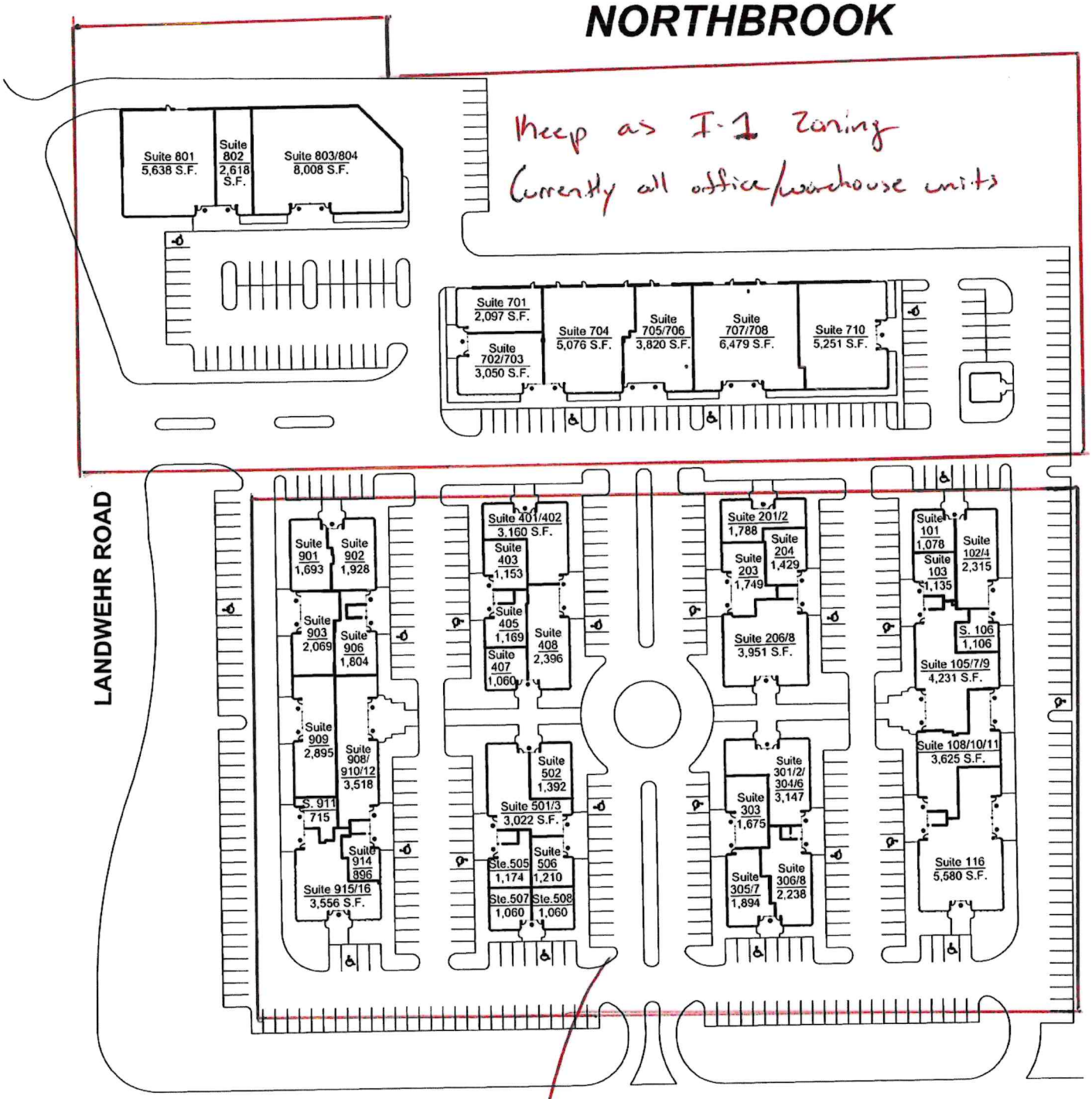
Property Information *(if more than one parcel is involved in the request please include the information for all parcels)*

Site Location/Address: 3100 Dundee Road, Northbrook
Size of Property: 10.88 Acres (square feet/acres)
Size of Building Space, if applicable: 115,866 (square feet)
Current Zoning[1]: I-1
Current Use of the Property: Office and office/warehouse units

[1] www.northbrook.il.us/zoningmap

OVER →

DUNDEE PLACE CORPORATE CENTER NORTHBROOK



Korman Lederer & Associates
3100 Dundee Road, Suite 116
Northbrook, Illinois 60062
(847) 498-1000

KORMAN | LEDERER
and Associates, LLC

Corporate Real Estate Services

September 18, 2023

Delivered Via Email

Ms. Michaela Kholstedt
Village of Northbrook
1225 Cedar Lane
Northbrook, IL 60062

Dear Michaela:

3100 Dundee Road is a single story complex consisting of multiple individual office spaces and flex/warehouse spaces. The property is 115,866 SF. Of that square footage, roughly 77,000 SF is strictly office space with the remainder being small flex/warehouse units (as per the attached site plan). Each unit has private access immediately adjacent to the parking lot, as there are no common (shared) areas.

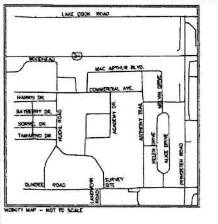
With the current I-1 zoning in place, 3100 is precluded from certain traditional office uses making it difficult to keep the complex leased. Korman/Lederer is requesting to amend the Zoning Code to allow medical office as a permitted use in the I-1 district or a rezoning of the property to an O-2 district, with the flex/warehouse to remain I-1.

With this change, there are no physical alterations or building improvements needed.

Sincerely,

KORMAN/LEDERER & ASSOCIATES

Harley Korman



Legend:

Storm MH		Electric Ground Light	
Storm CB		Gas Meter	
Storm Inlet		Sign Post	
San MH		Bumper Post	
Water MH		Unclassified Manhole	
Water Hand Hole		Auto Sprinkler	
Water Fire Hydrant		Hose Connection	
Telephone MH		Electric Vault	
Telephone Vault		Electric Meter	
Telephone Pedestal		Electric Pad	
Electric Manhole		Electric Pedestal	
Electric MH		Electric Light Pole	
		Electric Traffic Signal	

GREMLEY & BIEDERMANN
A DIVISION OF
PLCS Corporation
LICENSE NO. 184-005332
PROFESSIONAL LAND SURVEYORS
4505 NORTH ELSTON AVENUE, CHICAGO, IL 60630
TELEPHONE: (773) 685-5102 FAX: (773) 286-4184 EMAIL: INFO@PLCS-SURVEY.COM

GRAPHIC SCALE
(IN FEET)
1" = 40'

ALTA / NSPS Land Title Survey

PARCEL 1:
THAT PART OF LOT 4 IN BLOCK 3 OF FIRST RESUBDIVISION OF SKY HARBOR INDUSTRIAL PARK UNIT NO. 1 IN THE SOUTH 1/2 OF SECTION 5, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED NOVEMBER 28, 1972 AS DOCUMENT 22134317, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF LOT 4 AFORESAID; THENCE NORTH 89 DEGREES, 21 MINUTES, 38 SECONDS EAST ALONG THE SOUTH LINE THEREOF, 304.52 FEET; THENCE NORTH 00 DEGREE, 00 MINUTE, 44 SECONDS WEST FOR A DISTANCE OF 131.46 FEET; THENCE SOUTH 89 DEGREES, 59 MINUTES, 16 SECONDS WEST FOR A DISTANCE OF 357.11 FEET TO A POINT IN THE WESTERLY LINE OF LOT 4 AFORESAID; THENCE SOUTHERLY ALONG SAID WESTERLY LINE, BEING AN ARC OF A CIRCLE CONVEX EASTERLY AND HAVING A RADIUS OF 480.0 FEET FOR A DISTANCE OF 145.25 FEET TO THE POINT OF BEGINNING, ALL IN COOK COUNTY, ILLINOIS.

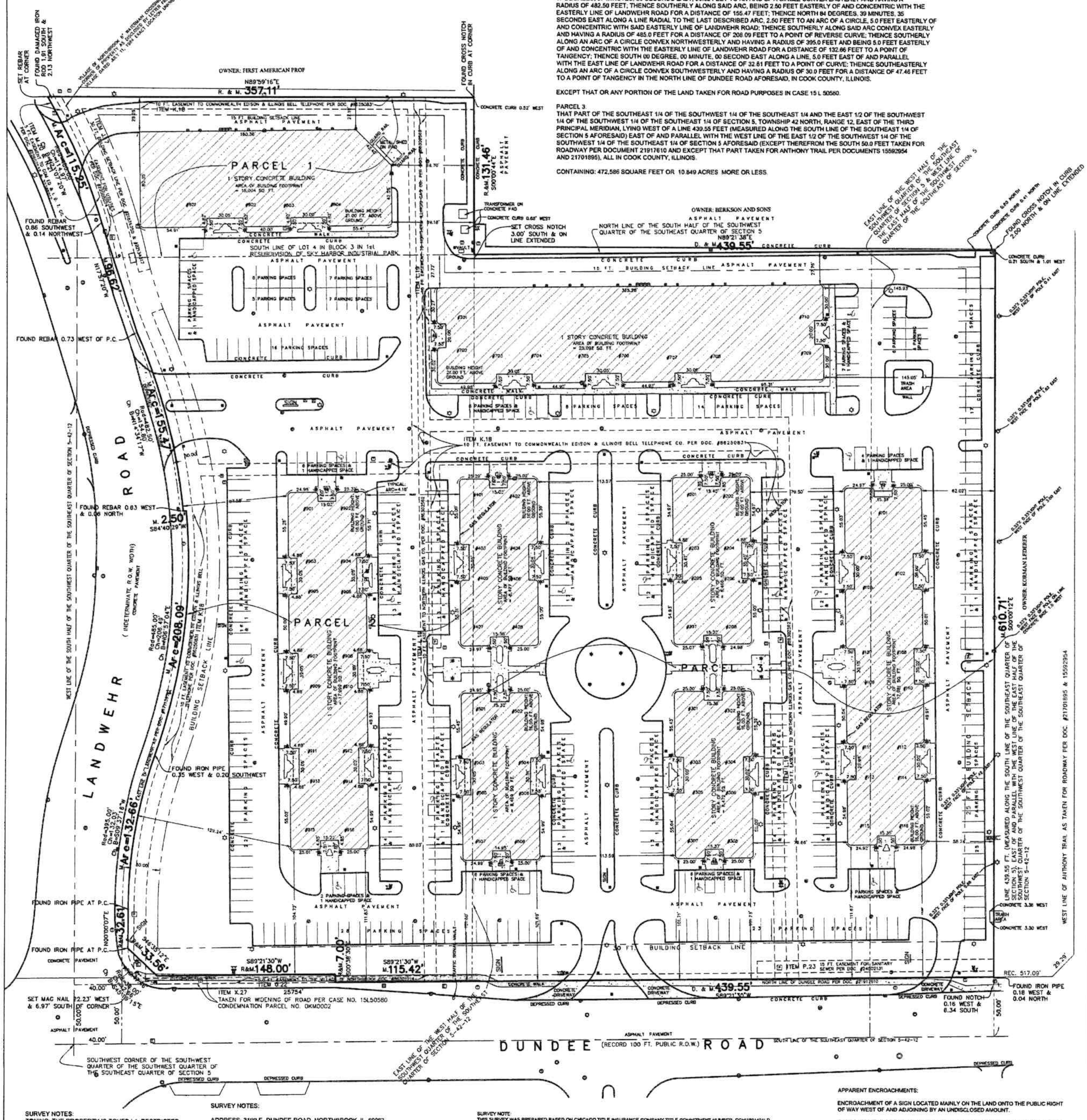
PARCEL 2:
THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 5, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, (EXCEPTING THE SOUTH 50 FEET THEREOF TAKEN FOR DUNDEE ROAD) EXCEPTING FROM THE AFORESAID PARCELS 1 AND 2, THAT PART THEREOF LYING WESTERLY OF THE EASTERLY LINE OF PART TAKEN FOR THE WIDENING OF LANDWEHR ROAD BY PLAT OF DEDICATION FOR PUBLIC STREET RECORDED AS DOCUMENT 87115971, SAID EASTERLY LINE, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE WESTERLY LINE OF AFORESAID LOT 4, BEING AN ARC OF A CIRCLE CONVEX EASTERLY AND HAVING A RADIUS OF 480.00 FEET, A DISTANCE OF 30.00 FEET (THE CHORD OF SAID ARC HAVING A BEARING OF NORTH 14 DEGREES, 27 MINUTES, 10 SECONDS WEST) NORTHERLY OF THE SOUTHWEST CORNER OF LOT 4 AFORESAID; THENCE SOUTH 17 DEGREES, 57 MINUTES, 20 SECONDS EAST, 96.62 FEET TO AN ARC OF A CIRCLE CONVEX EASTERLY AND HAVING A RADIUS OF 482.50 FEET; THENCE SOUTHERLY ALONG SAID ARC, BEING 2.50 FEET EASTERLY OF AND CONCENTRIC WITH THE EASTERLY LINE OF LANDWEHR ROAD FOR A DISTANCE OF 155.47 FEET; THENCE NORTH 84 DEGREES, 39 MINUTES, 35 SECONDS EAST ALONG A LINE RADIAL TO THE LAST DESCRIBED ARC, 2.50 FEET TO AN ARC OF A CIRCLE, 5.0 FEET EASTERLY OF AND CONCENTRIC WITH SAID EASTERLY LINE OF LANDWEHR ROAD; THENCE SOUTHERLY ALONG SAID ARC CONVEX EASTERLY AND HAVING A RADIUS OF 485.0 FEET FOR A DISTANCE OF 208.09 FEET TO A POINT OF REVERSE CURVE; THENCE SOUTHERLY ALONG AN ARC OF A CIRCLE CONVEX NORTHWESTERLY AND HAVING A RADIUS OF 395.0 FEET AND BEING 5.0 FEET EASTERLY OF AND CONCENTRIC WITH THE EASTERLY LINE OF LANDWEHR ROAD FOR A DISTANCE OF 132.66 FEET TO A POINT OF TANGENCY; THENCE SOUTH 00 DEGREE, 00 MINUTE, 00 SECOND EAST ALONG A LINE, 5.0 FEET EAST OF AND PARALLEL WITH THE EAST LINE OF LANDWEHR ROAD FOR A DISTANCE OF 32.61 FEET TO A POINT OF CURVE; THENCE SOUTHEASTERLY ALONG AN ARC OF A CIRCLE CONVEX SOUTHWESTERLY AND HAVING A RADIUS OF 30.0 FEET FOR A DISTANCE OF 47.46 FEET TO A POINT OF TANGENCY IN THE NORTH LINE OF DUNDEE ROAD AFORESAID, IN COOK COUNTY, ILLINOIS.

EXCEPT THAT OR ANY PORTION OF THE LAND TAKEN FOR ROAD PURPOSES IN CASE 15 L 50580.

PARCEL 3:
THAT PART OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 AND THE EAST 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 5, TOWNSHIP 42 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, LYING WEST OF A LINE 439.55 FEET (MEASURED ALONG THE SOUTH LINE OF THE SOUTHEAST 1/4 OF SECTION 5 AFORESAID) EAST OF AND PARALLEL WITH THE WEST LINE OF THE EAST 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 5 AFORESAID (EXCEPT THEREFROM THE SOUTH 50.0 FEET TAKEN FOR ROADWAY PER DOCUMENT 21917610 AND EXCEPT THAT PART TAKEN FOR ANTHONY TRAIL PER DOCUMENTS 15592954 AND 21701895), ALL IN COOK COUNTY, ILLINOIS.

CONTAINING: 472,586 SQUARE FEET OR 10.849 ACRES MORE OR LESS.



SURVEY NOTES:
ZONING: THE PROPERTY IS ZONED I-1, RESTRICTED INDUSTRIAL DISTRICT.
THE EXISTING US AS OFFICE BUILDINGS IS PERMITTED WITHIN THIS ZONE.
PARKING: ACCORDING TO THE ZONING REPORT, THE PROPERTY COMPLIES WITH PARKING REQUIREMENTS.
SETBACKS: THE PROPERTY COMPLIES WITH SETBACK REQUIREMENTS ACCORDING TO THE ZONING REPORT.
ZONING SOURCE: LETTER DATED SEPTEMBER 14, 2018 FOR THE VILLAGE OF NORTHBROOK.

PARKING SUMMARY:

TOTAL 434 STRIPED REGULAR PARKING SPACES
TOTAL 23 STRIPED HANDICAPPED PARKING SPACES.

REVISED AND ADDED ZONING OCTOBER 18, 2018
PER ORDER #2018-26033 [RL]

REVIEWED WITH TITLE AND REVISED AUGUST 24, 2018

ORDERED BY	3100 DUNDEE LLC c/o KORMAN LEDERER MANAGEMENT CO	CHECKED	DRAWN
ADDRESS	3100 E. DUNDEE ROAD, NORTHBROOK, IL, 60062	RL	AJH

GREMLEY & BIEDERMANN, PLCS, CORPORATION, LICENSE NO. 184-005332, PROFESSIONAL LAND SURVEYORS, 4505 NORTH ELSTON AVENUE, CHICAGO, IL 60630, TELEPHONE (773) 685-5102 FAX (773) 286-4184 EMAIL INFO@PLCS-SURVEY.COM

ORDER NO.	DATE	PAGE NO.
2018-25763-001	AUGUST 10, 2018 / SCALE: 1 INCH = 40 FEET	1 OF 1

G:\CAD\2018\2018-25763\2018-25763-001.dwg

SURVEY NOTES:

ADDRESS: 3100 E. DUNDEE ROAD, NORTHBROOK, IL. 60062

PROPERTY APPEARS IN "OTHER AREAS" ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, PER FLOOD INSURANCE RATE MAP VILLAGE OF NORTHBROOK, ILLINOIS, MAP NO. 17031C0068J, EFFECTIVE DATE AUGUST 19, 2008.

REGARDING TABLE A ITEM 11 AS TO OBSERVED EVIDENCE OF UTILITIES AND SURFACE MATTERS ONLY.

REGARDING TABLE A ITEM 16 THERE IS NO OBSERVED EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS.

REGARDING TABLE A ITEM 17 WE HAVE NO INFORMATION ABOUT PROPOSED CHANGES IN STREET RIGHT OF WAY LINES. THERE IS NO OBSERVED EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.

REGARDING TABLE A ITEM 18 THERE IS NO OBSERVED DELINEATION OF WETLANDS (i.e. MARKERS, FLAGS, etc.).

REGARDING TABLE A ITEM 19 THERE ARE NO OFF-SITE EASEMENTS INDICATED IN PROVIDED TITLE COMMITMENT.

SURVEYOR'S LICENSE EXPIRES NOVEMBER 30, 2018

Note R. & M. denotes Record and Measured distances respectively.

Distances are marked in feet and decimal parts thereof. Compare all points BEFORE building by same and at once report any differences BEFORE damage is done.

For easements, building lines and other restrictions not shown on survey plat refer to your abstract, deed, contract, title policy and local building line regulations.

NO dimensions shall be assumed by scale measurement upon this plat.

Unless otherwise noted hereon the Bearing Basis, Elevation Datum and Coordinate Datum if used is ASSUMED.

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SURVEY NOTE:
THIS SURVEY WAS PREPARED BASED ON CHICAGO TITLE INSURANCE COMPANY TITLE COMMITMENT NUMBER, CCHI1801491LD COMMITMENT DATE: OCTOBER 4, 2018 AS TO MATTERS OF RECORD.

ITEMS LISTED IN SCHEDULE "B"

J 17. BUILDING LINE ALONG THE WEST 30 FEET OF THE LAND AS SHOWN ON THE PLAT OF SUBDIVISION RECORDED AS DOCUMENTS 21876750 AND 22134317. (AFFECTS PARCEL 1 AND OTHER PROPERTY) [PLOTTED]

K 18. EASEMENT IN, UPON, UNDER, OVER AND ALONG THE SHADED AREAS MARKED ON EXHIBIT 'A' ON THE SKETCH ATTACHED THERETO, BEING A PART OF THE LAND TO INSTALL AND MAINTAIN ALL EQUIPMENT FOR THE PURPOSE OF SERVING THE LAND AND OTHER PROPERTY WITH TELEPHONE AND ELECTRIC SERVICE, TOGETHER WITH RIGHT OF ACCESS TO SAID EQUIPMENT, AS CREATED BY GRANT TO COMMONWEALTH EDISON COMPANY AND ILLINOIS BELL TELEPHONE COMPANY RECORDED JUNE 19, 1986 AS DOCUMENT 86250831. [PLOTTED]

L 19. EASEMENT IN, UPON, UNDER, OVER AND ALONG THE SHADED AREAS MARKED ON EXHIBIT 'A' ON THE SKETCH ATTACHED THERETO, BEING A PART OF THE LAND TO INSTALL AND MAINTAIN ALL EQUIPMENT FOR THE PURPOSE OF SERVING THE LAND AND OTHER PROPERTY WITH GAS SERVICE TOGETHER WITH RIGHT OF ACCESS TO SAID EQUIPMENT, AS CREATED BY GRANT TO NORTHERN ILLINOIS GAS COMPANY RECORDED JULY 18, 1986 AS DOCUMENT 86302562. [PLOTTED]

M 20. EASEMENT OVER THE AREAS AS SHOWN ON PLAT AND MARKED "EASEMENT" ATTACHED TO GRANT OF EASEMENT RECORDED JANUARY 28, 1974 AS DOCUMENT 22607532 FOR THE PURPOSE OF INSTALLING AND MAINTAINING ALL EQUIPMENT NECESSARY TO SERVE THE SUBDIVISION AND OTHER LAND WITH TELEPHONE AND ELECTRICAL SERVICE, TOGETHER WITH THE RIGHT TO OVERHANG AERIAL SERVICE WIRES AND THE RIGHT OF ACCESS TO SUCH WIRES, AS CREATED BY GRANT TO THE ILLINOIS BELL TELEPHONE COMPANY AND THE COMMONWEALTH EDISON COMPANY AND THEIR RESPECTIVE SUCCESSORS AND ASSIGNS. (AFFECTS PARCEL 1) [PLOTTED]

N 21. EASEMENT OVER THE AREAS AS SHOWN ON PLAT AND MARKED "EASEMENT", ATTACHED TO INSTRUMENT RECORDED JULY 6, 1973 AS DOCUMENT 22388912 FOR THE PURPOSE OF INSTALLING AND MAINTAINING ALL EQUIPMENT NECESSARY TO SERVE THE SUBDIVISION AND OTHER LAND WITH TELEPHONE AND ELECTRICAL SERVICE, TOGETHER WITH THE RIGHT TO OVERHANG AERIAL SERVICE WIRES AND THE RIGHT OF ACCESS TO SUCH WIRES, AS CREATED BY GRANT TO THE ILLINOIS BELL TELEPHONE COMPANY AND THE COMMONWEALTH EDISON COMPANY AND THEIR RESPECTIVE SUCCESSORS AND ASSIGNS. (AFFECTS PARCEL 1) [PLOTTED]

O 22. PERPETUAL NON-EXCLUSIVE EASEMENT FOR GENERAL INGRESS AND EGRESS TO ENTER UPON, ON AND OVER THE LAND FOR THE PURPOSE OF PROVIDING POLICE AND FIRE PROTECTION AND ENFORCING THE ORDINANCES, RULES AND REGULATIONS AND TO INSTALL, OPERATE, MAINTAIN, REPAIR AND REMOVE, FROM TIME TO TIME, FIRE HYDRANTS IN, OVER, UNDER, ACROSS, ALONG AND UPON THE SURFACE OVER PART OF THE LAND IN FAVOR OF THE VILLAGE OF NORTHBROOK, AS CREATED BY AFORESAID DECLARATION OF PROTECTIVE COVENANTS AND GRANT OF EASEMENTS RECORDED JULY 17, 1986 AS DOCUMENT 86301714. [PLOTTED]

P 23. EASEMENT FOR SEWAGE PURPOSES OVER THE NORTH 15 FEET OF THE SOUTH 65 FEET OF EAST 200 FEET OF THE LAND AS SET FORTH IN THE PLAT OF EASEMENT RECORDED MAY 24, 1978 AS DOCUMENT 24502131 BY THE EXCHANGE NATIONAL BANK OF CHICAGO, AS TRUSTEE UNDER TRUST AGREEMENT DATED JANUARY 6, 1978 AND KNOWN AS TRUST NUMBER 33439 (AFFECTS PARCEL 3) [PLOTTED]

K 27. RIGHTS OF THE PUBLIC, THE STATE OF ILLINOIS AND THE MUNICIPALITY IN AND TO THAT PART OF THE LAND, IF ANY, TAKEN OR USED FOR ROAD PURPOSES.

ALL REMAINING ITEMS ARE NOT A MATTER OF SURVEY.

APPARENT ENCROACHMENTS:

ENCROACHMENT OF A SIGN LOCATED MAINLY ON THE LAND ONTO THE PUBLIC RIGHT OF WAY WEST OF AND ADJOINING BY AN UNDISCLOSED AMOUNT.

ENCROACHMENT OF THE CONCRETE CURB LOCATED MAINLY ON THE LAND EAST OF AND ADJOINING ONTO THE LAND BY 0.52 FEET- 0.65 FEET.

ENCROACHMENT OF THE CONCRETE CURB LOCATED MAINLY ON THE LAND ONTO THE NORTH OF AND ADJOINING BY 0.41 FEET- 0.60 FEET.

ENCROACHMENT OF THE CONCRETE LIGHT POLE BASE LOCATED MAINLY ON THE LAND EAST OF AND ADJOINING ONTO THE LAND BY 1.00 FEET.

ENCROACHMENT OF THE CONCRETE TRASH AREA LOCATED MAINLY ON THE LAND EAST OF AND ADJOINING ONTO THE LAND BY 3.30 FEET- 3.36 FEET.

To:
Minnesota Life Insurance Company, a Minnesota corporation;
Chicago Title Insurance Company;
3100 Dundee Road L.L.C., an Illinois limited liability company, and to their successors and assigns.

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 6(a), 6(b), 7(a), 7(b)(1), 8, 9, 11, 13, 14, 16, 17, 18, 19 and 20 of Table A thereof.

The field work was completed on AUGUST 10, 2018.

Date of Plat ____________________

By:

PRELIMINARY

Robert G. Biedermann
Professional Illinois Land Surveyor No. 2802

3100 Dundee Tenant List

Tenant Name	Suite #	SF	Space	Company Description
Vacant	902	1,928	Office	Vacant
United Feather & Down	206/208	3,951	Office	Sales Office
Vacant	911	715	Office	Vacant
River West Consultants	507	1,060	Office	Executive Recruiting Firm
Delfax Solutions	407	1,060	Office	IT Consulting
Jennifer Warren Insurance Agency	914	896	Office	Insurance Firm
Resource Data Systems	201/202	1,788	Office	Copier Sales
Fitzsimmmons Law Group	901	1,693	Office	Law Firm
Sara Hearst & Associates	704-706	8,916	Warehouse	Pediatric Therapy
Structur Tech	908/910/912	3,518	Office	Consulting Firm
Families Building Dreams	401/402/404	3,160	Office	Not for Profit
Homeside Financial	904/906	1801	Office	Mortgage Company
Michlin Metals, Inc.	709/710	5,251	Warehouse	Metal Sales
Found Therapy	307	1,003	Office	Therapy Group
Birg & Meltser	913/915/916	3,556	Office	Attorney
Q7	405	1,169	Office	Accountant
Stephen Robin & Co.	505	1,174	Office	Accountant
PIL Services	203/205	1,749	Office	Mortgage Company
Mitzvah Memorial	801	5,638	Warehouse	Mortician
Vacant	111	2,074	Office	Vacant
Center for Christian Life	101/102/103/106	5,632	Office	Counseling
Vacant	501-504	4,299	Office	Vacant
The Ark	802	2,618	Warehouse	Charity Group
Vacant	406/408	2,396	Office	Vacant
Northshore Companions	105/107/109	4,231	Office	Home Health Company
2V Design	108/110	1,551	Office	Inteiror Design Firm
Houpis, Weisberg	112	1,200	Office	Insurance
Vacant	204	1,429	Office	Vancant
Elite Home Healthcare	301-304	4,822	Office	Home Health Company
MCI Metro	803-804	8,008	Warehouse	Switching Station
Learsi Co.	306/308	2,238	Office	Real Estate
Cookie Joint	701	2,097	Warehouse	Catering Company
Pyra Med	508	1,060	Office	Construction Firm
LIFECARE Home Health Svc	702/ 703	3,050	Office	Home Health Company

3100 Dundee Tenant List

Tenant Name	Suite #	SF	Space	Company Description
Imada Inc.	707/708	6,479	Warehouse	Precision Machine Sales
Lakeshore Academy	907/909	2,895	Office	Consulting Firm
3L Corp	403	1,153	Office	Sales Office
Cambridge Title	506	1210	Office	Attorney/Title Company
Korman/ Lederer Mgmt	113-116	4,380	Office	Real Estate

Office Square Feet	76,859 SF
Warehouse Square Feet	39,007 SF
Total Square Feet	115,866 SF

1

- **Preliminary Review of Sketch Plan by Board of Trustees**
  - The Board reviews schematic high level concept plan of the proposal.
  - The Board of Trustees provides initial, non-binding, comments on a proposal, indicating whether or not they see major issues that need to be addressed by the Applicant before they submit detailed plans.

2

- **Formal Application Submittal**
  - Technical review of detailed plans, traffic study, fiscal impact study, stormwater calculations, emergency response services etc. by Village Staff (Engineering, Police, Fire, Public Works & Planning)
  - Once technical issues are addressed, a Plan Commission public hearing can be scheduled.

3

- **Public Hearing Held by Northbrook Plan Commission**
  - Notice goes to neighbors by certified mail; a sign is posted on the property; and notice is published in the local newspaper.
  - The Applicant presents their FULL proposal with detailed plans; the public is invited and encouraged to speak, ask questions, and raise concerns and issues. Expert testimony on major issues are introduced into the record. The applicant is given opportunity to respond to public comment and make plan revisions or adjustments.
  - The Plan Commission makes a recommendation on the request to approve or deny

4

- **Board of Trustees Reviews Plan Commission Recommendation & Makes Decision** (approve or deny)
  - The Board of Trustees reviews the record of the Plan Commission, including all of the public testimony and makes a final decision – they may also ask for further changes before making a decision

MEMORANDUM

To: Village Manager Cara Pavlicek
From: Director of Public Works Kelly Hamill
Cc: Village Board of Trustees
Date: 2023-09-26
Subject: A Resolution Authorizing the Execution of a Sub-Lease Agreement for the Grind Cafe at the Metra Train Station with Charlie E. Bliss of Park Ridge, Illinois

Overview/Synopsis.
The Village of Northbrook and the Sub-Lessee of space at the Metra Train Station desire to enter into a new lease with revised terms and conditions as well as a reduced rent at the request of the Charlie E. Bliss (Sub-Lessee).

Fiscal Impact.
The Village will receive a monthly rent of $275.00 from the Sub-Lessee, for a total rental income in the amount of $3,300 for the 12-month period of this lease. This rental income is directed to the Parking Fund.

Recommendation.
Village Board approval of a Resolution authorizing the execution of a sub-lease agreement for the Grind Cafe at the Metra Train Station with Charlie E. Bliss of Park Ridge, Illinois.

Background.
The Village of Northbrook has sub-leased space within the Metra Train Station to the Sub-Lessee since 1994. The Village entered into a new lease with the Sub-Lessee in 2019 prior to the beginning of the pandemic with rent at that time being $600 per month. With the pandemic and the stay at home order that followed, the Village agreed to waive the rent for the property. The Sub-Lessee remained closed until earlier this year due to a lack of commuters utilizing Metra. Upon re-opening the Sub-Lessee made a good faith effort to make rent however requested a reduction in rent due to a change in commuter utilization of the station. Village staff considered this request and in conjunction with the Sub-Lessee's request offered to enter into a new 1-year lease at the lower rate in consideration for additional terms and conditions that were more favorable to the Village of Northbrook.

Exhibit A - A Resolution Authorizing the Execution of a Sub-Lease for the Grind Cafe at the Metra Train Station.docx
Exhibit B - Proposed Sub-Lease for the Grind Cafe at the Metra Train Station.pdf

Resolution _____

BE IT RESOLVED by the President and Board of Trustees of the Village of Northbrook, County of Cook and State of Illinois, THAT:

A Resolution Authorizing the Execution of a Sub-Lease Agreement for the Grind Cafe at the Metra Train Station with Charlie E. Bliss of Park Ridge, Illinois.

is hereby adopted, as follows:

Section 1. Recitals.

The Village of Northbrook sub-leases a portion of the Metra Train Station for use as a café. Charlie E. Bliss of Park Ridge, Illinois ("***Sub-Lessee***") has sub-leased this space since 1994. The Village entered into a new lease with the Sub-Lessee in 2019, prior to the beginning of the pandemic with rent at that time being $600 per month. With the pandemic and the stay at home order that followed, the Village agreed to waive the rent for the property. The Sub-Lessee remained closed until earlier this year due to a lack of commuters utilizing Metra. Upon re-opening, the Sub-Lessee made a good faith effort to make rent, however, requested a reduction in rent due to a change in commuter utilization of the station.

Village staff considered this request and, in conjunction with the Sub-Lessee's request, offered to enter into a new 1-year lease at the lower rate in consideration for additional terms and conditions that were more favorable to the Village of Northbrook ("***Sub-Lease***").

Section 2. Approval of Sub-Lease.

The Sub-Lease by and between the Village of Northbrook and the Sub-Lessee, shall be, and is hereby, approved in a final form acceptable to the Village Manager and Village Attorney.

Section 3. Authorization to Execute the Sub-Lease.

The Village Manager is hereby authorized and directed to execute, on behalf of the Village, the Sub-Lease.

Section 4. Effective Date.

This Resolution shall be in full force and effect upon passage.

ATTEST:

_____
Village President

_____
Village Clerk

NORTHBROOK COMMUTER RAILROAD STATION
MAINTENANCE AND SUB-LEASE AGREEMENT

THIS SUB-LEASE AGREEMENT made and entered into this _____ day of _____, 2023, by and between the Village of Northbrook, an Illinois Municipal Corporation and Charlie E. Bliss of 2342 DeCook Ct., Park Ridge, Illinois, (hereinafter referred to as "Sub-Lessee"):

WITNESSETH:

WHEREAS, the commuter railroad passenger station is constructed on land located at 1401 Shermer Road in the Village of Northbrook, County of Cook, State of Illinois, and schematically illustrated in Exhibit "A" attached hereto and, by this reference made a part hereof (the "Premises"); and

WHEREAS, the fee simple owner of the passenger station is the Commuter Rail Division of the Regional Transportation Authority (hereinafter referred to as "METRA"); and

WHEREAS, METRA leased the Premises to the Village of Northbrook under a Maintenance and Lease Agreement (hereinafter referred to as the "Lease Agreement" or "Underlying Lease") dated October 14, 1988; and

WHEREAS, the Village of Northbrook (hereinafter referred to as "Sub-Lessor") desires to sub-lease a portion of the Premises to the Sub-Lessee (approximately 232 square feet including two storage closets) plus certain limited common space in the north entry hallway and station waiting area adjacent to the tenant space for several licensed vending machines, and portable coolers, condiment cart and newspaper racks. The portion of the Premises which Sub-Lessee may occupy pursuant to the Sub-Lease is depicted on Exhibit "A."

NOW, THEREFORE, for and in consideration of the rent and provisions and covenants below, and other good and valuable consideration, the receipt and sufficiency which is hereby mutually acknowledged, the Sub-Lessor and the Sub-Lessee do hereby covenant and agree as follows:

1. SUB-LEASE. Each and every provision of this Sub-Lease shall be surbordinate and subject to the provisions of the Underlying Lease. Except as specifically provided herein, the Sub-Lessee shall be bound by the provisions of the Underlying Lease binding upon the Lessee therein, except that the Sub-Lessee herein shall not be bound by any provision of the Underlying Lease for the payment of rent, taxes and assessments or any other provision of the Underlying Lease which is applicable only to the Premises covered by it as a whole and not to the Premises covered by this Sub-Lease.

2. RENT and SECURITY DEPOSIT. The Sub-Lease term shall commence _____, 2023. Sub-Lessee covenants and agrees to pay Sub-Lessor monthly rent for the Premises in the amount of $275 dollars per month, which payment shall be due on the 1st day of each month. A security deposit of $733, originally paid on or about 9/30/94, remains on deposit.

3. UTILITIES. Sub-Lessee shall pay for any data connections for the space. Water and Electricity shall be provided to the rental space by the Village at no cost.

4. PURPOSE. The Premises shall be used by the Sub-Lessee for the following purpose(s) only: food, coffee, tea and other non-alcoholic beverage service including carry-out, donuts, bagels and snacks, vending machines, newspaper, magazine, and book vending services and such other compatible

services as may be approved by the Sub-Lessor in writing. Sub-Lessee agrees to handle only such articles as are appropriate to this type of business, occupancy or use.

5. HOUSEKEEPING. Sub-Lessee shall at all times keep the Premises clean, sanitary and in good condition and repair, including the painting thereof, and in full compliance with all applicable food service and health code regulations subject to enforcement by the Village Sanatarian. Sub-Lessee shall not post, paint or place, or permit others to post, paint, or place, on the Premises any advertisement or sign not related directly to Sub-Lessee's business. All such signage must be approved in writing by Sub-Lessor and METRA.

6. COMPLIANCE: INSURANCE AND LEGAL. (A) Sub-Lessee shall not use or permit upon the Premises (1) anything that will invalidate any policy of insurance now or hereafter carried on the Premises or any building or structure thereon, or (2) anything that will increase the rate of such insurance. Sub-Lessee shall maintain the Premises, building and structures thereon in accordance with the requirements of all local ordinances, and state and federal laws in effect during the term of this Sub-Lease.

   a. The Sub-Lessee agrees to obtain, at his own expense and cost, and to keep in full force and effect during the term of this Sub-Lease, General Liability Insurance for a combined single limit of not less than $2,000,000 in any one occurrence for personal injury and/or property damage liability. The insurance so afforded shall be written in favor of Sub-Lessee and METRA and shall include coverage for liability and indemnifications assumed under the Sub-Lease. The insurance shall name both the Sub-Lessor and METRA as additional insureds. Written evidence of such insurance shall be filed with both Sub-Lessor and METRA, and the insurance policy and/or certificate of insurance MUST show the following:

      (i) The policy will not be canceled or materially changed unless 60 days prior written notice is given to the Director of Public Works, Village of Northbrook, 655 Huehl Road, Northbrook, Illinois 60062.

      (ii) This insurance policy covers the contractual obligations of this Sub-Lease. Nothing contained in this section shall limit the liability of the Sub-Lessee under Sections 12, 13 and 30 hereunder.

7. NO SUBROGATION. Sub-Lessee agrees to have all insurance policies issued to it, or for or upon the Sub-Lessee's account, covering any injuries to persons or any loss or damage to property so written that the insurer shall have no claim or recourses of any kind whatsoever against Lessor, Sub-Lessor or the Premises.

8. POLLUTANTS & CONTAMINANTS. Sub-Lessee agrees to comply with all ordinances, laws, rules or regulations enacted by any governmental body or agency relating to the control, abatement, or emission of air and water contaminants and/or the disposal of refuse, solid wastes or liquid wastes or any other ordinances, laws, rules or regulations which may be applicable to him or his activities on the leased Premises. Sub-Lessee shall bear all costs and expenses arising from compliance with said ordinances, laws, rules or regulations, and shall indemnify and save harmless Sub-Lessor and METRA from all liability, including without limitation, fines, forfeitures and penalties arising in connection with failure by Sub-Lessee to comply with such ordinances, laws, rules or regulations. Sub-Lessee will provide to Sub-Lessor tangible evidence of his compliance with all ordinances, laws, rules or regulations upon the commencement date of this Sub-Lease.

9. RELOCATION OF UTILITIES OR FACILITIES. Sub-Lessee accepts the Premises subject to rights of any party, including METRA and Sub-Lessor, in and to any existing conduits, sewers, waterlines, gas lines, power lines, drainage facilities, telephone, telegraph, cable TV or other wires, and policies and utilities or easements, permits, licenses or facilities of any kind whatsoever, whether or not of record. Should it at any time become necessary to relocate any of same by reason of this Sub-Lease, Sub-Lessee shall bear and pay the cost of so doing.

10. EXISTING FACILITIES. METRA and Sub-Lessor reserve the right to maintain or relocate its existing facilities, or to construct and thereafter maintain new facilities, on or in the vicinity of the Premises with no liability for damages to Sub-Lessee's interests or property resulting from such activities. METRA and Sub-Lessor reserve the right to use any or all existing facilities in manners that meet the best interests of Metra and Sub-Lessor as determined by those entities. No dedicated free parking shall be provided for the Sub-Lessee.

11. TITLE. Sub-Lessor makes no covenant for quiet enjoyment of the Premises. Sub-Lessee assumes any damages that may result from, or be in connection with, any want or failure at any time of METRA's or Sub-Lessor's title, if any, to the Premises.

12. INDEMNIFICATION. Sub-Lessee agrees also to indemnify and hold harmless Sub-Lessor and METRA from any and all liability for loss or damage to property and all injury to or death of any persons while on the Premises whenever such loss or damage to the property or injury or death is caused solely by Sub-Lessee's negligence or arises solely from Sub-Lessee's operations on the Premises.

    a. Sub-Lessor agrees also to indemnify and hold harmless Sub-Lessee from any and all liability for loss or damage to property and all injury to or death of any persons while on the Premises whenever such loss or damage to the property or injury or death is caused solely by Sub-Lessor's negligence or arises solely from Sub-Lessor's operations on said Premises.

13. LIENS. Sub-Lessee agrees not to suffer or permit any lien of mechanics or materialmen to be placed upon the Premises or any part thereof and, in case of any such lien attaching, to immediately pay off and remove the same. It is further agreed by the parties hereto that Sub-Lessee has no authority or power to cause or permit any lien or encumbrance of any kind whatsoever, whether created by act of Sub-Lessee, operation of law or otherwise, to attach to or be placed on METRA's or Sub-Lessor's title or interest, if any, in the Premises, and any and all liens and encumbrances created or suffered by Sub-Lessee shall attach to Sub-Lessee's interest only.

14. HOLD-OVER. It is further agreed that in case Sub-Lessee, with the consent of Sub-Lessor, holds possession of the Premises beyond the term of this Sub-Lease such action of the parties shall have the effect of extending the term of this Sub-Lease on a month to month basis, subject in all respects to all of the terms, conditions and convenants of this Sub-Lease, including all rights of termination in all respect as herein provided.

15. EMINENT DOMAIN. If the whole or any part of the Premises shall be taken or condemned by any competent Authority for any public use or purpose this Sub-Lease shall, as to the part so taken, terminate as of the date when taken, or shall cease if all of the Premises be so taken. Rent shall abate proportionately as to the part so taken, or shall cease if all the Premises are to be so taken. The entire amount of damages or compensation payable or paid for the part taken and for the remainder, if any, shall be paid to and retained by METRA as its own property without apportionment. Sub-Lessee shall look solely to METRA for any compensation or damages on account of damage to Sub-Lessee's sub-leasehold interest, Sub-Lessee's business interest, Sub-Lessee's cost and expense of removing

Sub-Lessee's personal property from the Premises and for the cost and expense of moving any building or structure placed upon the Premises by Sub-Lessee and which Sub-Lessee would have the right to remove as a Sub-Lessee of the Premises.

16. CAUSES FOR BREACH. It is agreed that a breach has occurred upon the happening of any of the following: (1) if Sub-Lessee defaults in any of Sub-Lessee's undertakings in this Sub-Lease or (2) if any voluntary or involuntary petition or similar pleading under any bankruptcy act be filed by or against Sub-Lessee, or (3) if the sub-leasehold interests of Sub-Lessee are levied upon or attached by process of law, or (4) if Sub-Lessee makes an assignment for the benefit of creditors.

17. UNPAID BILLS. All payments becoming due under this Sub-Lease shall (1) be considered as rent and, if unpaid when due, shall bear interest at 18% per annum until paid, and (2) constitute a lien upon any building or other property owned by Sub-Lessee located upon the Premises, and the lien may be foreclosed according to law.

18. CANCELATION. Sub-Lessee may cancel the lease with 60-days written notice at any time. The Sub-Lessor may, at its option, cancel the lease with 30 days written notice at any time.

19. TERMINATION REFUND. Sub-Lessor may terminate this Sub-Lease if METRA terminates the Underlying Lease as provided in that Underlying Agreement. Upon any such termination, if rent shall have been paid in advance, Sub-Lessor shall refund to Sub-Lessee the unearned portion thereof for the period extending beyond such date of termination, less any cost of any repairs required to restore the Premises to their original condition.

20. SURRENDER OF PREMISES. Upon the termination of this Sub-Lease by any manner, means, or contingency whatsoever, Sub-Lessee shall without further notice or demand deliver possession of the Premises to Sub-Lessor in as good condition as when entered upon. Sub-Lessee hereby agrees to remove all materials, signs, debris, or any other articles, structures or facilities owned by Sub-Lessee or permitted to be placed on the Premises by Sub-Lessee before the termination of this Sub-Lease, restoring the area to its original condition, notwithstanding structural or utility improvements.

    a. If Sub-Lessee shall fail to so remove such property within 10 days of receipt of such notice of termination from Sub-Lessor then Sub-Lessor may, forthwith, make such removal at Sub-Lessee's expense. Such failure shall constitute an abandonment of such property and title thereto shall pass to Sub-Lessor immediately, without any reimbursement either by set-off, credit allowance, or otherwise to be paid to Sub-Lessee.

21. FAILURE TO VACATE. Sub-Lessee shall pay Sub-Lessor as liquidated damages and not as a penalty for forfeiture, $100 per day for all the times Sub-Lessee shall retain possession of the Premises or any part thereof, after the termination of this Sub-Lease whether by lapse of time or otherwise. "Possession of the Premises" shall include, but shall not be limited to continued placement of materials, signs, debris, or other articles or facilities owned by Sub-Lessee or permitted to be placed on the Premises by Sub-Lessee.

22. WAIVER OF REMEDIES. No waiver of any default of Sub-Lessee shall be implied from failure or omission by Sub-Lessor to take any action on account of such default. No express waiver shall affect any default other than the default specified in the express waiver and that only for the time and to the extent therein stated. No receipt of money by the Sub-Lessor from Sub-Lessee (1) after any default by Sub-Lessee, (2) after the termination of this Sub-Lease, (3) after the service of any notice or demand or after the commencement of suit, or (4) after final judgment for possession of the Premises,

shall waive such default or reinstate, continue or extend the term of this Sub-Lease or affect in any way any such notice or suit as the case may be.

a. The erection of buildings or other improvements on the Premises shall not constitute a waiver or affect in any way the right of either party to terminate this Sub-Lease.

23. NO ASSIGNMENT. Any sale, assignment, transfer, or underletting of this Sub-Lease by the Sub-Lessee without the previous written consent of METRA or Sub-Lessor shall be void. Such written consent shall not be unreasonably withheld.

24. RIGHTS ARE CUMULATIVE. All rights and remedies of METRA and Sub-Lessor shall be cumulative and none shall exclude any other rights and remedies allowed by law.

25. NOTICES. All notices, demands, elections, and other instruments required or permitted to be given or made by either party upon the other by the terms of this Sub-Lease or any statute shall be in writing. They shall be deemed to have been sufficiently served if sent by certified mail with proper postage prepaid to Sub-Lessor or Sub-Lessee at the respective address shown below. Such notices, demands, elections and other instruments shall be considered as delivered to recipient on the first business day after deposit in the U.S. Mail.

Notice to Lessor shall be mailed to:

Charlie E. Bliss
2342 DeCook Ct.
Park Ridge, Illinois 60068
773/744-8337 cell

Notices to Lessee shall be mailed to:

Village of Northbrook
1225 Cedar Lane
Northbrook, Illinois 60062
Attention: Director of Public Works
847/272-4711

26. ENTIRE AGREEMENT. All the representations and obligations of Sub-Lessor are contained herein. No modification, waiver, or amendment of this Sub-Lease, or any of its terms, shall be binding upon Sub-Lessor unless such are in writing and signed by a duly authorized Officer of the Sub-Lessor.

27. RENTAL TERM AND FUTURE REVIEW. This Sub-Lease shall have a term of one-year from the date of execution.

28. RAIL SERVICES. METRA and Sub-Lessor make no warranties or representations expressed or implied, as to continued rail service to the Premises.

29. JOINT OBLIGATION. In the event that Sub-Lessee embraces two or more individuals or corporations, the covenants and agreements herein contained shall be the joint and several obligations of each of such persons or corporations.

30. MAINTENANCE. Sub-Lessee, as a current tenant in good standing, knows the conditions of the Premises and shall accept same in their condition at the commencement of the term of this Sub-Lease. Sub-Lessee will at its own cost and expense make any necessary alterations required; however, no alterations shall be made without the consent of METRA and Sub-Lessor and application for and approval of any required building, electrical or plumbing permits. Sub-Lessee will make all repairs necessary to keep the Premises in at least as good a condition as when originally entered upon. Repairs necessitated by ordinary wear and tear, by storm, fire and wind shall be the sole responsibility of the Sub-Lessee. Sub-Lessee agrees to indemnify, and save harmless METRA and Sub-Lessor and defend from all claims, demands, liability, judgments, costs and expense, including attorney's fees, arising or growing out of loss or damage to any property whatsoever, other than property of Sub-Lessor, which is in, upon, or about any part of the Premises, from any cause whatsoever.

31. Emergency Declarations. In the case of an emergency declaration by the President of the United States or the Governor of Illinois affecting the Village of Northbrook, the Sub-Lessee may request a waiver of rent payments if the Sub-Lessee is unable to operate. The Village Manager on behalf of Sub-Lessor may grant a waiver for a mutually agreed to term in such case, but will be under no obligation to grant such a waiver. Should the Sub-Lessee resume operation before the end of the mutually agreed term of rent waivers, the Sub-Lessee shall be obligated to pay rent for the balance of that month in which the Sub-Lessee resumed operations prior to the end of that month and all future rent payments in accordance with the terms of this lease.

IN WITNESS WHEREOF, the parties hereto have executed this sub-lease agreement the day and year first above written.

THE VILLAGE OF NORTHBROOK

BY: _____
Cara Pavlicek
Village Manager

ATTEST:

Clementina T. Estrada
(For Sub-Lessor)

SUB-LESSEE

BY: Charlie E. Bliss
Charlie E. Bliss

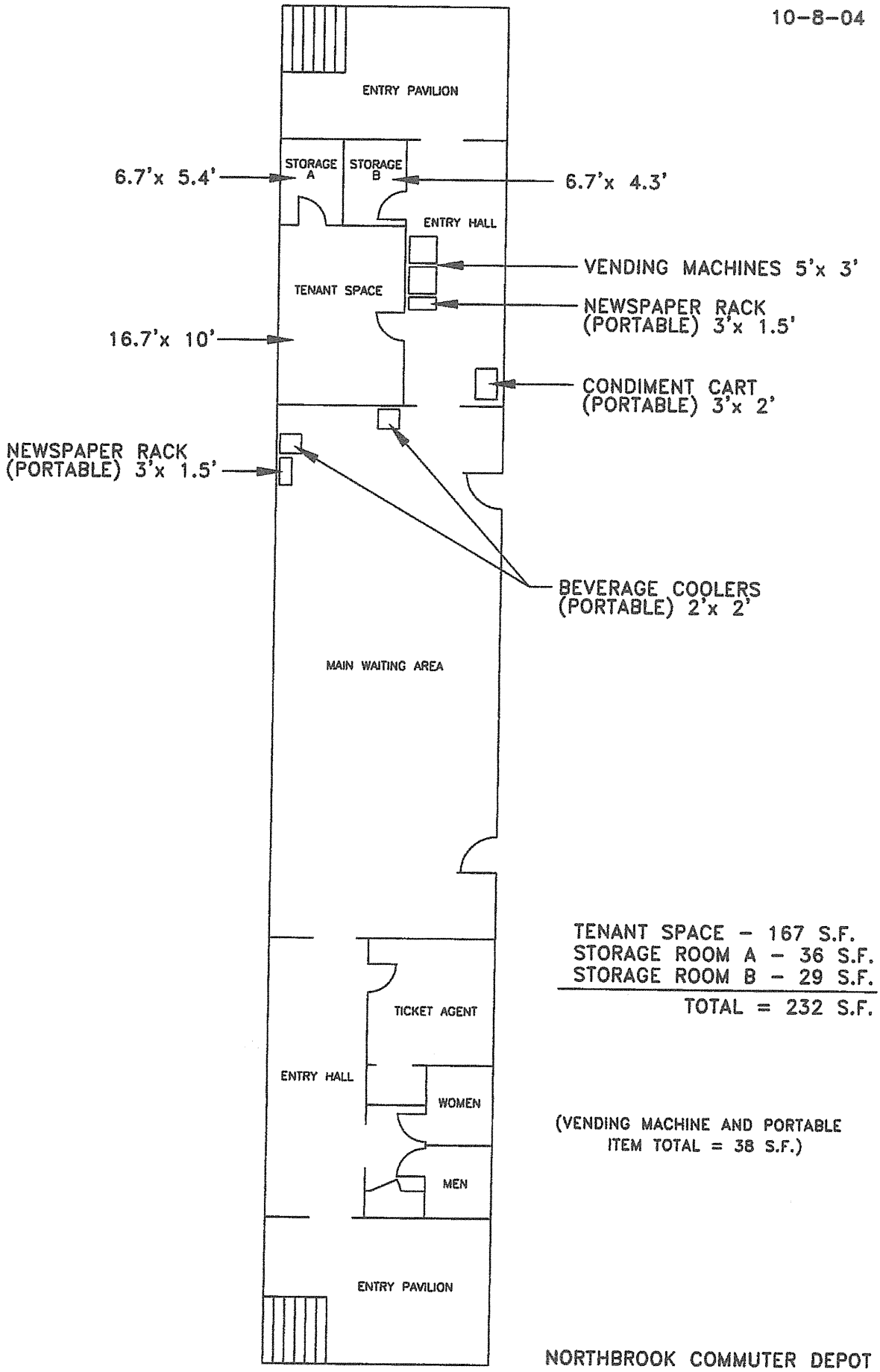
ATTEST:

_____
(For Sub-Lessee)

9/14/2023 12:04 PM

EXHIBIT "A"

10-8-04



TENANT SPACE - 167 S.F.
STORAGE ROOM A - 36 S.F.
STORAGE ROOM B - 29 S.F.

TOTAL = 232 S.F.

(VENDING MACHINE AND PORTABLE ITEM TOTAL = 38 S.F.)

NORTHBROOK COMMUTER DEPOT

D:\risinger/acad/metra station.dwg

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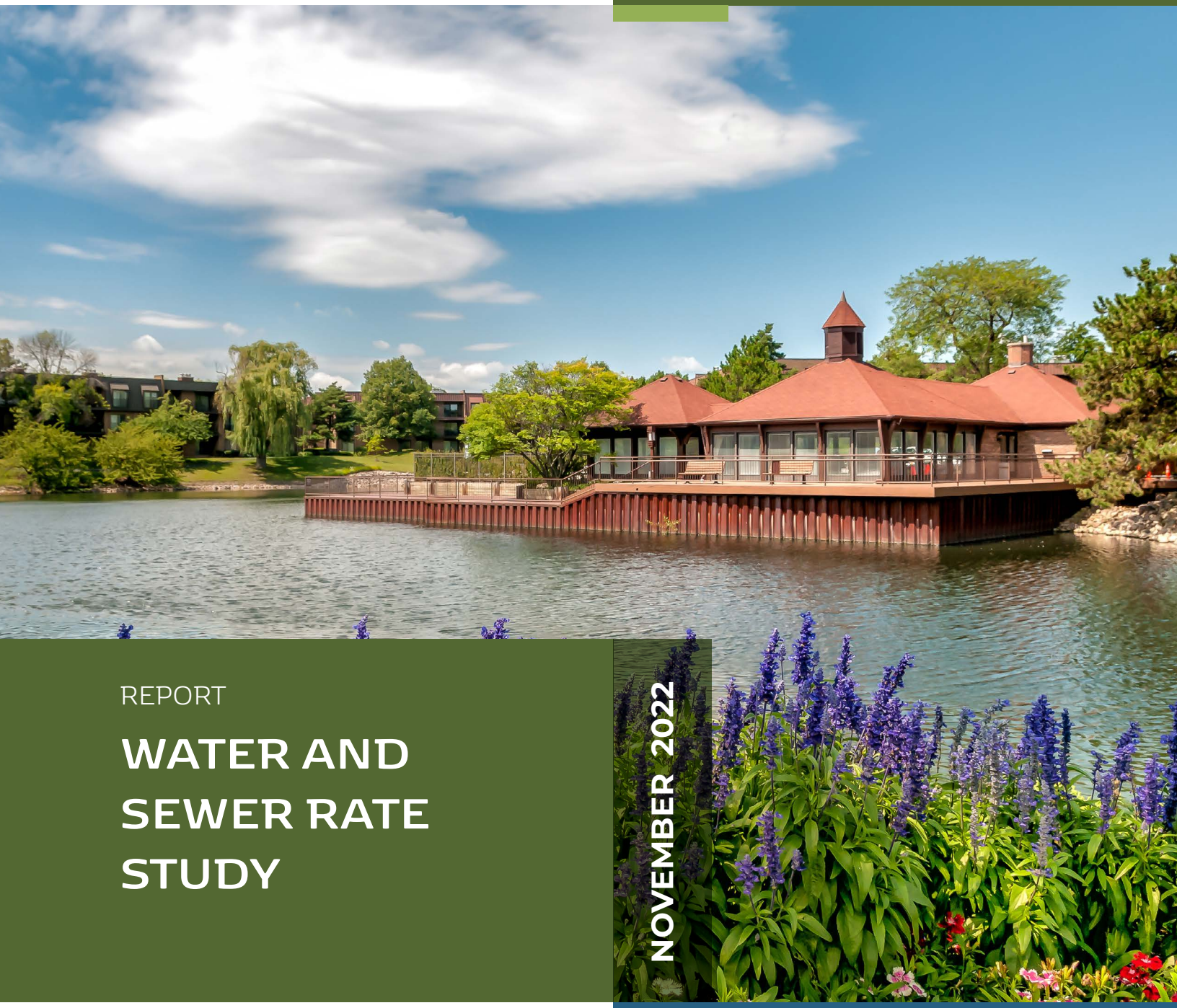
NewGen Strategies & Solutions

www.newgenstrategies.net

FINAL



REPORT

WATER AND SEWER RATE STUDY

NOVEMBER 2022

Village of Northbrook

Prepared for:
Village of Northbrook, Illinois
655 Huehl Road
Northbrook, Illinois 60062

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NewGen Strategies & Solutions

900 Bestgate Road, Suite 402
Annapolis, MD 21401
Phone: (410) 266-9101

September 18, 2023

Matthew Morrison
Deputy Public Works Director
Village of Northbrook
655 Huehl Road
Northbrook, Illinois 60062

Subject: Water and Sewer Rate Study Report

Dear Mr. Morrison:

NewGen Strategies and Solutions, LLC (NewGen) is pleased to submit to the Village of Northbrook our report detailing our completed Water and Sewer Rate Study. This report summarizes our study's results regarding the forecasted costs of providing water and sewer service to the Village's customers and our recommendations for recovering these costs over the next five years. Our recommendations relating to revenue increases will result in the sustainable operation of the Village's water and sewer utilities and the financial health of the Village's Water and Sewer Funds.

We appreciate the opportunity to provide our services to the Village and would like to express our sincere appreciation to Village staff. The dedication and assistance provided by Village staff was essential to the completion of this study. It has been a distinct pleasure to work with the Village of Northbrook.

Very truly yours,

DocuSigned by:
C11651334F8F462...
Eric Callocchia
Partner
NewGen Strategies and Solutions, LLC

DocuSigned by:
95BBEDC8271340F...
Aidan Oates
Consultant
NewGen Strategies and Solutions, LLC

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EXECUTIVE SUMMARY

The Village of Northbrook (Village) is a suburb of Chicago, located at the northern edge of Cook County, Illinois, on the border of Lake County. Per the 2020 census, the Village's population was 35,222. The Village provides water and sanitary sewer utility service to over 15,000 customer connections.

To supply water to customers, the Village pumps water directly from Lake Michigan and provides all treatment necessary to make it safe to use and drink. The treatment process is managed by the Village's Water Plant. The Village of owns and maintains two separate sewer systems: one for sanitary sewage and one for stormwater runoff. Sanitary sewage is made up of the wastewater from inside homes and businesses from various plumbing fixtures such as sinks, toilets, dishwashers, and washing machines. The sanitary sewer system is comprised of over 124 miles of pipes and 13 lift stations which transport wastewater to the Metropolitan Water Reclamation District's (MWRD) sewer system. Once in MWRD's sewer system, sewage is transported to and treated at MWRD's wastewater treatment plant in Skokie, Illinois.

The Village engaged NewGen Strategies and Solutions, LLC (NewGen) to complete a Water and Sewer Rate and Fee Study. The goal of the study was to work with the Village Managers Office, Finance, and Public Works Department to conduct a comprehensive water and sanitary sewer rate and fee study to develop a fair, equitable, and sustainable rate structure for the long term fiscal health and maintenance of the Village's water and sanitary sewer utilities.

As the basis for its cost projections NewGen used the Village's FY 2023 operating budget, currently payable debt service, and financing for the Village's five-year capital spending plan, including both new debt service and cash funded (i.e., pay-as-you-go, or PAYGO) projects. NewGen applied appropriate cost escalation for future years to ensure that future rates cover increased future costs. Although the Village does have some proposed commercial and residential growth, the study assumes that the Village will not add any additional water or sewer customers over the forecast period. However, during the course of the study, the Village identified meters within its system that were either under-reading water usage or not functional. Therefore, the Village was not accounting for all of the water demand in its system. The Village is in the process of replacing meters, and therefore NewGen's study includes an assumption that due to the replacement of deficient meters, the Village will bill 3% more water in the first three years of the study forecast period, and then maintain that level of billable usage for the remainder of the forecast.

As a part of the study, NewGen worked with the Village to develop a reserve policy based on operating and capital spending characteristics of each system. NewGen's recommended rates are designed to maintain a minimum of 30 days of operating costs in both the Water Fund and Sewer Fund's reserves for the five year projection, with the ability to increase those targets to 90 days over the next five year period.

Given all the information and adjustments described above, NewGen's study determined that the Village's FY 2023 rates are not sufficient to maintain the financial and operational health of the Village's Water and Sewer Funds over the next five years. The following figures show the cash flow and fund balance projections if the Village does not increase water or sewer rates over the five-year planning period.

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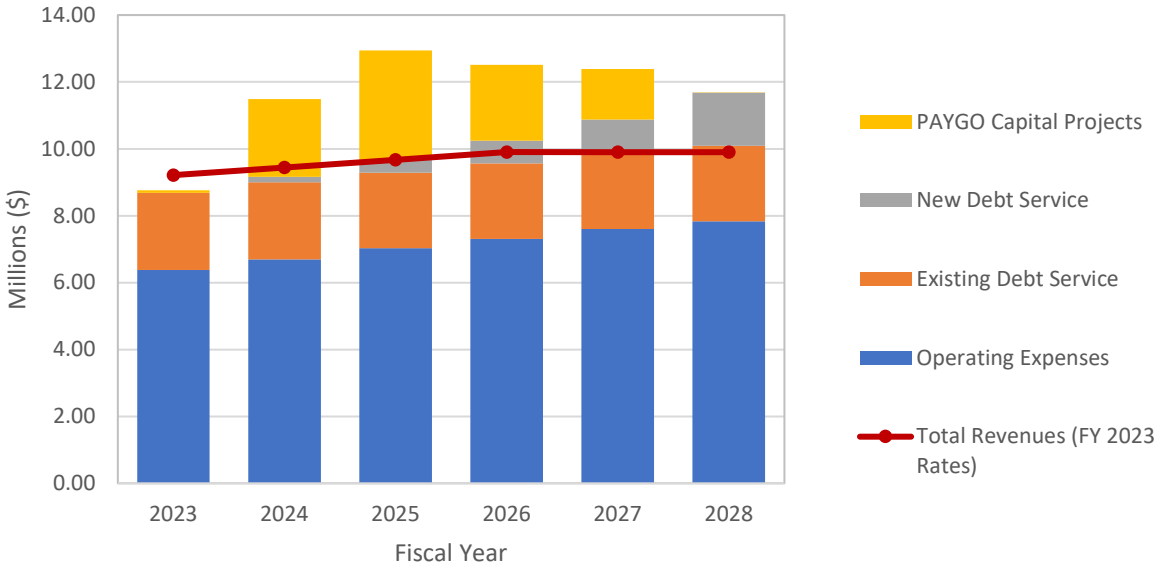
Figure E-1: Water Fund Expenses vs. Revenues at FY 2023 Rates



The forecasted expenses are driven by significant capital investments in the water system, particularly water main replacements. It is also worth noting that the revenues under the current rates are forecasted to decline due to decreases in future water demand. The following figure shows the forecasted Water Fund balance assuming the Village does not increase water rates. Note that part of the Village's FY 2023 fund balance is comprised of bond proceeds that are restricted for the use on capital spending only.

Figure E-2: Water Fund Balance Projection at FY 2023 Rates

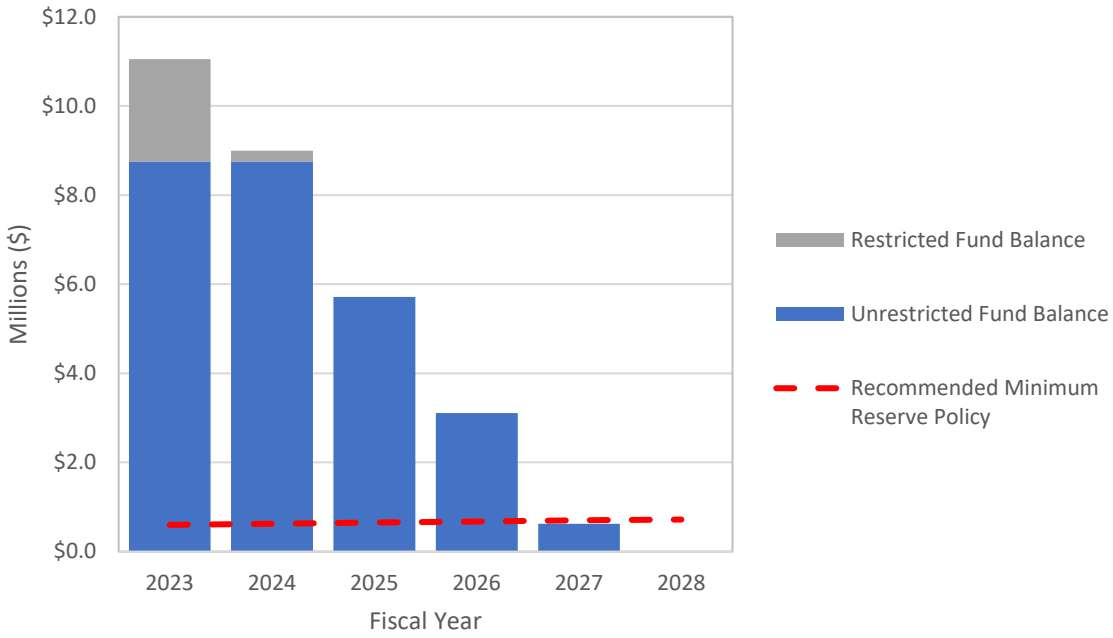


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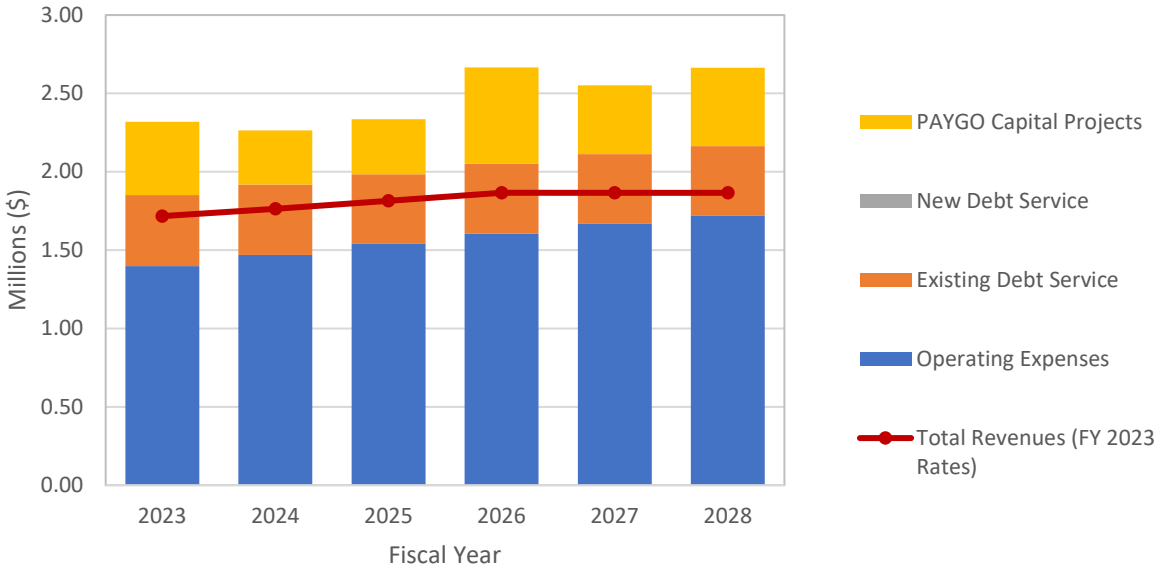
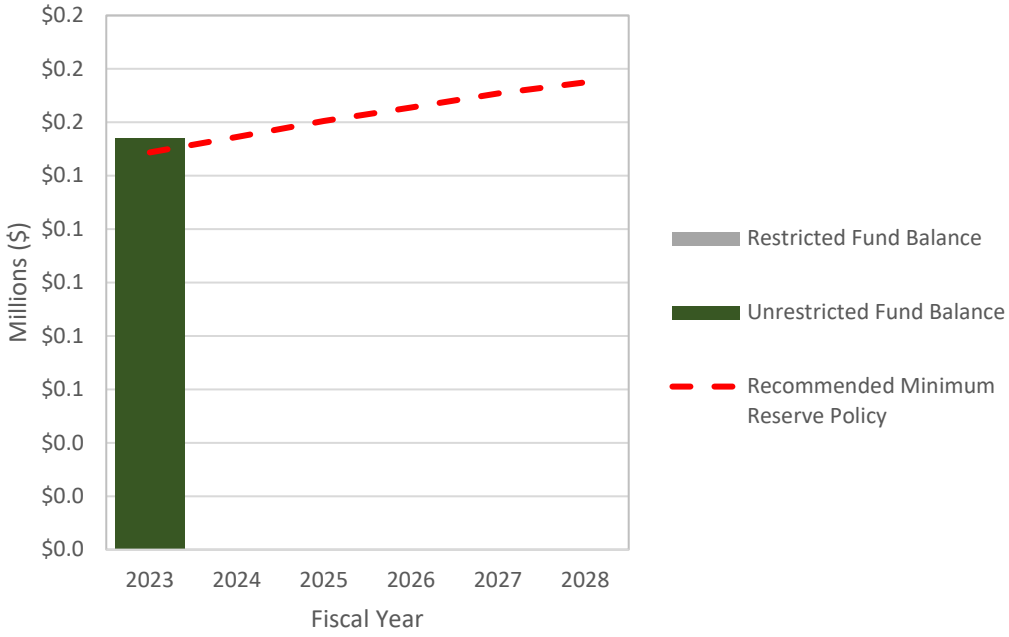
Figure E-3: Sewer Fund Expenses vs. Revenues at FY 2023 Rates



The forecasted sewer expenses are also driven by significant increases in expenses due to and the planned capital improvement projects, specifically, sewer main and lift station rehabilitation. Sewer rate revenues are forecasted to decline due to decreases in future water demand. The following figure shows the forecasted Sewer Fund balance assuming the Village does not increase sewer rates. Note that part of the Village's FY 2023 fund balance is comprised of bond proceeds that are restricted for the use on capital spending only.

Figure E-4: Sewer Fund Balance Projection at FY 2023 Rates



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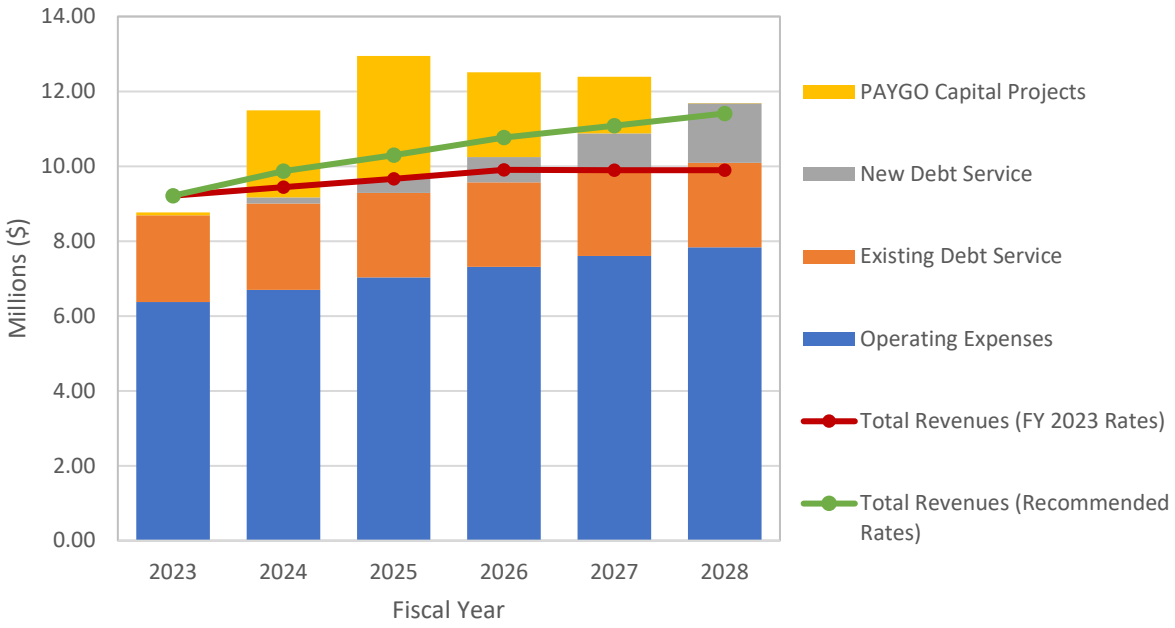
NewGen's recommended revenue increases to maintain the financial health of the Village's Water and Sewer Funds in the near term are shown in Table E-1 below.

Table E-1
Recommended Water and Sewer Rate Revenue Increases[1]

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Water Rate Revenue Increase	4.6%	2.0%	2.0%	3.0%	3.0%
Sewer Rate Revenue Increase	35.0%	0.0%	0.0%	0.0%	0.0%

The following figures show the Water Fund and Sewer Fund cash flows and fund balance projections if the Village adopts the revenue increases shown in Table E-1.

Figure E-5: Water Expenses vs. Revenues at Recommended Rates



[1] The Village adopted FY 2024 took effect on May 1, 2023.

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Figure E-6: Water Fund Balance Projection at Recommended Rates

Under the recommended rates, the Village maintains a Water Fund balance sufficient to meet and exceed the recommended minimum balance.

Figure E-7: Sewer Expenses vs. Revenues at Recommended Rates

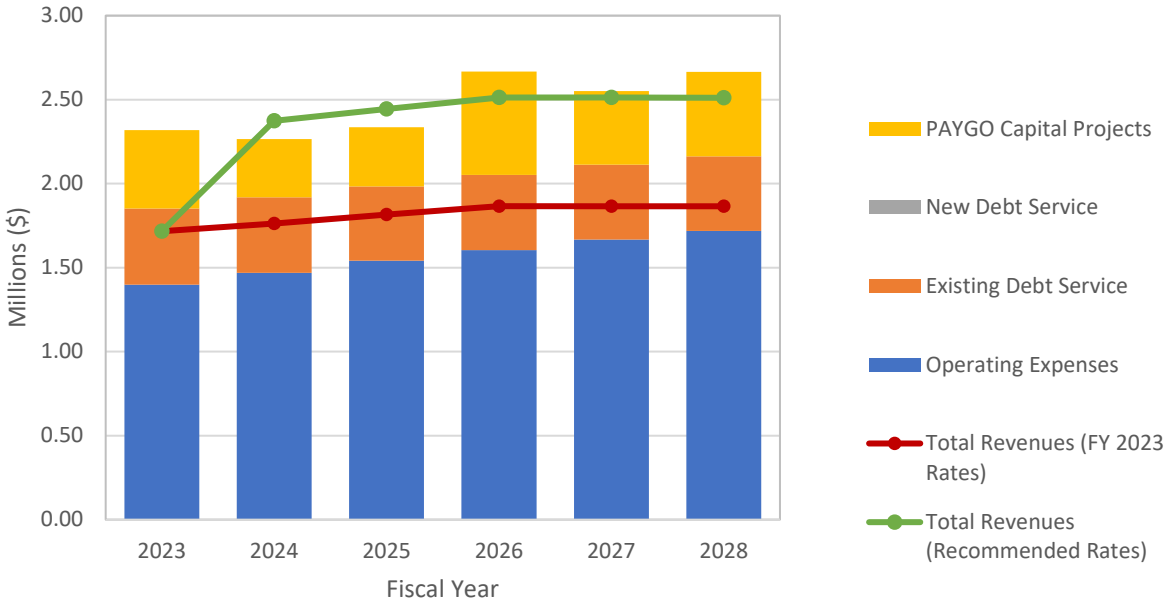

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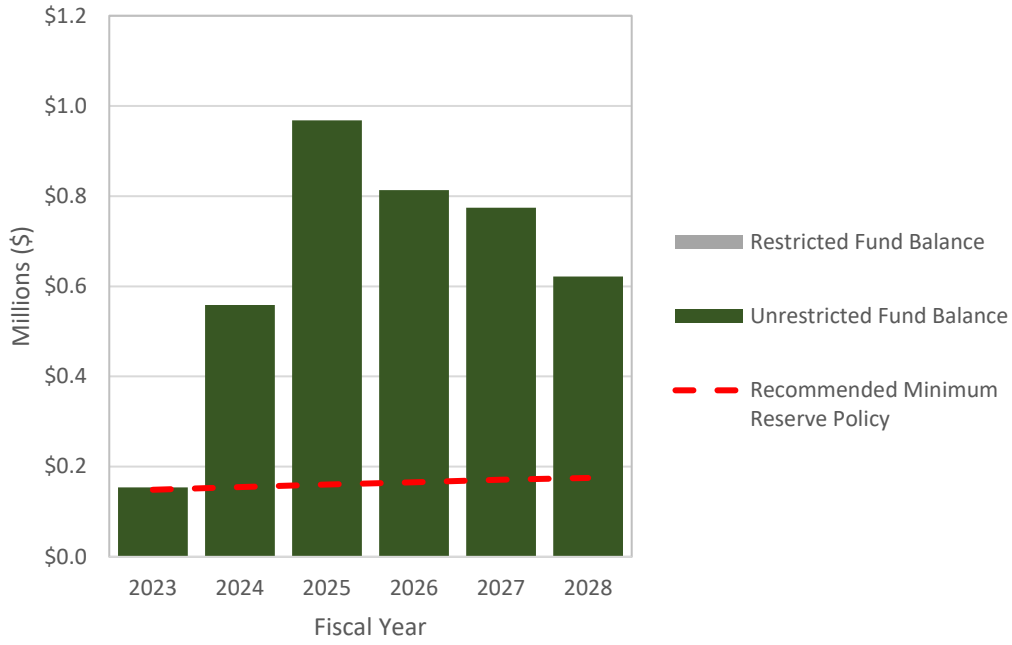
Figure E-8: Sewer Fund Balance Projection at Recommended Rates



Under the recommended rates, the Village maintains a Sewer Fund balance sufficient to meet and exceed the recommended minimum balance.

NewGen developed an alternative rate structure for the Village's water and sewer rates. Currently, the Village charges only a volumetric rate per 1,000 gallons (kgal) of usage per quarter, with a quarterly minimum of 7,000 gallons. NewGen developed a rate alternative that includes a fixed quarterly fee based on meter size with a Small Meter (up to 1 ½" and a Large Meter (over 1 ½") fee that includes no usage, and a volumetric rate per kgal for all metered usage. The impact of the alternative rate structure is different on customers based on their water demand.

The average Village residential customer uses 15,000 gallons of water per quarter. The following Tables show the impact of the recommended revenue increases on sample customer water and sewer bills under both the current and alternative rate structure. Both rate structures include the revenue increases recommended in Table E-1 and generate the same amount of total water and sewer revenue.

The tables assume that the Village adopts only the rate increase in FY 2024 and FY 2025 and keeps the current rate structure. The alternative rate structure is assumed to begin in FY 2026, after the Village has had time to evaluate the cost and impact of replacing the Village's meters with newer technology.

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Table E-9
Projected Quarterly Customer Water Bills – Current Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Low Use	**$41.16**	**$43.05**	**$43.89**	**$44.80**	**$46.13**	**$47.53**
Small Meter	*$ Change*	*$1.89*	*$0.84*	*$0.91*	*$1.33*	*$1.40*
3 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*2.1%*	*3.0%*	*3.0%*
Minimum Use	**$41.16**	**$43.05**	**$43.89**	**$44.80**	**$46.13**	**$47.53**
Small Meter	*$ Change*	*$1.89*	*$0.84*	*$0.91*	*$1.33*	*$1.40*
7 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*2.1%*	*3.0%*	*3.0%*
Average Use	**$88.20**	**$92.25**	**$94.05**	**$96.00**	**$98.85**	**$101.85**
Small Meter	*$ Change*	*$4.05*	*$1.80*	*$1.95*	*$2.85*	*$3.00*
15 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*2.1%*	*3.0%*	*3.0%*
High Use	**$294.00**	**$307.50**	**$313.50**	**$320.00**	**$329.50**	**$339.50**
Large Meter	*$ Change*	*$13.50*	*$6.00*	*$6.50*	*$9.50*	*$10.00*
50 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*2.1%*	*3.0%*	*3.0%*

Table E-10
Projected Quarterly Customer Sewer Bills – Current Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Low Use	**$8.82**	**$11.90**	**$11.90**	**$11.90**	**$11.90**	**$11.90**
Small Meter	*$ Change*	*$3.08*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
3 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Minimum Use	**$8.82**	**$11.90**	**$11.90**	**$11.90**	**$11.90**	**$11.90**
Small Meter	*$ Change*	*$3.08*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
7 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Average Use	**$18.90**	**$25.50**	**$25.50**	**$25.50**	**$25.50**	**$25.50**
Small Meter	*$ Change*	*$6.60*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
15 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
High Use	**$63.00**	**$85.00**	**$85.00**	**$85.00**	**$85.00**	**$85.00**
Large Meter	*$ Change*	*$22.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
50 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*

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Table E-11
Projected Quarterly Customer Water Bills – Alternative Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Low Use	**$41.16**	**$43.05**	**$43.89**	**$30.81**	**$37.81**	**$44.81**
Small Meter	*$ Change*	*$1.89*	*$0.84*	*($13.08)*	*$7.00*	*$7.00*
3 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*(29.8%)*	*22.7%*	*18.5%*
Minimum Use	**$41.16**	**$43.05**	**$43.89**	**$55.89**	**$62.89**	**$69.89**
Small Meter	*$ Change*	*$1.89*	*$0.84*	*$12.00*	*$7.00*	*$7.00*
7 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*27.3%*	*12.5%*	*11.1%*
Average Use	**$88.20**	**$92.25**	**$94.05**	**$106.05**	**$113.05**	**$120.05**
Small Meter	*$ Change*	*$4.05*	*$1.80*	*$12.00*	*$7.00*	*$7.00*
15 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*12.8%*	*6.6%*	*6.2%*
High Use	**$294.00**	**$307.50**	**$313.50**	**$505.50**	**$617.50**	**$729.50**
Large Meter	*$ Change*	*$13.50*	*$6.00*	*$192.00*	*$112.00*	*$112.00*
50 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*61.2%*	*22.2%*	*18.1%*

Table E-12
Projected Quarterly Customer Sewer Bills – Alternative Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Low Use	**$8.82**	**$11.90**	**$11.90**	**$24.10**	**$33.10**	**$42.10**
Small Meter	*$ Change*	*$3.08*	*$0.00*	*$12.20*	*$9.00*	*$9.00*
3 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*102.5%*	*37.3%*	*27.2%*
Minimum Use	**$8.82**	**$11.90**	**$11.90**	**$30.90**	**$39.90**	**$48.90**
Small Meter	*$ Change*	*$3.08*	*$0.00*	*$19.00*	*$9.00*	*$9.00*
7 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*159.7%*	*29.1%*	*22.6%*
Average Use	**$18.90**	**$25.50**	**$25.50**	**$44.50**	**$53.50**	**$62.50**
Small Meter	*$ Change*	*$6.60*	*$0.00*	*$19.00*	*$9.00*	*$9.00*
15 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*74.5%*	*20.2%*	*16.8%*
High Use	**$63.00**	**$85.00**	**$85.00**	**$104.00**	**$113.00**	**$122.00**
Large Meter	*$ Change*	*$22.00*	*$0.00*	*$19.00*	*$9.00*	*$9.00*
50 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*22.4%*	*8.7%*	*8.0%*

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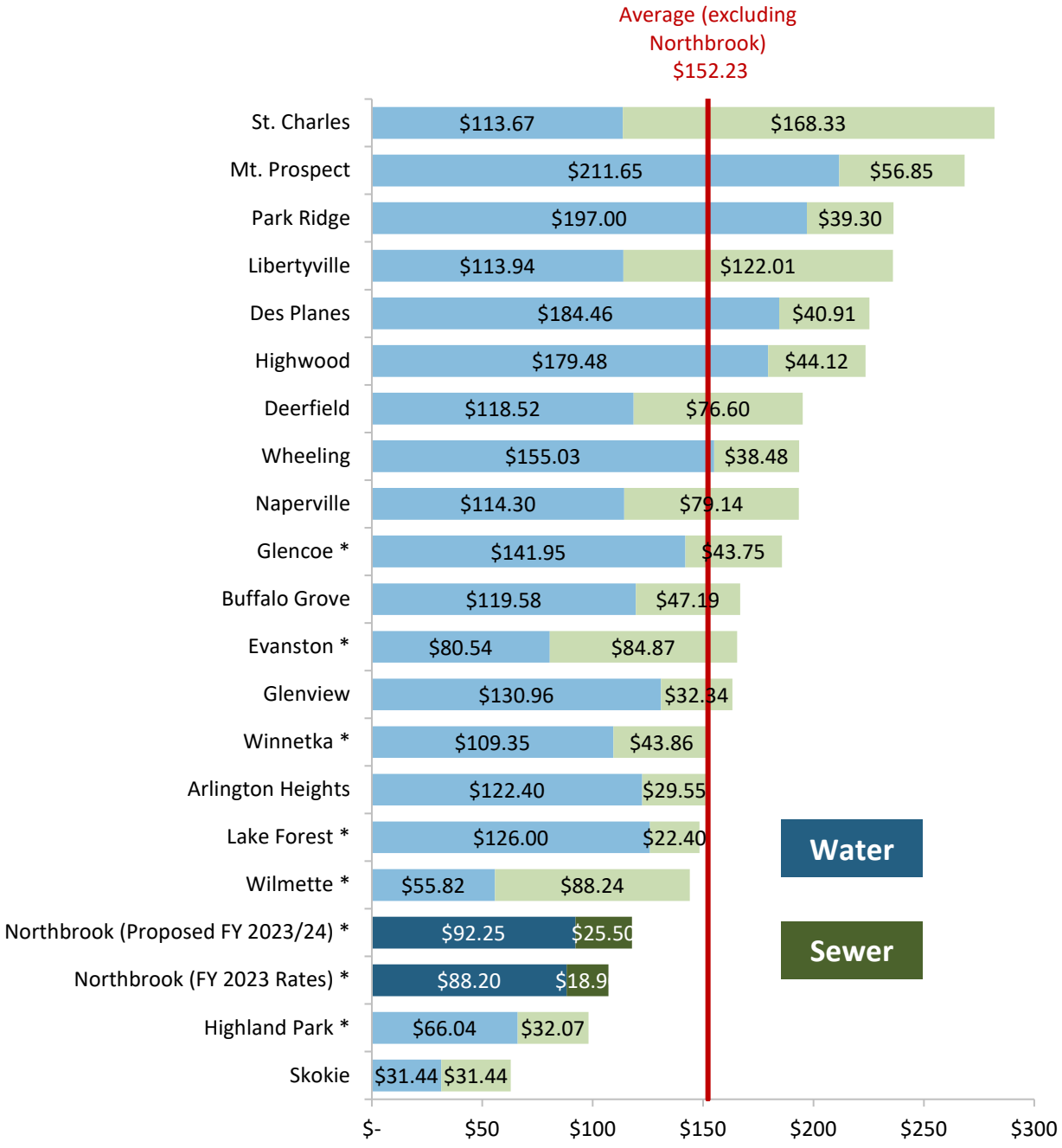
If the Village adopts the rates recommended in this report for FY 2024 and FY 2025, then the Village's combined water and sewer bill for a median Retail Village customer would still remain below the average of similar utilities in the region, as shown in the following Figure E-13. Utilities that produce their own water are marked with an asterisk (*). Again, FY 2024 assumes only an increase in rates, while FY 2025 assumes the adoption of the alternative rate structure.

Figure E-13: Regional Bill Comparison – Quarterly Bill, 5/8" Meter, 15,000 Gallons



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SECTION 1
STUDY BACKGROUND AND SCOPE OF WORK

Study Background

The Village of Northbrook (Village) is an established home rule community located in northern Illinois, approximately 25 miles north of downtown Chicago. The Village, which covers 13 square miles, is home to 35,222 residents as of the 2020 Census. The Village operates three utilities including a water utility, sanitary sewer utility, and stormwater utility. The Village's water utility is inclusive of drawing water from Lake Michigan through our own intakes, pumping this raw water to the Village's treatment facility, treatment of the water, distribution of the water, and billing for the sale of that water. The Village provides retail water service to customers within the Village limits and wholesale water service to the Mission Brook Sanitary District and the Village of Riverwoods. The Village's sanitary sewer utility is a collector system that feeds into the trunk line sewers of the Metropolitan Water Reclamation District of Greater Chicago (MWRD) that treats the wastewater.

The Village engaged NewGen Strategies and Solutions, LLC to complete a Water and Sewer Rate and Fee Study. The goal of the study was to work with the Village Managers Office, Finance, and Public Works Department to conduct a comprehensive water and sanitary sewer rate and fee study to develop a fair, equitable, and sustainable rate structure for the long term fiscal health and maintenance of the Village's water and sanitary sewer utilities.

Project Approach

NewGen's approach to reviewing and evaluating municipal utility rates is governed by the view that the ideal rate structure must satisfy seven criteria:

- ***Equity*** requires that rates and charges result in no undue discrimination among customers or customer classes. Although equity is normally related to the cost of service, it should be realized that customer acceptance will center on preconceived notions of equity and fairness.
- ***Efficiency*** refers to the ability of the rate schedule to encourage wise use of the resources devoted to the services that the utility provides.
  - Rates should reflect the cost of providing service.
  - Rates should be similar for customers or customer classes served under similar conditions.
  - Customers should be able to understand the rate schedules so that they can make rational decisions regarding their purchase of additional service(s).
- ***Revenue Adequacy*** is the most fundamental of all considerations, as it recognizes that rates are cost driven. When evaluating any rate structure, the rates must produce revenues sufficient to operate the system and those rates produce sufficient revenues if there are changes in demand for service.
- ***Affordability*** means that the recommended rates must result in bills that are realistically within the ability of customers to pay.

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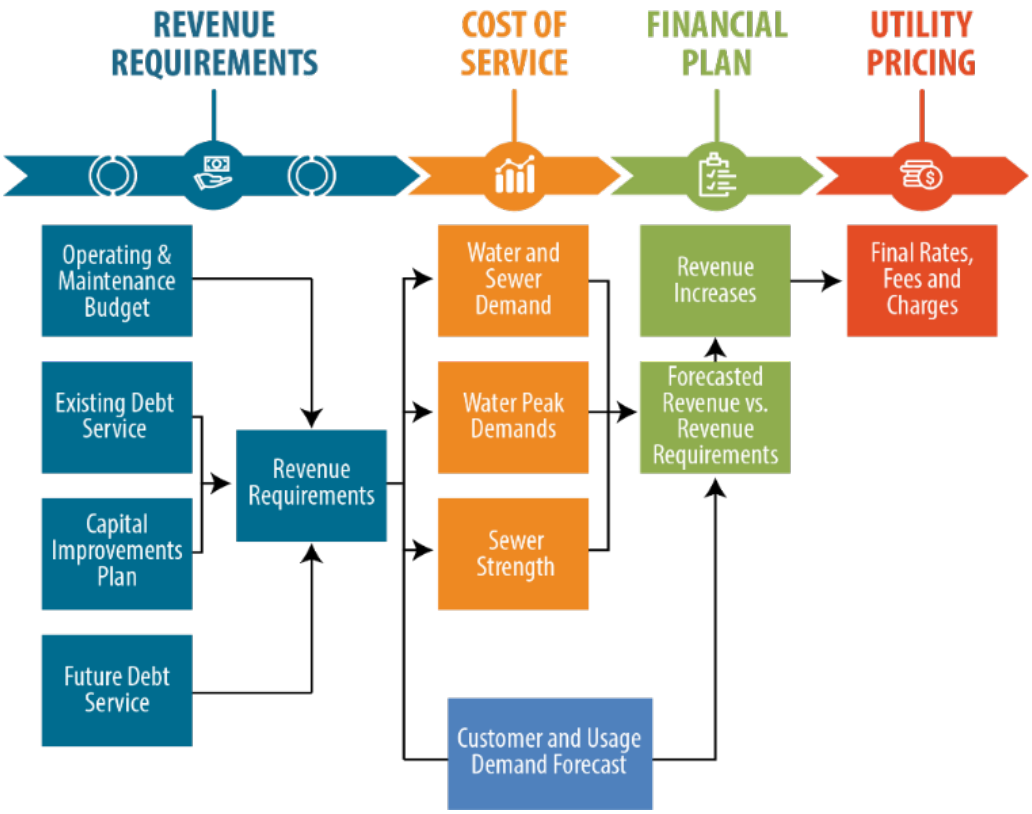
- ***Sustainability*** means that the objective of the rate methodology is to keep rates low over time, not to merely keep them low for the short-term by omitting or deferring needed expenses such as maintenance and funding of necessary cash reserves.
- ***Administrative Simplicity*** recognizes that limits must be placed on the number of customer classes, the complexity of the rate schedule, and the frequency of billing.
- ***Legal and Regulatory Compliance*** is a prime consideration because rate structures must incorporate applicable local, state, and federal statutes.

The application of the criteria should recognize that a rate schedule is a form of public policy statement, setting forth those values that the utility considers important. Rate structures must be tailored to community perceptions, realities, and values. While each utility's budgeting, financial reporting and flow of funds is unique, a generalized schematic illustrating our approach to a cost of service / rate study is shown in the figure below.

Figure 1-1: Water and Sewer Rate Study Process



NewGen's approach to completing a utility rate study is predicated on a four-step process which includes:

- **Revenue Requirements** - Development of the full cost of providing water and sewer service to each class of Village customers, including those costs that may not be identified such as the need for repair and replacement of assets (i.e., deferred maintenance).
- **Cost of Service** - Allocation of revenue requirements to customer classes or types of customers based on the cost of providing service and each class's demand for service.
- **Financial Plan** - Development of a financial plan to fund system revenue requirements considering customer and usage demand forecasts.

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- **Utility Pricing** - Review of the current and alternative rate designs based on revenue needs and rate design pricing objectives with specific rate projections.

This report details the results of our study and our recommendations regarding water and sewer rates sufficient to meet the future costs of each utility.

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SECTION 2
REVENUE REQUIREMENTS

The first step in the rate study is to identify and forecast the revenue requirements of the water and sewer systems. The revenue requirements reflect the true cost of operating and maintaining each system when accounting for day-to-day operation and maintenance (O&M) costs, existing debt service, planned capital improvements, and contributions to reserves. This section of our report will detail the full costs of each system and how those costs are reasonably expected to increase in the future.

Study Assumptions

While the study is predicated on the most recently available data, several assumptions must be made to forecast future costs and revenues.

Operating Budget Escalation Factors

NewGen's cost projections are based on the Village's FY 2023 adopted Water Fund and Sewer Fund budgets. To reasonably project future costs, NewGen applied inflation factors to each of the Village's budget line items. The study includes the following operating and maintenance line-item escalation factors in Table 2-1.

Table 2-1
Operating Budget Escalation Factors

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Salaries	5.0%	5.0%	4.0%	4.0%	3.0%
Benefits	5.0%	5.0%	4.0%	4.0%	3.0%
General	5.0%	5.0%	4.0%	4.0%	3.0%
Electricity	5.0%	5.0%	4.0%	4.0%	3.0%
Natural Gas	5.0%	5.0%	4.0%	4.0%	3.0%
Chemicals	5.0%	5.0%	4.0%	4.0%	3.0%

On average, NewGen projects that the water and sewer utility operating budgets will increase by 4.2% per year over the five-year forecast.

Water and Sewer Operating Costs

The Village's FY 2023 budget and forecasted FY 2024 – FY 2028 Water and Sewer Fund O&M expenses are shown in Tables 2-2 and 2-3. Also included are forecasted O&M cost impacts of the Village's Capital Improvement Plans.

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Table 2-2
Projected Water Operating and Maintenance Expenses

	FY 2023 Budget	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected	FY2027 Projected	FY2028 Projected
Personnel Services	$2,518,350	$2,644,268	$2,776,481	$2,887,540	$3,003,042	$3,093,133
Services & Commodities	$3,492,730	$3,667,367	$3,850,735	$4,004,764	$4,164,955	$4,289,903
Maintenance	$364,865	$383,108	$402,264	$418,354	$435,088	$448,141
Total O&M	**$6,375,945**	**$6,694,742**	**$7,029,479**	**$7,310,659**	**$7,603,085**	**$7,831,177**
% Change		*5.0%*	*5.0%*	*4.0%*	*4.0%*	*3.0%*

The Village budgets its water production and water distribution operating costs separately. The FY 2023 budget is 45% production costs and 55% distribution costs.

Table 2-3
Projected Sewer Operating and Maintenance Expenses

	FY 2023 Budget	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected	FY2027 Projected	FY2028 Projected
Personnel Services	$548,045	$575,447	$604,220	$628,388	$653,524	$673,130
Services & Commodities	$746,920	$784,266	$823,479	$856,418	$890,675	$917,395
Maintenance	$103,750	$108,938	$114,384	$118,960	$123,718	$127,430
Total O&M	**$1,398,715**	**$1,468,651**	**$1,542,083**	**$1,603,767**	**$1,667,917**	**$1,717,955**
% Change		*5.0%*	*5.0%*	*4.0%*	*4.0%*	*3.0%*

The rates and fees developed in this study are sufficient to cover the increasing operating and maintenance costs of the water and sewer utilities.

Water and Sewer Capital Costs

There are two components to the capital costs of the water and sewer systems. The first is the existing debt obligations payable by the Water and Sewer Funds. The second is any planned capital expenditures to be paid by the Funds, which can be paid on an annual basis (i.e., pay-as-you-go, or PAYGO funded) or with the issuance of new debt (i.e., debt funded). The Village's practice is to PAYGO fund smaller capital projects (i.e., less than $100,000) that are routine or rehabilitative in nature and issue debt to finance less frequent replacements or upgrades to assets that have longer useful lives, typically 30 to 40 years. A more detailed discussion on capital project funding will follow in this report.

Existing Debt Service

From time to time, when the Village issues General Obligation debt, it includes debt proceeds to support capital projects for the water and/or sewer systems. As of FY 2023, the Village is obligated to pay seven outstanding debt issuances which values in each split across water and sewer. The forecasted cost of Northbrook's debt service is a driver in the model's rate projections. The Village maintains a policy of taking on debt to finance capital projects instead of relying on PAYGO funding.

Tables 2-4 and 2-5 shows the projected water loan payments over the five-year study planning period.

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Table 2-4
Current Water Debt Service Obligations by Issue

GO Bond Issue Series	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
2013A	$87,437	$87,309	$87,140	$87,542	$87,069	$87,156
2014A	$485,739	$486,189	$486,594	$488,709	$488,601	$490,509
2015B	$578,500	$579,321	$576,038	$574,631	$570,316	$567,877
2016	$118,863	$118,702	$73,427	$72,928	$73,943	$73,957
2018A	$515,585	$513,863	$513,781	$515,257	$514,109	$513,904
2019	$341,150	$340,400	$339,150	$337,400	$340,150	$342,150
2021	$184,577	$182,150	$182,150	$181,900	$181,400	$180,650
Total Debt Service	**$2,311,851**	**$2,307,934**	**$2,258,280**	**$2,258,367**	**$2,255,588**	**$2,256,203**
% Change		*(0.2%)*	*(2.2%)*	*0.0%*	*(0.1%)*	*0.0%*

Table 2-5 shows the projected sewer loan payments over the five-year study planning period.

Table 2-5
Current Sewer Debt Service Obligations by Issue

GO Bond Issue Series	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
2013A	$41,637	$41,576	$41,495	$41,686	$41,461	$41,503
2014A	$215,884	$216,084	$216,264	$217,204	$217,156	$218,004
2015B	$82,643	$82,760	$82,291	$82,090	$81,474	$81,125
2016	$18,494	$18,469	$11,425	$11,347	$11,505	$11,507
2018A	$62,876	$62,666	$62,656	$62,836	$62,696	$62,671
2019	$9,500	$9,250	$9,000	$8,750	$8,500	$8,250
2021	$22,139	$19,500	$19,000	$23,500	$22,750	$22,000
Total Debt Service	**$453,173**	**$450,305**	**$442,131**	**$447,413**	**$445,542**	**$445,060**
% Change		*(0.6%)*	*(1.8%)*	*1.2%*	*(0.4%)*	*(0.1%)*

The rates and fees developed in this report are sufficient to fund the above stated debt obligations now and through their maturities.

Planned Capital Improvements

A major component of owning a sustainable water and sewer utility is the planning for the rehabilitation and replacement of the Village's assets. The Village provided NewGen with a ten-year Capital Improvement Plan (CIP) that is a detailed list of projects including when they are planned to be completed and how much they are projected to cost. Key capital projects include:

- **Water Main Replacements** – The Village plans to spend an average of $5.9 million per year on water main replacements.
- **Water Meter Replacement Project** – The Village plans to replace all meters with Advanced Metering Infrastructure (AMI) technology at a cost of $4.5 million. AMI is an integrated system of water meters, communication networks and data management systems that will enable the

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Village to remotely read meters on an hourly basis, detect system leaks in real time, and provide customers with hourly usage information, typically via a mobile app.

- **Sewer Line Repairs and Rehabilitation** – The Village plans to spend an average of $350,000 per year on sewer line repairs and rehabilitation.

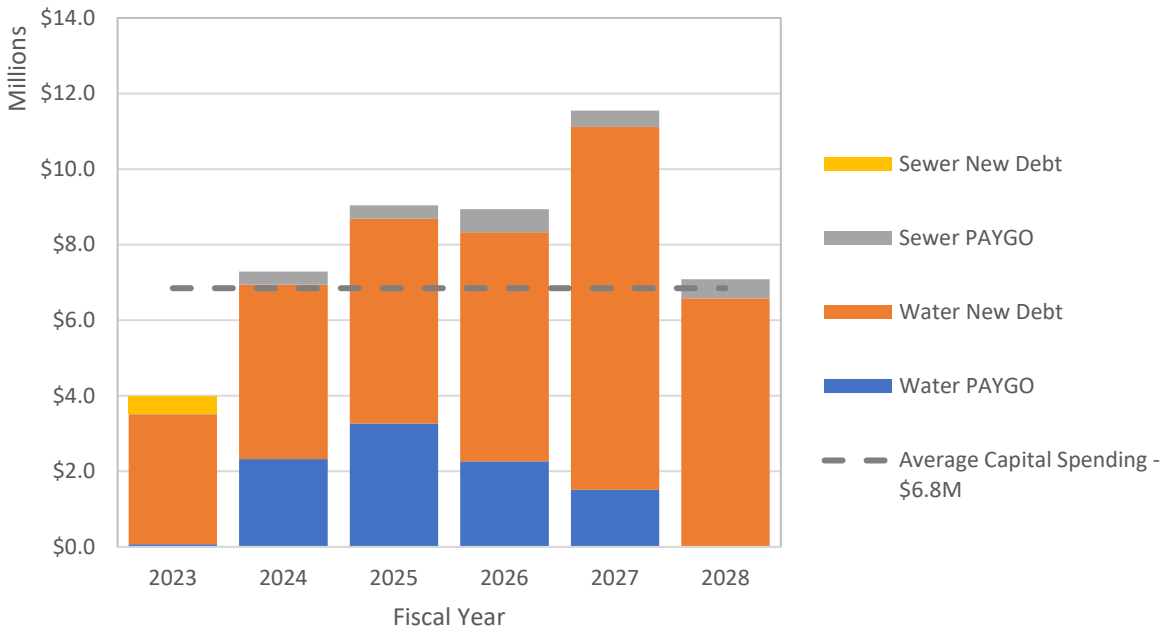
Table 2-6 summarizes the projects included in the study. FY 2023 reflects the Village's adopted budget, and future years are estimates developed by Village staff for the period FY 2024 – FY 2028.

Table 2-6
Planned Capital Improvement Projects

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Water Projects	$3,513,270	$6,942,541	$8,687,139	$8,326,403	$11,112,378	$6,579,422
Sewer Projects	466,000	345,690	351,910	615,750	437,915	501,480
Total Planed CIP	**$3,979,270**	**$7,288,231**	**$9,039,049**	**$8,942,153**	**$11,550,293**	**$7,080,902**

A full list of planned capital improvement projects is provided in Appendix A of this report. Figure 2-1 shows the annual variation of the Village's planned CIP spending and the funding source.

Figure 2-1: Capital Improvement Plan Financing Forecast



Based on the Village's financing plans provided to NewGen, all sewer line repairs/rehabilitation will be PAYGO funded beginning in FY 2024. Most of the water system CIP will be sustained by new loans. As the Village issues debt to support the water plan, the debt payable by the Water and Sewer Funds is forecasted to increase about 56% from FY 2023 to FY 2028 as shown in Figure 2-2.

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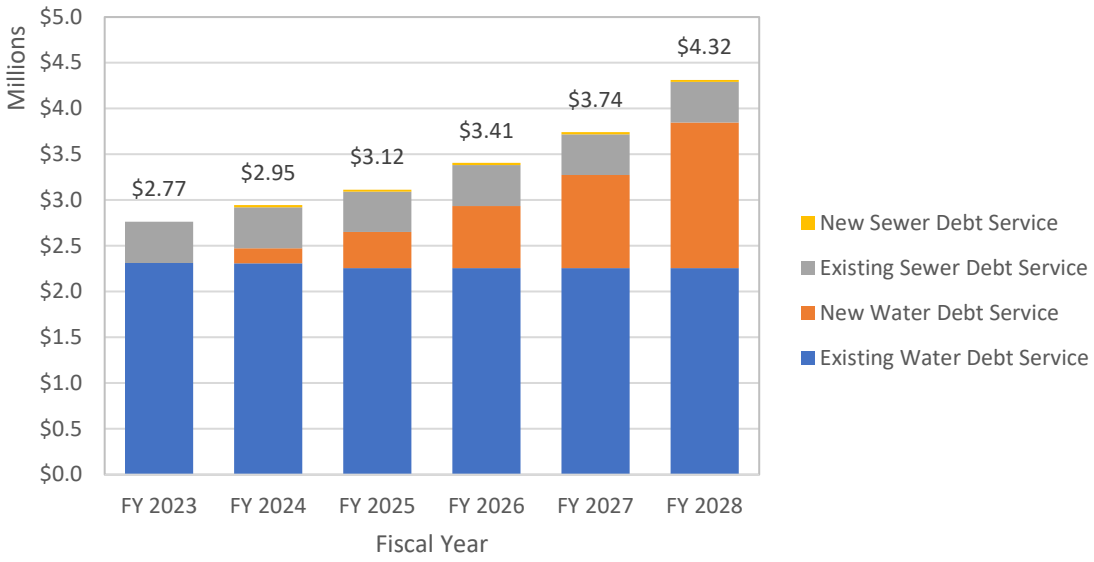
Figure 2-2: Total Forecasted Water and Sewer Debt Service



Miscellaneous Revenues

The Village accounts for certain Water and Sewer Fund revenues that are in addition to the water and sewer rates charged to customers. These non-rate revenues may be volatile from year to year, and therefore the Village budgets for a conservative amount each year. To determine the annual revenue needs of the water and sewer systems, these non-rate revenues need to be included in the fund's revenue. These revenues include Utility Permits, Hydrant Usage Fees, Recapture Fees, and investment interest. Tables 2-7 and 2-8 detail these non-rate revenues.

Table 2-7
Projected Non-Rate Water Revenue

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Utility Permits	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
Hydrant / Meter Usage Fees	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500
Miscellaneous	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000
Recapture Fees	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000
Hydrant Damage/Turn-On	$8,500	$8,500	$8,500	$8,500	$8,500	$8,500
Interest Income	$53,000	$47,121	$33,891	$25,181	$18,641	$17,233
Total Non-Rate Revenues	**$148,000**	**$142,121**	**$128,891**	**$120,181**	**$113,641**	**$112,233**

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Table 2-8
Projected Non-Rate Sewer Revenue

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Miscellaneous	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Interest Income	$6,000	$2,793	$4,839	$4,067	$3,873	$3,108
Total Non-Rate Revenues	**$16,000**	**$12,793**	**$14,839**	**$14,067**	**$13,873**	**$13,108**

Net Revenue Requirements

Based on the latest available FY 2023 budgeted operating, debt service, and capital expense data as well as the methodologies and assumptions detailed above, NewGen developed a net revenue requirement forecast for the Village's water and sewer systems, shown in Tables 2-9 and 2-10.

Table 2-9
Water Fund Net Revenue Requirement Projection

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Operating Expenses	$6,375,945	$6,694,742	$7,029,479	$7,310,659	$7,603,085	$7,831,177
Existing Debt Service	$2,311,851	$2,307,934	$2,258,280	$2,258,367	$2,255,588	$2,256,203
New Debt Service	$ -	$164,272	$392,307	$677,955	$1,017,924	$1,590,167
PAYGO Capital	$75,000	$2,325,000	$3,265,000	$2,265,000	$1,510,700	$15,000
Total Rev. Req.	**$8,762,796**	**$11,491,949**	**$12,945,066**	**$12,511,980**	**$12,387,297**	**$11,692,548**
Less: Non-Rate Rev.	($148,000)	($142,121)	($128,891)	($120,181)	($113,641)	($112,233)
Net Rev Req.	**$8,614,796**	**$11,349,827**	**$12,816,176**	**$12,391,799**	**$12,273,656**	**$11,580,315**

Table 2-10
Sewer Fund Net Revenue Requirement Projection

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Operating Expenses	$1,398,715	$1,468,651	$1,542,083	$1,603,767	$1,667,917	$1,717,955
Existing Debt Service	$453,173	$450,305	$442,131	$447,413	$445,542	$445,060
New Debt Service	$ -	$ -	$ -	$ -	$ -	$ -
PAYGO Capital	$466,000	$345,690	$351,910	$615,750	$437,915	$501,480
Total Rev. Req.	**$2,317,888**	**$2,264,646**	**$2,336,124**	**$2,666,930**	**$2,551,374**	**$2,664,495**
Less: Non-Rate Rev.	($16,000)	($12,793)	($14,839)	($14,067)	($13,873)	($13,108)
Net Rev Req.	**$2,301,888**	**$2,251,853**	**$2,321,285**	**$2,652,862**	**$2,537,502**	**$2,651,386**

The net revenue requirement is the basis upon which all rates and fees are calculated for the Village's systems. Although the net revenue requirement varies from year to year, the financial plan developed during the study takes a long-term perspective to maintain stable rates and sufficient reserves.

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SECTION 3
WATER AND SEWER CUSTOMERS AND USAGE

This section will detail the composition of the Village's water and sewer system customers. The Village's primary revenue source for the Water and Sewer Funds is the rates and fees charged to customers of the water and sewer systems. The latest full year of customer and consumption data available for the study was FY 2022. However, due to the impacts of COVID-19 on both customer demand and the ability of the Village to determine actual meter reads beginning March 2020, NewGen used the average of the past three full fiscal years to determine the Village's customer and usage amounts. This reflects a more typical usage profile on which to base rate calculations.

Water Customers and Consumption

Retail customers make up most of Village's water users and usage. The Village provides wholesale water service to the Mission Brook Sanitary District and the Village of Riverwoods. The Village serves about 15,490 retail customers. The number of water customers is expected to remain consistent throughout the study period.

Water Billing Units

Table 3-1 shows the billable water usage breakdown of the Village's water customers used in the study. Each billing unit is equal to 1,000 gallons.

Table 3-1
Water Billing Units by Customer Class (kgal)

Customer Type	Billing Units (kgal)
Retail	1,292,463
Mission Brook Sanitary District	62,697
Village of Riverwoods	123,316
Total Units	**1,478,476**

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Projected Water System Demand

The Village's projected consumption is outlined in Table 3-3 below. During the course of the study, the Village identified meters within its system that were either under-reading water usage or not functional. Therefore, the Village was not accounting for all of the water demand in its system. The Village is in the process of replacing meters, and therefore NewGen's study includes an assumption that due to the replacement of deficient meters, the Village will bill 3% more retail water in the first three years of the study forecast period, and then maintain that level of billable usage for the remainder of the forecast.

Table 3-3
Projected Water Billing Units (kgal)

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Retail	1,292,463	1,331,237	1,371,174	1,412,309	1,412,309	1,412,309
Mission Brook Sanitary District	62,697	62,697	62,697	62,697	62,697	62,697
Village of Riverwoods	123,316	123,316	123,316	123,316	123,316	123,316
Total Water Sold (kgal)	**1,478,476**	**1,517,250**	**1,557,187**	**1,598,322**	**1,598,322**	**1,598,322**
% Change		*2.6%*	*2.6%*	*2.6%*	*0.0%*	*0.0%*

Table 3-4 below shows the study's forecasted sewer usage totals in kgal.

Table 3-4
Projected Sewer Billing Units (kgal)

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Retail	1,292,463	1,331,237	1,371,174	1,412,309	1,412,309	1,412,309
Total Sewer Sold (kgal)	**1,292,463**	**1,331,237**	**1,371,174**	**1,412,309**	**1,412,309**	**1,412,309**
% Change		*3.0%*	*3.0%*	*3.0%*	*0.0%*	*0.0%*

Sewer usage is expected to change in a similar fashion to water demand.

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SECTION 4
FINANCIAL PLAN AND CASH FLOW PROJECTIONS

NewGen developed Water Fund and Sewer Fund balance projections assuming the revenue requirements detailed in Section 2 of this report and that the Village does not increase any water or sewer rates in any year of the five-year projection.

Recommended Minimum Cash Reserve Policy

The American Water Works Association's (AWWA) Rates and Charges Committee states that "The level of reserves maintained by a utility is an important component of short and long-term financial management, and is a key consideration in the rate-setting process."[2] Other industry groups have published specific recommendations for minimum utility fund reserve levels, including the Water Environment Federation (one – three months O&M costs), the International City/County Management Association (one – two months of total expenses), and The Government Finance Officers Association (Not less than 45 days of total expenses).

NewGen recommends that the Village establish a minimum fund balance policy for both the Water and Sewer Funds based on the annual operating and capital expanse of the water and sewer systems. NewGen's recommended policy has two components:

- **Minimum Operating Reserve**: 30 days of annual operating expenses
- **Minimum Capital Reserve**: 30 days of average 10-year PAYGO CIP

The following table shows NewGen's recommended fund balance for the Village in FY 2023 compared to the recommendations of the organizations referenced above.

Table 4-1
Minimum Fund Balance Recommendation Comparison – FY 2023

	Water Fund	Sewer Fund
WEF (30-90 Days O+M)	$524,050 - $1,572,151	$114,963 - $344,889
GFOA (45 Days Total Expenses)	$1,080,345	$285,767
ICMA (30-60 Days Total Expenses)	$720,230 - $1,440,460	$190,511 - $381,023
NewGen Strategies and Solutions	**$599,282**	**$148,719**

NewGen's recommendation falls slightly below the top "best practices" recommendations of industry organizations.

[2] AWWA Rates and Charges Committee Whitepaper, *Cash Reserve Policy Guidelines*, 2018

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The minimum Water Fund and Sewer Fund balance recommended for each year of NewGen's five-year projection is shown in Tables 4-2 and 4-3.

Table 4-2
Recommended Minimum Water Fund Balance Policy

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Annual O&M Costs	$6,375,945	$6,694,742	$7,029,479	$7,310,659	$7,603,085	$7,831,177
Days Required	30	30	30	30	30	30
O&M Reserve	**$524,050**	**$550,253**	**$577,765**	**$600,876**	**$624,911**	**$643,658**
Average PAYGO CIP	$915,319	$915,319	$915,319	$915,319	$915,319	$915,319
Days Required	30	30	30	30	30	30
Capital Reserve	**$75,232**	**$75,232**	**$75,232**	**$75,232**	**$75,232**	**$75,232**
Total Minimum Reserve	**$599,282**	**$625,484**	**$652,997**	**$676,108**	**$700,143**	**$718,890**

Table 4-2
Recommended Minimum Sewer Fund Balance Policy

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Annual O&M Costs	$1,398,715	$1,468,651	$1,542,083	$1,603,767	$1,667,917	$1,717,955
Days Required	30	30	30	30	30	30
O&M Reserve	**$114,963**	**$120,711**	**$126,747**	**$131,816**	**$137,089**	**$141,202**
Average PAYGO CIP	$410,699	$410,699	$410,699	$410,699	$410,699	$410,699
Days Required	30	30	30	30	30	30
Capital Reserve	**$33,756**	**$33,756**	**$33,756**	**$33,756**	**$33,756**	**$33,756**
Total Minimum Reserve	**$148,719**	**$154,467**	**$160,503**	**$165,573**	**$170,845**	**$174,958**

If in any year, based on NewGen's cash flow projections, the Village's Water Fund or Sewer Fund balance would fall below the required minimum, NewGen's study includes revenue increases that achieve the cash flow necessary to maintain the minimum recommended balance.

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Cash Flow Projections at FY 2023 Rates

The current structure of the Village's water and sewer rates is a usage rate per one thousand gallons (kgal) that is charged to each unit of metered consumption for all water customers. For retail customers, there is a minimum quarterly bill amount equal to 7,000 gallons of usage.

The FY 2023 retail water rate is $5.88 per kgal, and the FY 2023 sewer rate is $1.26 per kgal. The wholesale water rate applied to both Mission Brook and Ridgewood is $5.26 per kgal.

Water and Sewer Fund Cash Balance Projection at Current Rates

If the Village does not increase water or sewer rates from their current FY 2023 levels, the following four figures show NewGen's forecasted cash flow and Water and Sewer Funds balance for the period FY 2023 through FY 2028.

Figure 4-1: Water Fund Expenses vs. Revenues Forecast

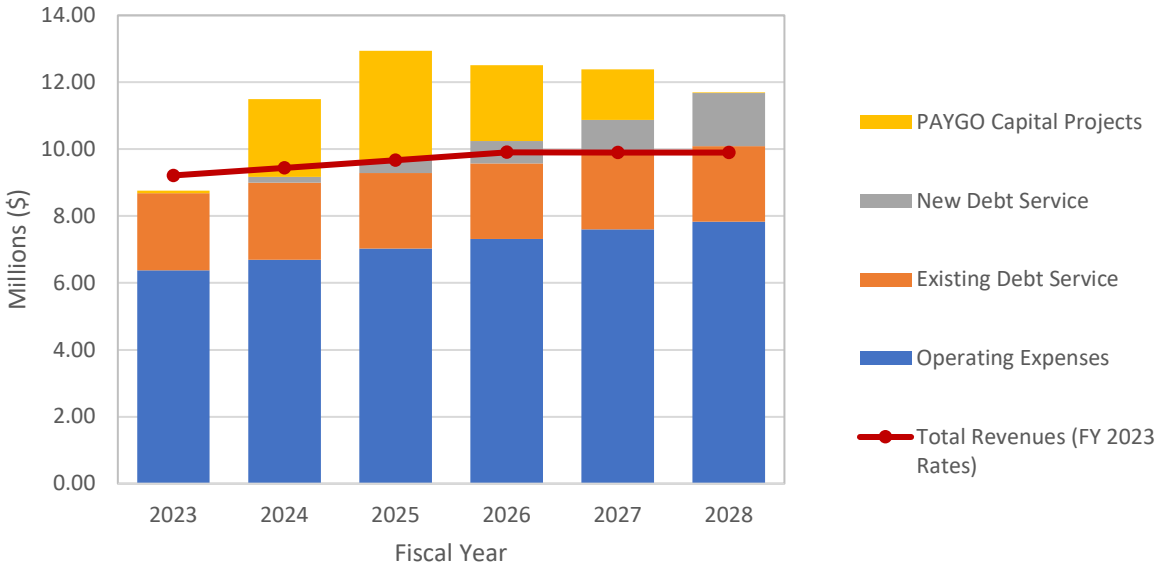

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Figure 4-2: Projected Water Fund Balance at FY 2023 Rates

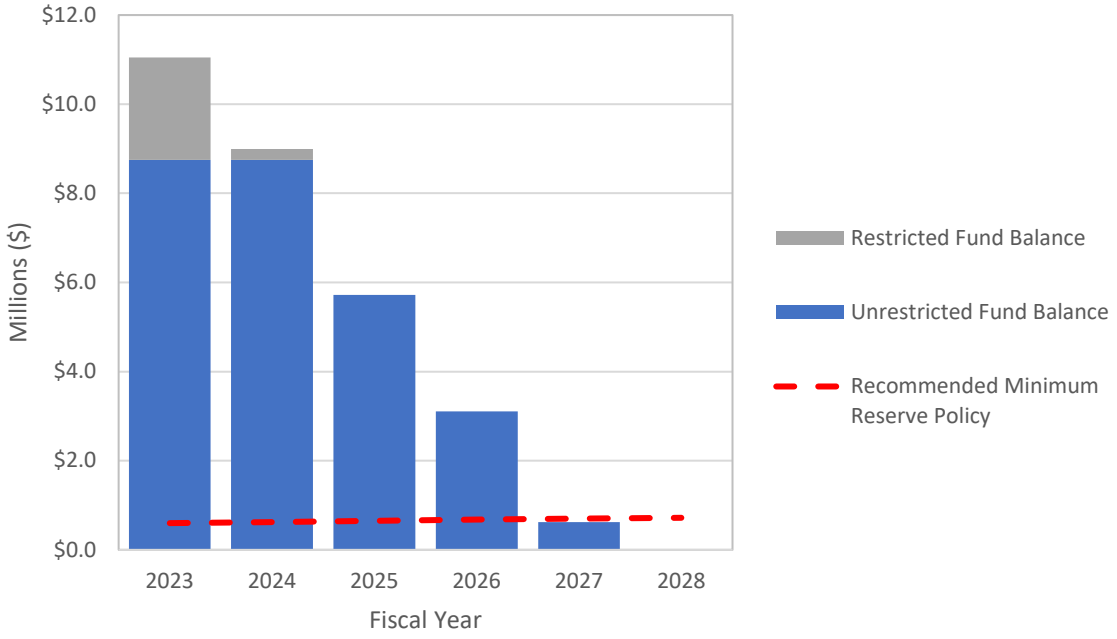

Figure 4-3: Sewer Fund Expenses vs. Revenues Forecast

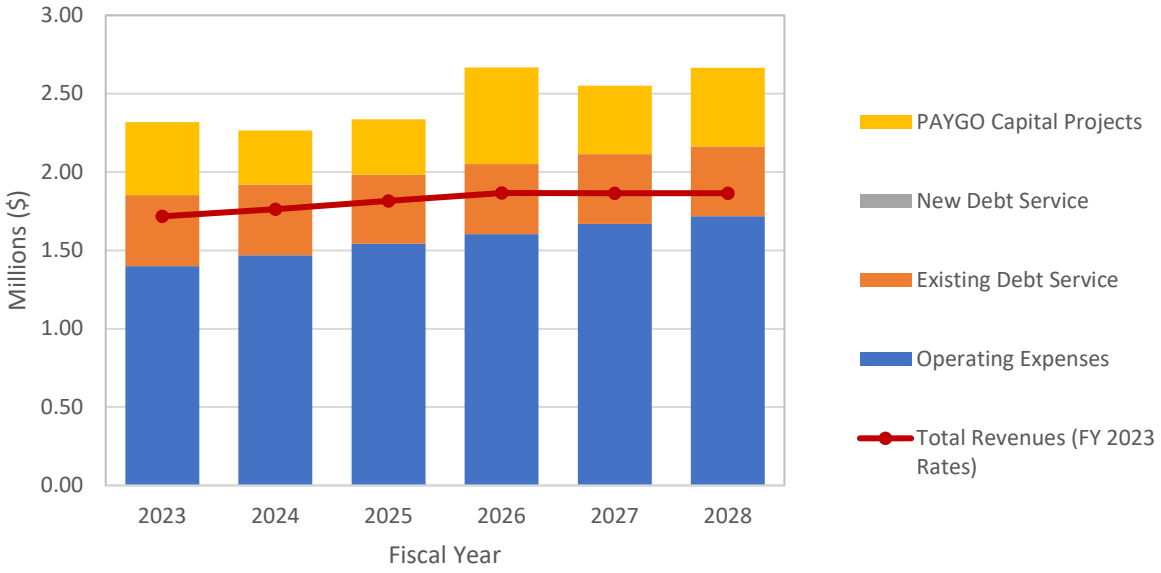

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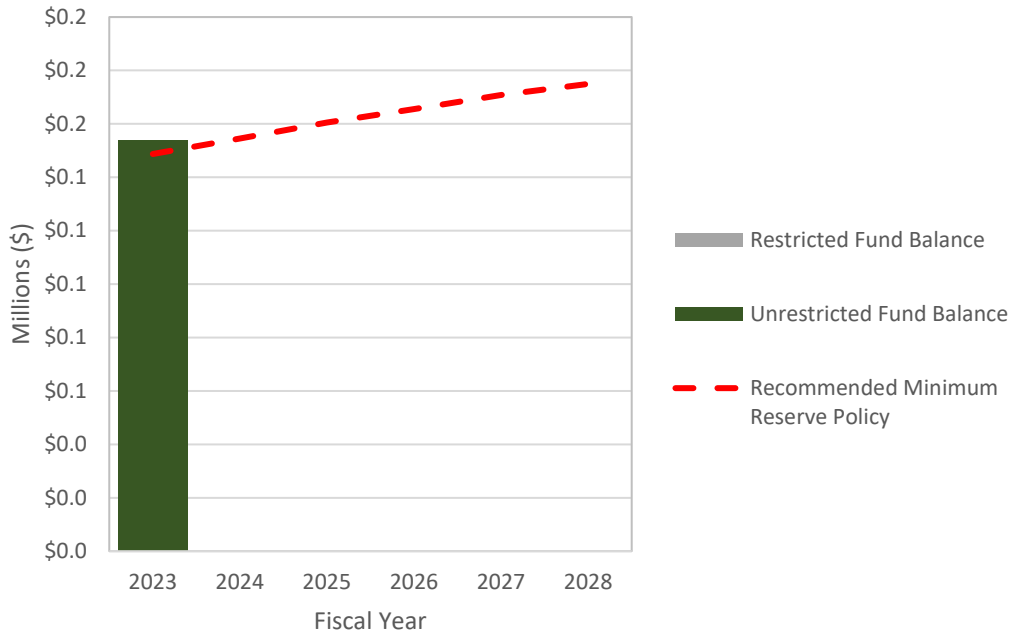
Figure 4-4: Projected Sewer Fund Balance at FY 2023 Rates



The Village's current FY 2023 water and sewer rates are not sufficient to maintain the financial health of the water and sewer systems. The next sections of this report will detail the revenue increases necessary to produce sufficient cash flow to maintain the minimum recommended fund balance for the Village's Water and Sewer Funds.

Recommended Rate Revenue Increases

To increase revenues that will sustain the water and sewer systems, NewGen recommends the following percent increases for the Village's water and sewer rates. The FY 2024 rate increases assume that the Village does not adopt any changes in rate structure.

Table 4-3
Recommended Water and Sewer Rate Revenue Increases

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Water Rate Revenue Increase	4.6%	2.0%	2.0%	3.0%	3.0%
Sewer Rate Revenue Increase	35.0%	0.0%	0.0%	0.0%	0.0%

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Water and Sewer Funds Cash Balance Projection at Recommended Rates

If the Village increases its water and sewer revenues consistent with the table above, the result is that the Village can fund each system's projected operating, capital, and debt service expenses while also maintaining the recommended reserves.

Figure 4-5: Water Fund Expenses vs. Revenues – Recommended Rates

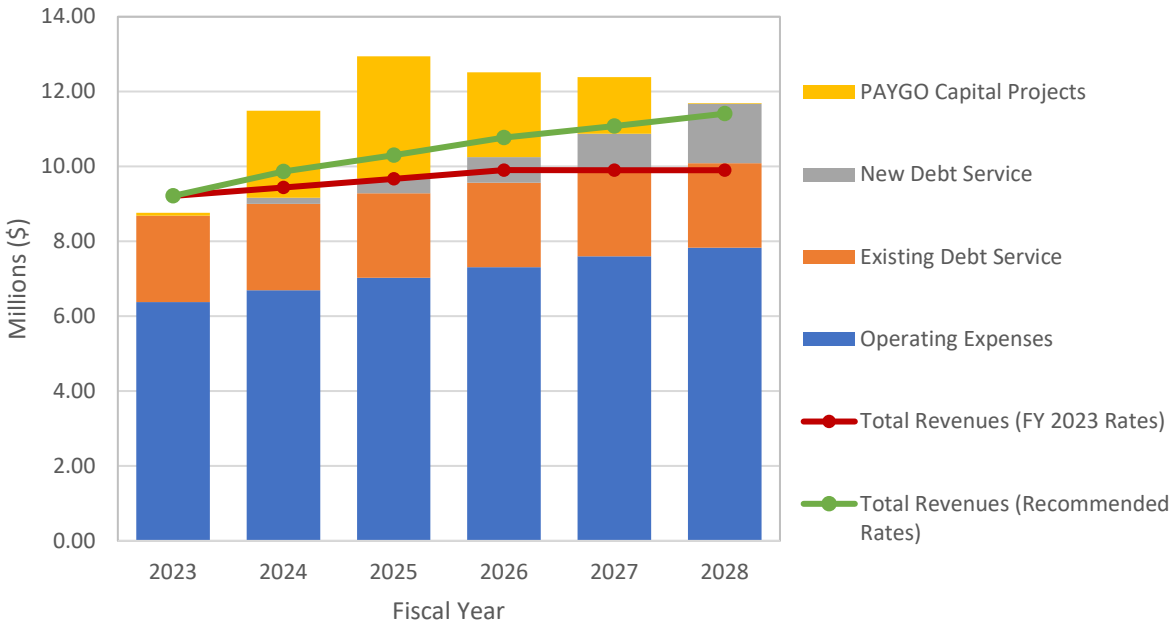
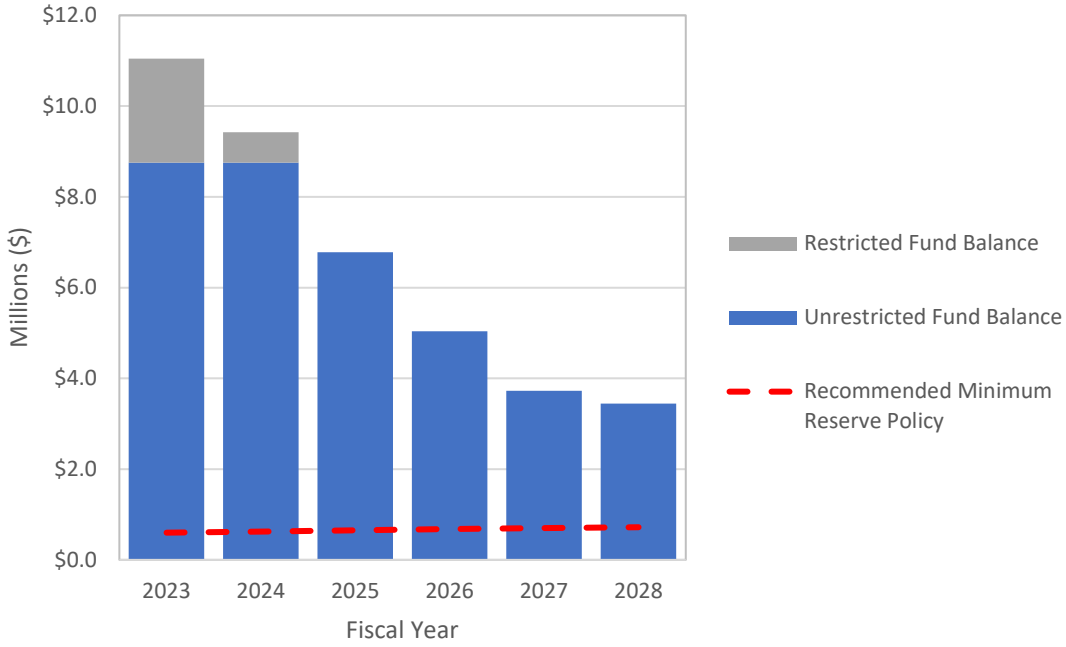


Figure 4-6: Water Fund Balance – Recommended Rates



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It should be noted that at the rates forecasted the Water Fund balance falls below NewGen's recommended minimum fund balance policy. The Village may in the future determine that rate increases need to be higher, or that a different minimum policy is better suited for the Water Fund.

Figure 4-7: Sewer Fund Expenses vs. Revenues – Recommended Rates

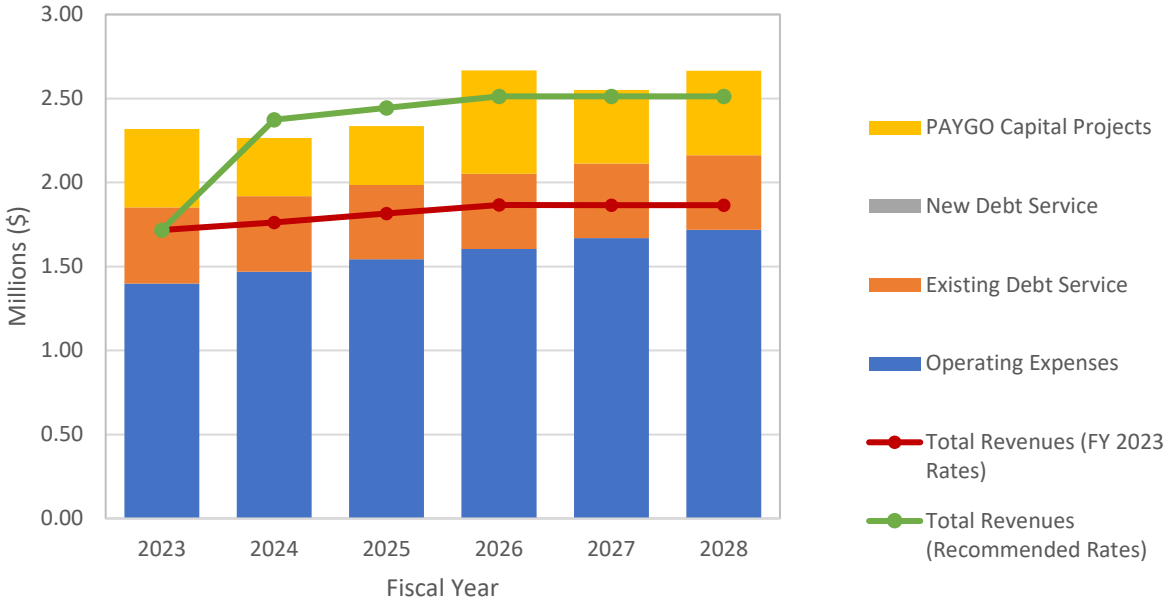
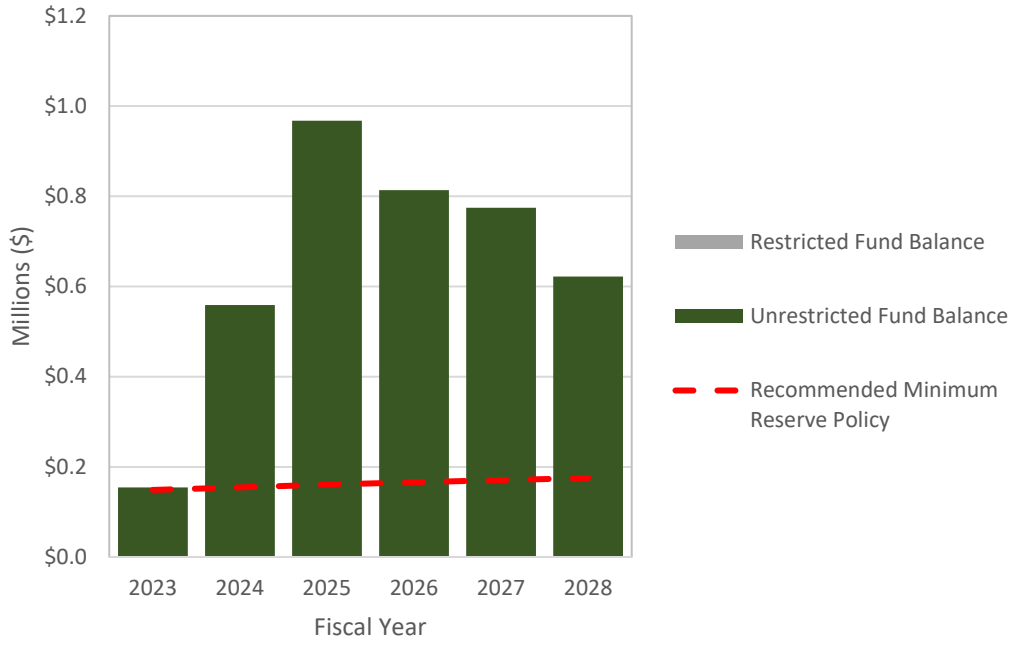


Figure 4-8: Sewer Fund Balance – Recommended Rates



The next section of our report will detail the specific rates that are projected to generate the revenue shown in the above figures.

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SECTION 5
RECOMMENDED RATES AND RATE ALTERNATIVE

This section of our report details our recommended water and sewer rates both under the Village's existing rate structure and an alternative rate structure that includes a quarterly fixed Service Charge.

Recommended Revenue Increases

This section includes the total increases in revenue shown in Table 5-1, as described in Section 4. These revenue increases are necessary to maintain the financial and operational health of the Village's water sewer infrastructure.

Table 5-1
Recommended Water and Sewer Rate Revenue Increases

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Water Rate Revenue Increase	4.6%	2.0%	2.0%	3.0%	3.0%
Sewer Rate Revenue Increase	35.0%	0.0%	0.0%	0.0%	0.0%

Projected Rates under Current Rate Structure

The following water rates shown in Table 5-2 are projected to fully support the future operating, capital, debt service, and reserve requirements of the water system. The rates below assume that the Village continues to bill a minimum of 7,000 gallons of water usage for each quarterly customer bill. Also, the rates assume that the wholesale rates charged to Mission Brook and Riverwoods continue to comply with all contract provisions relating to rates.

Table 5-2
Recommended Quarterly Water Rates

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Retail	$5.88	$6.15	$6.27	$6.40	$6.59	$6.79
Mission Brook	$5.29	$5.54	$5.64	$5.76	$5.93	$6.11
Riverwoods	$5.29	$5.54	$5.64	$5.76	$5.93	$6.11

If the Village adopts the recommended revenue increases for sewer rates in each year from FY 2024 – FY 2028, then the Village's sewer rates would be as shown in Table 5-3. Again, the rates below assume that the Village continues to bill a minimum of 7,000 gallons of water usage for each quarterly customer bill.

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Table 5-3
Recommended Quarterly Sewer Rates

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Retail	$1.26	$1.70	$1.70	$1.70	$1.70	$1.70

Projected Rates under Alternative Rate Structure

A key task of NewGen's study was to calculate a rate structure alternative in which there is a fixed component that is not based on a minimum usage, does not include any usage, and is charged to all customers monthly regardless of usage. The Village's current minimum charge is not an effective method of stabilizing revenue. AWWA Manual M1 states:

> *"It is often assumed that a minimum charge adds to the utility's revenue stability. However, if the consumption allotment for a minimum charge is set at a low level, a utility may actually receive little benefit in terms of revenue stability. The amount of revenue generated from the consumption component of the minimum charge is revenue that, for the most part, would normally be generated from water sales using the consumption charge."* – AWWA Manual M1, 7th Edition. p. 153

AWWA Manual M1 also states:

> *"In light of the decreased predictability and increased volatility of the variable or consumption portion of water-rate revenues, many utilities are looking to increase the portion of fixed-charge revenues."* – AWWA Manual M1, 7th Edition, p. 150

While M1 offers no specific percentage of revenues that should be collected via fixed charges, there are several categories of the Village's expenses that can be defined as "fixed", that is, they do not vary with customer demand. Expenses such as salaries and benefits, customer meter reading and billing, and investments in system capacity (whether that capacity is used or not). The only true variable costs of the Village's water system are electricity, natural gas, and chemical costs. These costs total only 7.8% of the Village's FY 2023 budget, meaning that 92.2% of the Village's total water expenses each year are fixed.

Large increases in fixed fees have a disproportionate impact on the customers with the smallest demand. The fixed costs drive up the average cost per unit for small customers because there is little demand over which to spread those costs. Because of this, a balance must be struck between revenue stability and customer affordability. Generally, utilities target 25% - 30% of revenue from fixed fees to balance these impacts.

An immediate adjustment to a fixed fee generating 25% of water rate revenues would place a burden on the smaller customers. Therefore, NewGen recommends phasing-in the proportion of revenue generated by fixed fees in the manner shown in Table 5-4. FY 2024 assumes that the Village does not adopt any fixed fee and only updates rates within the current structure.

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Table 5-4
Alternative Scenario Fixed Percentages

	FY 2023[3]	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Fixed Revenue %	0.0%	0.0%	10.0%	15.0%	20.0%	0.0%

The basis on which to apply a fixed fee can vary. For the Village's water rates, NewGen recommends generating the proportion of fixed rate revenue from a monthly fee per meter, with larger meters paying higher fees based on flow capacity. The AWWA publishes the maximum flow capacity in gallons per minute (gpm) of each meter size, shown in Table 5-5.

Table 5-5
AWWA Meter Flow Capacity Ratios

Meter Size	Flow Capacity (gpm)	Flow Capacity Ratio
5/8"	20	1.0
3/4"	30	1.5
1"	50	2.5
1 1/2"	100	5.0
2"	160	8.0
3"	300	15.0
4"	500	25.0
6"	1000	50.0
Average of 5/8" – 1 ½"	60	
Average of 2" – 10"	977	
Ratio of Averages		16.0

NewGen recommends charging large meters (over 2") a fee 16 times that of the fee charged to small meters, which reflects the average flow capacity of the two groups of meters. The fees, in total, are calculated to generate the percentage of rate revenue shown in Table 5-4 each year.

NewGen recommends charging the same quarterly fixed fee to all meter sizes for sewer rates.

Table 5-6 shows the recommended fixed monthly service charges for FY 2023 through FY 2027 consistent with the overall revenue forecast, percentage of fixed revenues, and AWWA meter flow factors.

[3] The Village's current 7,000 gallon quarterly minimum generates about 3.7% of total water rate revenue from usage that is not actually metered.

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Table 5-6
Recommended Retail Quarterly Water Service Charges

Meter Size	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Small Meters (5/8" – 1 ½")	N/A	N/A	N/A	$12.00	$19.00	$26.00
Large Meters (2" – 10")				$192.00	$304.00	$416.00

As the Village increases the proportion of revenues generated by fixed fees, the quarterly fee per meter increases relative to the variable rate per kgal.

Table 5-7
Recommended Retail Quarterly Sewer Service Charges

Meter Size	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
All Meters	N/A	N/A	N/A	$19.00	$28.00	$37.00

NewGen recommends that all meters pay the same Sewer Service Charge.

The above service charges would accompany a shift in water rates depicted in Table 5-7 and Sewer rates depicted in Table 5-8.

Table 5-7
Recommended Quarterly Water Rates – Alternative Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Retail	$5.88	$6.15	$6.27	$6.27	$6.27	$6.27
Mission Brook	$5.29	$5.50	$5.60	$5.60	$5.60	$5.60
Riverwoods	$5.29	$5.50	$5.60	$5.60	$5.60	$5.60

Table 5-8
Recommended Quarterly Sewer Rates – Alternative Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Retail	$1.26	$1.70	$1.70	$1.70	$1.70	$1.70

The fixed and variable rates shown above generate the same revenue as the Village's existing rate structure, assuming that the Village adopt the rate increases described in Section 4.

Any time a utility changes its rate structure, there are different impacts on different types of customers. The next section in this report shows the impact on customer bills of the increases in existing rates and the implementation of the alternative rate structure.

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SECTION 6
CUSTOMER BILL IMPACTS AND BENCHMARKING

A major consideration when developing any utility financial plan is the impact on the system's customer bills. The recommendations detailed in this report will result in revenue increases, and therefore cost increases to many of the system's customers. This section summarizes the impact on the system's customers as well as provide a comparison the total customer bill set against surrounding utilities.

Projected Customer Bills under Current Rate Structure

The following table shows the impact of NewGen's recommended revenue increases and rate structure changes on an average inside Village residential customer if the Village were to adopt the rate changes detailed in our report.

If the Village maintains its current rate structure, the percentage impact is the same for all types of retail customers.

Table 6-1
Projected Quarterly Customer Water Bills – Current Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Low Use	**$41.16**	**$43.05**	**$43.89**	**$44.80**	**$46.13**	**$47.53**
Small Meter	*$ Change*	*$1.89*	*$0.84*	*$0.91*	*$1.33*	*$1.40*
3 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*2.1%*	*3.0%*	*3.0%*
Minimum Use	**$41.16**	**$43.05**	**$43.89**	**$44.80**	**$46.13**	**$47.53**
Small Meter	*$ Change*	*$1.89*	*$0.84*	*$0.91*	*$1.33*	*$1.40*
7 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*2.1%*	*3.0%*	*3.0%*
Average Use	**$88.20**	**$92.25**	**$94.05**	**$96.00**	**$98.85**	**$101.85**
Small Meter	*$ Change*	*$4.05*	*$1.80*	*$1.95*	*$2.85*	*$3.00*
15 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*2.1%*	*3.0%*	*3.0%*
High Use	**$294.00**	**$307.50**	**$313.50**	**$320.00**	**$329.50**	**$339.50**
Large Meter	*$ Change*	*$13.50*	*$6.00*	*$6.50*	*$9.50*	*$10.00*
50 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*2.1%*	*3.0%*	*3.0%*

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Table 6-2
Projected Quarterly Customer Sewer Bills – Current Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Low Use	**$8.82**	**$11.90**	**$11.90**	**$11.90**	**$11.90**	**$11.90**
Small Meter	*$ Change*	*$3.08*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
3 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Minimum Use	**$8.82**	**$11.90**	**$11.90**	**$11.90**	**$11.90**	**$11.90**
Small Meter	*$ Change*	*$3.08*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
7 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Average Use	**$18.90**	**$25.50**	**$25.50**	**$25.50**	**$25.50**	**$25.50**
Small Meter	*$ Change*	*$6.60*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
15 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
High Use	**$63.00**	**$85.00**	**$85.00**	**$85.00**	**$85.00**	**$85.00**
Large Meter	*$ Change*	*$22.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
50 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*

Projected Customer Bills under Alternative Rate Structure

The following table shows the impact of NewGen's recommended revenue increases and rate structure changes on an average inside Village residential customer if the Village were to adopt the alternative rate changes detailed in our report.

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Table 6-3
Projected Quarterly Customer Water Bills – Alternative Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Low Use	**$41.16**	**$43.05**	**$43.89**	**$30.81**	**$37.81**	**$44.81**
Small Meter	*$ Change*	*$1.89*	*$0.84*	*($13.08)*	*$7.00*	*$7.00*
3 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*(29.8%)*	*22.7%*	*18.5%*
Minimum Use	**$41.16**	**$43.05**	**$43.89**	**$55.89**	**$62.89**	**$69.89**
Small Meter	*$ Change*	*$1.89*	*$0.84*	*$12.00*	*$7.00*	*$7.00*
7 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*27.3%*	*12.5%*	*11.1%*
Average Use	**$88.20**	**$92.25**	**$94.05**	**$106.05**	**$113.05**	**$120.05**
Small Meter	*$ Change*	*$4.05*	*$1.80*	*$12.00*	*$7.00*	*$7.00*
15 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*12.8%*	*6.6%*	*6.2%*
High Use	**$294.00**	**$307.50**	**$313.50**	**$505.50**	**$617.50**	**$729.50**
Large Meter	*$ Change*	*$13.50*	*$6.00*	*$192.00*	*$112.00*	*$112.00*
50 kgal/qr.	*% Change*	*4.6%*	*2.0%*	*61.2%*	*22.2%*	*18.1%*

Table 6-4
Projected Quarterly Customer Sewer Bills – Alternative Structure

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Low Use	**$8.82**	**$11.90**	**$11.90**	**$24.10**	**$33.10**	**$42.10**
Small Meter	*$ Change*	*$3.08*	*$0.00*	*$12.20*	*$9.00*	*$9.00*
3 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*102.5%*	*37.3%*	*27.2%*
Minimum Use	**$8.82**	**$11.90**	**$11.90**	**$30.90**	**$39.90**	**$48.90**
Small Meter	*$ Change*	*$3.08*	*$0.00*	*$19.00*	*$9.00*	*$9.00*
7 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*159.7%*	*29.1%*	*22.6%*
Average Use	**$18.90**	**$25.50**	**$25.50**	**$44.50**	**$53.50**	**$62.50**
Small Meter	*$ Change*	*$6.60*	*$0.00*	*$19.00*	*$9.00*	*$9.00*
15 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*74.5%*	*20.2%*	*16.8%*
High Use	**$63.00**	**$85.00**	**$85.00**	**$104.00**	**$113.00**	**$122.00**
Large Meter	*$ Change*	*$22.00*	*$0.00*	*$19.00*	*$9.00*	*$9.00*
50 kgal/qr.	*% Change*	*34.9%*	*0.0%*	*22.4%*	*8.7%*	*8.0%*

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Because of the shift to fixed revenues and away from a minimum bill, small users see a decrease in their quarterly water bill because they will no longer be paying for demand they did not use. Even with the increase in fixed costs, this represents a savings for the Village's smallest customers. The offsetting impact is that large users see a higher percent increase that the current structure increases because the fixed revenue impact is in addition to the consumption they were already being billed (i.e., above 7,000 gallons per quarter).

Regional Bill Comparison

The following figure shows a comparative bill for a median Retail Village customer (5/8" meter, 15 kgal quarterly usage) in surrounding service areas.

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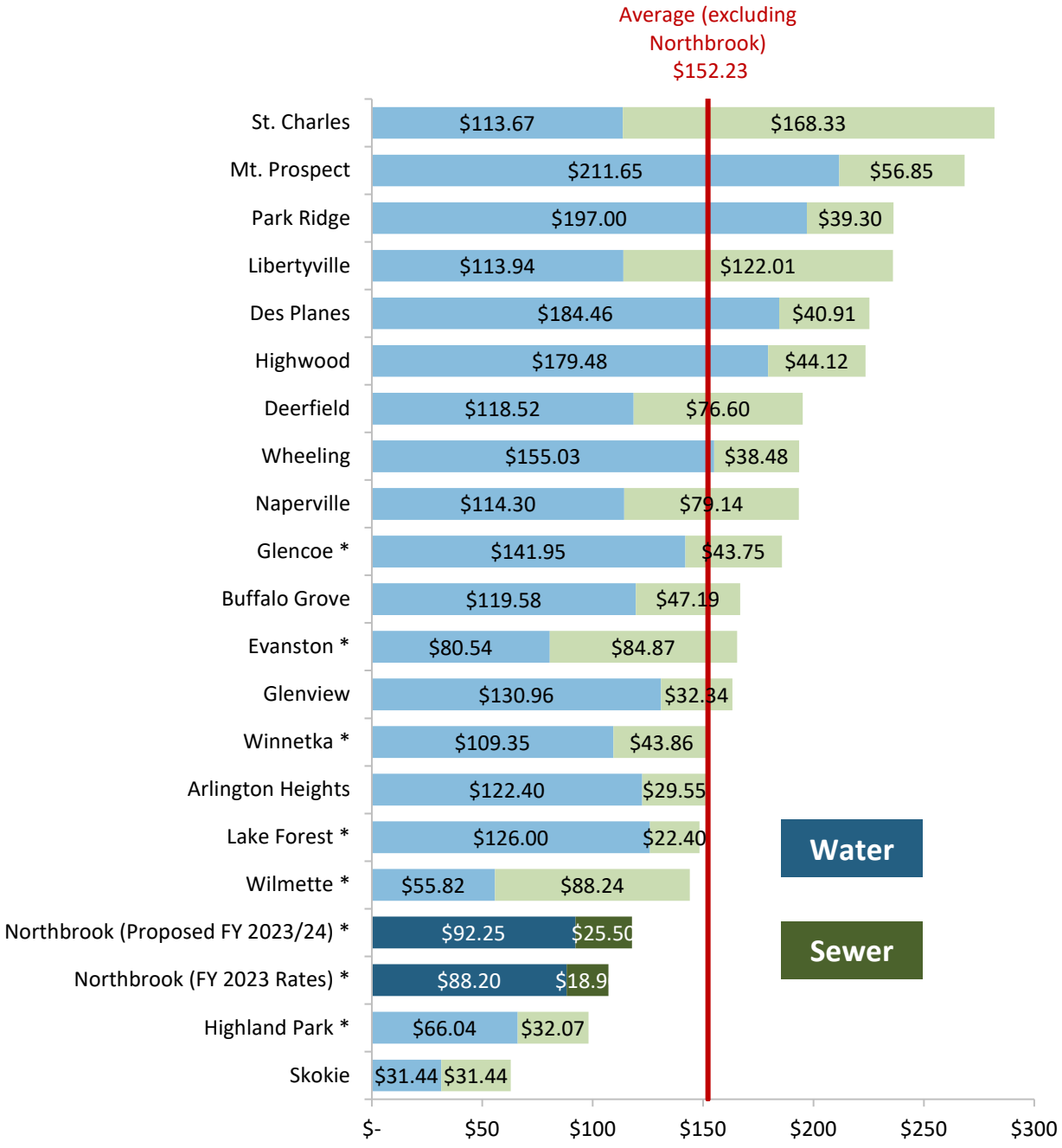
Figure 6-1: Regional Bill Comparison



While regional comparisons may provide some context, the ranking of individual customer bills is not a consideration when developing a financial plan and rate structure. The Village's cash needs are independent of the rates in the surrounding jurisdictions, and this comparison is provided for information only.

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SECTION 7
LONG-TERM PROJECTIONS

This report details the short-term, five-year impacts of the various revenue and rate options developed as a part of NewGen's study. It is recommended that the Village re-evaluate rate increases based on the previous year's actual data every year and re-evaluate rate structures every three to five years as a part of a full rate study. The charts below assume that the Village implements the revenue increases shown in Table 7-1 below.

Table 7-1
Projected Long-Term Revenue Increase Needs

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
Water Rates	4.6%	2.0%	2.0%	3.0%	3.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Sewer Rates	35.0%	0.0%	0.0%	0.0%	0.0%	1.5%	1.5%	1.5%	1.5%	1.5%

The following figures show the long-term revenue vs. expenses and fund balance charts based on the long-term projections at the time of NewGen's study.

Figure 7-1: Long-Term Water Revenues vs. Expenses Projection

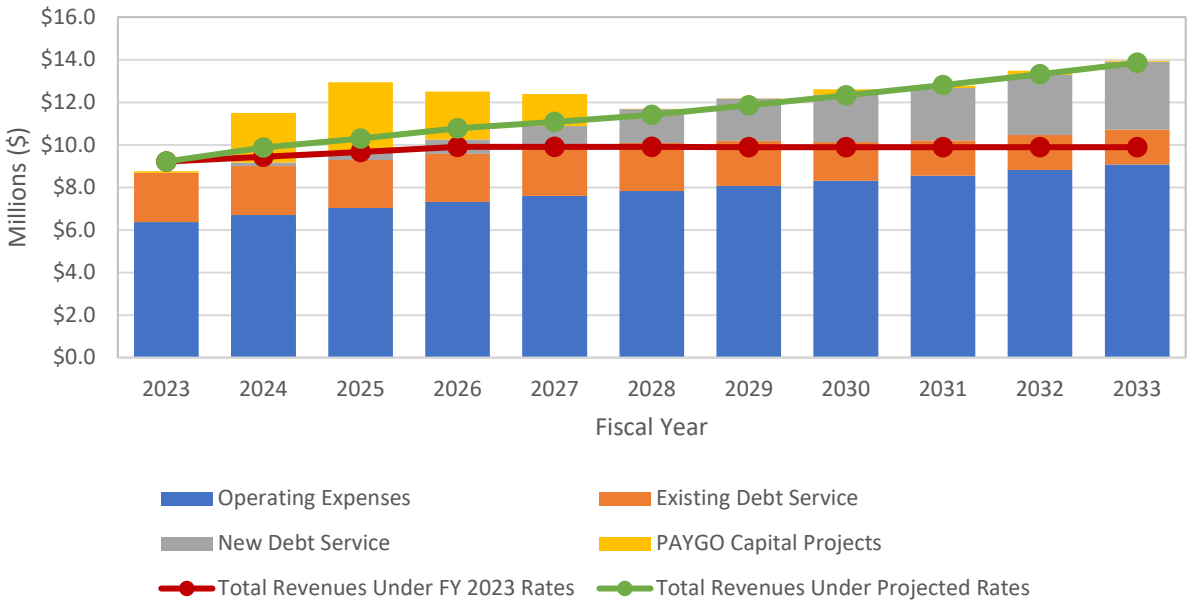

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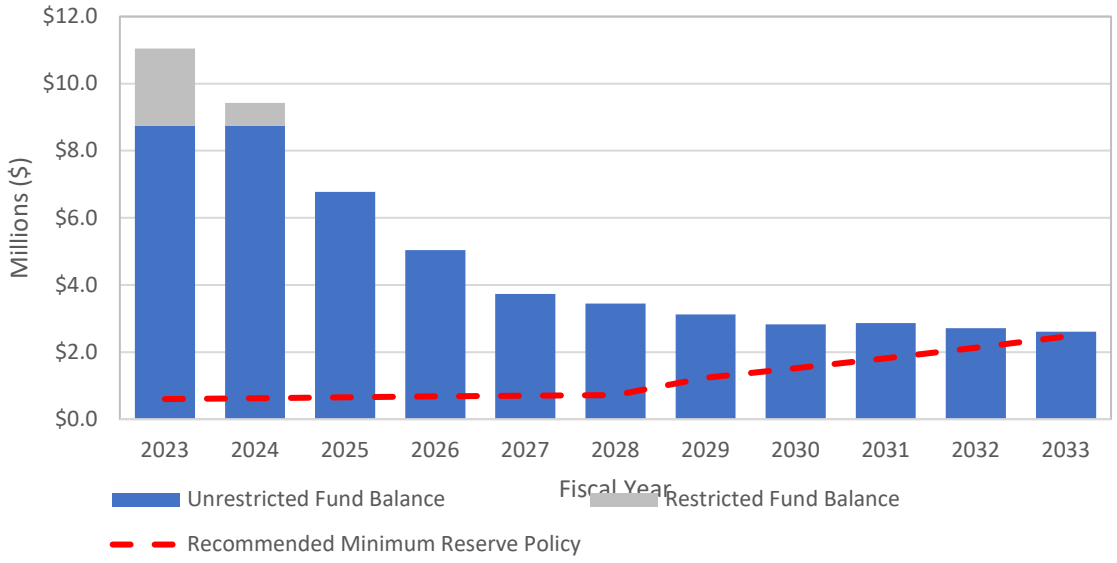
Figure 7-2: Long-Term Water Fund Balance Projection



The Village's Water Fund balance is stable in the out years of the forecast; however it remains below NewGen's recommended minimum reserve policy. The Village will have the opportunity to either revise rate increases in future years to meet the recommended fund balance policy or consider a different policy.

Figure 7-3 Long-Term Sewer Revenues vs. Expenses Projection

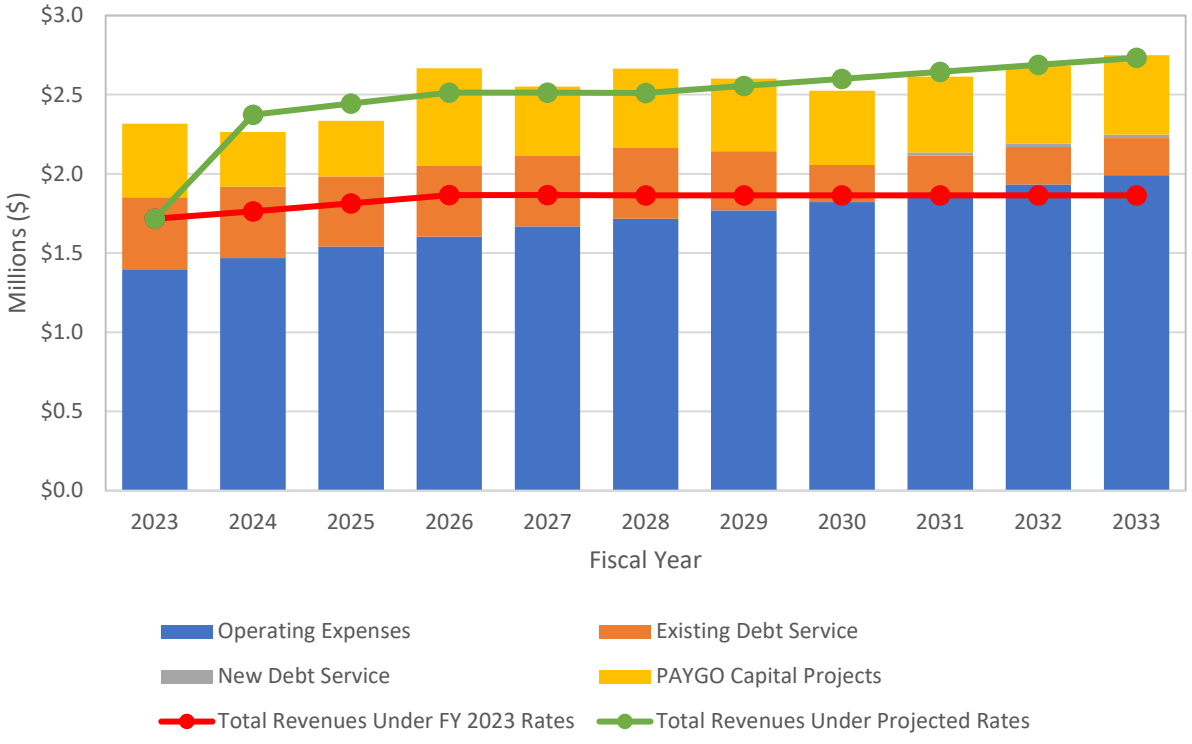


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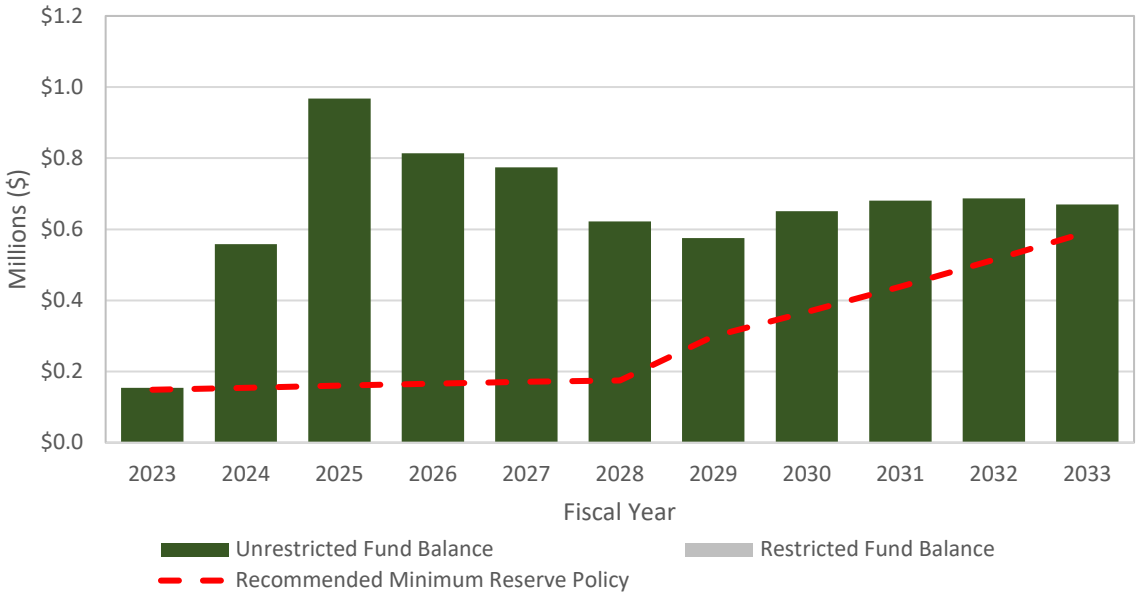
Figure 7-4: Long-Term Sewer Fund Balance Projection



The above projections are preliminary in nature and there will be unanticipated conditions that impact the projected expenses, customer demands, and revenues of the water and Sewer system over the next ten years.

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THANK YOU!

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