



AGENDA
SPECIAL ZONING BOARD MEETING
Public Meeting Room, Village Hall
Tuesday, January 26, 2016
7:00 p.m.

Reasonable accommodations or auxiliary aids will be provided to enable persons with disabilities to effectively participate in any public meetings. Please contact the Village Administrative Office (847.883.8600) 48 hours in advance if you need any special services or accommodations.

CALL TO ORDER

1.0 ROLL CALL

2.0 APPROVAL OF MINUTES

- 2.1 Approval of the Minutes of the Regular Zoning Board Meeting held on Tuesday, January 12, 2016.

3.0 GENERAL BUSINESS

- 3.1 Continued PUBLIC HEARING regarding a request for Special Use Permit to ratify operation of a public school with zoning exceptions, including a proposed 24,500 square foot building addition for Half Day school, 239 Olde Half Day Road (Lincolnshire-Prairie View School District 103)
- 3.2 Continued PUBLIC HEARING regarding a request to rezone a public school parking lot from R1 Single-Family Residence Zoning District to B1 Retail Business Zoning District for Half Day school, 239 Olde Half Day Road (Lincolnshire-Prairie View School District 103)
- 3.3 Continued PUBLIC HEARING regarding a request for Special Use Permit to ratify operation of a public school with zoning exceptions, including a proposed 14,000 square foot building addition for Laura B. Sprague elementary school, 2425 Riverwoods Road (Lincolnshire-Prairie View School District 103)

4.0 UNFINISHED BUSINESS

5.0 NEW BUSINESS

6.0 CITIZEN COMMENTS

7.0 ADJOURNMENT

The Zoning Board will not proceed past 10:30 p.m. unless a motion is made and approved by a majority of the Zoning Board members to extend the meeting one-half hour to 11:00 p.m. Any agenda items or other business that are not addressed within this time frame will be continued to the next regularly scheduled Zoning Board Meeting.

REQUEST FOR BOARD ACTION
Zoning Board
January 12, 2016

Subject:	Special Use Requests at Half Day School & Sprague Elementary School, and a rezoning from R1 to B1 for the parking lot at Half Day School
Action Requested:	<p>3.1 Public Hearing regarding a request for Special Use Permit to ratify operation of a public school with zoning exceptions, including a proposed 24,500 square foot building addition for Half Day school, 239 Olde Half Day Road</p> <p>3.2 Public Hearing regarding a request to rezone a public school parking lot from R1 Single-Family Residence Zoning District to B1 Retail Business Zoning District for Half Day school, 239 Olde Half Day Road</p> <p>3.3 Public Hearing regarding a request for Special Use Permit to ratify operation of a public school with zoning exceptions, including a proposed 14,000 square foot building addition for Laura B. Sprague elementary school, 2425 Riverwoods Road</p>
Petitioner:	Lincolnshire – Prairie View School District 103
Originated By/Contact:	Steve McNellis, Director Department of Community & Economic Development
Advisory Board Review:	Zoning Board

Background:

- School District 103 proposes additions to Half Day School and Laura B. Sprague Elementary School, as detailed in the attached presentation packet, to respond to increased enrollment and capacity issues throughout the District.
- Both schools were constructed prior to a 1965 Village Ordinance requiring schools obtain a Special Use Permit in the B1 (Half Day School) and R3 (Sprague Elementary) Zoning Districts in which the schools are located. Neither school had the necessity to obtain a Special Use Permit until now.
- The Half Day School site has maintained school operations since the early 1800's. The school was annexed to the Village of Lincolnshire in 1972, closed in the 1980's, and subsequently modernized and reopened in 1992. Additional land annexed and added to the west side of the school property in 1996 accommodated a parking lot for the most recent building expansion. This additional land was zoned R1 at the time of annexation, but was never rezoned.
- Sprague Elementary School was constructed in 1963 on property annexed to the Village in 1959. Sprague completed building expansions in 1967, 1990 and 1994.
- School District 103 requests Village consideration for the creation of Special Use Permits for both Half Day School and Sprague Elementary to comply with Village Code requirements. The current petition contemplates creation of a Special Use Permit for both sites while also addressing consideration of the proposed additions.

Project Summary:

- The proposed 2-story building expansion at Half Day School contemplates constructing an additional 24,500 square feet and relocating an existing parking lot on the west side of the lot further west to accommodate the proposed building addition.
- The area of the parking lot remains R1 Zoning since being annexed and is proposed to be rezoned to B1 Zoning so the entire school property is one consistent zoning.
- Given the expansion in impervious area at Half Day School, Lake County Stormwater Management Commission (SMC) requires an expansion in the existing detention pond at the southwest corner of the property.
- The proposed 2-story building addition at Sprague Elementary School contemplates construction of an additional 14,000 square feet, on the southwest corner of the existing building, adjacent to the School's gymnasium.
- Much of the Sprague Elementary expansion area is currently asphalt, so the increase in impervious surface is minimal and Lake County SMC will not require a detention pond.

Staff Comments:**3.1 Half Day School – Special Use Request**

- **Parking** - Required parking for a school is one space per employee. Between the existing parking east of the school and the new lot west of the school, there will be a total of approximately 80 spaces. Based on the estimated Staff of 70 in the expanded school, the Village's Code requirement of one space per employee will be met. At the Village Board Preliminary Evaluation meeting, a Trustee noted some concerns from parents who wanted to park and walk their children into school and were told this was not allowed. Given the expanded and enhanced stacking pattern for vehicles in and adjacent to the west parking lot (see attached Car Stacking Exhibit), this concern may be able to be addressed without the need for additional parking.

At Tuesday night's meeting, the Petitioner should confirm the proposed new parking lot meets Village code requirements for parking stall length and drive aisle width.

- **Vehicular Circulation** – A Parking Study, completed by a Traffic Engineer is attached. The findings of this Study demonstrate morning drop-off traffic is currently not an issue and should continue to function optimally with projected additional drop-off traffic. The afternoon pick-up is currently challenging and creates congestion on-site. The study depicts the need to stack up to an additional 26 vehicles on-site for pick-up in the afternoon. With a reconfigured parking lot and new Stacking Plan, an additional 15 vehicles can be accommodated on-site in the afternoon, representing a 50% increase in capacity, satisfying the additional demand.

Given the delicate circulation balance necessary for the entire system to work, Staff recommends a "Drop-off/Pick-Up Entrance" sign be added at the western driveway access.

The attached Traffic Study states curb cut improvements should be considered at the easternmost driveway to accommodate school bus turning radii. While not shown on the attached plans, Staff recommends this improvement as part of the Special use request to insure safe and efficient turning movements off Olde Half Day Road.

- **Pedestrian Circulation** – The School has discussed the idea of a crosswalk across Olde Half Day Road with Mayor Brandt. With the tie-in between students at the School utilizing

the Library, as well as an opportunity to use the Library parking lot for special events at the School, a crosswalk is recommended. Given sightline issues and existing utility poles and infrastructure in the area, Staff is recommending there be further coordination between the Village, the School District and IDOT regarding the best location for this crosswalk.

- **Stormwater Detention** - The proposed detention basin location, size and proposed planting plan must be approved by Lake County Stormwater Management Commission (SMC) and reviewed by the ARB for landscaping requirements. Appropriate safeguards will be necessary for a wet-bottom pond, in light of the school use.
- **Building Design & Landscape Plan** – The ARB will review the building architecture and landscaping details at a meeting on January 19th and provide a recommendation to the Village Board.
- **Special Use Exceptions** – Attached, please find a listing of all exceptions requested as part of the proposed Special Use. The School has been functioning under current conditions for over 40 years, without complaint. Many of the exceptions have been in place for most of that time period. As a result, Staff recommends accepting most of the proposed exceptions, as they relate to conditions that are not expected to change with the new addition. Staff would not typically recommend permitting the parking lot design standard and locational exceptions, however, given the limited ability to provide required parking on-site, as well as required detention, while leaving adequate play area for children, Staff believes these exceptions are warranted. Permitting a prohibited fence material (chainlink) to be removed and replaced along the south property line is an exception Staff believes should not be permitted. Any replaced fencing should meet current code and there should be a phased plan prepared to eliminate this prohibited material over a reasonable period of time.
- **Special Use Findings of Fact:** The attached presentation packet includes the Petitioner's response to the Findings of Fact for Special Use for consideration by the Zoning Board.

3.2 Half Day School – Rezoning Request

The fact that the small parking lot property at the west side of the site was never rezoned to the B1, Retail Business Zoning District, consistent with the remainder of the school property, is an oversight. This should have occurred at annexation in 1996. Since no other site improvements have occurred since that time, this is the first opportunity to remedy that oversight. Given the commercial zoning to the immediate east and south of this property, and office zoning to the north, the proposed B1 Zoning is consistent in intensity. The Comprehensive Plan designates this property as “Public & Institutional Use” consistent with the remainder of the school property. Map Amendment (Rezoning) Findings Fact will be provided to the Zoning Board prior to Tuesday night's meeting. Staff recommends approval.

3.3 Sprague Elementary School – Special Use Request

- **North Property Line Screening** – Staff received the following comment from Trustee Dan Servi, a resident who lives along the North property line: “I (have) concern about the potential for increased noise. Since my backyard is also adjacent to the playground on the north, I can attest that it can get noisy when the kids are out playing. The increased noise concern seems to revolve around the fact that the addition will jut out so that it is adjacent to the playground area on the south side of the playground. This could help buffer the neighbors to the south from the noise but may reflect noise to the north. My neighbor proposed a solid fence be erected along the properties adjacent to the north. Aside from the potential noise issue, I would support the fence to improve both aesthetics and security to the property. The current situation is there are multiple fence types in various states of repair and gaps between some of the fences.” Filling fence gaps could assist in security for the adjacent northern properties, while an alternate option of adding evergreen trees could

assist in sound dampening. The Zoning Board should consider whether or not such measures are warranted as part of the Special Use request for the existing school and proposed expansion.

- **Vehicle Circulation** – Staff has noted vehicles stack in the afternoon on the north side of the existing parking area east of the proposed building addition to pick-up for the “After School Program.” In exiting the site, those vehicles currently turn around in the large asphalt area to be covered by the proposed building addition. Staff is concerned with how this turning maneuver will work with the building addition. The Petitioner has responded – “Vehicles that enter into the parking area adjacent to the new addition would still have the ability to turn around using the new drive that connects to the south face of the new addition.” Staff is comfortable that the School can develop and communicate a plan to address this issue without adding additional impervious area.
- **South Property Line Screening** – In considering the expanse of glass on the south façade of the new building addition and reviewing the Sun Study, Staff is concerned screening for some southern properties may not be adequate. The required 30” of tree replacement, related to proposed tree removals, does not appear to be provided, so there are opportunities to add evergreen tree inches providing increased screening/buffering. The School’s use of “Low E glass” designed to reduce sun glare is very beneficial. However, the addition of evergreen trees in selected areas along the south property line would provide additional assurance that glare does not impact neighbors to the south. Staff will address this matter with the ARB in their review of the Landscape Plan. However, if the Zoning Board agrees with this concern, it can be reinforced with your recommendation the ARB analyze this concern.
- **Building Design & Landscape Plan** – The ARB will review the building architecture and landscaping details at a meeting on January 19th and provide a recommendation to the Village Board.
- **Special Use Exceptions** - Attached, please find a listing of all exceptions requested as part of the proposed Special Use. The School has been functioning under many of the current conditions for almost 50 years (with other “newer” conditions for at least 20 years), without complaint. Many of the exceptions have been in place for most of that time period. As a result, Staff recommends accepting most of the proposed exceptions, as they relate to conditions that are not expected to change with the new addition. The school District has provided the following commentary on the necessity for these structures:

“The shed contains equipment for PE classes and recess periods. Prior storage for this equipment was in the school corridor and the Fire Department requested that the equipment be removed from the corridor so it wouldn’t obstruct egress. The canopy was awarded to the School District through the American Cancer Society. It is intended to minimize student and/or community member exposure to the sun, and support the American Cancer Society’s goal to prevent skin cancer.”

Neither structure meets the Accessory Structure requirements of the Village Code. The storage shed is non-compliant with regard to location, base material, screening and materials, while the canopy is not listed as a permissible accessory structure. The Zoning Board should consider the necessity for these structures as described by the School District at Tuesday night’s meeting.

- **Special Use Findings of Fact:** The attached presentation packet includes the Petitioner’s response to the Findings of Fact for Special Use for consideration by the Zoning Board.

Recommendation:

Staff recommends approval of the two Special Use Permit requests, as well as the Rezoning request at Half Day School, subject to the following conditions:

3.1 Half Day School – Special Use Request

1. New “Drop-off/Pick-Up Entrance” sign be added at the west driveway access to the site.
2. Curb cut improvements at the east driveway access to accommodate school bus turning radii.
3. School District 103 work with the Village Board and Village Staff to coordinate approvals for a crosswalk across Olde Half Day Road at a mutually-agreeable location.
4. The proposed detention basin location, size and proposed planting plan be approved by Lake County Stormwater Management Commission (SMC) and reviewed by the ARB for landscaping requirements.
5. Removed chainlink fencing to be replaced by Code-Compliant fencing. Remaining chainlink fencing to be eliminated over a period of time mutually-agreeable to the Village and School District 103.

3.2 Half Day School – Rezoning Request – Recommended as presented.

3.3 Sprague Elementary School – Special Use Request

1. ARB to review and consider additional Evergreen trees in selected areas along the south property line to reduce impact of potential sun glare on properties to the south.
2. Curb cut improvements at the east driveway access to accommodate school bus turning radii.

Motions:

Attendance at Tuesday night’s meeting will meet the threshold for a quorum to open the meeting and hold a Public Hearing, but not to take action on these requests. Therefore, discussion on these requests will conclude at a Special Zoning Board Meeting on January 26th at 7:00 P.M. At that time, the Zoning Board will have sufficient attendance to take action and vote on these requests. Any revisions requested at Tuesday night’s meeting can be addressed at that meeting. Motions will be provided in the Zoning Board packet for the January 26th meeting.

Reports and Documents Attached:

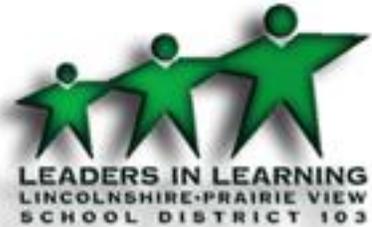
- Half Day School Special Use & Rezoning Request Presentation Packet, prepared by Wight & Company, dated January 8, 2016.
- Sprague Elementary School Special Use Request Presentation Packet, prepared by Wight & Company, dated January 8, 2016.
- Standards for Special Use, prepared by Wight & Company, dated January 7, 2016.

Meeting History	
Village Board Evaluation (COW):	December 14, 2015
Current Zoning Board (Public Hearing)	January 12, 2016

Village of Lincolnshire
Zoning Board Submittal Packet

Lincolnshire – Prairie View School District 103 Additions to Half Day School

January 8, 2016



Lincolnshire Prairie View School District 103
1370 N. Riverwoods Road
Lincolnshire, IL 60069



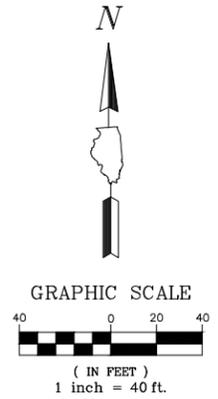
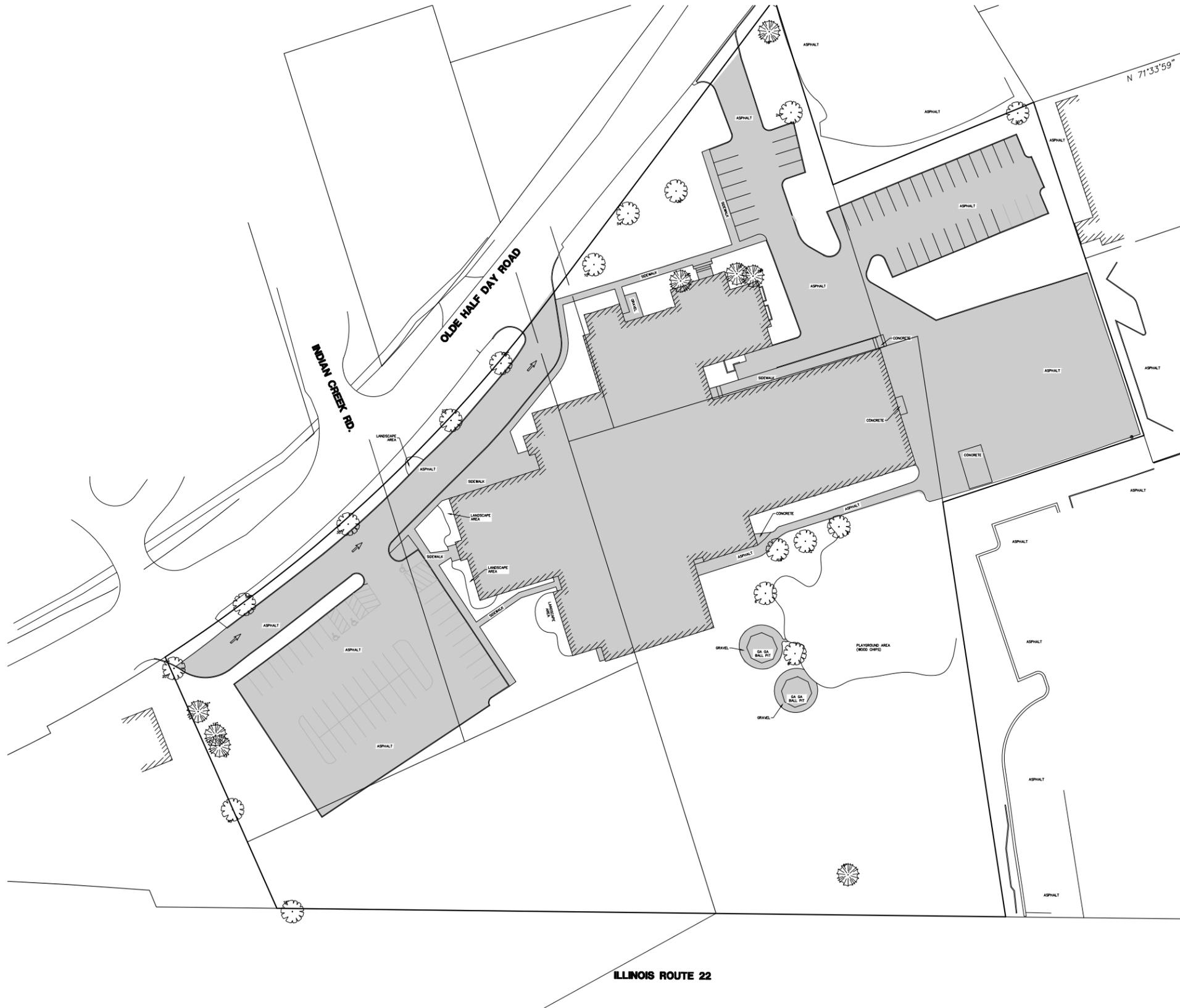
Prepared by:
Wight & Company
2500 North Frontage Road
Darien, IL 60561
630-969-7000

A/E Project No. 02-5467-06

Village of Lincolnshire
Zoning Board Submittal Packet
Lincolnshire – Prairie View School District 103
Additions to Half Day School

Impervious Surface Drawings

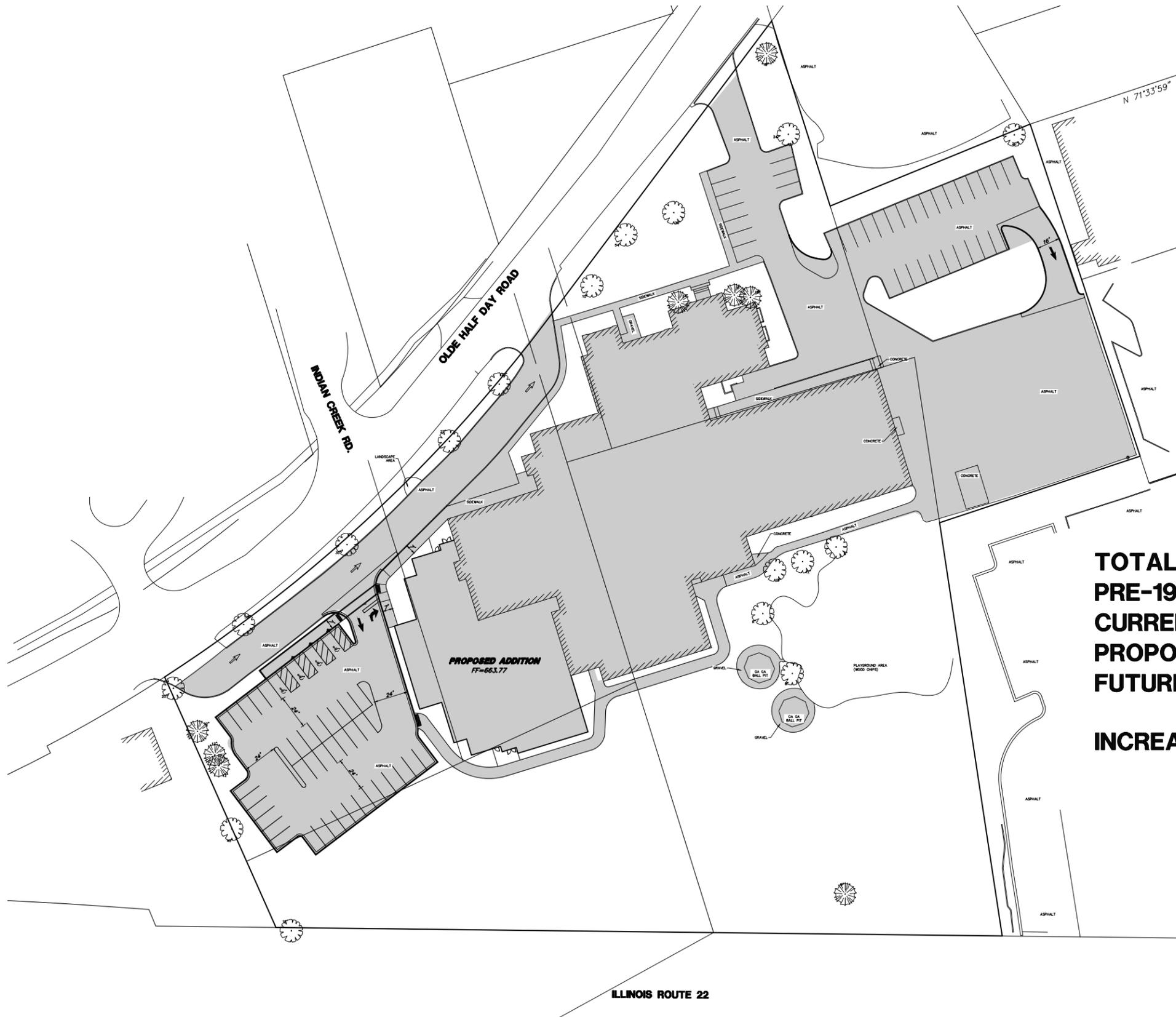
January 8, 2016



TOTAL PROPERTY AREA - 5.91 ACRES
PRE-1992 IMPERVIOUS AREA - 2.06 ACRES
CURRENT IMPERVIOUS AREA - 2.78 ACRES

NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION

FILE: Drainage.dwg	GHA PROJECT #
DRAWN BY: MXH	4521.100
DATE: 12/29/15	
CHECKED BY: KAJ	SCALE:
DATE: 12/29/15	1"=40'



TOTAL PROPERTY AREA - 5.91 ACRES
PRE-1992 IMPERVIOUS AREA - 2.06 ACRES
CURRENT IMPERVIOUS AREA - 2.78 ACRES
PROPOSED IMPERVIOUS AREA - 3.05 ACRES
FUTURE PLAYGROUND IMPERVIOUS AREA - 3.27 ACRES
INCREASE IN IMPERVIOUS AREA SINCE 1992 - 1.21 ACRES

NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION

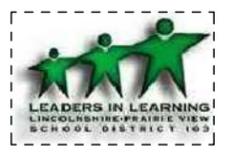
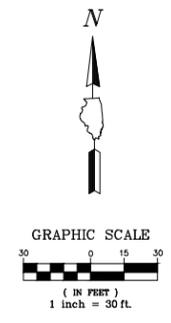
Village of Lincolnshire
Zoning Board Submittal Packet
Lincolnshire – Prairie View School District 103
Additions to Half Day School

Civil Drawings

January 8, 2016

STANDARD SYMBOLS

FEATURE	EXISTING	PROPOSED
BUFFALO BOX		
BUSH/SHRUB		
CATCH BASIN		
CLEANOUT		
COMBINE SEWER LINE		
CONTOUR		
CULVERT		
DITCH/SWALE		
ELECTRIC LINE		
ELECTRIC MANHOLE		
FENCE		
FIRE HYDRANT		
FLARED END SECTION		
GAS LINE		
GAS MANHOLE		
GAS VALVE		
INLET		
LIGHT POLE		
OVERHEAD WIRES		
POWER POLE		
R.O.W LINE		
R.O.W MARKER		
SANITARY FORCEMAIN LINE		
SANITARY SEWER LINE		
SANITARY SEWER MANHOLE		
SIGN		
SPOT ELEVATION		
STORM SEWER LINE		
STORM SEWER MANHOLE		
TELEPHONE LINE		
TELEPHONE MANHOLE		
TELEPHONE BOX/PEDESTAL		
TREE-CONIFEROUS (SIZE/TAG#)		
TREE-DECIDUOUS (SIZE/TAG#)		
VALVE BOX		
VALVE VAULT		
WATER VALVE		
WATERMAIN LINE		



Wight

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GHA JOB #4521.100

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
Tel. 847.478.9700 ■ Fax 847.478.9701

LEGEND

BITUMINOUS SURFACE REMOVAL 2" COLD MILL	
SIDEWALK REMOVAL	
CONCRETE CURB REMOVAL SAWCUT	
FENCE REMOVAL	
UTILITY ABANDON	
STRUCTURE REMOVAL	
TREE/SHRUB REMOVAL	
ROOT PRUNE	
CONSTRUCTION FENCE	
TREE PROTECTION FENCE	

REV DESCRIPTION DATE

ZONING BOARD SUBMITTAL	01.04.2015
COMMITTEE OF THE WHOLE SUBMITTAL	12.04.2015
DESCRIPTION	DATE

HALF DAY INTERMEDIATE SCHOOL

2425 RIVERWOODS ROAD
LINCOLNSHIRE, IL 60069

EXISTING CONDITIONS / DEMOLITION PLAN

Project Number:
02-5467-05
Drawn By:
LLM
Sheet:

C1.0

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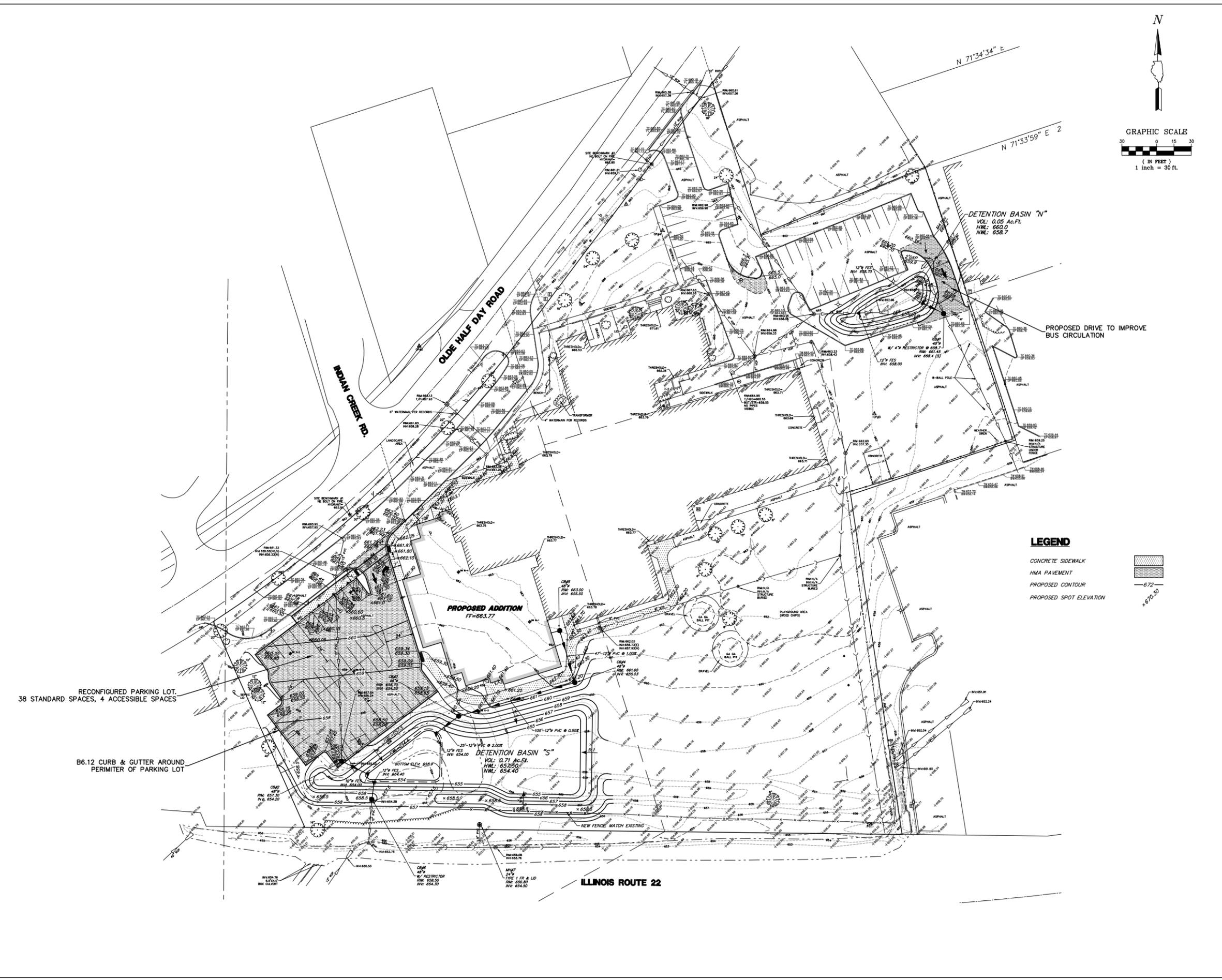
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GHA JOB #4521.100

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GRAPHIC SCALE
30 0 15 30
(IN FEET)
1 inch = 30 ft.



LEGEND

- CONCRETE SIDEWALK
- HMA PAVEMENT
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION

RECONFIGURED PARKING LOT.
38 STANDARD SPACES, 4 ACCESSIBLE SPACES

B6.12 CURB & GUTTER AROUND
PERIMETER OF PARKING LOT

PROPOSED ADDITION
FF=663.77

DETONATION BASIN "S"
VOL: 0.71 Ac.Ft.
HWM: 652.90
HWL: 654.40

DETONATION BASIN "N"
VOL: 0.05 Ac.Ft.
HWM: 660.0
HWL: 658.7

PROPOSED DRIVE TO IMPROVE
BUS CIRCULATION

ILLINOIS ROUTE 22

REV DESCRIPTION DATE

REV	DESCRIPTION	DATE
01	ZONING BOARD SUBMITTAL	01.04.2015
02	COMMITTEE OF THE WHOLE SUBMITTAL	12.04.2015
	DESCRIPTION	DATE

HALF DAY INTERMEDIATE SCHOOL

2425 RIVERWOODS ROAD
LINCOLNSHIRE, IL 60069

PRELIMINARY SITE PLAN

Project Number:
02-5467-05
Drawn By:
LLM
Sheet:

C2.0

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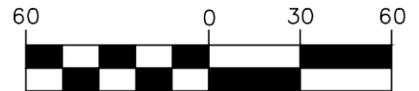
Village of Lincolnshire
Zoning Board Submittal Packet
Lincolnshire – Prairie View School District 103
Additions to Half Day School

Car Stacking / Autoturn Exhibit

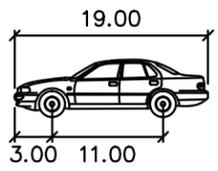
January 8, 2016



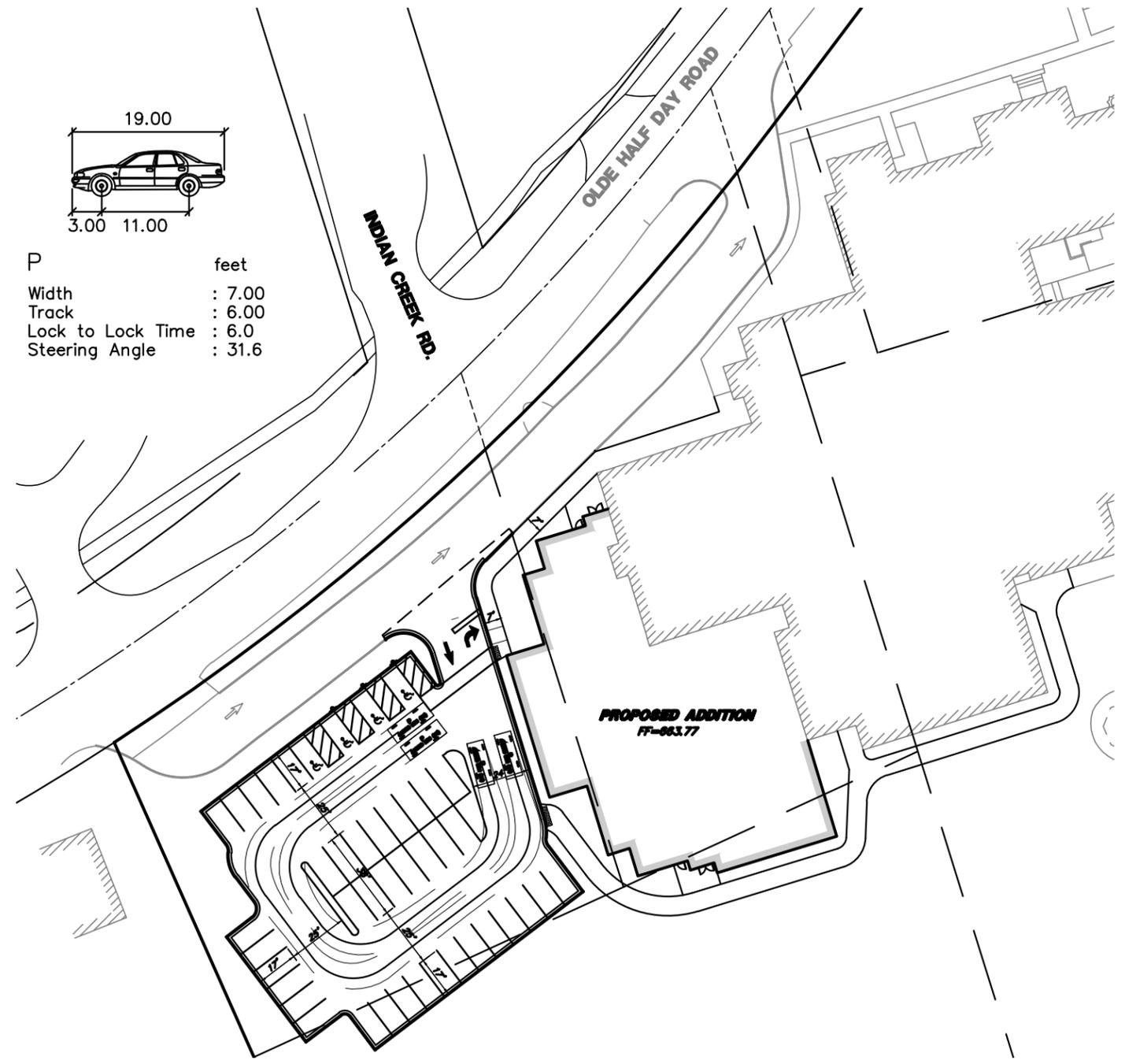
GRAPHIC SCALE



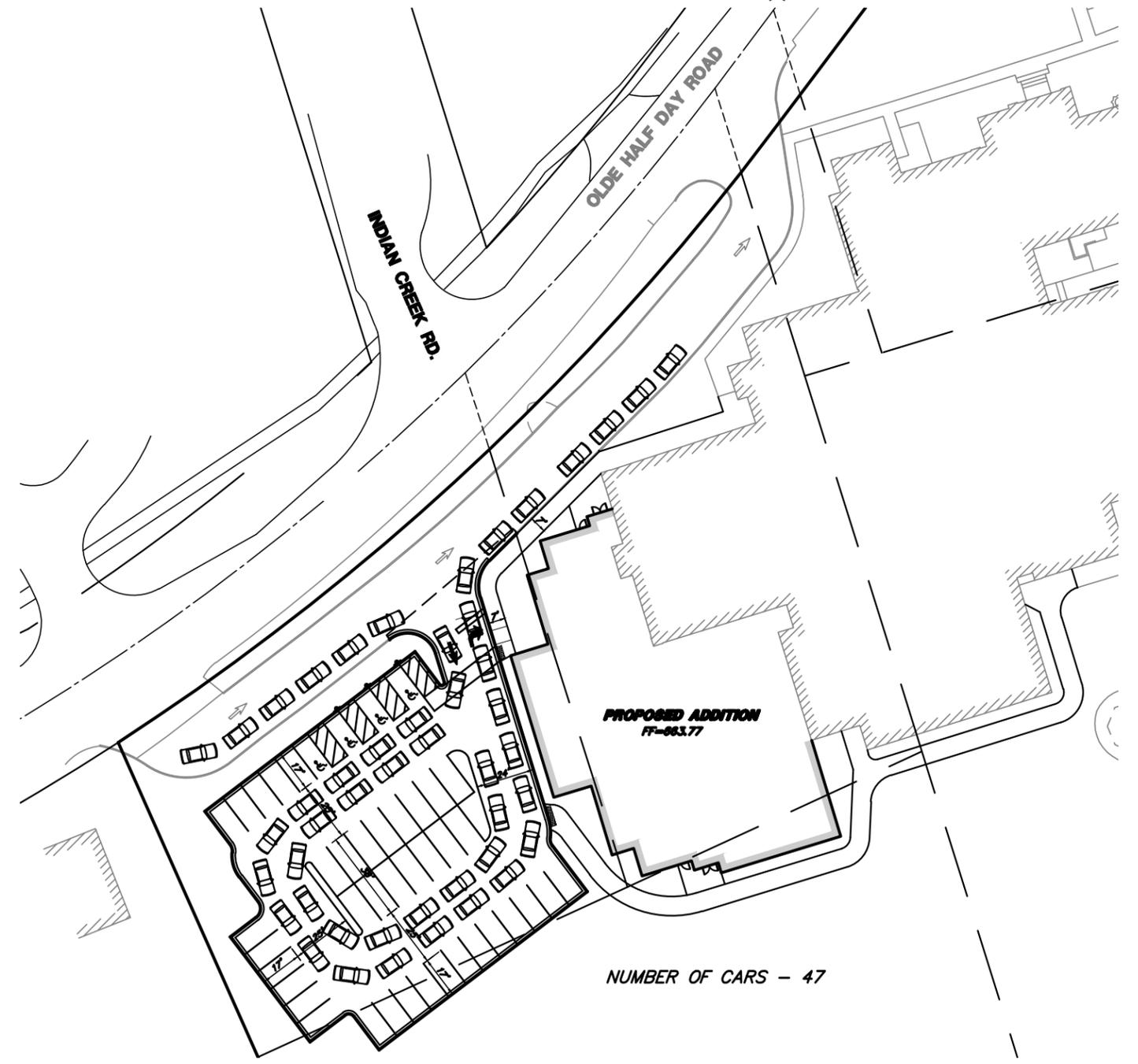
(IN FEET)
1 inch = 60 ft.



- P
- Width : 7.00
- Track : 6.00
- Lock to Lock Time : 6.0
- Steering Angle : 31.6



AUTOTURN EXHIBIT



CAR STACKING EXHIBIT

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ASSOCIATES, INC.
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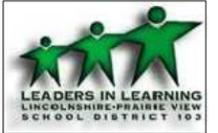
EXHIBIT 9 - EAST PARKING LOT EXHIBIT
HALF DAY INTERMEDIATE SCHOOL IMPROVEMENTS
PRAIRIEVIEW SCHOOL DISTRICT 103
LINCOLNSHIRE, ILLINOIS

FILE: 4521.100 Half Day - PR1.dwg		GHA PROJECT #
DRAWN BY:	MGFC	4521.100
DATE:	1/5/16	
CHECKED BY:	DPB	SCALE: 1"=60'

Village of Lincolnshire
Zoning Board Submittal Packet
Lincolnshire – Prairie View School District 103
Additions to Half Day School

Landscape Drawings

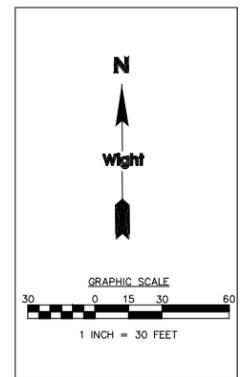
January 8, 2016



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REV	DESCRIPTION	DATE
ZONING BOARD REVISION 1		01.12.2016
ZONING BOARD SUBMITTAL		01.24.2016
	DESCRIPTION	DATE

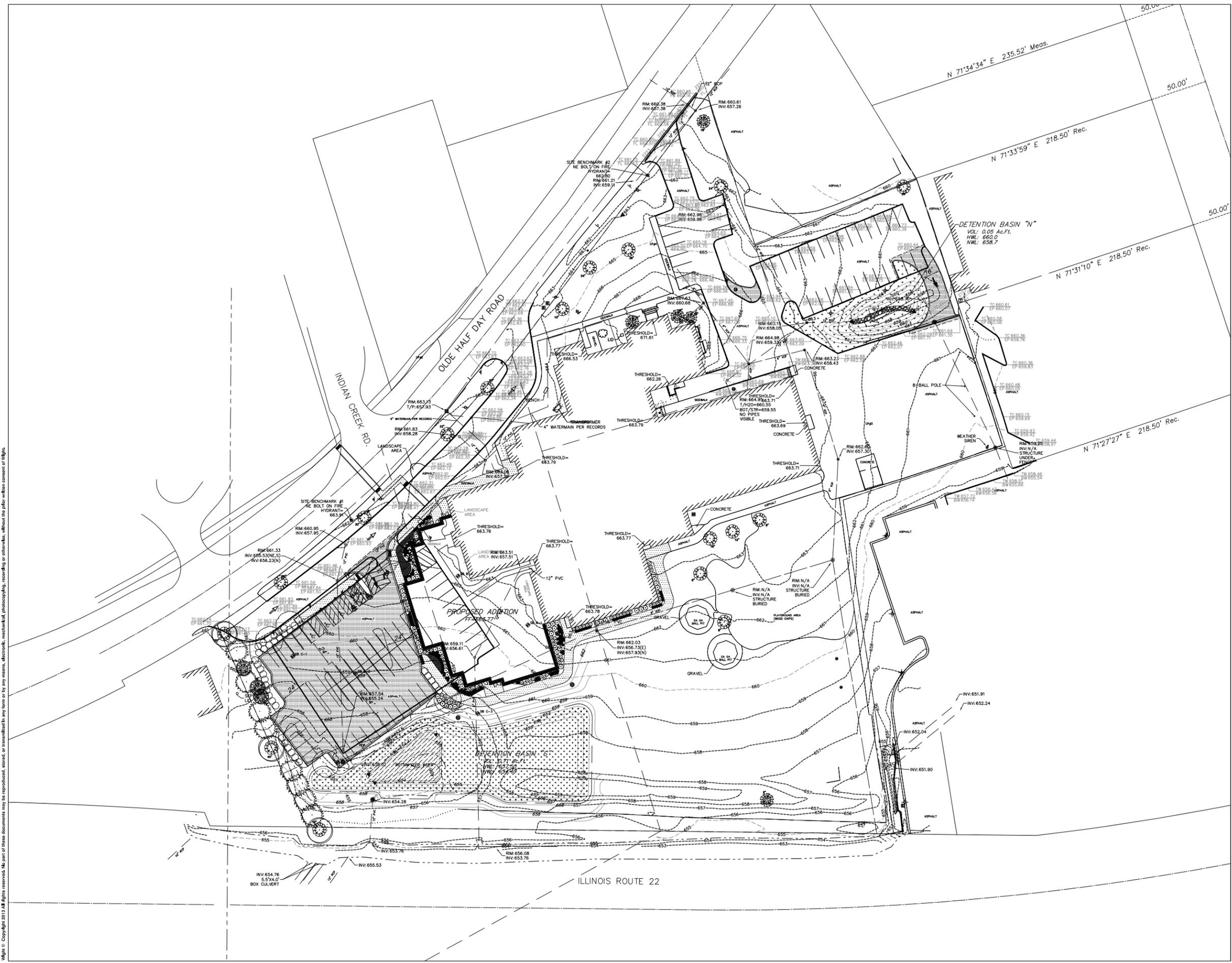
HALF DAY INTERMEDIATE SCHOOL

2425 RIVERWOODS ROAD
LINCOLNSHIRE, IL 60069

OVERALL LANDSCAPE PLAN

Project Number:
02-5467-05
Drawn By:
LLM
Sheet:

L1.00



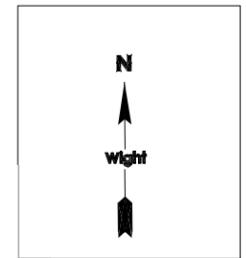
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REV DESCRIPTION DATE

ZONING BOARD REVISION 1 01.12.2016
ZONING BOARD SUBMITTAL 01.24.2016
DESCRIPTION DATE

HALF DAY INTERMEDIATE SCHOOL

2425 RIVERWOODS ROAD
LINCOLNSHIRE, IL 60069

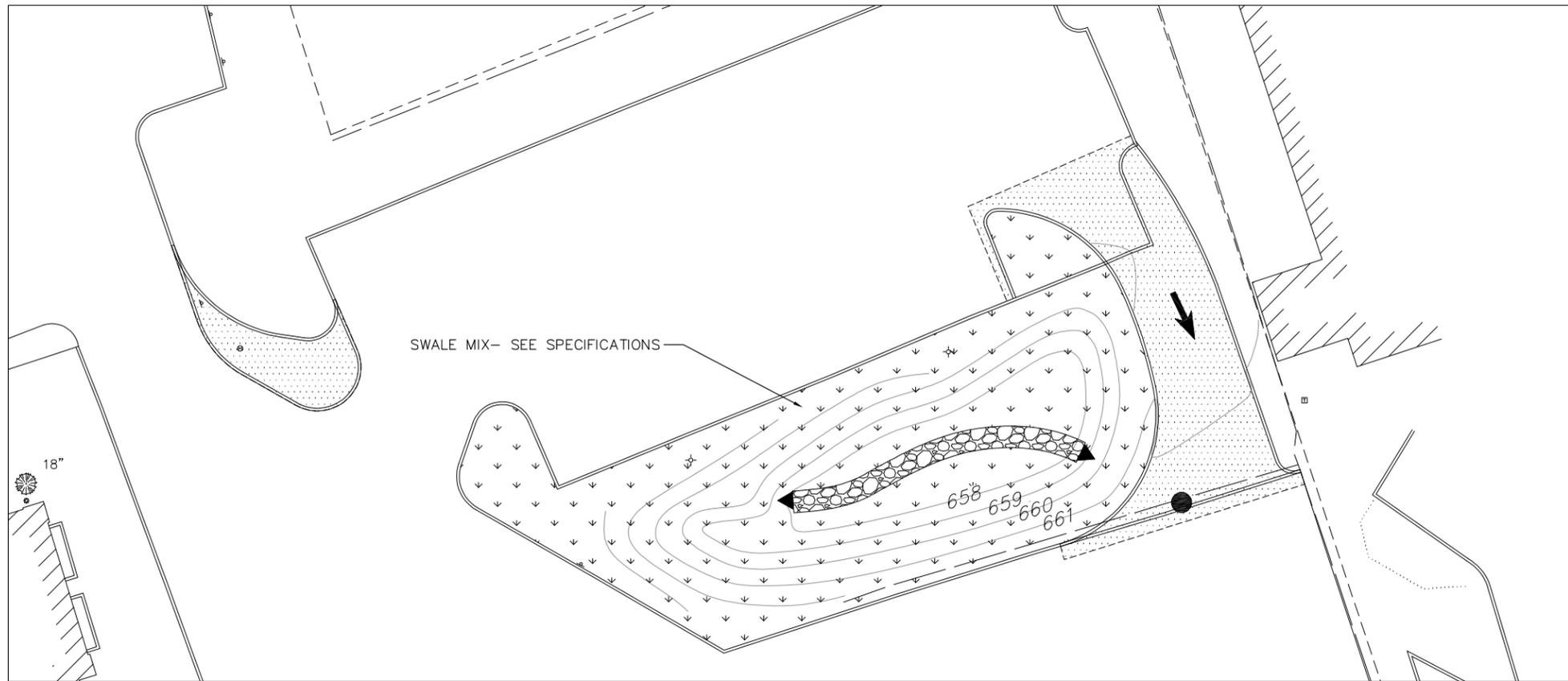
ENLARGED DETENTION AREAS

Project Number:
02-5467-05
Drawn By:
LLM
Sheet:

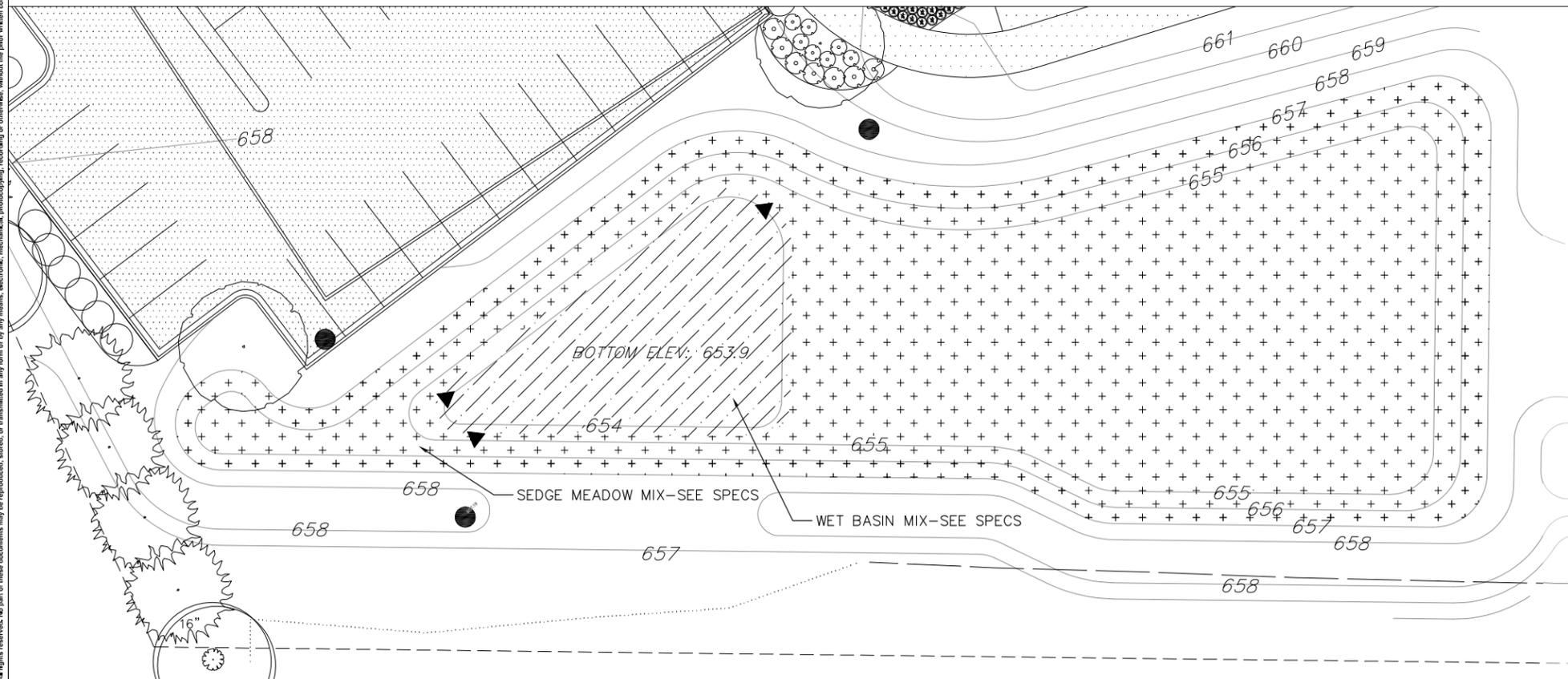
L1.01

LEGEND

- CONCRETE SIDEWALK
- HMA PAVEMENT
- PROPOSED CONTOUR
- RIVER COBBLE (4-8" DIA.)
- LOW GROWING SWALE MIX
- WET BASIN MIX
- SEDGE MEADOW MIX
- GROUND COVER
- PROPOSED EVERGREEN TREE
- PROPOSED DECIDUOUS TREE
- PROPOSED LARGE SHRUB (4-8' WIDTH)
- PROPOSED MEDIUM SHRUB (3-4' WIDTH)
- PROPOSED SMALL SHRUB/ GRASS
- PROPOSED PERENNIAL



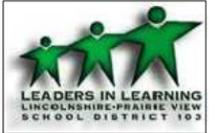
ES1 ENLARGED LANDSCAPE PLAN-DETENTION AREA 'N'
L1.01 SCALE: 1"=10'



ES2 ENLARGED LANDSCAPE PLAN-DETENTION AREA 'S'
L1.01 SCALE: 1"=10'

QTY	KEY	Botanical Name	Common Name	Size	Root	Spacing
SHADE TREES						
3	GIBI	Ginkgo biloba 'Princeton Sentry'	Princeton Sentry Ginkgo	3" caliper	B&B	as shown
1	QUUBI	Quercus bicolor	Swamp White Oak	3" caliper	B&B	as shown
ORNAMENTAL EVERGREEN TREES						
1	JACCO	Juniper communis	White Fir	8"	B&B	as shown
1	SPPU	Pinus pungens	Colorado Blue Spruce	8"	B&B	as shown
EVERGREEN SHRUBS						
1	BLUV	Rhus x 'Green Velvet'	Green Velvet Boxwood	45	cont.	as shown
1	JUVI	Juniperus virginiana 'Grey Owl'	Grey Owl Juniper	36"	B&B	as shown
DECIDUOUS SHRUBS						
1	COST	Cornus stolonifera 'Farrow'	Arctic Fire Red Twig Dogwood	45	cont.	as shown
1	HYLU	Hydrangea quercifolia 'Munchkin'	Munchkin Oakleaf Hydrangea	45	cont.	as shown
1	RHAR	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	47	cont.	as shown
1	RYAL	Ribes alpinum	Alpine Currant	45	cont.	as shown
1	SYPA	Syringa meyeri 'Palibau'	Dwarf Korean Lilac	47	cont.	as shown
PERENNIALS						
1	ACDG	Azoreum gramineus 'Ogon'	Golden Variegated Sweet Flag	41	cont.	18" o.c.
1	ASAR	Astilbe x arendii 'Deutschland'	Deutschland Astilbe	42	cont.	as shown
1	FRGR	Fernox gracilis	Crevice Fern/Oxley Fern	41	cont.	as shown
1	COVE	Carexpsis verticillata 'Moonbeam'	Moonbeam Carex	41	cont.	as shown
1	EPYD	Eupatorium x youngianum 'Niveau'	Bishop's Hat	41	cont.	as shown
1	PEGL	Festuca glauca 'Ti Jah Blue'	Ti Jah Blue Fescue	41	cont.	as shown
1	HECB	Heuchera x 'Obsidian'	Obsidian Coral Bells	41	cont.	as shown
1	HEBL	Hosta x 'Bright Lights'	Bright Lights Hosta	42	cont.	as shown
1	HOPA	Hosta x 'Patriot'	Patriot Hosta	42	cont.	as shown
1	MAST	Mertensia struthioflora	Strich Fern	42	cont.	as shown
1	PAVI	Panicum virgatum 'Shenandoah'	Shenandoah Switchgrass	42	cont.	as shown
1	PCAL	Pennisetum oligosperum 'Hameln'	Dwarf Fountaingrass	41	cont.	as shown
1	SAMA	Solidago 'May Night'	May Night Sage	41	cont.	as shown
GROUNDCOVER						
1	ECOU	Carexpsis verticillata 'Nana'	Dwarf Thickweed	PLG	TRAY	10" o.c.
1	OPPL	Ophiopogon planicaulis 'Elkni Zan'	Elkni Knight Mondo Grass	PLG	TRAY	10" o.c.
1	VIMI	Vallisneria	Parrot Palm	PLG	TRAY	10" o.c.

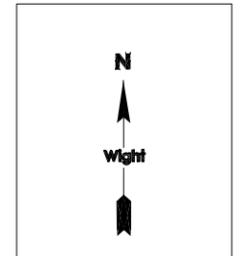
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REV DESCRIPTION DATE

ZONING BOARD REVISION 1 01.12.2016
ZONING BOARD SUBMITTAL 01.24.2016
DESCRIPTION DATE

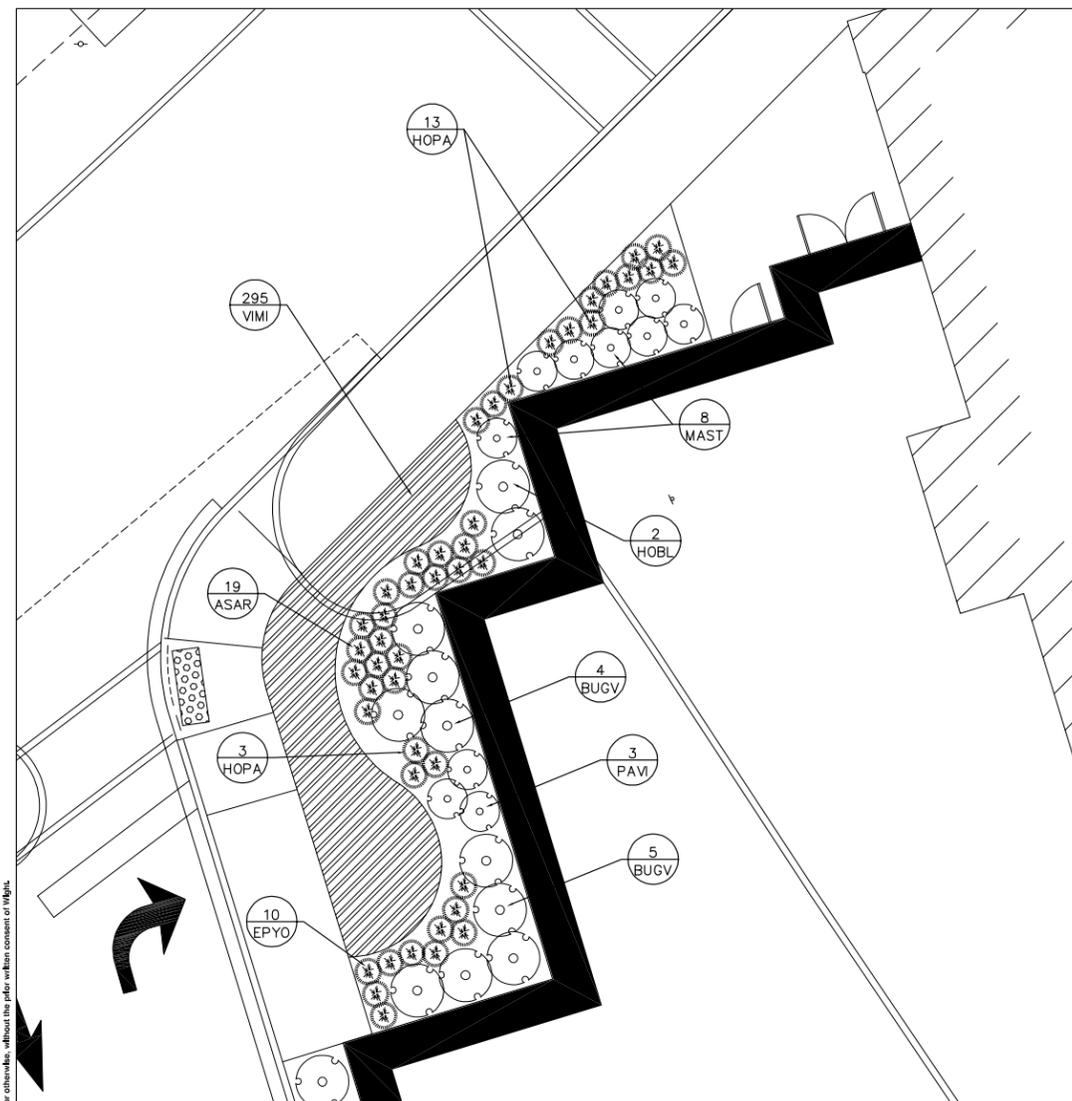
HALF DAY INTERMEDIATE SCHOOL

2425 RIVERWOODS ROAD
LINCOLNSHIRE, IL 60069

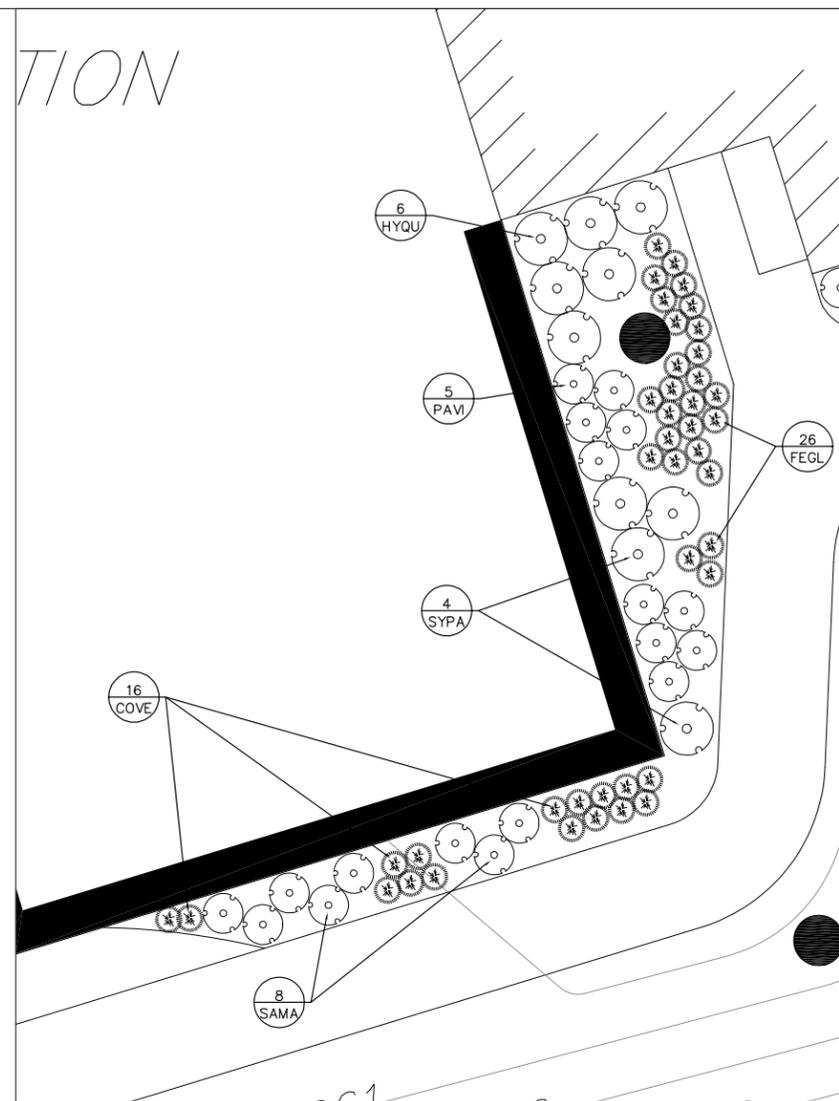
ENLARGED LANDSCAPE PLANS

Project Number:
02-5467-05
Drawn By:
LLM
Sheet:

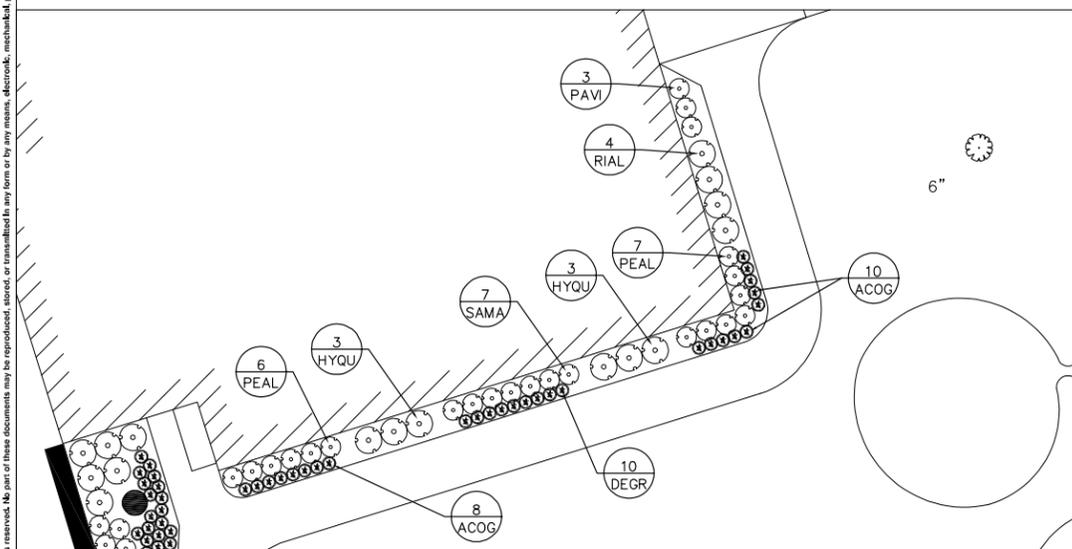
L1.02



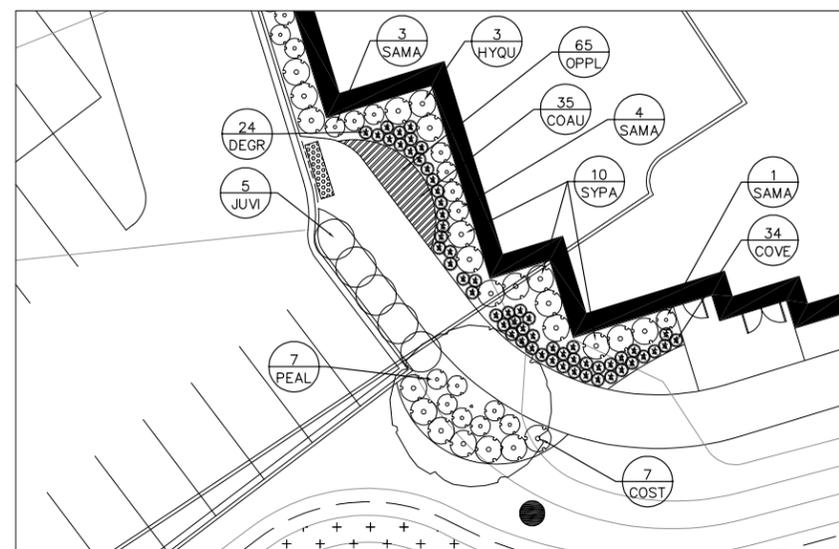
ES3 ENLARGED LANDSCAPE PLAN—FRONT ENTRANCE
L1.02 SCALE: 1"=5'



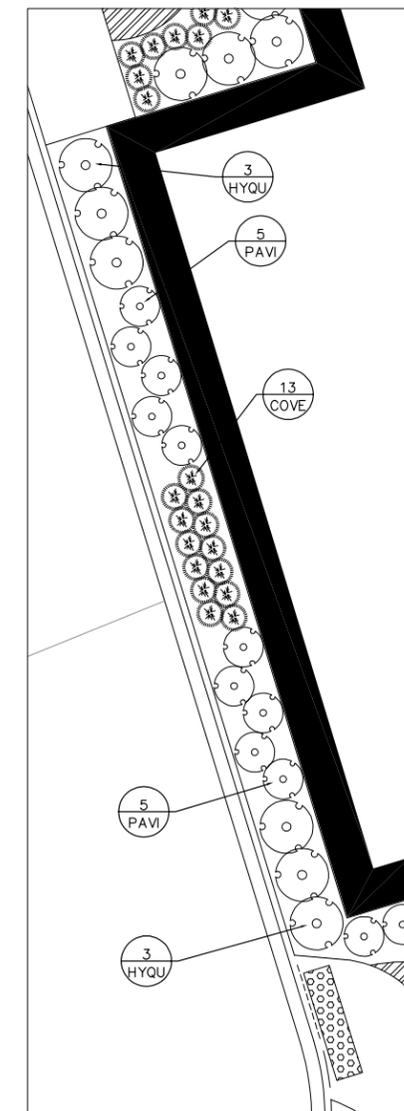
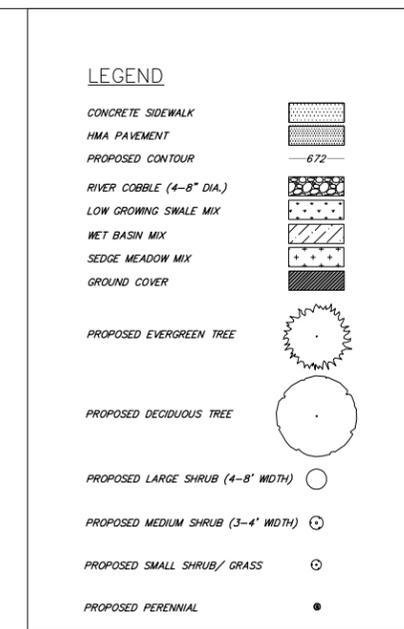
ES5 ENLARGED LANDSCAPE PLAN
L1.02 SCALE: 1"=5'



ES4 ENLARGED LANDSCAPE PLAN
L1.02 SCALE: 1"=10'



ES6 ENLARGED LANDSCAPE PLAN— SOUTH ENTRANCE
L1.02 SCALE: 1"=10'



ES7 ENLARGED LANDSCAPE PLAN
L1.02 SCALE: 1"=5'

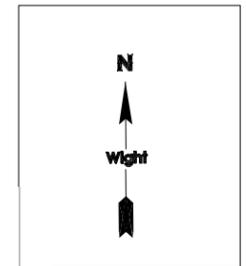
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ZONING BOARD SUBMITTAL 01.24.2016
DESCRIPTION DATE

HALF DAY INTERMEDIATE SCHOOL

2425 RIVERWOODS ROAD
LINCOLNSHIRE, IL 60069

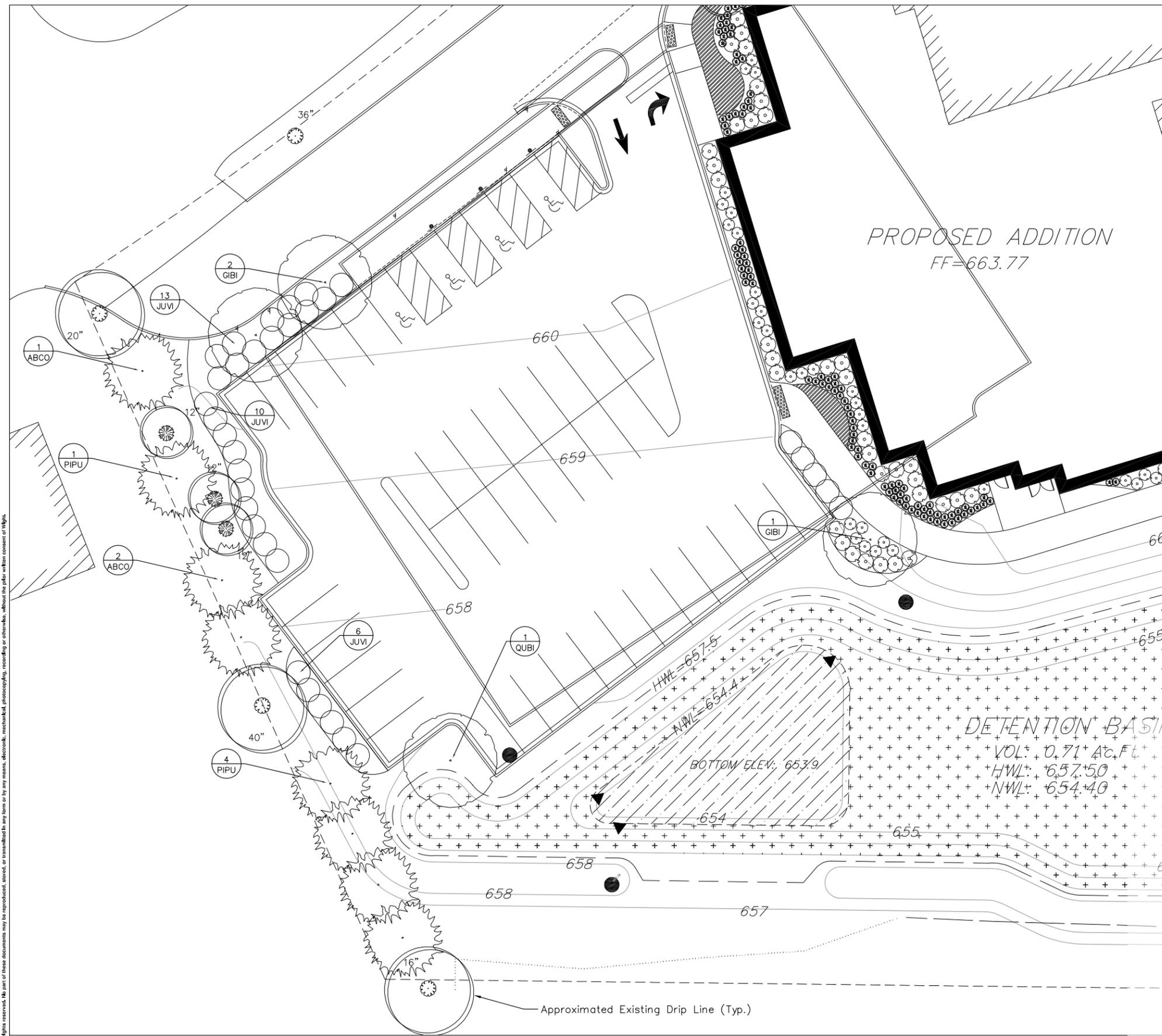
TREE PLAN

Project Number:
02-5467-05
Drawn By:
LLM
Sheet:

L1.03

LEGEND

- CONCRETE SIDEWALK
- HMA PAVEMENT
- PROPOSED CONTOUR
- RIVER COBBLE (4-8" DIA.)
- LOW GROWING SWALE MIX
- WET BASIN MIX
- SEDGE MEADOW MIX
- GROUND COVER
- PROPOSED EVERGREEN TREE
- PROPOSED DECIDUOUS TREE
- PROPOSED LARGE SHRUB (4-8" WIDTH)
- PROPOSED MEDIUM SHRUB (3-4" WIDTH)
- PROPOSED SMALL SHRUB/ GRASS
- PROPOSED PERENNIAL



PLANT SCHEDULE	QTY	KEY	Botanical Name	Common Name	Size	Root	Spacing
SHADE TREES							
3	GIBI	Ginkgo biloba	Princeton Sentry Ginkgo	3" caliper	B&B	as shown	
1	QUBI	Quercus alba	Swamp White Oak	3" caliper	B&B	as shown	
ORNAMENTAL/ EVERGREEN TREES							
1	ABCC	Abies concolor	White Fir	8"	B&B	as shown	
1	PIPU	Picea pungens	Colorado Blue Spruce	8"	B&B	as shown	
EVERGREEN SHRUBS							
1	BEVS	Buxus x Green Velvet	Green Velvet Boxwood	8"	cont.	as shown	
1	JAN	Juniperus virginiana	Grey Owl Juniper	36"	B&B	as shown	
DECIDUOUS SHRUBS							
1	COST	Cornus stolonifera	Arctic Fire Red Twig Dogwood	8"	cont.	as shown	
1	HYSL	Hydrangea serratifolia	Manchurian Oakleaf Hydrangea	8"	cont.	as shown	
1	REAR	Ribes ornamental	Spice Leaf Fragrant Spirea	8"	cont.	as shown	
1	RIAL	Ribes alpinum	Alpine Currant	8"	cont.	as shown	
1	SYPA	Syringa meyeri	Dwarf Korean Lilac	8"	cont.	as shown	
PERENNIALS							
1	ACDG	Acorus gramineus	Soldier's Trench Sweet Flag	8"	cont.	18" x 6"	
1	ASAR	Astilbe x orendii	Deutschland Astilbe	8"	cont.	as shown	
1	DEGR	Deutzia gracilis	Crimee Fraiche Deutzia	8"	cont.	as shown	
1	COVE	Coreopsis verticillata	Moonsbeam Coreopsis	8"	cont.	as shown	
1	EPHO	Eupatorium x scouplum	Bishop's Hat	8"	cont.	as shown	
1	FEGL	Festuca glauca	Elijah Blue Fescue	8"	cont.	as shown	
1	HEOB	Heuchera x Obsidian	Obsidian Coral Bells	8"	cont.	as shown	
1	HOBL	Hosta x Bright Lights	Bright Lights Hosta	8"	cont.	as shown	
1	HOFA	Hosta x Patriot	Patriot Hosta	8"	cont.	as shown	
1	MAST	Mattuccio struthifera	Ostrich Fern	8"	cont.	as shown	
1	PAVI	Panicum virgatum	Shenandoah Switchgrass	8"	cont.	as shown	
1	PEAL	Pennisetum alopecuroides	Dwarf Fountain Grass	8"	cont.	as shown	
1	SAMA	Soliva 'May Night'	May Night Sage	8"	cont.	as shown	
GROUND COVER							
1	COAU	Cornus amomifolia	Dwarf Fuchsia	PIG	TRAY	10" x 6"	
1	OPFA	Ophiopogon phloeocephalus	Essex Knight Mondo Grass	PIG	TRAY	10" x 6"	
1	VIMI	Vinca minor	Periwinkle	PIG	TRAY	10" x 6"	

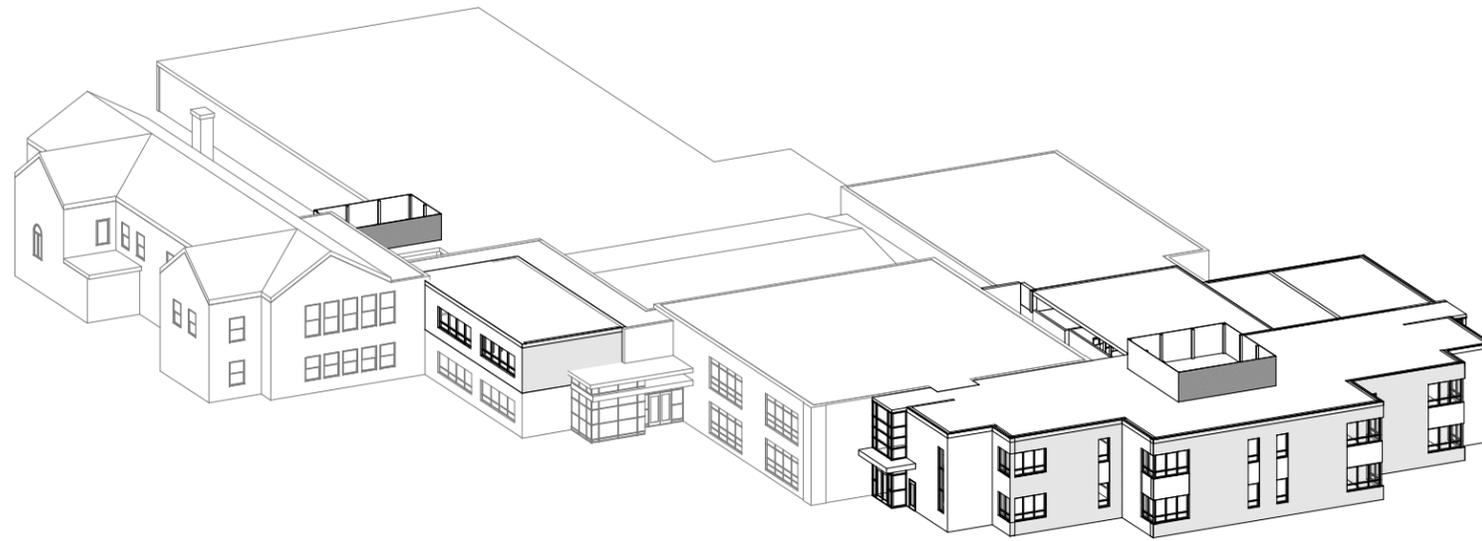
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TP1 ENLARGED TREE PLAN- WEST PROPERTY LINE SCREENING
L1.03 SCALE: 1"=10'

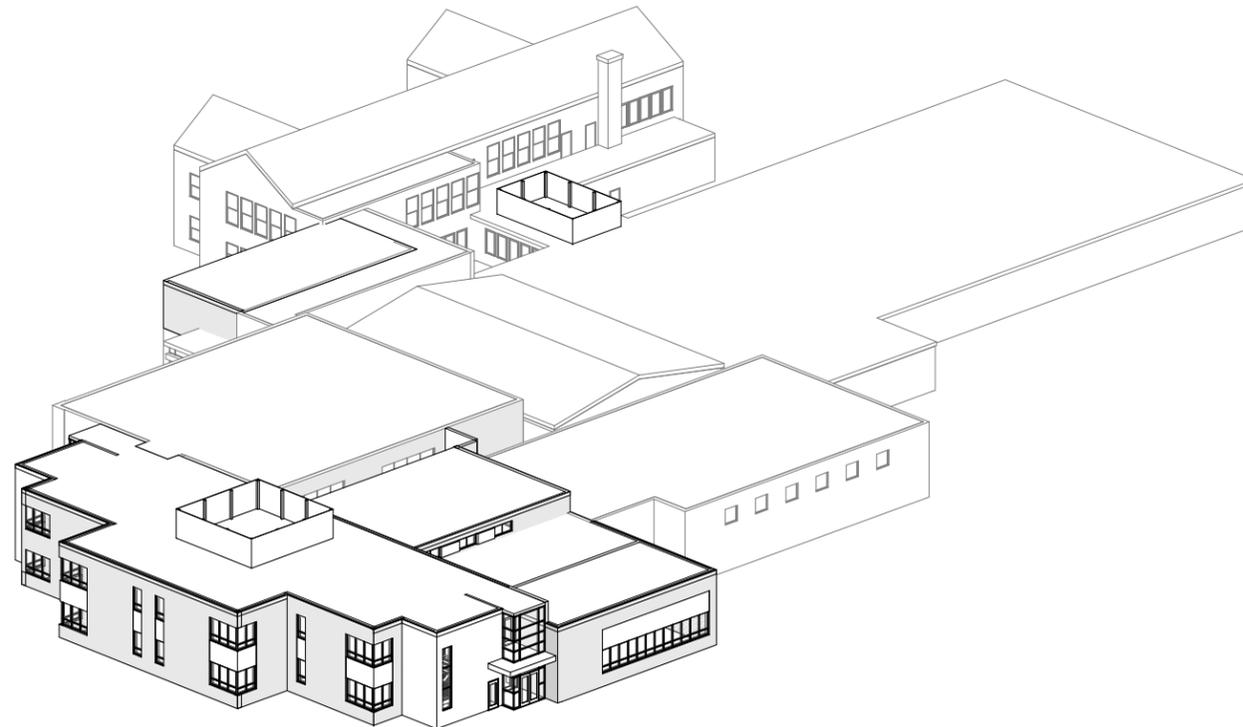
Village of Lincolnshire
Zoning Board Submittal Packet
Lincolnshire – Prairie View School District 103
Additions to Half Day School

3D Massing Views

January 8, 2016



1
H-A3.2 3-D MASSING
VIEW FROM NORTHWEST
SCALE:



2
H-A3.2 3-D MASSING
VIEW FROM SOUTHWEST
SCALE:

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REV	DESCRIPTION	DATE
	ZONING BOARD SUBMITTAL	01.04.2016
	DESCRIPTION	DATE

ZONING BOARD SUBMITTAL
DESCRIPTION
DATE

**HALF DAY
INTERMEDIATE
SCHOOL**

239 OLDE HALF DAY ROAD
LINCOLNSHIRE, IL 60069

3-D MASSING MODEL

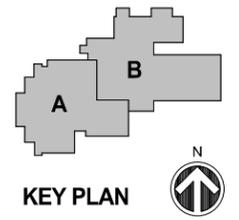
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H-A3.2

Village of Lincolnshire
Zoning Board Submittal Packet
Lincolnshire – Prairie View School District 103
Additions to Half Day School

Architectural Drawings

January 8, 2016



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ZONING BOARD SUBMITTAL		01.04.2016
COMMITTEE OF THE WHOLE SUBMITTAL		12.04.2015
	DESCRIPTION	DATE

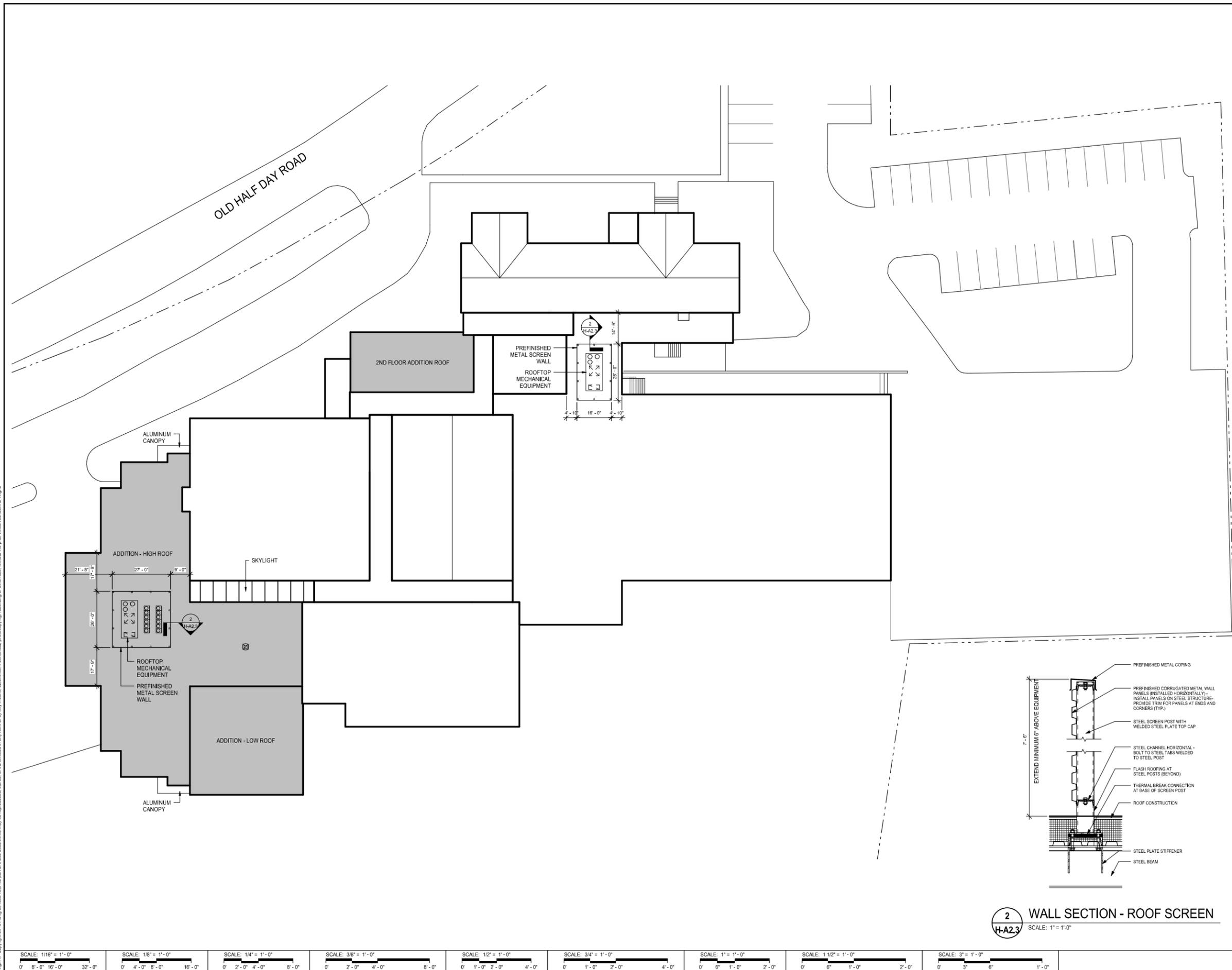
HALF DAY INTERMEDIATE SCHOOL

239 OLDE HALF DAY ROAD
LINCOLNSHIRE, IL 60069

ROOF PLAN

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H-A2.3



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COMMITTEE OF THE WHOLE SUBMITTAL 12.04.2015
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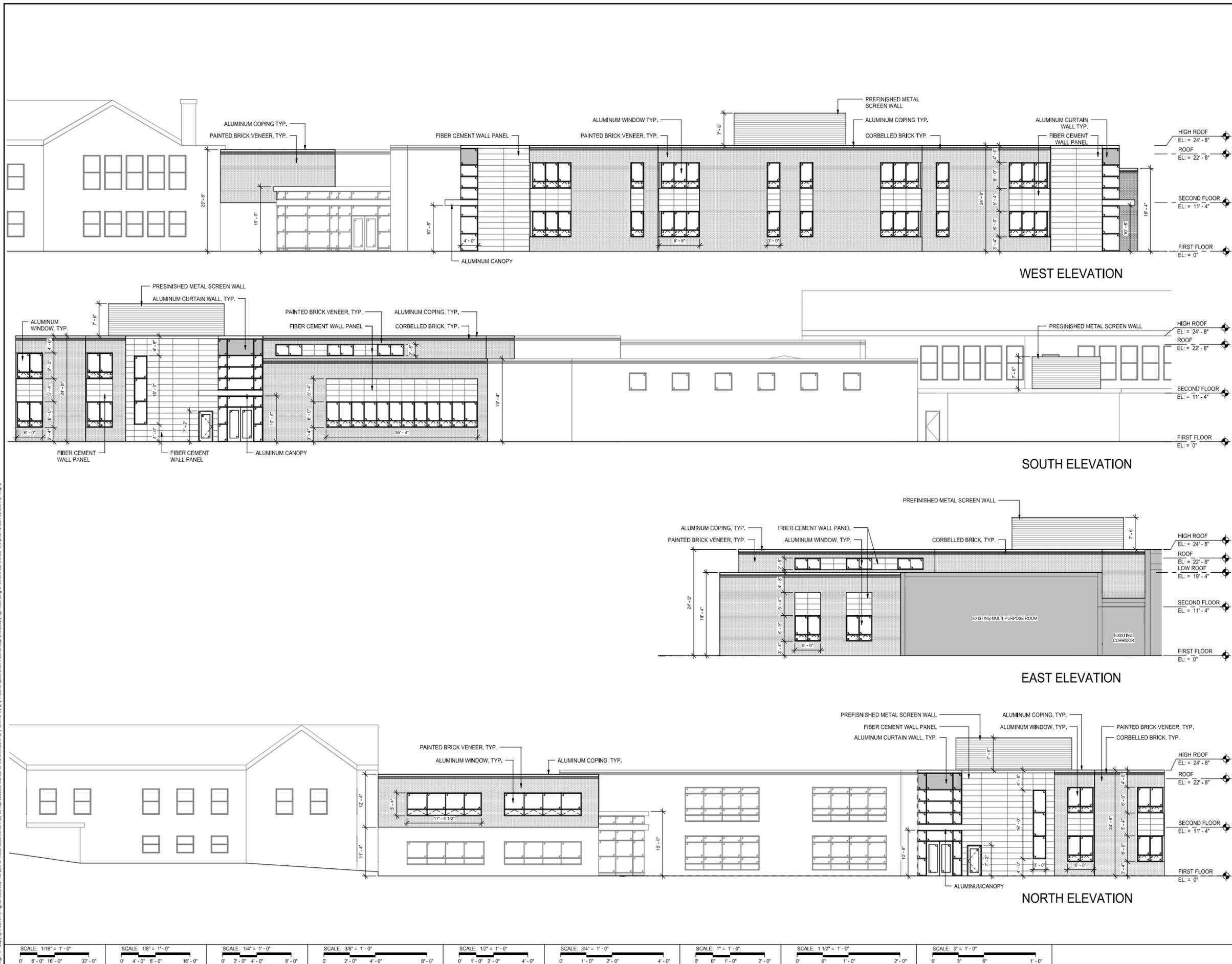
**HALF DAY
INTERMEDIATE
SCHOOL**

239 OLDE HALF DAY ROAD
LINCOLNSHIRE, IL 60069

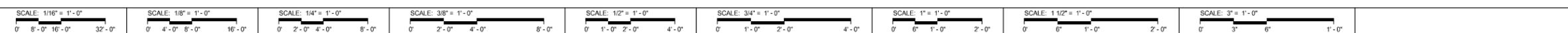
EXTERIOR ELEVATIONS

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Author:
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H-A3.0



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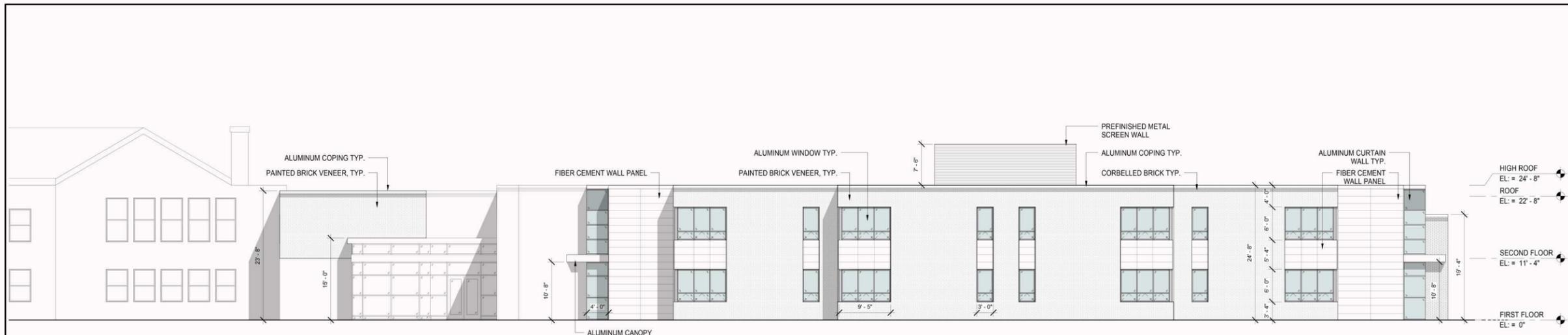
HALF DAY INTERMEDIATE SCHOOL

239 OLDE HALF DAY ROAD
LINCOLNSHIRE, IL 60069

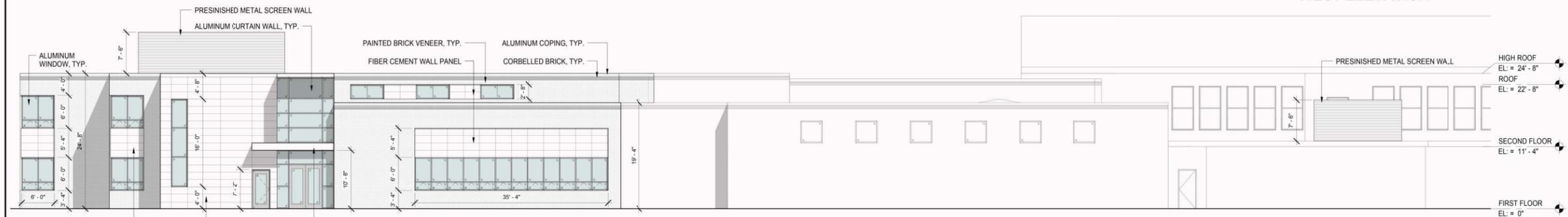
EXTERIOR ELEVATION RENDERINGS

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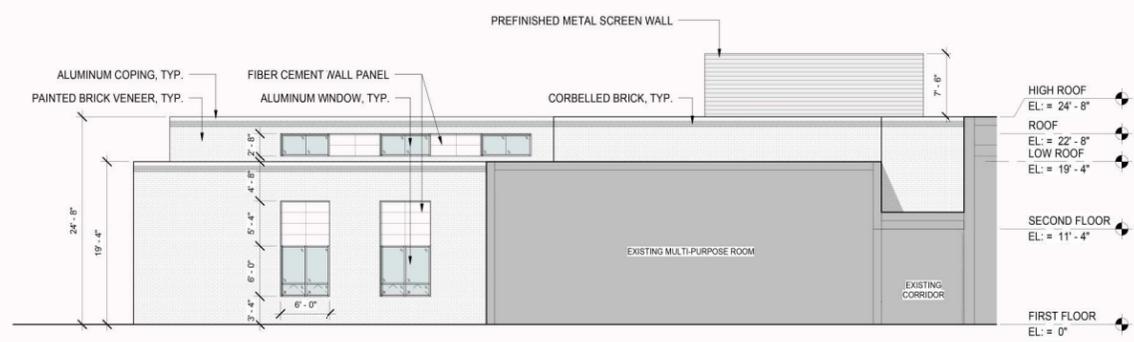
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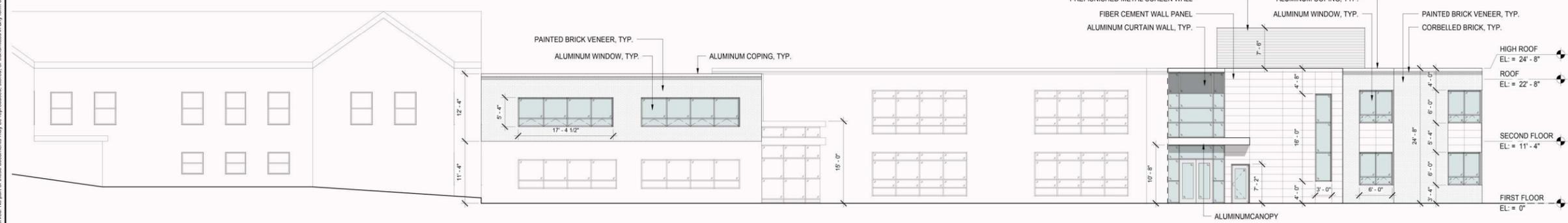
WEST ELEVATION



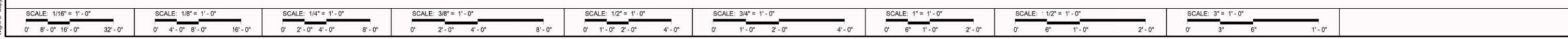
SOUTH ELEVATION



EAST ELEVATION



NORTH ELEVATION



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Village of Lincolnshire
Zoning Board Submittal Packet
Lincolnshire – Prairie View School District 103
Additions to Half Day School

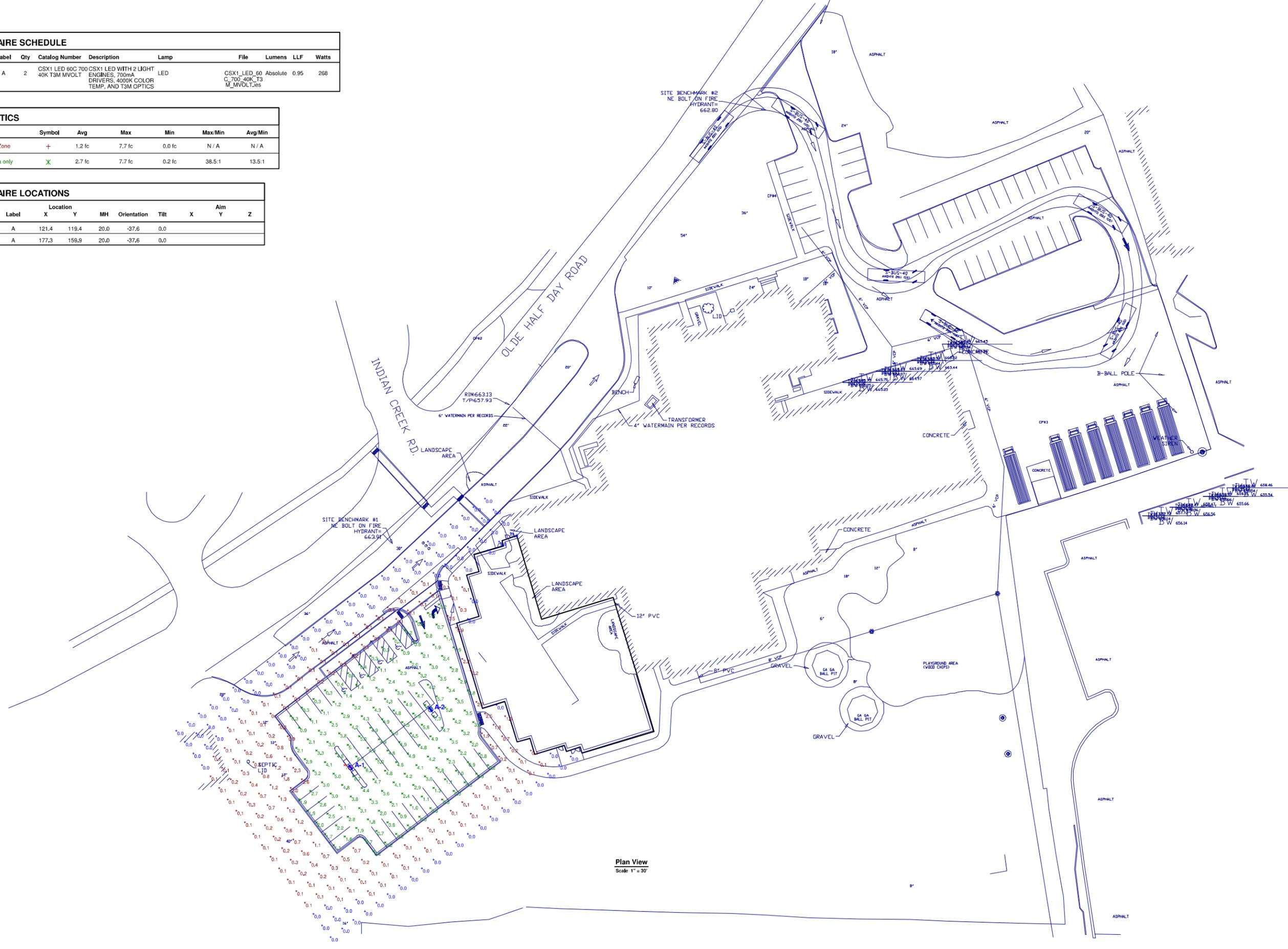
Site Photometrics

January 8, 2016

LUMINAIRE SCHEDULE									
Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
	A	2	CSX1 LED 800 700 CSX1 LED WITH 2 LIGHT ENGINES, 700mA DRIVERS, 4000K COLOR TEMP, AND T3M OPTICS	LED	CSX1_LED_60 C_700_40K_T3 M_MVOLT.lvs	Absolute	0.95	268	

STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Entire Calc Zone	+	1.2 fc	7.7 fc	0.0 fc	N / A	N / A
Parking Area only	X	2.7 fc	7.7 fc	0.2 fc	38.5:1	13.5:1

LUMINAIRE LOCATIONS									
No.	Label	Location		MH	Orientation	Tilt	X	Alm Y	Z
1	A	121.4	119.4	20.0	-37.6	0.0			
2	A	177.3	159.9	20.0	-37.6	0.0			



Plan View
Scale 1" = 30'



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DESCRIPTION DATE

HALF DAY INTERMEDIATE SCHOOL

239 OLDE HALF DAY ROAD
LINCOLNSHIRE, IL 60069

SITE PHOTOMETRICS

Project Number:
02-5467-05
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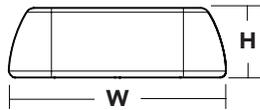
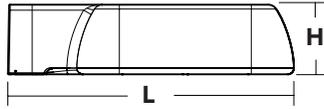
CSX1 LED LED Area Luminaire



CONTOUR
SERIES

Specifications

EPA:	0.7 ft ² (0.07 m ²)
Length:	23-1/2" (59.7 cm)
Width:	18-1/2" (46.9 cm)
Height:	5-7/8" (14.9 cm)
Weight (max):	37 lbs (16.8 kg)



Ordering Information

EXAMPLE: CSX1 LED 60C 1000 40K T3M MVOLT SPA DDBXD

CSX1 LED	60C							
Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Mounting	Options	Finish (required)
CSX1 LED	60C 60 LEDs	700 700 mA 1000 1000 mA (1 A)	40K 4000 K 50K 5000 K	T2M Type II T3M Type III T4M Type IV T5M Type V TFTM Forward throw	MVOLT ¹ 120 ¹ 208 ¹ 240 ¹ 277 ¹ 347 480	Shipped included SPA Square pole mounting RPA Round pole mounting WBA Wall bracket Shipped Separately² SPUMBA Square pole universal mounting adaptor ³ RPUMBA Round pole universal mounting adaptor ³ KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) ⁴	Shipped installed PER NEMA twist-lock receptacle only (no controls) DCR Dimmable and controllable via ROAM® (no controls) ⁵ DMG 0-10V dimming driver (no controls) ⁶ HS House-side shield ² SF Single fuse (120, 277, 347V) ⁷ DF Double fuse (208, 240, 480V) ⁷ DS Dual switching ^{8,9} ZELED Emergency LED secondary source (2 modules) battery pack (-20°C min. operating temperature) BL30 Bi-level switched dimming, nominal 30% ^{9,10} BL50 Bi-level switched dimming, nominal 50% ^{9,10} Shipped separately² VG Vandal guard BS Bird-deterrent spikes	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

Drilling

Template #8

Accessories

Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) ¹¹
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) ¹¹
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) ¹¹
SCU	Shorting cap ¹¹
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) ⁴
PUMBA DDBXD U*	Round and square pole universal mounting bracket adaptor (specify finish)
CSX1HS U	House-side shield (includes 2 shields)
CSX1VG U	Vandal guard accessory
CSX1BS U	Bird-deterrent spikes accessory

CSX1 shares a unique drilling pattern with the AERIS™ family. Specify this drilling pattern when specifying poles.

DM19AS	Single unit	DM29AS	2 at 90° *
DM28AS	2 at 180°	DM39AS	3 at 90° *
DM49AS	4 at 90° *	DM32AS	3 at 120° **

Example: SSA 20 4C DM19AS DDBXD

Visit Lithonia Lighting's **POLES CENTRAL** to see our wide selection of poles, accessories and educational tools.

*Round pole top must be 3.25" O.D. minimum.
**For round pole mounting (RPA) only.

Tenon Mounting Slipfitter**

Tenon O.D.	Single Unit	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2-3/8"	AST20-190	AST20-280	AST20-290	AST20-320	AST20-390	AST20-490
2-7/8"	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

NOTES

- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 options only when ordering with fusing (SF, DF options).
- Also available as a separate accessory; see Accessories information at left.
- 1.5 G vibration load rating per ANCI C136.31.
- Requires "SPA" mounting option. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" mast arm (not included).
- Specifies a ROAM® enabled luminaire with 0-10V dimming capability; PER option required. Not available with 347 or 480V. Add'l hardware and services required for ROAM® deployment; call 1-800-442-6745.
- Not available with 347 or 480V.
- Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
- Provides 50% dimming capability via two independent drivers, each operating half the luminaire. Available with MVOLT and two light engines only. N/A with PER, DCR, DMG or ZELED.
- Requires an additional switched line.
- Dimming driver standard. MVOLT only. Not available with DCR.
- Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item.



Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

LEDs	Drive Current (mA)	Performance Package	System Watts	Dist. Type	40K (4000 K, 70 CRI)					50K (5000 K, 67 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
60C (60 LEDs)	700 mA	60C 700 --K	134W	T2M	13,662	3	0	3	102	14,651	3	0	3	109
				T3M	14,461	3	0	3	108	15,508	3	0	3	116
				T4M	14,441	2	0	3	108	15,486	3	0	3	116
				T5M	14,494	4	0	2	108	15,543	4	0	2	116
				TFTM	14,643	2	0	3	109	15,703	2	0	3	117
	1000 mA	60C 1000 --K	209W	T2M	17,652	3	0	3	84	19,028	3	0	3	91
				T3M	18,684	3	0	3	89	20,141	3	0	4	96
				T4M	18,658	3	0	4	89	20,113	3	0	4	96
				T5M	18,726	5	0	3	90	20,187	5	0	3	97
				TFTM	18,919	3	0	3	91	20,395	3	0	4	98

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	1.00
40°C	104°F	0.99

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the CSX1 LED 60C platform in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	0.94	0.90	0.83

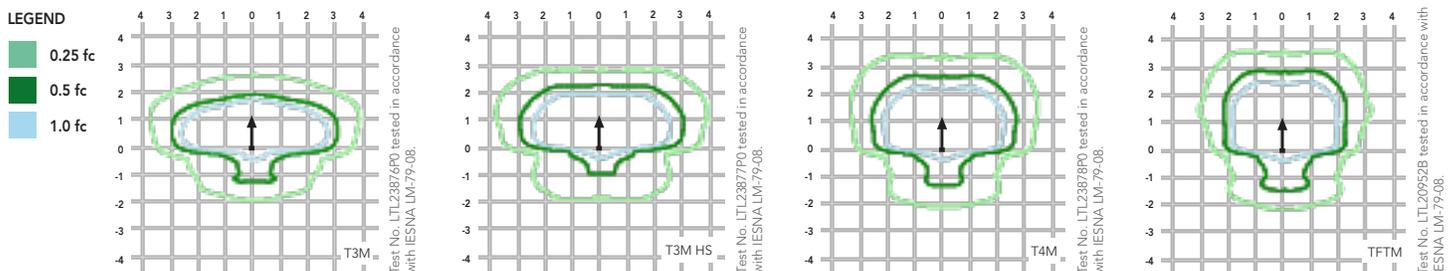
Electrical Load

Number of LEDs	Drive Current (mA)	System Watts	Current (A)					
			120V	208V	240V	277V	347V	480V
60C	700	134W	1.321	0.756	0.659	0.580	0.462	0.337
	1000	209W	2.068	1.198	1.056	0.943	0.764	0.605

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's [CSX1 homepage](#).

Isofootcandle plots for the CSX1 LED 60C 1000 40K. Distances are in units of mounting height (20').



FEATURES & SPECIFICATIONS

INTENDED USE

The Contour Series LED area luminaire is ideal for streets, walkways, parking lots, and surrounding areas that call for high-performance LED lighting in a transitional dayform.

CONSTRUCTION

Single-piece die cast housing has a unique flow-through design that allows for optimized thermal management through convective cooling. A metallic screen covers the top of the housing, preventing debris build-up while allowing natural cleaning of the heat sinks. Modular design allows for ease of maintenance and future light engine upgrades. The LED driver and electronics are thermally isolated from the light engine(s), ensuring long life. Housing is completely sealed against moisture and environmental contaminants.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.

OPTICS

Precision-molded acrylic lenses provide optimal luminaire spacing and improved uniformity. Lenses are indexed to the circuit board to ensure consistent optical alignment and delivering repeatable photometric performance. Light engines are available in standard 4000 K (70 CRI) or optional 5000 K (67 CRI) configurations. The CSX1 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engines consist of 60 high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (100,000 hrs at 40°C, L70). Class 1 electronic driver

designed to have a power factor >90%, THD <20%, with an expected life of 100,000 hours with <1% failure rate. Easily-serviceable surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

INSTALLATION

Integral arm provides easy installation to a pole and assists in alignment and leveling. Secure connection withstands up to 3.0 G vibration load rating per ANSI C136.31. The CSX1 utilizes the AERIS™ series pole drilling pattern for SPA and RPA options; wall mounting bracket also available. Available mast arm adapter accessory accepts horizontal tenons up to 2-3/8" O.D.

LISTINGS

CSA Certified to U.S. and Canadian standards. Light engines and luminaire are IP66 rated. **U.S. Patent No. D632830. U.S. Patent No. D653,382 S.**

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org to confirm which versions are qualified.

WARRANTY

Five year limited warranty. Full warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



Village of Lincolnshire
Zoning Board Submittal Packet
Lincolnshire – Prairie View School District 103
Additions to Half Day School

Traffic Study

January 8, 2016

Traffic Planning Study

To: Dan Stanley – Lincolnshire-Prairie View School District 103

Copy: Leanne Meyer-Smith – Wight & Company
Don Matthews - GHA

From: Daniel P. Brinkman, PE, PTOE

Date: January 8, 2016

Subject: Proposed School Addition & Site Improvements
Half Day School
239 Olde Half Day Road
Lincolnshire, Illinois

Part I. Project Context

Per your request, GEWALT HAMILTON ASSOCIATES, INC. (GHA) has conducted a Traffic Planning Study for the above captioned project. The following report summarizes our findings and recommendations for your consideration. The Exhibits and Appendices referenced throughout this report are conveniently located in the Technical Addendum at the end of this document.

School District 103 proposes to make two additions to the existing Half Day School located at 239 Olde Half Day Road in Lincolnshire. Per the Architectural Site Plan prepared by Wight & Company (see Appendix A) a small 2nd floor classroom addition over existing 1st floor space is proposed as well as a larger two-story addition to the west side of the building. In total, Half Day school will be expanded by just over 26,000 square feet for the purpose of accommodating 5th Grade students on campus. The major building expansion is proposed to occur in the primary staff parking lot and as such, modifications to the parking lot and circulation patterns on campus will be made.

Part II. Summary Statement

Briefly summarizing, we believe that the expansion of Half Day School represents a minimal impact on the traffic volumes and patterns in the area. Key reasons include:

- Site modifications are proposed to address the afternoon dismissal queue and improve operations.
- Additional buses will be provided and accommodations made on-site to improve stacking and circulation.
- On-site parking will continue to be in excess of the Village requirement.
- Our analyses does not discount future traffic volumes for potential siblings in the new 5th grade whose parents currently participate in drop-off and pick-up at Half Day School.

Part III. Background Conditions

Site Context and Photo Inventory

Exhibits 1 and 2 provide a location map/aerial photograph and a street-level photo inventory of the site vicinity respectively. Key conditions in the area are as follows:

- Olde Half Day Road is a local (Village of Lincolnshire jurisdiction) route that extends for approximately ¼ mile between IL Rte 22 (Half Day Road) and US 45 / IL Rte 21 (Milwaukee Avenue) in the Village of Lincolnshire. Olde Half Day provides a single travel lane in each direction but widens to provide separate left turn lanes at its signalized intersections with IL Rte 22 and US Rte 45/IL Rte 21. On-street parking is prohibited for the length of Olde Half Day Road. The posted speed limit is 35-mph but a 20-mph School Zone exists as well.
- Indian Creek Road is another local route that meets Olde Half Day at a “T” intersection roughly mid-way along the school site frontage. Indian Creek Road provides a single travel lane in each direction and has a posted speed limit of 25-mph. Left turns from Olde Half Day to Indian Creek are prohibited Monday - Friday between the hours of 3pm and 6pm.
- The Vernon Area Public Library is located across Olde Half Day Road from Half Day School on the west side of Indian Creek Road and the Chicago Lighthouse Church is located on the east side of Indian Creek Road.
- Half Day School is accessed via a single full access driveway near the east property line that provides access to 40 parking spaces and a paved play area that doubles as the bus loading and unloading area. Additionally a pair of one-way drives serve a drive that parallels Olde Half Day Road further southwest along the frontage. The western most drive aligns opposite an entrance for the Vernon Area Library. The one-way pair of drives also serve as the only access for the western parking lot which contains another 39 spaces including 3 handicapped accessible spaces.
- Parent pick-up /drop-off operations occur in the drive that parallels Olde Half Day Road and in the parking lot west of the building.
- Busses utilized the paved play area south of the eastern parking lot. Circling through the lot after the morning drop off and staging – all backed along the south fence line in the afternoon prior to student dismissal.

Existing Traffic Counts

Peak period traffic turning movement counts were conducted by GHA on Thursday November 12, 2015 from 6:00 – 9:00 AM and 2:00–6:00 PM at the school access drives along Olde Half Day.

Peak Hours at the school driveways occurred from 8:00-9:00 AM and from 3:00-4:00 PM – generally corresponding with the start and end times of the school day. The observed vehicle counts at the school driveways are illustrated in *Exhibit 3*.

No unusual activities (e.g. roadway construction, emergency vehicle activity or inclement weather) were observed during our counts that would be expected to impact traffic volumes or travel patterns in the vicinity.

Some key observations include:

- All students arriving in the morning enter the building from the various drop off locations
- Drop off maneuvers are efficient and accommodated within the limits of the front drive – rarely extending beyond the parking lot entrance.
- Bus arrival and departure during the morning hours is kept separate from parents and works efficiently.
- Busses arriving from the west need the entire east driveway to accommodate their almost 180-degree right turn into the site. A realignment of the drive should be considered as a future improvement.

- A school staff member encourages parents to extend the afternoon pick-up queue into the parking lot.
 - Currently vehicles stack clockwise around the lot resulting in a “crossover” as the queue extends to the driveway. This should be changed as soon as practical to a counter-clockwise pattern to eliminate the crossovers. Approximately 32 vehicles can be accommodated on site in the current stacking configuration.

- Parent vehicles were observed queuing to nearly Olde Half Day Road in the afternoon.
- Bus flow in and out of the site – despite the unconventional three-point-turn maneuvers is efficient and works well.

Exhibit 4 illustrates the current traffic operations.

Summaries of the existing traffic counts can be found in *Appendix B*.

Existing Parking Observations:

GHA collected “spot counts” of parking occupancy during our observation periods. The observed parking utilization is as follows:

Date / Time	East Lot 1	West Lot	Total	Percent Occupied
Nov 12 / 2:30 pm	27	19	46	58%
Nov 12 / 3:45 pm	18	16	37	43%
Nov 13 / 8:25 am	22	18	40	51%
Nov 13 / 9:10 am	27	19	46	58%
		Averages:	43	54%

As can be seen, from our observations during school hours, the parking lot was rarely more than ½ full with an average occupancy of 43 vehicles or 54% utilization. Currently there are 79 parking spaces on site including 3 accessible spaces.

Part IV. Proposed Development

Site Plan

Included as *Appendix A* is the Architectural Site Plan for Half Day School dated November 6, 2015 and prepared by Wight and Company. As can be seen, the proposed expansion includes a ±1,600 square foot 2nd

story classroom addition as well as a ±12,240 square foot two story classroom wing on the west side of the building.

Included as Appendix C is the January 8, 2016 preliminary site plan prepared by GHA. Key components of the site plan include:

- A new connection between the east parking area and the paved play area to better accommodate the movements of additional busses.
- Modified and slightly expanded west parking lot.
- Improved / widened pedestrian connection to new parking lot
- Modified and expanded detention areas/

Project Traffic Characteristics

Exhibit 5 – Part A tabulates the traffic generation calculations for the existing school. Part A.1 tabulates the observations made by GHA in November 2015. Part A.2 tabulates for comparison, the anticipated traffic volumes one would expect for a school of 375 students based on historical rates published by the Institute of Transportation Engineers (ITE) in the 9th Edition of the Manual *Trip Generation*.

As can be seen, the driveway volumes at Half Day School are slightly lower in the morning peak hour and appreciably higher during the afternoon peak hour than the published data would suggest. To be conservative, we have assigned traffic associated with the expansion and the addition of approximately 180 5th grade students based on the higher rates per student. This conservative approach estimates that Half Day School will experience an additional 80 trips (combined inbound and outbound) during each of the peak hours. We feel that this approach helps ensure that the maximum impacts of the proposed additional students is considered. Furthermore, it is likely that some of the new 5th grade students have siblings at Half Day School so drop-off and pick-up volumes may not increase at the same ratio as observed.

Exhibit 5 – Part B illustrates the observed trip distribution for school traffic from the November 2015 counts. While the arrival pattern of traffic is balance and nearly split evenly east and west of the school, a significant majority of traffic leaving campus turns right and heads to the east and the signalized intersection of Olde Half Day Road and IL Rte 21 (Milwaukee Avenue). Traffic assignments for the additional vehicles associated with adding 5th grade students to the campus were assumed to follow the current traffic patterns during the peak hours.

Part V. Traffic Evaluation

Traffic Assignments

Exhibit 6 illustrates the site traffic assignments for the new parking lot traffic, which is based on the traffic characteristics summarized in Exhibit 5 (i.e. traffic generation, trip distribution and driveway usage) and assigned to the site access and adjacent roadway network.

Site traffic was then combined with the Existing volumes in Exhibit 3 to produce the Total Traffic, which is illustrated in Exhibit 7.

Parking Discussion and Site Plan comments

Parking for elementary / Jr High Schools in accordance with the Village of Lincolnshire Zoning Ordinance 6-1-2 is as follows:

1 space per employee

Half Day School upon completion of the proposed building additions and inclusion of 5th Grade students, District 103 estimates that Half Day School will have 70 employees.

Based on the Zoning Ordinance, Half Day School will require 70 spaces. As previously noted the proposed site plan provides 79 spaces, including 4 accessible spaces. Parking exceeds the code requirement as proposed.

Exhibit 8 illustrates the proposed site improvements in addition to the building expansion, and recommendations for future traffic operations including:

- Expanded building footprint
- Additional and expanded sidewalks within the pick-up/drop-off zone and at the southwest corner of the expansion
- New bus drive connection in east parking lot to accommodate additional 3-5 busses
- New bus alignment / stacking location for dismissal
- West parking lot modifications with increased queueing space and improved – counterclockwise operation
- Additional detention area southwest of the parking lot and school expansion

Exhibit 9 provides additional detail of the proposed operations of the east parking lot including:

- AutoTurn simulation illustrating that there is ample clearance within the lot to allow two vehicles to stack side-by-side for maximum queueing during the afternoon pick-up operations.
- Illustration of the recommended queueing / stacking configuration showing both the dual queue and the counter-clockwise pattern in the new east parking lot. As noted the proposed stacking pattern increases the number of vehicles that can be accommodated on site to approximately 47.

Part VI. Conclusions and Recommendations

Our analyses conclude that the additional traffic generated by the school expansion represents a minimal impact on the area roadways. Expanding the stacking space on site and extending the drop-off / pick-up zone will help accommodate additional students. Parking is in excess of the requirement and our understanding is that an arrangement exists with Vernon Area Library for special event parking and the District is going to continue to work with the Village to provide a formal pedestrian crossing of Old Half Day Road.

Part VII. Technical Addendum

The following Exhibits and Appendices were previously referenced. They provide technical support for our observations, findings, and recommendations discussed in the text.

Exhibits

1. Site Context
2. Photographic Inventory
3. Existing Traffic
4. Current Traffic Operations
5. Project Traffic Characteristics
6. Site Traffic
7. Total Traffic
8. Recommended traffic operations
9. East Parking Lot

Appendices

- A. *Architectural Site Plan – Wight and Company*
- B. *Traffic Count Summaries*
- C. *Preliminary Site Engineering Plan*

TECHNICAL ADDENDUM



Proposed School Addition and Site Improvements: Half Day School – 239 Olde Half Day Road; Lincolnshire, IL



Looking south into Half Day School east parking lot from Olde Half Day Road



Looking east along Olde Half Day Road from School driveway



Looking west at drop-off exit drive



Looking east along school frontage from Indian Creek Rd



Looking south from Vernon Library driveway across Olde Half Day Road to drop off entrance



Looking east along drop off drive from Olde Half Day Road entrance



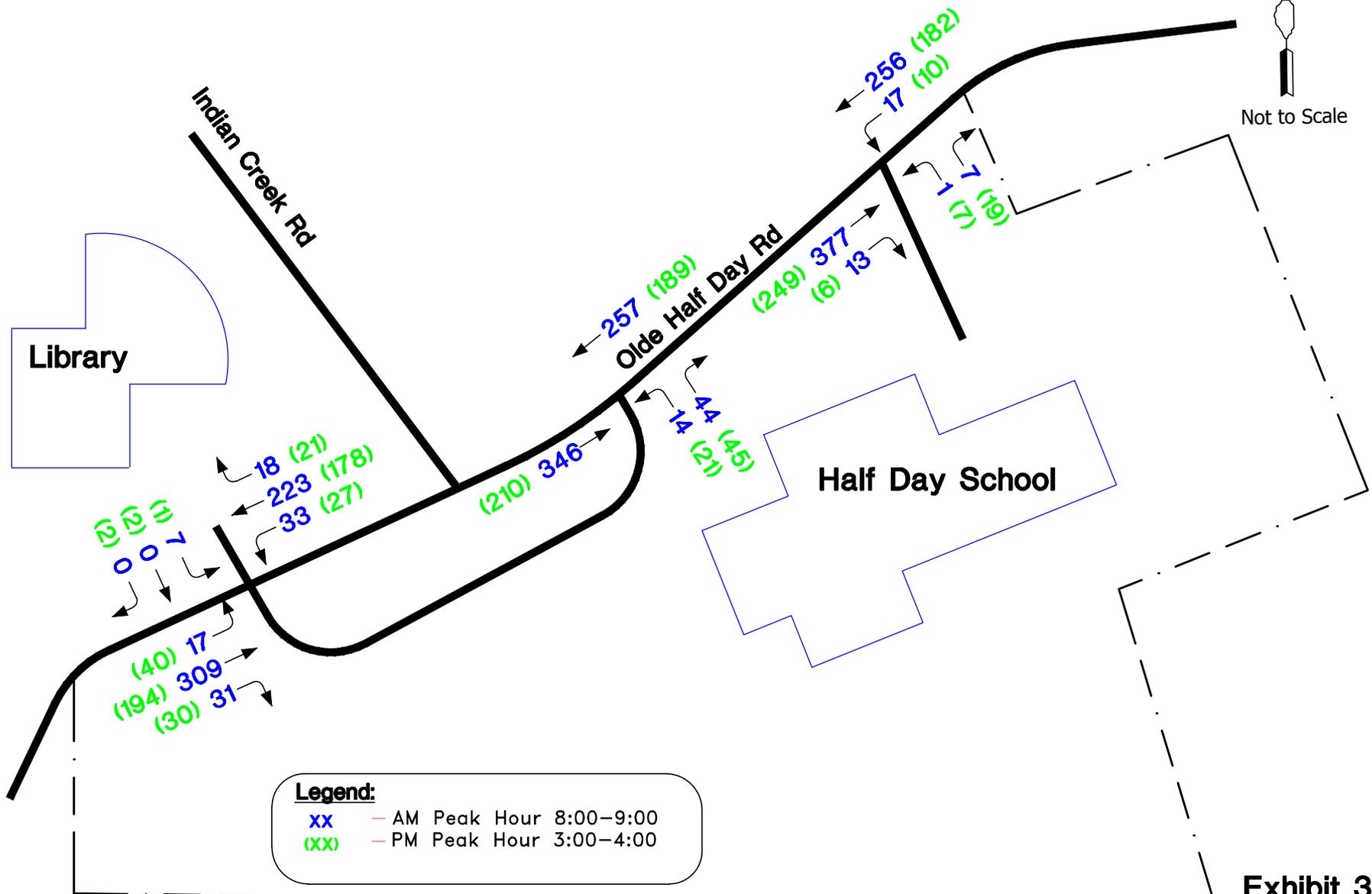
Afternoon pick-up traffic queued through parking lot



Busses staged in east play area prior to afternoon dismissal

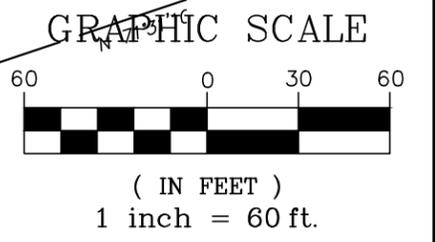
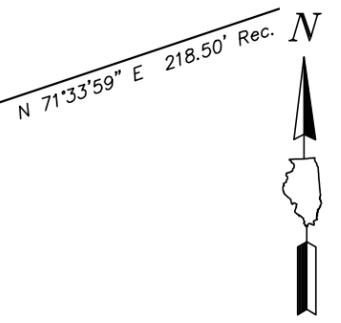
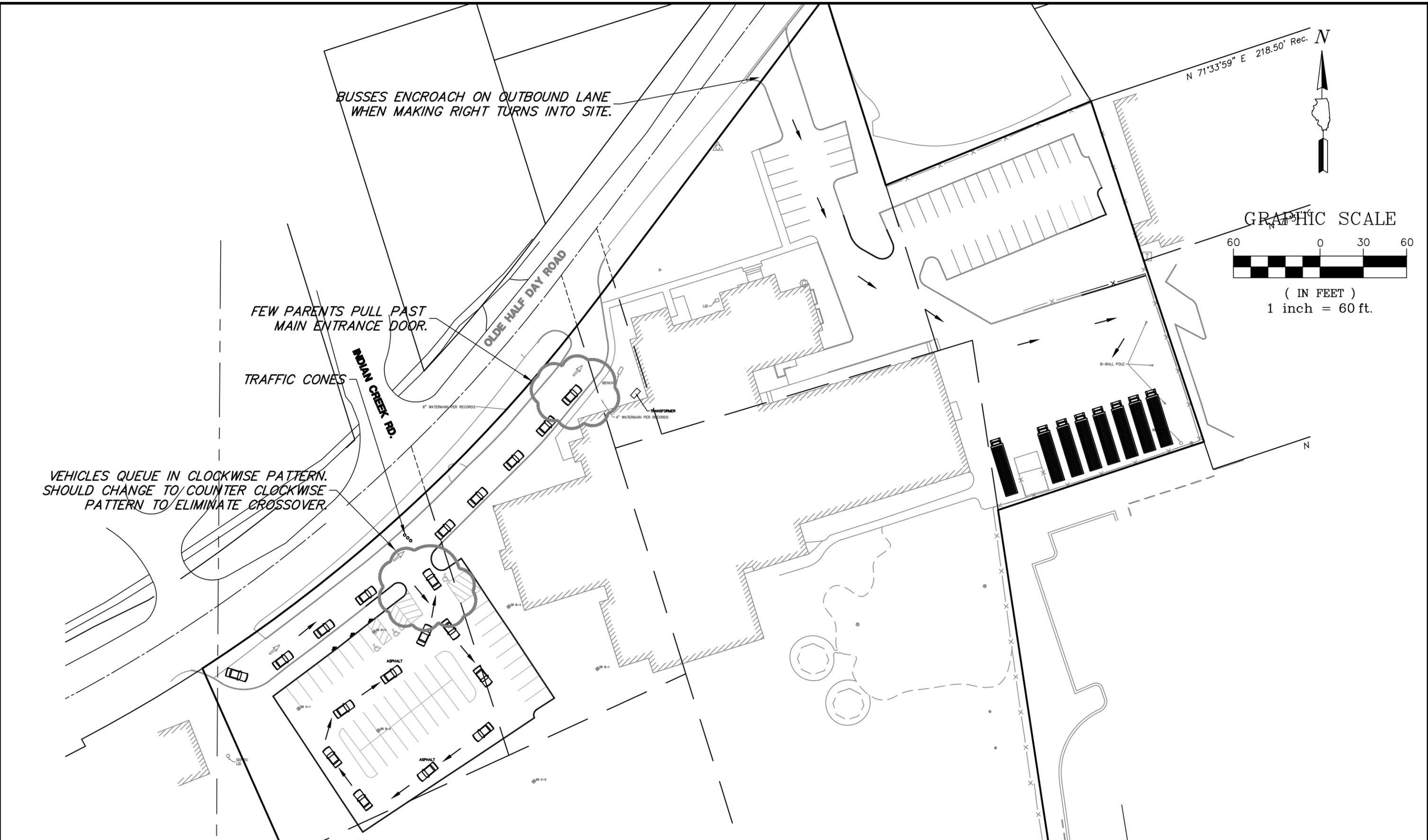


Not to Scale



Legend:

- xx — AM Peak Hour 8:00–9:00
- (xx) — PM Peak Hour 3:00–4:00



GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL. 60061
Tel.: 847.478.9700 ■ Fax.: 847.478.9701

EXHIBIT 4-CURRENT OPERATIONS
HALF DAY INTERMEDIATE SCHOOL IMPROVEMENTS
PRAIRIEVIEW SCHOOL DISTRICT 103
LINCOLNSHIRE, ILLINOIS

FILE: 4521.100 Half Day - PR1.dwg		GHA PROJECT #
DRAWN BY:	MGFC	4521.100
DATE:	11/16/15	
CHECKED BY:	LXM	SCALE: 1"=60'

Exhibit 5
Project Traffic Characteristics

Half Day School Expansion: 239 Olde Half Day Road - Lincolnshire, Illinois

Part A. Traffic Generation Calculations

	ITE Code	Morning Peak Hour			Evening Peak Hour		
		In	Out	Sum	In	Out	Sum
1. November 2015 Observations 375 Students	# 520	94	66	160	73	92	165
	trips/student			0.43			0.44
2. Anticipated per ITE	# 520	93	76	169	48	57	105
	trips/student			0.45			0.28

To be conservative use higher ITE rate for AM and higher observed rate for PM traffic

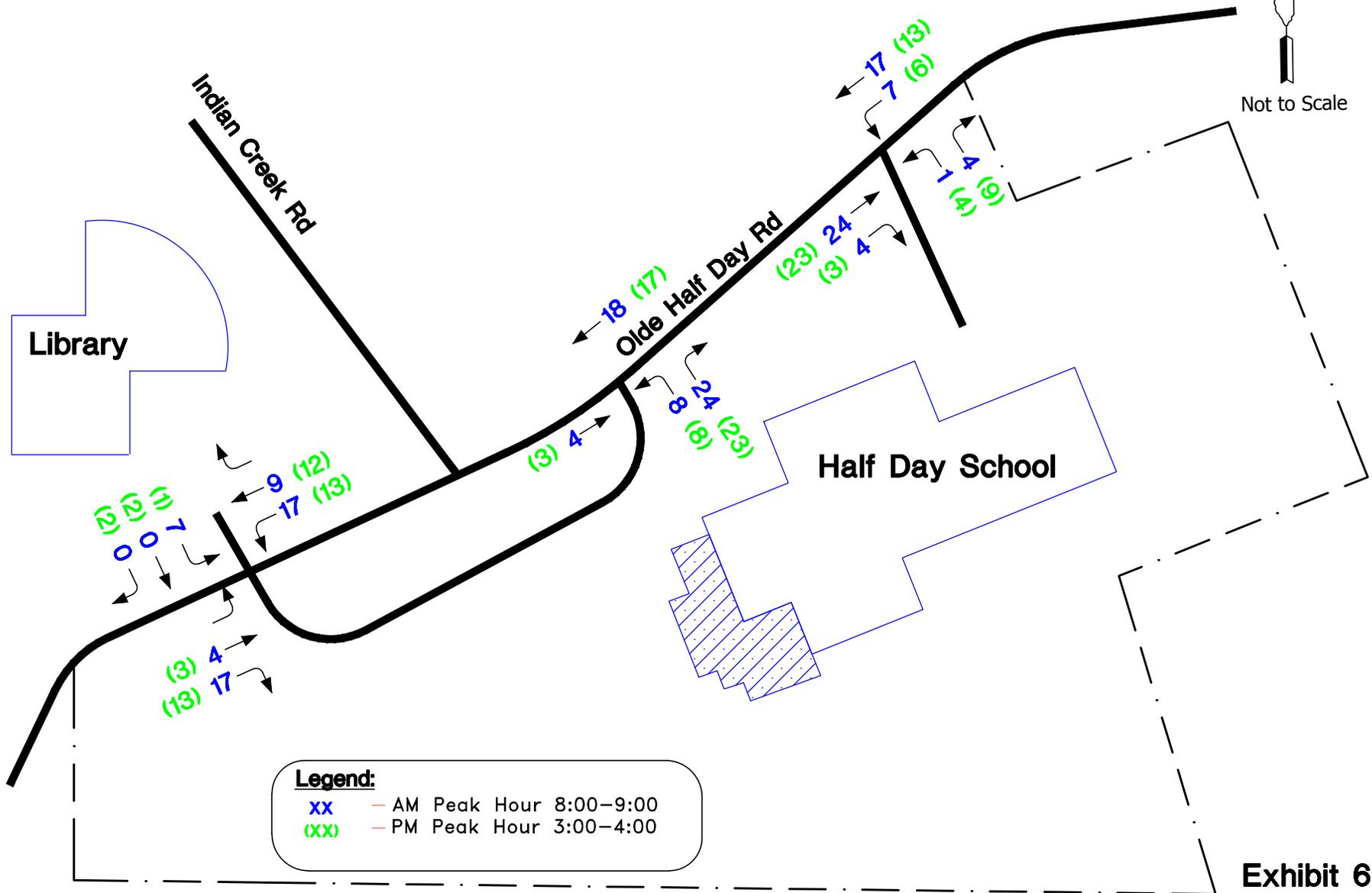
3. Additional 5th Grade Traffic 180 Students		45	37	82	35	44	79
---	--	----	----	----	----	----	----

Part B. Trip Distribution

Route & Direction	Percent Use by Route	
	Approach Site From	Depart Site To
Olde Half Day		
- East of School	53%	75%
- West of School	47%	25%
Totals =	100%	100%



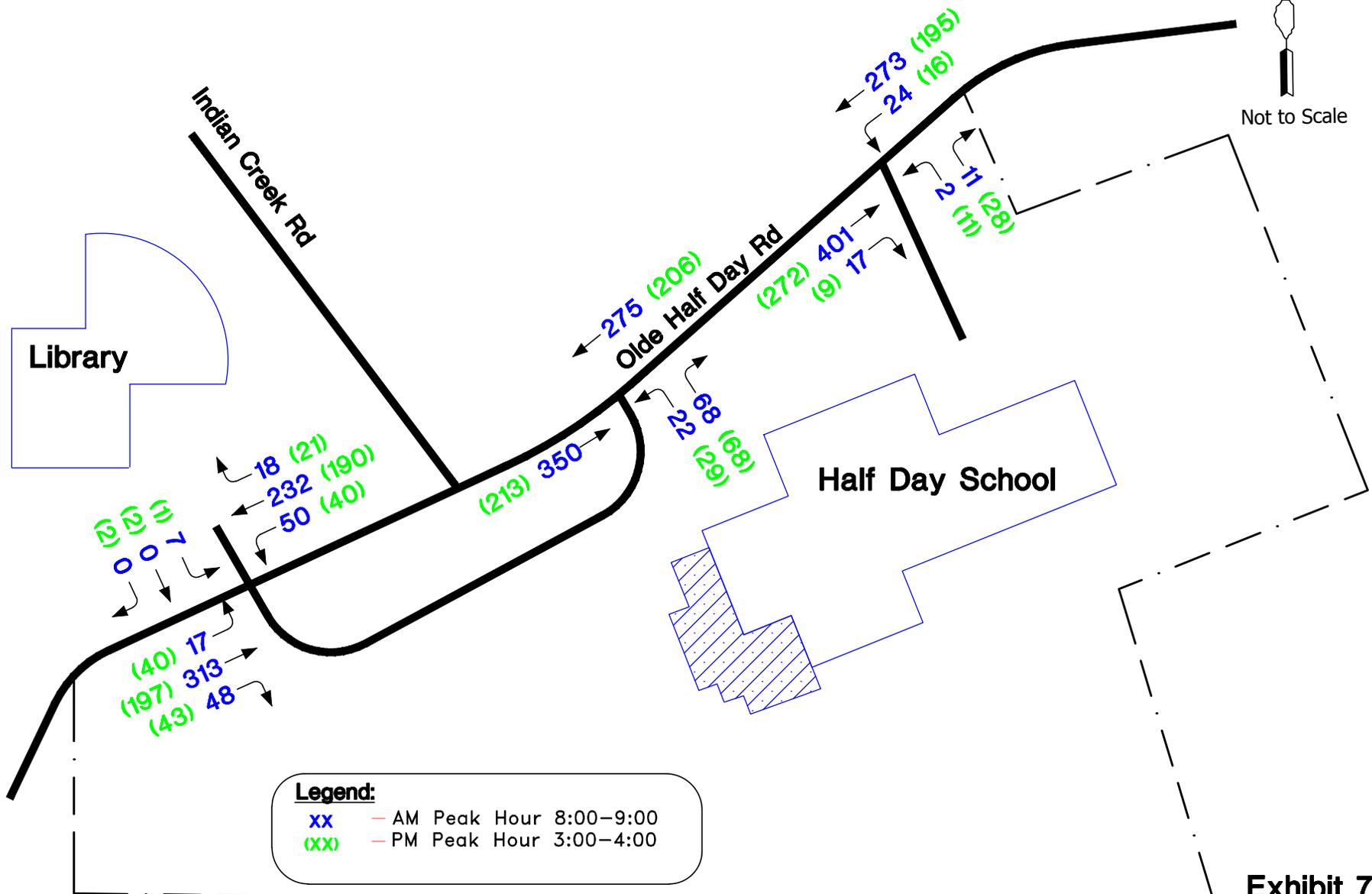
Not to Scale



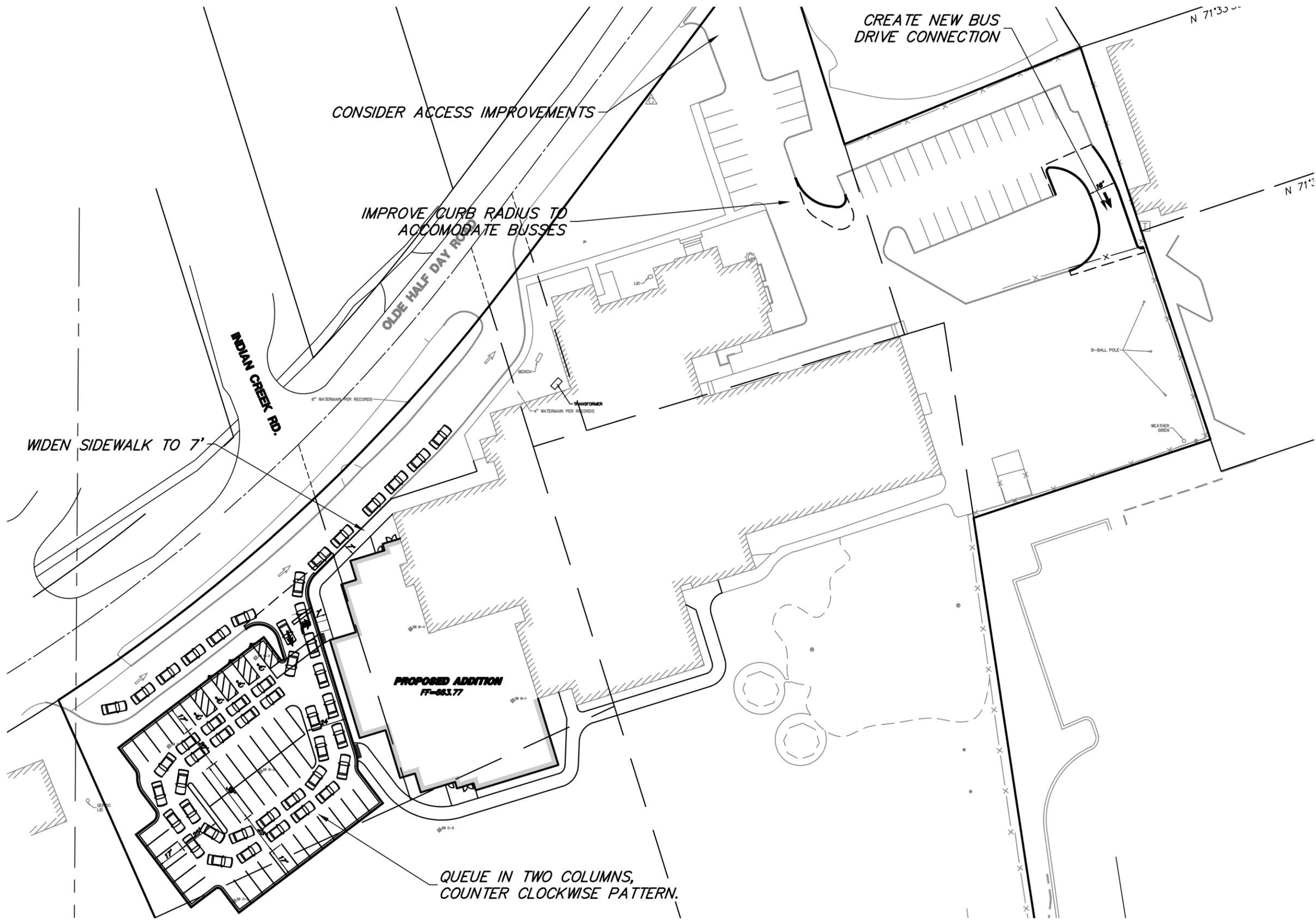
Legend:
xx — AM Peak Hour 8:00-9:00
(xx) — PM Peak Hour 3:00-4:00



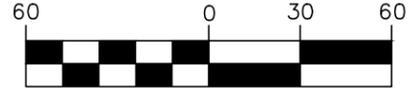
Not to Scale



Legend:
 xx — AM Peak Hour 8:00-9:00
 (xx) — PM Peak Hour 3:00-4:00



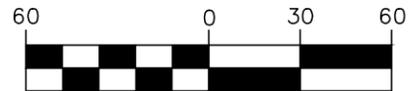
GRAPHIC SCALE



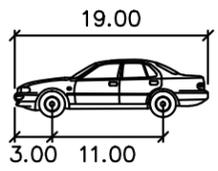
(IN FEET)
1 inch = 60 ft.



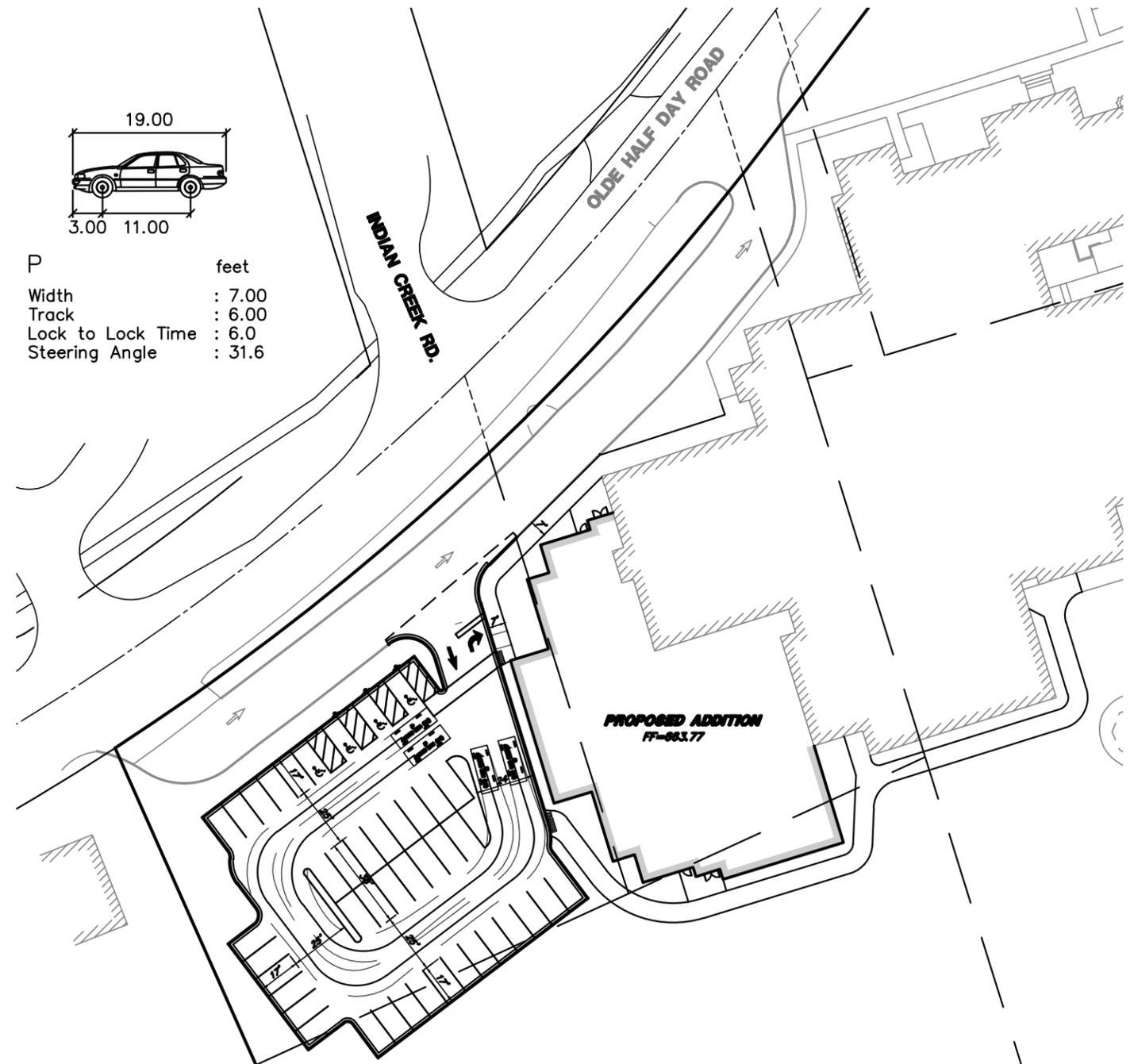
GRAPHIC SCALE



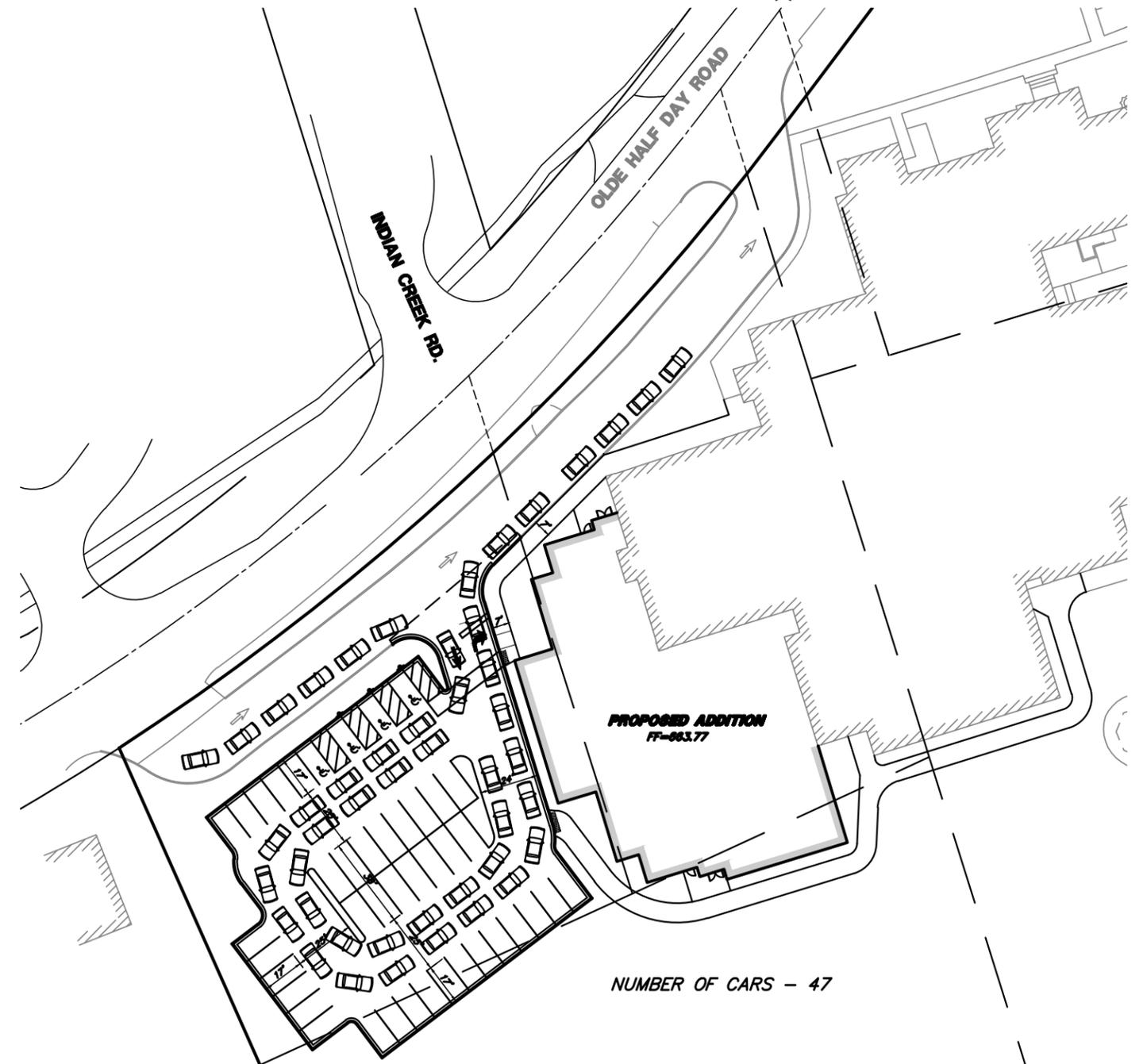
(IN FEET)
1 inch = 60 ft.



- P
- Width : 7.00
- Track : 6.00
- Lock to Lock Time : 6.0
- Steering Angle : 31.6



AUTOTURN EXHIBIT



NUMBER OF CARS - 47

CAR STACKING EXHIBIT



625 Forest Edge Drive ■ Vernon Hills, IL. 60061
Tel.: 847.478.9700 ■ Fax.: 847.478.9701

EXHIBIT 9 - EAST PARKING LOT EXHIBIT

**HALF DAY INTERMEDIATE SCHOOL IMPROVEMENTS
PRAIRIEVIEW SCHOOL DISTRICT 103
LINCOLNSHIRE, ILLINOIS**

FILE: 4521.100 Half Day - PR1.dwg

DRAWN BY: MGFC

DATE: 1/5/16

CHECKED BY: DPB

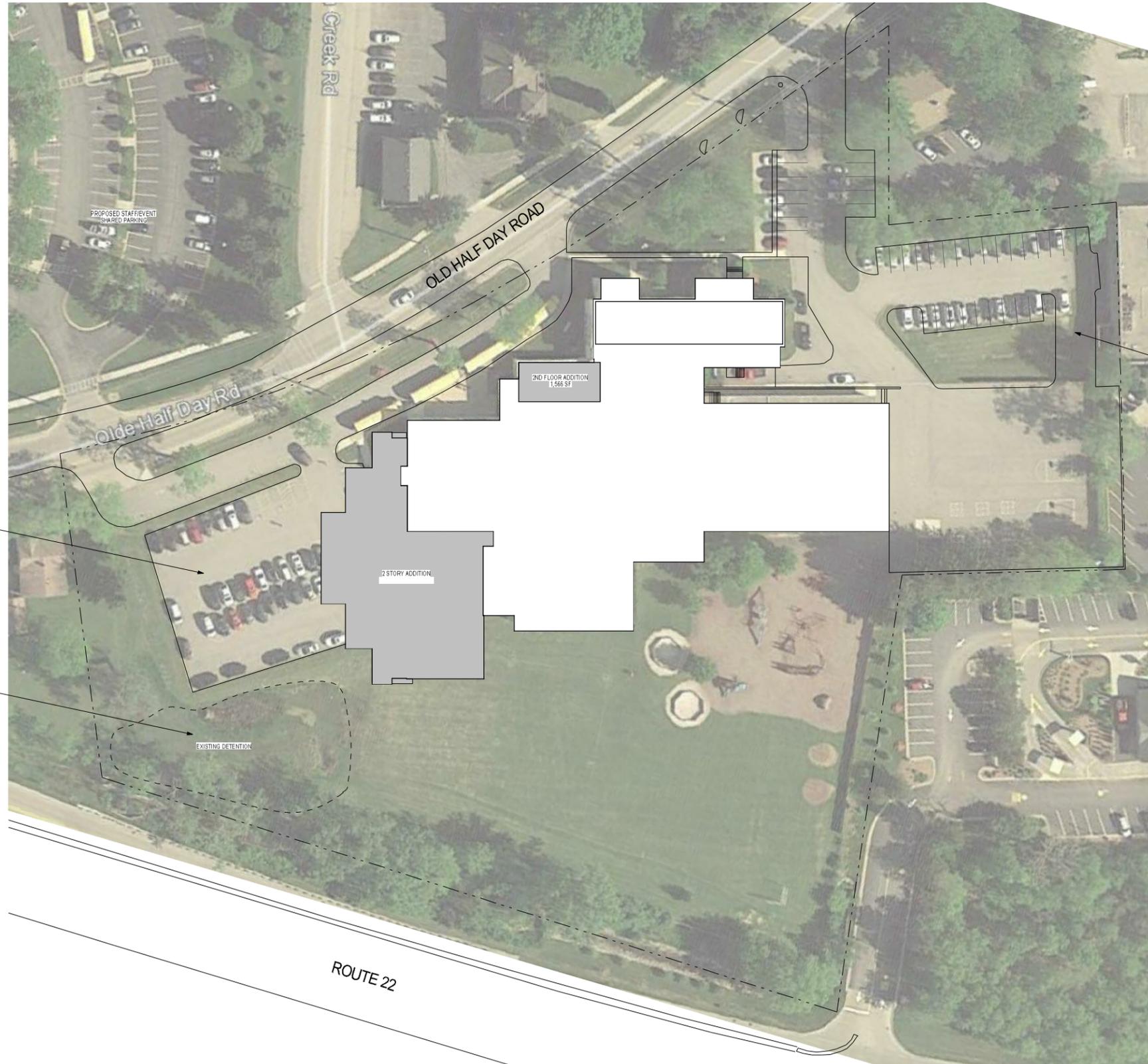
GHA PROJECT #

4521.100

SCALE:

1"=60'

h-A1.0 ARCHITECTURAL SITE PLAN



DETENTION RECONFIGURATION NOT SHOWN

EXISTING DETENTION

2 STORY ADDITION

2ND FLOOR ADDITION
1,566 SF

PROPOSED STAFF/EVENT
SHARED PARKING

ROUTE 22

Old Half Day Rd

Creek Rd

OLD HALF DAY ROAD



LINCOLNSHIRE - PRAIRIEVIEW SCHOOL DISTRICT 103
HALF DAY INTERMEDIATE SCHOOL
 11.06.2015



Scale: 1" = 30' 0"
 02-5467-05



11/06/15 11:57:21 AM
 C:\Users\jwagner\Documents\02-5467-05_Half Day_ARCH_2014_Cover_3_10.rvt
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4521 900 Lincolnshire, IL
 Olde Half Day Rd. and Half Day School
 Driveway
 4-hr
 GHA MIO

Gewalt Hamilton Associates Inc.
 625 Forest Edge Drive
 Vernon Hills, Illinois, United States 60061
 (847) 478-9700 dbrinkman@gha-engineers.com

Count Name: Olde Half Day and School
 Driveway
 Site Code:
 Start Date: 11/17/2015
 Page No: 1

Turning Movement Data

Start Time	Olde Half Day Rd. Southbound				Half Day School Driveway Westbound				Olde Half Day Rd. Northbound						
	U-Turn	Left	Thru	App. Total	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:30 AM	0	1	67	68	0	0	0	0	0	0	65	0	0	65	133
7:45 AM	0	2	94	96	0	1	0	0	1	0	70	4	0	74	171
Hourly Total	0	3	161	164	0	1	0	0	1	0	135	4	0	139	304
8:00 AM	0	1	63	64	0	0	0	0	0	0	80	3	0	83	147
8:15 AM	0	4	62	66	0	0	0	0	0	0	76	1	0	77	143
8:30 AM	0	5	61	66	0	1	0	0	1	0	104	5	0	109	176
8:45 AM	0	7	70	77	0	0	7	0	7	0	117	4	0	121	205
Hourly Total	0	17	256	273	0	1	7	0	8	0	377	13	0	390	671
BREAK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2:30 PM	0	0	37	37	0	0	1	0	1	0	34	0	0	34	72
2:45 PM	0	0	46	46	0	0	0	0	0	0	48	0	0	48	94
Hourly Total	0	0	83	83	0	0	1	0	1	0	82	0	0	82	166
3:00 PM	0	0	44	44	0	0	1	0	1	0	45	1	0	46	91
3:15 PM	0	10	51	61	0	0	1	0	1	0	45	4	0	49	111
3:30 PM	0	0	47	47	0	6	13	0	19	0	109	1	0	110	176
3:45 PM	0	0	40	40	0	1	4	0	5	0	50	0	0	50	95
Hourly Total	0	10	182	192	0	7	19	0	26	0	249	6	0	255	473
4:00 PM	0	0	46	46	0	1	3	0	4	0	89	0	0	89	139
4:15 PM	0	0	41	41	0	2	2	0	4	0	60	0	0	60	105
4:30 PM	0	0	45	45	0	0	1	0	1	0	77	0	0	77	123
4:45 PM	0	0	61	61	0	0	0	0	0	0	81	0	0	81	142
Hourly Total	0	0	193	193	0	3	6	0	9	0	307	0	0	307	509
Grand Total	0	30	875	905	0	12	33	0	45	0	1150	23	0	1173	2123
Approach %	0.0	3.3	96.7	-	0.0	26.7	73.3	-	-	0.0	98.0	2.0	-	-	-
Total %	0.0	1.4	41.2	42.6	0.0	0.6	1.6	-	2.1	0.0	54.2	1.1	-	55.3	-
Lights	0	20	853	873	0	7	22	-	29	0	1134	16	-	1150	2052
% Lights	-	66.7	97.5	96.5	-	58.3	66.7	-	64.4	-	98.6	69.6	-	98.0	96.7
Mediums	0	10	17	27	0	5	11	-	16	0	14	7	-	21	64
% Mediums	-	33.3	1.9	3.0	-	41.7	33.3	-	35.6	-	1.2	30.4	-	1.8	3.0
Articulated Trucks	0	0	5	5	0	0	0	-	0	0	2	0	-	2	7
% Articulated Trucks	-	0.0	0.6	0.6	-	0.0	0.0	-	0.0	-	0.2	0.0	-	0.2	0.3
Pedestrians	-	-	-	1	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-

4521 900 Lincolnshire, IL
 Olde Half Day Rd. and Half Day School
 Driveway
 4-hr
 GHA MIO

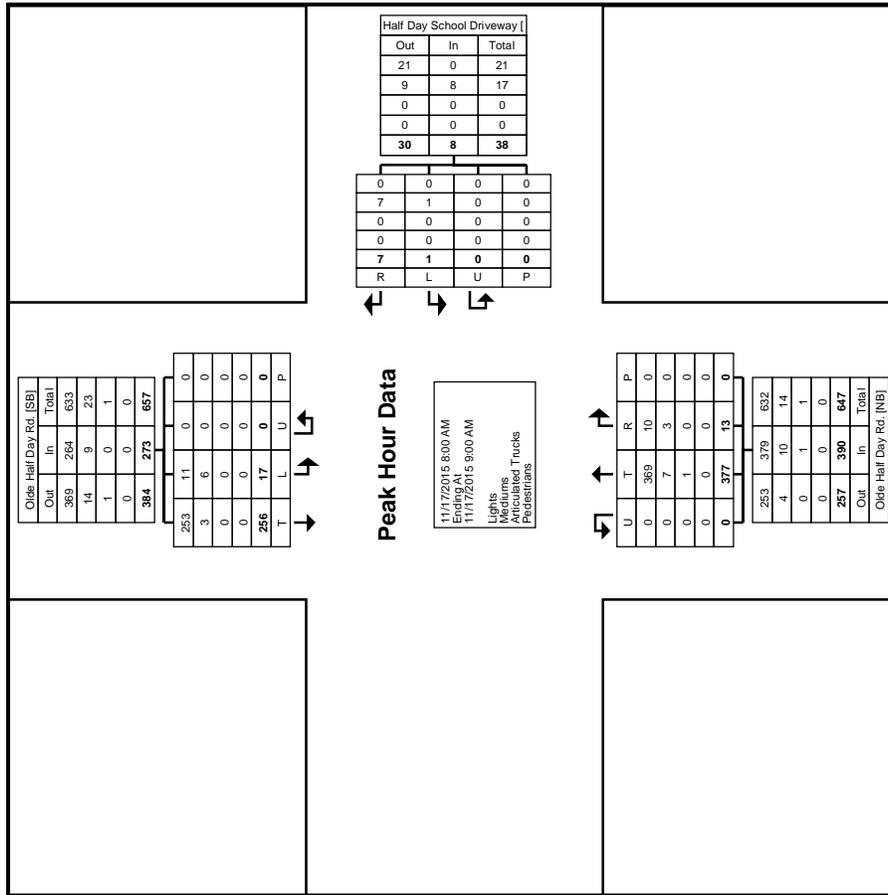
Gewalt Hamilton Associates Inc.
 625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
 (847) 478-9700 dbrinkman@gha-engineers.com

Count Name: Olde Half Day and School
 Driveway
 Site Code:
 Start Date: 11/17/2015
 Page No: 3

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Olde Half Day Rd. Southbound				Half Day School Driveway				Olde Half Day Rd. Northbound							
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
8:00 AM	0	1	63	0	64	0	0	0	0	0	0	80	3	0	83	147
8:15 AM	0	4	62	0	66	0	0	0	0	0	0	76	1	0	77	143
8:30 AM	0	5	61	0	66	0	1	0	0	1	0	104	5	0	109	176
8:45 AM	0	7	70	0	77	0	0	7	0	7	0	117	4	0	121	205
Total	0	17	256	0	273	0	1	7	0	8	0	377	13	0	390	671
Approach %	0.0	6.2	93.8	-	-	0.0	12.5	87.5	-	-	0.0	96.7	3.3	-	-	-
Total %	0.0	2.5	38.2	-	40.7	0.0	0.1	1.0	-	1.2	0.0	56.2	1.9	-	58.1	-
PHF	0.000	0.807	0.914	-	0.886	0.000	0.250	0.250	-	0.286	0.000	0.806	0.650	-	0.806	0.818
Lights	0	11	253	-	264	0	0	0	-	0	0	369	10	-	379	643
% Lights	-	64.7	96.8	-	96.7	-	0.0	0.0	-	0.0	-	97.9	76.9	-	97.2	95.8
Mediums	0	6	3	-	9	0	1	7	-	8	0	7	3	-	10	27
% Mediums	-	35.3	1.2	-	3.3	-	100.0	100.0	-	100.0	-	1.9	23.1	-	2.6	4.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	1	0	-	1	1
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.3	0.0	-	0.3	0.1
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Turning Movement Peak Hour Data Plot (8:00 AM)

4521 900 Lincolnshire, IL
 Olde Half Day Rd. and Half Day School
 Driveway
 4-hr
 GHA MIO

Gewalt Hamilton Associates Inc.
 625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
 (847) 478-9700 dbrinkman@gha-engineers.com

Count Name: Olde Half Day and School
 Driveway
 Site Code:
 Start Date: 11/17/2015
 Page No: 5

Turning Movement Peak Hour Data (3:00 PM)

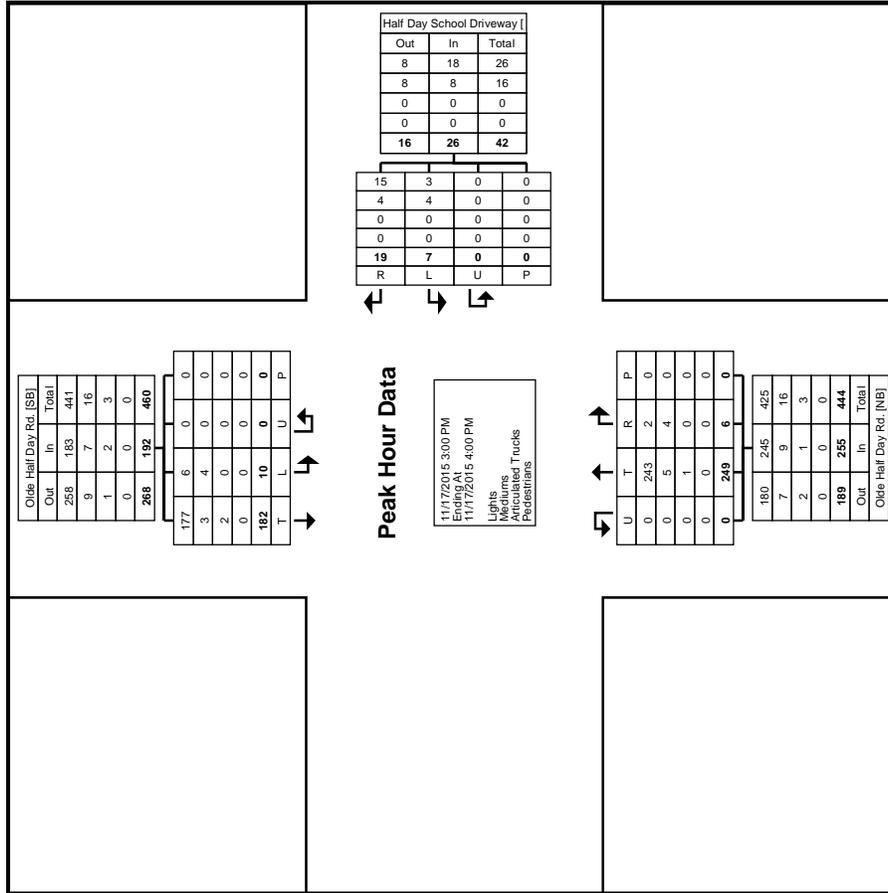
Start Time	Olde Half Day Rd. Southbound				Half Day School Driveway Westbound				Olde Half Day Rd. Northbound							
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
3:00 PM	0	0	44	0	44	0	0	1	0	1	0	45	1	0	46	91
3:15 PM	0	10	51	0	61	0	0	1	0	1	0	45	4	0	49	111
3:30 PM	0	0	47	0	47	0	6	13	0	19	0	109	1	0	110	176
3:45 PM	0	0	40	0	40	0	1	4	0	5	0	50	0	0	50	95
Total	0	10	182	0	192	0	7	19	0	26	0	249	6	0	255	473
Approach %	0.0	5.2	94.8	-	-	0.0	26.9	73.1	-	-	0.0	97.6	2.4	-	-	-
Total %	0.0	2.1	38.5	-	40.6	0.0	1.5	4.0	-	5.5	0.0	52.6	1.3	-	53.9	-
PHF	0.000	0.250	0.892	-	0.787	0.000	0.292	0.365	-	0.342	0.000	0.571	0.375	-	0.580	0.672
Lights	0	6	177	-	183	0	3	15	-	18	0	243	2	-	245	446
% Lights	-	60.0	97.3	-	95.3	-	42.9	78.9	-	69.2	-	97.6	33.3	-	96.1	94.3
Mediums	0	4	3	-	7	0	4	4	-	8	0	5	4	-	9	24
% Mediums	-	40.0	1.6	-	3.6	-	57.1	21.1	-	30.8	-	2.0	66.7	-	3.5	5.1
Articulated Trucks	0	0	2	-	2	0	0	0	-	0	0	1	0	-	1	3
% Articulated Trucks	-	0.0	1.1	-	1.0	-	0.0	0.0	-	0.0	-	0.4	0.0	-	0.4	0.6
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

4521 900 Lincolnshire, IL
 Olde Half Day Rd. and Half Day School
 Driveway
 4-hr
 GHA MIO

Gewalt Hamilton Associates Inc.
 625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
 (847) 478-9700 dbrinkman@gha-engineers.com

Count Name: Olde Half Day and School
 Driveway
 Site Code:
 Start Date: 11/17/2015
 Page No: 6



Turning Movement Peak Hour Data Plot (3:00 PM)

Gewalt Hamilton Associates Inc.
 625 Forest Edge Drive
 Vernon Hills, Illinois, United States 60061
 (847) 478-9700 dbrinkman@gha-engineers.com

Count Name: Olde Half Day and School Exit
 Site Code:
 Start Date: 11/17/2015
 Page No: 1

4521.900 Lincolnshire, IL
 Old Half Day Rd. and Half Day School Entrance
 4-hr
 GHA MIO

Turning Movement Data

Start Time	Olde Half Day Rd. Southbound					Half Day School Exit Westbound					Olde Half Day Rd. Northbound					Church Driveway Eastbound												
	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total	
7:30 AM	0	0	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66	133	
7:45 AM	0	0	95	0	0	0	1	0	0	0	0	0	78	0	0	0	0	0	0	0	0	0	0	0	0	78	174	
Hourly Total	0	0	162	0	0	0	1	0	0	0	1	0	144	0	0	0	0	0	0	0	0	0	0	0	0	144	307	
8:00 AM	0	0	63	0	0	0	1	0	0	0	1	0	83	0	0	0	0	0	0	0	0	0	0	0	0	83	147	
8:15 AM	0	0	61	0	0	0	1	0	0	1	0	0	80	0	0	0	0	0	0	0	0	0	0	0	0	80	142	
8:30 AM	0	0	63	0	0	0	2	0	14	0	16	0	97	0	0	0	0	0	0	0	0	0	0	0	0	97	176	
8:45 AM	0	0	70	0	2	70	0	11	0	29	0	40	0	89	0	3	89	0	2	0	0	0	0	0	0	89	201	
Hourly Total	0	0	257	0	2	257	0	14	0	44	0	58	0	349	0	3	349	0	2	0	0	0	0	0	0	349	666	
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2:30 PM	0	0	37	0	0	37	0	1	0	1	0	2	0	33	0	0	33	0	0	0	0	0	0	0	0	33	72	
2:45 PM	0	0	46	0	0	46	0	0	0	0	0	0	47	0	0	47	0	1	0	0	0	0	0	0	0	47	94	
Hourly Total	0	0	83	0	0	83	0	1	0	1	0	2	0	80	0	0	80	0	1	0	0	0	0	0	0	0	80	166
3:00 PM	0	0	44	0	0	44	0	0	0	2	0	2	0	44	0	0	44	0	0	0	0	0	0	0	0	44	90	
3:15 PM	0	0	49	0	2	49	0	0	0	2	0	2	0	48	0	2	48	0	0	0	0	0	0	0	0	48	99	
3:30 PM	0	0	52	1	3	53	0	15	0	36	0	51	0	71	0	2	71	0	0	0	0	0	0	0	0	71	175	
3:45 PM	0	0	42	1	0	43	0	6	0	5	0	11	0	44	0	0	44	0	1	0	0	0	0	0	0	44	99	
Hourly Total	0	0	187	2	5	189	0	21	0	45	0	66	0	207	0	4	207	0	1	0	0	0	0	0	0	0	207	463
4:00 PM	0	0	47	0	0	47	0	2	0	3	0	5	0	86	0	0	86	0	0	0	0	0	0	0	0	86	138	
4:15 PM	0	0	43	0	0	43	0	2	0	4	0	6	0	57	0	0	57	0	0	0	0	0	0	0	0	57	106	
4:30 PM	0	0	45	0	0	45	0	1	0	2	0	3	0	75	0	0	75	0	0	0	0	0	0	0	0	75	123	
4:45 PM	0	0	62	0	0	62	0	0	0	2	0	2	0	78	0	0	78	0	0	0	0	0	0	0	0	78	142	
Hourly Total	0	0	197	0	0	197	0	5	0	11	0	16	0	296	0	0	296	0	0	0	0	0	0	0	0	0	296	509
Grand Total	0	0	886	2	7	888	0	42	0	101	0	143	0	1076	0	7	1076	0	4	0	0	0	0	0	0	0	1076	2111
Approach %	0.0	0.0	99.8	0.2	-	-	0.0	29.4	0.0	70.6	-	-	0.0	100.0	0.0	-	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	
Total %	0.0	0.0	42.0	0.1	-	42.1	0.0	2.0	0.0	4.8	-	6.8	0.0	51.0	0.0	-	51.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	51.0	1053	
Lights	0	0	858	2	-	860	0	41	0	100	-	141	0	1053	0	-	1053	0	4	0	0	0	0	0	0	4	2058	
% Lights	-	-	96.8	100.0	-	96.8	-	97.6	-	99.0	-	98.6	-	97.9	-	-	97.9	-	100.0	-	-	-	-	-	-	-	100.0	97.5
Mediums	0	0	23	0	-	23	0	1	0	1	-	2	0	22	0	-	22	0	0	0	0	0	0	0	0	0	22	47
% Mediums	-	-	2.6	0.0	-	2.6	-	2.4	-	1.0	-	1.4	-	2.0	-	-	2.0	-	0.0	-	-	-	-	-	-	-	0.0	2.2
Articulated Trucks	0	0	5	0	-	5	0	0	0	0	-	0	0	1	0	-	1	0	0	0	0	0	0	0	0	1	6	
% Articulated Trucks	-	-	0.6	0.0	-	0.6	-	0.0	-	0.0	-	0.0	-	0.1	-	-	0.1	-	0.0	-	-	-	-	-	-	-	0.0	0.3
Pedestrians	-	-	-	-	7	-	-	-	-	-	0	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Gewalt Hamilton Associates Inc.
 625 Forest Edge Drive
 Vernon Hills, Illinois, United States 60061
 (847) 478-9700 dbrinkman@gha-engineers.com

Count Name: Olde Half Day and School Exit
 Site Code:
 Start Date: 11/17/2015
 Page No: 3

4521.900 Lincolnshire, IL
 Old Half Day Rd. and Half Day School Entrance
 4-hr
 GHA MIO

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Olde Half Day Rd. Southbound					Half Day School Exit Westbound					Olde Half Day Rd. Northbound					Church Driveway Eastbound												
	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total	
8:00 AM	0	0	63	0	0	0	1	0	0	0	0	0	83	0	0	0	0	0	0	0	0	0	0	0	0	83	0	
8:15 AM	0	0	61	0	0	0	0	0	1	0	1	0	80	0	0	0	0	0	0	0	0	0	0	0	0	80	0	
8:30 AM	0	0	63	0	0	0	2	0	14	0	16	0	97	0	0	0	0	0	0	0	0	0	0	0	0	97	0	
8:45 AM	0	0	70	0	2	70	11	0	29	0	40	0	89	0	3	89	2	0	0	0	0	0	0	0	0	89	2	
Total	0	0	257	0	2	257	14	0	44	0	58	0	349	0	3	349	2	0	0	0	0	0	0	0	0	349	2	
Approach %	0.0	0.0	100.0	0.0	-	0.0	24.1	0.0	75.9	-	-	0.0	100.0	0.0	-	0.0	100.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-
Total %	0.0	0.0	38.6	0.0	-	38.6	2.1	0.0	6.6	-	8.7	0.0	52.4	0.0	-	52.4	0.3	0.0	0.0	0.0	-	-	0.3	0.0	0.0	-	0.3	
PHF	0.000	0.000	0.918	0.000	-	0.918	0.318	0.000	0.379	-	0.363	0.000	0.899	0.000	-	0.899	0.250	0.000	0.000	0.000	-	-	0.250	0.000	0.000	-	0.250	
Lights	0	0	252	0	-	252	14	0	43	-	57	0	340	0	-	340	2	0	0	0	-	-	2	0	0	-	2	
% Lights	-	-	98.1	-	-	98.1	100.0	-	97.7	-	96.3	-	97.4	-	-	97.4	100.0	-	-	-	-	-	100.0	-	-	-	97.7	
Mediums	0	0	5	0	-	5	0	0	1	-	1	0	9	0	-	9	0	0	0	0	-	0	0	0	0	9	0	
% Mediums	-	-	1.9	-	-	1.9	0.0	-	2.3	-	1.7	-	2.6	-	-	2.6	0.0	-	-	-	-	0.0	-	-	-	2.6	0.0	
Articulated Trucks	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	0	
% Articulated Trucks	-	-	0.0	-	-	0.0	0.0	-	0.0	-	0.0	-	0.0	-	-	0.0	0.0	-	-	-	-	0.0	-	-	-	0.0	0.0	
Pedestrians	-	-	-	-	2	-	-	-	-	0	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	3	-	
% Pedestrians	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	100.0	-	

Gewalt Hamilton Associates Inc.
 625 Forest Edge Drive
 Vernon Hills, Illinois, United States 60061
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Count Name: Olde Half Day and School Exit
 Site Code:
 Start Date: 11/17/2015
 Page No: 5

4521.900 Lincolnshire, IL
 Old Half Day Rd. and Half Day School Entrance
 4-hr
 GHA MIO

Turning Movement Peak Hour Data (3:00 PM)

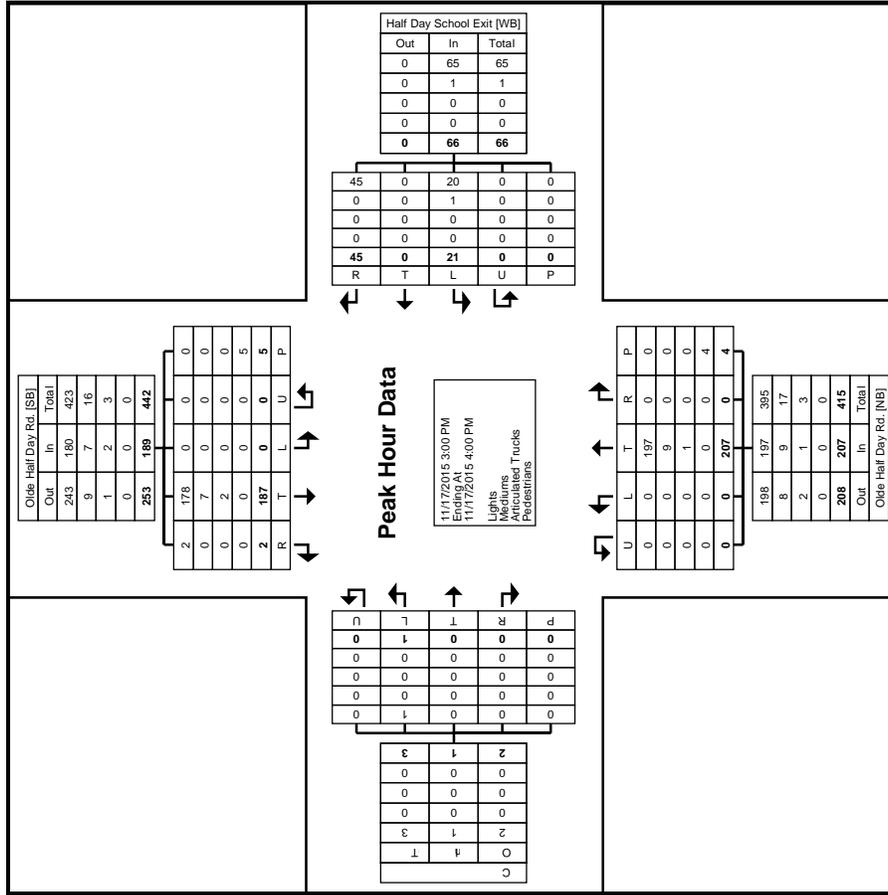
Start Time	Olde Half Day Rd. Southbound					Half Day School Exit Westbound					Olde Half Day Rd. Northbound					Church Driveway Eastbound											
	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
3:00 PM	0	0	44	0	0	0	0	0	2	0	0	0	44	0	0	0	0	0	0	0	0	0	0	0	0	44	0
3:15 PM	0	0	49	0	2	0	0	2	2	0	0	0	48	0	2	0	0	0	0	0	0	0	0	0	0	48	0
3:30 PM	0	0	52	1	3	0	15	0	36	0	51	0	71	0	2	0	0	0	0	0	0	0	0	0	0	71	175
3:45 PM	0	0	42	1	0	0	6	0	5	0	11	0	44	0	0	0	1	0	0	0	0	0	0	0	0	44	99
Total	0	0	187	2	5	0	21	0	45	0	66	0	207	0	4	0	1	0	0	0	0	0	0	0	0	207	463
Approach %	0.0	0.0	98.9	1.1	-	0.0	31.8	0.0	68.2	-	-	0.0	100.0	0.0	-	0.0	100.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	-
Total %	0.0	0.0	40.4	0.4	-	0.0	4.5	0.0	9.7	-	14.3	0.0	44.7	0.0	-	0.0	0.2	0.0	0.0	-	0.0	0.2	0.0	0.0	-	0.2	-
PHF	0.000	0.000	0.899	0.500	-	0.000	0.350	0.000	0.313	-	0.324	0.000	0.729	0.000	-	0.000	0.250	0.000	0.000	-	0.000	0.250	0.000	0.000	-	0.250	0.861
Lights	0	0	178	2	-	0	20	0	45	-	65	0	197	0	-	0	1	0	0	-	0	1	0	0	-	197	443
% Lights	-	-	95.2	100.0	-	-	95.2	-	100.0	-	98.5	-	95.2	-	-	-	100.0	-	-	-	-	100.0	-	-	-	95.2	95.7
Mediums	0	0	7	0	-	0	1	0	0	-	1	0	9	0	-	0	0	0	0	-	0	0	0	0	-	9	17
% Mediums	-	-	3.7	0.0	-	-	4.8	-	0.0	-	1.5	-	4.3	-	-	-	0.0	-	-	-	-	0.0	-	-	-	4.3	3.7
Articulated Trucks	0	0	2	0	-	0	0	0	0	-	0	0	1	0	-	0	0	0	0	-	0	0	0	0	-	1	3
% Articulated Trucks	-	-	1.1	0.0	-	-	0.0	-	0.0	-	0.0	-	0.5	-	-	-	0.0	-	-	-	-	0.0	-	-	-	0.5	0.6
Pedestrians	-	-	-	-	5	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
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Count Name: Olde Half Day and School Exit
Site Code:
Start Date: 11/17/2015
Page No: 6

4521.900 Lincolnshire, IL
Old Half Day Rd. and Half Day School Entrance
4-hr
GHA MIO



Turning Movement Peak Hour Data Plot (3:00 PM)

Count Name: Olde Half Day and School
Entrance
Site Code:
Start Date: 11/17/2015
Page No: 1

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive
Vernon Hills, Illinois, United States 60061
(847) 478-9700 dbrinkman@gha-engineers.com

4521 900 Lincolnshire, IL
Olde Half Day Rd. and Half Day School
Entrance
4-hr
GHA MIO

Turning Movement Data

Start Time	Olde Half Day Rd. Southbound					Half Day School Entrance Westbound					Olde Half Day Rd. Northbound					Vernon Library Eastbound												
	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total	
7:30 AM	0	0	79	1	0	0	0	0	0	0	0	2	75	2	0	0	2	0	0	0	0	2	0	0	0	0	0	161
7:45 AM	0	7	91	0	0	0	0	0	0	0	0	1	84	2	0	0	0	0	0	0	0	0	0	0	0	0	0	185
Hourly Total	0	7	170	1	0	0	0	0	0	0	0	3	159	4	0	0	2	0	0	0	0	2	0	0	0	0	2	346
8:00 AM	0	3	61	2	0	0	0	0	0	0	0	3	68	0	0	0	1	0	0	0	0	0	0	0	0	0	1	138
8:15 AM	0	2	58	1	0	0	0	0	0	0	0	3	62	1	0	0	0	1	0	0	0	0	0	0	0	0	1	128
8:30 AM	0	9	56	4	0	0	0	0	0	0	0	2	90	12	0	0	3	0	0	0	0	0	0	0	0	0	3	176
8:45 AM	0	19	48	11	0	0	0	0	0	0	0	9	89	18	0	0	2	0	0	0	0	0	0	0	0	0	2	196
Hourly Total	0	33	223	18	0	0	0	0	0	0	0	17	309	31	0	0	7	0	0	0	0	0	0	0	0	0	7	638
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2:30 PM	0	0	37	4	0	0	0	0	0	0	0	6	31	3	0	0	3	0	4	0	0	0	0	4	0	0	7	88
2:45 PM	0	4	38	3	0	0	0	0	0	0	0	6	48	1	0	0	1	0	6	0	0	0	0	6	0	0	7	107
Hourly Total	0	4	75	7	0	0	0	0	0	0	0	12	79	4	0	0	4	0	10	0	0	0	0	10	0	0	14	195
3:00 PM	0	9	41	3	0	0	0	0	0	0	0	8	42	5	0	0	3	0	6	0	0	0	0	6	0	0	9	117
3:15 PM	0	9	41	6	0	0	0	0	0	0	0	12	41	13	0	0	4	1	8	0	0	0	1	8	0	0	13	135
3:30 PM	0	7	54	9	0	0	0	0	0	0	0	10	66	9	0	0	4	1	5	0	0	0	4	1	5	0	10	165
3:45 PM	0	2	42	3	0	0	0	0	0	0	0	10	45	3	0	0	1	0	6	0	0	0	1	0	6	0	7	112
Hourly Total	0	27	178	21	0	0	0	0	0	0	0	40	194	30	0	0	12	2	25	0	0	0	12	2	25	0	39	529
4:00 PM	0	0	42	8	0	0	0	0	0	0	0	11	81	2	0	0	3	0	11	0	0	0	3	0	11	0	14	158
4:15 PM	0	0	41	8	0	0	0	0	0	0	0	15	54	2	0	0	0	3	0	13	0	0	0	13	0	0	16	136
4:30 PM	0	2	44	2	0	0	0	0	0	0	0	18	68	1	0	0	6	0	8	1	0	0	6	0	8	1	14	149
4:45 PM	0	1	57	6	0	0	0	0	0	0	0	15	71	3	0	0	9	0	5	0	0	0	9	0	5	0	14	167
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Grand Total	0	74	830	71	0	0	0	0	0	0	0	131	1015	77	0	0	46	2	72	1	0	0	46	2	72	1	120	2318
Approach %	0.0	7.6	85.1	7.3	-	-	-	-	-	-	0.0	10.7	83.0	6.3	-	0.0	38.3	1.7	60.0	-	-	0.0	38.3	1.7	60.0	-	-	-
Total %	0.0	3.2	35.8	3.1	-	-	-	-	-	-	0.0	5.7	43.8	3.3	-	0.0	2.0	0.1	3.1	-	-	0.0	2.0	0.1	3.1	-	5.2	-
Lights	0	72	791	71	-	-	-	-	-	-	0	131	996	77	-	0	46	2	72	-	-	0	46	2	72	-	120	2258
% Lights	-	97.3	95.3	100.0	-	-	-	-	-	-	-	100.0	98.1	100.0	-	-	100.0	100.0	100.0	-	-	-	100.0	100.0	100.0	-	100.0	97.4
Mediums	0	2	35	0	-	-	-	-	-	-	0	0	18	0	-	0	0	0	0	-	-	0	0	0	0	-	0	5.5
% Mediums	-	2.7	4.2	0.0	-	-	-	-	-	-	-	0.0	1.8	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	-	0.0	2.4
Articulated Trucks	0	0	4	0	-	-	-	-	-	-	0	0	1	0	-	0	0	0	0	-	-	0	0	0	0	-	0	5
% Articulated Trucks	-	0.0	0.5	0.0	-	-	-	-	-	-	-	0.0	0.1	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	-	0.0	0.2
Pedestrians	-	-	-	-	0	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-
% Pedestrians	-	-	-	-	0	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-

4521 900 Lincolnshire, IL
 Olde Half Day Rd. and Half Day School
 Entrance
 4-hr
 GHA MIO

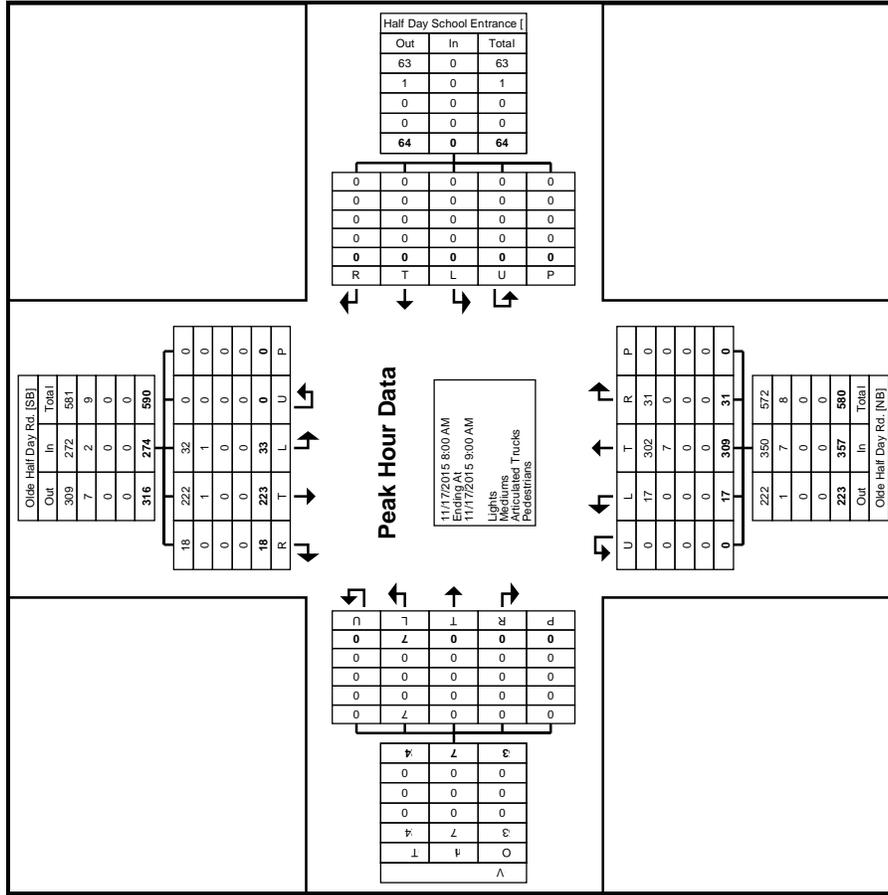
Gewalt Hamilton Associates Inc.
 625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
 (847) 478-9700 dbrinkman@gha-engineers.com

Count Name: Olde Half Day and School
 Entrance
 Site Code:
 Start Date: 11/17/2015
 Page No: 3

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Olde Half Day Rd. Southbound					Half Day School Entrance Westbound					Olde Half Day Rd. Northbound					Vernon Library Eastbound												
	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total	
8:00 AM	0	3	61	2	0	0	0	0	0	0	0	3	68	0	0	0	1	0	0	0	0	0	1	0	0	0	1	138
8:15 AM	0	2	58	1	0	0	0	0	0	0	0	3	62	1	0	0	1	0	0	0	0	0	1	0	0	0	1	128
8:30 AM	0	9	56	4	0	0	0	0	0	0	2	90	12	0	104	0	3	0	0	0	0	3	0	0	0	3	176	
8:45 AM	0	19	48	11	0	0	0	0	0	0	9	89	18	0	116	0	2	0	0	0	0	2	0	0	0	2	196	
Total	0	33	223	18	0	0	0	0	0	0	17	309	31	0	357	0	7	0	0	0	0	7	0	0	0	7	638	
Approach %	0.0	12.0	81.4	6.6	-	NaN	NaN	NaN	NaN	-	0.0	4.8	86.6	8.7	-	0.0	100.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
Total %	0.0	5.2	35.0	2.8	-	0.0	0.0	0.0	0.0	-	0.0	2.7	48.4	4.9	-	0.0	1.1	0.0	0.0	0.0	-	-	-	-	-	-	-	-
PHF	0.000	0.434	0.914	0.409	-	0.000	0.000	0.000	0.000	-	0.000	0.472	0.858	0.431	-	0.000	0.583	0.000	0.000	0.000	-	-	-	-	-	-	-	-
Lights	0	32	222	18	-	0	0	0	0	-	0	17	302	31	-	0	7	0	0	0	-	0	7	0	0	0	7	629
% Lights	-	97.0	99.6	100.0	-	-	-	-	-	-	-	100.0	97.7	100.0	-	-	100.0	-	-	-	-	-	100.0	-	-	-	100.0	98.6
Mediums	0	1	1	0	-	0	0	0	0	-	0	0	7	0	-	0	0	0	0	0	-	0	0	0	0	0	0	9
% Mediums	-	3.0	0.4	0.0	-	-	-	-	-	-	-	0.0	2.3	0.0	-	-	0.0	-	-	-	-	-	0.0	-	-	-	0.0	1.4
Articulated Trucks	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	-	-	-	-	-	-	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	0.0	-	-	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Turning Movement Peak Hour Data Plot (8:00 AM)

4521 900 Lincolnshire, IL
 Olde Half Day Rd. and Half Day School
 Entrance
 4-hr
 GHA MIO

Gewalt Hamilton Associates Inc.
 625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
 (847) 478-9700 dbrinkman@gha-engineers.com

Count Name: Olde Half Day and School
 Entrance
 Site Code:
 Start Date: 11/17/2015
 Page No: 5

Turning Movement Peak Hour Data (3:00 PM)

Start Time	Olde Half Day Rd. Southbound					Half Day School Entrance Westbound					Olde Half Day Rd. Northbound					Vernon Library Eastbound										
	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	Int. Total
3:00 PM	0	9	41	3	53	0	0	0	0	0	0	8	42	5	55	0	3	0	6	9	0	0	0	0	0	117
3:15 PM	0	9	41	6	56	0	0	0	0	0	0	12	41	13	66	0	4	1	8	13	0	0	0	0	0	135
3:30 PM	0	7	54	9	70	0	0	0	0	0	0	10	66	9	85	0	4	1	5	10	0	0	0	0	0	165
3:45 PM	0	2	42	3	47	0	0	0	0	0	0	10	45	3	58	0	1	0	6	7	0	0	0	0	0	112
Total	0	27	178	21	226	0	0	0	0	0	0	40	194	30	264	0	12	2	25	39	0	0	0	0	0	529
Approach %	0.0	11.9	78.8	9.3	-	NaN	NaN	NaN	NaN	-	0.0	15.2	73.5	11.4	-	0.0	30.8	5.1	64.1	-	0.0	0.0	0.0	0.0	0.0	-
Total %	0.0	5.1	33.6	4.0	42.7	0.0	0.0	0.0	0.0	0.0	0.0	7.6	36.7	5.7	49.9	0.0	2.3	0.4	4.7	7.4	0.0	0.0	0.0	0.0	0.0	-
PHF	0.000	0.750	0.824	0.583	0.807	0.000	0.000	0.000	0.000	0.000	0.000	0.833	0.735	0.577	0.776	0.000	0.750	0.500	0.781	0.750	0.000	0.000	0.000	0.500	0.781	0.802
Lights	0	26	171	21	218	0	0	0	0	0	0	40	185	30	255	0	12	2	25	39	0	0	0	2	25	512
% Lights	-	96.3	96.1	100.0	96.5	-	-	-	-	-	-	100.0	95.4	100.0	96.6	-	100.0	100.0	100.0	100.0	-	-	-	100.0	100.0	96.8
Mediums	0	1	5	0	6	0	0	0	0	0	0	0	8	0	8	0	0	0	0	0	0	0	0	0	0	14
% Mediums	-	3.7	2.8	0.0	2.7	-	-	-	-	-	-	0.0	4.1	0.0	3.0	-	0.0	0.0	0.0	0.0	-	-	-	0.0	0.0	2.6
Articulated Trucks	0	0	2	0	2	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3
% Articulated Trucks	-	0.0	1.1	0.0	0.9	-	-	-	-	-	-	0.0	0.5	0.0	0.4	-	0.0	0.0	0.0	0.0	-	-	-	0.0	0.0	0.6
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Wight

Wight & Company
wightco.com
2500 North Frontage Road
Darien, IL 60551
P 630.969.7000
F 630.969.7979

GHA JOB #4521.100

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive • Vernon Hills, IL 60061
Tel. 847.478.9700 • Fax 847.478.9701



GRAPHIC SCALE
30 0 15 30
(IN FEET)
1 inch = 30 ft.



RECONFIGURED PARKING LOT.
38 STANDARD SPACES, 4 ACCESSIBLE SPACES

B6.12 CURB & GUTTER AROUND
PERIMETER OF PARKING LOT

LEGEND

- CONCRETE SIDEWALK
- HMA PAVEMENT
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION

REV	DESCRIPTION	DATE
	PER VILLAGE COMMENTS	01.08.2016
	ZONING BOARD SUBMITTAL	01.04.2015
	COMMITTEE OF THE WHOLE SUBMITTAL	12.04.2015
	DESCRIPTION	DATE

HALF DAY INTERMEDIATE SCHOOL

2425 RIVERWOODS ROAD
LINCOLNSHIRE, IL 60069

PRELIMINARY SITE PLAN

Project Number:
02-5467-05
Drawn By:
LLM
Sheet:

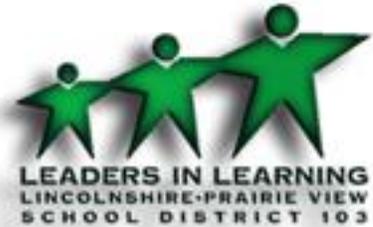
Appendix C - Site Plan

C2.0

Village of Lincolnshire
Zoning Board Submittal Packet

Lincolnshire – Prairie View School District 103 Additions to Laura B. Sprague Elementary School

January 8, 2016



Lincolnshire Prairie View School District 103
1370 N. Riverwoods Road
Lincolnshire, IL 60069



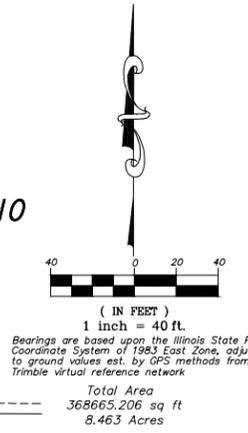
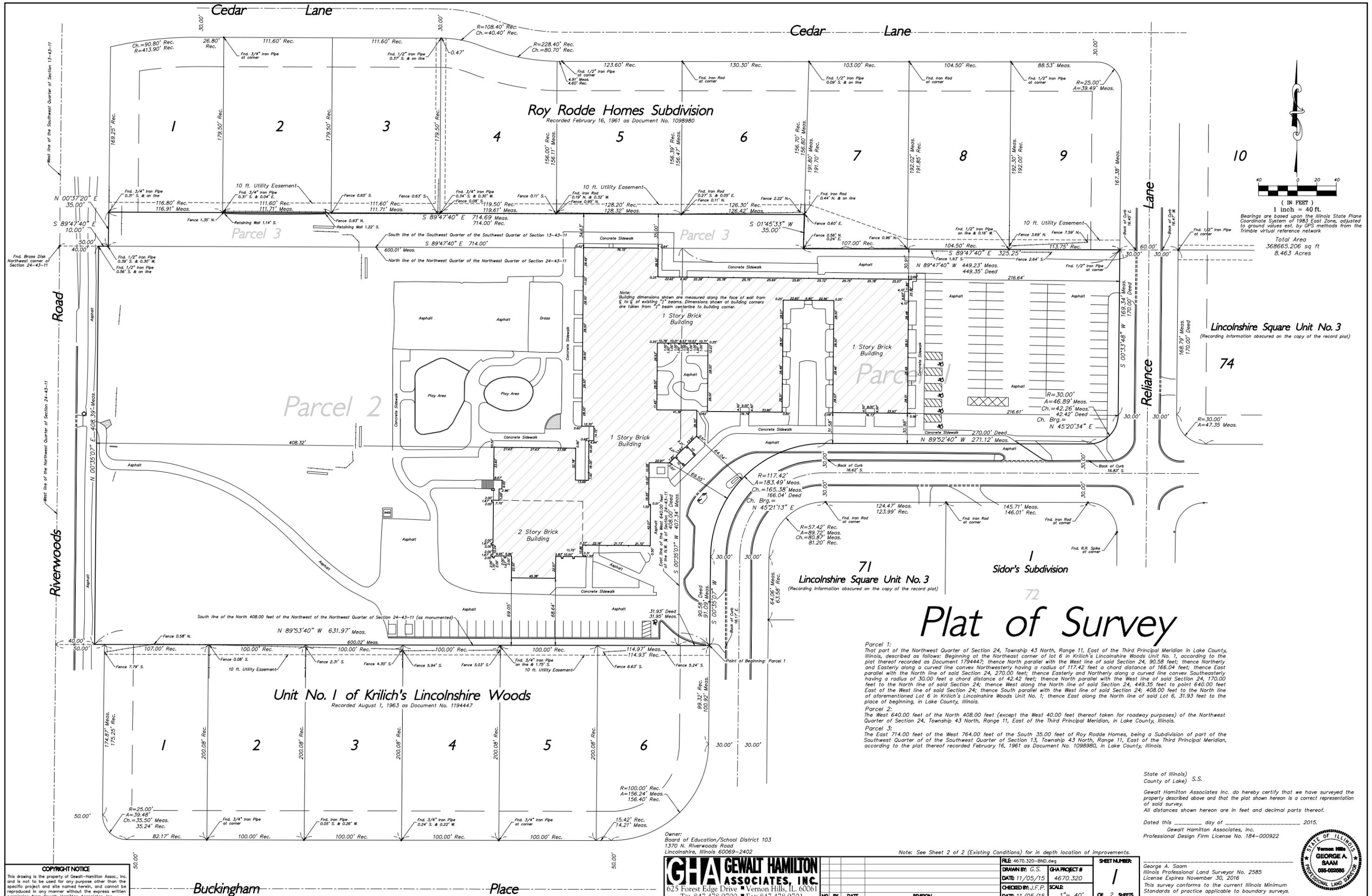
Prepared by:
Wight & Company
2500 North Frontage Road
Darien, IL 60561
630-969-7000

A/E Project No. 02-5467-06

Village of Lincolnshire
Zoning Board Submittal Packet
Lincolnshire – Prairie View School District 103
Additions to Laura B. Sprague Elementary School

Plat of Survey

January 8, 2016



Plat of Survey

Parcel 1:
That part of the Northwest Quarter of Section 24, Township 43 North, Range 11, East of the Third Principal Meridian in Lake County, Illinois, described as follows: Beginning at the Northeast corner of lot 6 in Krilich's Lincolnshire Woods Unit No. 1, according to the plat thereof recorded as Document 1794447; thence North parallel with the West line of said Section 24, 90.58 feet; thence North and Easterly along a curved line convex Northwesterly having a radius of 117.42 feet a chord distance of 168.04 feet; thence East parallel with the North line of said Section 24, 270.00 feet; thence Easterly and Northwesterly along a curved line convex Southeasterly having a radius of 30.00 feet a chord distance of 42.42 feet; thence North parallel with the West line of said Section 24, 170.00 feet to the North line of said Section 24; thence West along the North line of said Section 24, 449.35 feet to point 640.00 feet East of the West line of said Section 24; thence South parallel with the West line of said Section 24; 408.00 feet to the North line of aforementioned Lot 6 in Krilich's Lincolnshire Woods Unit No. 1; thence East along the North line of said Lot 6, 31.93 feet to the place of beginning, in Lake County, Illinois.

Parcel 2:
The West 640.00 feet of the North 408.00 feet (except the West 40.00 feet thereof taken for roadway purposes) of the Northwest Quarter of Section 24, Township 43 North, Range 11, East of the Third Principal Meridian, in Lake County, Illinois.

Parcel 3:
The East 714.00 feet of the West 764.00 feet of the South 35.00 feet of Roy Rodde Homes, being a Subdivision of part of the Southwest Quarter of Section 13, Township 43 North, Range 11, East of the Third Principal Meridian, according to the plat thereof recorded February 16, 1961 as Document No. 1098980, in Lake County, Illinois.

State of Illinois)
County of Lake) S.S.

Gewalt Hamilton Associates Inc. do hereby certify that we have surveyed the property described above and that the plat shown hereon is a correct representation of said survey.

All distances shown hereon are in feet and decimal parts thereof.

Dated this _____ day of _____ 2015.

Gewalt Hamilton Associates, Inc.
Professional Design Firm License No. 184-000922



Owner:
Board of Education/School District 103
1370 N. Riverwoods Road
Lincolnshire, Illinois 60069-2402

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

Note: See Sheet 2 of 2 (Existing Conditions) for in depth location of improvements.

FILE: 4670.320-BND.dwg	SHEET NUMBER: 1
DRAWN BY: G.S.	GHA PROJECT #: 4670.320
DATE: 11/05/15	SCALE: 1" = 40'
CHECKED BY: J.F.P.	OF 2 SHEETS
DATE: 11/05/15	

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Buckingham

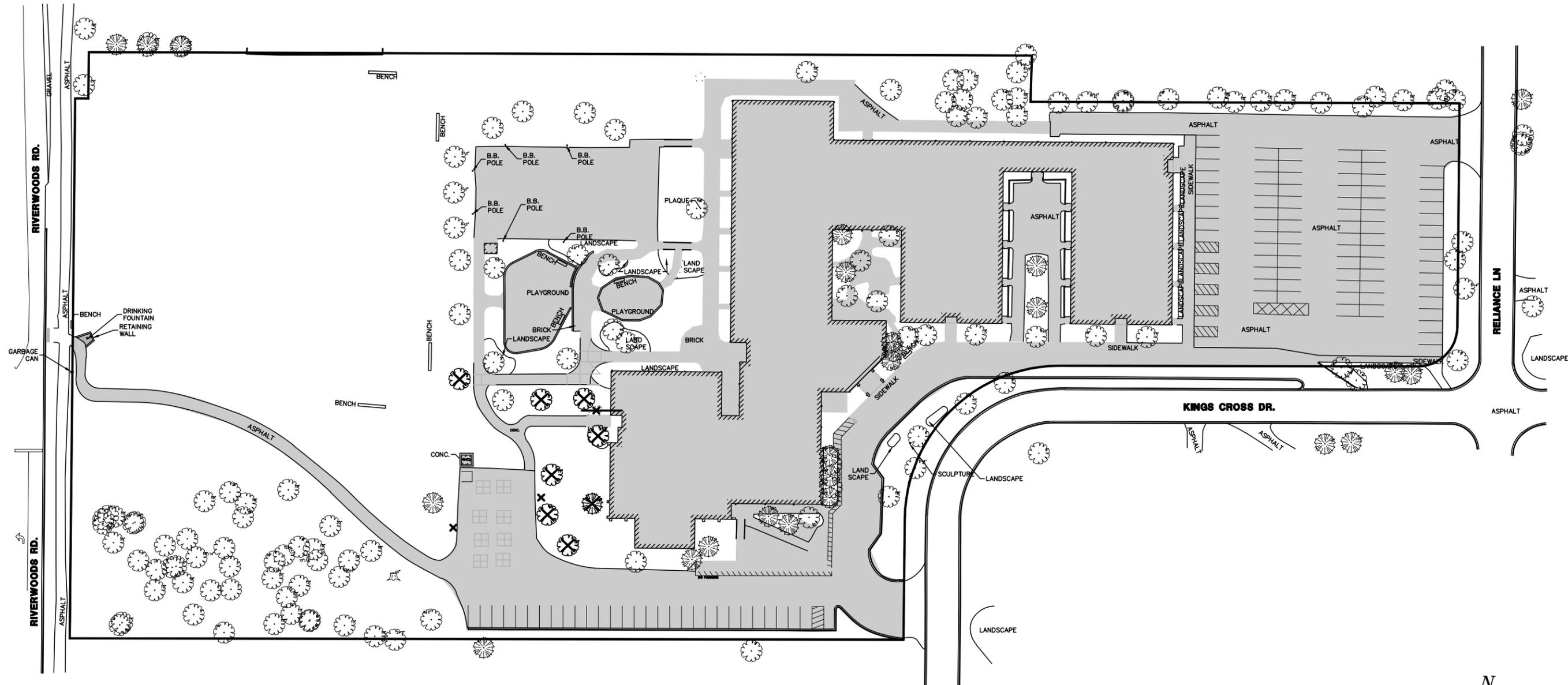
Place

NO.	DATE	REVISION

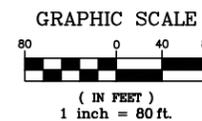
Village of Lincolnshire
Zoning Board Submittal Packet
Lincolnshire – Prairie View School District 103
Additions to Laura B. Sprague Elementary School

Impervious Surface Drawings

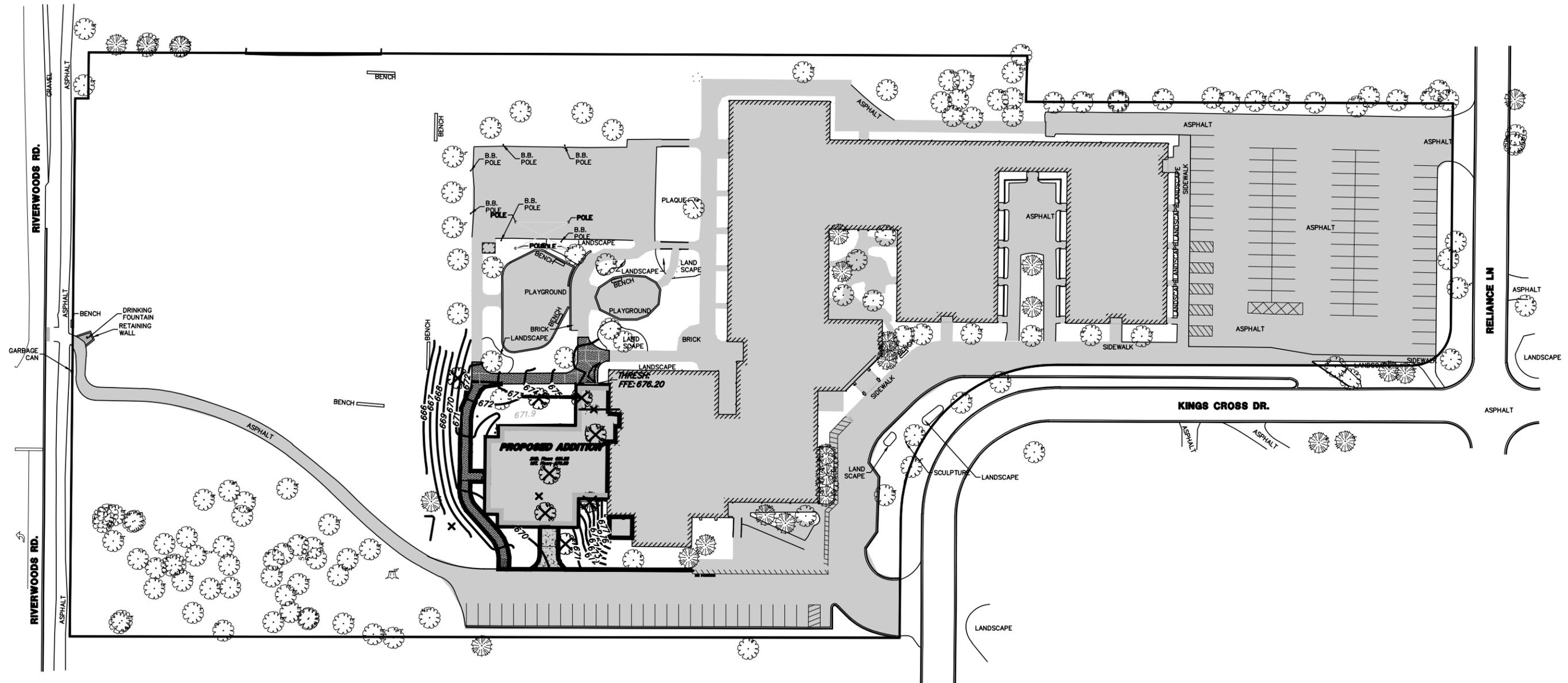
January 8, 2016



TOTAL PROPERTY AREA - 8.46 ACRES
PRE-1992 IMPERVIOUS AREA - 3.63 ACRES
CURRENT IMPERVIOUS AREA - 3.93 ACRES

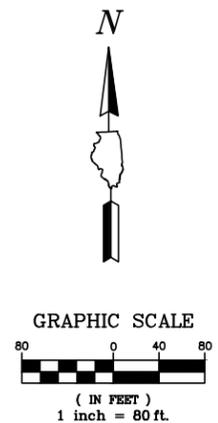


NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION



TOTAL PROPERTY AREA - 8.46 ACRES
PRE-1992 IMPERVIOUS AREA - 3.63 ACRES
CURRENT IMPERVIOUS AREA - 3.93 ACRES
PROPOSED IMPERVIOUS AREA - 3.97 ACRES

INCREASE IN IMPERVIOUS AREA SINCE 1992 - 0.34 ACRES



NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION

Village of Lincolnshire
Zoning Board Submittal Packet
Lincolnshire – Prairie View School District 103
Additions to Laura B. Sprague Elementary School

Civil Drawings

January 8, 2016



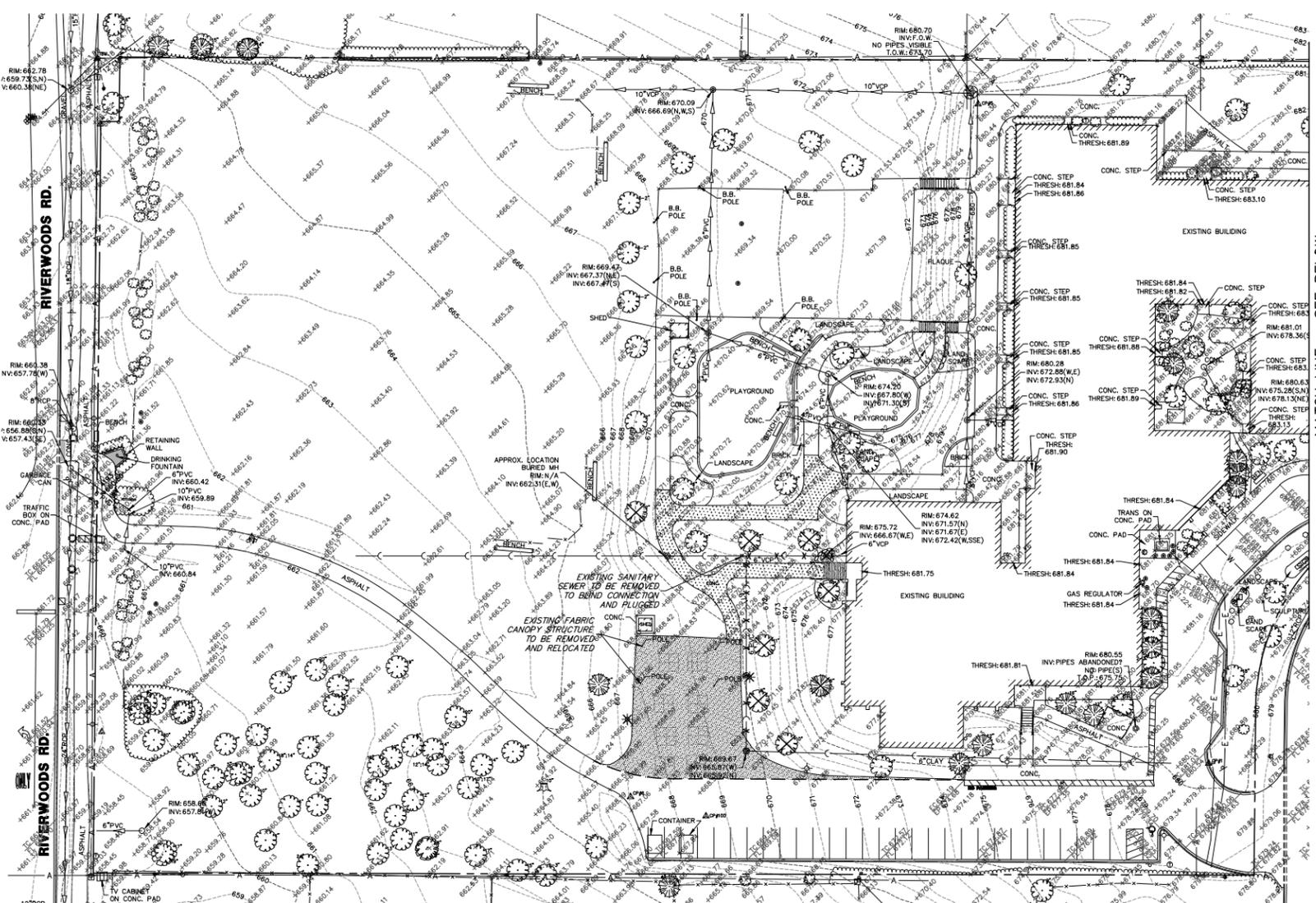
Wight

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GHA JOB #4521.100

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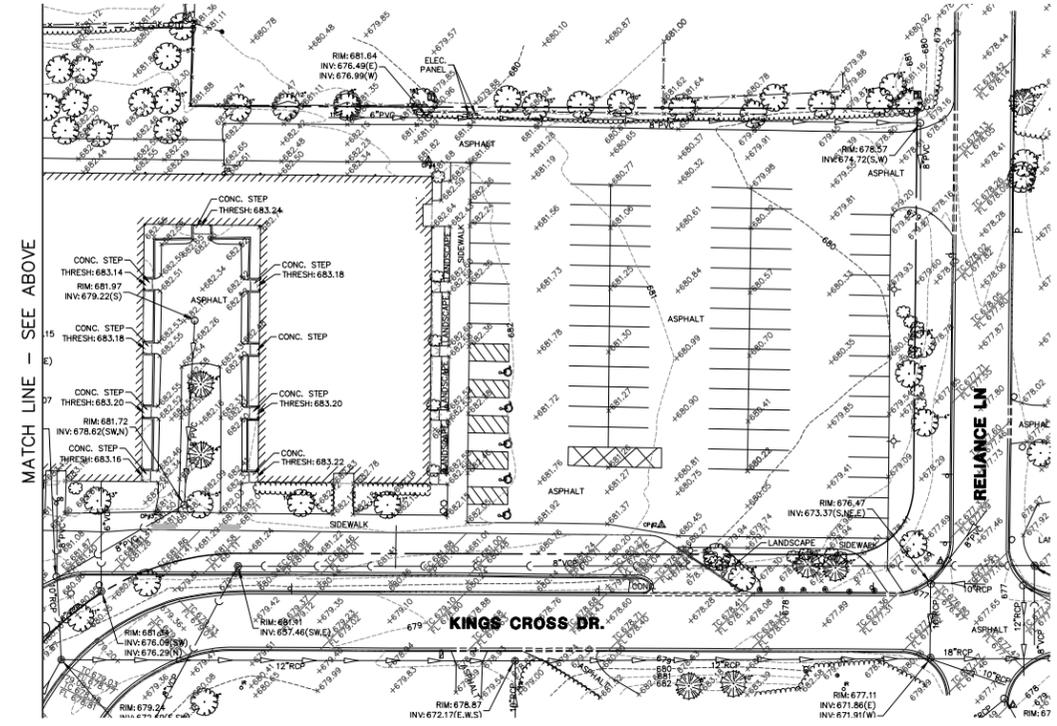
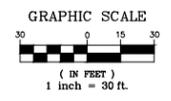
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MATCH LINE - SEE BELOW

LEGEND

- BITUMINOUS PAVEMENT REMOVAL
- SIDEWALK REMOVAL
- CONCRETE REMOVAL
- SAWCUT
- UTILITY REMOVAL
- UTILITY ABANDON
- STRUCTURE REMOVAL
- TREE/SHRUB REMOVAL
- ROOT PRUNE
- CONSTRUCTION FENCE
- TREE PROTECTION FENCE



MATCH LINE - SEE ABOVE

REV DESCRIPTION DATE

REV	DESCRIPTION	DATE
01	ZONING BOARD SUBMISSION	01.04.2015
02	COMMITTEE OF THE WHOLE SUBMITTAL	12.04.2015
03	DESCRIPTION	DATE

**LAURA B. SPRAGUE
ELEMENTARY
SCHOOL**

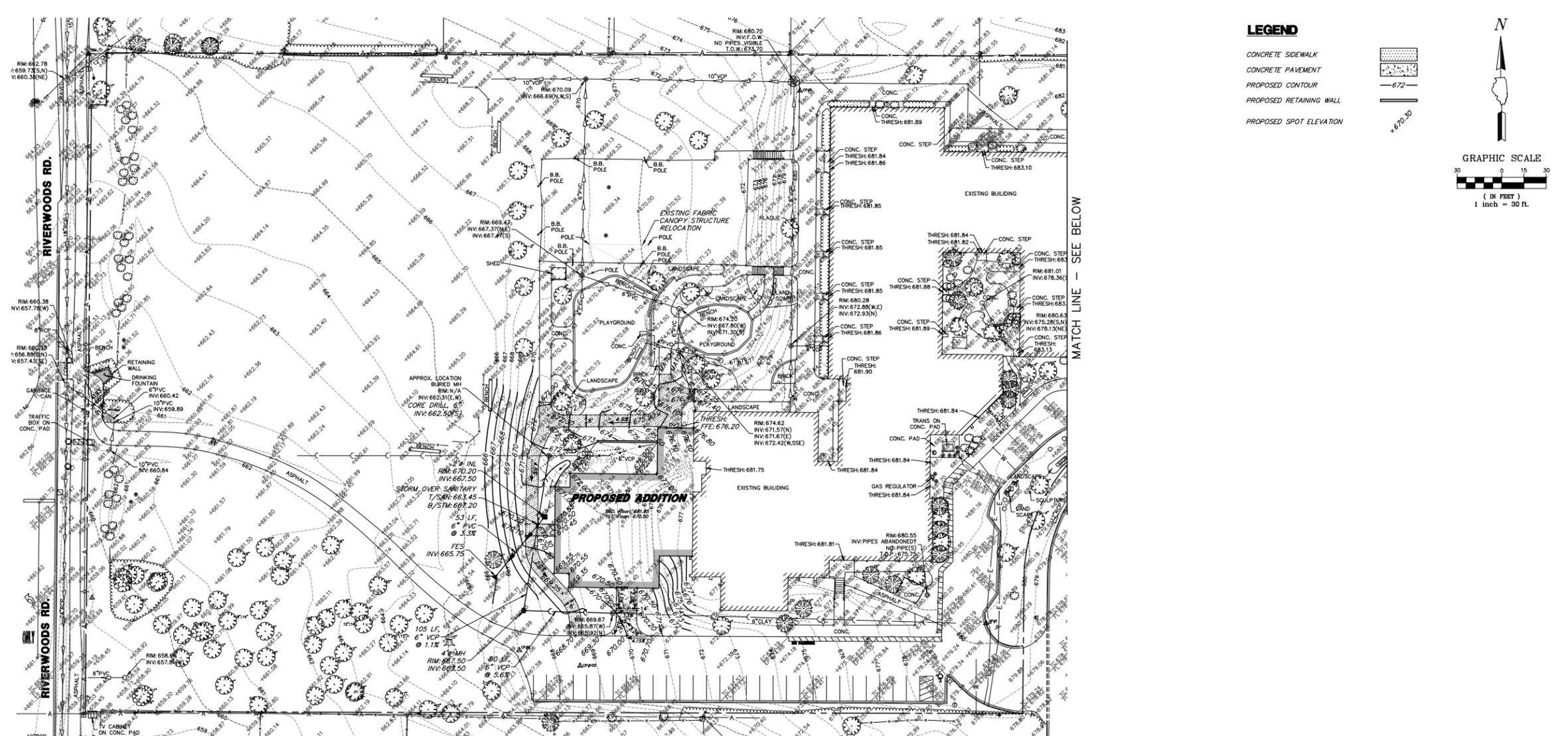
2425 RIVERWOODS ROAD
LINCOLNSHIRE, IL 60069

**EXISTING CONDITIONS/
DEMOLITION PLAN**

Project Number:
02-5467-05
Drawn By:
KAJ/JALC
Sheet:

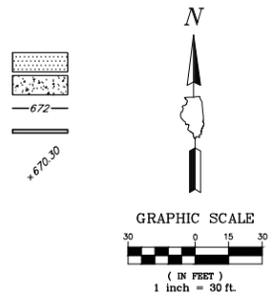
C3.0

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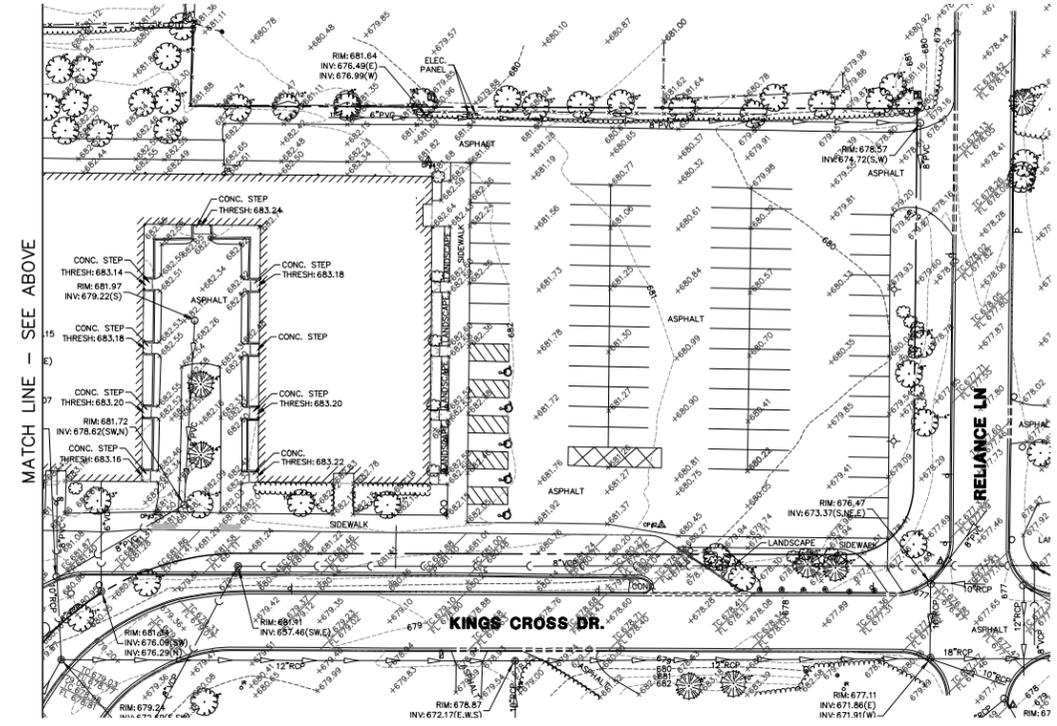


LEGEND

- CONCRETE SIDEWALK
- CONCRETE PAVEMENT
- PROPOSED CONTOUR
- PROPOSED RETAINING WALL
- PROPOSED SPOT ELEVATION



MATCH LINE - SEE BELOW



MATCH LINE - SEE ABOVE



Wight

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wightco.com
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Darien, IL 60551
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F 630.969.7979

GHA JOB #4521.100
GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive • Vernon Hills, IL 60061
Tel. 847.478.9700 • Fax 847.478.9701

REV	DESCRIPTION	DATE
ZONING BOARD SUBMISSION		01.04.2015
COMMITTEE OF THE WHOLE SUBMITTAL		12.04.2015
DESCRIPTION		DATE

LAURA B. SPRAGUE ELEMENTARY SCHOOL

2425 RIVERWOODS ROAD
LINCOLNSHIRE, IL 60069

PRELIMINARY SITE PLAN

Project Number:
02-5467-05
Drawn By:
KAJ/JALC
Sheet:

C4.0

Village of Lincolnshire
Zoning Board Submittal Packet
Lincolnshire – Prairie View School District 103
Additions to Laura B. Sprague Elementary School

Landscape Drawings

January 8, 2016



Wight

Wight & Company
wightco.com
2500 North Frontage Road
Danm., IL 60561
P 630.969.7000
F 630.969.7979

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625 Forest Edge Drive • Vernon Hills, IL 60061
Tel: 847.478.9700 • Fax: 847.478.9701

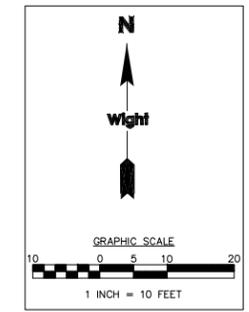
LEGEND

- BITUMINOUS PAVEMENT REMOVAL
- SIDEWALK REMOVAL
- STRUCTURE REMOVAL
- TREE/SHRUB REMOVAL
- PROPOSED DECIDUOUS TREE
- PROPOSED EVERGREEN TREE

Proposed Tree Schedule				
Evergreens to be Removed				
QTY	KEY	Species	Unit DBH	Net DBH
1		Spruce (Sp.)	6.0	6.0
Evergreens to be Planted				
QTY	KEY	Species	Unit DBH	Net DBH
1	PIPU	Colorado Blue Spruce-8'	3.0	3.0
Deciduous Trees to be Removed				
QTY	KEY	Species	Unit DBH	Net DBH
1		Honey Locust	9.0	9.0
1		Honey Locust	10.0	10.0
1		Honey Locust	11.0	11.0
Deciduous Trees to be Planted				
QTY	KEY	Species	Unit DBH	Net DBH
2	GIBI	Princeton Sentry Ginkgo(Male)	3.0	6.0
1	TIAM	American Linden	3.0	3.0

LANDSCAPE NOTES

1. ANY DAMAGE TO THE RIGHT-OF-WAY DURING DEMOLITION SHALL BE RESTORED TO EXISTING CONDITIONS.
2. ALL DIMENSIONS ARE TO THE BACK OF CURB/EDGE OF PAVEMENT UNLESS OTHERWISE SHOWN. ALL RADII DIMENSIONS ARE TO THE BACK OF CURB/EDGE OF PAVEMENT.
3. CONTRACTOR TO PROTECT ALL EXISTING UTILITIES DURING DEMOLITION AND CONSTRUCTION ACTIVITIES UNLESS OTHERWISE SPECIFIED.
4. ALL EXISTING TREES TO REMAIN AND TO BE PROTECTED UNLESS OTHERWISE NOTED.
5. ANY UTILITY ADJUSTMENTS, CONFLICTS, RELOCATIONS, ETC. REQUIRED SHALL BE COORDINATED WITH ENGINEER AND UTILITY OWNER/PROVIDER.
6. ALL REMOVAL OF CONCRETE SHALL BE DONE TO THE NEAREST JOINT.
7. ANY DAMAGE TO THE LANDSCAPE AREAS SHALL BE RESTORED TO EXISTING CONDITIONS.
8. PROPOSED LANDSCAPE CONFORMS TO VILLAGE ORDINANCE. SPECIES (DECIDUOUS/CONIFEROUS) CONCESSIONS MAY BE TAKEN INTO CONSIDERATION WITH VILLAGE APPROVALS.



REV DESCRIPTION DATE

ZONING BOARD REVISION 1 01.12.2016
ZONING BOARD SUBMITTAL 01.04.2016
DESCRIPTION DATE

LAURA B. SPRAGUE ELEMENTARY SCHOOL

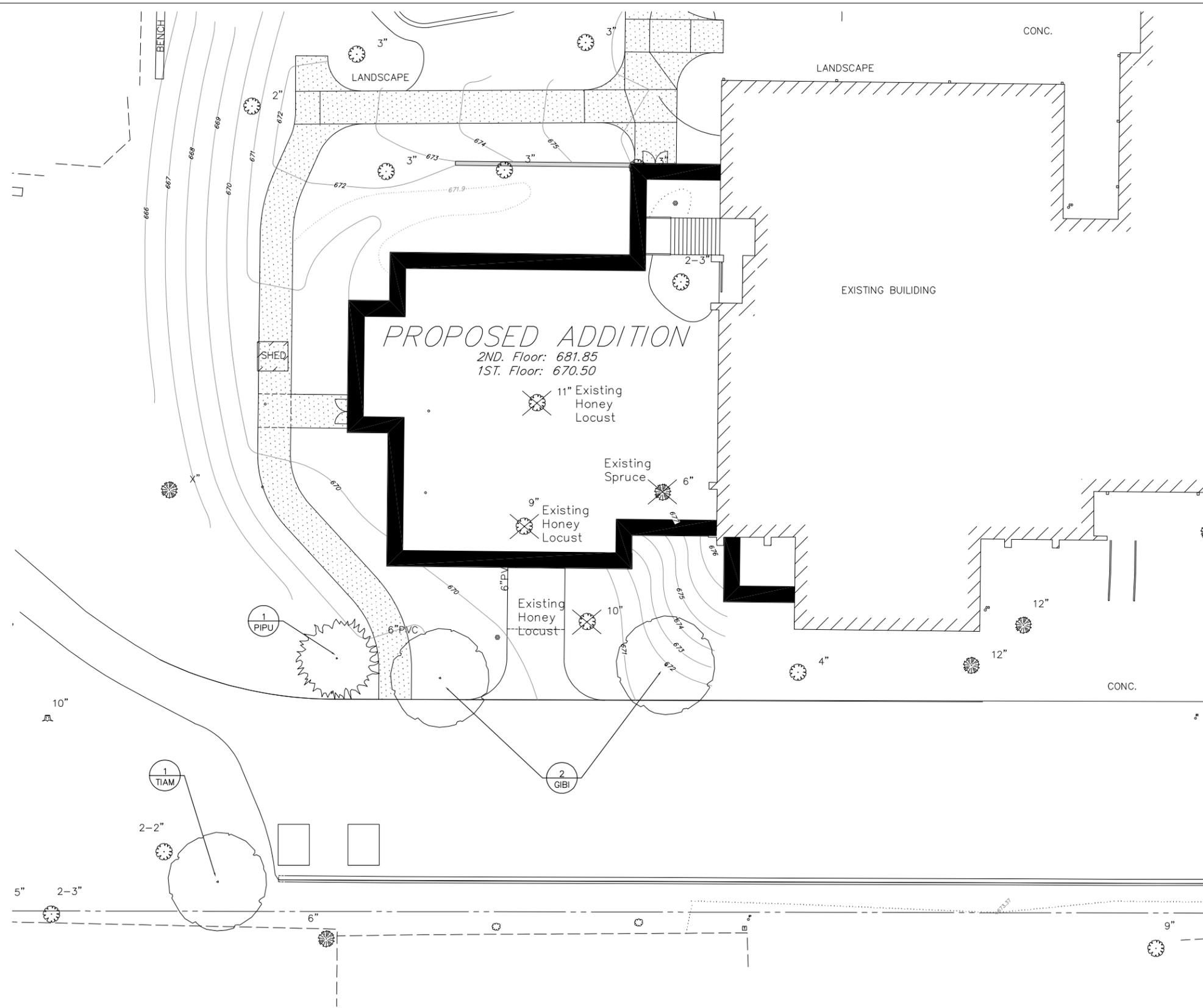
2425 RIVERWOODS ROAD
LINCOLNSHIRE, IL 60069

PROPOSED TREE PLAN

Project Number:
02-5467-05
Drawn By:

Sheet:

L1.00



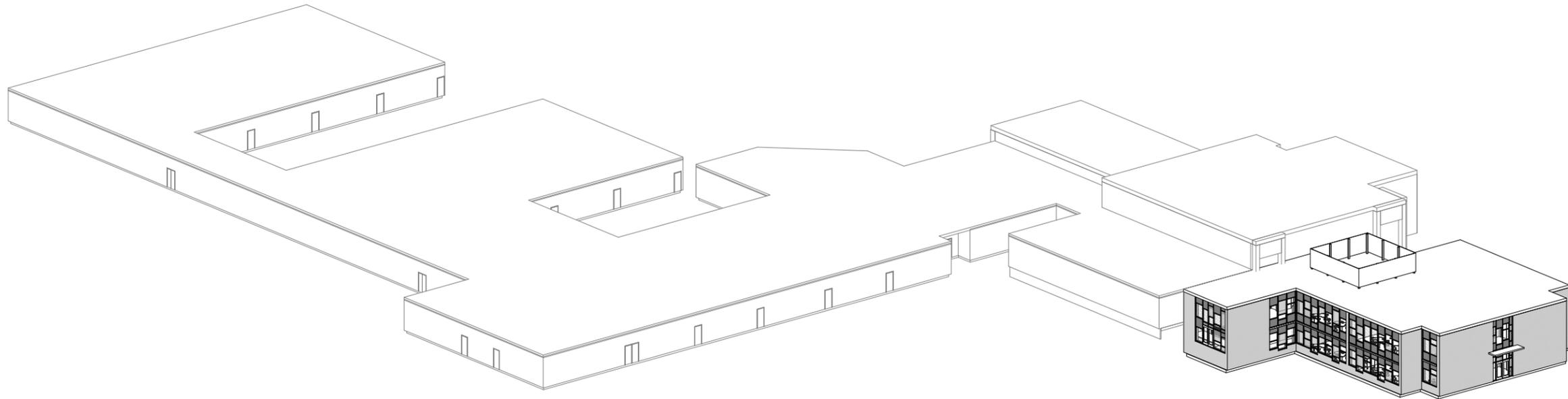
TP1 TREE PLAN— GLARE SCREENING
L1.00 SCALE: 1"=10'

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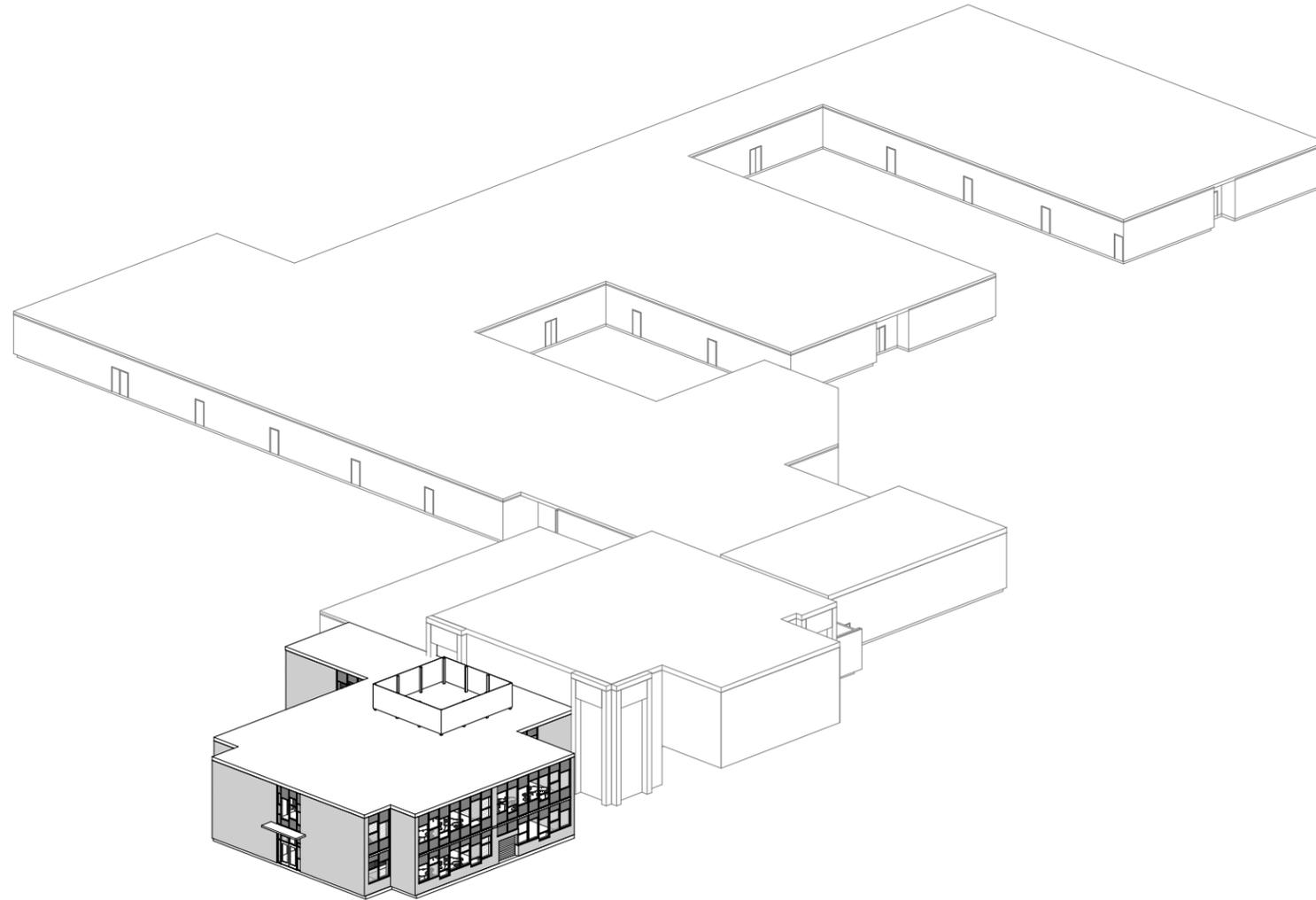
Village of Lincolnshire
Zoning Board Submittal Packet
Lincolnshire – Prairie View School District 103
Additions to Laura B. Sprague Elementary School

3D Massing Views

January 8, 2016



1 3-D MASSING VIEW FROM NORTHWEST
L-A3.2 SCALE:



2 3-D MASSING VIEW FROM SOUTHWEST
L-A3.2 SCALE:

**NOT FOR
CONSTRUCTION**

REV	DESCRIPTION	DATE
	ZONING BOARD SUBMITTAL	01.04.2016
	DESCRIPTION	DATE

ZONING BOARD SUBMITTAL
DESCRIPTION
DATE

**LAURA B. SPRAGUE
ELEMENTARY SCHOOL**

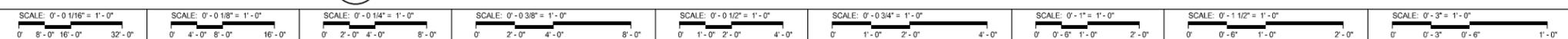
2425 RIVERWOODS ROAD
LINCOLNSHIRE, IL 60069

3-D MASSING MODEL

Project Number:
02-5467-05
Drawn By:
Author:
Sheet:

L-A3.2

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Village of Lincolnshire
Zoning Board Submittal Packet
Lincolnshire – Prairie View School District 103
Additions to Laura B. Sprague Elementary School

Architectural Drawings

January 8, 2016

**NOT FOR
CONSTRUCTION**

REV	DESCRIPTION	DATE

ZONING BOARD SUBMITTAL	01.04.2016
COMMITTEE OF THE WHOLE SUBMITTAL	12.04.2015
DESCRIPTION	DATE

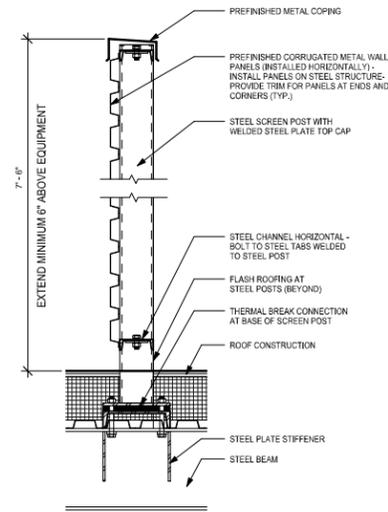
**LAURA B. SPRAGUE
ELEMENTARY SCHOOL**

2425 RIVERWOODS ROAD
LINCOLNSHIRE, IL 60069

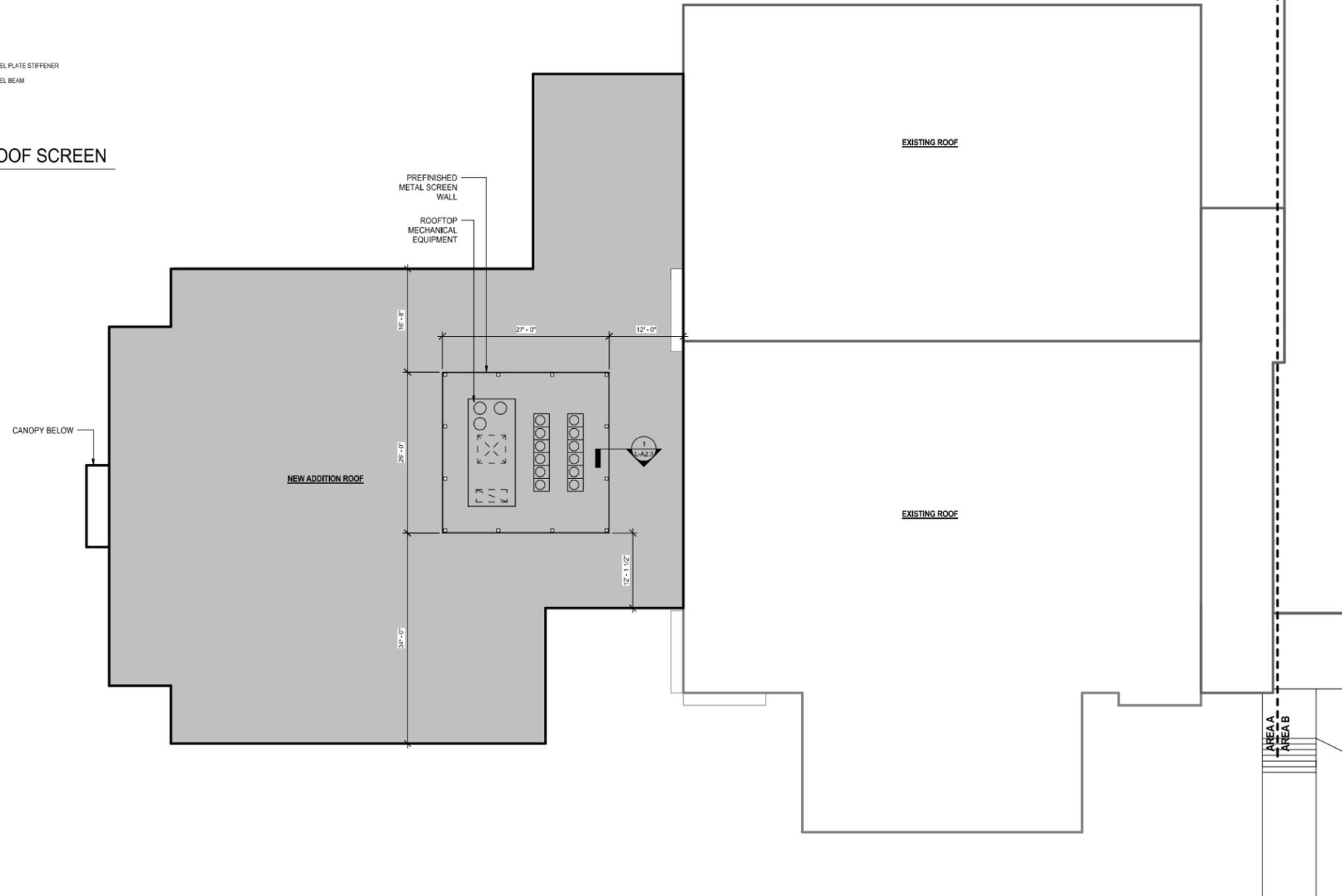
ROOF PLAN - AREA A

Project Number:
02-5467-05
Drawn By:
Author
Sheet:

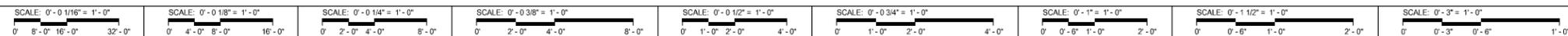
L-A2.3

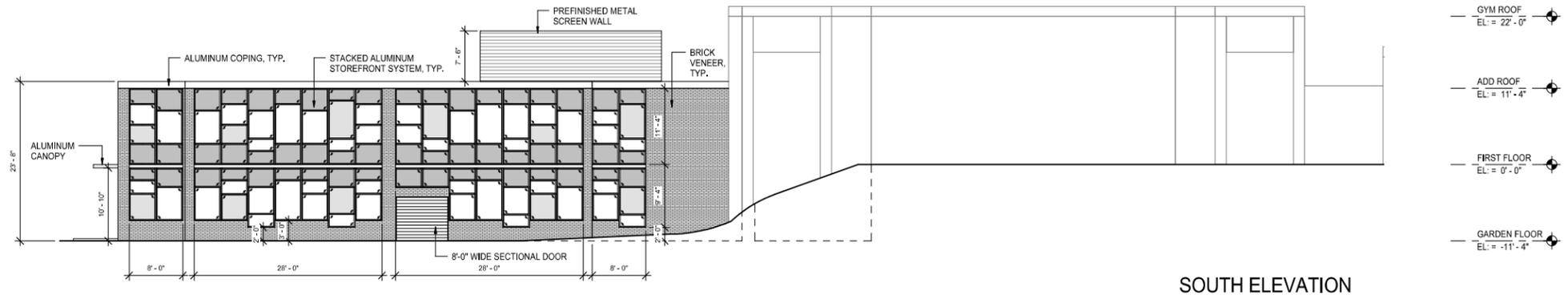


1 WALL SECTION - ROOF SCREEN
SCALE: 1" = 1'-0"

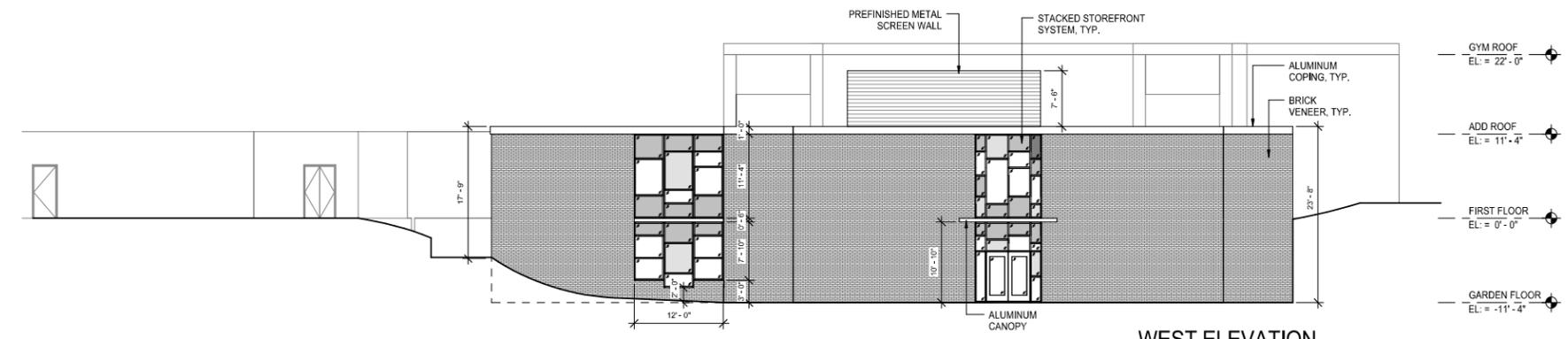


12/23/2015 8:08:30 AM C:\Users\wlp\OneDrive\Documents\02-5467-05_Laura Sprague_ARCH\2016_Central_west\area.vxd Wight & Company, 2015. All rights reserved. No part of these documents may be reproduced, stored, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written consent of Wight.

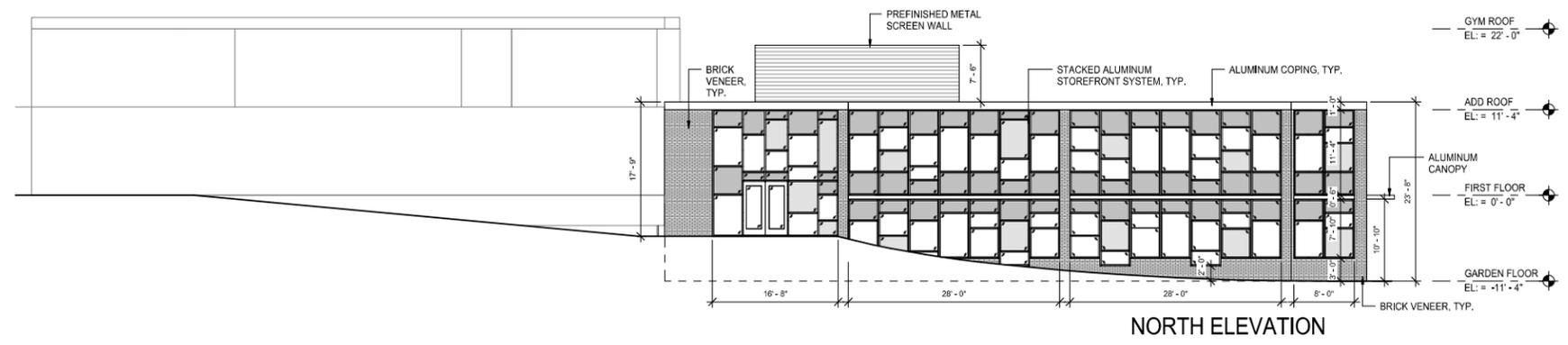




SOUTH ELEVATION



WEST ELEVATION



NORTH ELEVATION

NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE
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ZONING BOARD SUBMITTAL	01.04.2015
COMMITTEE OF THE WHOLE SUBMITTAL	12.04.2015
DESCRIPTION	DATE

**LAURA B. SPRAGUE
ELEMENTARY SCHOOL**

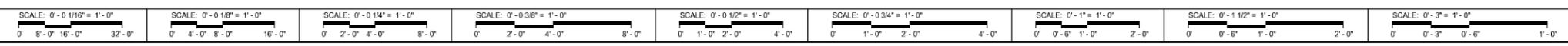
2425 RIVERWOODS ROAD
LINCOLNSHIRE, IL 60069

EXTERIOR ELEVATIONS

Project Number:
02-5467-05
Drawn By:
Author:
Sheet:

L-A3.0

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Village of Lincolnshire
Zoning Board Submittal Packet
Lincolnshire – Prairie View School District 103
Additions to Laura B. Sprague Elementary School

Sun Study

January 8, 2016

Lincolnshire – Prairie View School District 103 Sprague School Addition Sun Study

12/24/2015

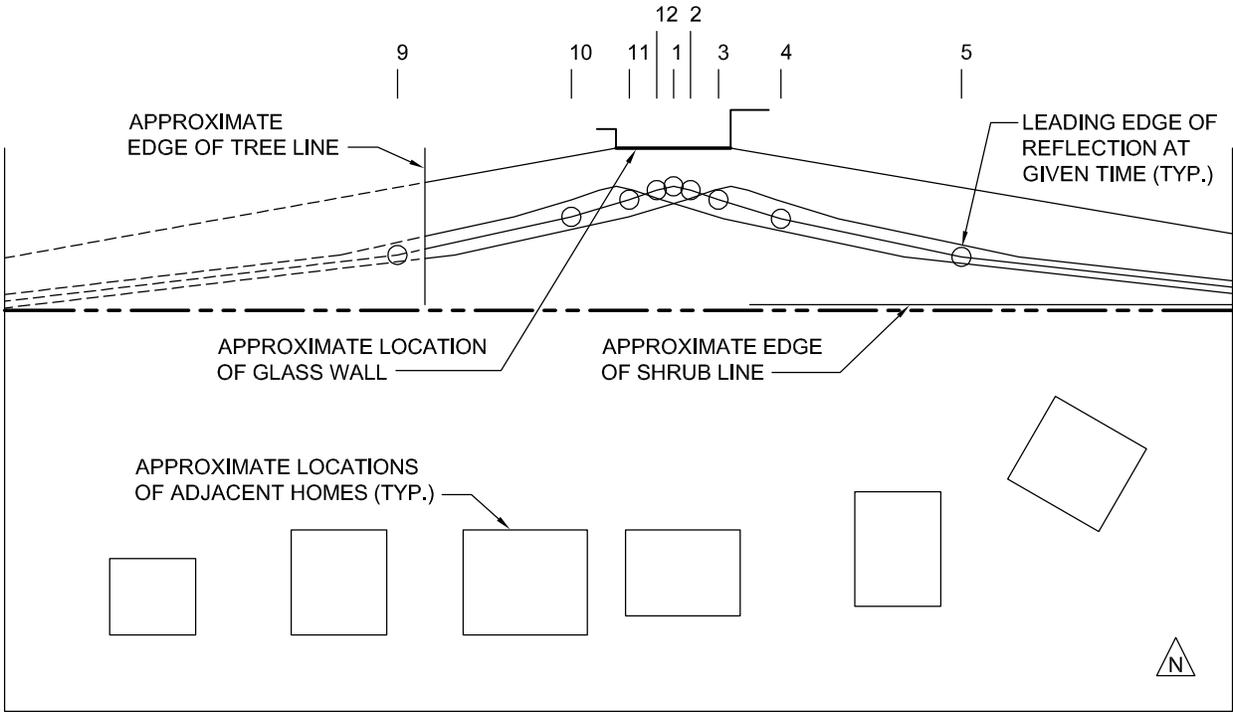
Per the request of the Village of Lincolnshire, in response to concerns about potential sunlight reflected off the glass wall of the Sprague School addition, the following diagrams have been prepared to represent the anticipated path of reflected sunlight for the dates indicated on each diagram. Altitude and azimuth information used to calculate the leading edge of reflected sunlight was obtained from the website of the Astronomical Applications Department of the United States Naval Observatory (<http://aa.usno.navy.mil/data/docs/AltAz.php>). No survey data for the locations of the homes adjacent to Sprague School is currently available, and as such their depicted locations have been approximated from a digital aerial photograph obtained from Google Maps. The existing school building, for which the dimensions are known, was used to approximate the appropriate scale for the digital aerial photograph.

Note that the sun study diagrams that have been generated assume a flat terrain, which is not an accurate representation of the current site conditions. Based on the known elevations of the school site, which increase to the east and decrease to the west, it is anticipated that the leading edge of the reflected sunlight will be shortened to the east and lengthened to the west. This will correspondingly shorten and lengthen the duration that an adjacent home may experience reflected sunlight exposure.

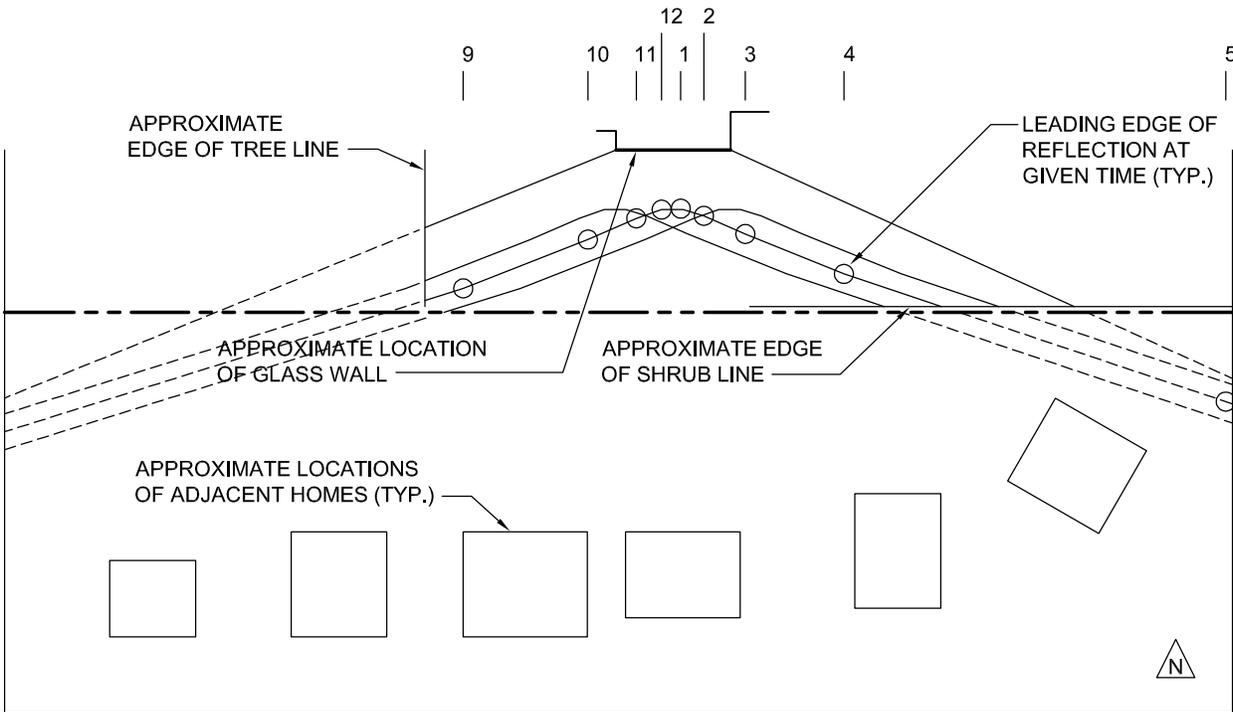
The approximate path of reflected sunlight was calculated for four individual days of the year. December 21 was selected to represent the greatest potential for reflected sunlight, with the lowest altitude and azimuth angles occurring at that time of year. The 21st days of November, October, and September were also selected to illustrate the change in the path of reflected sunlight over time. It is assumed that the 21st days of January, February, and March will roughly correspond to their opposing fall months opposite the December 21 date.

Of the six homes to the immediate south of the Sprague School addition only two will have any chance of exposure to reflected sunlight off the glass wall, including the home furthest to the west and the home furthest to the east. It is anticipated that the home furthest to the west will begin to fall into the path of reflected sunlight early in the month of December, and will reach its peak exposure on December 21 where it would be in the reflected sunlight path for roughly the first hour of the day following sunrise. As per the terrain conditions previously noted; included in this estimate is an increase of approximately 15 minutes to account for the decrease in elevation. There is currently a substantially wooded area separating this home from the Sprague School addition, the effect of which has not been calculated in this study. It is anticipated that the home furthest to the east will begin to fall into the path of reflected sunlight early in the month of November, and will reach its peak exposure on December 21 where it will be in that path for roughly the last hour of the day preceding sunset. As per the terrain conditions previously noted; included in this estimate is a decrease of approximately 15 minutes to account for the increase in elevation. There is currently a modestly wooded area separating this home from the Sprague School addition, the effect of which has not been calculated in this study.

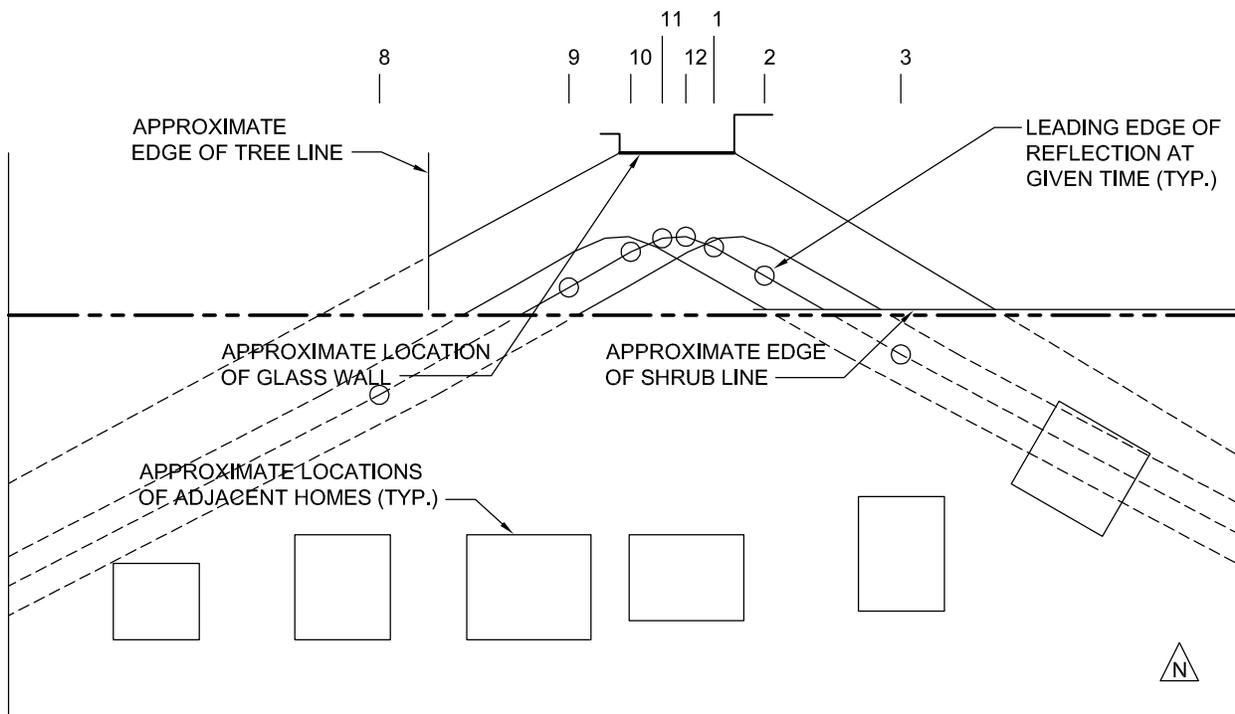
The current intent is to use a glass product that is equivalent to PPG's Solarban 70XL Clear glass, which is listed as having a 12% visible light reflectance (see attached product data sheet for reference).



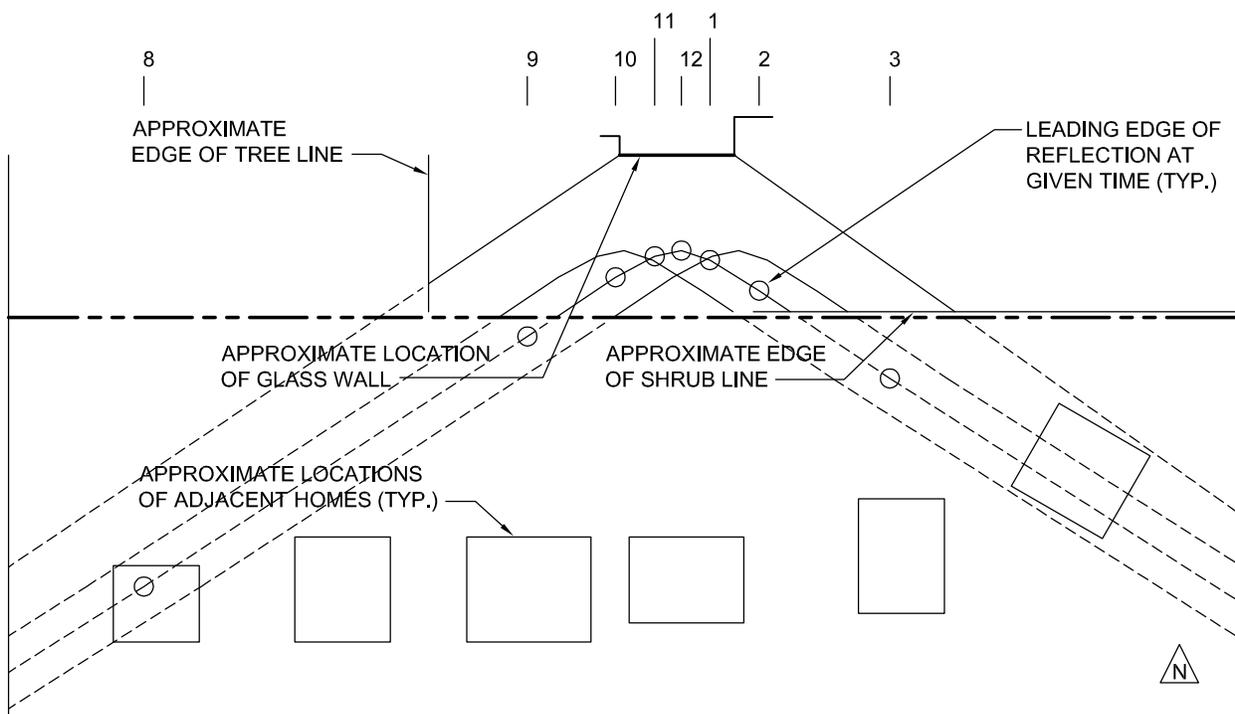
**LINCOLNSHIRE - PRAIRIE VIEW SCHOOL DISTRICT 103
 SPRAGUE SCHOOL ADDITION SUN STUDY
 SEPTEMBER 21 (MARCH SIMILAR)**



**LINCOLNSHIRE - PRAIRIE VIEW SCHOOL DISTRICT 103
 SPRAGUE SCHOOL ADDITION SUN STUDY
 OCTOBER 21 (FEBRUARY SIMILAR)**



**LINCOLNSHIRE - PRAIRIE VIEW SCHOOL DISTRICT 103
 SPRAGUE SCHOOL ADDITION SUN STUDY
 NOVEMBER 21 (JANUARY SIMILAR)**



**LINCOLNSHIRE - PRAIRIE VIEW SCHOOL DISTRICT 103
 SPRAGUE SCHOOL ADDITION SUN STUDY
 DECEMBER 21**

Aesthetic Description

Solarban[®] 70XL glass is a revolutionary new Solar Control Low-E glass that brilliantly combines the clear appearance of transparent, color-neutral glass with an unprecedented combination of solar control and visible light transmittance.

With the introduction of **Solarban 70XL** Magnetic Sputter Vacuum Deposition (MSVD) coated glass, PPG has expanded the universe of design possibilities in two important ways. First, this product allows architects to incorporate vast areas of vision glass into a building's design without a requisite expansion of its cooling capabilities. Second, architects can now specify a clear aesthetic while achieving solar control performance that was previously attainable only through the use of tinted glass and a Solar Control Low-E coating in an insulating glass unit.

Performance Options

When coupled with conventional clear glass in a one-inch insulating glass unit, **Solarban 70XL** surpasses, by far, the performance of any other Solar Control Low-E glass on the market today.

- Solar Heat Gain Coefficient (SHGC): 0.27
- Visible Light Transmittance (VLT): 64%
- Light to Solar Gain (LSG) ratio: 2.37

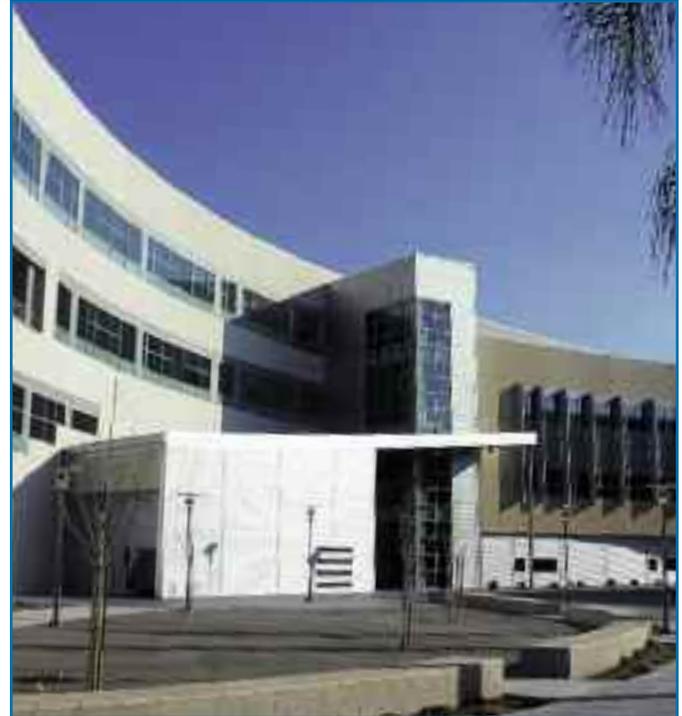
For architects who desire a tinted glass aesthetic and enhanced solar control, **Solarban 70XL** glass can be combined in an insulating glass unit with any tinted glass from PPG, including the four tints from the **Oceans of Color[®]** collection of ocean inspired tinted glasses, as well as any PPG performance or high-performance earth-toned tint.

Lower Upfront Equipment Costs. Long-Term Energy Savings.

While architects will appreciate **Solarban 70XL** sputter coated glass for its aesthetic qualities, their clients and building owners will truly value the energy-related cost savings it provides. According to a recent study by an independent energy and environmental research firm, **Solarban 70XL** glass has the potential to reduce annual energy costs by 5 percent or more in comparison with leading Solar Control Low-E coated glasses.

The greatest benefit of specifying this glass may be realized before the building is even occupied. Thanks to the unequalled solar control characteristics of **Solarban 70XL** glass, architects can specify smaller HVAC systems for buildings glazed with this product, potentially reducing the associated upfront capital investment by as much as \$124,000.

As a result, architects and building owners who specify **Solarban 70XL** glass instead of other Solar Control Low-E coated glass products may have their investment repaid in a matter of months.



*The College of Business Administration at California State University's San Marcos campus features **Solarban 70XL** glass, a revolutionary Solar Control Low-E coated glass that offers an unprecedented combination of visible light transmittance and solar control characteristics in a clear, color-neutral glass.*
Architect: A.C. Martin Partners, Los Angeles
Glass Fabricator: Oldcastle BuildingEnvelope[™]
Glazing Contractor: Division 8, Inc.
CSUSM photo by George Cagala

Eight-Story Office Building, Window Wall

City	Annual Operating Expenses		Annual Savings	Total HVAC Equipment Cost		Immediate Equipment Savings	1st Year Savings
	SB60	SB70XL		SB60	SB70XL		
Atlanta	\$622,492	\$586,400	\$36,092	\$1,267,770	\$1,146,495	\$121,275	\$157,367
Boston	\$764,793	\$729,696	\$35,097	\$1,251,705	\$1,136,450	\$115,255	\$150,352
Chicago	\$370,681	\$352,779	\$17,902	\$1,252,297	\$1,137,731	\$114,566	\$132,468
Denver	\$397,799	\$375,521	\$22,278	\$1,292,788	\$1,168,451	\$124,337	\$146,615
Houston	\$761,534	\$718,618	\$42,916	\$1,253,879	\$1,140,825	\$113,054	\$155,970
Los Angeles	\$623,649	\$582,454	\$41,195	\$1,263,556	\$1,144,014	\$119,542	\$160,737
Mexico City	\$707,060	\$668,434	\$38,626	\$1,278,536	\$1,154,115	\$124,421	\$163,047
Ottawa	\$431,308	\$412,595	\$18,713	\$1,247,862	\$1,133,965	\$113,897	\$132,610
Philadelphia	\$378,447	\$365,425	\$13,022	\$1,249,329	\$1,132,635	\$116,694	\$129,716
Phoenix	\$394,492	\$374,898	\$19,594	\$1,256,077	\$1,140,972	\$115,105	\$134,699
St. Louis	\$310,660	\$294,417	\$16,243	\$1,274,889	\$1,156,292	\$118,597	\$134,840
Seattle	\$299,472	\$284,629	\$14,843	\$1,237,408	\$1,125,334	\$112,074	\$126,917

Total Glass Area: 56,640 ft²

*The chart above is taken from a study conducted by an independent energy and environmental research firm. It shows that **Solarban 70XL** glass can dramatically reduce costs for cooling equipment while generating significant savings on annual cooling costs when compared with other industry-leading high-performance glasses such as **Solarban 60** Solar Control Low-E Glass.*



Fabrication and Availability

Solarban 70XL glass is available through more than 60 locations of the PPG Certified Fabricator Network. PPG Certified Fabricators can meet tight construction deadlines and accelerate the delivery of replacement glass before, during and after construction. **Solarban** 70XL glass, manufactured utilizing the MSVD sputter-coating process, is available for annealed, heat strengthened and tempered applications.



More Information

PPG has published a paper detailing the results of a comprehensive energy simulation study of **Solarban** 70XL coated glass in 12 major North American cities. To order

a copy of *Immediate and Long-Term Economic Advantages of Specifying Solarban® 70XL Solar Control Low E-Glass*, call 1-888-PPG-IDEA (774-4332), call your local PPG Architectural Glass representative or visit www.ppgideascales.com.

Additional Resources

Solarban 70XL glass is just one of the **ecological Building Solutions™** from PPG. For more information, or to obtain samples of this product, call 1-888-PPG-IDEA, or visit www.ppgideascales.com. All PPG architectural glass is Cradle to Cradle Certified.™



PPG IdeaScapes.™ Integrated products, people and services to inspire your design and color vision.

Solarban® 70XL Glass Performance — Commercial Insulating Glass Unit

Insulating Vision Unit Performance Comparisons 1-inch (25mm) units with 1/2-inch (13mm) airspace and two 1/4-inch (6mm) lites; interior lite clear unless otherwise noted											
Glass Type	Transmittance			Reflectance		U-Value (Imperial)		European U-Value	Shading Coefficient	Solar Heat Gain Coefficient	Light to Solar Gain (LSG)
	Ultra-violet %	Visible %	Total Solar Energy %	Visible Light %	Total Solar Energy %	Winter Night-time	Summer Day-time				
Coated											
SOLARBAN® 70XL Solar Control Low-E Glass											
SOLARBAN 70XL (2)* + Clear	6	64	25	12	52	0.28	0.26	1.50	0.32	0.27	2.37
SOLEXIA + SOLARBAN 70XL (3)*	3	56	20	11	13	0.28	0.26	1.50	0.37	0.32	1.74
ATLANTICA + SOLARBAN 70XL (3)*	2	49	17	10	8	0.28	0.26	1.50	0.32	0.28	1.74
CARIBIA + SOLARBAN 70XL (3)*	2	49	17	9	8	0.28	0.26	1.50	0.32	0.28	1.75
AZURIA + SOLARBAN 70XL (3)*	4	49	17	10	8	0.28	0.26	1.50	0.33	0.29	1.70
PACIFICA + SOLARBAN 70XL (3)*	2	31	12	6	7	0.28	0.26	1.50	0.26	0.22	1.38
SOLARBLUE + SOLARBAN 70XL (3)*	3	41	16	8	16	0.28	0.26	1.50	0.32	0.27	1.48
SOLARBRONZE + SOLARBAN 70XL (3)*	3	38	15	8	20	0.28	0.26	1.50	0.30	0.26	1.48
SOLARGRAY + SOLARBAN 70XL (3)*	2	32	13	7	15	0.28	0.26	1.50	0.27	0.24	1.34
OPTIGRAY23 + SOLARBAN 70XL (3)*	1	17	7	5	7	0.28	0.26	1.50	0.19	0.16	1.04
GRAYLITE + SOLARBAN 70XL (3)*	1	10	5	5	11	0.28	0.26	1.50	0.16	0.14	0.71
VISTACOOL™ and SOLARCOOL® with SOLARBAN® 70XL Solar Control Low-E (3)*											
VISTACOOL (2) AZURIA + Low-E	4	38	14	21	12	0.28	0.26	1.50	0.27	0.24	1.59
VISTACOOL (2) PACIFICA + Low-E	1	24	9	11	9	0.28	0.26	1.50	0.22	0.19	1.24
VISTACOOL (2) CARIBIA + Low-E	2	38	13	20	11	0.28	0.26	1.50	0.27	0.23	1.65
VISTACOOL (2) SOLARGRAY + Low-E	2	25	10	11	17	0.28	0.26	1.50	0.23	0.20	1.24
SOLARCOOL (2) SOLEXIA + Low-E	1	22	8	24	16	0.28	0.26	1.50	0.20	0.17	1.28
SOLARCOOL (2) CARIBIA + Low-E	1	19	6	19	10	0.28	0.26	1.50	0.18	0.15	1.27
SOLARCOOL (2) AZURIA + Low-E	1	19	7	19	10	0.28	0.26	1.50	0.18	0.15	1.27
SOLARCOOL (2) PACIFICA + Low-E	1	12	4	10	8	0.28	0.26	1.50	0.15	0.13	0.89
SOLARCOOL (2) SOLARBLUE + Low-E	1	16	6	14	16	0.28	0.26	1.50	0.18	0.15	1.03
SOLARCOOL (2) SOLARBRONZE + Low-E	1	15	6	14	19	0.28	0.26	1.50	0.17	0.15	1.01
SOLARCOOL (2) SOLARGRAY + Low-E	1	13	5	11	15	0.28	0.26	1.50	0.16	0.14	0.89
SOLARCOOL (2) GRAYLITE + Low-E	<1	3	1	5	5	0.28	0.26	1.50	0.11	0.09	0.27

*Solarban 70XL for annealed applications is applied to **Starphire** glass, heat treated applications will require either clear or **Starphire** glass depending on manufacturing process.

All performance data calculated using LBNL Window 5.2 software, except European U-Value, which is calculated using WinDat version 3.0.1 software. For detailed information on the methodologies used to calculate the aesthetic and performance values in this table, please visit www.ppgideascales.com or request our Architectural Glass Catalog.

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Darien, IL 60561

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F 630.969.7979

January 7, 2016

Mr. Stephen McNellis
Community & Economic Development Director
Village of Lincolnshire
One Olde Half Day Road
Lincolnshire, IL 60069

**LINCOLNSHIRE - PRAIRIE VIEW SCHOOL DISTRICT 103
HALF DAY SCHOOL & SPRAGUE ELEMENTARY SCHOOL ADDITIONS
VILLAGE OF LINCOLNSHIRE STANDARDS RESPONSES
WIGHT & COMPANY PROJECT #02-5467-06**

Dear Mr. McNellis,

Pursuant to the Village of Lincolnshire Standards, as identified in Section 6-14-11.D.1-6 of the Village Code, we offer the following responses:

Half Day School:

1. The special use will not be injurious to the use and enjoyment of other property in the immediate vicinity of the subject premises for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood in which it is to be located.

Response: Other properties in the immediate vicinity of Half Day School will continue to be able to be used in the same manner that they currently are. Half Day School has been a longstanding fixture of the neighborhood, and the proposed addition will not substantially alter the function of the school or fundamentally change the way the building or site are used.

2. The establishment of the special use will not impede the normal and orderly development and improvement of the surrounding property for the uses permitted in the district.

Response: Half Day School does not currently impede the ability of surrounding properties to be developed and improved as permitted by the Village. None of the work associated with the proposed addition will substantially alter the relationship of the school to surrounding properties, and as such will continue to allow those properties to be developed and improved as permitted by the Village.

3. Adequate utilities, access roads, drainage and/or necessary facilities have been or will be provided.

Response: The utilities, access roads, drainage, and necessary facilities for Half Day School are currently existing and will satisfy the demands of the proposed addition. The detention basin will be expanded to both bring the existing basin into compliance with current Lake County SMC standards and to meet the additional detention needs of the proposed addition.

4. Adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.

Response: The existing Half Day School has employed strategies to minimize the impact of school operations on traffic congestion in the public streets, including queuing parents within the parking lot during afternoon pick-up and leveraging relationships with adjacent properties, such as the Library, for event parking. The work associated with the addition to Half Day School includes an expansion of the queuing capability so as to limit the impact of that work on traffic congestion in the public streets.

5. The proposed special use is not contrary to the objectives of the Official Comprehensive Plan of the Village as amended.

Response: The Comprehensive Plan identifies the current and future land use of the property as 'Public & Institutional'; and the existing school and proposed addition are consistent with the description of permitted uses in that land use classification. The existing Half Day School has been a longstanding part of the character of the community, and the proposed addition is intended to maintain that character. The Comprehensive Plan identifies the School District as one of several 'great assets' to the community; and the work associated with the proposed addition, which will improve the ability of the school to better serve the community, is anticipated to continue this trend.

6. The special use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may, in each instance, be varied pursuant to Section 6-14-9 of this Chapter.

Response: The existing school does have existing non-conforming conditions that the School District is respectfully requesting be included as exceptions to the Special Use. None of the work associated with the addition to Half Day School is intended to create new non-conforming conditions.

Sprague Elementary School:

1. The special use will not be injurious to the use and enjoyment of other property in the immediate vicinity of the subject premises for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood in which it is to be located.

Response: Other properties in the immediate vicinity of Laura Sprague Elementary School will continue to be able to be used in the same manner that they currently are. Laura Sprague Elementary School has been a longstanding fixture of the neighborhood, and the proposed addition will not substantially alter the function of the school or fundamentally change the way the building or site are used.

2. The establishment of the special use will not impede the normal and orderly development and improvement of the surrounding property for the uses permitted in the district.

Response: Laura Sprague Elementary School does not currently impede the ability of surrounding properties to be developed and improved as permitted by the Village. None of the work associated with the proposed addition will substantially alter the relationship of the school to surrounding properties, and as such will continue to allow those properties to be developed and improved as permitted by the Village.

3. Adequate utilities, access roads, drainage and/or necessary facilities have been or will be provided.

Response: The utilities, access roads, drainage, and necessary facilities for Laura Sprague Elementary School are currently existing and will satisfy the demands of the proposed addition. The existing and proposed improvements at the school are below the Lake County SMC threshold requiring storm water detention.

4. Adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.

Response: The existing Laura Sprague Elementary School has existed and operated successfully within the surrounding neighborhood for many years. No new access points are being proposed to any public or private roadways, and the work associated with the proposed addition is not anticipated to substantially alter the impact that the school has on the surrounding neighborhood with regard to traffic congestion in the public streets.

5. The proposed special use is not contrary to the objectives of the Official Comprehensive Plan of the Village as amended.

Response: The Comprehensive Plan identifies the current and future land use of the property as 'Public & Institutional'; and the existing school and proposed addition are consistent with the description of permitted uses in that land use classification. The existing Laura Sprague Elementary School has been a longstanding part of the character of the community, and the proposed addition is intended to maintain that character. The Comprehensive Plan identifies the School District as one of several 'great assets' to the community; and the work associated with the proposed addition, which will improve the ability of the school to better serve the community, is anticipated to continue this trend.

6. The special use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may, in each instance, be varied pursuant to Section 6-14-9 of this Chapter.

Mr. Stephen McNellis
Village of Lincolnshire
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January 7, 2016

Response: The existing school does have existing non-conforming conditions that the School District is respectfully requesting be included as exceptions to the Special Use. None of the work associated with the addition to Laura Sprague Elementary School is intended to create new non-conforming conditions.

Respectfully submitted,

WIGHT & COMPANY



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Senior Project Architect

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