

CITY OF BATAVIA
100 N. Island Ave., Batavia, IL 60510
(630) 454-2000
www.cityofbatavia.net

**PLAN COMMISSION
AGENDA**

**Wednesday, May 18, 2016
7:00 PM
City Council Chambers - First Floor**

1. Call To Order
2. Roll Call
3. Items Removed/Added/Changed
4. Approval Of Minutes
May 4, 2016, Plan Commission & Zoning Board of Appeals

Documents: [05-04-16 PCZBAM.PDF](#)
5. Design Review: Suncast Building Expansion
1801 Suncast Lane
Mackie Consultants Applicant

Documents: [PC-MEMO-DESIGN REVIEW-05132016.PDF](#)
6. Administrative Design Review For Tanglewood Hills Unit 5 Landscape Revisions
Toll IL IV LP., applicant

Documents: [PC-TWH-ADR-051316.PDF](#)
7. Public Hearing: Amendments To The Text Of The Zoning Code
Chapter 2.1: Single Family Residential Districts
Chapter 2.2: Multi-Family Residential Districts
Chapter 5.1: Planning Administration
City of Batavia, Applicant

Documents: [PC-CODEUPDATEMEMO-051216.PDF](#)
8. Other Business
9. Adjournment

Plan Commission

Tom Gosselin
Sara Harms
Joan Joseph
Tom LaLonde, Chair
Sue Peterson
Gene Schneider, Vice-Chair

MINUTES
May 4, 2016
Plan Commission and Zoning Board of Appeals
City of Batavia

PLEASE NOTE: These minutes are not a word-for-word transcription of the statements made at the meeting, nor intended to be a comprehensive review of all discussions. They are intended to make an official record of the actions taken by the Committee/City Council, and to include some description of discussion points as understood by the minute-taker. They may not reference some of the individual attendee's comments, nor the complete comments if referenced.

1. Meeting Called to Order for the Plan Commission and Zoning Board of Appeals Meeting

Vice-Chair Schneider called the Plan Commission (PC) and Zoning Board of Appeals (ZBA) meeting to order at 7:00pm.

2. Roll Call:

Members Present: Vice-Chair Schneider; Commissioners Peterson, Harms and Joseph

Members Absent: Chair LaLonde; Commissioner Gosselin

Also Present: Joel Strassman, Planning and Zoning Officer; Drew Rackow, Planner; and Jennifer Austin-Smith, Recording Secretary

3. Items to be Removed, Added or Changed

Strassman reported that the City, as applicant, has withdrawn their application for an amendment to the City's Zoning Map. Strassman explained that not all of the landowners want this item to move forward. Therefore, agenda item number six will be removed from the agenda and the Public Hearing would not be held.

**4. Approval of Minutes: April 6, 2016 Plan Commission
April 20, 2016 Plan Commission and Zoning Board of Appeals**

Motion: To approve the Plan Commission minutes from April 6, 2016 and Plan Commission and Zoning Board of Appeals minutes from April 20, 2016

Maker: Joseph

Second: Harms

Voice Vote: 4 Ayes, 0 Nays, 2 Absent
Motion carried.

5. PUBLIC HEARING: Variances for a Home Second Story Addition at 514 Main Street Spillane and Sons, Mike Spillane, Applicant

Rackow reported that tonight's public hearing is for a variance that would allow a second story addition at 514 Main Street. This property is zoned Residential Single Family High Density, R1H. The applicant is proposing to use the existing footprint of the sunroom off the east side of the building and build above that footprint only to create a second bathroom on the second floor. It would not increase the size of the structure's footprint. A second floor addition, under the Zoning Code, would have to meet the current setback requirements. The current setback

requirements for this property are five feet on one side and ten feet on the other. The variance request would be to allow this second floor encroachment to encroach into that required five-foot setback and to allow the overhangs to go into that required setback up to 1.625 feet rather than the required three feet. A variance is also proposed for the west interior setback of the home. Rackow reminded the ZBA that a garage variance request was reviewed earlier this year, which reviewed many of the conditions on the property. The applicant has explained, to enhance the livability of the home, a second bathroom is needed and it would have a positive effect of the neighborhood.

Rackow stated that staff is in support of the variances, mostly because it would not increase the footprint of the building. This is a small variance relative to the overall site. If the findings are found in the affirmative, staff is recommending approval of the following variances: an east setback of 2.87 feet with a roof overhang to be at 1.625 feet from the property line, and to establish the existing west side of the building having a side setback of approximately seven feet rather than the required ten feet.

Motion: To open the Public Hearing
Maker: Peterson
Second: Joseph
Voice Vote: 4 Ayes, 0 Nays, 2 Absent
Motion carried.

Strassman swore in all who wanted to address the Commission and Zoning Board of Appeals.

Thomas Bridge, 365 S Jefferson St, a resident of Belleview place, stated that he is in support of the work that the applicant, Mr. Spillane, has done. Mr. Spillane has taken dilapidated homes and improved them for the better. The more that people like Mr. Spillane come to Batavia and rehab homes the more the City will receive a positive effect in terms of our equity and resale. It would behoove the City to pass these variances right away. The home is an eyesore and it would be changed into positive equity to the community.

Mike Spillane, applicant, stated that he is here to answer any questions. There were none.

Motion: To approve the five findings as listed on the 4-28-16 memo
Maker: Joseph
Second: Peterson
Voice Vote: 4 Ayes, 0 Nays, 2 Absent
Motion carried.

Motion: To recommend approval of the three variances
Maker: Harms
Second: Schneider
Voice Vote: 4 Ayes, 0 Nays, 2 Absent
Motion carried.

Rackow stated that staff would try to get this item on the May 10th Committee of the Whole agenda. Otherwise it would have to go onto the May 24th agenda. The May 17th agenda is being utilized for closed session, interviewing for the new City Administrator.

6. PUBLIC HEARING: Amendment to the Official Zoning Map from LI, Limited Industrial to R2, Two Family Residence District. Northeast Corner of South Mallory Street and First Street. City of Batavia, Applicant.

This was removed from the agenda. The applicant withdrew their application.

7. Approval: Amendments Plan Commission & Zoning Board of Appeals By-Laws

Rackow stated that the changes of the bylaws were based on the conversation at the last PC and ZBA meeting. The changes are to remove the limitation of one term for the chair and vice-chair. During staff's review, it was discovered that we do have to make modifications to the Zoning Code for the requirements for the ZBA. As part of the next PC meeting, we will have a Public Hearing. Action could be made on the bylaw contingent on the zoning change taking place. The PC changes could be made without any such condition. Joseph stated that she likes the way the bylaws are written.

Motion: To approve the Plan Commission bylaws for the officers term of chair and vice-chair, that they may be re-elected no more than three consecutive two-year terms

Maker: Joseph

Second: Peterson

Voice Vote: 4 Ayes, 0 Nays, 2 Absent
Motion carried.

Motion: To approve the Zoning Board of appeals bylaws for terms of chair and vice-chair with election every two years and may be re-elected no more than three consecutive terms contingent on amendment to the Zoning Code

Maker: Joseph

Second: Harms

Discussion was held on the motion. Joseph asked if the ZBA chair and the vice-chair could be different than the PC. Strassman stated that having the same chair and vice chair for both the PC and the ZBA does work best since the two function jointly. However, there is no requirement that they be the same.

Voice Vote: 4 Ayes, 0 Nays, 2 Absent
Motion carried.

8. Election of Officers – Plan Commission & Zoning Board of Appeals

Strassman stated that election of the chair and vice-chair are to be every two years at the first meeting in May. There are two Commissioners not in attendance this evening. An alternative would be to individually table each one of these elections. We would want to table the ZBA election until the City Council takes final action to amend the Zoning Code. It may be best to table each of these items until that time. In the interim, the current chair and vice-chair would

continue in their capacities until new ones are elected. There was no objection from the Commission.

Motion: To table election of officers for the Zoning Board of Appeals until June 15, 2016

Maker: Harms

Second: Joseph

Voice Vote: 4 Ayes, 0 Nays, 2 Absent
Motion carried.

Motion: To table election of officers for the Plan Commission until June 15, 2016

Maker: Harms

Second: Joseph

Voice Vote: 4 Ayes, 0 Nays, 2 Absent
Motion carried.

9. Other Business

Rackow reported that a text amendment would be at the next PC meeting to address the terms of office as well as some changes for accessory structures in the Residential Districts. Also, there may be a possible Design Review application.

The next PC meeting is May 18, 2016.

In response to an inquiry on the progress of the Dunkin Donuts drive through, Strassman reported that the owner has acquired more information on the existing building and existing retaining wall on the property from staff to give to his architect and engineer. The owner has been made aware of the six-month period in which the variances remain effective.

Schneider commended the City for the tree list that is on record. He stated that it is important to have a variety of species to avoid having the same issues as with the Ash trees. Strassman stated that staff does not allow more than three of the same species in a row on City parkways or development applications.

Rackow announced that the United Methodist Church would be going to the Committee of the Whole next week for their variances and map amendments.

10. Adjournment

There being no other business to discuss, Vice-Chair Schneider asked for a motion to adjourn the Plan Commission. Joseph moved to adjourn the meeting, Harms seconded. The motion carried. The meeting was adjourned at 7:28pm.

Minutes respectfully submitted by Jennifer Austin-Smith

CITY OF BATAVIA

DATE: May 13, 2016
TO: Plan Commission
FROM: Drew Rackow AICP, Planner
SUBJECT: Design Review: Suncast Building Expansion – 1801 Suncast Lane
Mackie Consultants on behalf of Suncast Corporation, Applicant

Background and Information Supplied by the Applicant

Mackie Consultants has submitted Design Review plans on behalf of Suncast Corporation for a proposed building expansion for the existing warehouse facility on Suncast Lane. The applicant proposes a 308,900 square foot building addition to the south end of the existing 717,000 square foot building. The proposed use is expanded warehousing, with a manufacturing component. The existing pre-cast architecture would be continued with the addition, with increased heights of the structure to allow for the use of cranes within the manufacturing portion of the structure. The applicant proposes landbanking (designed but not constructed for future installation) a significant number of parking spaces that would otherwise be required by the Zoning Code. A total of 13 new parking spaces would be added to the southwest corner of the building. Future landbanked parking would be possible around the required fire lane around the building. A larger parking field would also be landbanked on the east side of the building.

The parcel is zoned GI, General Industrial District. Abutting properties to the south, east and west share this designation. Properties to the north are LI, Light Industrial and GI, General Industrial. The existing structure is used for warehousing and was constructed in 2000. A BNSF rail spur is located on the west side of the property.

Analysis

General/Building/Setbacks: The application depicts a building designed in a manner to be reflective of the existing structure. The architecture and design continue the patterns and design of the existing structure. The proposed building and perimeter landscape areas meet the Zoning Code requirements. A staircase is provided at the southeast corner of the building to provide access to rooftop equipment. New operations will require more frequent access to this portion of the building, requiring a staircase rather than a ladder system. Locations have been indicated for a silo structure to provide raw material along the western edge of the property near the railroad.

Landscape: Landscaping would primarily be focused along the Pierson Drive frontage at the east end of the property. Required perimeter landscape plantings are along street frontages. Required foundation planting has been provided along the elevations facing the public right of way. Landscaping in future parking areas would be required to be provided at the time of installation

of those parking areas. Parkway trees are also shown along Pierson Drive, along with a sidewalk.

Lighting: The applicant proposes extending existing building lighting across the addition. Similar to Chicago Expert Importers Expansion, this will require a variance from the current Zoning Code or a Text Amendment to allow the taller installation. Pole lighting would be provided around the addition. Building lighting would be providing illumination around the south edge of the building. The specified fixtures are all full-cut off LED fixtures. Staff recommends a condition of lowering the wall mounted lighting to 15 feet, unless a text amendment or variance is granted prior to occupancy.

Access: Access to the site would not change with the proposed addition. Primary access is provided at Suncastr Lane and Schuler Drive. Railroad access is possible with the site, although improvements would be necessary down the existing line to facilitate its future use. A driveway/fire lane is provided around the building. The applicant has provided auto-turn diagrams indicating trucks can maneuver the proposed traffic lanes.

Parking: The proposed addition with the mix of manufacturing and warehousing proposed (66,228 manufacturing and 242,579 square feet of warehousing and mechanical) requires 374 spaces. The existing structure has 285 spaces plus additional truck bays. Under the present Zoning Code the existing building would require 715 spaces (1,089 total). The parking for the existing building may remain as is, but the addition would have to follow current code requirements. Landbanking, of up to 50% of the required spaces is allowed by Administrative Use Permit. The applicant proposes constructing 13 additional parking spaces and landbanking the remainder of the parking for the addition (361 spaces). This will require a variance if they wish to increase the landbanked parking beyond the 50% maximum allowed. The proposed geometry for the proposed parking lot addition does not meet all requirements of Chapter 4.2. Namely islands would need to be provided at each end of the stalls and the parking must be separated from the building by either a 4 foot wide raised sidewalk or 5 foot wide landscape island. The applicant has indicated that the proposed expansion will not significantly increase the number of employees in the facility per shift.

In order to allow the provided parking in the amounts depicted as landbanked a variance would need to be sought to increase the allowed percentage of landbanked spaces. Staff would support a variance to increase the amount of landbanked spaces from the maximum allowed 187 spaces (50%) to 361 spaces (96.5%) required by the addition. Staff would recommend a condition of approval for modification of the proposed parking lot at the southwest corner to conform to Section 4.2 of the Zoning Code. In the absence of a variance, only 187 spaces may be landbanked. Staff would recommend a condition of approval requiring either 1) 187 spaces be constructed prior to occupancy, 2) a variance is granted to increase the amount of landbanked parking to 361 spaces (96.5%) prior to occupancy, or 3) that a letter of credit or acceptable surety be submitted guaranteeing the construction of the spaces if zoning relief is not granted prior to occupancy.

The Zoning Code has several findings for the Plan Commission to consider for approval of a Design Review. Staff has drafted responses to the findings for the Commission to consider.

Findings for Approval:

A. The project is consistent with applicable design guidelines: The proposed improvements would be generally consistent with the Standard Design Review Criteria for Industrial Projects.

B. The project conforms to the Comprehensive Plan, and specifically to the Land Use, Urban Design, and Environment Elements: Proposed improvements balance the Land Use and Urban Design elements' goals and policies with the proposed employment activity and the existing context of the area. Landscape provides additional screening not currently provided along the street frontage.

C. The project is consistent with all applicable provisions of the Zoning Code: With the proposed Text Amendments expected to accompany the addition as described in the lighting and expected variances for parking, the project will be consistent with the Zoning Code.

D. The project is compatible with adjacent and nearby development: Site improvements are compatible with the adjacent development and are designed in a manner consistent with the adjoining employment district uses.

E. The project design provides for safe and efficient provision of public services: As approved, public services can be delivered safely and efficiently.

Staff Recommendation

Staff recommends that the Plan Commission review this proposal in accordance to the Findings for Approval for Design Review. Staff believes that the Plan Commission can review the Findings in the affirmative, and approve this design review request for a building addition subject to:

1. That building lighting is reduced to 15 feet on building permit drawings, unless a Text Amendment or variance be sought prior to occupancy to allow lighting at the depicted height be granted prior to occupancy.
2. That one of the following occur a) 187 new spaces be constructed prior to occupancy, b) a variance is granted to increase the amount of landbanked parking to 361 spaces (96.5%) prior to occupancy, or 3) that a letter of credit or acceptable surety be submitted guaranteeing the construction of the spaces if zoning relief is not granted prior to occupancy.
3. That the provided parking at the southwest corner of the building be redesigned to comply with 4.203.N of the Zoning Code incorporating separation from the building and islands pursuant to 4.203.N and 4.211.B

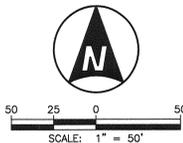
Attachment: Design Review Submittal

C: Mayor and City Council
Anthony Martini, Mackie Consultants
John Lenz, FCL Builders
Mary Ann Mings, Suncast
Media

PLAT OF TOPOGRAPHY

S89°56'41"E 1040.00'

PROPERTY DESCRIPTION:
 LOT 65 IN BATAVIA BUSINESS PARK, BEING A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER OF SECTION 12 AND PART OF THE EAST HALF OF SECTION 13, TOWNSHIP 39 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, ALL IN KANE COUNTY, ILLINOIS, AND PART OF THE SOUTHWEST QUARTER OF SECTION 18, TOWNSHIP 39 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN IN DUPAGE COUNTY, ILLINOIS, ACCORDING TO THE PLAT THEREOF RECORDED JUNE 30, 2000 AS DOCUMENT 2000K052067 AND CERTIFICATE OF CORRECTION RECORDED FEBRUARY 20, 2001 AS DOCUMENT 2001K014507, IN KANE COUNTY, ILLINOIS AND IN DUPAGE COUNTY ON JUNE 30, 2000 AS DOCUMENT R2000-099708.



P.L.N.:
12-13-203-002

LEGEND:

- BOUNDARY LINE
- PROPOSED LOT LINE
- BUILDING SETBACK LINE (BSL)
- EASEMENT LINE
- EXISTING RIGHT-OF-WAY LINE
- EXISTING LOT LINE
- UNDERLYING LOT LINE
- SECTION LINE
- SANITARY SEWER
- STORM SEWER
- COMBINED SEWER
- WM WATER MAIN
- FM FORCE MAIN
- CATV CABLE TV LINE
- E ELECTRIC LINE
- FO FIBER OPTIC LINE
- G GAS LINE
- T TELEPHONE LINE
- OH OVERHEAD WIRE
- X FENCE
- GUARDRAIL
- BUSH LINE
- TREE LINE
- RAILROAD
- EDGE OF WATER
- WETLANDS
- MANHOLE (STMH/SAMH)
- CATCH BASIN (CB)
- INLET (NL)
- FLARED END SECTION (FES)
- VALVE VAULT (VV)
- VALVE BOX (VB)
- BUFFALO BOX (BB)
- FIRE HYDRANT (FH)
- AUXILIARY VALVE (AV)
- CLEANOUT (CO)
- BOLLARD (BOL)
- GAS VALVE (GV)
- ELECTRIC MANHOLE (EMH)
- TELEPHONE MANHOLE (TMH)
- HANDHOLE (HH)
- TRAFFIC SIGNAL BOX (TSB)
- TRAFFIC SIGNAL (TS)
- LIGHT (LHT)
- GROUND LIGHT (GLHT)
- POWER POLE (PP)
- GUY WIRE (GW)
- CABLE PEDESTAL (PEDC)
- ELECTRIC PEDESTAL (PEDE)
- TELEPHONE PEDESTAL (PEDT)
- TRANSFORMER
- SIGN
- SOIL BORING
- MAILBOX (MB)
- DECIDUOUS TREE (SIZE IN INCHES)
- CONIFEROUS TREE (SIZE IN INCHES)
- BUSH
- CONTOUR LINE
- SPOT ELEVATION
- PAVEMENT ELEVATION
- TOP OF CURB ELEVATION
- TOP OF DEPRESSED CURB ELEVATION
- WALK ELEVATION
- AIR CONDITIONER UNIT
- BOTTOM OF WALL
- CHORD BEARING
- CHORD LENGTH
- CHAIN LINK FENCE
- DEED
- DUCTILE IRON PIPE
- ELECTRIC METER
- FINISHED FLOOR
- FOUND IRON ROD
- FOUND IRON PIPE
- GARAGE FLOOR
- GRADE AT FOUNDATION
- GAS METER
- INVERT
- ARC LENGTH
- MEASURED
- POLYVINYL CHLORIDE PIPE
- RADIUS
- RECORD
- REINFORCED CONCRETE PIPE
- RETAINING WALL
- SANITARY
- SITE BENCHMARK
- SET IRON PIPE
- SET IRON ROD
- STORM
- STRUCTURE
- TOP OF FOUNDATION
- TOP OF PIPE
- TOP OF WALL
- TRANSFORMER
- CONCRETE (CONC)
- GRAVEL
- HOT MIX ASPHALT (HMA)
- BUILDING
- DEPRESSED CURB

BENCHMARKS:

- SOURCE BENCHMARK: NGS BRASS DISK "DK3231" AT THE SW CORNER OF FABYAN PKWY AND KIRK RD ELEVATION = 792.74 (NAVD 88)
- SITE BENCHMARK #1: SE ARROW BOLT ON HYDRANT AT THE INTERSECTION OF SUNCAST LN AND PIERSON DR ELEVATION = 762.00
- SITE BENCHMARK #2: NW ARROW BOLT ON HYDRANT APPROX. 190' WESTERLY FROM THE SOUTHWEST BUILDING CORNER OF #1801 SUNCAST LN ELEVATION = 764.01

NOTES:

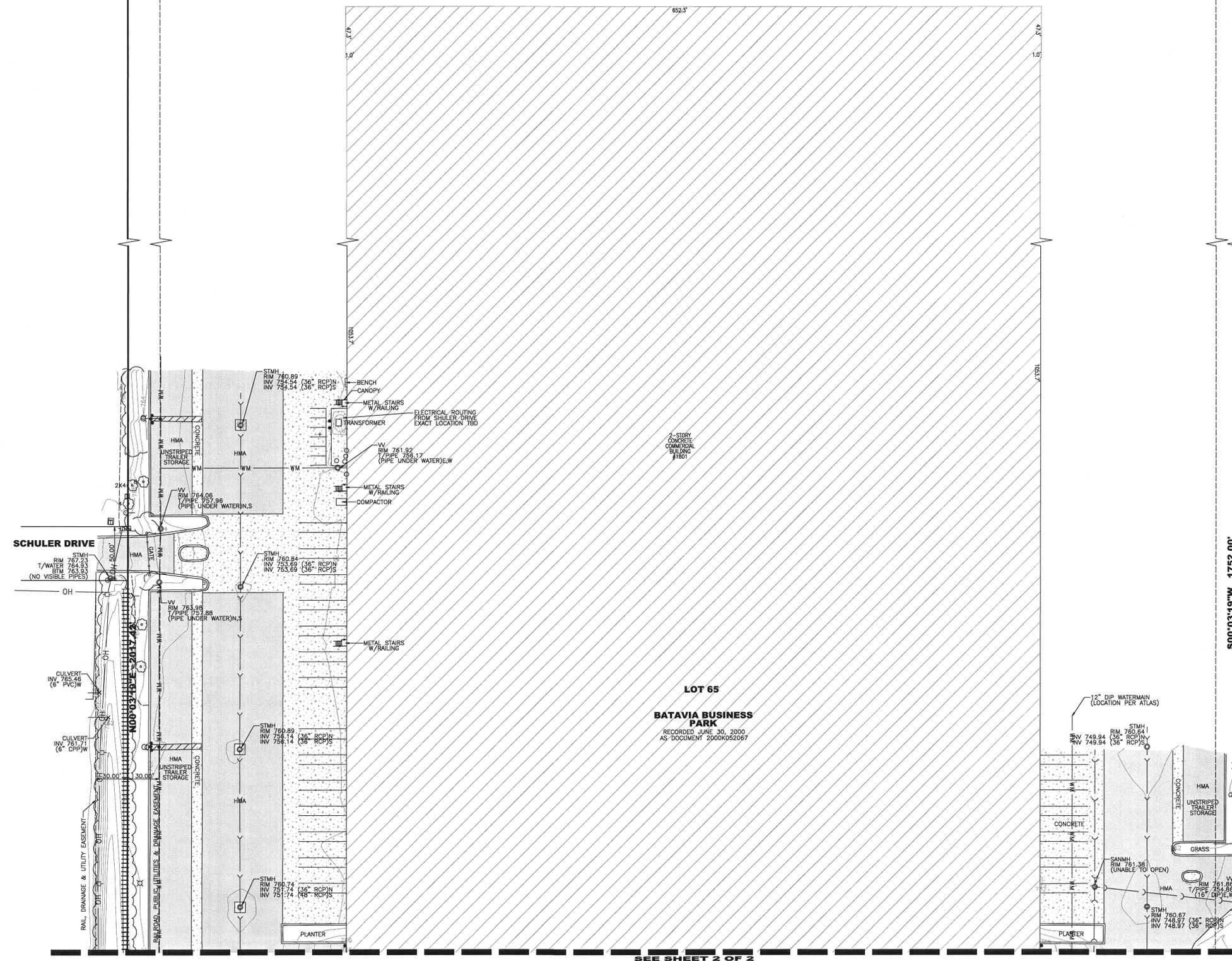
1. BOUNDARY SHOWN HEREON IS BASED ON RECORD INFORMATION AS SHOWN ON THE PLAT OF BATAVIA BUSINESS PARK, RECORDED JUNE 30, 2000 AS DOCUMENT NUMBER 2000K052067 AND CERTIFICATE OF CORRECTION RECORDED FEBRUARY 20, 2001 AS DOCUMENT 2001K014507.
2. BEARINGS BASED ON THE PLAT OF BATAVIA BUSINESS PARK, RECORDED JUNE 30, 2000 AS DOCUMENT NUMBER 2000K052067.
3. BUILDING DIMENSIONS AND TIES SHOWN HEREON ARE MEASURED FROM THE OUTSIDE FACE OF CONCRETE FOUNDATION.
4. ALL DIMENSIONS ARE GIVEN IN FEET AND DECIMAL PARTS THEREOF.
5. COMPARE DEED DESCRIPTION AND SITE CONDITIONS WITH THE DATA GIVEN ON THIS PLAT AND REPORT ANY DISCREPANCIES TO THE SURVEYOR AT ONCE.
6. ONLY THOSE BUILDING LINE SETBACKS AND EASEMENTS WHICH ARE SHOWN ON THE RECORDED PLAT OF SUBDIVISION ARE SHOWN HERE ON. REFER TO THE DEED, TITLE INSURANCE POLICY AND LOCAL ORDINANCES FOR OTHER RESTRICTIONS.
7. NO DIMENSIONS SHALL BE DERIVED FROM SCALE MEASUREMENTS.
8. OBSERVABLE ABOVE GROUND UTILITIES AND ABOVE GROUND EVIDENCE OF UNDERGROUND UTILITIES LOCATED AND SHOWN HEREON.
9. CONTACT JULIE AT 1-800-892-0123 FOR EXACT LOCATION OF BURIED UTILITIES PRIOR TO DIGGING.
10. PLAT IS BASED ON FIELD WORK COMPLETED ON 03-23-16.
11. CERTIFIED COPIES OF THIS TOPOGRAPHY BEAR AN IMPRESSED SEAL.

STATE OF ILLINOIS)
 COUNTY OF COOK) S.S.

WE, MACKIE CONSULTANTS LLC, AN ILLINOIS PROFESSIONAL DESIGN FIRM NUMBER 184-002694, HEREBY CERTIFY THAT WE HAVE PREPARED THE TOPOGRAPHY ON THE ABOVE DESCRIBED PROPERTY AND THAT THIS PLAT REPRESENTS THE CONDITIONS FOUND AT THE TIME OF SAID TOPOGRAPHY.

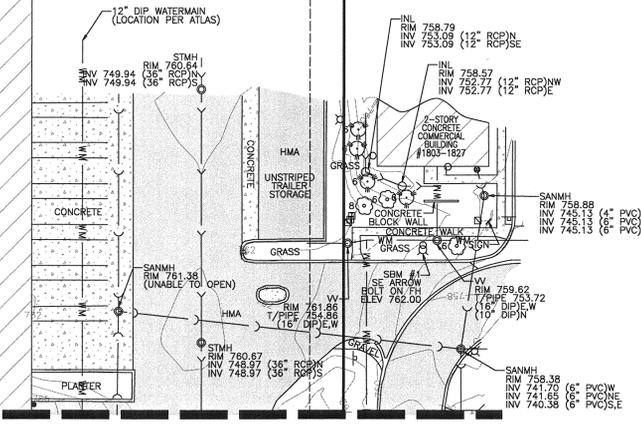
GIVEN UNDER MY HAND AND SEAL THIS 1ST DAY OF APRIL 2016 IN ROSEMONT, ILLINOIS.

Lea Ann Graves
 LEA ANN GRAVES
 EMAIL: lgraves@mackieconsult.com
 ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 035-003834
 LICENSE EXPIRES: NOVEMBER 30, 2016



LOT 65
BATAVIA BUSINESS PARK
 RECORDED JUNE 30, 2000
 AS DOCUMENT 2000K052067

SEE SHEET 2 OF 2



4/1/2016 9:14:10 AM N:\2992\Survey\Editing\2912-Plat of Topography.dwg

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

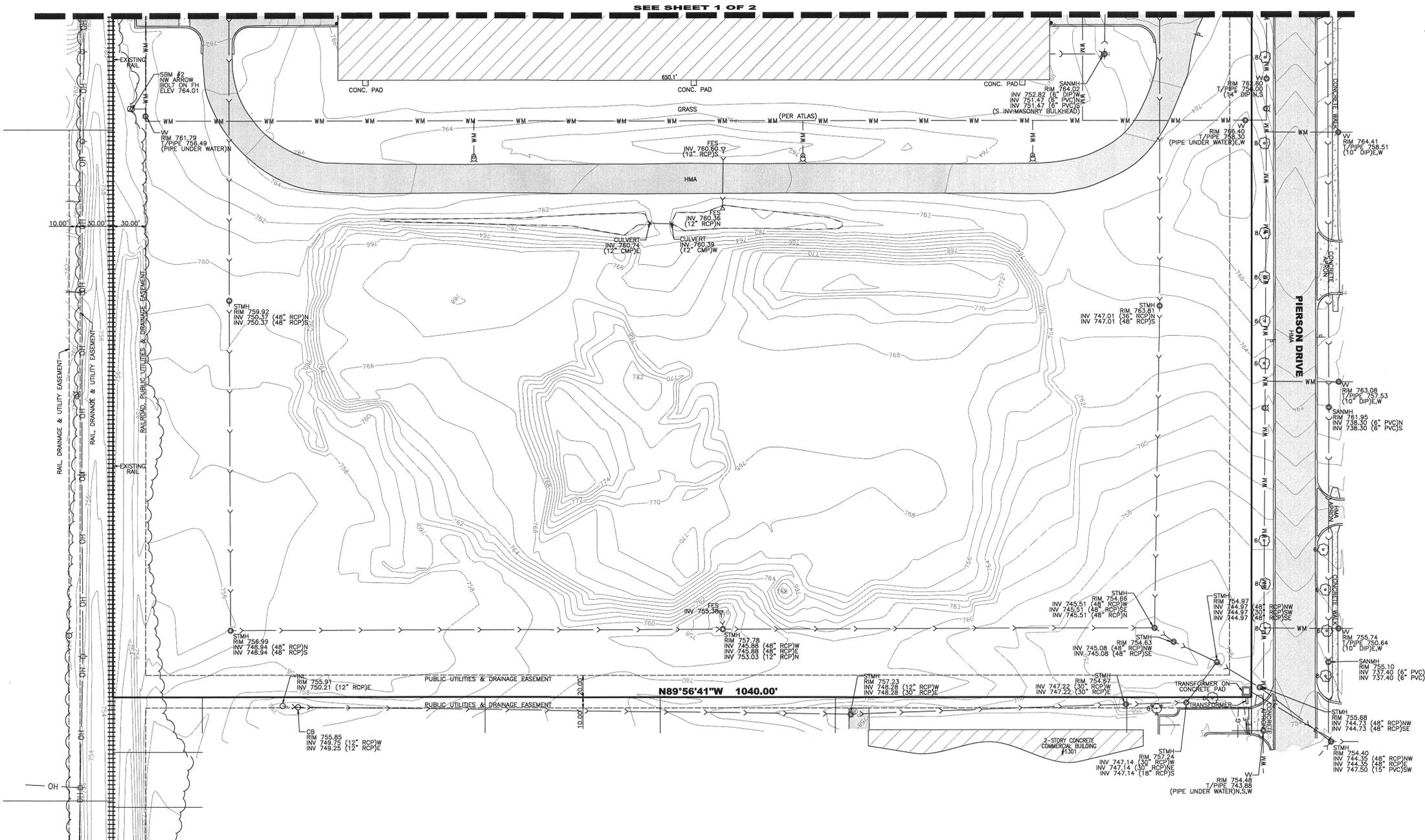
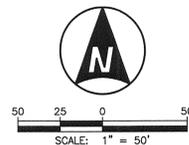
CLIENT:
FCL BUILDERS
 1150 SPRING LAKE DRIVE
 ITASCA, IL 60143

DESIGNED	LAG
DRAWN	DAG
APPROVED	DAG
DATE	04-01-16
SCALE	1" = 50'
DATE	DESCRIPTION OF REVISION
BY	

PLAT OF TOPOGRAPHY
1801 SUNCAST LANE
BATAVIA, IL

SHEET
1 OF 2
 PROJECT NUMBER: 2912
 © MACKIE CONSULTANTS LLC, 2016
 ILLINOIS FIRM LICENSE 184-002694

PLAT OF TOPOGRAPHY



LEGEND:

—	BOUNDARY LINE	⊕	SOIL BORING
- - -	PROPOSED LOT LINE	⊕	MAILBOX (MB)
- - -	BUILDING SETBACK LINE (BSL)	⊕	DECIDUOUS TREE (SIZE IN INCHES)
- - -	EASEMENT LINE	⊕	CONIFEROUS TREE (SIZE IN INCHES)
- - -	EXISTING RIGHT-OF-WAY LINE	⊕	BUSH
- - -	EXISTING LOT LINE	⊕	CONTOUR LINE
- - -	UNDERLYING LOT LINE	⊕	SPOT ELEVATION
- - -	SECTION LINE	⊕	PAVEMENT ELEVATION
- - -	SANITARY SEWER	⊕	TOP OF CURB ELEVATION
- - -	STORM SEWER	⊕	TOP OF DEPRESSED CURB ELEVATION
- - -	COMBINED SEWER	⊕	WALK ELEVATION
- - -	WATER MAIN	⊕	AIR CONDITIONER UNIT
- - -	FORCE MAIN	⊕	BOTTOM OF WALL
- - -	CATV	⊕	CHORD BEARING
- - -	ELECTRIC LINE	⊕	CHORD LENGTH
- - -	FIBER OPTIC LINE	⊕	CHAIN LINK FENCE
- - -	GAS LINE	⊕	DEED
- - -	TELEPHONE LINE	⊕	DUCTILE IRON PIPE
- - -	OVERHEAD WIRE	⊕	ELECTRIC METER
- - -	FENCE	⊕	FINISHED FLOOR
- - -	GUARDRAIL	⊕	FIR
- - -	BUSH LINE	⊕	FOUND IRON ROD
- - -	TREE LINE	⊕	FOUND IRON PIPE
- - -	RAILROAD	⊕	GARAGE FLOOR
- - -	EDGE OF WATER	⊕	GRADE AT FOUNDATION
- - -	WETLANDS	⊕	GAS METER
- - -	MANHOLE (STMH/SAMH)	⊕	INVERT
- - -	CATCH BASIN (CB)	⊕	ARC LENGTH
- - -	INLET (INL)	⊕	MEASURED
- - -	FLARED END SECTION (FES)	⊕	POLYVINYL CHLORIDE PIPE
- - -	VALVE VAULT (VV)	⊕	R=
- - -	VALVE BOX (VB)	⊕	RADIUS
- - -	VALVE VAULT (VV)	⊕	RECORD
- - -	VALVE BOX (VB)	⊕	REINFORCED CONCRETE PIPE
- - -	BUFFALO BOX (BB)	⊕	RETAINING WALL
- - -	FIRE HYDRANT (FH)	⊕	SANITARY
- - -	AUXILIARY VALVE (AV)	⊕	SANITARY
- - -	CLEANOUT (CO)	⊕	SITE BENCHMARK
- - -	BOLLARD (BOL)	⊕	SET IRON PIPE
- - -	GAS VALVE (GV)	⊕	SET IRON ROD
- - -	ELECTRIC MANHOLE (EMH)	⊕	STORM
- - -	TELEPHONE MANHOLE (TMH)	⊕	STRUCTURE
- - -	HANDHOLE (HH)	⊕	T/F
- - -	TRAFFIC SIGNAL BOX (TSB)	⊕	TOP OF FOUNDATION
- - -	TRAFFIC SIGNAL (TS)	⊕	TOP OF PIPE
- - -	LIGHT (LHT)	⊕	TOP OF WALL
- - -	GROUND LIGHT (GLHT)	⊕	T/WALL
- - -	POWER POLE (PP)	⊕	TRANSFORMER
- - -	GUY WIRE (GW)	⊕	
- - -	CABLE PEDESTAL (PEDC)	⊕	
- - -	ELECTRIC PEDESTAL (PEDE)	⊕	
- - -	TELEPHONE PEDESTAL (PEDT)	⊕	
- - -	TRANSFORMER	⊕	
- - -	SIGN	⊕	

4/1/2016 9:58:44 AM C:\2282\Survey\Easting\2912-Plat of Topography 2.plt

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

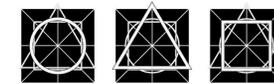
CLIENT:
FCL BUILDERS
 1160 SPRING LAKE DRIVE
 ITASCA, IL 60143

DATE	DESCRIPTION OF REVISION	BY

DESIGNED	LAG
DRAWN	LAG
APPROVED	DAG
DATE	04-01-16
SCALE	1" = 50'

PLAT OF TOPOGRAPHY
1801 SUNCAST LANE
BATAVIA, IL

SHEET
2 OF 2
 PROJECT NUMBER: 2912
 © MACKIE CONSULTANTS LLC, 2016
 ILLINOIS FIRM LICENSE 184-002694



HEITMAN
ARCHITECTS
INCORPORATED

555 PIERCE ROAD, SUITE 130
ITASCA, ILLINOIS 60143, USA
TEL. 630.773.3551
FAX. 630.773.3599

Heitman Architects Incorporated is a Professional Design Firm - Architect Corporation (License No. 184-000715)
© Copyright 2016 by Heitman Architects Incorporated. These documents, in printed and electronic form, are Instruments of Service for use solely with respect to this project. Heitman Architects Incorporated retains all common law, statutory and other rights, including copyright. No license or right to reproduce or use these documents is granted or implied, except with the written permission of Heitman Architects Incorporated. Unauthorized reproduction or use is strictly prohibited, violates the copyright laws of the United States and will subject the violator to legal prosecution.



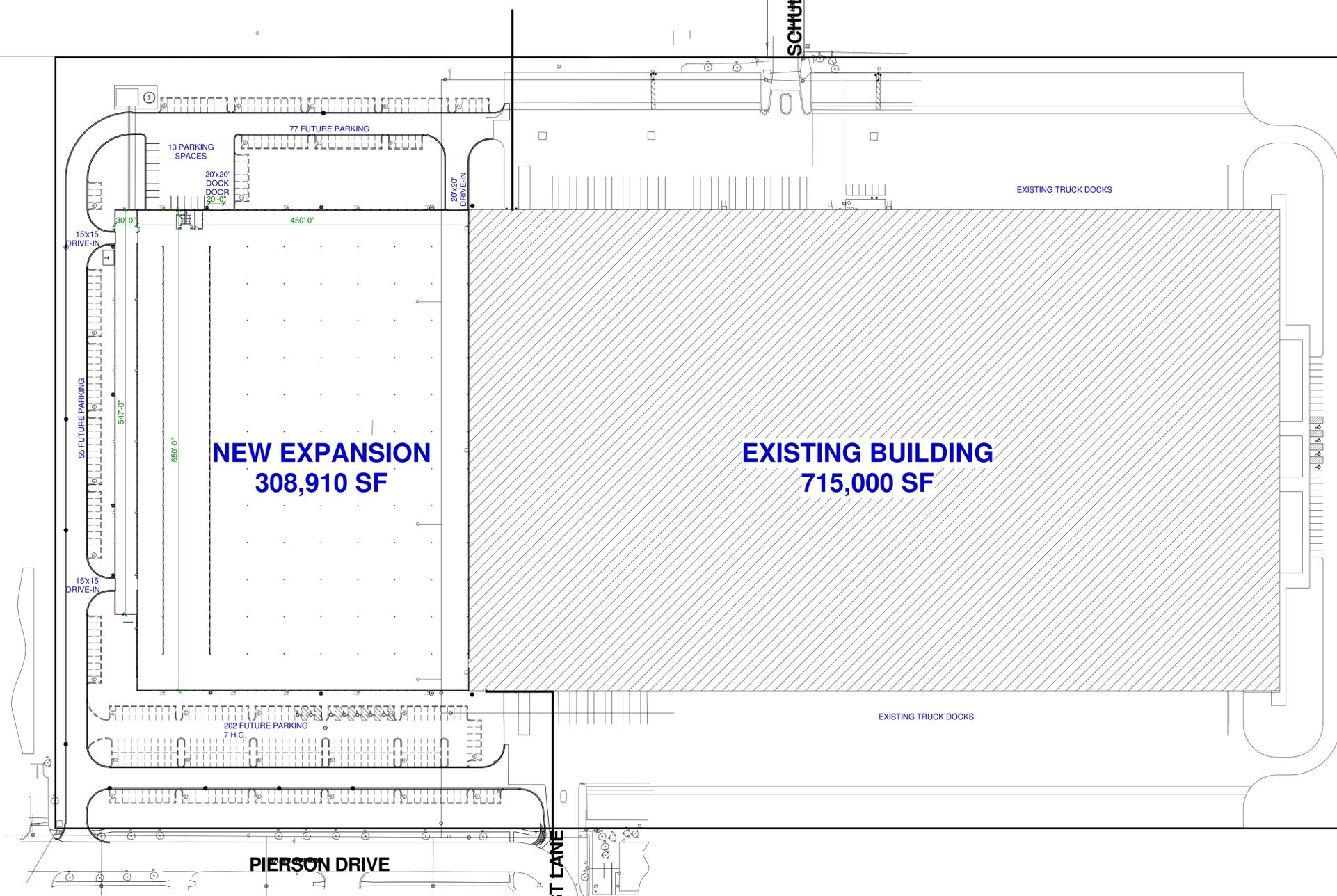
SUNCAST EXPANSION
701 N. KIRK RD.
BATAVIA, IL 60510



PARAMOUNT PKWY

SCHULER DR.

FABYAN PARKWAY



100 EXISTING CARS

PIERSON DRIVE

SUNCAST LAVE

BUILDING EXPANSION TABULATIONS:

BUILDING AREA:	715,000 SF EXISTING 292,500 SF EXPANSION STORAGE 15,410 SF EXPANSION MECHANICAL 1,023,910 SF TOTAL
DOCKS:	50 FUTURE DOCK DOORS 1 20x20 DOCK DOOR 1 20x20 FUTURE DOCK DOOR 1 20x20 DRIVE-IN DOOR
CAR PARKING	13 NEW CARS 341 FUTURE NEW CARS 100 EXISTING CARS 454 TOTAL CARS

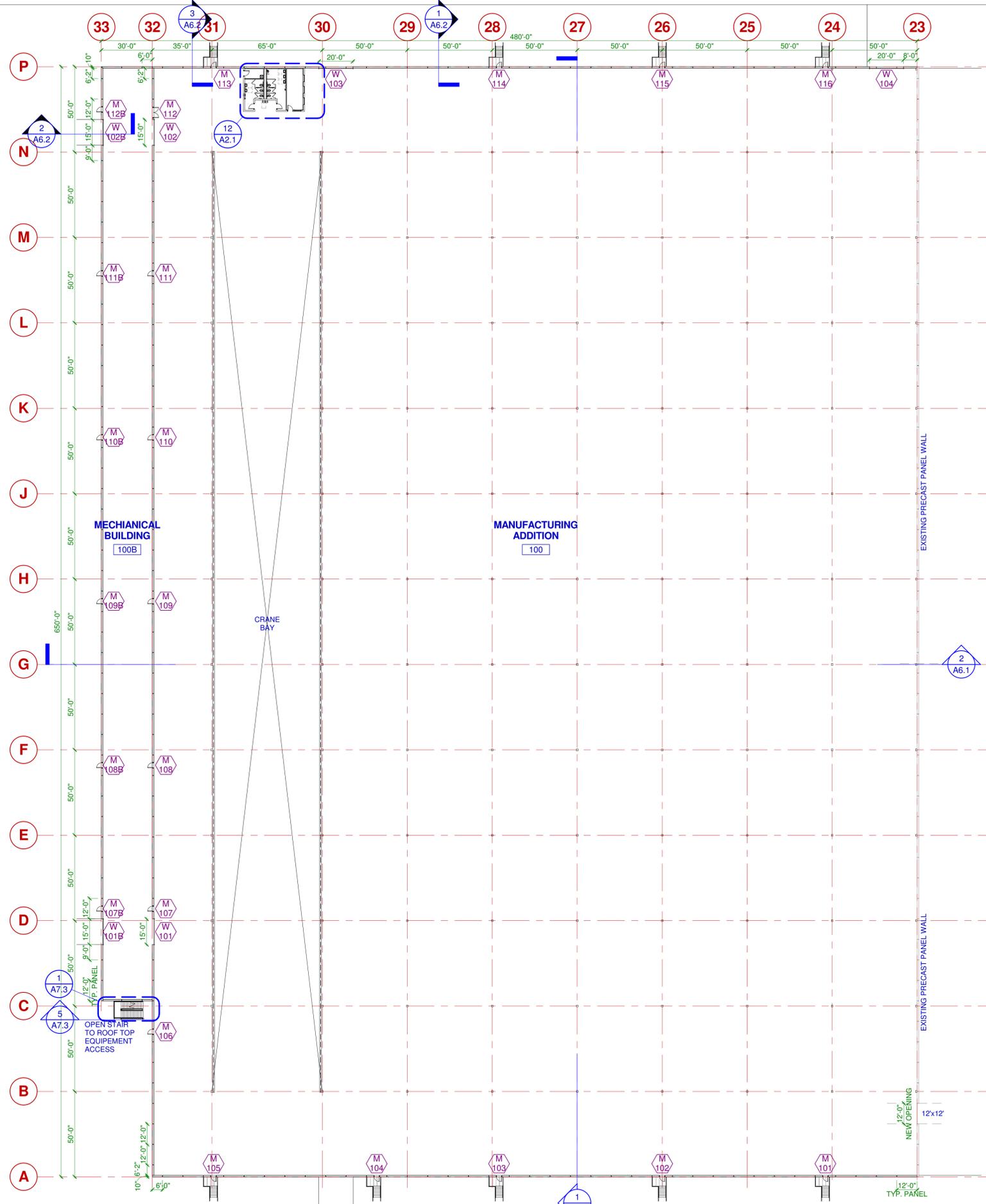
ISSUE DATE	DESCRIPTION
04/15/2016	PLANNING COMMISSION SUBMITTAL
05/11/2016	1ST RESUBMITTAL - FINAL ENGINEERING AND SITE PLAN APPROVAL

SHEET TITLE
SITE PLAN

DATE	SHEET NUMBER
05/02/2016	A1.1
PROJECT NUMBER	216020

1 GROUND FLOOR PLAN
A1.1 1" = 80'-0"

DESIGN DRAWINGS:
NOT FOR CONSTRUCTION
This plan is not to be used for construction. Plan layouts are for concept design only, and are subject to change based on detailed local code analysis and thorough evaluation of specific existing building conditions. Employee counts, furniture inventories and product inventories are provided as preliminary guidelines estimates only. Detailed design documents will be required by licensed design professionals of record, as project moves forward.



1
A2.0 **GROUND FLOOR PLAN**
1/32" = 1'-0"

BUILDING EXPANSION TABULATIONS:

BUILDING AREA:	715,000 SF EXISTING
	292,500 SF EXPANSION STORAGE
	16,410 SF EXPANSION MECHANICAL
	1,023,910 SF TOTAL
DOCKS:	50 FUTURE DOCK DOORS
	1 20x20 DOCK DOOR
	1 20x20 FUTURE DOCK DOOR
	1 20x20 DRIVE-IN DOOR
CAR PARKING	13 NEW CARS
	341 FUTURE NEW CARS
	100 EXISTING CARS
	454 TOTAL CARS

DESIGN DRAWINGS:
NOT FOR CONSTRUCTION
This plan is not to be used for construction. Plan layouts are for concept design only, and are subject to change based on detailed local code analysis and thorough evaluation of specific existing building conditions. Employee counts, furniture inventories and product inventories are provided as preliminary guideline estimates only. Detailed design documents will be required by licensed design professionals of record, as project moves forward.



555 PIERCE ROAD, SUITE 130
ITASCA, ILLINOIS 60143, USA
TEL. 630.773.3551
FAX. 630.773.3599

Heitman Architects Incorporated is a Professional Design Firm - Architect Corporation (License No. 184-000715)
© Copyright 2016 by Heitman Architects Incorporated. These documents, in printed and electronic form, are Instruments of Service for use solely with respect to this project. Heitman Architects Incorporated retains all common law, statutory and other rights, including copyrights. No license or right to reproduce or use these documents is granted or implied, except with the written permission of Heitman Architects Incorporated. Unauthorized reproduction or use is strictly prohibited, violates the copyright laws of the United States and will subject the violator to legal prosecution.



SUNCAST EXPANSION
701 N. KIRK RD.
BATAVIA, IL 60510



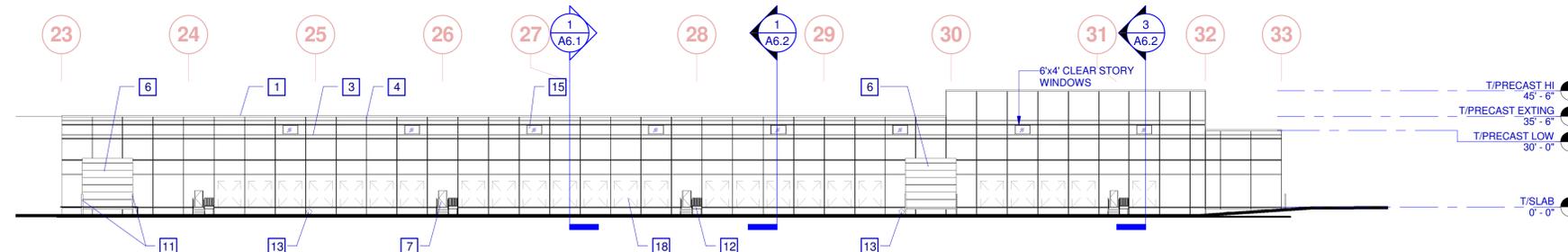
ISSUE DATE	04/15/2016	PLANNING COMMISSION SUBMITTAL
	05/11/2016	1ST RESUBMITTAL - FINAL ENGINEERING AND SITE PLAN APPROVAL

SHEET TITLE
COMPOSITE GROUND FLOOR PLAN

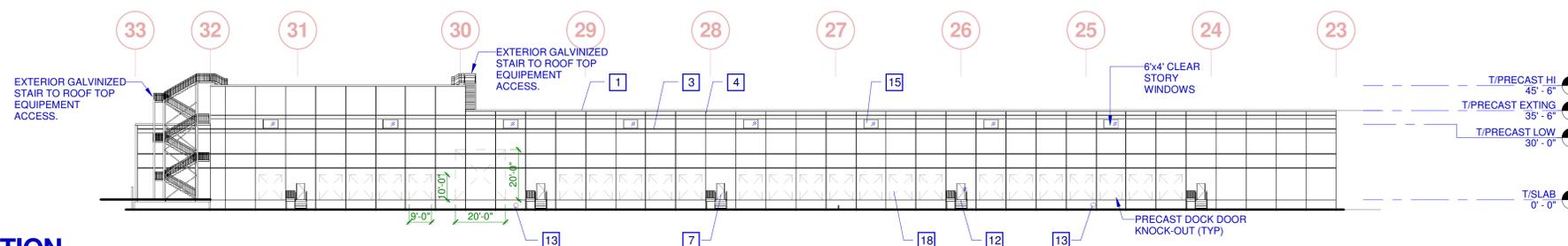
DATE	05/02/2016	SHEET NUMBER	A2.0
PROJECT NUMBER	216020		



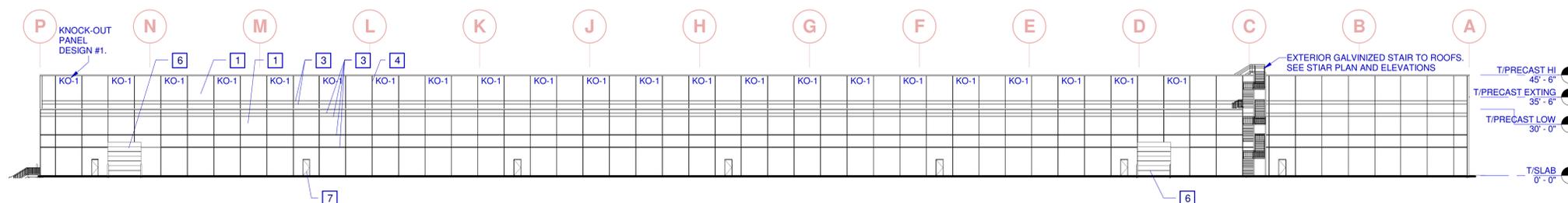
1 NORTH ELEVATION
A5.0 1" = 30'-0"



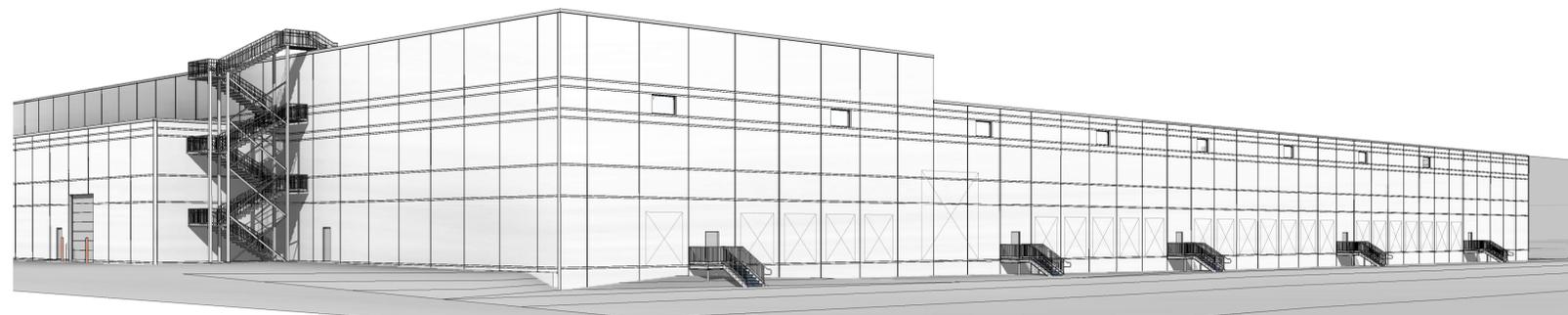
2 WEST ELEVATION
A5.0 1" = 30'-0"



3 EAST ELEVATION
A5.0 1" = 30'-0"



4 SOUTH ELEVATION
A5.0 1" = 30'-0"



SOUTH EAST PERSPECTIVE

EXTERIOR MATERIAL LEGEND

- | | |
|---|---|
| 1 PRE-FINISHED 24 GA. GALVANIZED STEEL PAC-CLAD FASCIA / GRAVEL STOP TO MATCH COLOR: PAC-CLAD - TBD | 11 CONCRETE-FILLED BUMPER POST, DETAIL SHEET A1.3 |
| 2 PRECAST CONCRETE PANEL PAINTED TO MATCH THE EXISTING PRECAST. | 12 GALVANIZED STEEL STAIR AND RAILING. SEE DETAIL. |
| 3 PRECAST PANEL REVEAL, DETAIL SHEET A7.1 | 13 OVERFLOW ROOF DRAIN DISCHARGE (1'-0" ABOVE GRADE - TYP.) |
| 4 PRECAST PANEL JOINT, DETAIL SHEET A7.1 | 14 DRIVE-IN DOOR RAMP GUARD RAIL |
| 5 CONCRETE FOUNDATION | 15 1" CLEAR STORY WINDOW. VISION GLAZING WITH LOW-E. |
| 6 INSULATED PREFINISHED STEEL OVERHEAD SECTIONAL DOOR. | 16 WALL MOUNTED LIGHT PACK, xx"x" A.F.F., SEE ELECTRICAL. |
| 7 INSULATED HOLLOW METAL DOOR AND FRAME. PAINT TO MATCH PRECAST PANEL COLOR | 17 MAN DOOR LIGHT, HEIGHT A.F.F. TO MATCH EXISTING, SEE ELECTRICAL. |
| 8 N/A | 18 FUTURE DOCK DOOR KNOCK-OUT |
| 9 N/A | 19 FUTURE DRIVE-IN DOOR KNOCK-OUT |
| 10 N/A | |

**DESIGN DRAWINGS:
NOT FOR CONSTRUCTION**
This plan is not to be used for construction. Plan layouts are for concept design only, and are subject to change based on detailed local code analysis and thorough evaluation of specific existing building conditions. Employee counts, furniture inventories and product inventories are provided as preliminary guidelines estimates only. Detailed design documents will be required by licensed design professionals of record, as project moves forward.

ISSUE DATE	
04/15/2016	PLANNING COMMISSION SUBMITTAL
05/11/2016	1ST RESUBMITTAL - FINAL ENGINEERING AND SITE PLAN APPROVAL

SHEET TITLE
BUILDING ELEVATIONS

DATE	SHEET NUMBER
05/02/2016	A5.0
PROJECT NUMBER	216020

Suncast Expansion

1801 Suncast Lane
Batavia, Illinois

DAVID R. McCALLUM ASSOCIATES, INC.
LANDSCAPE ARCHITECTS
350 N. Milwaukee Avenue | Libertyville, Illinois 60048
T 847.382.2209 | F 847.382.2204



Landscape Plan

2	Village Review Site Mod.	05.11.16
1	For Review	04.14.16
Mark	Description	Date
Issuance		

Number	449316
Scale	1" = 40'
File	4493FP2A
Sheet	L10

Plant List

Shade Trees			
Key	Qty.	Size	Remarks
ACF	6	2.5"	Acer x freemanii 'Autumn Blaze' Autumn Blaze Freeman Maple BB
CEO	5	2.5"	Celtis occidentalis 'Prairie Pride' Prairie Pride Common Hackberry BB
GTS	4	2.5"	Gleditsia triacanthos var. inermis 'Skyline' Skyline Thornless Honeylocust BB
ULM	5	2.5"	Ulmus x 'Morton Glossy' Triumph Elm BB

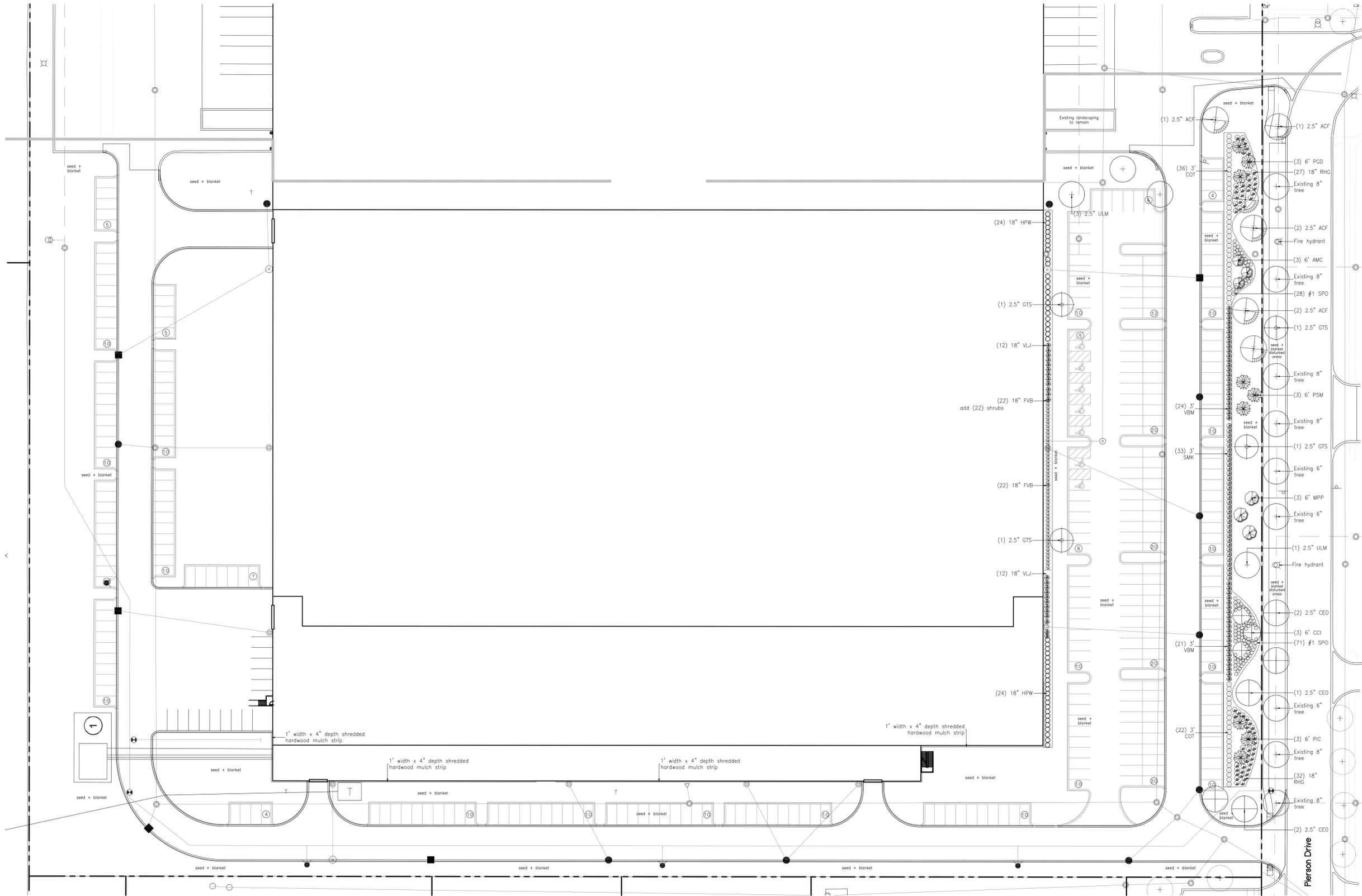
Ornamental Trees			
Key	Qty.	Size	Remarks
AMC	3	6'	Amelanchier canadensis Shadblow Serviceberry BB/Clump
CCI	3	6'	Crataegus crusgalli var. inermis Thornless Cockspur Hawthorn BB/Clump
MPP	3	6'	Malus 'Purple Prince' Purple Prince Crabapple BB/Clump

Evergreen Trees			
Key	Qty.	Size	Remarks
PGD	3	6'	Picea glauca 'Densata' Black Hills Spruce BB
PIC	3	6'	Picea pungens Colorado Green Spruce BB
PSM	3	6'	Pseudotsuga menziesii Douglas Fir BB

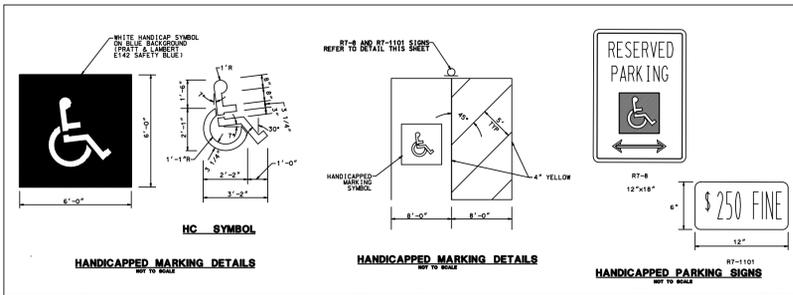
Shrubs			
Key	Qty.	Size	Remarks
COT	58	3'	Cotoneaster acutifolius Peking Cotoneaster BB
FVB	38	18"	Forsythia viridissima 'Bronxensis' Bronx Dwarf Forsythia BB
HPW	49	18"	Hydrangea paniculata 'Pinky Winky' Pinky Winky Hydrangea BB
RHG	59	18"	Rhus aromatica 'Gra-Low' Gra-Low Fragrant Sumac BB
SMK	33	3'	Syringa patula 'Miss Kim' Miss Kim Dwarf Lilac BB
VBM	45	3'	Viburnum dentatum 'Christom' Blue Muffin Arrowwood Viburnum BB
VLJ	24	18"	Viburnum dent. KLM seventeen Little Joe Little Joe Viburnum BB

Ornamental Grasses			
Key	Qty.	Size	Remarks
SPO	99	#1	Sporobolus heterolepis Prairie Dropseed Container

NOTE: Blanket to be North American Green DS-75 erosion control blanket.



Pierson Drive



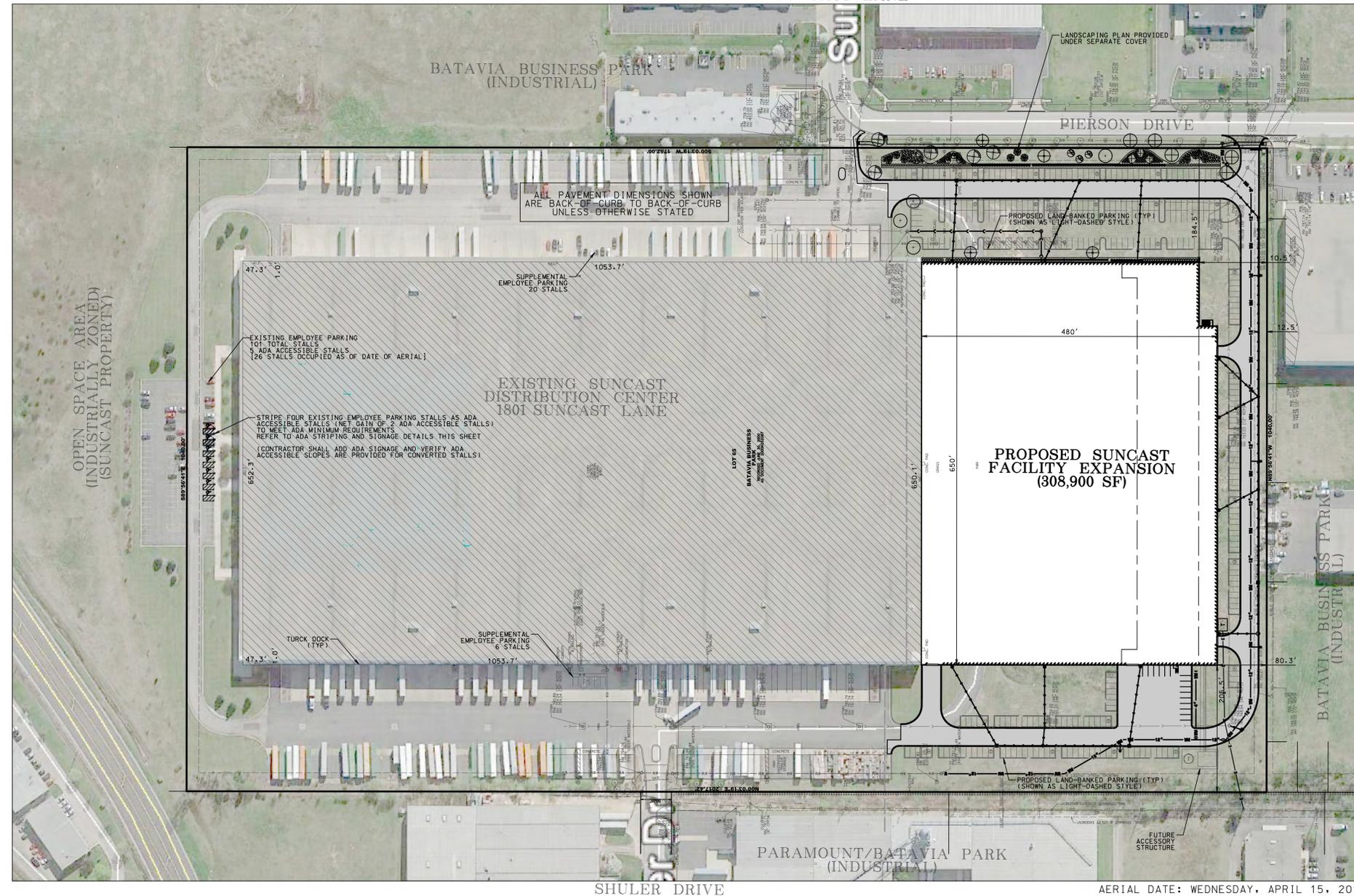
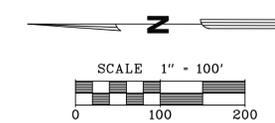
CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL APPROPRIATE TRAFFIC CONTROL IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS AND DETAILS

UNLESS OTHERWISE NOTED, ALL DISTURBED AREAS SHALL BE RESTORED WITH 6" INCHES OF TOPSOIL AND SEED

STORMWATER DETENTION SUMMARY:

TOTAL TRIBUTARY AREA (IN PERMIT)	41.83 ACRES
COMPOSITE RUNOFF COEFFICIENT (C)	0.90 (PERMITTED)
COMPOSITE RUNOFF COEFFICIENT (C)	0.83 (PROPOSED)
RETENTION VOLUME PROVIDED	(WITHIN EXISTING BASIN)

** THE PROPOSED SITE IMPROVEMENTS ARE MUCH LESS IMPERVIOUS THAN ORIGINALLY PERMITTED THUS SUFFICIENT DETENTION IS PROVIDED BY THE EXISTING REGIONAL DETENTION BASIN PROVIDED WITHIN THE BATAVIA BUSINESS PARK DEVELOPMENT.



ZONING & SETBACKS:

EMPLOYMENT DISTRICT
ZONING = G1 (GENERAL INDUSTRIAL)

TABLE 2.604 (CITY OF BATAVIA):
FRONT SETBACK = 20.0' (NOT APPLICABLE TO IMPROVEMENTS)
SIDE SETBACK - EMPLOYMENT DISTRICT = 0.0'
SIDE SETBACK - COLLECTOR OR LOCAL ROAD = 20.0'
REAR SETBACK - EMPLOYMENT DISTRICT = 0.0' / 10.0'

NOTE: ACCESSORY STRUCTURE SHALL NOT BE LOCATED IN A REQUIRED PRINCIPAL BUILDING SETBACK AND IN NO CASE CLOSER THAN 10.0' FROM THE PROPERTY LINE.

LANDSCAPE BUFFER FROM EAST PROPERTY LINE = 20.0'

SITE ACREAGE:

TOTAL SITE ACREAGE = +/- 41.83 ACRES
SITE AREA DISTURBED = +/- 14.53 ACRES

ENGINEERING PLAN GENERAL NOTES

- REFER TO THE CITY OF BATAVIA ENGINEERING SPECIFICATIONS WITHIN THIS PLAN SET FOR INFORMATION REGARDING SANITARY SEWER, STORM SEWER, AND WATERMAIN CONSTRUCTION.
- SANITARY SEWER AND WATERMAIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", LATEST EDITION AND ALL SUPPLEMENTS THERETO.
- EXISTING DRAIN TILE ENCOUNTERED DURING CONSTRUCTION WHICH DRAIN OFF-SITE AREAS WILL BE RE-ROUTED TO THE STORM SEWER SYSTEM. ALL OTHER DRAIN TILE ENCOUNTERED WILL BE REMOVED OR ABANDONED DURING CONSTRUCTION.
- ALL REQUIRED EASEMENTS FOR DRAINAGE AND UTILITIES ARE PROVIDED IN THE RECORDED PLAN OF SUBDIVISION FOR THE BATAVIA BUSINESS PARK AND/OR SHALL BE PROVIDED AS A COMPONENT OF THE FINAL ENGINEERING SUBMITTAL UPON APPROVALS.
- ALL PROPOSED SANITARY SEWER, STORM SEWER, AND WATERMAIN AND SERVICES UNDER AND WITHIN 2' OF PAVEMENT SHALL BE BACKFILLED WITH TRENCH BACKFILL, CRUSHED STONE OR CRUSHED ASPHALT MEETING CA-6 GRADATION.
- ALL DIMENSIONS AND RADII ARE TO BACK OF CURB, UNLESS OTHERWISE SHOWN.
- ALL LIGHTING AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE CITY OF BATAVIA STANDARDS.
- THE PROPOSED PROJECT SITE DOES NOT LIE WITHIN FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) REGULATORY FLOODPLAIN LIMITS PER THE DELINEATION FOUND IN COMMUNITY PANEL NOS. 17089C0332H WITH AN EFFECTIVE DATE OF AUGUST 3, 2009.
- ALL MANHOLES AND CATCH-BASINS SHALL BE 4'-0" DIAMETER UNLESS OTHERWISE INDICATED.
- ADA ACCESSIBLE CURB RAMP SHALL BE PROVIDED AT ALL LOCATIONS WHERE THE SIDEWALK ADJOINS THE CURB AND GUTTER. ALL DETECTABLE WARNINGS SHALL BE RED IN COLOR.
- 76 PARKING STALLS (20.3%) ARE TO BE LAND-BANKED FOR FUTURE USE UNDER THIS PLAN. LAND-BANKING FUTURE EMPLOYEE PARKING STALLS FOR UP TO 50% OF THE REQUIRED AMOUNT IS PERMITTED PER THE CITY OF BATAVIA.
- REFER TO THE WATERMAIN RELOCATION PLAN PREPARED BY MACKIE CONSULTANTS LLC, DATED MAY 4, 2016 FOR INFORMATION PROVIDED PROVIDED TO THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA) REQUESTING APPROVAL FOR EXISTING WATERMAIN DEMOLITION AND PROPOSED WATERMAIN CONSTRUCTION. AN APPROVED IEPA WATER PERMIT MUST BE OBTAINED PRIOR TO ANY CONSTRUCTION ACTIVITIES.
- LIGHTING AND PHOTOMETRIC PLAN TO BE PROVIDED BY MECHANICAL, ELECTRICAL AND PLUMBING ENGINEER UNDER SEPARATE COVER.
- LANDSCAPE AND TREE PRESERVATION PLAN TO BE PROVIDED BY LANDSCAPE ARCHITECT UNDER SEPARATE COVER.
- SITE PLAN TO BE PROVIDED BY ARCHITECT UNDER SEPARATE COVER.
- ELECTRIC SERVICE AND DESIGN TO BE PROVIDED BY THE CITY OF BATAVIA.
- ALL SITE IMPROVEMENTS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF BATAVIA, THE APPLICABLE PROVISIONS OF THE FOLLOWING SPECIFICATIONS SHALL SUPPLEMENT THEIR REQUIREMENTS:
- ALL NOMINAL BUILDING DIMENSIONS ARE BASED ON ARCHITECTURAL PLANS. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS AND CONTACT THE ARCHITECT FOR ANY DISCREPANCIES.
- REFUSE AND RECYCLING CONTAINERS SHALL BE LOCATED WITHIN THE EXISTING BUILDING. REFER TO THE REFUSE AND RECYCLING NOTES ON THIS SHEET.

PARKING STALL SUMMARY:

	EXISTING	ADDITIONAL	PROVIDED	REQUIRED
TOTAL PROPOSED PARKING	285	13	298	187*
TRAILER PARKING (NOT INCLUDING TRUCK DOCKS)	158	0	158	
EMPLOYEE PARKING STALLS	96	13	107	
SUPPLEMENTAL EMPLOYEE PARKING	26	0	26	
ADA ACCESSIBLE STALLS	5	2***	7	7*
TOTAL PROPOSED LANDBANKED PARKING	0	326	326	76**
EMPLOYEE PARKING STALLS	0	319	319	(20.3%)
ADA ACCESSIBLE STALLS	0	7	7	3
TOTAL PROPOSED PARKING (EXISTING, PROPOSED AND FUTURE/LANDBANKED)			624	374

* CITY OF BATAVIA REQUIREMENT: 374 TOTAL PARKING SPACES ARE REQUIRED WITH ELIGIBILITY FOR 50% LANDBANKED (187 PARKING SPACES REQUIRED PRIOR TO LANDBANKING). LANDBANKED STALLS ARE SHOWN AS A DASHED LINE STYLE.

** PROVIDED 298 PARKING SPACES ARE PROPOSED. ONLY 76 LANDBANKED PARKING SPACES OF THE POTENTIAL 326 ARE REQUIRED PER CITY OF BATAVIA MINIMUM PARKING REQUIREMENT.

*** PARKING LOCATED ON NORTH END OF FACILITY WILL REQUIRE TWO ADDITIONAL ADA ACCESSIBLE STALLS TO MEET MINIMUM REQUIREMENT.

REFUSE AND RECYCLING CONTAINER NOTES:

- REFUSE AND RECYCLING CONTAINERS TO BE LOCATED IN EXISTING TRUCK DOCK.
- OWNER SHALL BE RESPONSIBLE FOR COLLECTION AND DISPOSAL OF ALL REFUSE AND RECYCLING CONTAINERS.
- CONTAINERS SHALL BE OPEN-TOP ROLL-OFF CONTAINERS AND SHALL BE SIZED BASED ON OWNER OPERATION AND NUMBER OF PICKUPS PER USAGE.
- DISPOSAL SHALL BE PERFORMED BY REAR END LOADING REFUSE AND/OR RECYCLING TRUCK.

PROPOSED STORMWATER RUNOFF IS DETAINED REGIONALLY VIA THE BATAVIA BUSINESS PARK DETENTION BASIN - REFER TO THE STORMWATER MANAGEMENT REPORT FOR DETAIL

REFER TO SHEETS 9 & 9A OF THIS PLAN SET FOR INFORMATION REGARDING THE GEOMETRIC/PAVING PLAN AND LANDBANKED PARKING PLANS

CONTRACTOR / OWNER RESPONSIBLE FOR MAINTAINING THE SAFE AND ORDERLY FLOW OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC THROUGHOUT CONSTRUCTION

5/11/2016 2:57:25 PM M:\2016\Engineering\Projects\1801Suncastr\1801Suncastr.dwg

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

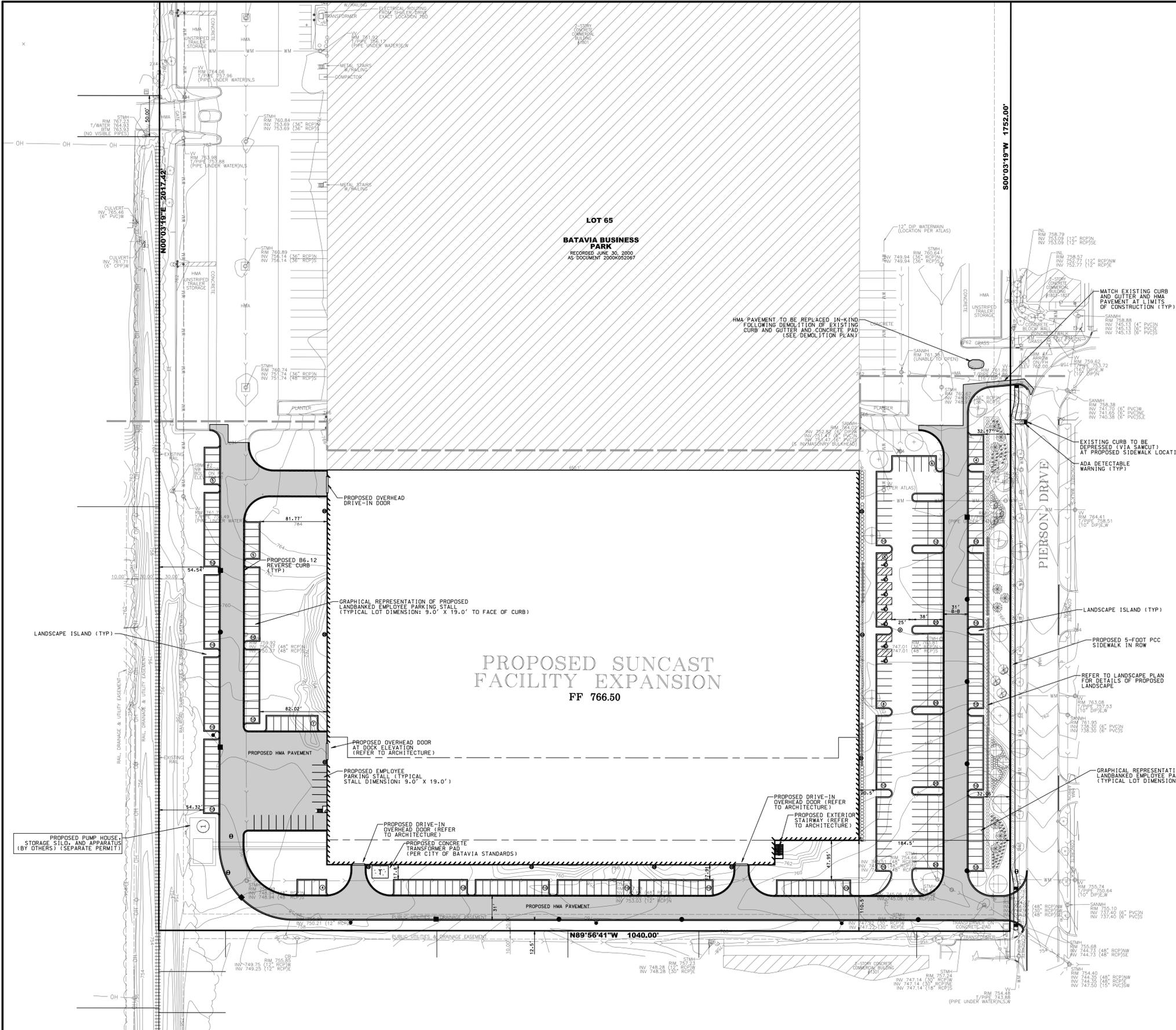
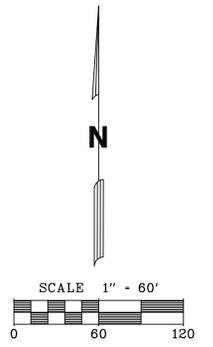
CLIENT:
FCL BUILDERS
1150 SPRING LAKE DRIVE
ITASCA, ILLINOIS 60143

DATE	DESCRIPTION OF REVISION	BY

DESIGNED	RNM
DRAWN	DWP
APPROVED	AJM
DATE	05/11/2016
SCALE	1" = 100'

OVERALL SITE EXHIBIT
1801 SUNCASTR LANE
BATAVIA, ILLINOIS

SHEET
2 OF 13
PROJECT NUMBER: 2912
© MACKIE CONSULTANTS LLC, 2016
ILLINOIS FIRM LICENSE 184-002694



PARKING STALL SUMMARY:

	EXISTING	ADDITIONAL	PROVIDED	REQUIRED
TOTAL PROPOSED PARKING	285	13	298	187*
TRAILER PARKING (NOT INCLUDING TRUCK DOCKS)	158	0	158	
EMPLOYEE PARKING STALLS	96	13	107	
SUPPLEMENTAL EMPLOYEE PARKING	26	0	26	
ADA ACCESSIBLE STALLS	5	2***	7	7*
TOTAL PROPOSED LANDBANKED PARKING	0	326	326	76** (20.3%)
EMPLOYEE PARKING STALLS	0	319	319	
ADA ACCESSIBLE STALLS	0	7	7	3
TOTAL PROPOSED PARKING (EXISTING, PROPOSED AND FUTURE/LANDBANKED)			624	374

- * CITY OF BATAVIA REQUIREMENT: 374 TOTAL PARKING SPACES ARE REQUIRED WITH ELIGIBILITY FOR 50% LANDBANKED (187 PARKING SPACES REQUIRED PRIOR TO LANDBANKING). LANDBANKED STALLS ARE SHOWN AS A DASHED LINE STYLE.
- ** PROVIDED 298 PARKING SPACES ARE PROPOSED, ONLY 76 LANDBANKED PARKING SPACES OF THE POTENTIAL 326 ARE REQUIRED PER CITY OF BATAVIA MINIMUM PARKING REQUIREMENT.
- *** PARKING LOCATED ON NORTH END OF FACILITY WILL REQUIRE TWO ADDITIONAL ADA ACCESSIBLE STALLS TO MEET MINIMUM REQUIREMENT.

LEGEND	
PROPOSED DRIVES/PARKING	
LANDBANKED PARKING	
REVERSE B6.12 CURB & GUTTER	
B6.12 CURB & GUTTER	
DEPRESSED CURB & GUTTER	
REFER TO SHEET 9 FOR PAVING PLAN	

5/11/2016 5:02:07 PM M:\2016\Engineering\1801 Landbanked parking exhibit.dwg

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

CLIENT:
FCL BUILDERS
 1150 SPRING LAKE DRIVE
 ITASCA, ILLINOIS 60143

DATE	DESCRIPTION OF REVISION	BY

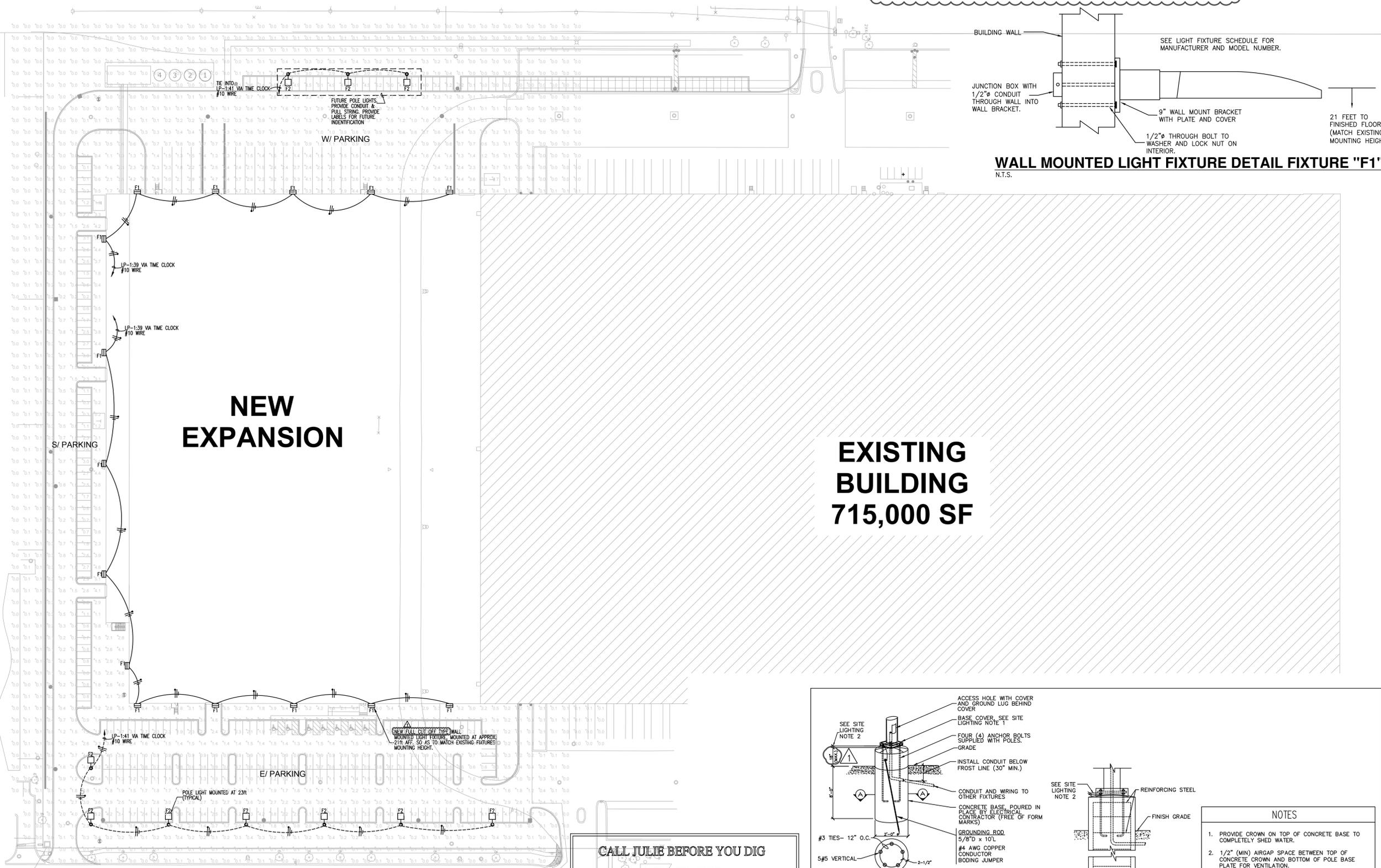
LANDBANKED PARKING EXHIBIT
1801 SUNCAST LANE
BATAVIA, ILLINOIS

SHEET
9A OF 13
 PROJECT NUMBER: 2912
 © MACKIE CONSULTANTS LLC, 2016
 ILLINOIS FIRM LICENSE 184-002694

DESIGNED	RNM
DRAWN	DWP
APPROVED	AJM
DATE	05/11/2016
SCALE	1" = 60'

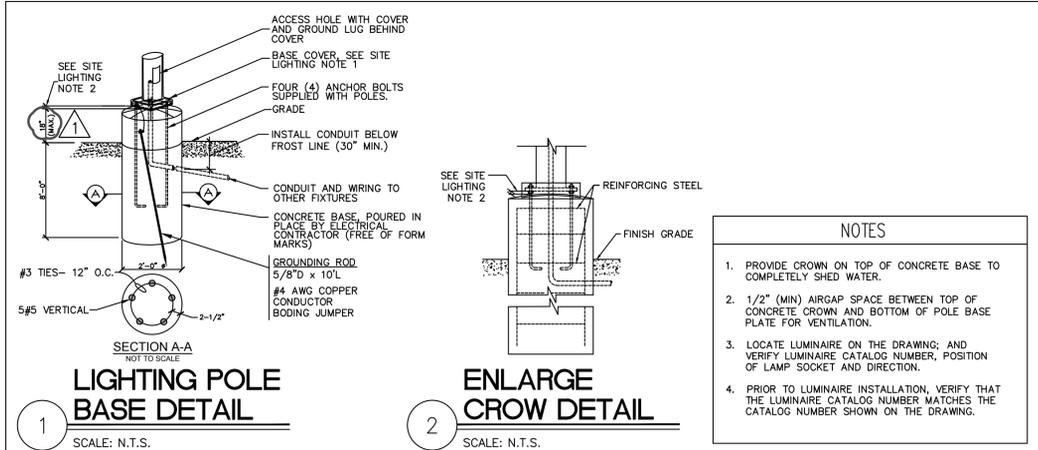
LIGHTING FIXTURE SCHEDULE								
FIXTURE TAG	SYMBOL	MANUFACTURER	MODEL NUMBER	LAMPS	VOLTAGE	WATTAGE	MOUNTING	NOTES
F1		LITHONIA LIGHTING	GLEON-AE-04-LED-SL4-WM	LED 19669Lm/EACH 4000K	120V-277V	213W	WALL	LED FULL CUT OFF WALL PACK LIGHT FIXTURE. MATCH EXISTING MOUNTING HEIGHT
F2		McGRAW EDISON	GLEON-AE-04-LED-SL4	LED 19669Lm/EACH 4000K	120V-277V	213W	POLE	POLE LIGHT, 20FT POLE, WITH 1 POLE HEAD, DRILLING PATTERN AS REQUIRED BY POLE HEAD, BLACK IN COLOR

PARKING AREA STATISTICS					
Description	Avg	Max	Min	Max/Min	Avg/Min
WEST PARKING	3.7fc	5.2fc	0.4fc	13.0:1	9.3:1
SOUTH PARKING	2.0fc	5.6fc	0.1fc	56.0:1	20.0:1
EAST PARKING	2.1fc	5.3fc	0.4fc	13.3:1	5.3:1



1 SITE PLAN - ELECTRICAL PHOTOMETRICS
1"=60'-0"
ELECTRICAL

CALL JULIE BEFORE YOU DIG
1-800-892-0123
IS STAFFED 24 HOURS PER DAY
365 DAYS PER YEAR



© Copyright 2016 by Heitman Architects Incorporated. These documents, in printed and electronic form, are Instruments of Service for use solely with respect to this project. Heitman Architects Incorporated retains all common law, statutory and other rights, including copyright. No license or right to reproduce or use these documents is granted or implied, except with the written permission of Heitman Architects Incorporated. Unauthorized reproduction or use is strictly prohibited, violates the copyright laws of the United States and will subject the violator to legal prosecution.



SUNCAST EXPANSION
701 N. KIRK RD.
BATAVIA, IL 60510

ISSUE DATE
04/14/2016 PLANNING COMMISSION SUBMITTAL
05/11/2016 ISSUED PER REVIEW COMMENTS

SHEET TITLE
SITE PLAN - ELECTRICAL PHOTOMETRICS

DATE
04/14/2016 SHEET NUMBER

PROJECT NUMBER
216020 SHEET NUMBER
E1.0

DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics

Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT 70 CRI. Optional 6000K CCT and 3000K CCT.

Electrical

LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 530mA and 700mA drive currents.

Mounting

STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during assembly. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table.

Round pole adapter included.

For wall mounting, specify wall mount bracket option. 3G vibration rated. **QUICK MOUNT ARM:** Arm is bolted directly to the pole and the fixture slides onto the quick mount arm and is secured via a single fastener, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

Finish

Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty

Five-year warranty.

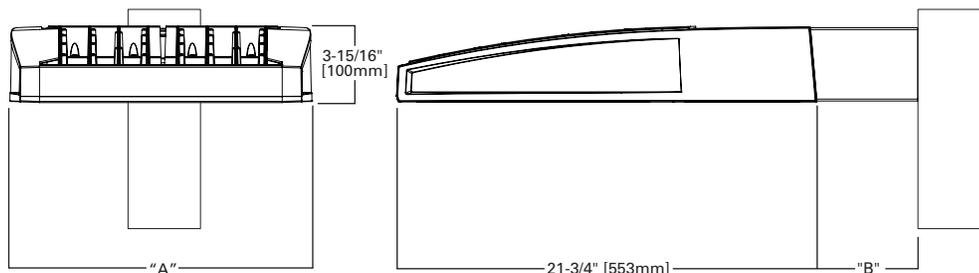


GLEON GALLEON LED

1-10 Light Squares
Solid State LED

AREA/SITE LUMINAIRE

DIMENSIONS

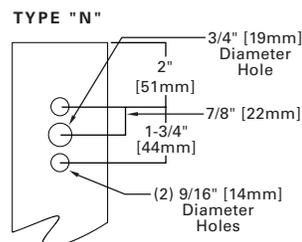


DIMENSION DATA

Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Optional Arm Length ¹	Weight with Arm (lbs.)	EPA with Arm ² (Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

NOTES: 1. Optional arm length to be used when mounting two fixtures at 90° on a single pole. 2. EPA calculated with optional arm length.

DRILLING PATTERN



CERTIFICATION DATA

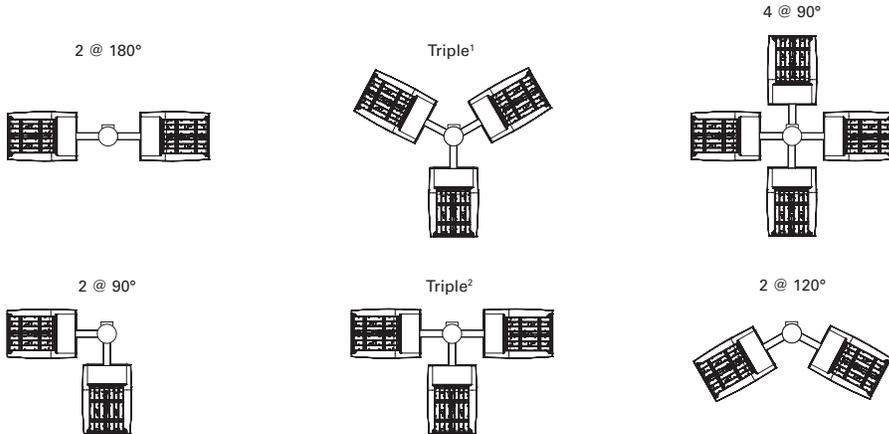
UL/cUL Wet Location Listed
ISO 9001
LM79 / LM80 Compliant
3G Vibration Rated
IP66 Rated
DesignLights Consortium™ Qualified*

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120V-277V 50/60Hz
347V & 480V 60Hz
-40°C Min. Temperature
40°C Max. Temperature
50°C Max. Temperature (HA Option)

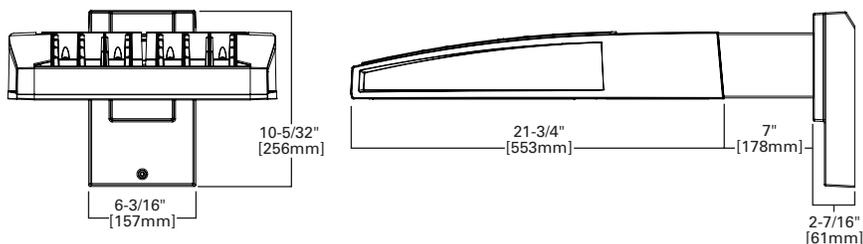
ARM MOUNTING REQUIREMENTS

Configuration	90° Apart	120° Apart
GLEON-AE-01	7" Arm (Standard)	7" Arm (Standard)
GLEON-AE-02	7" Arm (Standard)	7" Arm (Standard)
GLEON-AE-03	7" Arm (Standard)	7" Arm (Standard)
GLEON-AE-04	7" Arm (Standard)	7" Arm (Standard)
GLEON-AE-05	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AE-06	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AE-07	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AE-08	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AE-09	16" Extended Arm (Required)	16" Extended Arm (Required)
GLEON-AE-10	16" Extended Arm (Required)	16" Extended Arm (Required)

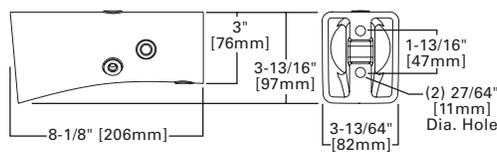


NOTES: 1 Round poles are 3 @ 120°. Square poles are 3 @ 90°. 2 Round poles are 3 @ 90°.

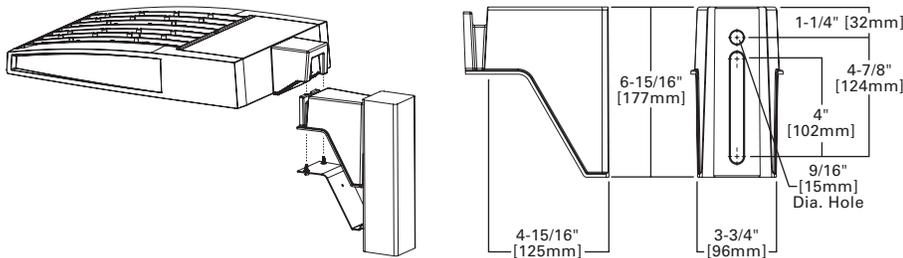
STANDARD WALL MOUNT



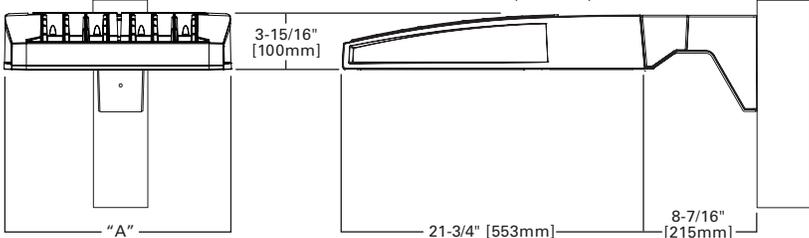
MAST ARM MOUNT



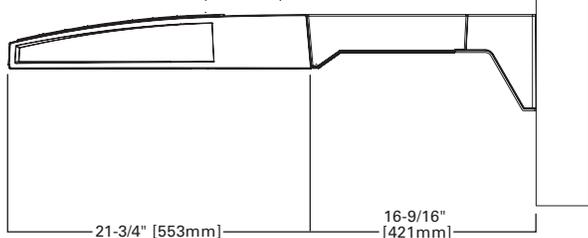
QUICK MOUNT ARM (INCLUDES FIXTURE ADAPTER)



QM Quick Mount Arm (Standard)



QMEA Quick Mount Arm (Extended)

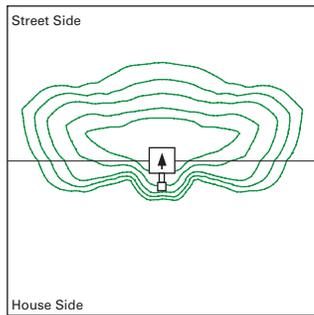


QUICK MOUNT ARM DATA

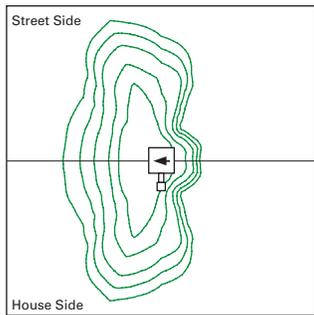
Number of Light Squares ^{1,2}	"A" Width	Weight with QM Arm (lbs.)	Weight with QMEA Arm (lbs.)	EPA (Sq. Ft.)
1-4	15-1/2" (394mm)	35 (15.91 kgs.)	38 (17.27 kgs.)	1.11
5-6 ³	21-5/8" (549mm)	46 (20.91 kgs.)	49 (22.27 kgs.)	
7-8	27-5/8" (702mm)	56 (25.45 kgs.)	59 (26.82 kgs.)	

NOTES: 1 QM option available with 1-8 light square configurations. 2 QMEA option available with 1-6 light square configurations. 3 QMEA arm to be used when mounting two fixtures at 90° on a single pole.

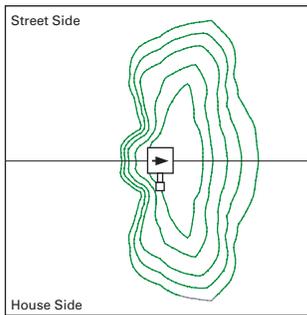
OPTIC ORIENTATION



Standard



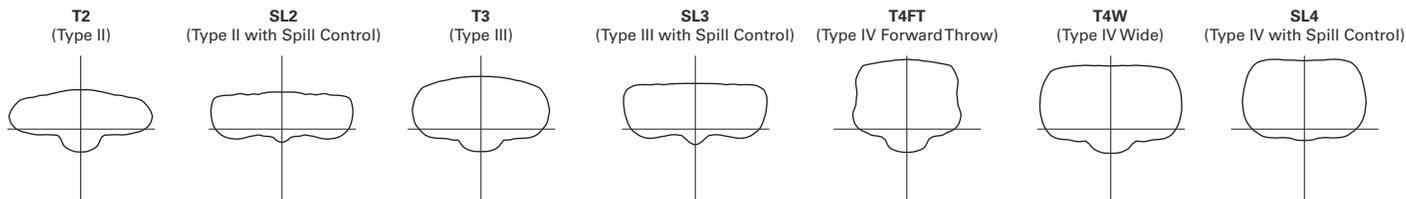
Optics Rotated Left @ 90° [L90]



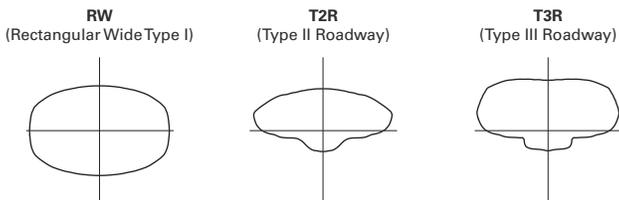
Optics Rotated Right @ 90° [R90]

OPTICAL DISTRIBUTIONS

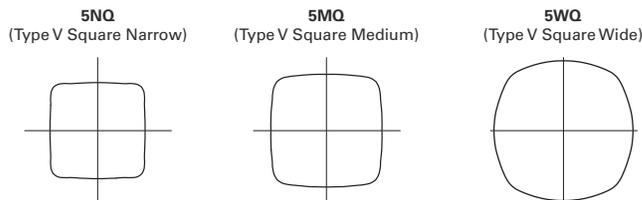
Asymmetric Area Distributions



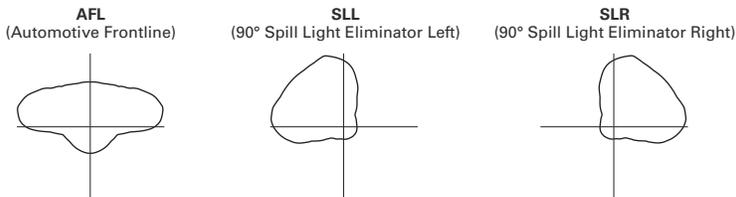
Asymmetric Roadway Distributions



Symmetric Distributions



Specialized Distributions



NOMINAL POWER AND LUMENS (1A)

Number of Light Squares	1	2	3	4	5	6	7	8	9	10	
Drive Current	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	
Nominal Power (Watts)	56	107	157	213	264	315	370	421	475	528	
Input Current @ 120V (A)	0.47	0.90	1.31	1.79	2.21	2.64	3.09	3.51	3.96	4.41	
Input Current @ 208V (A)	0.28	0.51	0.74	1.02	1.25	1.48	1.76	1.99	2.22	2.50	
Input Current @ 240V (A)	0.25	0.45	0.65	0.90	1.10	1.30	1.55	1.75	1.95	2.20	
Input Current @ 277V (A)	0.23	0.41	0.59	0.82	1.00	1.18	1.41	1.59	1.77	2.00	
Optics											
T2	Lumens	5,272	10,303	15,373	20,313	25,168	30,118	35,618	40,357	45,018	49,842
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
T2R	Lumens	5,597	10,938	16,321	21,565	26,719	31,974	37,813	42,844	47,792	52,914
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5
T3	Lumens	5,374	10,501	15,669	20,704	25,652	30,697	36,303	41,134	45,884	50,802
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T3R	Lumens	5,493	10,735	16,017	21,164	26,222	31,379	37,110	42,048	46,904	51,930
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
T4FT	Lumens	5,405	10,562	15,760	20,824	25,801	30,875	36,514	41,372	46,150	51,096
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
T4W	Lumens	5,335	10,426	15,556	20,555	25,468	30,476	36,042	40,838	45,554	50,436
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL2	Lumens	5,263	10,285	15,347	20,278	25,124	30,066	35,556	40,288	44,940	49,756
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
SL3	Lumens	5,373	10,500	15,667	20,701	25,649	30,693	36,298	41,128	45,878	50,794
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
SL4	Lumens	5,105	9,976	14,886	19,669	24,370	29,163	34,488	39,078	43,591	48,262
	BUG Rating	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	Lumens	5,542	10,830	16,160	21,352	26,455	31,658	37,439	42,421	47,320	52,392
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4
5MQ	Lumens	5,644	11,029	16,457	21,745	26,942	32,241	38,128	43,202	48,191	53,356
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
5WQ	Lumens	5,659	11,059	16,501	21,803	27,014	32,327	38,230	43,317	48,320	53,498
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
SLL/SLR	Lumens	4,722	9,227	13,767	18,191	22,539	26,971	31,897	36,141	40,315	44,635
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
RW	Lumens	5,492	10,732	16,014	21,159	26,216	31,372	37,101	42,038	46,893	51,918
	BUG Rating	B2-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
AFL	Lumens	5,512	10,771	16,072	21,236	26,311	31,486	37,236	42,191	47,063	52,107
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4

* Nominal data for 4000K CCT.

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
25°C	> 94%	> 350,000
40°C	> 93%	> 250,000
50°C*	> 90%	> 170,000

* 50°C lumen maintenance data applies to 530mA and 700mA drive currents.

NOMINAL POWER AND LUMENS (700MA)

Number of Light Squares	1	2	3	4	5	6	7	8	9	10	
Drive Current	700mA	700mA	700mA	700mA	700mA	700mA	700mA	700mA	700mA	700mA	
Nominal Power (Watts)	38	72	105	138	176	210	243	276	314	348	
Input Current @ 120V (A)	0.32	0.59	0.86	1.14	1.45	1.72	2	2.28	2.58	2.86	
Input Current @ 208V (A)	0.21	0.36	0.51	0.67	0.87	1.02	1.18	1.34	1.53	1.69	
Input Current @ 240V (A)	0.19	0.32	0.45	0.59	0.77	0.90	1.04	1.18	1.35	1.49	
Input Current @ 277V (A)	0.20	0.29	0.40	0.51	0.69	0.80	0.91	1.02	1.20	1.31	
Optics											
T2	Lumens	3,854	7,531	11,237	14,847	18,395	22,013	26,033	29,497	32,904	36,430
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
T2R	Lumens	4,091	7,995	11,929	15,762	19,529	23,370	27,638	31,316	34,932	38,676
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
T3	Lumens	3,928	7,676	11,453	15,133	18,750	22,437	26,534	30,065	33,537	37,132
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
T3R	Lumens	4,015	7,846	11,707	15,469	19,166	22,936	27,124	30,733	34,283	37,957
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
T4FT	Lumens	3,951	7,720	11,519	15,221	18,858	22,567	26,688	30,240	33,732	37,347
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
T4W	Lumens	3,900	7,620	11,370	15,024	18,615	22,276	26,343	29,849	33,296	36,864
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
SL2	Lumens	3,847	7,518	11,217	14,821	18,364	21,975	25,988	29,447	32,847	36,368
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
SL3	Lumens	3,927	7,675	11,451	15,131	18,747	22,434	26,531	30,061	33,533	37,126
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
SL4	Lumens	3,731	7,292	10,880	14,376	17,812	21,315	25,208	28,562	31,861	35,275
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G4	B2-U0-G5	B2-U0-G5	B3-U0-G5
5NQ	Lumens	4,051	7,916	11,811	15,606	19,336	23,139	27,365	31,006	34,587	38,294
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3
5MQ	Lumens	4,125	8,062	12,029	15,894	19,692	23,565	27,869	31,577	35,224	38,999
	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
5WQ	Lumens	4,136	8,083	12,061	15,936	19,745	23,628	27,943	31,661	35,318	39,103
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
SLL/SLR	Lumens	3,451	6,744	10,063	13,296	16,474	19,714	23,314	26,416	29,467	32,625
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
RW	Lumens	4,014	7,844	11,704	15,465	19,162	22,930	27,118	30,726	34,274	37,948
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
AFL	Lumens	4,029	7,873	11,747	15,522	19,231	23,014	27,216	30,838	34,399	38,086
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3

* Nominal data for 4000K CCT.

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
25°C	> 94%	> 350,000
40°C	> 93%	> 250,000
50°C*	> 90%	> 170,000

* 50°C lumen maintenance data applies to 530mA and 700mA drive currents.

NOMINAL POWER AND LUMENS (530MA)

Number of Light Squares	1	2	3	4	5	6	7	8	9	10	
Drive Current	530mA	530mA	530mA	530mA	530mA	530mA	530mA	530mA	530mA	530mA	
Nominal Power (Watts)	30	54	80	105	130	159	184	209	234	259	
Input Current @ 120V (A)	0.25	0.45	0.66	0.86	1.07	1.32	1.52	1.72	1.93	2.14	
Input Current @ 208V (A)	0.17	0.28	0.39	0.51	0.63	0.78	0.9	1.02	1.14	1.26	
Input Current @ 240V (A)	0.17	0.25	0.35	0.45	0.55	0.70	0.80	0.90	1.00	1.10	
Input Current @ 277V (A)	0.19	0.24	0.32	0.40	0.49	0.64	0.72	0.80	0.89	0.98	
Optics											
T2	Lumens	3,079	6,017	8,978	11,862	14,697	17,588	20,800	23,567	26,289	29,106
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4
T2R	Lumens	3,269	6,388	9,531	12,593	15,603	18,672	22,082	25,020	27,909	30,900
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4
T3	Lumens	3,138	6,133	9,150	12,091	14,980	17,926	21,200	24,021	26,795	29,667
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
T3R	Lumens	3,208	6,269	9,354	12,359	15,313	18,325	21,671	24,555	27,390	30,326
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
T4FT	Lumens	3,156	6,168	9,203	12,161	15,067	18,030	21,323	24,160	26,950	29,839
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
T4W	Lumens	3,116	6,088	9,084	12,004	14,872	17,797	21,047	23,848	26,602	29,453
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
SL2	Lumens	3,074	6,006	8,962	11,842	14,672	17,558	20,764	23,527	26,244	29,056
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
SL3	Lumens	3,138	6,132	9,149	12,089	14,978	17,924	21,197	24,018	26,791	29,662
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
SL4	Lumens	2,981	5,826	8,693	11,486	14,231	17,030	20,140	22,820	25,456	28,184
	BUG Rating	B0-U0-G1	B1-U0-G2	B1-U0-G3	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G4	B2-U0-G5
5NQ	Lumens	3,236	6,324	9,437	12,469	15,449	18,487	21,863	24,773	27,634	30,595
	BUG Rating	B1-U0-G0	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2
5MQ	Lumens	3,296	6,441	9,610	12,698	15,733	18,828	22,266	25,229	28,142	31,158
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G3
5WQ	Lumens	3,305	6,458	9,636	12,732	15,775	18,878	22,325	25,296	28,217	31,241
	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
SLL/SLR	Lumens	2,757	5,388	8,040	10,623	13,162	15,751	18,627	21,105	23,543	26,066
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4
RW	Lumens	3,207	6,267	9,351	12,356	15,309	18,320	21,666	24,549	27,384	30,319
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3
AFL	Lumens	3,219	6,290	9,385	12,401	15,365	18,387	21,745	24,638	27,484	30,429
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3

* Nominal data for 4000K CCT.

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
25°C	> 94%	> 350,000
40°C	> 93%	> 250,000
50°C*	> 90%	> 170,000

* 50°C lumen maintenance data applies to 530mA and 700mA drive currents.

ORDERING INFORMATION

Sample Number: GLEON-AE-04-LED-E1-T3-GM-700

Product Family ^{1,2}	Light Engine	Number of Light Squares ³	Lamp Type	Voltage	Distribution	Color	Mounting
GLEON=Galleon	AE=1A Drive Current	01=1 02=2 03=3 04=4 05=5 06=6 07=7 ⁴ 08=8 ⁴ 09=9 ⁵ 10=10 ⁵	LED=Solid State Light Emitting Diodes	E1=(120-277V) 347=347V ⁶ 480=480V ^{6,7}	T2=Type II T2R=Type II Roadway T3=Type III T3R=Type III Roadway T4FT=Type IV Forward Throw T4W=Type IV Wide 5NQ=Type V Narrow 5MQ=Type V Square Medium 5WQ=Type V Square Wide SL2=Type II w/Spill Control SL3=Type III w/Spill Control SL4=Type IV w/Spill Control SLL=90° Spill Light Eliminator Left SLR=90° Spill Light Eliminator Right RW=Rectangular Wide Type I AFL=Automotive Frontline	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White	[Blank]=Arm for Round or Square Pole EA=Extended Arm ⁸ MA=Mast Arm Adapter ⁹ WM=Wall Mount QM=Quick Mount Arm (Standard Length) ¹⁰ QMEA=Quick Mount Arm (Extended Length) ¹¹
Options (Add as Suffix)					Accessories (Order Separately)		
2L=Two Circuits ^{12,13} 7030=70 CRI / 3000K ¹⁴ 8030=80 CRI / 3000K ¹⁵ 7050=70 CRI / 5000K ¹⁵ 7060=70 CRI / 6000K ¹⁴ 530=Drive Current Factory Set to 530mA ¹⁶ 700=Drive Current Factory Set to 700mA ¹⁶ P=Button Type Photocontrol (120, 208, 240 or 277V) PER7=NEMA 7-PIN Twistlock Photocontrol Receptacle R=NEMA Twistlock Photocontrol Receptacle HA=50°C High Ambient ^{13,17} MS/DIM-L08=Motion Sensor for Dimming Operation, Maximum 8' Mounting Height ^{18,19,20,21,22} MS/DIM-L20=Motion Sensor for Dimming Operation, 9' - 20' Mounting Height ^{18,19,20,21,22} MS/DIM-L40=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height ^{18,19,20,21} MS/DIM-L40W=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height (Wide Range) ^{18,19,20,21,25} MS/X-L08=Bi-Level Motion Sensor, Maximum 8' Mounting Height ^{18,19,20,21,22,26} MS/X-L20=Bi-Level Motion Sensor, 9' - 20' Mounting Height ^{18,19,20,21,23,26} MS/X-L40=Bi-Level Motion Sensor, 21' - 40' Mounting Height ^{18,19,20,21,24,26} MS/X-L40W=Bi-Level Motion Sensor, 21' - 40' Mounting Height (Wide Range) ^{18,19,20,21,25,26} MS-L08=Motion Sensor for ON/OFF Operation, Maximum 8' Mounting Height ^{18,19,20,21,22} MS-L20=Motion Sensor for ON/OFF Operation, 9' - 20' Mounting Height ^{18,19,20,21,23} MS-L40=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height ^{18,19,20,21,24} MS-L40W=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height (Wide Range) ^{18,19,20,25} DIMRF-LW=LumaWatt Wireless Sensor, Wide Lens for 8' - 16' Mounting Height ²⁷ DIMRF-LN=LumaWatt Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height ²⁷ L90=Optics Rotated 90° Left R90=Optics Rotated 90° Right MT=Factory Installed Mesh Top TH=Tool-less Door Hardware LCF=Light Square Trim Plate Painted to Match Housing ²⁸ HSS=Factory Installed House Side Shield ²⁹ CE=CE Marking ³⁰					OA/RA1016=NEMA Photocontrol Multi-Tap - 105-285V OA/RA1027=NEMA Photocontrol - 480V OA/RA1201=NEMA Photocontrol - 347V OA/RA1013=NEMA Photocontrol Shorting Cap OA/RA1014=120V Photocontrol MA1252=10kV Surge Module Replacement MA1036-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon MA1037-XX=2 @ 180° Tenon Adapter for 2-3/8" O.D. Tenon MA1197-XX=3 @ 120° Tenon Adapter for 2-3/8" O.D. Tenon MA1188-XX=4 @ 90° Tenon Adapter for 2-3/8" O.D. Tenon MA1189-XX=2 @ 90° Tenon Adapter for 2-3/8" O.D. Tenon MA1190-XX=3 @ 90° Tenon Adapter for 2-3/8" O.D. Tenon MA1191-XX=2 @ 120° Tenon Adapter for 2-3/8" O.D. Tenon MA1038-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon MA1039-XX=2 @ 180° Tenon Adapter for 3-1/2" O.D. Tenon MA1192-XX=3 @ 120° Tenon Adapter for 3-1/2" O.D. Tenon MA1193-XX=4 @ 90° Tenon Adapter for 3-1/2" O.D. Tenon MA1194-XX=2 @ 90° Tenon Adapter for 3-1/2" O.D. Tenon MA1195-XX=3 @ 90° Tenon Adapter for 3-1/2" O.D. Tenon FSIR-100=Wireless Configuration Tool for Occupancy Sensor ³¹ GLEON-MT1=Field Installed Mesh Top for 1-4 Light Squares GLEON-MT2=Field Installed Mesh Top for 5-6 Light Squares GLEON-MT3=Field Installed Mesh Top for 7-8 Light Squares GLEON-MT4=Field Installed Mesh Top for 9-10 Light Squares GLEON-QM=Quick Mount Arm Kit ¹⁰ GLEON-QM-EA=Quick Mount Extended Length Arm Kit ¹¹ LS/HSS=Field Installed House Side Shield ^{29,32}		

NOTES:

- Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information.
- DesignLights Consortium™ Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
- Standard 4000K CCT and minimum 70 CRI.
- Not compatible with extended quick mount arm (QMEA).
- Not compatible with standard quick mount arm (QM) or extended quick mount arm (QMEA).
- Requires the use of a step down transformer when combined with MS/DIM, MS/X or DIMRF.
- Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
- May be required when two or more luminaires are oriented on a 90° or 120° drilling pattern. Refer to arm mounting requirement table.
- Factory installed.
- Maximum 8 light squares.
- Maximum 6 light squares.
- 2L is not available with MS/X or MS/DIM at 347V or 480V. 2L in AE-02 through AE-04 requires a larger housing, normally used for AE-05 or AE-06. Extended arm option may be required when mounting two or more fixtures per pole at 90° or 120°. Refer to arm mounting requirement table.
- Not available with LumaWatt wireless sensors.
- Extended lead times apply. Use dedicated IES files for 3000K and 6000K when performing layouts. These files are published on the Galleon luminaire product page on the website.
- Extended lead times apply. For 8030, factor 7030 IES files x .92 (8% lumen loss). For 7050, use 7060 IES files.
- 1 Amp standard. Use dedicated IES files for 530mA and 700mA when performing layouts. These files are published on the Galleon luminaire product page on the website.
- 50°C lumen maintenance data applies to 530mA and 700mA drive currents.
- Consult factory for more information.
- Utilizes internal step-down transformer when 347V or 480V is selected.
- The FSIR-100 accessory is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information.
- Not available with HA option.
- Approximately 22" detection diameter at 8' mounting height.
- Approximately 40" detection diameter at 20' mounting height.
- Approximately 60" detection diameter at 40' mounting height.
- Approximately 100" detection diameter at 40' mounting height.
- Replace X with number of light squares operating in low output mode.
- LumaWatt wireless sensors are factory installed only requiring network components RF-EM-1, RF-GW-1 and RF-ROUT-1 in appropriate quantities. See www.eaton.com/lighting for LumaWatt application information.
- Not available with house side shield (HSS).
- Only for use with SL2, SL3, SL4 and AFL distributions. The Light Square trim plate is painted black when the HSS option is selected.
- CE is not available with the DIMRF, MS, MS/X, MS/DIM, P, R or PER7 options. Available in 120-277V only.
- This tool enables adjustment of parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information.
- One required for each Light Square.

CITY OF BATAVIA

DATE: May 13, 2016
TO: Plan Commission
FROM: Drew Rackow AICP, Planner
SUBJECT: **Administrative Design Review for Tanglewood Hills Unit 5 Landscape Revisions**
Toll IL IV LP., applicant

Background

Toll Brothers has worked with the Tanglewood Hills Home Owners Association (HOA) and the City to address concerns from the HOA Board that may result in the HOA not accepting the common area improvements for this Unit at the conclusion of the project. The following changes to the landscape plans are proposed:

1. Relocate trees from the Common Open Space areas onto private lots. The number of plantings would be maintained, and agreements would be in place to allow the HOA to require landscape maintenance on the back of the private lots. This would allow the open areas to remain more prairie-like similar to the other units.
2. Modification of the Common Open Space Landscape plan to remove areas of turf grass and certain other specifics from the seed mix, similar to the other units.
3. Paths would be composed of crushed limestone rather be paved. Connections within the right of way would be paved.
4. Path at Mann/Josyln Court to Limestone would be removed. The City would mark a bike route down Mann Lane to reconnect to the Nicor Trail and Deerpath Road via Limestone Drive.
5. Removal of the Common Area fence on lots 30-32. This was to be a stockade fence.

The applicant also seeks to revise the planting listing due to availability from their suppliers. While modification of Design Review (Landscape Plans) qualifies for staff-only review/approval through administrative design review (Section 5.603.B), staff feels that these changes should be reviewed and approved by the Plan Commission. The referenced Zoning Code section allows staff to refer ADR to the Commission for review and approval. The administrative design review application material is attached.

Summary of Proposed Changes and Staff Analysis

The proposed landscape and site changes would still maintain current quantities and levels of landscaping. The proposed modifications would better align the open space of Unit 5 with the original open space elements of the subdivision. The changes would reduce the amount of turf grass in the open space, and put planting varieties in line with the HOA's current planting program. The bulk of the relocated plantings would be to private lots, where covenants would give the HOA the authority to require the plantings' maintenance. The revised landscape selections would maintain a reasonable variety of. The HOA would prefer to not have a fence along lots 30-32 and instead have the landscaping provide a buffer to the homes along Deerpath Road. Staff believes this too is an appropriate change, as the stockade fence was approved subject to HOA design requirements. Staff believes the significant landscaping will provide a uniform appearance along Deerpath Road.

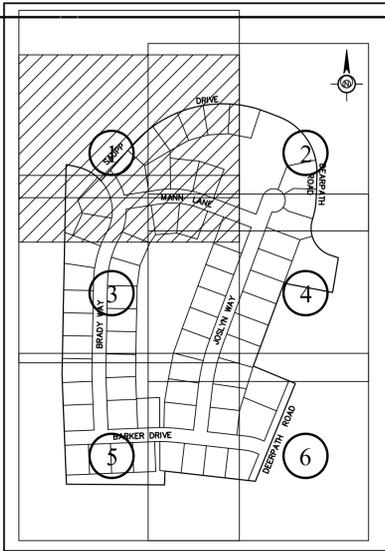
The use of limestone for the private paths would also be consistent with the existing units of Tanglewood Hills. The HOA was concerned about maintaining different path types, and costs of repaving. Public portions of the trail system (in the right of way) would remain paved. While a linkage would be removed from Limestone to Josyln Way, a full sidewalk would replace the portion of the trail along Josyln Way. Staff believes that it is important to have connections to the Nicor Trail and to the Deerpath Road bridge; this will be accomplished by signing a bike route along Limestone Drive, as a compromise to address the HOAs concerns about this trail connection.

Staff Recommendation

Staff recommends approval to the proposed revisions to the Tanglewood Hills Unit 5 Design Review, as presented.

Attachment: Administrative Design Review Application Package

- c Mayor and City Council
- Department Heads
- Jim Hepler, Toll Brothers Inc., Applicant
- Media



PLANT SCHEDULE			
OPEN SPACE CONIFEROUS TREES	CODE	BOTANICAL NAME	COMMON NAME
	IO	ILEX OPACA	AMERICAN HOLLY
	JE	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR
	PS	PINUS STROBUS	WHITE PINE
OPEN SPACE ORNAMENTAL TREES	CODE	BOTANICAL NAME	COMMON NAME
	AC	AMELANCHIER CANADENSIS	CANADIAN SERVICEBERRY
	CA2	CARPINUS CAROLINIANA	AMERICAN HORNBEAM
	CC	CERCIS CANADENSIS	EASTERN REDBUD
OPEN SPACE SHADE TREES	CODE	BOTANICAL NAME	COMMON NAME
	GK	GYMNOCLADUS DIOICA	KENTUCKY COFFEE TREE
	OV	OSTRYA VIRGINIANA	AMERICAN HOPHORNBEAM
	QA	QUERCUS ALBA	WHITE OAK
	UA	ULMUS AMERICANA 'NEW HARMONY'	NEW HARMONY AMERICAN ELM
OPEN SPACE / BUFFER SHRUBS	CODE	BOTANICAL NAME	COMMON NAME
	HV2	HAMAMELIS VIRGINIANA	COMMON WITCH HAZEL
	VL	VIBURNUM LENTAGO	NANNYBERRY
	CA	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA
	HQ	HYDRANGEA QUERCIFOLIA	OAKLEAF HYDRANGEA
	VB	VIBURNUM PRUNIFOLIUM	BLACKHAM VIBURNUM
PARKWAY TREES	CODE	SPECIES TO BE CHOSEN AND PLANTED BY CITY.	
	PT		

- 7" ELM *EXISTING TREES TO BE REMOVED
 - 8" HAWTHORNE *EXISTING TREES TO REMAIN
 - EXISTING TREE SYMBOL N.T.S. - DRILINE TO BE FIELD VERIFIED.
 - *MAY CHANGE PENDING FINAL GRADING PLAN
 - TYPICAL TREE PROTECTION FENCE
 - TYPICAL STREET LIGHT
- GRAPHIC SCALE
 0 20 40 60 80 100
 (IN FEET)
 1 inch = 40 ft.



ESE Consultants, Inc.
 250 Gibraltar Road,
 Suite 2E
 Horsham, PA 19044
 TEL: 215-914-2050
 FAX: 215-293-5488

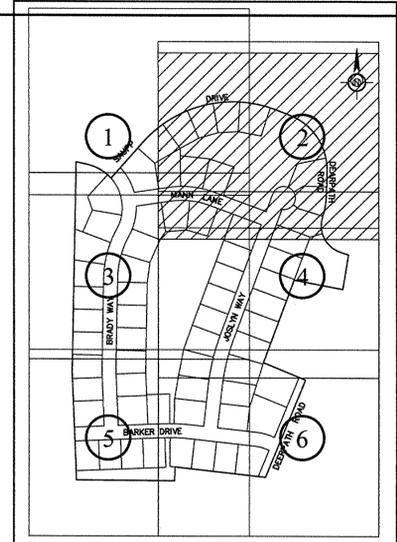
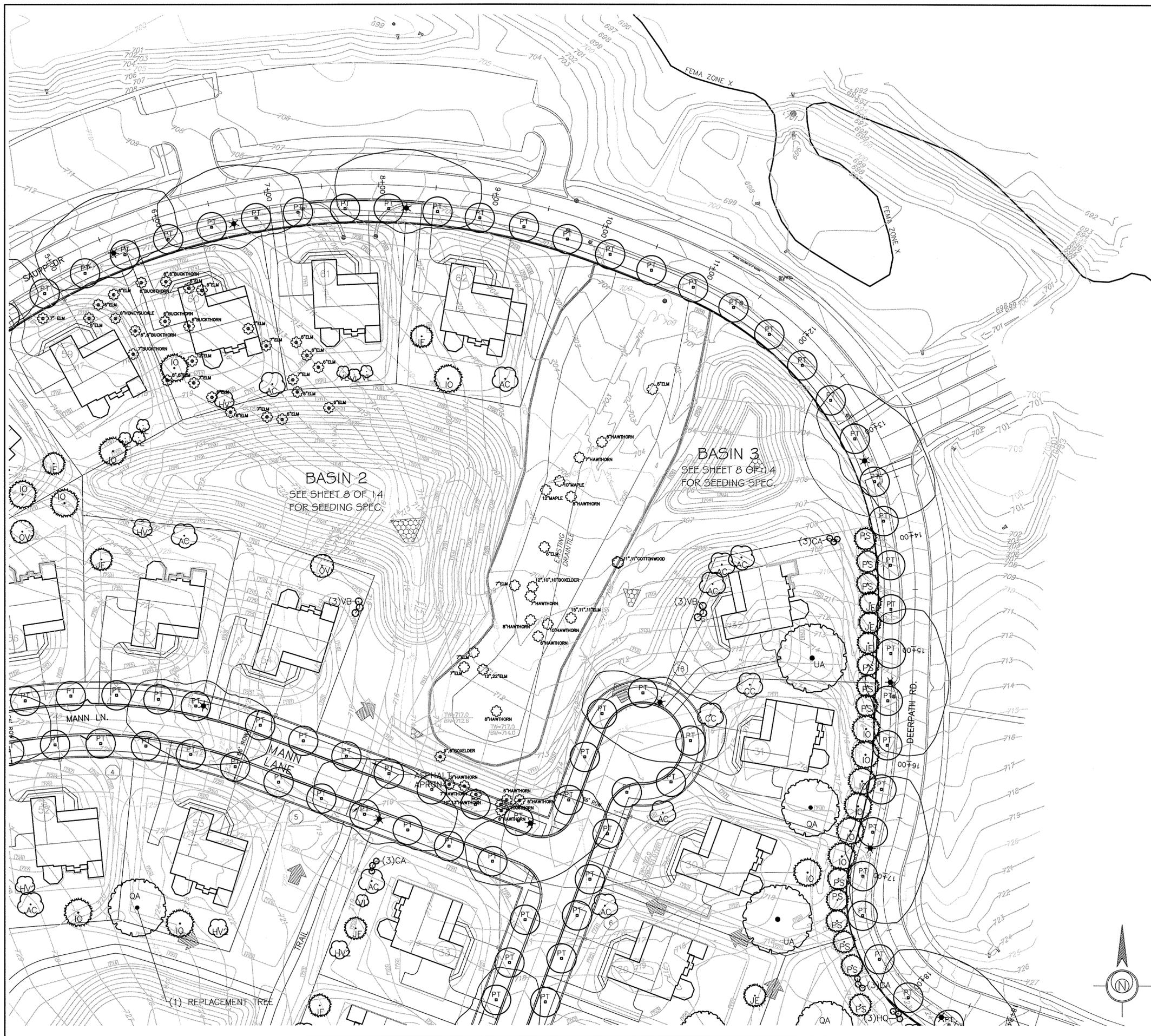
Land Planning
 Engineering
 Land Surveying



NO.	DATE	DESCRIPTION
7	10-16-15	PER CITY STAFF COMMENT VIA EMAIL 9-24-15
6	07-27-15	PER TOWN & HOA AGREEMENT
5	11-14-14	PER REVIEW LETTER DATED 10-16-14
4	09-25-14	PER REVIEW LETTER DATED 08-25-14
3	07-24-14	PER REVIEW LETTER DATED 06-18-14
2	05-09-14	PER TOWN COMMENTS DATED 03-25-14
1	02-27-14	PER REVIEW LETTER DATED 11-26-13

LANDSCAPE PLAN
TANGLEWOOD HILLS - UNIT 5
 CITY OF BATAVIA, KANE COUNTY, ILLINOIS

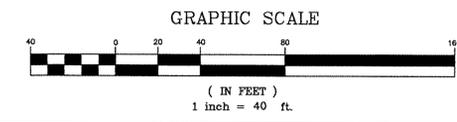
DATE: 10/24/2013	SCALE: 1" = 40'
DESIGN: CDW	DRAWN: CDW
JOB NO.: 3487	FILE NAME: 3487-B-LAND
REF. NO.: SD14.01	
SHEET NO.: 1	OF 14



LOCATION MAP

PLANT SCHEDULE			
CODE	BOTANICAL NAME	COMMON NAME	
OPEN SPACE CONIFEROUS TREES			
IO	ILEX OPACA	AMERICAN HOLLY	
JE	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	
PS	PINUS STROBUS	WHITE PINE	
OPEN SPACE ORNAMENTAL TREES			
AC	AMELANCHIER CANADENSIS	CANADIAN SERVICEBERRY	
CA2	CARPINUS CAROLINIANA	AMERICAN HORNBEEAM	
CC	CERCIS CANADENSIS	EASTERN REDBUD	
OPEN SPACE SHADE TREES			
GK	GYMNOCLADUS DIOICA	KENTUCKY COFFEE TREE	
OV	OSTRYA VIRGINIANA	AMERICAN HOPHORNBEAM	
QA	QUERCUS ALBA	WHITE OAK	
UA	ULMUS AMERICANA NEW HARMONY	NEW HARMONY AMERICAN ELM	
OPEN SPACE / BUFFER SHRUBS			
HV2	HAMAMELIS VIRGINIANA	COMMON WITCH HAZEL	
VL	VIBURNUM LENTAGO	NANNYBERRY	
CA	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA	
HQ	HYDRANGEA QUERCIFOLIA	OAKLEAF HYDRANGEA	
VB	VIBURNUM PRUNIFOLIUM	BLACKHAM VIBURNUM	
PARWAY TREES			
PT	SPECIES TO BE CHOSEN AND PLANTED BY CITY.		

- 7' ELM *EXISTING TREES TO BE REMOVED
- 8' HAWTHORNE *EXISTING TREES TO REMAIN
- EXISTING TREE SYMBOL N.T.S. - DRILLLINE TO BE FIELD VERIFIED.
- *MAY CHANGE PENDING FINAL GRADING PLAN
- TYPICAL TREE PROTECTION FENCE
- TYPICAL STREET LIGHT



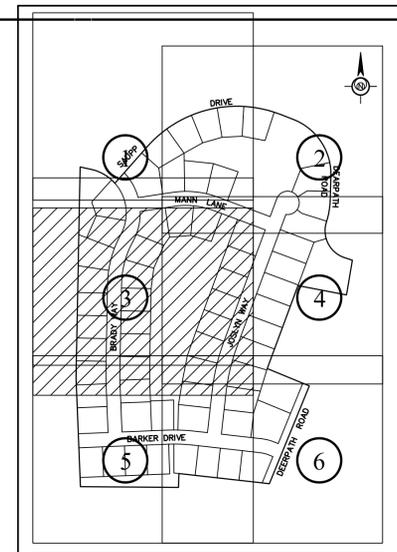
ESE Consultants, Inc.
250 Gibraltar Road,
Suite 2E
Horsham, PA 19044
TEL: 215-914-2050
FAX: 215-293-5488

Land Planning
Engineering
Land Surveying

NO.	DATE	DESCRIPTION
7	10-16-15	PER CITY STAFF COMMENT VIA EMAIL 9-24-15
6	07-27-15	PER TOWN & HOA AGREEMENT
5	11-14-14	PER REVIEW LETTER DATED 10-16-14
4	09-25-14	PER REVIEW LETTER DATED 08-25-14
3	07-24-14	PER REVIEW LETTER DATED 06-18-14
2	05-09-14	PER TOWN COMMENTS DATED 03-25-14
1	02-27-14	PER REVIEW LETTER DATED 11-26-13

LANDSCAPE PLAN
TANGLEWOOD HILLS - UNIT 5
CITY OF BATAVIA, KANE COUNTY, ILLINOIS

DATE:	10/24/2013	SCALE:	1" = 40'
DESIGN:	CDW	DRAWN:	CDW
JOB NO.:	3487	FILE NAME:	3487-B-LAND
REF. NO.:	SD14.02		
SHEET NO.:	2	OF	14



OPEN SPACE CONIFEROUS TREES	CODE	BOTANICAL NAME	COMMON NAME
	O	ILEX OPACA	AMERICAN HOLLY
	JE	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR
	PS	PINUS STROBUS	WHITE PINE
OPEN SPACE ORNAMENTAL TREES	CODE	BOTANICAL NAME	COMMON NAME
	AC	AMELANCHIER CANADENSIS	CANADIAN SERVICEBERRY
	CA2	CARPINUS CAROLINIANA	AMERICAN HORNBEAM
	CC	CERCIS CANADENSIS	EASTERN REDBUD
OPEN SPACE SHADE TREES	CODE	BOTANICAL NAME	COMMON NAME
	G6	GYNOCLADUS DIOICA	KENTUCKY COFFEE TREE
	OV	OSTRYA VIRGINIANA	AMERICAN HOPHORNBEAM
	QA	QUERCUS ALBA	WHITE OAK
	UA	ULMUS AMERICANA 'NEW HARMONY'	NEW HARMONY AMERICAN ELM
OPEN SPACE / BUFFER SHRUBS	CODE	BOTANICAL NAME	COMMON NAME
	HV2	HAMAMELIS VIRGINIANA	COMMON WITCH HAZEL
	VL	VIBURNUM LENTAGO	NANNYBERRY
	CA	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA
	HQ	HYDRANGEA QUERCIFOLIA	OAKLEAF HYDRANGEA
	VB	VIBURNUM PRUNIFOLIUM	BLACKHAW VIBURNUM
PARKWAY TREES	CODE		
	PT	SPECIES TO BE CHOSEN AND PLANTED BY CITY.	

7" ELM *EXISTING TREES TO BE REMOVED
 8" HAWTHORNE *EXISTING TREES TO REMAIN
 EXISTING TREE SYMBOL N.T.S. - DRILINE TO BE FIELD VERIFIED.
 *MAY CHANGE PENDING FINAL GRADING PLAN
 TYPICAL TREE PROTECTION FENCE
 TYPICAL STREET LIGHT

GRAPHIC SCALE

 (IN FEET)
 1 inch = 40 ft.

ESE CONSULTANTS, INC.
 250 GIBRALTAR ROAD,
 SUITE 2E
 HORSHAM, PA 19044
 TEL: 215-914-2050
 FAX: 215-293-5888

ESE
 Land Planning
 Engineering
 Land Surveying

LANDSCAPE PLAN
TANGLEWOOD HILLS - UNIT 5
 CITY OF BATAVIA, KANE COUNTY, ILLINOIS

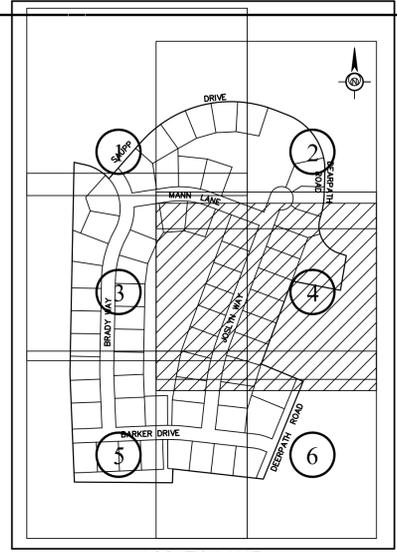
REV	DATE	DESCRIPTION
7	10-16-15	PER CITY STAFF COMMENT VIA EMAIL 9-24-15
6	07-27-15	PER TOWN & HOA AGREEMENT
5	11-14-14	PER REVIEW LETTER DATED 10-16-14
4	09-25-14	PER REVIEW LETTER DATED 08-25-14
3	07-24-14	PER REVIEW LETTER DATED 06-18-14
2	05-09-14	PER TOWN COMMENTS DATED 03-25-14
1	10-27-14	PER REVIEW LETTER DATED 11-26-13

DATE:	10/24/2013	SCALE:	1" = 40'
DESIGN:	CDW	DRAWN:	CDW
JOB NO.:	3487	FILE NAME:	3487-B-LAND
REF. NO.:			
SHEET NO.:	3	OF	14



BASIN 4
SEE SHEET 8 OF 14
FOR SEEDING SPEC.

TYPICAL TREE PROTECTION FENCE
EXACT LOCATION TO BE DETERMINED IN FIELD
SEE SHEET 7 OF 14 FOR DETAILS



LOCATION MAP

PLANT SCHEDULE		
CODE	BOTANICAL NAME	COMMON NAME
OPEN SPACE CONIFEROUS TREES		
IO	ILEX OPACA	AMERICAN HOLLY
JE	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR
PS	PINUS STROBUS	WHITE PINE
OPEN SPACE ORNAMENTAL TREES		
AC	AMELANCHIER CANADENSIS	CANADIAN SERVICEBERRY
CA2	CARPINUS CAROLINIANA	AMERICAN HORNBEAM
CC	CERCIS CANADENSIS	EASTERN REDBUD
OPEN SPACE SHADE TREES		
GK	SYMOGLADUS DIOICA	KENTUCKY COFFEE TREE
OV	OSTRYA VIRGINIANA	AMERICAN HOPHORNBEAM
QA	QUERCUS ALBA	WHITE OAK
UA	ULMUS AMERICANA 'NEW HARMONY'	NEW HARMONY AMERICAN ELM
OPEN SPACE / BUFFER SHRUBS		
HV2	HAMAMELIS VIRGINIANA	COMMON WITCH HAZEL
VL	VIBURNUM LENTAGO	NANNYBERRY
CA	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA
HQ	HYDRANGEA QUERCIFOLIA	OAKLEAF HYDRANGEA
VB	VIBURNUM FRUNIFOLIUM	BLACKHAM VIBURNUM
PARKWAY TREES		
PT	SPECIES TO BE CHOSEN AND PLANTED BY CITY.	

- 7" ELM *EXISTING TREES TO BE REMOVED
 - 8" HAWTHORNE *EXISTING TREES TO REMAIN
 - EXISTING TREE SYMBOL N.T.S. - DRIPLINE TO BE FIELD VERIFIED.
 - *MAY CHANGE PENDING FINAL GRADING PLAN
 - TYPICAL TREE PROTECTION FENCE
 - TYPICAL STREET LIGHT
- GRAPHIC SCALE

 (IN FEET)
 1 inch = 40 ft.



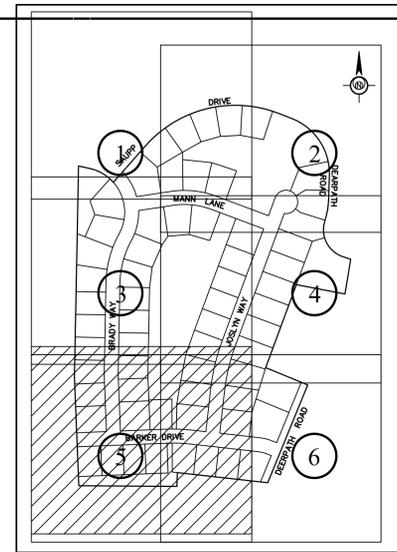
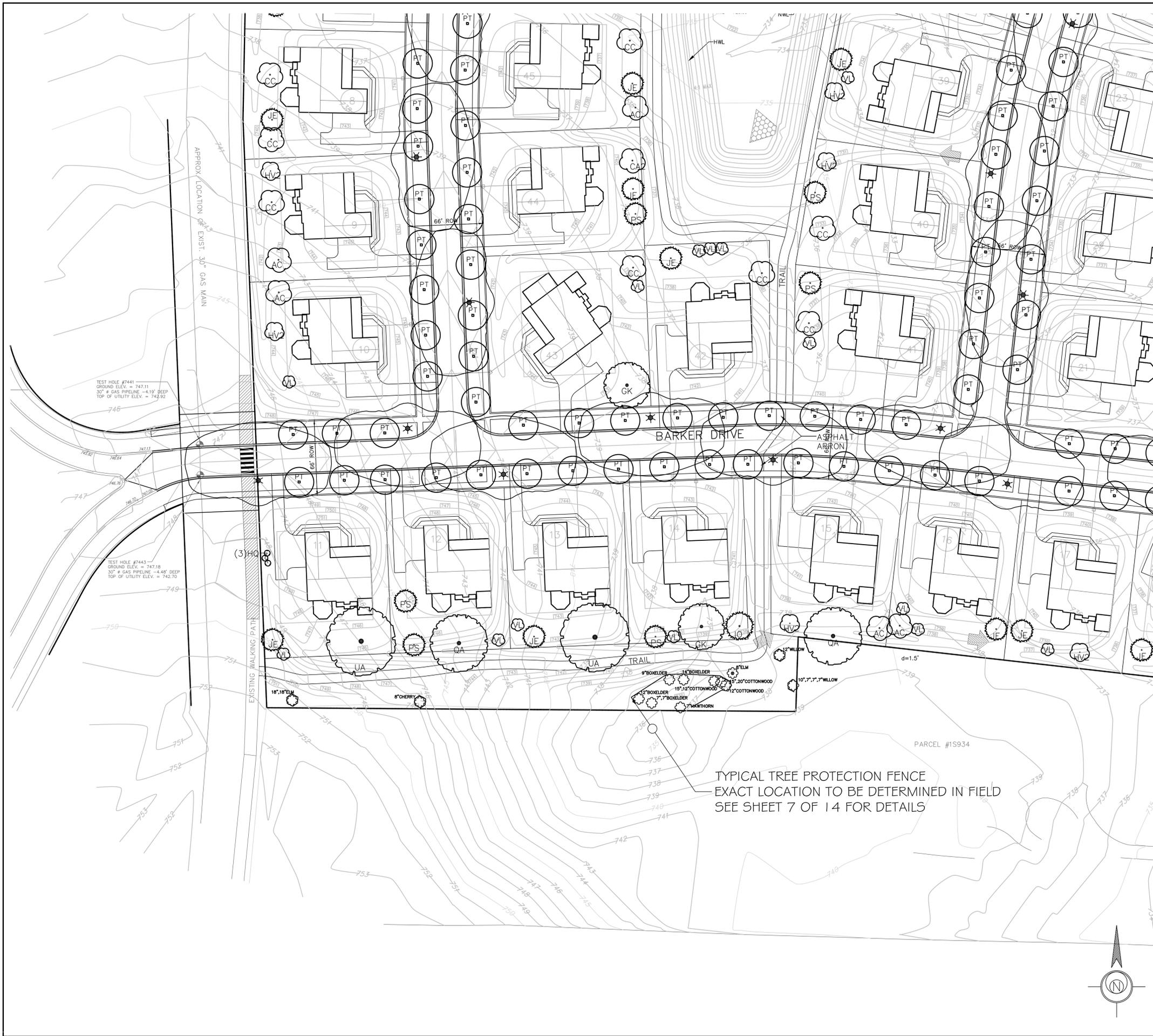
ESE Consultants, Inc.
250 Gibraltar Road,
Suite 2E
Horsham, PA 19044
TEL: 215-914-2050
FAX: 215-293-5488

Land Planning
Engineering
Land Surveying

REV	DATE	DESCRIPTION
7	10-16-15	PER CITY STAFF COMMENT VIA EMAIL 9-24-15
6	07-27-15	PER TOWN & HOA AGREEMENT
5	11-14-14	PER REVIEW LETTER DATED 10-16-14
4	09-24-14	PER REVIEW LETTER DATED 08-25-14
3	07-24-14	PER REVIEW LETTER DATED 06-18-14
2	05-09-14	PER TOWN COMMENTS DATED 03-25-14
1	02-27-14	PER REVIEW LETTER DATED 11-26-13

LANDSCAPE PLAN
TANGLEWOOD HILLS - UNIT 5
 CITY OF BATAVIA, KANE COUNTY, ILLINOIS

DATE: 10/24/2013	SCALE: 1" = 40'
DESIGN: CDW	DRAWN: CDW
JOB NO.: 3487	FILE NAME: 3487-B-LAND
REF. NO.:	SD14.04
SHEET NO.:	4 OF 14



PLANT SCHEDULE		
CODE	BOTANICAL NAME	COMMON NAME
OPEN SPACE CONIFEROUS TREES		
IO	ILEX OPACA	AMERICAN HOLLY
JE	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR
PS	PINUS STROBUS	WHITE PINE
OPEN SPACE ORNAMENTAL TREES		
AC	AMELANCHIER CANADENSIS	CANADIAN SERVICEBERRY
CA2	CARPINUS CAROLINIANA	AMERICAN HORNBEAM
CC	CERCIS CANADENSIS	EASTERN REDBUD
OPEN SPACE SHADE TREES		
GK	GYMNOCLADUS DIOICA	KENTUCKY COFFEE TREE
OV	OSTRYA VIRGINIANA	AMERICAN HOPHORNBEAM
QA	QUERCUS ALBA	WHITE OAK
UA	ULMUS AMERICANA 'NEW HARMONY'	NEW HARMONY AMERICAN ELM
OPEN SPACE / BUFFER SHRUBS		
HV2	HAMAMELIS VIRGINIANA	COMMON WITCH HAZEL
VL	VIBURNUM LENTAGO	NANNYBERRY
CA	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA
HQ	HYDRANGEA QUERCIFOLIA	OAKLEAF HYDRANGEA
VB	VIBURNUM PRUNIFOLIUM	BLACKHAM VIBURNUM
PARKWAY TREES		
PT	SPECIES TO BE CHOSEN AND PLANTED BY CITY.	

- 7" ELM *EXISTING TREES TO BE REMOVED
 - 8" HAWTHORNE *EXISTING TREES TO REMAIN
 - EXISTING TREE SYMBOL N.T.S. - DRIPLINE TO BE FIELD VERIFIED.
*MAY CHANGE PENDING FINAL GRADING PLAN
 - TYPICAL TREE PROTECTION FENCE
 - TYPICAL STREET LIGHT
- GRAPHIC SCALE
-
- (IN FEET)
1 inch = 40 ft.



ESE Consultants, Inc.
250 Gibraltar Road,
Suite 2E
Horsham, PA 19044
TEL: 215-914-2050
FAX: 215-293-5488

Land Planning
Engineering
Land Surveying

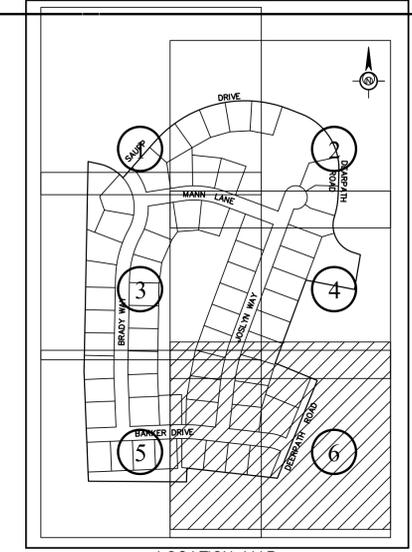
ESE

REV.	DATE	DESCRIPTION
7	10-16-15	PER CITY STAFF COMMENT VIA EMAIL 02-24-15
6	07-27-15	PER TOWN & HOA AGREEMENT
5	11-14-14	PER REVIEW LETTER DATED 10-16-14
4	09-25-14	PER REVIEW LETTER DATED 08-25-14
3	07-24-14	PER REVIEW LETTER DATED 06-18-14
2	05-09-14	PER TOWN COMMENTS DATED 03-25-14
1	02-27-14	PER REVIEW LETTER DATED 11-26-13

LANDSCAPE PLAN

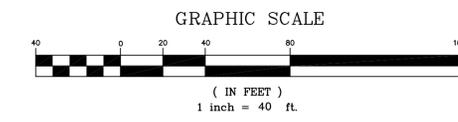
TANGLEWOOD HILLS - UNIT 5
CITY OF BATAVIA, KANE COUNTY, ILLINOIS

DATE:	10/24/2013	SCALE:	1" = 40'
DESIGN:	CDW	DRAWN:	CDW
JOB NO.:	3487	FILE NAME:	3487-B-LAND
REF. SHEET NO.:	SD14.05	SHEET NO.:	5 OF 14

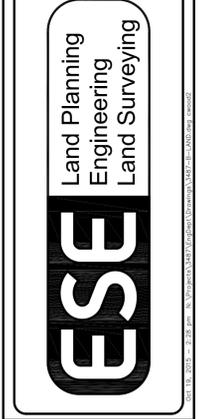


PLANT SCHEDULE		
CODE	BOTANICAL NAME	COMMON NAME
OPEN SPACE CONIFEROUS TREES		
IO	ILEX OPACA	AMERICAN HOLLY
JE	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR
PS	PINUS STROBUS	WHITE PINE
OPEN SPACE ORNAMENTAL TREES		
AC	AMELANCHIER CANADENSIS	CANADIAN SERVICEBERRY
CA2	CARPINUS CAROLINIANA	AMERICAN HORNBEAM
CC	CERCIS CANADENSIS	EASTERN REDBUD
OPEN SPACE SHADE TREES		
GK	GYMNOCLADUS DIOICA	KENTUCKY COFFEE TREE
OV	OSTRYA VIRGINIANA	AMERICAN HOPHORNBEAM
QA	QUERCUS ALBA	WHITE OAK
JA	ULMUS AMERICANA 'NEW HARMONY'	NEW HARMONY AMERICAN ELM
OPEN SPACE / BUFFER SHRUBS		
HV2	HAMAMELIS VIRGINIANA	COMMON WITCH HAZEL
VL	VIBURNUM LENTAGO	NANNYBERRY
CA	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA
HQ	HYDRANGEA QUERCIFOLIA	OAKLEAF HYDRANGEA
VB	VIBURNUM PRUNIFOLIUM	BLACKHAW VIBURNUM
PARKWAY TREES		
PT	SPECIES TO BE CHOSEN AND PLANTED BY CITY.	

- 7' ELM *EXISTING TREES TO BE REMOVED
- 8' HAWTHORNE *EXISTING TREES TO REMAIN
- EXISTING TREE SYMBOL N.T.S. - DRIPLINE TO BE FIELD VERIFIED.
- *MAY CHANGE PENDING FINAL GRADING PLAN
- TYPICAL TREE PROTECTION FENCE
- TYPICAL STREET LIGHT



ESE Consultants, Inc.
250 Gibraltar Road,
Suite 2E
Horsham, PA 19044
TEL: 215-914-2050
FAX: 215-293-5488

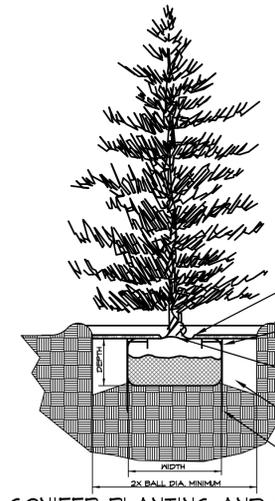


REV	DATE	DESCRIPTION
7	10-16-15	PER CITY STAFF COMMENT VIA EMAIL 9-24-15
6	07-27-15	PER TOWN & HOA AGREEMENT
5	11-14-14	PER REVIEW LETTER DATED 10-16-14
4	09-25-14	PER REVIEW LETTER DATED 08-25-14
3	07-24-14	PER REVIEW LETTER DATED 06-18-14
2	05-09-14	PER TOWN COMMENTS DATED 03-25-14
1	02-27-14	PER REVIEW LETTER DATED 11-26-13

LANDSCAPE PLAN
TANGLEWOOD HILLS - UNIT 5
CITY OF BATAVIA, KANE COUNTY, ILLINOIS

DATE: 10/24/2013	SCALE: 1" = 40'
DESIGN: CDW	DRAWN: CDW
JOB NO.: 3487	FILE NAME: 3487-B-LAND
REF. NO.: SD14.06	
SHEET NO.: 6	OF 14

Types 1, 2, and 3 Spreading, semi- spreading, globe, and compact upright		Types 4 and 5 Pyramidal, broad upright		Type 6* Columnar	
Spread (Types 1 and 2)	Minimum diameter ball	Height/ caliper	Minimum diameter Ball	Height/ caliper	Minimum diameter ball
9 in.	8 in.	12 in.	8 in.	12 in.	7 in.
12 in.	10 in.	15 in.	10 in.	15 in.	8 in.
15 in.	12 in.	18 in.	12 in.	18 in.	9 in.
18 in.	14 in.	24 in.	14 in.	24 in.	11 in.
24 in.	16 in.	30 in.	16 in.	30 in.	13 in.
30 in.	18 in.	3 ft.	18 in.	3 ft.	14 in.
36 in.	24 in.	4 ft.	20 in.	4 ft.	16 in.
42 in.	26 in.	5 ft.	22 in.	5 ft.	18 in.
4 ft.	28 in.	6 ft.	24 in.	6 ft.	20 in.
5 ft.	36 in.	7 ft.	26 in.	7 ft.	22 in.
6 ft.	40 in.	8 ft.	28 in.	8 ft.	24 in.
7 ft.	46 in.	9 ft./3 in.	32 in.	9 ft./2 1/2 in.	26 in.
8 ft.	52 in.	3 1/2 in.	34 in.	3 in.	28 in.
		4 in.	38 in.	3 1/2 in.	32 in.
		4 1/2 in.	42 in.	4 in.	36 in.
		5 in.	48 in.	4 1/2 in.	40 in.
		5 1/2 in.	54 in.	5 in.	44 in.
		6 in.	60 in.	5 1/2 in.	48 in.
		7 in.	72 in.	6 in.	54 in.
		8 in.	84 in.	7 in.	66 in.
		9 in.	90 in.	8 in.	78 in.
				9 in.	90 in.

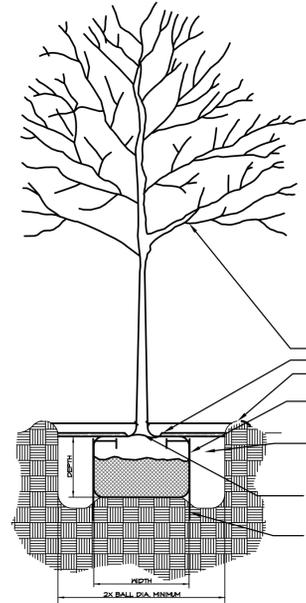


CONIFER PLANTING AND STAKING
NOT TO SCALE

2"-3" MULCH WITH NO MULCH AGAINST TRUNK
3" EARTH SAUCER
TREE STAPLE (2 MINIMUM)
SEE TREE STAPLE SPECIFICATIONS
FOR QUANTITY, SIZING & INSTALLATION
REMOVE BURLAP FROM TOP 1/3 OF BASE. NO BURLAP SHALL BE
SEEN ABOVE SOIL LINE. ROPE & TWINE TO BE REMOVED FROM PIT.
CUT WIRE BASKET IN 4 PLACES, FOLD DOWN 8" INTO HOLE.
TOP OF BALL LEVEL WITH GRADE. ROOT FLARE EXPOSED.
BACKFILL MIXTURE: NATIVE SOIL DUG FROM HOLE
THAT HAS BEEN AMENDED WITH BIO-TONE STARTER
PLUS 4-3-3. WORK COMPOST INTO TOP LAYER.
TREE STAPLE MUST EXTEND AT LEAST
12" FROM BOTTOM OF ROOTBALL

NOTE:
1. SEE CHART FOR MINIMUM ROOTBALL DIAMETER
2. THE DEPTH OF THE ROOTBALL SHALL BE NO LESS THAN 60% ITS DEPTH

Type 1 and Type 2 Shade Trees	
Caliper	Minimum diameter root ball
1/2 in.	12 in.
3/4 in.	14 in.
1 in.	16 in.
1 1/4 in.	18 in.
1 1/2 in.	20 in.
1 3/4 in.	22 in.
2 in.	24 in.
2 1/2 in.	28 in.
3 in.	32 in.
3 1/2 in.	38 in.
4 in.	42 in.
4 1/2 in.	48 in.
5 in.	54 in.
5 1/2 in.	57 in.
6 in.	60 in.
7 in.	70 in.
8 in.	80 in.



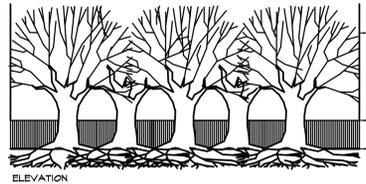
TREE PLANTING AND STAKING
NOT TO SCALE

ALL DAMAGED BRANCHES TO BE REMOVED
2"-3" MULCH WITH NO MULCH AGAINST TRUNK
3" EARTH SAUCER
TREE STAPLE (2 MINIMUM)
SEE TREE STAPLE SPECIFICATIONS
FOR QUANTITY, SIZING & INSTALLATION
BACKFILL MIXTURE: NATIVE SOIL DUG FROM HOLE
THAT HAS BEEN AMENDED WITH BIO-TONE STARTER
PLUS 4-3-3. WORK COMPOST INTO TOP LAYER.
REMOVE BURLAP FROM TOP 1/3 OF BASE. NO BURLAP SHALL BE
ABOVE SOIL LINE. REMOVE TWINE AND ROPE FROM PIT.
CUT WIRE BASKET IN 4 PLACES, FOLD DOWN 8" INTO PLANTING HOLE.
TOP OF BALL TO BE LEVEL WITH GRADE WITH ROOT FLARE EXPOSED.
TREE STAPLE MUST EXTEND AT LEAST
12" FROM BOTTOM OF ROOTBALL

NOTE:
1. SEE CHART FOR MINIMUM ROOTBALL DIAMETER
2. THE DEPTH OF THE ROOTBALL SHALL BE NO LESS THAN 60% ITS DEPTH

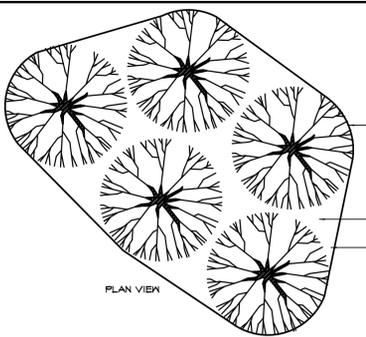
LANDSCAPE NOTES:

- IN THE EVENT THAT ANY DISCREPANCIES BETWEEN THE QUANTITIES OF PLANTS INDICATED ON THE PLANT SCHEDULE AND THOSE INDICATED ON THE PLAN, THE QUANTITIES INDICATED ON THE PLAN SHALL GOVERN.
- PLANT MATERIAL IN THE PLANT SCHEDULE IS REPRESENTATIVE. SUBSTITUTIONS SHALL BE ACCEPTED, WITH THE WRITTEN PERMISSION OF THE LANDSCAPE ARCHITECT OR HIS AGENT AND THE CITY OF BATAVIA COMMUNITY DEVELOPMENT STAFF.
- THE LANDSCAPE ARCHITECT OR HIS AGENT SHALL BE THE SOLE JUDGE OF THE QUALITY AND ACCEPTABILITY OF THE MATERIALS. ALL REJECTED MATERIALS SHALL BE IMMEDIATELY REPLACED WITH ACCEPTABLE MATERIAL AT NO ADDITIONAL COST.
- ALL PLANT BEDS SHALL BE MULCHED WITH A MINIMUM OF 2", MAXIMUM 3" SHREDDED BARK MULCH OR OTHER MATERIAL APPROVED BY THE LANDSCAPE ARCHITECT. ALL PROPOSED PLANT MATERIAL (WITH THE EXCEPTION OF PARKWAY TREES TO BE PLANTED BY CITY) SHALL BE FULLY GUARANTEED FOR ONE (1) YEAR FROM DATE OF ACCEPTANCE AND SHALL BE IN HEALTHY AND VIGOROUS CONDITION. ANY PLANT MATERIAL WHICH DIES WITHIN THAT PERIOD SHALL BE REPLACED WITH THE SAME SIZE AND SPECIES OF PLANT MATERIAL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT CORRECT GRADES AND ALIGNMENT.
- PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY; HAVE NORMAL GROWTH HABITS; WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE FROM DEFECTS AND INJURIES.
- THE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITION CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL.
- QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH "AMERICAN STANDARDS FOR NURSERY STOCK" ANSI Z60.1 (MOST RECENT EDITION) AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.

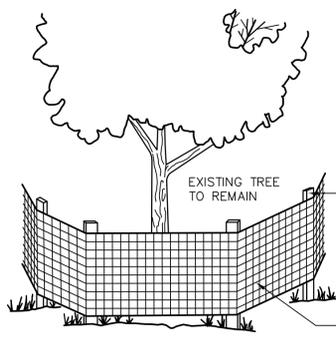


TREE PROTECTION DETAIL-TREE CLUSTER
NOT TO SCALE

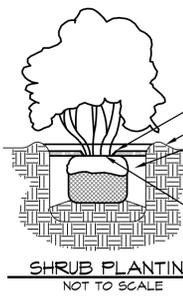
NOTE: FENCE MUST REMAIN AND BE MAINTAINED THROUGHOUT ENTIRE BUILDING PHASE(S) DURING WHICH CONSTRUCTION MAY AFFECT TREES. LOCATION OF THE FENCE MUST BE VERIFIED BY THE TOWNSHIP PRIOR TO START OF CONSTRUCTION.



PLAN VIEW



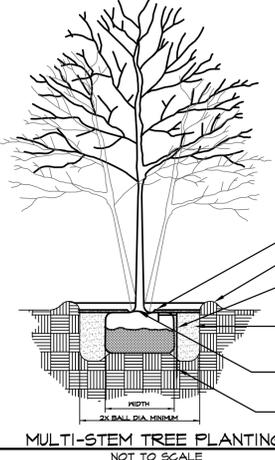
TREE PROTECTION DETAIL
NOT TO SCALE



SHRUB PLANTING
NOT TO SCALE

2"-3" MULCH WITH NO MULCH AGAINST TRUNKS/STEMS
3" EARTH SAUCER
BACKFILL MIXTURE: NATIVE SOIL FROM HOLE THAT HAS BEEN AMENDED WITH ESPOMA BIO-TONE STARTER PLUS 4-3-3. WORK COMPOST INTO TOP LAYER.
REMOVE BURLAP FROM TOP 1/3 OF BASE. NO BURLAP SHALL BE ABOVE SOIL LINE. ROPE, TWINE, & CAGE TO BE REMOVED FROM PIT.
TOP OF BALL TO BE LEVEL WITH GRADE
DO NOT BACKFILL OR MULCH AGAINST STEMS

NOTE:
SHRUB ROOTBALLS SHALL BE TYPICALLY 1/2 FEET. THE DEPTH OF THE ROOTBALL SHALL BE NO LESS THAN 60% ITS DEPTH.



MULTI-STEM TREE PLANTING
NOT TO SCALE

2"-3" MULCH WITH NO MULCH AGAINST TRUNK
3" EARTH SAUCER
TREE STAPLE (2 MINIMUM)
SEE TREE STAPLE SPECIFICATIONS FOR QUANTITY, SIZING & INSTALLATION
BACKFILL MIXTURE: NATIVE SOIL DUG FROM HOLE THAT HAS BEEN AMENDED WITH ESPOMA BIO-TONE STARTER PLUS 4-3-3. WORK COMPOST INTO TOP LAYER.
REMOVE BURLAP FROM TOP 1/3 OF BASE. NO BURLAP TO BE ABOVE SOIL LINE. REMOVE TWINE & ROPE FROM PIT.
CUT WIRE BASKET IN 4 PLACES, FOLD DOWN 8" INTO PLANTING HOLE
TOP OF BALL TO BE LEVEL WITH GRADE, ROOT FLARE EXPOSED
TREE STAPLE MUST EXTEND AT LEAST
12" FROM BOTTOM OF ROOTBALL

NOTE:
1. SEE CHART FOR MINIMUM ROOTBALL DIAMETER
2. THE DEPTH OF THE ROOTBALL SHALL BE NO LESS THAN 60% ITS DEPTH

PLANT SCHEDULE

OPEN SPACE CONIFEROUS TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SIZE
	IO	19	ILEX OPACA	AMERICAN HOLLY	B & B	7'-8' HT.
	JE	36	JUNIFERUS VIRGINIANA 'CORCORCOR'	EASTERN RED CEDAR	B & B	7'-8' HT.
	PS	24	PINUS STROBUS	WHITE PINE	B & B	7'-8' HT.
OPEN SPACE ORNAMENTAL TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SIZE
	AC	24	AMELANCHIER CANADENSIS	CANADIAN SERVICEBERRY	B & B	2 - 2 1/2' CAL.
	CA2	2	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	B & B	2 - 2 1/2' CAL.
	CC	24	CERCIS CANADENSIS	EASTERN REDBUD	B & B	2 - 2 1/2' CAL.
OPEN SPACE SHADE TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SIZE
	6K	4	GYMNOCLADUS DIOICA	KENTUCKY COFFEE TREE	B & B	2.5' CAL
	OV	2	OSTRYA VIRGINIANA	AMERICAN HOPHORNBEAM	B & B	2.5' CAL
	QA	6	QUERCUS ALBA	WHITE OAK	B & B	2.5' CAL
	UA	6	ULMUS AMERICANA 'NEW HARMONY'	NEW HARMONY AMERICAN ELM	B & B	2.5' CAL
OPEN SPACE SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SIZE
	HV2	26	HAMAMELIS VIRGINIANA	COMMON WITCH HAZEL	24-30" SPREAD	3'-4' HT.
	VL	41	VIBURNUM LENTAGO	NANNYBERRY	24-30" SPREAD	3'-4' HT.
BUFFER SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SIZE
	Ga	17	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA	36" HT. MIN.	
	Hq	17	HYDRANSEA QUERCIFOLIA	OAKLEAF HYDRANGEA	36" HT. MIN.	
	VB	9	VIBURNUM PRUNIFOLIUM	BLACKHAM VIBURNUM	36" HT. MIN.	
PARKWAY TREES	CODE	QTY				
	PT	1 PER 40 LF	**SPECIES TO BE CHOSEN AND PLANTED BY TOWN			

7" ELM *EXISTING TREES TO BE REMOVED - (N.T.S.-DRIPLINE TO BE FIELD VERIFIED)

8" HAWTHORNE *EXISTING TREES TO REMAIN - (N.T.S.-DRIPLINE TO BE FIELD VERIFIED)

*MAY CHANGE PENDING FINAL GRADING PLAN.
**BUILDER/DEVELOPER TO PAY CITY \$8 PER LF OF LOTS FOR ALL PARKWAY TREES.
1,048 LF OPEN SPACE LOTS
1,048 LF OPEN SPACE LOTS TOTAL @ \$8 PER LF = \$8,384 FOR OPEN SPACE PARKWAY TREES
INDIVIDUAL LOT FEES TO BE DETERMINED & CALCULATED AT TIME OF BUILDING PERMIT
(3) QA @ 2.5" CAL. = 7.5" REPLACEMENT CAL. FOR EXISTING 6" CAL. OAK TREE REMOVED ON DEERPATH
ALL DEVIATIONS FROM THIS PLAN, INCLUDING THOSE DEEMED NECESSARY BY OBSERVED FIELD CONDITIONS AT THE TIME OF PLANTING, MUST BE APPROVED BY THE CITY OF BATAVIA.

- B & B PLANTS SHALL BE HANDLED FROM THE BOTTOM OF THE ROOT BALL ONLY. PLANTS WITH BROKEN, SPLIT OR DAMAGED ROOT BALLS SHALL BE REJECTED. SYNTHETIC MATERIALS SUCH AS TWINE, TAGS, ROPE & WIRES TO BE REMOVED FROM TREE AND PLANTING PIT. BURLAP SHALL MEET "AMERICAN STANDARDS FOR NURSERY STOCK" ANSI Z60 BY BEING NATURAL BIODEGRADABLE BURLAP RATHER THAN PLASTIC.
- SHRUBS AND TREES SHALL BE LOCATED IN A MANNER WHICH WILL NOT OBSTRUCT ACCESS TO FIRE HYDRANT OR VISIBILITY OF STREET OR TRAFFIC SIGNS. NO TREES OR SHRUBS SHALL BE PLANTED IN A SIGHT TRIANGLE. NO TREES OR SHRUBS SHALL BE PLANTED IN ANY UTILITY OR MUNICIPAL EASEMENTS EXCEPT FOR BUFFER, BASIN, AND OPEN SPACE EASEMENTS AS SHOWN ON PLAN.
- PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITION ARE SUITABLE. SPRING PLANTING SEASON SHALL BE: MARCH 1ST TO JUNE 1ST. FALL PLANTING SEASON SHALL BE: AUGUST 15TH TO NOVEMBER 30TH FOR EVERGREEN PLANTS AND SEPTEMBER 15TH TO DECEMBER 15TH FOR DECIDUOUS PLANTS.
- SET ALL PLANTS PLUMB AND STRAIGHT. SET AT SUCH LEVEL THAT, AFTER SETTLEMENT, A NORMAL OR NATURAL RELATIONSHIP TO THE CROWN OF THE PLANT WITH THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE PLANTS IN THE CENTER OF THE PLANTING PIT. PLANTING HOLE DEPTH SHALL EQUAL THE HEIGHT OF THE BALL AND 1.5 TIMES AS WIDE AS THE BALL. ROOT FLARE SHALL NOT BE BURIED IN SOIL OR MULCH. DO NOT MULCH OR BACKFILL AGAINST TRUNK. DO NOT USE YOUR FOOT TO PACK SOIL AS THIS MAY DAMAGE ROOTS AND COMPACT SOIL.
- TREES SHALL BE SUPPORTED IMMEDIATELY AFTER PLANTING IN ACCORDANCE WITH THE PLANTING DETAILS.
- THE LOCATION OF ALL PLANT MATERIAL IS DIAGRAMMATIC. FINAL LOCATION OF ALL PLANT MATERIAL SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE LANDSCAPE ARCHITECT OR HIS AGENT.
- THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY BEARING UPON THE PERFORMANCE OF THE WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO CALL FOR UTILITY LOCATIONS, IF NECESSARY.



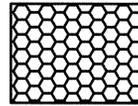
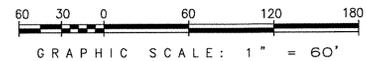
ESE Consultants, Inc.
250 Cabarrus Road,
Suite 2E
Horseshoe, PA 19044
TEL: 215-914-2050
FAX: 215-293-5488



REV	DATE	DESCRIPTION
7	10-16-15	PER CITY STAFF COMMENT VIA EMAIL 9-24-15
6	07-27-15	PER TOWN & HOA AGREEMENT
5	11-14-14	PER REVIEW LETTER DATED 10-16-14
4	09-25-14	PER REVIEW LETTER DATED 08-25-14
3	07-24-14	PER REVIEW LETTER DATED 06-18-14
2	05-09-14	PER TOWN COMMENTS DATED 05-25-14
1	05-27-14	PER REVIEW LETTER DATED 11-26-13

PLANTING DETAILS
PLANT SCHEDULE
TANGLEWOOD HILLS - UNIT 5
CITY OF BATAVIA, KANE COUNTY, ILLINOIS

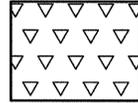
DATE: 10/24/2013	SCALE: N.T.S.
DESIGN: CDW	DRAWN: CDW
JOB NO.: 3487	FILE NAME: S-DET-LAND
REF. NO.: SD14.07	
SHEET NO.: 7	OF 14



**EROSION CONTROL BLANKET
NORTH AMERICAN GREEN S150**
FOR SIDE SLOPES AND FALL/WINTER SEEDING

SEE SHEET 10 OF 14 FOR EROSION BLANKET SPECIFICATION & INSTALLATION INSTRUCTIONS

SEE SHEET 11 OF 14 FOR SPECIES RATIOS BY MIX & MONITORING AND MANAGEMENT PLAN



**EROSION CONTROL BLANKET
NORTH AMERICAN GREEN S75**
FOR BOTTOM OF BASIN AND SPRINGS/SUMMER SEEDING

SEE SHEET 10 OF 14 FOR EROSION BLANKET SPECIFICATION & INSTALLATION INSTRUCTIONS

SEE SHEET 11 OF 14 FOR SPECIES RATIOS BY MIX & MONITORING AND MANAGEMENT PLAN



ESE Consultants, Inc.
250 Gibraltar Road,
Suite 2E
Horsesham, PA 19044
TEL: 215-914-2050
FAX: 215-293-5488

Land Planning
Engineering
Land Surveying

REV.	DATE	DESCRIPTION
5	10-16-15	PER CITY START COMMENT VIA EMAIL 9-24-15
4	07-27-15	PER TOWN & TOWNSHIP COMMENTS
3	11-14-14	PER REVIEW LETTER DATED 08-25-14
2	07-24-14	PER REVIEW LETTER DATED 06-18-14
1		

BASIN SEEDING DETAILS
EROSION CONTROL

TANGLEWOOD HILLS - UNIT 5
CITY OF BATAVA, KANE COUNTY, ILLINOIS

DATE: 03/26/2014	SCALE: 1" = 60'
DESIGN: CDW	DRAWN: CDW
JOB NO.: 3487	FILE NAME: S-DET-LAND
REF. NO.: SD14.09	
SHEET NO.: 9	OF 14

1.0 PURPOSE

The purpose of these native landscape specifications is to ensure the successful installation and establishment of the native plant communities within the Tanglewood Hills Unit 5 naturalized areas. The naturalized stormwater management basins and enhanced buffer area around preserved Wetland G are designed to provide improved water quality, water filtration and infiltration, water retention, soil stabilization, and wildlife habitat.

2.0 CONTRACTOR QUALIFICATIONS

1. The Native Landscape Contractor chosen for the establishment and enhancement of the natural areas must be experienced in the restoration, installation, and management of said areas. They must have a minimum of five years experience conducting ecological restoration and management projects.
2. There shall be a supervisor available at all times that can identify non-native and native plants by genus and species. The goal of installing successful native plant communities is a long-term process. Therefore, it is imperative that a qualified Native Landscape Contractor perform the initial installation and maintenance.

3.0 QUALITY AND CONDITION

1. Native seed shall be obtained from sources east of the Mississippi River within the same EPA Level III Ecoregion as the project site (Central Corn Belt Plains). Plant origins outside of the Ecoregion shall be approved by the Wetland Consultant.
2. Native seeds shall be blended by the vendor, and the mixture and ratio shall be guaranteed in writing to be as specified. The amount of seed indicated on the specifications shall mean the total amount of pure live seed (PLS) per acre for all species listed. It is the sole responsibility of the Native Landscape Contractor to provide approved seed that meets industry-standard PLS requirements. Seed supplied to the site should be tagged with seed species, weights and documentation of PLS testing. Seed must meet a minimum 75% PLS per species as verified by independent laboratory test results no more than one year old.
3. Native Landscape Contractor shall provide the Wetland Consultant with the name and location of the seed supplier, origin of the various kinds of plants, and a statement of the purity of the seed.
4. Seed shall conform to applicable State and Federal regulations as in effect on the date of letting. Unless otherwise specified, seed shall not contain in excess of 1 percent weed seeds; 0 percent is desirable.
5. All storage requirements, stratification, and scarification considerations shall be the sole responsibility of the Native Landscape Contractor.
6. Mycorrhizal inoculants shall be pelletized and mixed at 1 lb. per acre with the fine seeds before installation. The inoculants shall contain a diverse mixture of Glomales fungal species (*Glomus* spp.) in palletized form.
7. Under no circumstances shall Wheat (*Triticum aestivum*), Cereal Rye (*Secale cereale*), Perennial Rye (*Lolium perenne*), or Barley (*Hordeum vulgare*) be used as a temporary cover crop.

4.0 HANDLING

1. Native Landscape Contractor shall be solely responsible for the proper handling and storage of the seed according to the best seed handling and storage practices, including fungicide treatments and stratification considerations. Owner shall make no compensation for damage to the seed because of improper storage, cleaning, threshing, or screening operations.
2. All native seeds shall be packed and covered in such a manner as to ensure adequate protection against damage and maintain dormancy while in transit, storage, or during planting operations.
3. Seed shall be kept dry and unopened until needed for use. Seed shall not be stored or temporarily stored in locations or vehicles where the temperature will be in excess of 90 degrees F.

5.0 SITE PREPARATION

1. The General Contractor and Native Landscape Contractor shall be responsible for performing all work necessary to achieve and maintain an acceptable seedbed prior to seeding. All areas must be properly prepared before seeding begins. Underground utility location maps and plans should be reviewed prior to work. Equipment having low unit pressure ground contact shall be utilized within the planting areas.
2. Unless the Wetland Consultant agrees to another approach, the seedbed shall be prepared by working the topsoil to a depth of 3 inches. Site preparation equipment shall be of a design that can be utilized efficiently by the Native Landscape Contractor to meet the requirements for the work specified. The equipment proposed for use by the Native Landscape Contractor for disking and herbicide applications shall be subject to approval by the Wetland Consultant.
3. Prior to seeding, at least 6 inches of topsoil shall be present and free of all clods, stones, roots, sticks, rivulets, gullies, crusting, and cracking. The soil aggregate size will be no greater than 1 inch in the largest diameter.
4. If present, compacted soils shall be disked or raked prior to seeding. Remedial measures for the access area may, at the direction of the Wetland Consultant, involve ripping from 12 to 18 inches of the soil horizon prior to disking. If compaction is not a concern and the seedbed needs to be loosened prior to seeding to ensure good seed-soil contact, disking or raking shall be performed using equipment and the approach recommended by the Native Landscape Contractor, subject to approval by the Wetland Consultant.
5. In preparation of seeding, top dressing is to be thoroughly soaked and left standing at least three days; grades should be reset after soil has settled.
6. The developer will provide the City with notification 24-hours prior to the start of planting installation.

7.0 SEED INSTALLATION

1. Except where site conditions preclude their use, seeding shall be performed using a Truax drill, Truax Trillion seeder, or comparable equipment designed specifically for installation of native seed. For areas where site conditions preclude the use of specialized equipment, seed may be installed through hand broadcasting and lightly raking in the seed. Hand broadcast seed shall be spread at twice the specified rate. Other methods of seed installation may be used with prior approval from the Wetland Consultant.
2. Seasonal Considerations:
 - November 1 through February 28:* Seed must be protected from displacement due to water and wind erosion. Seeding on bare, graded surfaces must be protected with erosion control blankets. Less cover crop will be observed during the following spring due to frost damage.
 - March 1 through June 29:* Seeding during this period is appropriate but germination of a portion of the seed may not occur until the following season due to lack of cold stratification to break seed dormancy. Cover crop generally germinates within 2-3 weeks of seeding operation. Seeding on bare, graded surfaces must be protected with erosion control blankets.
 - June 30 through September 15:* Installation of native seed should be suspended unless irrigation can be provided or unseasonably cool conditions persist. Also, any annual forbs planted with the mix during this time period may germinate but not have sufficient time to flower before fall senescence. Seeding on bare, graded surfaces must be protected with erosion control blankets.
 - September 15 through October 31:* Seeding on bare, graded surfaces must be protected with erosion control blankets. Less cover crop will be observed during the following spring due to frost damage.
3. Prior to starting work, all seeding equipment shall be calibrated and adjusted to sow seeds at the proper seeding rate. In general, the optimum seeding depth is 0.25 inch below the soil surface. Areas where the seed has not been incorporated into the soil to the proper depths will not be accepted, and no compensation for materials or labor for the rejected work will be made by the Owner.
4. Equipment shall be operated in a manner to ensure complete, uniform coverage of the entire area to be seeded and to avoid damage to existing plants. Any area inadequately covered, as solely determined by the Wetland Consultant, shall be retreated at no additional cost to the Owner.
5. Seeding and soil tracking/firming shall not be done during periods of rain, severe drought, high winds, excessive moisture, frozen ground, or other conditions that preclude satisfactory results.
6. To achieve best results, seed boxes should be kept more than one-quarter full at all times and ground speed should be no more than 2 to 3 mph.
7. Seeding operations must occur when soil moisture is appropriate for seeding operation.
8. Native plant seed shall not receive fertilizer.
9. Wet seed that is moldy or otherwise damaged in transit or storage shall not be used.
10. After seeding operation is completed, install erosion control blanket per manufacturer's specifications as necessary.

8.0 EROSION CONTROL

1. The Native Landscape Contractor shall be fully responsible for implementing erosion control measures within prescribed planting areas.
2. All areas are recommended to be covered with erosion control blanket; North American Green S75 or equivalent will be used at a minimum. Fall-winter plantings and/or 3:1 slopes require North American Green S150 or equivalent. Erosion control blanket shall be installed within 24 hours after an area is seeded. See manufacturer's specifications for erosion control blanket composition.

9.0 CLEAN-UP AND PROTECTION

1. During landscape work, store materials and equipment where directed. Keep pavements clean and work areas and adjoining areas in an orderly condition.
2. Protect landscape work and materials from damage due to landscape operations or operations by other trades and trespassers. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged landscape work as directed by the Wetland Consultant.

10.0 INSPECTIONS AND ACCEPTANCE

1. Owner reserves the right to inspect all seeds and plants either at place of growth or at site before planting for compliance with requirements for name, variety, size, quantity, quality or mix proportion.
2. Native Landscape Contractor is to keep records of the certificates of composition or invoices of seed mixtures and integrity of plant materials with respect to species, variety, and source after purchase.
3. Following substantial completion, the developer will submit documentation that natural area landscape re-vegetation has been completed. Nursery packing lists indicating the species and quantities of materials installed will accompany this notice.



ESE Consultants, Inc.
250 Gibraltar Road,
Suite 2E
Horsham, PA 19044
TEL: 215-914-2050
FAX: 215-293-5488



REV.	DATE	DESCRIPTION
5	10-16-15	PER CITY STAFF COMMENT VIA EMAIL 9-24-15
4	07-27-15	PER TOWN & HOA AGREEMENT
3	11-14-14	PER REVIEW LETTER DATED 10-16-14
2	09-25-14	PER REVIEW LETTER DATED 08-25-14
1	07-24-14	PER REVIEW LETTER DATED 06-18-14
		DRAWN

SEEDING INSTALLATION/SPECIFICATIONS
NATURALIZED DETENTION & BUFFER

TANGLEWOOD HILLS - UNIT 5
CITY OF BATAVIA, KANE COUNTY, ILLINOIS

DATE: 03/18/2014 SCALE:

DESIGN: CDW DRAWN: CDW

JOB NO.: 3487 FILE NAME: S-DET-LAND

REF. NO.: SD14.10

SHEET NO.: 10 OF 14

6.0 PLANT MATERIALS

Table 1: Stormwater Seed Mix (to be planted in the Basin Bottom (BB) and Occasionally Inundated (OI) Areas as specified on the Landscape Plan)

Scientific Name	Common Name
<i>Alisma spp.</i>	Water Plantain Mix
<i>Asclepias incarnata</i>	Swamp Milkweed
<i>Bidens spp.</i>	Bidens Mix
<i>Carex cristatella</i>	Crested Oval Sedge
<i>Carex lurida</i>	Bottlebrush Sedge
<i>Carex vulpinoidea</i>	Brown Fox Sedge
<i>Elymus virginicus</i>	Virginia Wild Rye
<i>Glyceria striata</i>	Fowl Mannagrass
<i>Helenium autumnale</i>	Sneezeweed
<i>Juncus effusus</i>	Common Rush
<i>Juncus torreyi</i>	Torrey's Rush
<i>Leersia oryzoides</i>	Rice Cut Grass
<i>Lycopus americanus</i>	Common Water Horehound
<i>Mimulus ringens</i>	Monkey Flower
<i>Panicum virgatum</i>	Switchgrass
<i>Penthorum sedoides</i>	Ditch Stonecrop
<i>Persicaria pennsylvanicum</i>	Pinkweed
<i>Rudbeckia subtomentosa</i>	Sweet Black-Eyed Susan
<i>Sagittaria latifolia</i>	Common Arrowhead
<i>Scirpus atrovirens</i>	Green Bulrush
<i>Scirpus cyperinus</i>	Wool Grass
<i>Schoenoplectus fluviatilis</i>	River Bulrush
<i>Schoenoplectus tabernaemontani</i>	Great Bulrush
<i>Senna hebecarpa</i>	Wild Senna
<i>Thalictrum dasycarpum</i>	Purple Meadow Rue

Table 2. Swale Seed Mix (to be planted in the Basin Bottom (BB) and Occasionally Inundated (OI) Areas as specified on the Landscape Plan)

Scientific Name	Common Name
<i>Andropogon gerardii</i>	Big Bluestem
<i>Alisma spp.</i>	Water Plantain Mix
<i>Asclepias incarnata</i>	Swamp Milkweed
<i>Symphyotrichum novae-angliae</i>	New England Aster
<i>Carex comosa</i>	Bristly Sedge
<i>Carex cristatella</i>	Crested Oval Sedge
<i>Carex lurida</i>	Bottlebrush Sedge
<i>Carex spp.</i>	Prairie Sedge Mix
<i>Coreopsis tripteris</i>	Tall Coreopsis
<i>Elymus virginicus</i>	Virginia Wild Rye
<i>Eutrochium maculatum</i>	Spotted Joe-Pye Weed
<i>Glyceria striata</i>	Fowl Manna Grass
<i>Iris virginica</i>	Blue Flag
<i>Liatris spicata</i>	Marsh Blazing Star
<i>Lobelia cardinalis</i>	Cardinal Flower
<i>Lobelia siphilitica</i>	Great Blue Lobelia
<i>Lycopus americanus</i>	Common Water Horehound
<i>Panicum virgatum</i>	Switch Grass
<i>Sagittaria latifolia</i>	Common Arrowhead
<i>Silphium terebinthinaceum</i>	Prairie Dock
<i>Scirpus atrovirens</i>	Dark Green Rush
<i>Scirpus cyperinus</i>	Wool Grass
<i>Spartina pectinata</i>	Prairie Cord Grass
<i>Verbena hastata</i>	Blue Vervain
<i>Zizia aurea</i>	Golden Alexanders

Table 3. Economy Prairie Seed Mix (to be planted in the Basin Bottom (BB) and Occasionally Inundated (OI) Areas as specified on the Landscape Plan)

Scientific Name	Common Name
<i>Andropogon gerardii</i>	Big Bluestem
<i>Asclepias syriaca</i>	Common Milkweed
<i>Asclepias tuberosa</i>	Butterfly Weed
<i>Bouteloua curtipendula</i>	Side Oats Grama
<i>Carex spp.</i>	Prairie Sedge Mix
<i>Chaemaecrista fasciculata</i>	Partridge Pea
<i>Coreopsis lanceolata</i>	Sand Coreopsis
<i>Elymus canadensis</i>	Canada Wild Rye
<i>Echinacea purpurea</i>	Purple Coneflower
<i>Heliopsis helianthoides</i>	False Sunflower
<i>Lupinus perennis</i>	Wild Lupine
<i>Monarda fistulosa</i>	Wild Bergamot
<i>Panicum virgatum</i>	Switch Grass
<i>Pycnanthemum virginianum</i>	Common Mountain Mint
<i>Ratibida pinnata</i>	Yellow Coneflower
<i>Rudbeckia hirta</i>	Black-eyed Susan
<i>Schizachyrium scoparium</i>	Little Bluestem
<i>Sorghastrum nutans</i>	Indian Grass
<i>Symphyotrichum laevis</i>	Smooth Blue Aster
<i>Symphyotrichum novae-angliae</i>	New England Aster

Table 4. Cover Crop Grass Mixture (To be planted with seed mixes in Tables 1-3 above)

Scientific Name	Common Name
<i>Avena sativa</i>	Seed Oats
<i>Elymus canadensis</i>	Canada Wild Rye
<i>Elymus virginicus</i>	Virginia Wild Rye

MONITORING AND MANAGEMENT PLAN

1.0 MONITORING METHODOLOGY

The planted areas will be monitored annually for a three-year period to ensure successful establishment of the plantings. Annual vegetation monitoring will occur in August, September, or early October. The primary objective of the monitoring program is to track the success of the planted species over the 3-year period of regularly scheduled monitoring sessions. The monitoring documents changes in plant community composition and reveals the need for management changes to improve floristic quality. Specific goals of the monitoring are to determine the vegetative species present, the percent cover by vegetation, and identify hydrology and erosion problems.

Monitoring within the planted areas shall be conducted annually utilizing a meander survey methodology. The monitoring shall identify 1) the limits of all vegetation areas by general community type and dominant species within each planting zone; 2) all plant species (native and non-native) in each planting zone; 3) the three most dominant species within each planting zone; 4) the percent survival of planted species; 5) the approximate percent ground cover by native species within each planting zone; 6) the percent ground cover by non-native or invasive species in each planting zone; 7) erosion and sedimentation problems; 8) water level or drainage problems; 9) areas of bare soil larger than 0.25 square meter; and 10) observations on specific management strategies necessary to achieve acceptance requirements. Observations shall be made during the monitoring to identify specific management strategies necessary to reach design goals.

Site conditions shall be photo documented during monitoring sessions.

Monitoring shall be performed for a minimum of three years after planting is substantially complete, and until acceptance standards are met, subject to acceptance by the USACE and City of Batavia.

2.0 PERFORMANCE CRITERIA

- In no year should areas contain rills or gullies greater than four inches wide by four inches deep.
- By the end of the third year, a minimum of 90% of all planted areas must be stabilized with vegetation. No area greater than 1/4 square meter shall be devoid of vegetation as measured by aerial coverage. This standard does not apply to emergent and aquatic communities.
- By the end of the third year, the native floristic quality index value (native FQI) must be greater than or equal to 15 as measured over the planted areas. The floristic quality assessment method is described in Swink and Wilhelm, Plants of the Chicago Region.
- At the end of each growing season, none of the three most dominant species in any plant community zone may be non-native species or invasive species, including but not limited to: Common Reed (*Phragmites australis*), Reed Canary Grass (*Phalaris arundinacea*), Purple Loosestrife (*Lythrum salicaria*), Sweet Clover (*Melilotus* spp.), Canada Thistle (*Cirsium arvense*), and Bull Thistle (*Cirsium vulgare*). Cattails species (*Typha* spp.) will be allowed as a dominant within the basins as they are native and provide water quality functions.

3.0 REPORTING

An annual vegetation monitoring report will be submitted to the Owner, the City of Batavia, and the USACE by January 31 following the monitoring season each year. This report will be used to determine if the natural areas are meeting performance standards. The report shall include a location map; a summary of the annual monitoring observations; a description of the management performed during the year; a list of recommendations for management during the upcoming year; and representative photographs of the natural areas.

4.0 MANAGEMENT PLAN

- First Year.** Mow the planted slope areas to a height of 6-8 inches 2-4 times during the early growing season or as needed to control non-native and invasive species. Mowing (including weed whipping) shall take place prior to or when non-native and invasive species are flowering to prevent seed set. Control undesirable plant species, when present in small quantities, by hand pulling prior to the development and maturity of the plant. Hand removal shall include the removal of all aboveground and belowground stems, roots and flower masses prior to development of seeds. Apply herbicide (as necessary) to non-native and invasive species within the naturalized areas with appropriate herbicide.

Herbicide should be applied by a trained and licensed applicator or operator. Non-selective herbicides can be used but with utmost caution. Non-selective herbicides are absorbed through the plant tissues and work their way into the root system, effectively killing the plant. The only acceptable non-selective herbicides are glyphosate based such as RoundUp, AquaNeat, Rodeo, or Razor. The only acceptable selective herbicides (i.e. targeting broad leaf and woody plants) are 2,4-D (2,4-Dichlorophenoxyacetic acid) based or triclopyr based such as Garlon 4. Removal of debris shall be conducted when on-site performing maintenance activities.

- Second Year.** Control of undesirable plant species during the second growing season shall consist primarily of herbicide application, hand pulling, and/or mowing. Mowing (including weed whipping) shall be conducted 1-3 times during the early growing season and as needed to a height of 6 to 8 inches to prevent annual weeds from producing seed.

- Third Year.** Undesirable plant species will be controlled (as necessary) by mowing (including weed whipping), hand pulling, and/or spot herbicide application. At the completion of the third growing season (dependent on fuel availability; dominance of graminoid species, i.e. grasses and sedges, is required for successful burning), fire may be introduced to the planted areas as the primary management tool. Trained professionals experienced in the fuel types present shall conduct burning. State and local permits shall be obtained prior to prescribed burning. Prior to a prescribed burn, surrounding property owners as well as local police and fire departments will be notified. A burn plan designating the preferred wind direction and speed, location of firebreaks, and necessary personnel and equipment shall be prepared and utilized in planning and burn implementation.

The initial burn shall be dependant on fuel availability that is directly related to the quantity and quality of grasses, sedges, and forbs present within the planting area. The burn season runs from November 1 through April 30 and burns shall be conducted whenever conditions are suitable. Generally, a new prairie/wetland area shall be burned during the third growing season and then every other year thereafter, burning approximately 50-75% of the area.

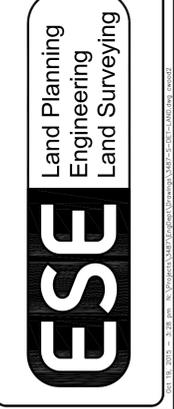
If prescribed burning is not practical, mowing in late fall or very early spring will be substituted for burning. The burn replacement mow will occur as low to the ground as practicable, with cut material bagged for off-site disposal.

- Long Term.** As the planted areas mature, required supplemental management will be significantly reduced. The plant communities will stabilize and be effectively managed through prescribed burning (If practical). Mowing to prevent seed set of undesirable species and spot herbicide application are recommended when and where applicable. Please see the Long-Term Management Plan prepared by ENCAP, Inc. for further information regarding long-term management activities.

- All Years.** Debris and litter (e.g. paper, plastic, metal, concrete, grass clippings, brush, etc.) will be removed from the site during site visits to prevent floating materials from clogging the outlet. Debris will be disposed of at an appropriate off-site trash receptacle. Pest control or wildlife management may be necessary to ensure the success of the native plantings. The need for additional management measures will be determined on a quarterly basis during normal maintenance visits.



ESE Consultants, Inc.
250 Gibraltar Road,
Suite 2E
Horsham, PA 19044
TEL: 215-914-2050
FAX: 215-293-5488



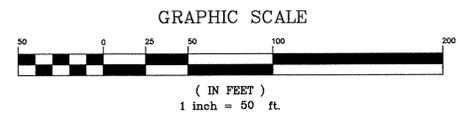
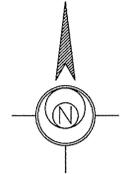
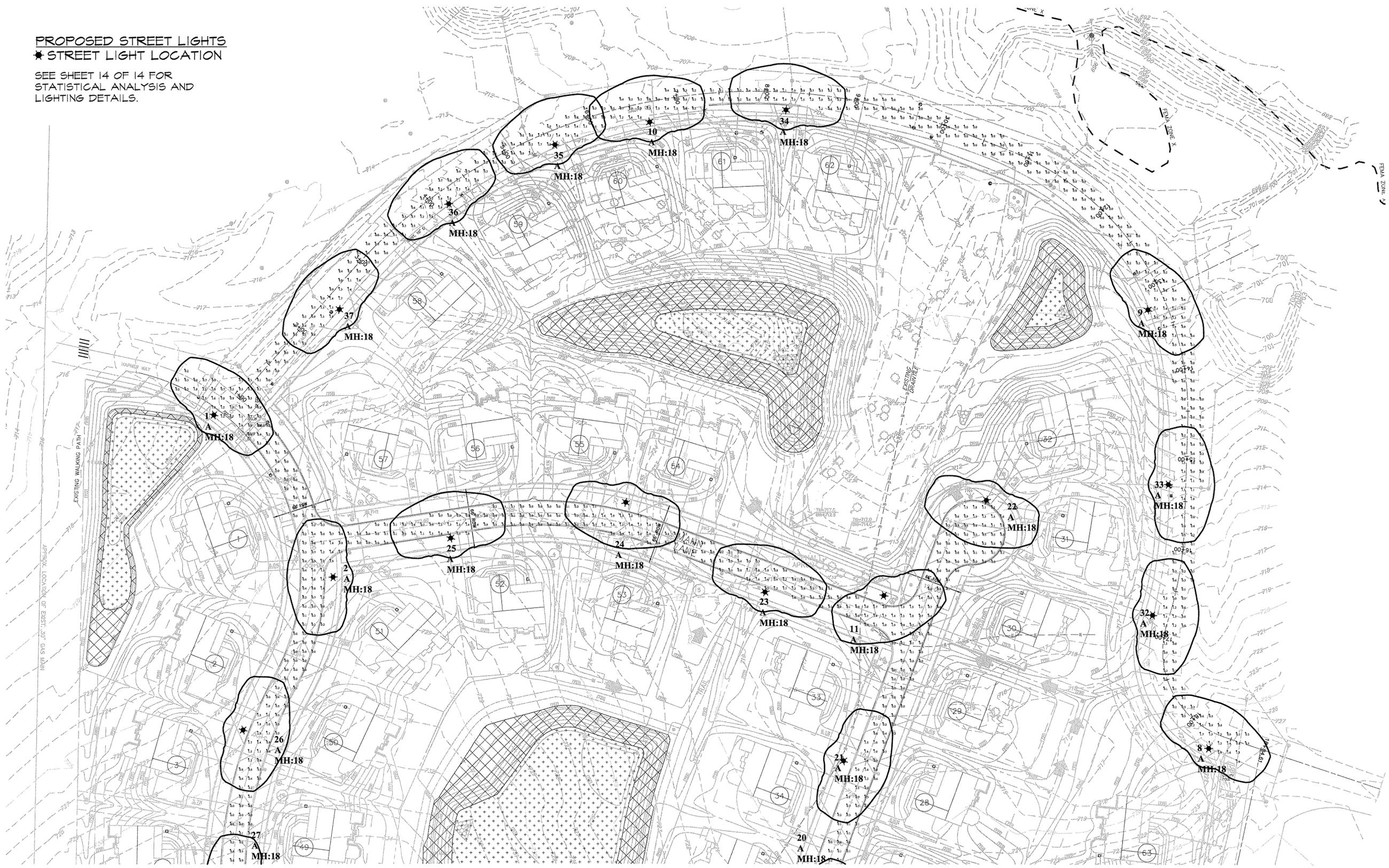
REV	DATE	DESCRIPTION
5	10-16-15	PER CITY STAFF COMMENT VIA EMAIL 9-24-15
4	07-27-15	PER TOWNS & HOA AGREEMENT
3	11-14-14	PER REVIEW LETTER DATED 10-16-14
2	09-25-14	PER REVIEW LETTER DATED 08-25-14
1	07-24-14	PER REVIEW LETTER DATED 06-18-14

MONITORING & MAINTENANCE PLAN
NATURALIZED DETENTION & BUFFER
TANGLEWOOD HILLS – UNIT 5
 CITY OF BATAVIA, KANE COUNTY, ILLINOIS

DATE: 03/18/2014	SCALE:
DESIGN: CDW	DRAWN: CDW
JOB NO.: 3487	FILE NAME: S-DET-LAND
REF. NO.: SD14.11	
SHEET NO.: 11	OF 14

PROPOSED STREET LIGHTS
★ STREET LIGHT LOCATION

SEE SHEET 14 OF 14 FOR
 STATISTICAL ANALYSIS AND
 LIGHTING DETAILS.



ESE Consultants, Inc.
 250 Gibraltar Road,
 Suite 2E
 Horsham, PA 19044
 TEL: 215-914-2050
 FAX: 215-293-5488

ESE
 Land Planning
 Engineering
 Land Surveying

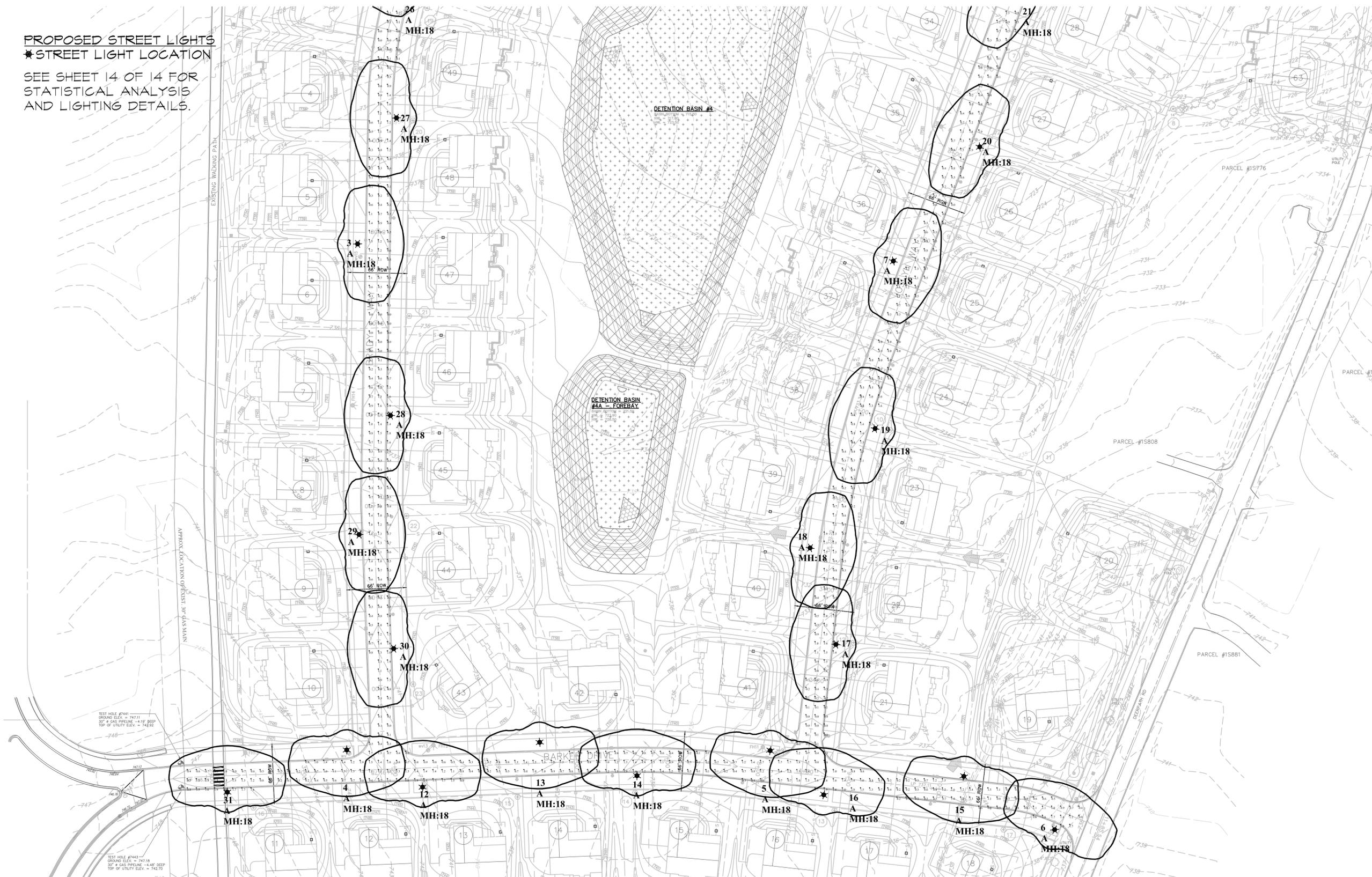
REV	DATE	DESCRIPTION
5	10-16-15	PER CITY STAFF COMMENT VIA EMAIL 9-24-15
4	07-27-15	PER TOWN & HON. AGREEMENT
3	11-14-14	PER REVIEW LETTER DATED 10-16-14
2	09-25-14	PER REVIEW LETTER DATED 08-25-14
1	07-24-14	PER REVIEW LETTER DATED 06-18-14

LIGHTING PLAN
 STREET LIGHTING

TANGLEWOOD HILLS — UNIT 5
 CITY OF BATAVIA, KANE COUNTY, ILLINOIS

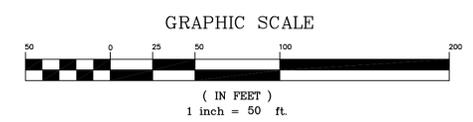
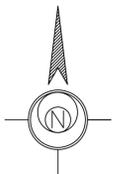
DATE:	04/22/2015	SCALE:	1" = 50'
DESIGN:	CDW	DRAWN:	CDW
JOB NO.:	3487	FILE NAME:	S-DET-LAND
REF. NO.:	SD14.12		
SHEET NO.:	12	OF	14

PROPOSED STREET LIGHTS
 * STREET LIGHT LOCATION
 SEE SHEET 14 OF 14 FOR
 STATISTICAL ANALYSIS
 AND LIGHTING DETAILS.



TEST HOLE #7441
 GROUND ELEV. = 747.11
 30" GAS PIPELINE - 4.19' DEEP
 TOP OF UTILITY ELEV. = 743.92

TEST HOLE #7445
 GROUND ELEV. = 747.10
 30" GAS PIPELINE - 4.48' DEEP
 TOP OF UTILITY ELEV. = 742.62



ESE Consultants, Inc.
 250 Gibraltar Road,
 Suite 2E
 Horsham, PA 19044
 TEL: 215-914-2050
 FAX: 215-293-5488

ESE
 Land Planning
 Engineering
 Land Surveying

REV	DATE	DESCRIPTION	CDW
5	10/16/15	PER CITY STAFF COMMENT VIA EMAIL 9-24-15	CDW
4	07-27-15	PER TOWN & HOA AGREEMENT	CDW
3	11-14-14	PER REVIEW LETTER DATED 10-16-14	CDW
2	09-25-14	PER REVIEW LETTER DATED 08-25-14	CDW
1	07-24-14	PER REVIEW LETTER DATED 06-18-14	CDW

LIGHTING PLAN
 STREET LIGHTING
TANGLEWOOD HILLS - UNIT 5
 CITY OF BATAVIA, KANE COUNTY, ILLINOIS

DATE:	04/22/2014	SCALE:	1"=50'
DESIGN:	CDW	DRAWN:	CDW
JOB NO.:	3487	FILE NAME:	S-DET-LAN
REF. NO.:	SD14.13		
SHEET NO.:	13	OF	14

Symbol	Qty	Label	Arrangement	Lum. Watts	Total Watts	Lum. Lumens	LLF	Description
	37	A	SINGLE	73	2701	5812	0.912	UTLDB03LEDEUSL3

Label	Description	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
ROADWAY	CALCS @ GRADE	Illuminance	Fc	0.62	2.0	0.0	N.A.	N.A.

STREET LIGHTING AVG. .62 FC MEETS ANSI / IESNA RP-8-00 AMERICAN NATIONAL STANDARD PRACTICE FOR ROADWAY LIGHTING REQUIREMENTS ON A LOCAL ROAD WITH LOW PEDESTRIAN CONFLICT AND R4 PAVING TYPE. (TABLE SHOWN BELOW). MINIMUM AVG. REQUIRED .4 FC / PROPOSED AVG. .62 FC

PLAN UNABLE TO MEET ANSI / IESNA RP-8-00 STANDARDS FOR UNIFORMITY RATIO DUE TO CITY REQUIREMENTS FOR POLE LOCATION. PER CITY COMMENTS DATED JUNE 18, 2014, THE FOLLOWING MODIFICATIONS HAVE BEEN MADE TO MEET CITY STANDARDS.

"MOVE STREET LIGHTS WITHIN THE BARKER/HAPNER AND BARKER/JOSLYN INTERSECTION TO THE NORTHWEST CORNERS." LIGHTS 4, 5 HAVE BEEN PLACED SO AS TO MEET CITY OF BATAVIA STANDARD.

"MOVE THE MID BLOCK STREET LIGHTS ON BOTH HAPNER WAY AND JOSLYN WAY TO THE PROPERTY LINE EXTENDED." LIGHTS 3, 7 HAVE BEEN PLACED SO AS TO MEET CITY STANDARD. ALL NON-INTERSECTION STREET LIGHTS HAVE BEEN PLACED TO MEET THE SAME STANDARD.

"PROPOSED STREET LIGHT AT LIMESTONE AND DEERPATH (SOUTH INTERSECTION, SWC) MAY CONFLICT WITH A FUTURE SIDEWALK CONNECTION." LIGHT 8 HAS BEEN PLACED TO MEET CITY STANDARD.

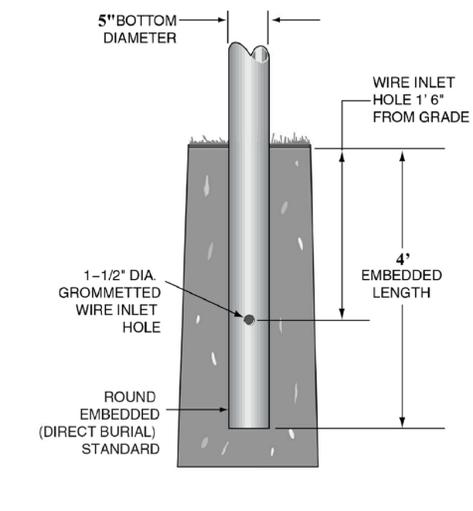
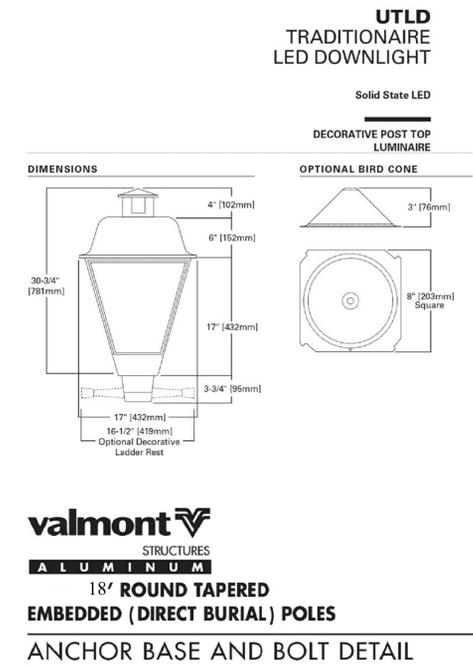
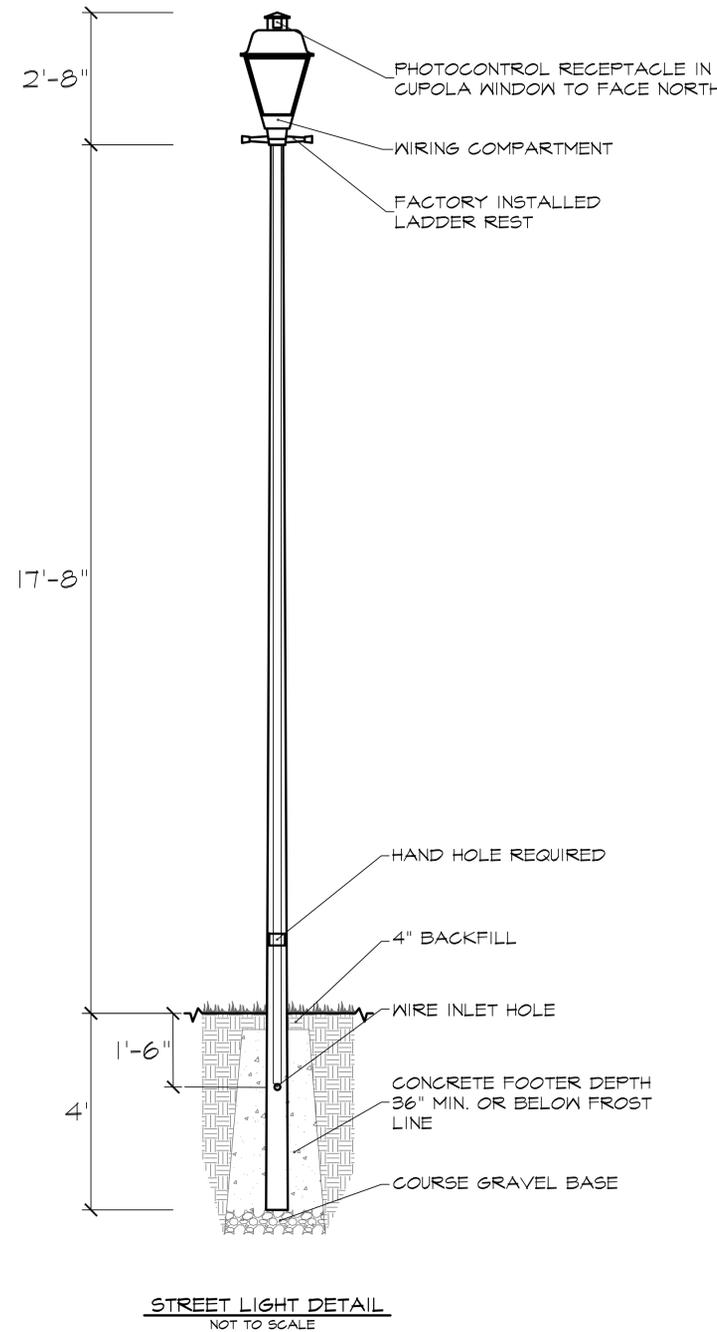
Road and Pedestrian Conflict Area		Pavement Classification <small>(Minimum Minimum Average 100psi)</small>			Uniformity Ratio
Road	Pedestrian Conflict Area	R1 lux/ft	R2 & R3 lux/ft	R4 lux/ft	E_{min}/E_{max}
Freeway Class A		6.0/0.6	9.0/0.9	8.0/0.8	3.0
Freeway Class B		4.0/0.4	6.0/0.6	5.0/0.5	3.0
Expressway	High	10.0/1.0	14.0/1.4	13.0/1.3	3.0
	Medium	8.0/0.8	12.0/1.2	10.0/1.0	3.0
	Low	6.0/0.6	9.0/0.9	8.0/0.8	3.0
Major	High	12.0/1.2	17.0/1.7	15.0/1.5	3.0
	Medium	9.0/0.9	13.0/1.3	11.0/1.1	3.0
	Low	6.0/0.6	9.0/0.9	8.0/0.8	3.0
Collector	High	8.0/0.8	12.0/1.2	10.0/1.0	4.0
	Medium	6.0/0.6	9.0/0.9	8.0/0.8	4.0
	Low	4.0/0.4	6.0/0.6	5.0/0.5	4.0
Local	High	6.0/0.6	9.0/0.9	8.0/0.8	6.0
	Medium	5.0/0.5	7.0/0.7	6.0/0.6	6.0
	Low	3.0/0.3	4.0/0.4	4.0/0.4	6.0

LIGHTING NOTES:

FIXTURE SHALL BE COOPER LIGHTING UTLD TRADITIONAIRE LED DOWNLIGHT DECORATIVE POST TOP LUMINAIRE WITH SELF ALIGNING POLE-TOP FITTER FOR 3" O.D. POLE TOPS OR VERTICAL TENONS. CAST COMPONENTS FINISHED IN DURABLE BLACK TGIC POLYESTER POWDER COAT PAINT. SYSTEM IS TO BE RATED FOR 90% LUMEN MAINTENANCE AT 60,000 HOURS. FIXTURE SHALL HAVE (3) 21 LED LIGHTBARS, 73 LUM. WATTS, SL3 OPTICS WITH I-O-2 BUG RATING AND NON-DIMMING DRIVER WITH 120-277V, TYPE III DISTRIBUTION W/SPILL CONTROL. LIGHTING FIXTURE SHALL HAVE INTERNAL NEMA PHOTOCONTROL RECEPTACLE AND FACTORY INSTALLED LADDER REST. ITEM NUMBER UTLDB03LEDEUSL3J4

POLE SHALL BE VALMONT STRUCTURES 18' ROUND TAPERED EMBEDDED (DIRECT BURIAL) WITH 3" DIAMETER TOP AND 5" DIAMETER BASE. POLE SHALL HAVE BLACK ANODIZED FINISH AND HAND HOLE OPTION FOR WIRING. PART NUMBER 170830504TEA

LumNo	Label	X	Y	Z	Orient	Tilt
1	A	394	1529.5	18	47.49	0
2	A	526	1358	18	180	0
3	A	389.5	865	18	0	0
4	A	377	311	18	270	0
5	A	843	311	18	261.416	0
6	A	1155.5	224	18	64.359	0
7	A	980.5	844.5	18	341.565	0
8	A	1490	1163	18	57.724	0
9	A	1425.5	1645.5	18	38.29	0
10	A	875	1853	18	100.305	0
11	A	1140	1327	18	291.161	0
12	A	461.5	273	18	90	0
13	A	590	315.5	18	273.366	0
14	A	696.5	283	18	87.797	0
15	A	1056	282.5	18	258.69	0
16	A	918	264.5	18	77.217	0
17	A	915.5	427	18	174.508	0
18	A	891	540	18	350.91	0
19	A	958.5	663	18	168.366	0
20	A	1071	978	18	154.654	0
21	A	1093	1145	18	338.325	0
22	A	1246.5	1435.5	18	251.114	0
23	A	1003	1334	18	70.974	0
24	A	847	1425.5	18	257.196	0
25	A	655.5	1393	18	101.482	0
26	A	426	1182	18	344.65	0
27	A	432.5	1003	18	180	0
28	A	425.5	677.5	18	180	0
29	A	390.5	547.5	18	0	0
30	A	429.5	422.5	18	180	0
31	A	241.5	265	18	90	0
32	A	1429.5	1309.5	18	355.101	0
33	A	1447	1454	18	0	0
34	A	1025.5	1866.5	18	84.289	0
35	A	770.5	1827.5	18	115.56	0
36	A	653.5	1762	18	125.676	0
37	A	533	1646	18	139.574	0



THE DEVELOPER SHALL COORDINATE SITE CONSTRUCTION WITH PW-ELECTRIC DIVISION TO ALLOW ELECTRIC FACILITIES TO BE INSTALLED PRIOR TO PAVING AND CURBING. PW-ELECTRIC DIVISION REQUIRES 30 WORKING DAYS OF ADVANCE WRITTEN NOTICE PRIOR TO PAVEMENT INSTALLATION TO ALLOW FOR THE INSTALLATION OF ELECTRIC FACILITIES. ELEVATION MUST BE WITHIN 4" OF FINAL GRADING BEFORE ELECTRIC FACILITIES CAN BE INSTALLED.



ESE Consultants, Inc.
250 Gibraltar Road,
Suite 2E
Horsesham, PA 19044
TEL: 215-914-2050
FAX: 215-293-5488

Land Planning
Engineering
Land Surveying

ESE

REV	DATE	DESCRIPTION
5	10/16/15	PER CITY STAFF COMMENT VIA EMAIL 9-24-15
4	10/27/15	PER TOWN & HOA AGREEMENT
3	11/14/14	PER REVIEW LETTER DATED 10-16-14
2	10/25/14	PER REVIEW LETTER DATED 08-25-14
1	10/24/14	PER REVIEW LETTER DATED 06-18-14

LIGHTING PLAN
LIGHT DETAILS/STATISTICAL ANALYSIS

TANGLEWOOD HILLS - UNIT 5
CITY OF BATAVIA, KANE COUNTY, ILLINOIS

DATE: 04/22/2014	SCALE:
DESIGN: CDW	DRAWN: CDW
JOB NO.: 3487	FILE NAME: S-DET-LAND
REF. NO.: SD14.14	
SHEET NO.: 14	OF 14



September 11, 2015

Adrian Allatt
425 Brady Lane
Batavia, IL 60510

Re: Landscape Plan Revisions

Dear Mr. Allatt:

Based on discussions with Toll Brothers and the Tanglewood Hills Homeowners Association Board (the "Board") relative to the landscape plan changes on January 12th, 2015 and further discussions with the City of Batavia on August 17th, 2015, the Board has been asked by the City to provide a memo outlining certain changes to the landscape plan that have been agreed to by Toll Brothers and the Board. The requested changes are as follows:

1. Trees – no trees shall be installed in the common space. Trees are only to be installed on private lots. Attached is a separate agreement citing this change.
2. Turf – no turf shall be installed in the common space. The only HOA mowed areas should be the 3ft path buffers and the HOA common space parkway along limestone. Toll Brothers agrees to this provision, however the stated language should also include mowing of any common area behind the curb. Toll agrees with this provision as long as it meets City ordinance.
3. All paths should be stone – Materials used consistent with the following: 8ft.; weed fabric under base; 6" of grade 8 road base; 2" of rotten granite (color match). The following specifications submitted by Toll Brothers meets this requirement: weed barrier, 6" of CA-6 and 2" of crushed limestone, color to match.
4. No path leading from Mann Lane to Limestone, along wetlands and lot 32. The City has agreed to delete this path. By signing this document Toll Brother's agrees to this also.
5. No path leading from Barker to Nicor path in between lots 14-15 and behind 11, 12, 13, and 14. The City is not willing to delete this path and will remain in place.
6. Grasses – Eliminate the following prairie grasses: Big Blue Stem, Indian Grass, Spotted Joe Pye, annual rye grass, and anything else that is over 4ft when mature. Toll Brothers agrees to this request.
7. No fence along Limestone and behind lots 30, 31, and 32. Evergreens instead in a V pattern. Toll Brothers agrees to delete the split-rail fence, however plantings shall be consistent with the approved landscape plan. Currently from the intersection of lot 63 going north to lot 32, plantings are scheduled as follows: 12 White Pines, ³ Eastern Red Cedars, 6 American Holly. HOA - Ok.

Thank you for your immediate attention and cooperation with these landscape plan revisions. If you are in agreement with these changes please countersign the letter and return it to my attention. Please feel free to contact me at 630-363-9435 or jeff.vaughn@associa.us if you have any questions or concerns.

Sincerely,

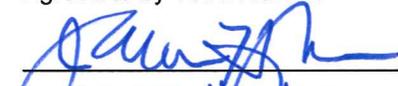


ASSOCIA CHICAGOLAND

Jeff Vaughn

Jeff Vaughn, CMCA
Community Association Manager
Tanglewood Hills Homeowners Association

Agreed to by Toll Brothers:

 Date: 5/5/16
JAMES HEPLER
Director of Land Development

Tanglewood Hills - Batavia

<u>Qty</u>	<u>Size</u>	<u>Quote</u>	<u>Sub</u>
19	8'	AMERICAN HOLLY	Crab Assorted white/pink
36	8'	EASTERN RED CEDAR	Black Hills Spruce
24	8'	WHITE PINE	Norway Spruce
24	6-7'	Canadian Serviceberry	Autumn Brilliance Serviceberry
2	4"	AMERICAN HORNBEAM	Accolade Elm
24	8'	EASTERN REDBUD	Eastern Redbud
4	3-4"	KENTUCKY COFFEE TREE	Autumn Blaze Maple
2	4"	AMERICAN HOPHORNBEAM	Accolade Elm
6	3"	WHITE OAK	Swamp White Oak
6	3-4"	NEW HARMONY AMERICAN ELM	Green Mountain Sugar Maple
26	4-5'	Common Witchhazel	Vernal Witchhazel
41	48"	Nannyberry	Red Twig Dogwood
17	3-4'	Summersweet Clethra	Forsythia
17	36"	Oakleaf Hydrangea	Autumn Jazz Viburnum
9	6'	Blackhaw Viburnum	Blackhaw Viburnum



DECLARATION OF RESTRICTIVE COVENANTS

Prepared by and Return to:
Gary L. Plotnick
Thompson Coburn LLP
55 East Monroe Street
37th Floor 800
Chicago, IL 60603

pd
W

2015K060285
SANDY WEGMAN
RECORDER - KANE COUNTY, IL

RECORDED: 11/6/2015 09:58 AM
REC FEE: 65.00 RHSPS FEE: 9.00
PAGES: 21

Space Above This Line for Recording Data

DECLARATION OF RESTRICTIVE COVENANTS

This **DECLARATION OF RESTRICTIVE COVENANTS** ("Declaration") is made as of this 30th day of October, 2015 by **TOLL IL IV, L.P.**, an Illinois limited partnership ("Declarant").

R E C I T A L S :

WHEREAS, Declarant is the legal title holder of the real estate legally described on Exhibit "A" attached hereto and made a part hereof (the "Property");

WHEREAS, Declarant has caused the Property to be subdivided by recording the Final Plat of Subdivision of Tanglewood Hills- Unit 5 with the Recorder of Deeds of Kane County, Illinois as Document Number 2014K054865 ("Plat of Subdivision");

WHEREAS, the Plat of Subdivision caused the Property to be subdivided in to sixty three (63) individual single family lots ("Lot" or "Lots"); and

WHEREAS, Declarant desires to subject such Property to the covenants, conditions, restrictions and easements hereinafter set forth as to all of and each portion of such Property and each present and future owner thereof and such other persons as hereinafter set forth on the terms and conditions herein provided;

NOW, THEREFORE, for and in consideration of the sum of Ten and 00/00 Dollars and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Declarant hereby makes the following declarations:

1. The Property shall be held, transferred, sold, conveyed, leased and occupied subject to the terms and conditions of this Declaration. This Declaration shall be binding upon Declarant and any subsequent Owner of the Property or a Lot. For the purposes of this Declaration, "Owner" mean the record owner of fee simple title to a Lot within the Property, whether one or more persons or entities. In the event fee simple title of a Lot is held in a land trust, the holder(s) of the beneficial interest in the land trust shall also be deemed Owner(s) of the Lot.

2. The Declarant hereby declares that each Owner of a Lot shall, at all times during his or her ownership of a Lot, maintain the number and species of trees on his Lot as set forth in the Landscape Plan, which is attached hereto and made apart hereof as Exhibit "B". In the event a tree located on a Lot needs to be replaced, as determined by the Tanglewood Hills Homeowners Association, an Illinois not for profit corporation ("Association"), in its reasonable judgement, and such removal is confirmed by an unrelated third party certified arborist, the Owner of the Lot shall replace said tree with a tree of similar quality and species. In the event the Owner fails or is unable to cause said tree to be replaced in accordance with this Section 2 within one hundred eight (180) days after notice from the Association that the tree needs to be replaced, the Association shall have the right to enter upon the Lot to cause said tree to be removed and replaced with a new tree of similar quality and species, all at the sole cost and expense of the Owner.

3. An easement is hereby declared, reserved and created over and upon the Property and each Lot for the benefit of the Association and the Association shall have the right and easement of access to and of ingress and egress on, over, across, in, upon and to the Property and each Lot for the purposes as set forth in this Declaration.

4. The restrictions contained in this Declaration are for the benefit of the Association. In addition to all other rights herein granted to the Association, the Association may enforce the provisions of this Declaration by any proceeding at law or in equity against any person or persons violating or attempting to violate any such provisions. All rights and remedies may be exercised at any time and from time to time, cumulatively or otherwise, and failure of the Association to enforce any such provisions shall in no way be deemed a waiver of the right to do so thereafter. All expenses incurred by the Association in connection with any such proceedings, including court costs and attorneys' fees, together with interest thereon at the highest interest permitted by law, shall be charged to and assessed against any Owner violating any such provisions and shall constitute a lien on his Lot. If any Owner, or his guests, violates any provisions of this Declaration, the Association may, after affording the Owner an opportunity to be heard, levy a reasonable fine against such Owner, and such fine shall constitute a lien on his Lot.

5. It is expressly understood and agreed that if any covenant, declaration or restriction contained in this Declaration, or any portion of any such covenant, declaration or restriction, is held by a court of competent jurisdiction to be invalid or void, such invalidity or voiding shall in no way affect any other covenant, declaration, or restriction contained in this Declaration.

6. The restrictions hereby imposed shall be enforceable by the Association for a term of fifty (50) years from the date this Declaration is recorded, after which time this Declaration shall be automatically extended for successive periods of ten (10) years. If any of the rights or restrictions imposed by this Declaration would otherwise be unlawful or void for violation of (a) the rule against perpetuities or some analogous statutory provision, (b) the rule restricting restraints on alienation, or (c) any other statutory or common law rules imposing time limits, then such provision shall continue only until twenty-one (21) years after the death of the survivor of the now living lawful descendants of the current Governor of the State of Illinois as of the date of this Declaration.

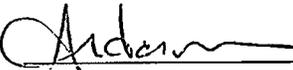
7. The foregoing declarations shall be considered as covenants running with the land and shall be binding on Declarant, any and all Owners, and their respective heirs, devisees, grantees, executors, administrators, successors in interest and assigns.

(SIGNATURES APPEAR ON NEXT PAGE)

IN WITNESS WHEREOF, TOLL IL IV, L.P., an Illinois limited partnership, executed this document as of the 30th day of October, 2015.

TOLL IL IV, L.P.,
an Illinois limited partnership

By: Toll IL GP Corp., an Illinois corporation
Its: General Partner

By: 
Name: KEITH ANDERSON
Its: GROUP PRESIDENT

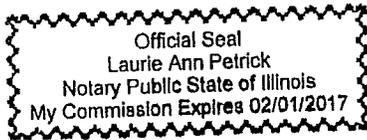
STATE OF ILLINOIS)

) SS.

COUNTY OF COOK)

I, Laurie Ann Petrick a Notary Public in and for the County and State aforesaid, DO HEREBY CERTIFY THAT Keith Anderson, as Group President of Toll IL GP Corp., an Illinois corporation, as General Partner of TOLL IL IV, L.P., an Illinois limited partnership, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed and delivered the same instrument as his own free and voluntary act and as the free and voluntary act of said Partnership, for the uses and purposes therein set forth.

GIVEN under my hand and Notarial Seal this 30th day of October, 2015.



Laurie Ann Petrick
Notary Public

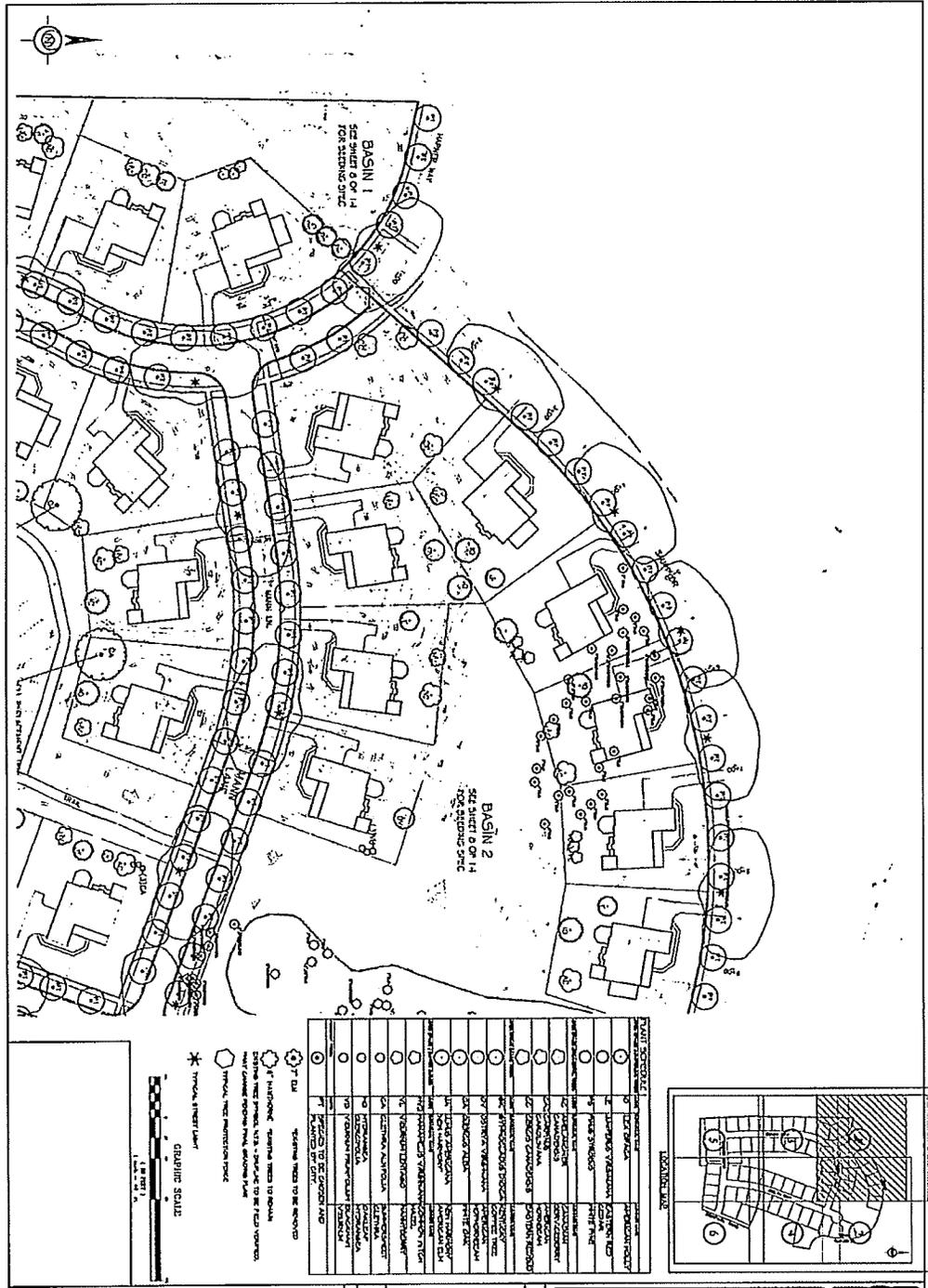
EXHIBIT "A"

LEGAL DESCRIPTION OF THE PROPERTY

LOTS 1 THROUGH 63 IN THE FINAL PLAT OF SUBDIVISION OF TANGLEWOOD HILLS UNIT 5, BEING A SUBDIVISION IN THE SOUTHWEST QUARTER OF SECTION 20, TOWNSHIP 39 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN IN KANE COUNTY, ILLINOIS. ACCORDING TO THE PLAT THEREOF RECORDED AS DOCUMENT No. 2014K054865.

EXHIBIT "B"

LANDSCAPE PLAN



NO.	DESCRIPTION	QUANTITY	UNIT
1	PLANT MATERIAL		
2	PLANT MATERIAL		
3	PLANT MATERIAL		
4	PLANT MATERIAL		
5	PLANT MATERIAL		
6	PLANT MATERIAL		
7	PLANT MATERIAL		
8	PLANT MATERIAL		
9	PLANT MATERIAL		
10	PLANT MATERIAL		
11	PLANT MATERIAL		
12	PLANT MATERIAL		
13	PLANT MATERIAL		
14	PLANT MATERIAL		
15	PLANT MATERIAL		
16	PLANT MATERIAL		
17	PLANT MATERIAL		
18	PLANT MATERIAL		
19	PLANT MATERIAL		
20	PLANT MATERIAL		
21	PLANT MATERIAL		
22	PLANT MATERIAL		
23	PLANT MATERIAL		
24	PLANT MATERIAL		
25	PLANT MATERIAL		
26	PLANT MATERIAL		
27	PLANT MATERIAL		
28	PLANT MATERIAL		
29	PLANT MATERIAL		
30	PLANT MATERIAL		
31	PLANT MATERIAL		
32	PLANT MATERIAL		
33	PLANT MATERIAL		
34	PLANT MATERIAL		
35	PLANT MATERIAL		
36	PLANT MATERIAL		
37	PLANT MATERIAL		
38	PLANT MATERIAL		
39	PLANT MATERIAL		
40	PLANT MATERIAL		
41	PLANT MATERIAL		
42	PLANT MATERIAL		
43	PLANT MATERIAL		
44	PLANT MATERIAL		
45	PLANT MATERIAL		
46	PLANT MATERIAL		
47	PLANT MATERIAL		
48	PLANT MATERIAL		
49	PLANT MATERIAL		
50	PLANT MATERIAL		
51	PLANT MATERIAL		
52	PLANT MATERIAL		
53	PLANT MATERIAL		
54	PLANT MATERIAL		
55	PLANT MATERIAL		
56	PLANT MATERIAL		
57	PLANT MATERIAL		
58	PLANT MATERIAL		
59	PLANT MATERIAL		
60	PLANT MATERIAL		
61	PLANT MATERIAL		
62	PLANT MATERIAL		
63	PLANT MATERIAL		
64	PLANT MATERIAL		
65	PLANT MATERIAL		
66	PLANT MATERIAL		
67	PLANT MATERIAL		
68	PLANT MATERIAL		
69	PLANT MATERIAL		
70	PLANT MATERIAL		
71	PLANT MATERIAL		
72	PLANT MATERIAL		
73	PLANT MATERIAL		
74	PLANT MATERIAL		
75	PLANT MATERIAL		
76	PLANT MATERIAL		
77	PLANT MATERIAL		
78	PLANT MATERIAL		
79	PLANT MATERIAL		
80	PLANT MATERIAL		
81	PLANT MATERIAL		
82	PLANT MATERIAL		
83	PLANT MATERIAL		
84	PLANT MATERIAL		
85	PLANT MATERIAL		
86	PLANT MATERIAL		
87	PLANT MATERIAL		
88	PLANT MATERIAL		
89	PLANT MATERIAL		
90	PLANT MATERIAL		
91	PLANT MATERIAL		
92	PLANT MATERIAL		
93	PLANT MATERIAL		
94	PLANT MATERIAL		
95	PLANT MATERIAL		
96	PLANT MATERIAL		
97	PLANT MATERIAL		
98	PLANT MATERIAL		
99	PLANT MATERIAL		
100	PLANT MATERIAL		

○ T.D.S. STAIRS NEED TO BE REMOVED
 ○ IF PLANTING "STAIRS" NEED TO BE REMOVED
 ○ EXISTING TREE PROTECT WITH "STAIRS" TO BE FIELD CONTROL
 ○ TYPICAL TREE PROTECT WITH "STAIRS" TO BE FIELD CONTROL
 ○ TYPICAL TREE PROTECT WITH "STAIRS" TO BE FIELD CONTROL
 * TYPICAL STREET LIGHT

GRAPHIC SCALE
 1" = 10'

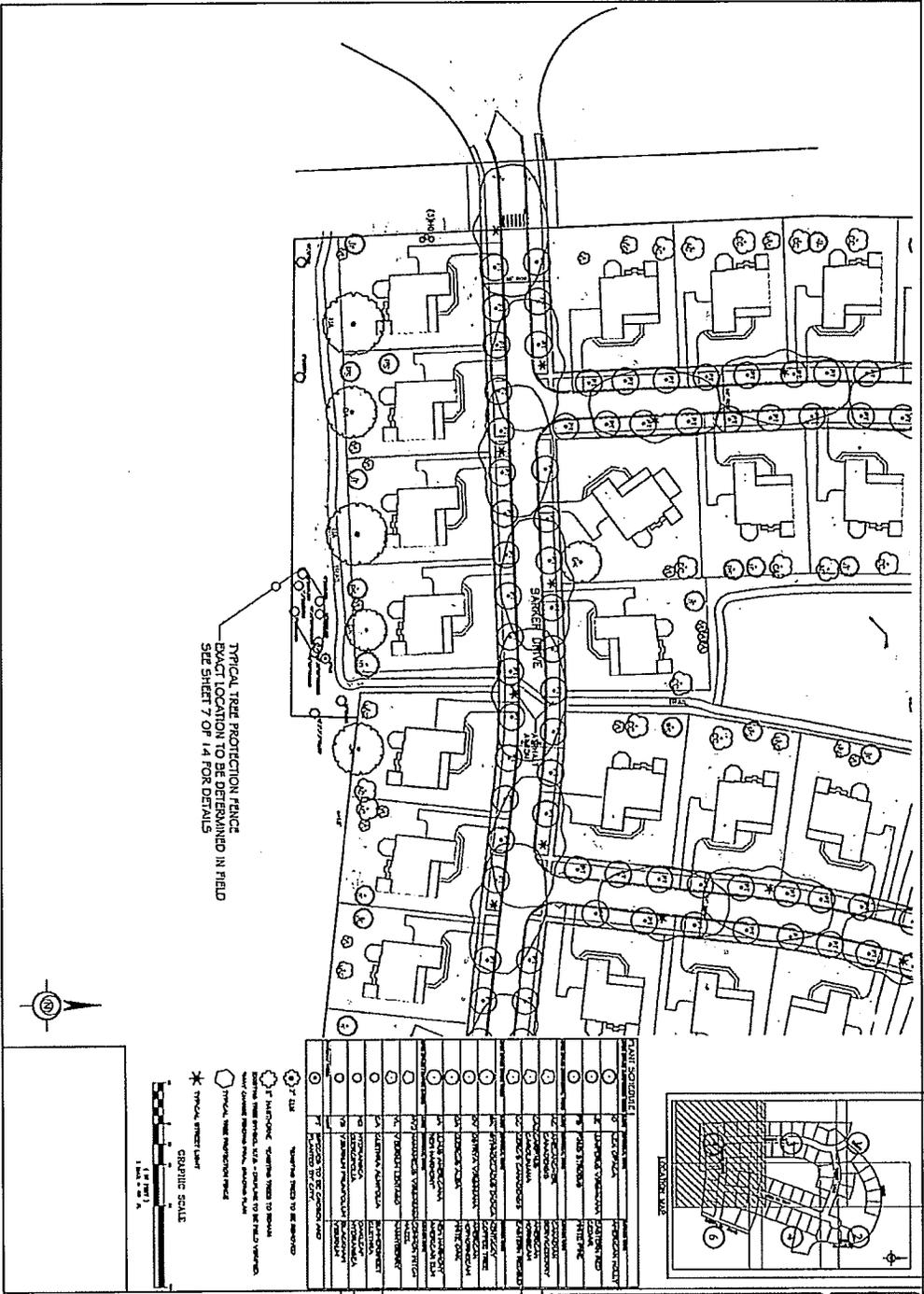
LANDSCAPE PLAN
TANGLEWOOD HILLS - UNIT 5
 CITY OF BATAVA, KAN. COUNTY, KANSAS

NO.	DESCRIPTION	QUANTITY	UNIT
1	PLANT MATERIAL		
2	PLANT MATERIAL		
3	PLANT MATERIAL		
4	PLANT MATERIAL		
5	PLANT MATERIAL		
6	PLANT MATERIAL		
7	PLANT MATERIAL		
8	PLANT MATERIAL		
9	PLANT MATERIAL		
10	PLANT MATERIAL		
11	PLANT MATERIAL		
12	PLANT MATERIAL		
13	PLANT MATERIAL		
14	PLANT MATERIAL		
15	PLANT MATERIAL		
16	PLANT MATERIAL		
17	PLANT MATERIAL		
18	PLANT MATERIAL		
19	PLANT MATERIAL		
20	PLANT MATERIAL		
21	PLANT MATERIAL		
22	PLANT MATERIAL		
23	PLANT MATERIAL		
24	PLANT MATERIAL		
25	PLANT MATERIAL		
26	PLANT MATERIAL		
27	PLANT MATERIAL		
28	PLANT MATERIAL		
29	PLANT MATERIAL		
30	PLANT MATERIAL		
31	PLANT MATERIAL		
32	PLANT MATERIAL		
33	PLANT MATERIAL		
34	PLANT MATERIAL		
35	PLANT MATERIAL		
36	PLANT MATERIAL		
37	PLANT MATERIAL		
38	PLANT MATERIAL		
39	PLANT MATERIAL		
40	PLANT MATERIAL		
41	PLANT MATERIAL		
42	PLANT MATERIAL		
43	PLANT MATERIAL		
44	PLANT MATERIAL		
45	PLANT MATERIAL		
46	PLANT MATERIAL		
47	PLANT MATERIAL		
48	PLANT MATERIAL		
49	PLANT MATERIAL		
50	PLANT MATERIAL		
51	PLANT MATERIAL		
52	PLANT MATERIAL		
53	PLANT MATERIAL		
54	PLANT MATERIAL		
55	PLANT MATERIAL		
56	PLANT MATERIAL		
57	PLANT MATERIAL		
58	PLANT MATERIAL		
59	PLANT MATERIAL		
60	PLANT MATERIAL		
61	PLANT MATERIAL		
62	PLANT MATERIAL		
63	PLANT MATERIAL		
64	PLANT MATERIAL		
65	PLANT MATERIAL		
66	PLANT MATERIAL		
67	PLANT MATERIAL		
68	PLANT MATERIAL		
69	PLANT MATERIAL		
70	PLANT MATERIAL		
71	PLANT MATERIAL		
72	PLANT MATERIAL		
73	PLANT MATERIAL		
74	PLANT MATERIAL		
75	PLANT MATERIAL		
76	PLANT MATERIAL		
77	PLANT MATERIAL		
78	PLANT MATERIAL		
79	PLANT MATERIAL		
80	PLANT MATERIAL		
81	PLANT MATERIAL		
82	PLANT MATERIAL		
83	PLANT MATERIAL		
84	PLANT MATERIAL		
85	PLANT MATERIAL		
86	PLANT MATERIAL		
87	PLANT MATERIAL		
88	PLANT MATERIAL		
89	PLANT MATERIAL		
90	PLANT MATERIAL		
91	PLANT MATERIAL		
92	PLANT MATERIAL		
93	PLANT MATERIAL		
94	PLANT MATERIAL		
95	PLANT MATERIAL		
96	PLANT MATERIAL		
97	PLANT MATERIAL		
98	PLANT MATERIAL		
99	PLANT MATERIAL		
100	PLANT MATERIAL		

ESE Land Planning
 Engineering
 Land Surveying

ESE CONSULTANTS, INC.
 2500 GARDNER ROAD,
 SUITE 111
 WASHINGTON, PA 15364
 TEL: 724-225-4200
 FAX: 724-225-4200

R.L.A. # 157-001217
 TIMOTHY J. GIBSON

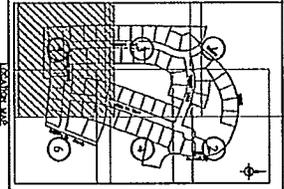


TYPICAL TREE PROTECTION FENCE
 EXACT LOCATION TO BE DETERMINED IN FIELD
 SEE SHEET 7 OF 14 FOR DETAILS



- 2" TREE
- 4" TREE
- TYPICAL TREE PROTECTION FENCE
- TYPICAL TREE PROTECTION FENCE
- TYPICAL TREE PROTECTION FENCE

NO.	DESCRIPTION	QTY	UNIT
1	LANDSCAPE		
2	...		
3	...		
4	...		
5	...		
6	...		
7	...		
8	...		
9	...		
10	...		
11	...		
12	...		
13	...		
14	...		
15	...		
16	...		
17	...		
18	...		
19	...		
20	...		
21	...		
22	...		
23	...		
24	...		
25	...		
26	...		
27	...		
28	...		
29	...		
30	...		
31	...		
32	...		
33	...		
34	...		
35	...		
36	...		
37	...		
38	...		
39	...		
40	...		
41	...		
42	...		
43	...		
44	...		
45	...		
46	...		
47	...		
48	...		
49	...		
50	...		



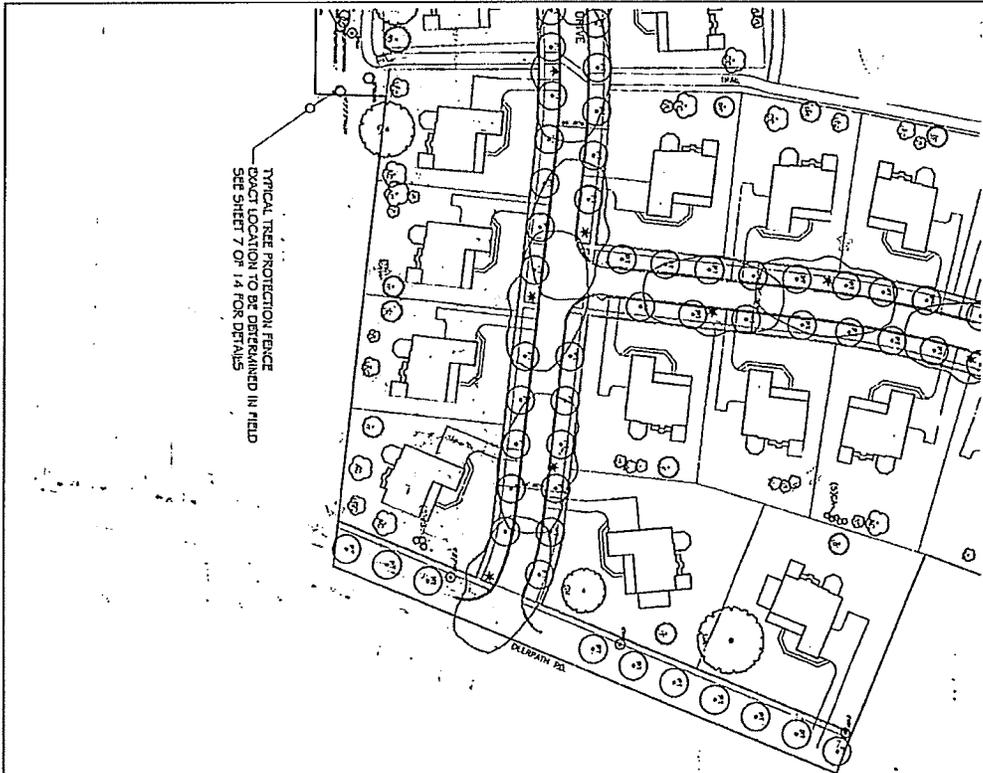
DATE	BY	CHKD
05/18/18	J. GIBSON	J. GIBSON

LANDSCAPE PLAN
TANGLEWOOD HILLS - UNIT 5
 CITY OF DATAWA, KANE COUNTY, ILLINOIS

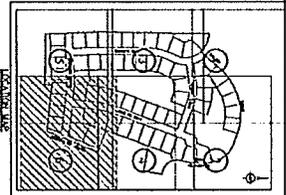
ESE Land Planning
Engineering
Land Surveying

ESE Consultants, Inc.
 503 Central Road,
 Suite 2E
 Northbrook, IL 60062
 TEL: 219-519-2233
 FAX: 219-519-5486

ILL. E. 157-091217
 J. GIBSON



- 1" DIA. - 10' HIGHT, 10" DIA. - 10' HIGHT
- 2" DIA. - 10' HIGHT, 20" DIA. - 10' HIGHT
- 3" DIA. - 10' HIGHT, 30" DIA. - 10' HIGHT
- 4" DIA. - 10' HIGHT, 40" DIA. - 10' HIGHT
- 5" DIA. - 10' HIGHT, 50" DIA. - 10' HIGHT
- 6" DIA. - 10' HIGHT, 60" DIA. - 10' HIGHT
- 7" DIA. - 10' HIGHT, 70" DIA. - 10' HIGHT
- 8" DIA. - 10' HIGHT, 80" DIA. - 10' HIGHT
- 9" DIA. - 10' HIGHT, 90" DIA. - 10' HIGHT
- 10" DIA. - 10' HIGHT, 100" DIA. - 10' HIGHT
- 11" DIA. - 10' HIGHT, 110" DIA. - 10' HIGHT
- 12" DIA. - 10' HIGHT, 120" DIA. - 10' HIGHT
- 13" DIA. - 10' HIGHT, 130" DIA. - 10' HIGHT
- 14" DIA. - 10' HIGHT, 140" DIA. - 10' HIGHT
- 15" DIA. - 10' HIGHT, 150" DIA. - 10' HIGHT
- 16" DIA. - 10' HIGHT, 160" DIA. - 10' HIGHT
- 17" DIA. - 10' HIGHT, 170" DIA. - 10' HIGHT
- 18" DIA. - 10' HIGHT, 180" DIA. - 10' HIGHT
- 19" DIA. - 10' HIGHT, 190" DIA. - 10' HIGHT
- 20" DIA. - 10' HIGHT, 200" DIA. - 10' HIGHT
- 21" DIA. - 10' HIGHT, 210" DIA. - 10' HIGHT
- 22" DIA. - 10' HIGHT, 220" DIA. - 10' HIGHT
- 23" DIA. - 10' HIGHT, 230" DIA. - 10' HIGHT
- 24" DIA. - 10' HIGHT, 240" DIA. - 10' HIGHT
- 25" DIA. - 10' HIGHT, 250" DIA. - 10' HIGHT
- 26" DIA. - 10' HIGHT, 260" DIA. - 10' HIGHT
- 27" DIA. - 10' HIGHT, 270" DIA. - 10' HIGHT
- 28" DIA. - 10' HIGHT, 280" DIA. - 10' HIGHT
- 29" DIA. - 10' HIGHT, 290" DIA. - 10' HIGHT
- 30" DIA. - 10' HIGHT, 300" DIA. - 10' HIGHT
- 31" DIA. - 10' HIGHT, 310" DIA. - 10' HIGHT
- 32" DIA. - 10' HIGHT, 320" DIA. - 10' HIGHT
- 33" DIA. - 10' HIGHT, 330" DIA. - 10' HIGHT
- 34" DIA. - 10' HIGHT, 340" DIA. - 10' HIGHT
- 35" DIA. - 10' HIGHT, 350" DIA. - 10' HIGHT
- 36" DIA. - 10' HIGHT, 360" DIA. - 10' HIGHT
- 37" DIA. - 10' HIGHT, 370" DIA. - 10' HIGHT
- 38" DIA. - 10' HIGHT, 380" DIA. - 10' HIGHT
- 39" DIA. - 10' HIGHT, 390" DIA. - 10' HIGHT
- 40" DIA. - 10' HIGHT, 400" DIA. - 10' HIGHT
- 41" DIA. - 10' HIGHT, 410" DIA. - 10' HIGHT
- 42" DIA. - 10' HIGHT, 420" DIA. - 10' HIGHT
- 43" DIA. - 10' HIGHT, 430" DIA. - 10' HIGHT
- 44" DIA. - 10' HIGHT, 440" DIA. - 10' HIGHT
- 45" DIA. - 10' HIGHT, 450" DIA. - 10' HIGHT
- 46" DIA. - 10' HIGHT, 460" DIA. - 10' HIGHT
- 47" DIA. - 10' HIGHT, 470" DIA. - 10' HIGHT
- 48" DIA. - 10' HIGHT, 480" DIA. - 10' HIGHT
- 49" DIA. - 10' HIGHT, 490" DIA. - 10' HIGHT
- 50" DIA. - 10' HIGHT, 500" DIA. - 10' HIGHT
- 51" DIA. - 10' HIGHT, 510" DIA. - 10' HIGHT
- 52" DIA. - 10' HIGHT, 520" DIA. - 10' HIGHT
- 53" DIA. - 10' HIGHT, 530" DIA. - 10' HIGHT
- 54" DIA. - 10' HIGHT, 540" DIA. - 10' HIGHT
- 55" DIA. - 10' HIGHT, 550" DIA. - 10' HIGHT
- 56" DIA. - 10' HIGHT, 560" DIA. - 10' HIGHT
- 57" DIA. - 10' HIGHT, 570" DIA. - 10' HIGHT
- 58" DIA. - 10' HIGHT, 580" DIA. - 10' HIGHT
- 59" DIA. - 10' HIGHT, 590" DIA. - 10' HIGHT
- 60" DIA. - 10' HIGHT, 600" DIA. - 10' HIGHT
- 61" DIA. - 10' HIGHT, 610" DIA. - 10' HIGHT
- 62" DIA. - 10' HIGHT, 620" DIA. - 10' HIGHT
- 63" DIA. - 10' HIGHT, 630" DIA. - 10' HIGHT
- 64" DIA. - 10' HIGHT, 640" DIA. - 10' HIGHT
- 65" DIA. - 10' HIGHT, 650" DIA. - 10' HIGHT
- 66" DIA. - 10' HIGHT, 660" DIA. - 10' HIGHT
- 67" DIA. - 10' HIGHT, 670" DIA. - 10' HIGHT
- 68" DIA. - 10' HIGHT, 680" DIA. - 10' HIGHT
- 69" DIA. - 10' HIGHT, 690" DIA. - 10' HIGHT
- 70" DIA. - 10' HIGHT, 700" DIA. - 10' HIGHT
- 71" DIA. - 10' HIGHT, 710" DIA. - 10' HIGHT
- 72" DIA. - 10' HIGHT, 720" DIA. - 10' HIGHT
- 73" DIA. - 10' HIGHT, 730" DIA. - 10' HIGHT
- 74" DIA. - 10' HIGHT, 740" DIA. - 10' HIGHT
- 75" DIA. - 10' HIGHT, 750" DIA. - 10' HIGHT
- 76" DIA. - 10' HIGHT, 760" DIA. - 10' HIGHT
- 77" DIA. - 10' HIGHT, 770" DIA. - 10' HIGHT
- 78" DIA. - 10' HIGHT, 780" DIA. - 10' HIGHT
- 79" DIA. - 10' HIGHT, 790" DIA. - 10' HIGHT
- 80" DIA. - 10' HIGHT, 800" DIA. - 10' HIGHT
- 81" DIA. - 10' HIGHT, 810" DIA. - 10' HIGHT
- 82" DIA. - 10' HIGHT, 820" DIA. - 10' HIGHT
- 83" DIA. - 10' HIGHT, 830" DIA. - 10' HIGHT
- 84" DIA. - 10' HIGHT, 840" DIA. - 10' HIGHT
- 85" DIA. - 10' HIGHT, 850" DIA. - 10' HIGHT
- 86" DIA. - 10' HIGHT, 860" DIA. - 10' HIGHT
- 87" DIA. - 10' HIGHT, 870" DIA. - 10' HIGHT
- 88" DIA. - 10' HIGHT, 880" DIA. - 10' HIGHT
- 89" DIA. - 10' HIGHT, 890" DIA. - 10' HIGHT
- 90" DIA. - 10' HIGHT, 900" DIA. - 10' HIGHT
- 91" DIA. - 10' HIGHT, 910" DIA. - 10' HIGHT
- 92" DIA. - 10' HIGHT, 920" DIA. - 10' HIGHT
- 93" DIA. - 10' HIGHT, 930" DIA. - 10' HIGHT
- 94" DIA. - 10' HIGHT, 940" DIA. - 10' HIGHT
- 95" DIA. - 10' HIGHT, 950" DIA. - 10' HIGHT
- 96" DIA. - 10' HIGHT, 960" DIA. - 10' HIGHT
- 97" DIA. - 10' HIGHT, 970" DIA. - 10' HIGHT
- 98" DIA. - 10' HIGHT, 980" DIA. - 10' HIGHT
- 99" DIA. - 10' HIGHT, 990" DIA. - 10' HIGHT
- 100" DIA. - 10' HIGHT, 1000" DIA. - 10' HIGHT



DATE	8/14
BY	SDI/ADP
CHECKED BY	
SCALE	AS SHOWN

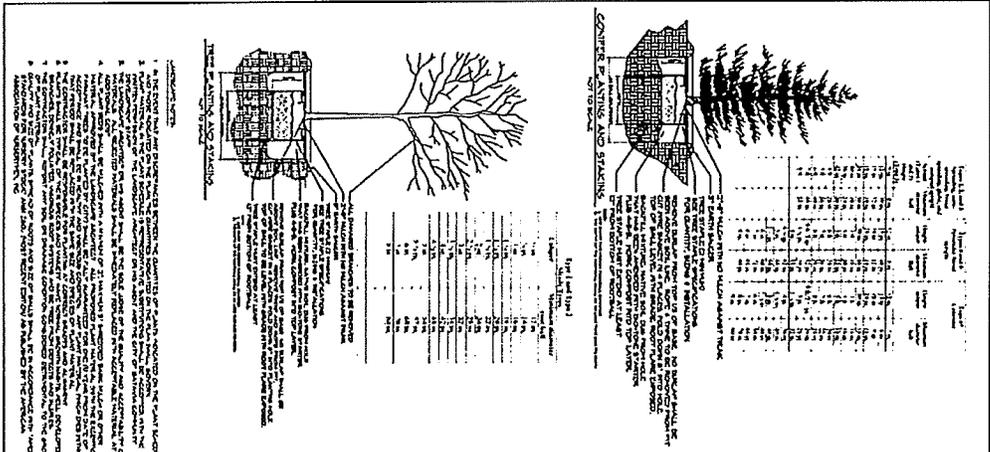
LANDSCAPE PLAN
TANGLEWOOD HILLS -- UNIT 5
 CITY OF BATAVIA, WAY COUNTY, MISSOURI

NO.	DESCRIPTION	DATE
1	PRELIMINARY LAYOUT	8/14/14
2	REVISIONS	
3	REVISIONS	
4	REVISIONS	
5	REVISIONS	
6	REVISIONS	
7	REVISIONS	
8	REVISIONS	
9	REVISIONS	
10	REVISIONS	
11	REVISIONS	
12	REVISIONS	
13	REVISIONS	
14	REVISIONS	
15	REVISIONS	
16	REVISIONS	
17	REVISIONS	
18	REVISIONS	
19	REVISIONS	
20	REVISIONS	
21	REVISIONS	
22	REVISIONS	
23	REVISIONS	
24	REVISIONS	
25	REVISIONS	
26	REVISIONS	
27	REVISIONS	
28	REVISIONS	
29	REVISIONS	
30	REVISIONS	
31	REVISIONS	
32	REVISIONS	
33	REVISIONS	
34	REVISIONS	
35	REVISIONS	
36	REVISIONS	
37	REVISIONS	
38	REVISIONS	
39	REVISIONS	
40	REVISIONS	
41	REVISIONS	
42	REVISIONS	
43	REVISIONS	
44	REVISIONS	
45	REVISIONS	
46	REVISIONS	
47	REVISIONS	
48	REVISIONS	
49	REVISIONS	
50	REVISIONS	
51	REVISIONS	
52	REVISIONS	
53	REVISIONS	
54	REVISIONS	
55	REVISIONS	
56	REVISIONS	
57	REVISIONS	
58	REVISIONS	
59	REVISIONS	
60	REVISIONS	
61	REVISIONS	
62	REVISIONS	
63	REVISIONS	
64	REVISIONS	
65	REVISIONS	
66	REVISIONS	
67	REVISIONS	
68	REVISIONS	
69	REVISIONS	
70	REVISIONS	
71	REVISIONS	
72	REVISIONS	
73	REVISIONS	
74	REVISIONS	
75	REVISIONS	
76	REVISIONS	
77	REVISIONS	
78	REVISIONS	
79	REVISIONS	
80	REVISIONS	
81	REVISIONS	
82	REVISIONS	
83	REVISIONS	
84	REVISIONS	
85	REVISIONS	
86	REVISIONS	
87	REVISIONS	
88	REVISIONS	
89	REVISIONS	
90	REVISIONS	
91	REVISIONS	
92	REVISIONS	
93	REVISIONS	
94	REVISIONS	
95	REVISIONS	
96	REVISIONS	
97	REVISIONS	
98	REVISIONS	
99	REVISIONS	
100	REVISIONS	

ESE Land Planning
Engineering
Land Surveying

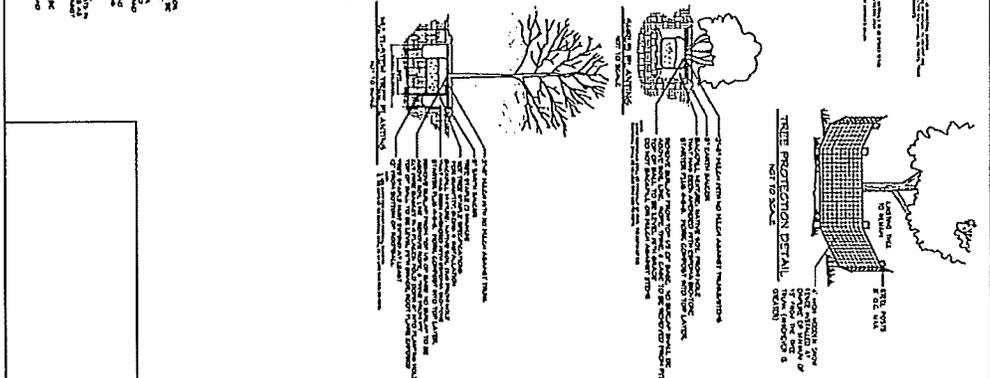
856 Consultants, Inc.
250 Central Blvd.
Suite 205
Pittsburg, MO 64571
TEL: 316-441-2722
FAX: 316-441-5446

R.L.A. # 157-001217
REGISTERED PROFESSIONAL ENGINEER



PLANT SCHEDULE

SYMBOL	PLANT NAME	HEIGHT	SPREAD	PLANTING	REMARKS
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100



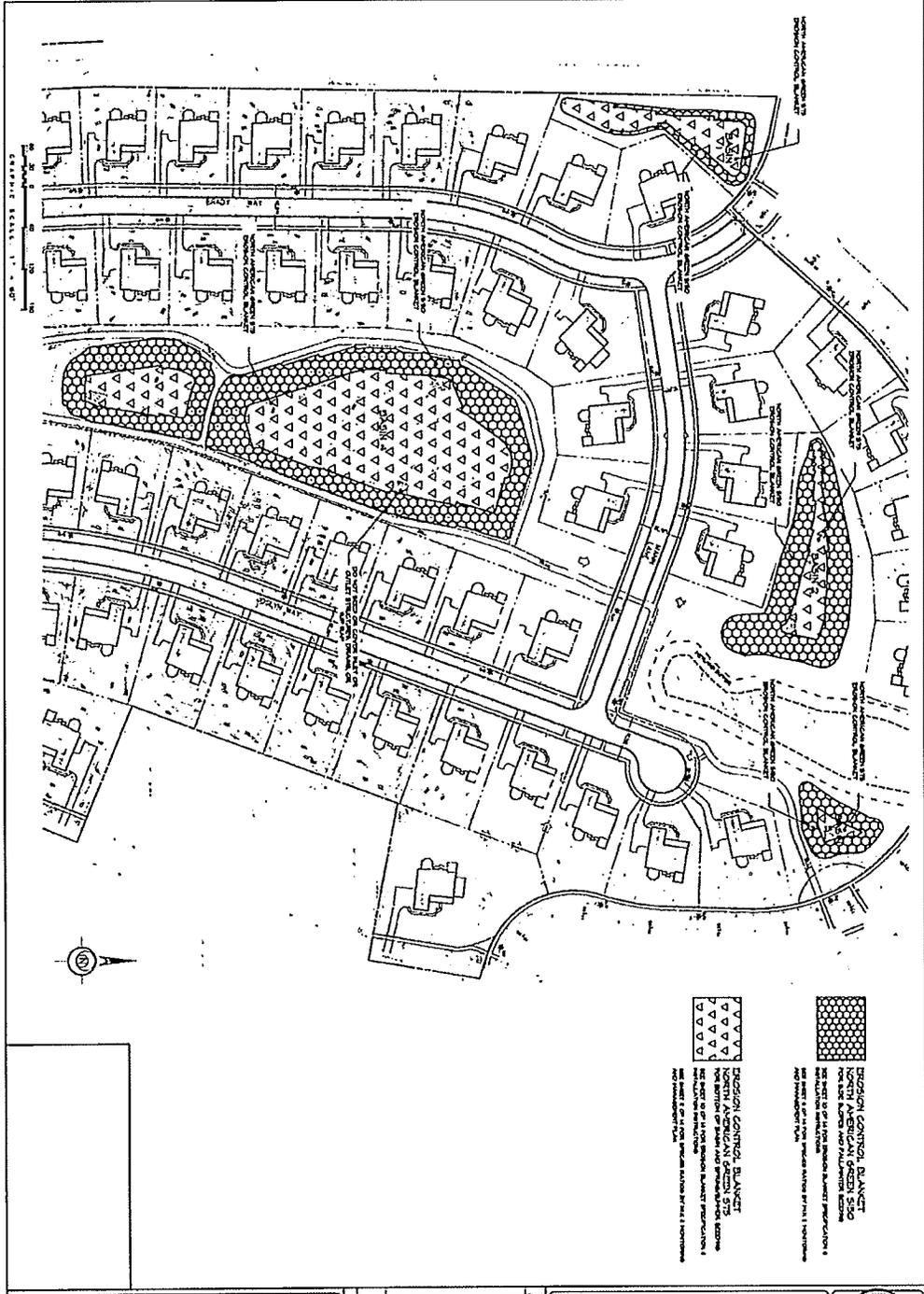
PLANTING DETAILS
PLANT SCHEDULE

TANGLEWOOD HILLS - UNIT 5
 CITY OF BATON ROUGE, LOUISIANA

ESE Land Planning
 Engineering
 Land Surveying

156 Consultants, Inc.
 350 Governor Road,
 Suite 200
 Baton Rouge, LA 70804
 TEL: 225-381-2500
 FAX: 225-381-1486

STATE OF LOUISIANA
 PROFESSIONAL ENGINEER
 No. 157-001217
 EXPIRES 12/31/2015





 EROSION CONTROL BLANKET
 NORTH AMERICAN GRASS SEEDS
 100% PURE, 100% VIBRANT GREEN
 100% GUARANTEED TO SURVIVE
 AND PRODUCE FULLY
 ESTABLISHED GRASS



 EROSION CONTROL BLANKET
 NORTH AMERICAN GRASS SEEDS
 100% PURE, 100% VIBRANT GREEN
 100% GUARANTEED TO SURVIVE
 AND PRODUCE FULLY
 ESTABLISHED GRASS

DATE	11/14/11
BY	ES
CHECKED	ES
SCALE	AS SHOWN
SHEET NO.	14
TOTAL SHEETS	14

BASIN SEEDING DETAILS
EROSION CONTROL
TANGLEWOOD HILLS - UNIT 5
 CITY OF BATAVA, KANE COUNTY, ILLINOIS

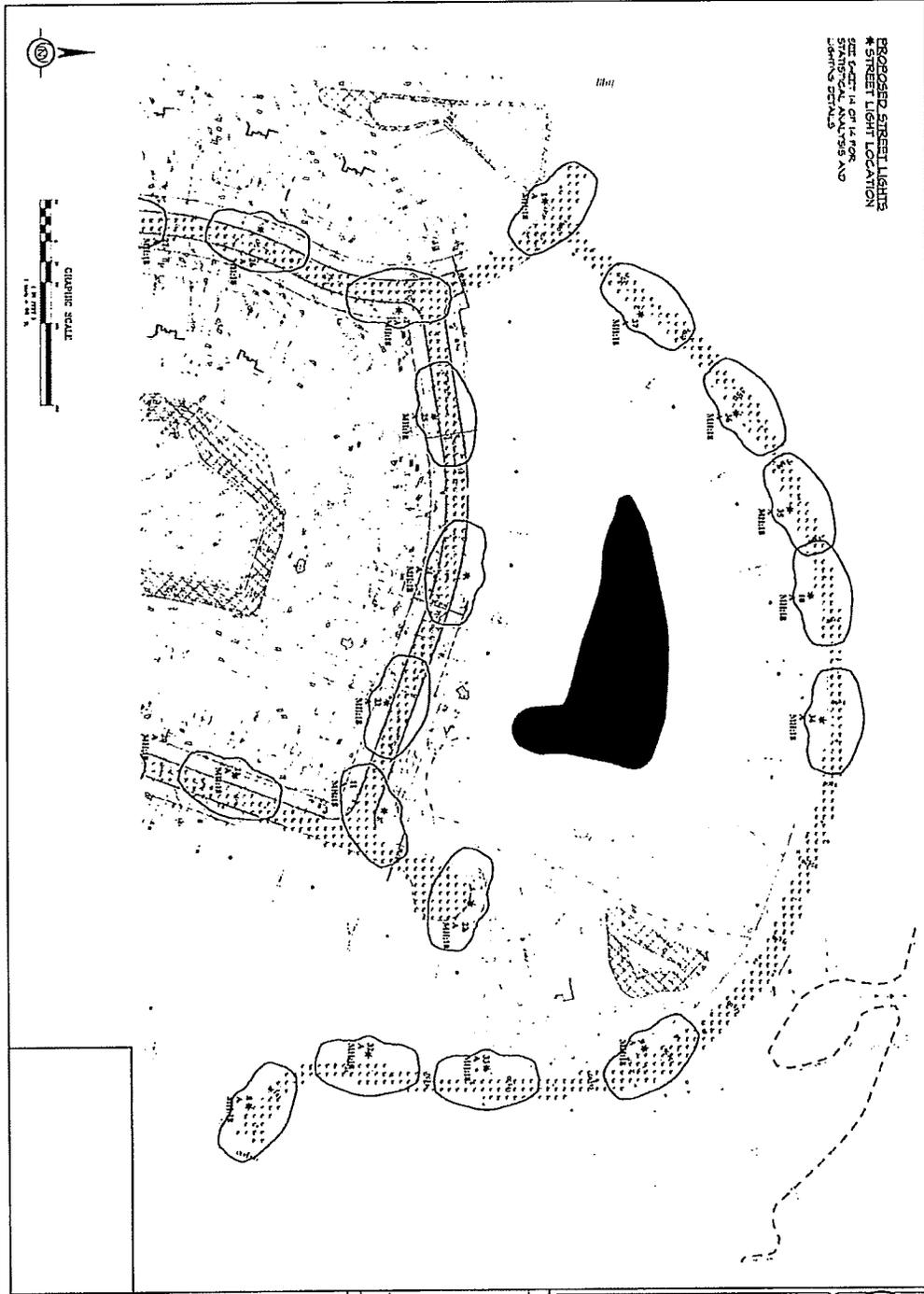
NO.	DESCRIPTION	DATE
1	PREPARED BY ENGINEER	11/14/11
2	DESIGNED BY ENGINEER	11/14/11
3	REVISIONS	11/14/11
4	REVISIONS	11/14/11
5	REVISIONS	11/14/11
6	REVISIONS	11/14/11
7	REVISIONS	11/14/11
8	REVISIONS	11/14/11
9	REVISIONS	11/14/11
10	REVISIONS	11/14/11


ESE Land Planning
 Engineering
 Land Surveying

ESE Consultants, Inc.
 250 Gibraltar Road
 Suite 200
 Huntley, IL 60141
 TEL: 312-914-2928
 FAX: 312-914-2928


 R.L.A. # 111-091217
 TIMOTHY J. GARDNER

PROPOSED STREET LIGHTS
 * STREET LIGHT LOCATION
 SET POINT IS ON 14 FOR
 STATISTICAL ANALYSIS AND
 LIGHTING DETAILS



DATE	BY	REVISION
12/12/14	SO1432	

LIGHTING PLAN
 STREET LIGHTING
 TANGLEWOOD HILLS - UNIT 5
 CITY OF GATHER, KANSAS COUNTY, MISSOURI

NO.	DESCRIPTION	DATE
1	ISSUED FOR PERMITS	12/12/14
2	ISSUED FOR CONSTRUCTION	12/12/14
3	ISSUED FOR RECORDS	12/12/14

ESE Land Planning
 Engineering
 Land Surveying

650 Creighton, Inc.
 2500 Oakdale Road
 Suite 207
 Overland Park, MO 66204
 TEL: 316-918-2922
 FAX: 316-251-1548

REGISTERED PROFESSIONAL ENGINEER
 STATE OF MISSOURI
 No. 157401217
 TIMOTHY J. GIBSON

CITY OF BATAVIA

DATE: May 12, 2016
TO: Plan Commission
FROM: Joel Strassman, Planning and Zoning Officer
SUBJECT: PUBLIC HEARING - Amendments to the Text of the Zoning Code
Chapter 2.1: Single Family Residential Districts
Chapter 2.2: Multi-Family Residential Districts
Chapter 5.1: Planning Administration

Background

A May 18th public hearing is set to review proposed Zoning Code amendments related to items staff has encountered through the administration of the Zoning Code. Recent variance applications have sought and have received reductions in setbacks for single family residences and accessory structures. The proposed amendments address these situations. Another proposed amendment would clarify term limits for Zoning Board of Appeals (ZBA) officers.

Summary of Proposed Text Amendments

Chapter 2.1 Single Family Residential District -Table 2.105: Lot Development Regulations

Residence Setback: In the current Zoning Code residences in the R1-H District require one side setback of at least 10 feet (including corner side setback) with the other side setback of at least 5 feet. This is the only zoning district that requires different interior side setback widths. While this can provide flexibility, it does not address well existing residences that lack a side setback of 10 feet. To better accommodate these existing situations while retaining the allowed buildable width of R1-H properties, staff is recommending that each interior side setback be 7.5 feet, with the interior side setback on corner lots being 5 feet.

Accessory Structure Setbacks: When adopted in 2010, the Zoning Code increased the required interior side and rear setbacks on many of the older single family properties to 5 feet from 3 feet allowed previously. Staff is seeking to restore the previous setback for most of these older properties that are now zoned R1-H and R1-M Single Family Medium Density. Roof overhangs on accessory structures effectively would need to be set back 3 feet.

Chapter 2.2 Multi-Family Residential Districts

Currently, accessory structures may be located only in the principal structure building envelope. Staff feels that detached garages on duplex properties zoned R2 can reasonably be located in the rear and side setback areas, with a minimum setback of 5 feet. Staff has drafted such regulations.

Chapter 5.1: Planning Administration

Zoning Code Section 5.104.A prohibits ZBA Chair and Vice-Chair from being reelected. Staff is proposing amending this Section to be consistent with the ZBA's desire for officer terms as established with the recently amended ZBA By-Laws. This Section is proposed to specify that officers may be elected to up to 3 consecutive 2-year terms.

Below are excerpts from the Zoning Code showing the proposed amendments to Chapters 2.1 and 5.1. Proposed Amendments to Chapter 2.2 are attached.

Staff Recommendation

Staff recommends the Plan Commission open and conduct the public hearing. The Commission should then discuss the proposed amendments. Once discussion has concluded, the Commission may provide further direction for staff to research or prepare additional language for consideration. The Commission may elect to keep the Hearing open to gather additional information. Otherwise, the hearing may be closed and a recommendation may be made to the Committee of the Whole.

- c Mayor and City Council
 - Department Heads
 - Media

Attachment: Draft Chapter: 2.2 Multi-Family Residential Districts

Standards	R0	RI-L	RI-M	RI-H	Additional Regulations
Minimum Lot Area (sq.ft.)	14,000	9,500	7,200	5,000	
Minimum Lot Width (ft.)	95	80	60	45	
Maximum Height (ft.)					
House	35	35	30	30	
Accessory Structure	25	25	25	25	
Maximum Floor Area Ratio (FAR)	0.35	0.40	0.45	0.50	
Front Setback (ft.)					
House	30	30	25	20	See 2.106.J
Attached Garage	(A)	(A)	(A)	(B)	
Rear Setback (ft.)	30	30	30	25	
	15	12	10	5-one-side 10-one side7.5 (LI)	
Interior Side Setback (ft.)					
Corner Side Setback (ft.)	30	30	12	10	
Accessory Structure Setbacks (ft.)					See 2.106.A
Front	30	30	30	30	(C)
Rear	10	6	53	53	(D)
Interior Side	10	6	53	53	(D)
Corner Side	30	30	12	10	
Principal Structure	10	10	10	10	(E)
Maximum Percentage of Building Frontage as Garage with Vehicle Door(s)	50	50	50	50	(F)
(A) Attached garages shall be set back a minimum of 6 feet from the front plane of the house. (B) Attached garages shall be set back a minimum of 12 feet from the front plane of the house. (C) Detached garages shall be located at least 6 feet behind the front plane of the principal structure (D) Rear and interior side setbacks shall be increased by 1 foot for each 2 feet or fraction thereof in excess of 15 feet in height. (E) Structure may be located closer in compliance with applicable Building and Fire codes (F) Unroofed porches wider than the enclosed building shall be excluded from the width of the building frontage (LI) Interior side setbacks on corner lots shall be a minimum of 5 feet					

5.104 Zoning Board of Appeals

The Zoning Board of Appeals of the City of Batavia (ZBA) is established pursuant to Illinois Compiled Statutes.

- A. *Creation, Membership and Officers.* The seven members of the Plan Commission shall serve as the Zoning Board of Appeals. One of the members of the ZBA shall be named by the Mayor as chair at the time of his or her appointment. The chair shall serve for two years, at which time the ZBA shall elect a chair from its membership. The ZBA shall elect a vice-chair from its membership. Officers shall serve two year terms, and shall not ~~serve for more than three consecutive terms, succeed themselves.~~ serve for more than three consecutive terms.

Chapter 2.2: Multi-Family Residential Districts

Sections:

- 2.201 Purposes
- 2.202 Multi-Family Residential Districts
- 2.203 Land Use Regulations
- 2.204 Site Development Regulations
- 2.205 Additional Use and Development Regulations

2.201 Purposes

The purposes of multi-family residential districts established in this chapter are to:

- A. Provide for multi-family residential uses in appropriate locations;
- B. Provide for a variety of housing opportunities;
- C. Establish reasonable regulations to create and preserve quality higher density living environments; and
- D. Provide for appropriate transitions to other uses.

2.202 Multi-Family Residential Districts

The multi-family residential districts are:

R2 (Two Family Residential). This district permits two family residences, either in a side by side or stacked configuration.

R3 (Multi-Family Low Density). This district permits multi-family housing at densities of approximately 5-8 dwelling units per acre.

R4 (Multi-Family Medium Density). This district permits multi-family housing at densities of approximately 8-14 dwelling units per acre.

R5 (Multi-Family High Density). This district permits multi-family housing at densities of approximately 14-25 dwelling units per acre.

2.203 Land Use Regulations

- A. ***Regulations.*** Table 2.203: Land Use Regulations – Multi-Family Residential Districts sets forth the land use regulations for multi-family residential districts. The regulations for each district are established by letter designations as follows:

"P" designates permitted uses.

"L" designates uses that are permitted subject to certain limitations. Number designations refer to the limitations listed at the bottom of Table 2.203: Land Use Regulations – Multi-Family Residential Districts.

"T" designates uses that are permitted to be conducted for a temporary period of time. Time limitations are listed in Table 4.509: Temporary Uses.

"A" designates uses that require an Administrative Use Permit pursuant to Chapter 5.4: Use Permits.

"C" designates uses that require a Conditional Use Permit pursuant to Chapter 5.4: Use Permits.

- B. **Unlisted Uses.** Uses are defined in Chapter 6: Use Definitions. If a proposed use is not listed in the Use Definitions, the Planning and Zoning Officer shall determine if the proposed use is substantially similar to a permitted use; in that event, the Planning and Zoning Officer shall assign the proposed use to a permitted use definition.
- C. **Prohibited Uses.** Uses not listed in Table 2.203: Land Use Regulations – Multi-Family Residential Districts below, or not assigned to a Use Definition pursuant to Section 2.203B: Unlisted Uses, are prohibited.
- D. **Additional Use and Development Regulations.** Additional use and development regulations for multi-family residential districts are set forth in Section 2.205: Additional Use and Development Regulations.

Table 2.203: Land Use Regulations – Multi-Family Residential Districts					
Use Classification	R2	R3	R4	R5	Additional Regulations
Amateur Radio Facilities	P, LI	P, LI	--	--	See Chapter 4.8
Bed and Breakfast Homes	C	C	--	--	In single family detached structures only
Carnival	T	T	T	T	See Title 3-4
Child Day Care, Home Occupation	P, LI	P, LI	P, LI	P, LI	See Section 4.503
Congregate Living Facility	--	--	C	C	
Day Care Home	C	C	--	--	
Garage Sales	T	T	T	T	See Section 4.509
Group Home	P	P	--	--	
Home Occupation	P	P	P	P	See Section 4.502
Homeowner Association Facilities	P	P	P	P	
Laundry Services	--	--	P, LI	P, LI	
Mobile Home Park	--	C	C	--	See Title 3-9
Model Home	T	T	T	T	See Section 4.511
Nursing Home	--	--	C	C	
Over-The-Air Reception Device	P	P	P	P	See Chapter 4.8
Religious Assembly	C, L2	C, L2	C, L2	C, L2	

Use Classification	R2	R3	R4	R5	Additional Regulations
Residential, Permanent					
<i>Single Family, Detached</i>	P	P	--	--	
<i>Single Family, Attached (Duplex)</i>	P	P	--	--	
<i>Multi-Family</i>	--	P	P	P	
<i>Townhouse</i>	--	P	P	--	
Satellite Dish Antenna, Large	P, L1	P, L1	P, L1	P, L1	See Chapter 4.8
Schools, Public or Private	C, L2	C, L2	C, L2	C, L2	
Senior Housing	P	P	P	P	
Utilities					
<i>Facilities</i>	A	A	A	A	
<i>Well Site</i>	A	A	A	A	
L1: Only as a use incidental to the principal use of the property L2: Public and Private Schools and Religious Assembly Uses are permitted as separate structures, but not permitted in multi-family residential structures					

2.204 Site Development Regulations

Table 2.204: Site Development Regulations – Multi-Family Residential Districts, sets forth the site development regulations for multi-family residential districts, which are in addition to the regulations set forth in Section 2.205: Additional Use and Development Regulations and Chapter 4. Letter designations in the Additional Regulations column refer to regulations that follow Table 2.204: Site Development Regulations.

Standards	R2	R3	R4	R5	Additional Regulations
Minimum Parcel Area (sq. ft.)	10,000	15,000	20,000	87,120	
Minimum Net Land Area per Unit (sq. ft.)	5,000	4,375	2,333	1,750	
Maximum Net Land Area per Unit (sq. ft.)	10,000	7,000	4,375	2,333	
Maximum Height (ft.)	35	35	40	45	
Building Step-back	0	0	0	10' at 3 rd floor	
Minimum Perimeter Building Setbacks (ft.)					
Front	25	25	30	40	
Side (Corner)	25	25	30	40	
Side (Single and Two Family Residential)	10	15	30	40	
Side (Multi-Family and Non-residential)	10	15	20	30	
Rear (Single and Two Family Residential)	25	20	30	40	
Rear (Multi-Family and Non-residential)	30	25	20	30	

Table 2.204: Site Development Regulations – Multi-Family Residential Districts					
Standards	R2	R3	R4	R5	Additional Regulations
Minimum Perimeter Accessory Structure Setbacks (ft.)					
Front	<u>25</u>	<u>See Section 2.205.A.1</u>	<u>See Section 2.205.A.1</u>	<u>See Section 2.205.A.1</u>	
Corner Side	<u>25</u>	<u>2.205.A.1</u>	<u>2.205.A.1</u>	<u>2.205.A.1</u>	
Interior Side	<u>5</u>				
Rear	<u>5</u>				
Minimum Perimeter Landscape Area (depth in ft.)					
Front	20	20	20	20	
Side (Corner)	20	20	20	20	
Side (Single and Two Family Residential)	--	15	15	15	
Side (Multi-Family and Non-residential)	--	15	20	20	
Rear	20 <u>(LI)</u>	20	20	20	
Separation Between Buildings (ft.)					
Single story		15	15	20	
Two story		20	25	25	
Three story		20	25	25	
Building Setback to Parking (ft.)		10	10	10	See Section 4.203.N
Off-Street Parking and Loading					(A)
Private Open Space (sq. ft.)		80	60	60	(B)
Common Open Space (minimum)		50% of net site area	45% of net site area	40% of net site area	(C)
Common Open Space Landscaping		1 tree/unit	1 tree/unit	1 tree/unit	(C)
Landscaping (Perimeter & Public Street Frontages)		Perimeter & Public Street Frontages: 1 tree/40 linear ft.			(D)
Exterior Lighting Standards (ft.)	15	15	15	20	See Section 4.103
<p>(A) Parking for Multi-Family Buildings. In the R4 and R5 zoning districts, a minimum of 25 percent of required parking shall be in enclosed buildings.</p> <p>(B) Private Open Space. Each unit shall contain an exterior private open space. The minimum dimension of private open space is 6 feet. Private open space shall be covered and screened by a barrier fence or wall a minimum of 4 feet in height. Ground floor private open space may be screened by a fence or wall exceeding 4 feet, but no more than 8 feet in height. Screen walls or fences shall be a minimum 50 percent opacity.</p> <p>(C) Common Open Space Amenities. Common open space shall contain the following amenities:</p> <ol style="list-style-type: none"> One enclosed community facility of at least 1,000 square feet for developments of 100 units or more; One children’s play area of at least 600 square feet with play equipment, located outside of stormwater management areas. Age-restricted developments are exempt from this requirement. <p>(D) Street Frontage Landscape. Unless otherwise permitted by the Zoning Code, street frontage landscape areas shall not contain parking areas, buildings, fences, parking screen walls or other permanent improvements other than sidewalks, permitted signs, stormwater management areas</p>					

Table 2.204: Site Development Regulations – Multi-Family Residential Districts					
Standards	R2	R3	R4	R5	Additional Regulations
and lighting.					
(L1) Accessory structures may be located in the Perimeter Landscape Area					

2.205 Additional Use and Development Regulations

- A. **Accessory Structures.** Accessory structures shall comply with the following regulations:
 - 1. **Location.**
 - a. Accessory structures may be located anywhere within the building envelope, [and in other areas in the R2 District as specified in Table 2.204.](#)
 - b. [In the R3, R4, and R5 Districts,](#) parking canopies and garages shall be set back a minimum of 10 feet from nonresidential and multi-family residential zoning districts or properties designated as nonresidential or multi-family in the Comprehensive Plan.
 - c. [In the R3, R4, and R5 Districts,](#) parking canopies and garages shall be set back a minimum of 20 feet from single family residential zoning districts or properties designated as single family residential in the Comprehensive Plan.
 - 2. **Maximum Height.** The maximum height of accessory structures shall be 15 feet.
- B. **Gated Facility Entrances.** A minimum of 40 feet of vehicle queuing area shall be provided behind each security control point. The minimum width of the vehicular entry shall be 20 feet in width. A vehicular turn-around area shall be provided between the control point and the security gate. The vehicular turn-around area shall have a minimum interior turning radius of 35 feet and an exterior turning radius of 55 feet.
- C. **Recreational Vehicles on Residential Lots.** Recreational Vehicles owned by the occupant of a developed R2: Two Family Residential lot or parcel may be kept on the property. Recreational Vehicles shall be kept entirely over a hard surface of asphalt, concrete or pavers accessible by a continuous driveway to the curb or edge of street pavement. A Recreational Vehicle cannot be located closer than 5 feet from the rear or interior side property line. Recreational Vehicles on other Multi-Family Residential Zoning District lots are prohibited on commonly shared parking lots or driveways, unless parked in a location designated for Recreational Vehicles on an approved Design Review Plan.

- D. **Utility Vehicles on Residential Lots.** Utility Vehicles owned by the occupant of a developed Residential lot or parcel may be kept on a residentially zoned property when entirely over a hard surface of asphalt, concrete or pavers and not in the front or corner side setback areas. Utility Vehicles may be parked on a residentially zoned property entirely over a hard surface in the front or corner side setback area only on a driveway or Additional Parking space (per Section 4.203.X) for a period not to exceed 48 hours when being loaded, unloaded, or serviced. Recreational Vehicles shall remain unoccupied while on a Residential lot.
- E. **Access to Nonresidential Property.** Use of multi-family zoned property to provide primary vehicular access to a nonresidential use is prohibited.
- F. **Storage, Outdoor.** Outdoor storage, as defined in Chapter 7 of this code, is prohibited.
- G. **Play Equipment.** Play Equipment is a permitted structure and not subject to the issuance of a building permit. Play Equipment shall:
1. not be placed in an easement,
 2. not be located in a Front or Corner Side Setback area,
 3. be located a minimum of five feet from all lot lines.
- H. **Large Refuse Receptacles.** Large refuse receptacles, as defined in this code, are permitted on a residentially zoned property. Large Refuse Receptacles may be placed:
1. on a driveway or other hard surface for a period not to exceed 14 days.
 2. on a driveway or other hard surface for a period greater than 14 days when used in conjunction with an active building permit.
 3. on properties containing multi-family residences, other than Two Family Residences, for a period greater than 14 days solely in accordance with regulations set forth in Section 4.106: Refuse and Recycling Enclosures.