# PLANNING AND DEVELOPMENT SERVICES STAFF REPORT

**For Planning Commission Meeting of February 21, 2019**

**SUBJECT: Brightdawn Village Apartments Site Plan and Conditional Rezoning for City Council Approval**
**(2805 Burton Road)**
**File Nos. SP18-010 & Z18-007**

| PROPOSED CITY PLANNING COMMISSION MOTION |
|---|
| The Ann Arbor City Planning Commission hereby recommends that the Mayor and City Council approve the Brightdawn Village Apartments Conditional Rezoning from R4B (Multiple-Family Dwelling District) to R4D (Multiple-Family Dwelling District). |

| PROPOSED CITY PLANNING COMMISSION MOTION |
|---|
| The Ann Arbor City Planning Commission hereby recommends that the Mayor and City Council approve the Brightdawn Village Apartments Site Plan and Development Agreement, subject to providing a minimum of 63% open space. |

| PROPOSED CITY PLANNING COMMISSION MOTION |
|---|
| The Ann Arbor City Planning Commission hereby recommends that the Mayor and City Council approve the Wetland Use Permit for the Brightdawn Village development. |

| PROPOSED CITY PLANNING COMMISSION MOTION |
|---|
| The Ann Arbor City Planning Commission hereby authorizes activity in the natural features open space for the Brightdawn Village development. |

## STAFF RECOMMENDATION

Staff recommends the zoning be **denied.** The current R4B zoning is already inconsistent with the Master Plan Future Land Use Element, which recommends single family residential. Additionally, rezoning to R4D would not be consistent with the following Master Plan Land Use Goals, Objectives and Action Statements:

- Goal B, Action Statement b): Encourage residential densities that can sustain bus transit on sites that front mass transit routes. While in proximity, the site does not front on a mass transit route.
- Goal D, Objective 1) Encourage new development and redevelopment within established residential areas to complement the design elements of the neighborhood, including size

and height. With the proposed conditional rezoning, the maximum height would exceed that currently permitted, as well as the height restrictions of all adjacent property.

Based on the recommendation to deny the proposed conditional zoning, staff also recommends the associated site plan, Wetland Use Permit, and Authorization for activity in the Natural Features open space be **denied,** as the plan does not comply with R4B zoning requirements.

## STAFF REPORT

This petition was postponed at the December 18, 2018 City Planning Commission Meeting to allow the petitioner to address City Planning Commission questions and concerns for this site.

Affordable Units

The developer proposes to modify their previous proposal of rent control for the 40 units meeting the 80% of Area Median Income (AMI) to Twenty (20) Units rented at 60% of AMI for a term of 15 years and Twenty (20) Units rented at 80% of AMI for a term of 15 years. The developer/operator will submit annually copies of their rent summary as proof of compliance annually for the 15 year term as noted.

Planning Commission inquired about a lease term of 99 years for controlling rent. The petitioner states length of term is associated with projects that received tax payer funding through the State, or Federal governments. This project is fully funded by the developer/owner with no tax payer funding and as such the developer/owner proposes a 15 year term for the rent control.

Sound Wall

The petitioner state several architectural elements are proposed in the buildings for the development that are intended to reduce noise pollution from the highway including windows and insulation. Additionally, the orientation of the buildings reduces impact on noise pollution on individual units by aligning the stairwells with a reduced number of windows at the east/west faces of the building.

An additional 22 tree plantings within the setback between the proposed parking and US-23 right-of-way are proposed. This addition can be graphically seen on the attached landscape graphic.

Traffic

The developer/owner hosted an additional neighbors meeting with a number of the adjacent neighbors. It was suggested that the proposed $15,000 over 3 years for the pool be allocated toward traffic calming, or the infilling of sidewalk in areas lacking sidewalks. No consensus was reached with the neighbors as to which priority would be better served by the $15,000 contribution. The developer/owner indicated they are amenable to using these funds ($5,000/year for 3 years) toward traffic calming, infilling of sidewalk gaps, or toward the neighborhood pool.

Based on proximity to the schools and review of the Ann Arbor Public Schools website, it appears that the children attending Pittsfield Elementary and Scarlett Middle School would be considered walkers. Bus service would be available to Huron High School with the stop located at Pittsfield Elementary School. The result of communication with Durham School Services, who provides the bus service for Ann Arbor Public School District, is that they would access

private property for student pick-up as required for those with disabilities and/or individual educational plans requiring transportation. Bus access can be accommodated at the Brightdawn development for those students in need.

The rights-of-way for both Eli and Burton Roads are available for a full connection. The previous plans as submitted depict an emergency only connection, however based upon input from the Planning Commission, the developer would like to agree to provide a full connection from Burton through Eli Roads. This addition can be graphically seen on the attached site plan and landscape graphic.

## STAFF COMMENTS

Planning – An additional neighborhood meeting was held on January 22nd from 6 to 8pm. Neighbor attendance was facilitated by Brian Smith. There were six neighbors that attended. Tom Covert, Midwestern Consulting, facilitated the meeting, and the petitioner, Schwartz family, participated by phone conference.

Staff recognizes the petitioner's response to City Planning Commission recommendations of a paved connection between Burton Road and Eli Road to address secondary access, eliminate maintenance concerns and satisfy planning recommendations along with committing to 20 dwelling units rented at 60% AMI for 15 years.

Staff recommends the proposed rezoning continue to be scrutinized in terms of the maximum density permitted by the proposed district and the proposed site be limited to the R4B zoning and 120 dwelling units. This proposal does not meet the recommendation of the South Area Plan.

Prepared by Chris Cheng
Reviewed by Brett Lenart

Attachments: 12/18/18 Staff Report
Revised Site Plan
Revised Landscape Plan

c: City Attorney
Systems Planning
File Nos. SP18-010 & Z18-007

# PLANNING AND DEVELOPMENT SERVICES STAFF REPORT

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## STAFF RECOMMENDATION

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- Goal B, Action Statement b): Encourage residential densities that can sustain bus transit on sites that front mass transit routes. While in proximity, the site does not front on a mass transit route.
- Goal D, Objective 1) Encourage new development and redevelopment within established residential areas to complement the design elements of the neighborhood, including size

and height. With the proposed conditional rezoning, the maximum height would exceed that currently permitted, as well as the height restrictions of all adjacent property.

Based on the recommendation to deny the proposed conditional zoning, staff also recommends the associated site plan, Wetland Use Permit, and Authorization for activity in the Natural Features open space be **denied,** as the plan does not comply with R4B zoning requirements.

## LOCATION

This site is located on the east side of Burton Road, which runs parallel to US-23, and is in the Swift Run watershed (South Area). Ward 3.

## DESCRIPTION OF PETITION

This vacant 8 acre site is currently zoned R4B (Multiple-Family Dwelling District). The petitioner is requesting Conditional Rezoning to R4D (Multiple-Family Dwelling District) and Site Plan approval in order to construct four, four-story buildings that include 160 apartment homes with a community club house. The residential homes consist of one, two, and three bedroom units.

The petitioner is requesting Conditional Rezoning to R4D (application attached) with the following conditions:

- Restrict 40 units to be reserved for households at or below 80% of the Area Median Income
- Limit the site to four residential mid-rise buildings plus a clubhouse
- Limit the total number of units to 160 homes
- Restrict the height to 4 stories/50 feet for residential buildings
- Provide a minimum of 55% open space
- Developer construction of infrastructure improvements to Burton Road including water main, sanitary main, storm conveyance, and roadway lighting

There will be a total of 252 carport parking spaces provided on site, 53 of these spaces being small car and 12 barrier free. Site access is proposed from two curb cuts on Burton Road. As part of this development, the petitioner proposes improvements along Burton Road from Packard Road to the end of the subject site. These improvements include street lighting, curb and gutter, utilities, paving and the public sidewalk portion fronting this site.

An emergency access road connection from Burton Road to Eli Drive is also proposed by the petitioner. This connection is to be locked and gated and used only in emergency situations. A new sidewalk will be constructed that will connect the existing neighborhood from Eli Drive to the Brightdawn development despite the lack of vehicular connection.

Three solid waste and recycling facilities are proposed along the eastern edge of the parking lot throughout the site along with vehicular charging stations, Class A and C bicycle parking spaces, and motorcycle and scooter parking spaces.

Currently no storm water treatment exists for the site. Storm water management has been reviewed by the WCWRC's office and meets the 100-year storm water detention requirement. Storm water detention is provided by north and south underground detention basins, which provide infiltration and discharges into either a city storm system located in Eli Dr. or into the

southern wetland. The Burton Road paved portion is also detained in these underground storm structures.

Natural features on the site include a wetland in the south, woodlands in the northern, eastern and central areas of the site, and numerous scattered landmark trees. A watercourse crosses the site in the south, carrying water from the vicinity of US-23 through the wetland to a culvert under Burton Road and may ultimately lead to Swift Run Drain. The wetland is not regulated by the Michigan Department of Environmental Quality, but is subject to the City of Ann Arbor Guidelines for the Protection and Mitigation of Natural Features.

The existing wetland is approximately 26,000 square feet surrounded by a 25-foot natural features open space buffer and is of low to medium quality. Numerous invasive species, including buckthorn and Common reed grass, are found in and around the wetland. Approximately 1,200 square feet of the existing wetland would be impacted for the installation of a boardwalk over the wetland to access a proposed community garden, an irrigation line to be bored underneath the wetland for the community garden, a detention outlet, and 715 square feet of wetland fill for the construction of a sidewalk and road improvements along Burton Road. There will also be permanent impacts to the natural features open space for the installation of the boardwalk over the wetland. Wetland mitigation totaling 1,853 square feet is proposed adjacent to the existing wetland for this wetland disturbance.

Three low to mid-quality woodlands are located in the northern and central areas of the site. The plan proposes to remove the central woodland to construct the building and parking. There are 21 woodland trees and 29 landmark trees proposed to be removed along with critical root zone impacts to 2 landmark trees. Mitigation trees are proposed to be planted throughout the site for all woodland and landmark trees removed or impacted. A conflicting land use buffer is required on the south side of the site to screen from the adjacent residential use. The plan proposes to use the existing vegetation to meet this requirement.

Bio-retention is proposed in the central interior landscape island. The petitioner provided in excess of what is required by code.

The estimated cost of construction is $25,000,000 and the project is to be constructed in one phase.

## CITIZEN PARTICIPATION

The petitioner held two meetings for interested citizens on February 8th and June 14th, 2018. Invitations were sent to all residents and property owners within 1,000 feet of the site as well as all subscribers to the GovDelivery planning update service. The attendees asked questions about storm water controls, neighborhood traffic, affordability and rezoning. The full reports provided by the petitioner are attached.

## SURROUNDING LAND USES AND ZONING

| | LAND USE | ZONING |
|---|---|---|
| NORTH | Park Land | PL (Public Land District) |
| EAST | US-23 Hwy & Township | TWP (Township) |
| SOUTH | Residential & Duplexes | R1C & R2A (Single and Two-Family Dwelling District) |
| WEST | Single-Family Residential | R1C (Single-Family Residential District) |

## COMPARISON CHART

| | | EXISTING | PROPOSED | REQUIRED | REQUIRED |
|---|---|---|---|---|---|
| Zoning | | R4B | R4D | R4D | R4B |
| Gross Lot Area | | 8.06 acres (351,034 sf.) | 8.06 acres (351,034 sf.) | 1.9 acre (83,000 sf MIN) | .32 acre (14,000 sf MIN) |
| Setbacks | Front | N/A - Vacant | 25 ft – Burton Rd.<br>63 ft – US-23 | 15 ft MIN<br>40 ft MAX | 15 ft MIN<br>40 ft MAX |
| | Side(s) | N/A - Vacant | 161 ft (South) *<br>199 ft (North) * | 30 ft MIN (South)*<br>30 ft MIN (North) * | 53.1 ft MIN (South)*<br>53.1 ft MIN (North) * |
| | Rear | N/A - Vacant | NA | 30 ft MIN | 30 ft MIN<br>(2 fronts for this site) |
| Minimum Useable Open Space | | N/A - Vacant | 63% | 55% MIN (based on proposed conditional rezoning) | 55% MIN |
| Minimum Active Open Space/Dwelling Unit | | N/A - Vacant | 993 sf<br>(159,000 sf) | 300 sf MIN | 300 sf MIN |
| Maximum Density (Dwelling Units/Acre) | | NA - Vacant | 160 units | 25 Units/Acre<br>(201 units) | 15 Units/Acre<br>(121 units) |
| Height | | N/A - Vacant | 47 ft | 50 ft MAX (based on proposed conditional rezoning) | 35 ft MAX |
| Parking - Automobiles | | N/A - Vacant | 252 spaces<br>(187 regular spaces<br>53 spaces small car<br>12 b.f.) | 240 Spaces MIN | 240 spaces MIN |
| Parking – Bicycles | | N/A - Vacant | 32 spaces<br>16 Class A<br>16 Class C | 32 spaces MIN<br>50% – Class A<br>50%– Class C | 32 spaces MIN<br>50% – Class A<br>50%– Class C |

*****Required side setback shall be increased 1 ½ inches for each foot of building length over 50 feet and 3 inches for each foot of building height above 35 feet.

## HISTORY

The subject site includes Lots 14 through 22 of Supervisor's Plat No. 1, which was recorded in Pittsfield Township in 1938. The plat was subsequently cut in half by the construction of US-23. Now half of the remaining platted subdivision is east of US-23 and remains in Pittsfield Township and half is west of US-3 in the City of Ann Arbor. Most of the lots along Burton Road were annexed into the City of Ann Arbor in the 1970s.

The adjacent subdivision to the west, Pittsfield Hills Subdivision No. 2 (consisting of Brandywine Boulevard, Terhune Road, Yost Boulevard, Lillian Road, Eli Road, Donegal Court, and Gallway Court) was platted in 1960. At the time there was unplatted land between Supervisor's Plat No. 1 and Pittsfield Hills Subdivision No. 2 that was not associated with either subdivision. The 120-foot wide strip of unplatted land is now owned by a single individual according to City of Ann Arbor tax records, but is used as common area by the residents of Pittsfield Hills Subdivision No. 2. Two stub streets in Pittsfield Hills Subdivision No. 2 extended to its eastern plat boundary. The right-of-way for Eli Road, the stub street in the north, connects to the Burton Road right-of-way. The right-of-way for Terhune Road, the stub street in the south does not directly connect with the Burton Road right-of-way because of the unplatted land that lies between the two subdivisions.

In 2007, a petitioner assembled the parcels to create an eight-acre site, requesting rezoning to R4C (Multiple-Family Dwelling District), and proposed to construct 120 multiple-family dwelling units in five buildings, along with surface parking, a community building and playground areas.

At this time of this request, staff recommended the site be rezoned to R4B rather than R4C as requested by the petitioner. This would have no effect on the proposed planned project site plan but would be more consistent with the intent of Zoning Ordinance. The intent of the requested R4C district is to allow multiple-family dwellings to be located in the central area of the City in close proximity to downtown and the University of Michigan campus. The subject site is not located near either of these areas. On the contrary, the location of the subject site better matches the intent of the R4B district. This district is intended for intermediate areas of the City on small tracts of land in established areas for in-fill purposes or medium sized tracts of land for moderate-sized developments.

Since approval of this planned project site plan and rezoning, three administrative amendments were granted to extend the deadline for construction. The site plan expired December 28, 2017 and any new development requires new site plan submission and approval.

## PLANNING BACKGROUND

While the 2007 petition was considered under previous Master Plan language (The South Area Plan, adopted in 1990) in which the plan indicated that "Density could be increased. . . ", this provision has not been carried forward in the current Master Plan to support higher density zoning at this location.

> *Excerpt from previous The South Area Plan (now replaced):*
>
> *Location: Burton Road, north of Packard*
> *Number of Parcels: 18*
> *Existing Zoning: R1C (minimum lot size of 7,200 square feet)*

*Typical Parcel Size: 130 feet x 290 feet (37,000 square feet)*

*Comments: Most lots contain single-family detached structures. Density could be increased but shifting of parcel lines and lot accessibility would have to be addressed. Lots on the east side of Burton are adjacent to US-23. Additions to Sylvan Park and to the Terhune Pioneer Cemetery would improve access to both of these parks. The exiting gravel road will need improvements including drainage and sidewalks.*

The basic recommendation that higher densities may be appropriate if improvements to Burton Road and connection to other streets are provided remains applicable.

The City's Transportation Master Plan and Master Land Use Plan both support connections to adjacent neighborhoods with both vehicular and non-motorized infrastructure. In this case, the petitioner has responded to neighborhood preference and limited such connection to non-motorized trips only. Staff believes that this is inconsistent with adopted plan goals.

## STAFF COMMENTS

*Systems Planning* – Engineering supports a full road connection between Burton Road to Eli Drive. It is noted that the City will be the maintaining authority of the street lighting. The mitigation calculations for the increase in sanitary sewer flow have been reviewed and are approved. Flow equivalent to 119 GPM, will need to be removed from the sanitary sewer system in order to mitigate new flow from this proposed development. Alternately, a payment may be made in lieu of performing actual flow removal.

*Traffic- This application is recommended for Planning Commission action. However, Transportation recommends that the Planning Commission consider the following.*
The proposed plan will increase the number of residents in this area but fails to provide an integrated, connected neighborhood. Failure to include the planned access between Burton Road and Eli Road will have public safety and service implications. These implications include:

• School bus service to the site would not be possible as the AAPS drivers are prohibited from backing maneuvers. This is a condition that would be particularly impactful to a special needs student who would be eligible for door to door service.

• The ability to provide access and services during future predictable events, e.g. utilities and road maintenance, will be greatly impacted.

• Intra-neighborhood trips conducted by vehicle will be forced out of the local street network onto the arterial road system.

Additionally, the Brightdawn Village proposal does not meet the vision and the goals of the City's transportation plan. The City's comprehensive transportation plan has the following vision: *"An integrated multi-modal system that will build upon the unique qualities of each part of the city."*

The transportation plan also has the following goals, unmet goals are noted in bold:

**1. Provide effective access and mobility for people and goods, with minimal negative impacts for all.** *Note: Failure to provide connectivity does not provide effective access.*

**2. Protect and enhance the natural environment and energy resources, and the human and built environment.** *Note: Forced detours would increase driving time for some trips.*

**3. Promote a safe, secure, attractive, and productive transportation system.** *Note: Trips would be forced onto the arterial system even if the final destination is within the neighborhood, e.g. Pittsfield Elementary School.*

**4. Invest in transportation infrastructure in a manner consistent with other goals, and within the financial constraints of public/private resources.** *Note: The proposed design will not allow for the most efficient service delivery.*

5. Promote cooperation between the City of Ann Arbor and other governmental entities, particularly the surrounding townships and municipalities and the University of Michigan, in support of transportation initiatives in a manner consistent with the other goals. City of Ann Arbor 2009 Transportation Plan Update Page 2-2

6. Ensure that meaningful public involvement will be part of any transportation project in the City of Ann Arbor.

**7. Promote a transportation system supportive of and integrated with land use decisions.** *Note: A transportation system that does not connect all areas of a neighborhood is not supporting the land use.*

8. Promote green transportation improvements to reduce vehicle emissions.

Parks – For the proposed development, the park contribution formula to improve nearby parks such as Sylvan Park, Scheffler Park, Buhr Park or Rose Park would be as follows:
160 units x .0125ac x $50,000 = $100,000.00

Fire – Fire hydrant coverage is being met, with hydrants installed on the site. The Fire Marshall states that the gated connection to Eli Drive is adequate for secondary access to the site.

Planning – In 2007, this site was rezoned from R1C (Single-Family Residential) to R4B to allow density to increase from 6 dwelling units/acre to 15 dwelling units/acre. The petitioner returned to staff in early 2018 requesting an R4E conditional rezoning allowing 75 units/acre with a cap of 160 dwelling units maximum for the site. Staff did not support this rezoning as it did not fit the intent of the R4E district as Burton Drive is not on a signature transit corridor.

The petitioner then requested R4D conditional rezoning as this district is intended to permit higher density in the form of high-rise buildings on substantial tracts of land located in areas other than downtown. Staff acknowledges the change to R4D zoning has a lower maximum density than the previously submitted R4E conditional rezoning. Nonetheless, as previously stated, this site was rezoned from R1C (Single-Family Residential) to R4B (Multiple-Family Residential) to increase density on this site from 48 dwelling units to 120 units.

While staff recognizes the benefits of reserved housing, infrastructure improvements and recognizes the petitioners intent to further limit development limits, planning staff recommends denial of the rezoning proposal.

The location of the subject site better matches the intent of the R4B district. This district is intended for intermediate areas of the City on small tracts of land in established areas for in-fill purposes or medium sized tracts of land for moderate-sized developments. As also shown in

the comparison chart of zoning districts below, the primary difference between the two districts aside from their intents is the maximum allowable density.

| **District** | **Intent and Principal Uses** | **Density** | **Max. # Units on 8.06-acre Site** |
|---|---|---|---|
| R1C Single-Family | Single-family dwellings. | 6 d.u./acre | 48 dwellings |
| R1D Single-Family | Single-family dwellings. | 8 d.u./acre | 64 dwellings |
| R2A Two-Family | Two-family dwellings. Intended to be similar to the R1D district. | 10 d.u./acre | 80 dwellings |
| R2B Two-Family | Two-family dwellings, fraternities and sororities. Intended near U of M campus. | 10 d.u./acre | 80 dwellings |
| R3 Townhouse | Multiple-family dwellings in side-by-side arrangement. | 10 d.u./acre | 80 dwellings |
| R4A Multiple-Family | Multiple-family dwellings located in perimeter areas of City. | 10 d.u./acre | 80 dwellings |
| R4B Multiple-Family | Multiple-family dwellings located in intermediate areas of City, on medium-sized tracts for moderate-sized developments. | 15 d.u./acre | 120 dwellings * |
| R4C Multiple-Family | Multiple-family dwellings located in central area of City close to downtown and U of M central campus. | 20 d.u./acre | 160 dwellings * |
| R4D Multiple-Family | Multiple-family dwellings in form of high-rise buildings outside of downtown area. | 25 d.u./acre | 200 dwellings * |
| R4E Multiple-Family | Multiple-family dwellings in form of high density along signature transit corridors | 75 d.u./acre | 600 dwellings** |

*More than 100 dwelling units requires second means of access per fire code.

**Total number of units capped at 160 as part of conditional zoning.

Regarding the proposed site plan, staff has few comments about the proposed style and layout of the site. As proposed, the development would contribute to the supply of much-needed affordable housing in the City, however the City has adopted goals for 60% AMI or lower housing vs 80% AMI.

Staff has learned that the petitioner has met on more than one occasion with residents of the Pittsfield Hills Subdivision and the proposed site plan reflects some of their suggestions, including restriction of access to the site via Eli Drive. Connecting stub streets to new and existing developments is a goal in many of the City's area master plans and is strongly promoted by planning principals advocated in many communities throughout the state and nation. Connecting the pavement of Burton and Eli Roads promotes general safety, beyond that solely for emergency vehicles, by providing an alternative access point to properties on both streets. Alternative access routes are critical in timely emergency service response for ambulances and police as well as firefighters, both to get to and away from sites.

Connection will also allow more efficient delivery of public services such as mail and waste pick-up, and will allow more efficient routing of school buses and other transportation providers. It is important for the general convenience of the future Brightdawn Village residents to be able to get to the nearby schools and stores on Washtenaw Avenue. Without such a connection, vehicles will be forced to join and add to the congestion on Packard Road, Carpenter Road and perhaps Brandywine Boulevard-Yost Boulevard.

Staff has repeatedly advocated for connected streets with all new developments, but the final approved plan has often provided an emergency-only connection to existing public streets. Examples of these developments include Turnberry, The Woodlands, Liberty Glen and Barclay Park. An informal survey of some of these developments has found the approved emergency-only connections are now useless because they have not been properly maintained, are overgrown with trees and shrubs, or are not known to current emergency staff, particularly police and private ambulances.

In the past, it was common practice to design subdivisions to seamlessly connect with one another, forming larger neighborhoods. Evidence of this can be found by the existing stub streets of Eli Road and Terhune Road.

Staff's recommendation is for the proposed pavement of Burton Road to connect with Eli Road without obstruction. This is viewed to be the best solution to achieve proper secondary access, eliminate maintenance concerns and satisfy planning recommendations. If the preferred pavement connection cannot be accomplished, staff recommends the proposed rezoning be scrutinized in terms of the maximum density permitted by the proposed district and the proposed site be limited to the R4B zoning and 120 dwelling units. Finally, it does not meet the recommendation of the South Area Plan or other area plans to provide connection between neighborhoods. No additional natural features would be impacted if the roads were to connect.

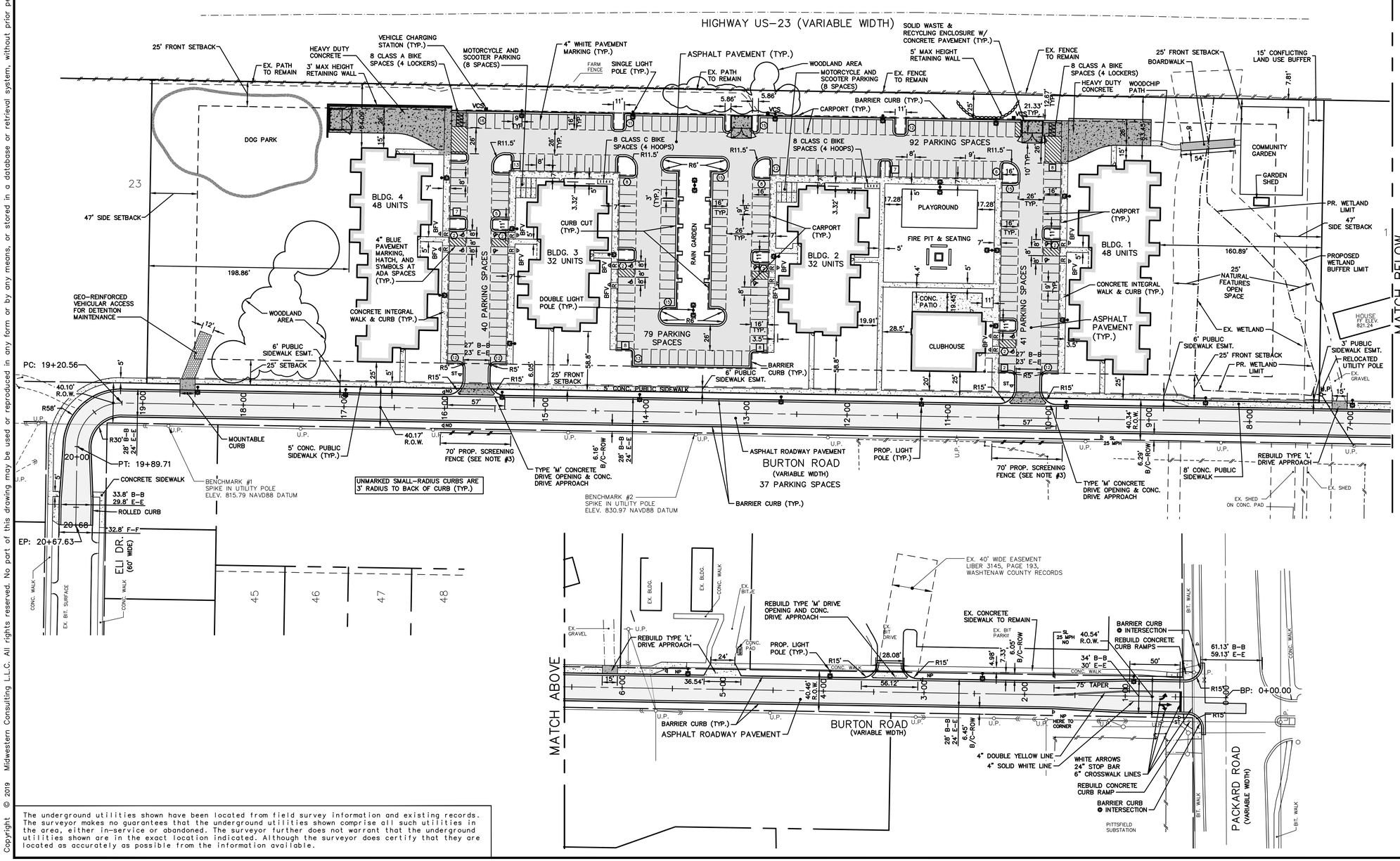
A draft development agreement to address issues including the improvement of Burton Road, mitigation of sanitary sewer flow, off-site tree mitigation, and any other off-site issue that may arise is included.
Prepared by Chris Cheng
Reviewed by Brett Lenart & Alexis Dileo

Attachments: Parcel/Zoning Map
Aerial Photo
Site Plan/ Landscape Plan/Utilities
Elevations
Conditional Zoning Application Memo
Rezoning Application
Brightdawn Draft Development Agreement
Citizen Participation Report #1
Citizen Participation Report #2

c: Petitioner: GloryCrest Burton Road, Inc.
2750 Carpenter Road, Suite 4
Ann Arbor, MI 48108

Petitioner's Representative: Tom Covert
Midwestern Consulting, LLC
3815 Plaza Drive
Ann Arbor, MI 48108

City Attorney
Systems Planning
File Nos. SP18-010 & Z18-007




The underground utilities shown have been located from field survey information and existing records. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated. Although the surveyor does certify that they are located as accurately as possible from the information available.

SCALE: 1" = 50'

0 50 100 150

## LEGEND

- NUMBER OF STANDARD PARKING SPACES IN ROW
- NUMBER OF COMPACT CAR PARKING SPACES IN ROW
- NUMBER OF BARRIER FREE PARKING SPACES IN ROW
- SIGN
- BF — BARRIER FREE PARKING SIGN
- BFV — VAN ACCESSIBLE BARRIER FREE PARKING SIGN
- NO — NO OUTLET SIGN
- SL — SPEED LIMIT SIGN
- ST — STOP SIGN
- NP — NO PARKING SIGN
- FEUO — FIRE & EMERGENCY USE ONLY SIGN
- BARRIER FREE SIDEWALK RAMP
- PROP. CURB & GUTTER
- PROP. SINGLE LIGHT
- PROP. DOUBLE LIGHT
- VCS — PROP. VEHICLE CHARGING STATION
- PROP. BITUMINOUS PAVEMENT
- PROP. CONCRETE SURFACE
- PROP. HEAVY DUTY CONCRETE
- PROP. GRASS PAVE DRIVE
- PROP. WOODCHIP SURFACE

## PARKING

OFF-STREET VEHICULAR PARKING
- 187 STANDARD PARKING SPACES
- 53 COMPACT CAR PARKING SPACES
- 12 BARRIER FREE SPACES (12 VAN)

=> 252 VEHICULAR SPACES PROVIDED

BICYCLE PARKING
- 16 CLASS A
- 16 CLASS C

=> 32 BICYCLE SPACES PROVIDED

MOTORCYCLE/SCOOTER PARKING
=> 16 TOTAL MOTORCYCLE/SCOOTER SPACES PROVIDED

## NOTES

1. THE CITY OF ANN ARBOR OR ITS AUTHORIZED AGENT, DTE ENERGY, WILL BE THE MAINTAINING AUTHORITY OF THE PROPOSED STREETLIGHTING.
2. ALL ELEMENTS OF THE NORTH DETENTION MAINTENANCE ACCESS DRIVE, INCLUDING:
   - MOUNTABLE CURB
   - ADJACENT SIDEWALK
   - GEO-REINFORCED PATHWAY

   SHALL BE THE PERPETUAL RESPONSIBILITY OF THE PROPERTY OWNER.
3. THE PROPOSED 70' SCREEN FENCES ON THE WEST SIDE OF BURTON ROAD WILL BE CONSTRUCTED ONLY UPON RECEIVING DOCUMENTED PERMISSION, IN A TIME CONSISTENT WITH THE TIMING OF SITE PLAN APPROVAL AND WITHOUT ADDITIONAL CONDITIONS, FROM THE OWNER OF THE PROPERTY ON WHICH THEY WOULD BE CONSTRUCTED.
   - THESE FENCES SHALL NOT EXCEED FOUR (4) FEET IN HEIGHT OR 50% OPACITY.
   - THESE FENCES WILL BE CONSTRUCTED ON PRIVATE PROPERTY AND MUST COMPLY WITH ALL APPLICABLE CITY CODES AND ORDINANCES.

MIDWESTERN CONSULTING
3815 Plaza Drive Ann Arbor, Michigan 48108
(734) 995-0200 • www.midwesternconsulting.com
Land Development • Land Survey • Institutional • Municipal
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CLIENT
GLORYCREST BURTON ROAD INC.
2750 CARPENTER ROAD, SUITE 4
ANN ARBOR, MI 48108
JOSEPH M. WEST

# BRIGHTDAWN VILLAGE
SITE PLAN AND CONDITIONAL REZONING
DIMENSIONAL SITE PLAN

09

DATE: 02/22/18
SHEET 9 OF 27
CADD:
ENG: TPH
PM: TJC
TECH:
17241SP.dwg
17241

| REVISIONS: | REV. DATE |
|---|---|
| CONDITIONAL REZONING & WCWRC REV. | 05/18/18 |
| CITY REV. | 07/26/18 |
| CITY REV. | 09/07/18 |
| CITY REV. | 10/22/18 |
| DUAL SEL RD. CONNECTION | 01/28/19 |

JOB No. 17241A

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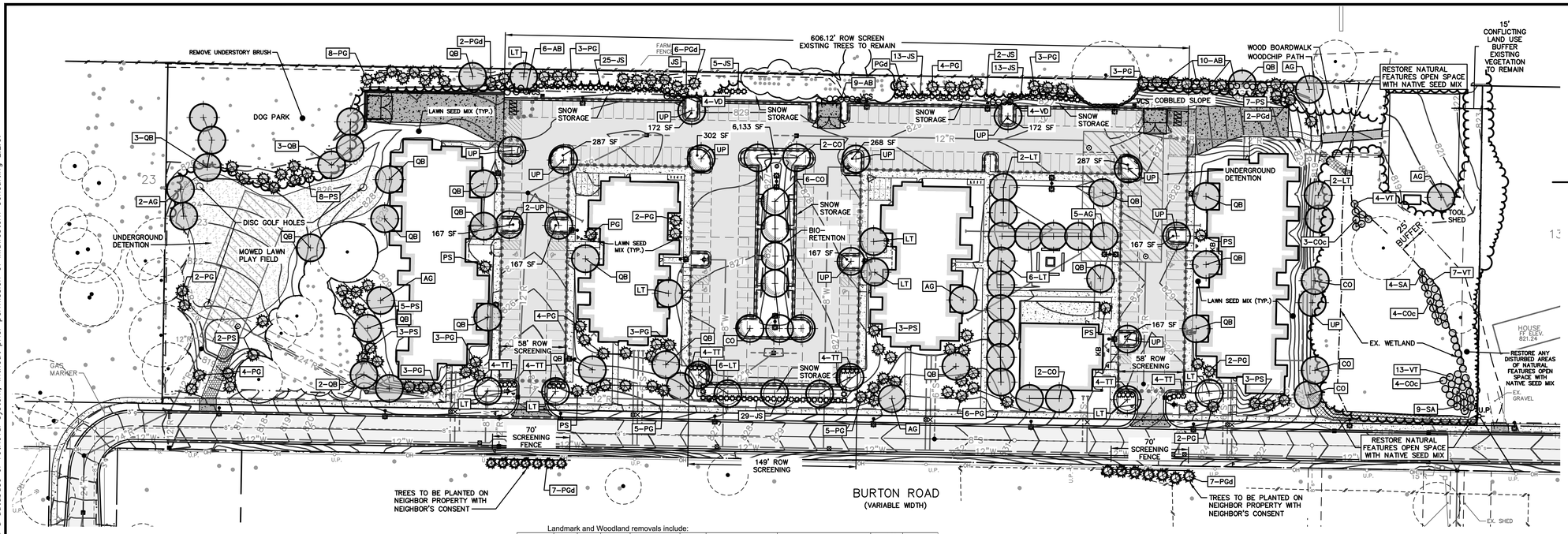


SCALE: 1" = 50'

0 50 100 150

## LEGEND

- PROPOSED CANOPY TREE (INTERIOR VUA)
- PROPOSED EVERGREEN TREE (INTERIOR VUA)
- PROPOSED CANOPY TREE (RIGHT-OF-WAY SCREEN)
- PROPOSED EVERGREEN TREE (RIGHT-OF-WAY SCREEN)
- PROPOSED CANOPY TREE (MITIGATION)
- PROPOSED EVERGREEN TREE (MITIGATION)
- PROPOSED DECIDUOUS SHRUBS
- PROPOSED EVERGREEN SHRUBS
- VEHICULAR USE AREA LIMITS

## LANDSCAPE NOTES

1. Water outlets will be provided within 150 feet of all required plantings.
2. Plant materials shall be selected and installed in accordance with standards established by the City Parks and Recreation Department.
3. All diseased, damaged or dead material shown on the site plan as proposed plantings shall be replaced by the end of the following growing season as a continuing obligation for the duration of the site plan.
4. Restore disturbed areas with a minimum of three (3) inches of topsoil and then seed/fertilize/mulch. Fertilizer for the initial installation of lawns shall provide not less than one (1) pound of actual nitrogen per 1000 sq ft of lawn area and shall contain not less than two percent (2%) potassium and four percent (4%) phosphoric acid.
   After the first growing season, only fertilizers that contain no phosphorus shall be used on the site.
   Lawn seed mix shall consist as follows:
   - 15% Rugby Kentucky Bluegrass
   - 10% Park Kentucky Bluegrass
   - 40% Ruby Creeping Red Fescue
   - 15% Pennifine Perennial Ryegrass
   - 20% Scaldis Hard Fesque

   Seed shall be applied at a rate of five pounds (5 lbs) per 1000 sq ft. Mulch within 24 hours with two (2) tons of straw per acre, or 71 bales of excelsior mulch per acre. Anchor straw mulch with spray coating of adhesive material applied at the rate of 150 gals./acre.
5. Deciduous plants shall be planted between March 1 and May 15 and from October 1 until the prepared soil becomes frozen. Evergreen plants shall be planted between March 1 and June 1 and from August 15 and September 15.
6. All plants except ground cover are to receive four (4) inches of shredded bark mulch. Ground cover to receive two (2) inches of Canadian peat mulch. All mulch beds to have landscape fabric between mulch and planting soil.
7. All trees to be located a minimum of 10 feet from public utilities or as approved by the City of Ann Arbor Project Management Services Unit.
8. All single trunk, deciduous trees shall have a straight and a symmetrical crown with a central leader. One sided trees or those with thin or open crowns shall not be accepted.
9. All evergreen trees shall be branched fully to the ground, symmetrical in shape and have not been sheared in the last three (3) growing seasons.
10. Shade trees are to be a minimum of 15 feet on center. Evergreen trees are to be minimum of 12 feet on center.
11. All compacted subgrade soils in proposed landscape areas shall be tilled to a minimum 12-inch depth prior to placement of topsoil, geotextile fabric, or other planting media as specified.
12. Planting Soil: Existing, in-place or stockpiled topsoil. Supplement with imported topsoil as needed. Verify suitability of existing surface soil to produce viable planting soil. Remove stones, roots, plants, sod, clods, clay lumps, pockets of coarse sand, concrete slurry, concrete layers or chunks, cement, plaster, building debris, and other extraneous materials harmful to plant growth. Mix surface soil with the following soil amendments to produce planting soil:
    a. Ratio of Loose Compost to Topsoil by Volume: 1:4.
    b. Ratio of Loose Compost to Topsoil by Volume: 1:4.
    c. Ratio of Loose Compost to Topsoil by Volume: 1:4.
    d. Ratio of Loose Compost to Topsoil by Volume: 1:4.
    e. Weight of Lime per 1000 Sq. Ft.: Amend with lime only on recommendation of soil test to adjust soil pH.
    f. Weight of Sulfur or Aluminum Sulfate per 1000 Sq. Ft.: Amend with sulfur or aluminum sulfate only on recommendation of soil test to adjust soil pH.
    g. Volume of Sand: Amend with sand only on recommendation of Landscape Architect to adjust soil texture.
    h. Weight of Slow-Release Fertilizer per 1000 Sq. Ft.: Amend with fertilizer only on recommendation of soil test to adjust soil fertility.
13. Snow cannot be pushed onto interior islands unless they are designated on the plan for snow storage. Bio-retention islands can be used for snow storage.
14. Snow storage areas are located along edges and corners of parking areas as shown on the plan.

## LANDSCAPE REQUIREMENTS

I. PARKING LOT LANDSCAPING:
   Vehicular Use Area = 75,509 s.f.
   Interior Landscape Area required 1:15 = 5,034 s.f.
   Interior Landscape Area proposed = 8,454 s.f.
   Trees required: 1/250 SF = 21 trees
   Trees proposed: 12 UP + 9 CO = 21 total
   Bio-retention required (50% total required) = 2,517 s.f.
   Bio-retention proposed = 6,133 s.f.

II. STREET TREE ESCROW:
   Burton Road frontage = 1,165 l.f.
   1,165 lf x $1.30/lf of street frontage = $1,514.50
   Proposed: $1,514.50 to City Tree Fund
   This amount must be paid prior to issuing building permits. Checks are to be made payable to: City of Ann Arbor, and mailed to Systems Planning Unit, 301 E. Huron St., PO Box 8647, Ann Arbor, MI 48107-8647 Attn: Kerry Gray. Include the project name and number on the check.

III. TREE MITIGATION:
   There are (29) Landmark Trees and (21) Woodland Trees being removed. Two (2) additional landmark trees will remain but are included in the mitigation calculations.
   Total landmark/woodland regulated trees removed = 52 trees / 742 caliper inches
   50% mitigation required = 742 inches x 0.5 mitigation = 371 caliper inches required
   Trees provided: 149 (35 PS + 55 PG + 1 UP + 5 CO + 15 LT + 26 QB + 12 AG) trees x 2.5" = 372.5 cal. inches provided

   Proposed mitigation plantings are shown in the Plant Schedule on Sheet 15.

Landmark and Woodland removals include:

| Tag # | Rem. | Type | Trunks | Size | | | Comp DBH | Common Name | Scientific Name | Inv/LM/W | Health |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Landmark Tree Removals | | | | | | | | | | | |
| 45 | R | D | 1 | 17 | | | | RED OAK | QUERCUS RUBRA | LM | 18 |
| 98 | R | D | 1 | 19 | | | | BASSWOOD | TILIA AMERICANA | LM/W | 20 |
| 141 | R | D | 1 | 12 | | | | PEAR | PYRUS COMMUNIS | LM | 18 |
| 165 | R | C | 1 | 9 | | | | RED CEDAR | JUNIPERUS VIRGINIANA | LM | 21 |
| 176 | R | C | 1 | 9 | | | | RED CEDAR | JUNIPERUS VIRGINIANA | LM | 21 |
| 177 | R | C | 1 | 10 | | | | RED CEDAR | JUNIPERUS VIRGINIANA | LM | 21 |
| 178 | R | C | 1 | 9 | | | | RED CEDAR | JUNIPERUS VIRGINIANA | LM | 21 |
| 197 | R | C | 1 | 9 | | | | RED CEDAR | JUNIPERUS VIRGINIANA | LM | 21 |
| 221 | R | D | 1 | 18 | | | | PEAR | PYRUS COMMUNIS | LM | 19 |
| 223 | R | C | 1 | 8 | | | | RED CEDAR | JUNIPERUS VIRGINIANA | LM | 21 |
| 231 | R | D | 1 | 18 | | | | BASSWOOD | TILIA AMERICANA | LM | 20 |
| 232 | R | C | 1 | 13 | | | | RED CEDAR | JUNIPERUS VIRGINIANA | LM | 21 |
| 280 | R | D | 1 | 26 | | | | AMERICAN ELM | ULMUS AMERICANA | LM | 18 |
| 282 | R | D | 1 | 22 | | | | BLACK WALNUT | JUGLANS NIGRA | LM | 20 |
| 307 | R | D | 1 | 19 | | | | HONEY LOCUST | GLEDITSIA TRIACANTHOS | LM | 22 |
| 308 | R | D | 1 | 19 | | | | BASSWOOD | TILIA AMERICANA | LM | 21 |
| 311 | R | C | 1 | 19 | | | | WHITE PINE | PINUS STROBUS | LM | 21 |
| 315 | R | D | 1 | 27 | | | | SILVER MAPLE | ACER SACCHARINUM | LM | 18 |
| 319 | R | D | 1 | 21 | | | | SILVER MAPLE | ACER SACCHARINUM | LM | 19 |
| 336 | R | C | 1 | 20 | | | | WHITE PINE | PINUS STROBUS | LM | 18 |
| 339 | R | C | 1 | 20 | | | | WHITE PINE | PINUS STROBUS | LM | 20 |
| 469 | R | D | 3 | 14 | 14 | 13 | 24 | SILVER MAPLE | ACER SACCHARINUM | LM | 18 |
| 470 | R | D | 1 | 17 | | | | PEAR | PYRUS COMMUNIS | LM | 20 |
| 478 | R | D | 1 | 10 | | | | RED BUD | CERCIS CANADENSIS | LM | 21 |
| 689 | R | D | 1 | 18 | | | | BUR OAK | QUERCUS MACROCARPA | LM | OFFSITE |
| 693 | R | D | 1 | 22 | | | | BUR OAK | QUERCUS MACROCARPA | LM | OFFSITE |
| 695 | R | D | 1 | 18 | | | | BUR OAK | QUERCUS MACROCARPA | LM | OFFSITE |
| 715 | R | D | 1 | 25 | | | | SILVER MAPLE | ACER SACCHARINUM | LM | OFFSITE |
| 719 | R | D | 1 | 18 | | | | SUGAR MAPLE | ACER SACCHARUM | LM | OFFSITE |
| Landmark Trees to Remain but Mitigated | | | | | | | | | | | |
| 766 | M | D | 1 | 20 | | | | BLUE SPRUCE | PICEA PUNGENS | LM | OFFSITE |
| 771 | M | D | 1 | 18 | | | | BOXELDER | ACER NEGUNDO | LM | OFFSITE |
| **Tag #** | **Rem.** | **Type** | **Trunks** | **Size** | | | **Comp DBH** | **Common Name** | **Scientific Name** | **Inv./LM/W** | **Health** |
| Woodland Tree Removals | | | | | | | | | | | |
| 93 | R | C | 1 | 10 | | | | RED PINE | PINUS RESINOSA | W | |
| 94 | R | C | 1 | 15 | | | | RED PINE | PINUS RESINOSA | W | |
| 95 | R | C | 1 | 12 | | | | RED PINE | PINUS RESINOSA | W | |
| 96 | R | C | 1 | 11 | | | | RED PINE | PINUS RESINOSA | W | |
| 97 | R | D | 1 | 9 | | | | BLACK CHERRY | PRUNUS SEROTINA | W | |
| 99 | R | D | 1 | 8 | | | | BLACK CHERRY | PRUNUS SEROTINA | W | |
| 106 | R | D | 1 | 9 | | | | BLACK CHERRY | PRUNUS SEROTINA | W | |
| 121 | R | D | 1 | 8 | | | | BLACK CHERRY | PRUNUS SEROTINA | W | |
| 552 | R | C | 1 | 8 | | | | RED PINE | PINUS RESINOSA | W | |
| 553 | R | C | 1 | 12 | | | | RED PINE | PINUS RESINOSA | W | |
| 554 | R | C | 1 | 9 | | | | RED PINE | PINUS RESINOSA | W | |
| 555 | R | C | 1 | 10 | | | | RED PINE | PINUS RESINOSA | W | |
| 556 | R | C | 1 | 9 | | | | RED PINE | PINUS RESINOSA | W | |
| 557 | R | C | 1 | 12 | | | | RED PINE | PINUS RESINOSA | W | |
| 558 | R | C | 1 | 9 | | | | RED PINE | PINUS RESINOSA | W | |
| 559 | R | C | 1 | 9 | | | | RED PINE | PINUS RESINOSA | W | |
| 560 | R | C | 1 | 9 | | | | RED PINE | PINUS RESINOSA | W | |
| 561 | R | C | 1 | 12 | | | | RED PINE | PINUS RESINOSA | W | |
| 563 | R | C | 1 | 10 | | | | RED PINE | PINUS RESINOSA | W | |
| 564 | R | C | 1 | 8 | | | | RED PINE | PINUS RESINOSA | W | |
| 566 | R | C | 1 | 9 | | | | RED PINE | PINUS RESINOSA | W | |

IV. RIGHT OF WAY SCREENING:
   Required: One tree per 30 feet of frontage
   Frontage: 60 l.f. (N), 135 l.f. (M), 60 l.f. (S), and 700 l.f. (E) = 955 l.f.
   Trees Required: 955 ÷ 30 =32 trees
   Trees Provided: 32 (9 LT + Existing Trees along E. Property Line)
   Required: Hedge, berm or wall, minimum 30 inches tall; 50% evergreen
   Shrubs Required: 955 ÷ 5 = 192 shrubs
   Common Buckthorn and Black Cherry along E. Property Line)

V. CONFLICTING LAND USE BUFFER:
   Required: 15 l.f. wide buffer strip average, no less than 8 l.f.
   Required: (1) tree for each 15 l.f., 50% evergreen
   Required: 4 ft high continuous opaque screen, hedge, or berm
   Proposed: Only required along south property line and adjacent residential use.
   Existing vegetation trees to remain undisturbed along the entire south property line, with a minimum width of 15 l.f. Existing vegetation consists of dense mix of deciduous and evergreen trees with a thick shrub and small tree understory of primarily Common Buckthorn and Honeysuckle filling the voids between trees. Existing vegetation to remain exceeds Code requirements.

VI. NATURAL FEATURES:
   Statement of Natural Features Impacts is shown on Sheet 1.

## NATURAL FEATURES OPEN SPACE SEED MIX

### Low-Profile Prairie SOURCE: CARDNO NATIVE PLANT NURSERY

This prairie seed mix provides a wide range of shorter prairie grass, sedge, and wildflower species. Most species will grow to 4 feet or less, making this an ideal mix for areas where taller forbs and grasses are not appropriate. Once established, this wildflower community displays a variety of colors, blooming from early spring to fall, creating a diverse habitat for birds, butterflies, moths, and other pollinators. This seed mix is suitable for medium-to-dry sites. This seed mix includes at least 5 of 6 native permanent grass and sedge species and 29 of 34 native forb species. Apply at 38.67 PLS pounds per acre.

| Botanical Name | Common Name | PLS Oz/Acre |
|---|---|---|
| Permanent Grasses/Sedges | | |
| *Bouteloua curtipendula* | Side Oats Grama | 16.00 |
| *Carex spp.* | Prairie Sedge Mix | 4.00 |
| *Elymus canadensis* | Canada Wild Rye | 32.00 |
| *Koeleria pyramidata* | June Grass | 1.00 |
| *Panicum virgatum* | Switch Grass | 1.00 |
| *Schizachyrium scoparium* | Little Bluestem | 36.00 |
| | Total | 90.00 |
| Temporary Cover | | |
| *Avena sativa* | Common Oat | 360.00 |
| *Lolium multiflorum* | Annual Rye | 100.00 |
| | Total | 460.00 |
| Forbs | | |
| *Amorpha canescens* | Lead Plant | 0.50 |
| *Anemone cylindrica* | Thimbleweed | 0.50 |
| *Asclepias syriaca* | Common Milkweed | 2.00 |
| *Asclepias tuberosa* | Butterfly Weed | 2.00 |
| *Baptisia alba* | White Wild Indigo | 2.00 |
| *Chamaecrista fasciculata* | Partridge Pea | 12.00 |
| *Coreopsis lanceolata* | Sand Coreopsis | 5.00 |
| *Coreopsis palmata* | Prairie Coreopsis | 1.00 |
| *Dalea candida* | White Prairie Clover | 1.50 |
| *Dalea purpurea* | Purple Prairie Clover | 1.50 |
| *Desmanthus illinoensis* | Illinois Sensitive Plant | 3.00 |
| *Echinacea purpurea* | Broad-Leaved Purple Coneflower | 7.00 |
| *Eryngium yuccifolium* | Rattlesnake Master | 3.00 |
| *Lespedeza capitata* | Round-Head Bush Clover | 2.00 |
| *Liatris aspera* | Rough Blazing Star | 0.50 |
| *Lupinus perennis* | Wild Lupine | 4.00 |
| *Monarda fistulosa* | Wild Bergamot | 0.75 |
| *Oligoneuron rigidum* | Stiff Goldenrod | 1.00 |
| *Parthenium integrifolium* | Wild Quinine | 1.00 |
| *Penstemon digitalis* | Foxglove Beard Tongue | 0.50 |
| *Penstemon hirsutus* | Hairy Beard Tongue | 0.50 |
| *Pycnanthemum virginianum* | Common Mountain Mint | 1.00 |
| *Ratibida pinnata* | Yellow Coneflower | 4.00 |
| *Rudbeckia hirta* | Black-Eyed Susan | 5.00 |
| *Rudbeckia subtomentosa* | Sweet Black-Eyed Susan | 1.00 |
| *Silphium terebinthinaceum* | Prairie Dock | 0.50 |
| *Solidago speciosa* | Showy Goldenrod | 0.50 |
| *Symphyotrichum ericoides* | Heath Aster | 0.25 |
| *Symphyotrichum laeve* | Smooth Blue Aster | 1.00 |
| *Symphyotrichum novae-angliae* | New England Aster | 0.50 |
| *Tradescantia ohiensis* | Common Spiderwort | 0.75 |
| *Verbena stricta* | Hoary Vervain | 1.00 |
| *Vernonia spp* | Ironweed Mix | 1.75 |
| *Veronicastrum virginicum* | Culver's Root | 0.25 |
| | Total | 68.75 |

## WETLAND \ BIORETENTION ISLAND SEED MIX

### Stormwater SOURCE: CARDNO NATIVE PLANT NURSERY

A wetland seed mix for saturated soils in a detention pond or for seeding a saturated basin, this mix will tolerate highly fluctuating water levels and poor water quality associated with urban stormwater wetlands and ponds. For detention basins that experience long, dry periods, use the Economy Prairie seed mix in the upper third to half of the basin area in combination with this mix. This seed mix includes at least 10 of 12 native permanent grass and sedge species and 12 of 16 native forb species. Apply at 32.81 PLS pounds per acre.

| Botanical Name | Common Name | PLS Oz/Acre |
|---|---|---|
| Permanent Grasses/Sedges | | |
| *Bolboschoenus fluviatilis* | River Bulrush | 0.25 |
| *Carex cristatella* | Crested Oval Sedge | 2.00 |
| *Carex lurida* | Bottlebrush Sedge | 3.00 |
| *Carex vulpinoidea* | Brown Fox Sedge | 6.00 |
| *Elymus virginicus* | Virginia Wild Rye | 13.50 |
| *Glyceria striata* | Fowl Manna Grass | 1.25 |
| *Juncus effusus* | Common Rush | 2.00 |
| *Leersia oryzoides* | Rice Cut Grass | 1.00 |
| *Panicum virgatum* | Switch Grass | 2.00 |
| *Schoenoplectus tabernaemontani* | Softstem Bulrush | 3.00 |
| *Scirpus atrovirens* | Dark Green Rush | 2.00 |
| *Scirpus cyperinus* | Wool Grass | 1.00 |
| | Total | 37.00 |
| Temporary Cover | | |
| *Avena sativa* | Common Oat | 360.00 |
| *Lolium multiflorum* | Annual Rye | 100.00 |
| | Total | 460.00 |
| Forbs | | |
| *Alisma spp* | Water Plantain Mix | 4.25 |
| *Alisiphilus dasycarpata* | Swamp Milkweed | 1.50 |
| *Bidens spp.* | Bidens Mix | 2.00 |
| *Helenium autumnale* | Sneezeweed | 2.00 |
| *Iris virginica* | Blue Flag | 4.00 |
| *Lycopus americanus* | Common Water Horehound | 0.25 |
| *Mimulus ringens* | Monkey Flower | 1.00 |
| *Oligoneuron riddellii* | Riddell's Goldenrod | 0.50 |
| *Pentherum sedoides* | Ditch Stonecrop | 0.50 |
| *Polygonum spp.* | Pinkweed Mix | 4.00 |
| *Rudbeckia subtomentosa* | Sweet Black-Eyed Susan | 1.00 |
| *Rudbeckia triloba* | Brown-Eyed Susan | 1.50 |
| *Sagittaria latifolia* | Common Arrowhead | 1.00 |
| *Senna hebecarpa* | Wild Senna | 1.00 |
| *Symphyotrichum novae-angliae* | New England Aster | 1.50 |
| *Thalictrum dasycarpum* | Purple Meadow Rue | 2.00 |
| | Total | 28.00 |

ALL AREAS SEEDED WITH WETLAND/STORMWATER SEED MIX (INCLUDING ALL BIORETENTION ISLANDS) SHALL BE STABILIZED WITH STRAW MULCH BLANKETS.

**Plant Materials List**

| Mitigation | V.U.A. | C.L.U.B. | R.O.W. | Wetland Mitigation | Noise Mitigation | Symbol | Botanical Name | Common Name | Size | Root | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | **Deciduous Trees** | | | | |
| 12 | 1 | | | | | AG | *Amelanchier x grandiflora 'Autumn Brilliance'* | Autumn Brilliance Serviceberry | 2-2.5" cal | BB | Single Stem |
| 5 | 9 | | | | | CO | *Celtis occidentalis* | Northern Hackberry | 2-2.5" cal | BB | |
| 15 | | | 9 | | | LT | *Liriodendron tulipifera* | Tulip Tree | 2-2.5" cal | BB | |
| 26 | | | | | | QB | *Quercus bicolor* | Swamp White Oak | 2-2.5" cal | BB | |
| 1 | 12 | | | | | UP | *Ulmus americana 'Princeton'* | Princeton Elm | 2-2.5" cal | BB | |
| | | | | | | | **Conifers** | | | | |
| 55 | | | | | 11 | PG | *Picea glauca* | White Spruce | 7-8' ht. | BB | Unsheared |
| | | | 14 | | 11 | PGd | *Picea glauca 'densata'* | Black Hills Spruce | 7-8' ht. | BB | Unsheared |
| 35 | | | | | | PS | *Pinus strobus* | White Pine | 7-8' ht. | BB | Unsheared |
| | | | | | | | **Shrubs** | | | | |
| | | | 25 | | | AB | *Aronia arbutifolia 'Brilliantissima'* | Red Chokeberry | #5 | Cont. | |
| | | | | 11 | | COc | *Cephalanthus occidentalis* | ButtonBush | #5 | Cont. | |
| | | | 88 | | | JS | *Juniperus x 'Sea Green'* | Sea Green Juniper | 24-30" ht. | Cont. | |
| | | | | 13 | | SA | *Spiraea alba* | Meadowsweet | #5 | Cont. | |
| | | | 24 | | | TT | *Taxus x 'Tauntonii'* | Taunton Yew | 24-30" ht. | BB | |
| | | | 8 | | | VD | *Viburnum dentatum 'Chicago Lustre'* | Chicago Lustre Arrowwood Viburnum | #5 | Cont. | |
| | | | | 24 | | VT | *Viburnum trilobum* | Highbush Cranberry | #5 | Cont. | |

NOTE: C.L.U.B plant materials are comprised of existing evergreen and deciduous vegetation along the south property line that will remain undisturbed.


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LANDSCAPE PLAN



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