



December 18, 2018

Mr. Tom Harrigan
Zoning/ Planning Administrator
Village of Elm Grove
13600 Juneau Boulevard
Elm Grove, WI 53122

Re: Elm Grove Heights Request to:

1. Re-zone 13040 W Bluemound Road from B-3 to RM-2 with a Planned Development Overlay;
2. Amend the Comprehensive Plan.

Dear Mr. Harrigan,

On behalf of Horizon Development Group, Inc., (“Horizon”) we would like to thank the Village of Elm Grove for the opportunity to submit this request. We believe strongly in the need for independent senior apartments in Elm Grove, and we look forward to working together to make Elm Grove Heights a reality.

Enclosed, please find the necessary materials for the Plan Commission to evaluate Horizon’s request to (1) re-zone 13040 Bluemound Road to RM-2 with a Residential Planned Development Overlay, and (2) amend the Comprehensive Plan.

If you have any questions or need any additional information, please contact Will Rutherford at w.rutherford@horizondbm.com / (608) 354 – 0843. Thank you in advance for your time and consideration.

Sincerely,

HORIZON DEVELOPMENT GROUP, INC.

Philip Schultz
Director of Development

Cc. Will Rutherford, Horizon

I. Introduction

Elm Grove Heights:

Horizon is proposing to develop Elm Grove Heights, a 75-unit independent senior apartment community to be located at 13040 W Bluemound Road. The project will feature a mix of one and two-bedroom apartments, a clubroom with a kitchen, an exercise room, tenant storage, and heated underground parking. As an independent senior living facility, the property will function like a traditional apartment building and will neither provide meals nor medical services. Pursuant to the RM-2 zoning district, all units will be rented to households in which every occupant is age 62 and better.

Entitlements History:

Horizon originally submitted a re-zoning request for Elm Grove Heights in June of 2018, but the Village ultimately determined that the zoning code could not accommodate a project of this size on our site. The Village Board recognized the need for independent senior housing in the Village and recommended that staff research a potential structure for a new zoning ordinance. In November 2018, the Village passed a new zoning ordinance (RM-2 Multiple-Family Residential) to better address the development of independent senior housing.

Request, Deliverables, and Appendices:

Horizon submits this request to (1) re-zone 13040 W Bluemound Road from B-3 to the newly-created RM-2 district, (2) apply for a Residential Planned Development Overlay, and (3) amend the Comprehensive Plan. We have included the following items to aid in the Plan Commission's evaluation of our request:

1. Rationale for Re-zoning (Section II);
2. Planned Development Overlay Petition (Section III);
3. Rationale for Enhanced Density (Section III);
4. Appendices (Section V).

In reviewing this request, please reference the below Appendices as appropriate:

1. Proposed Building Plans and Existing Building Plans;
2. ALTA Survey and Existing Conditions Survey;
3. Proposed Site Plan;
4. Proposed Lighting Plan;
5. Proposed Surface Water Drainage Plan and Stormwater Management and Utility Plan;
6. Landscaping Plan;
7. Parking Submittal – Independent Senior Housing;
8. Re-zoning Map Submitted to the Board of Trustees.

II. Rationale for Re-zoning

Section 335-77 of the Elm Grove Municipal Code requires that all petitions to amend the zoning code include a rationale for granting the request, together the following items: (A.) Plot plan, drawn to a scale of one inch equals 100 feet, showing the area proposed to be rezoned, its location, its dimensions, the location and classification of adjacent zoning districts and the location and existing use of all properties within 300 feet of the area proposed to be rezoned (this item was submitted to the Trustees and is included in Appendix 8); (B.) Owners' names and addresses of all properties lying within 100 feet of the area proposed to be rezoned (this item was submitted to the Trustees on December 5th, 2018 and is available on request from Village Staff); and (C.) Additional information required by the Plan Commission or Village Board.

The below excerpt was submitted to the Board of Trustees on December 5, 2018 as our rationale for re-zoning.

“Amending the Comprehensive Plan to accommodate Elm Grove Heights will help meet the housing demand for the Village’s rapidly expanding senior population. The US Census Bureau estimates that the senior demographic will continue to expand over the next decade, reaching approximately 20% of the national population by 2030.¹ Elm Grove is actually well ahead of this trend: as of 2000, the Comprehensive Plan indicates that over 34% of Elm Grove’s residents are over the age of 64, 16.9% of which are over the age of 75.² Unfortunately, Elm Grove residents do not currently have options in the Village or the immediate surrounding area for independent senior housing. Elm Grove Heights presents an opportunity for the Village to create the only independent senior community in the Village. With an already large senior population that will continue to expand, it is important for Elm Grove to address this need.

Elm Grove Heights is compatible with the multifamily uses in the surrounding area. There are 18 parcels of Elm Grove land within 1,000 feet of the Property that are zoned for or have an existing conditional use permit for multifamily (several of which front Bluemound Road). This includes the immediately adjacent parcels to the north, northwest, and northeast, which all contain existing condominiums or multifamily rentals. Independent senior housing will work well with these uses and it will provide support to local businesses.

Elm Grove Heights will help to stimulate Elm Grove’s next economic cycle by keeping higher income seniors in the Village, and by promoting turnover of the existing housing stock. The Village’s Comprehensive Plan identifies the following issues:

“(1) Senior-aged persons that desire to remain as Village residents but “downsize” their housing accommodation may be unable to secure housing within the Village that provides options for senior-aged services, is affordable and is of smaller scale than typical single family detached units.

¹ *An Aging Nation: The Older Population in the United States*. US Census Bureau. Pp. 2-4.

² The Comprehensive Plan for the Village of Elm Grove, Chapter 3: Housing. P. 24.

(2) The density of housing in the Village represents a potential barrier for future economic viability and vitality as a local hub for retail goods and services.”³

Elm Grove Heights will provide seniors, who helped build the community, the opportunity to sell their homes and remain in the Village. In the process, the existing housing stock will be turned over to families who will become the next generation of Elm Grove’s home owners. The increase in population will support local businesses and make Elm Grove a more attractive location for future retail goods and services. Also, Elm Grove Heights will increase the Village population at a location that is designed to accommodate higher levels of population.

High visibility locations like Bluemound Road are ideal for projects like Elm Grove Heights because independent senior housing has a low impact on traffic counts. The development team contacted the Wis DOT to discuss the proposed project, and Wis DOT indicated that they will not require a traffic study. They believe that Bluemound Road is well-suited to handle the light increase in vehicular traffic that will be generated by 75 units of senior housing. Wis DOT’s conclusion is consistent with Horizon’s internal data – we typically see less than one trip per unit (coming and going) per 12-hour period at comparable properties.”

³ The Comprehensive Plan for the Village of Elm Grove, Chapter 2: Issues and Opportunities. P. 5.

III. Planned Development Overlay Petition.

In submitting a request for a Planned Development Overlay, Section 335-30(G)(2) requests that the developer submit a Petition for re-zoning that contains two primary components: (a) a “**statement** that describes the relation of the proposed PDO District to the Village’s Zoning Code, adopted Master Plan (or any component thereof), and describes in detail the uses requested to be included in the proposed PDO District”; and (b) a **general development plan**. PDO proposals requesting **enhanced density** must also provide a **rationale** pursuant to Section 335-30(F)(3). This section addresses each Petition item in turn.

(a) Statement of Uses within PDO District

The PDO will consist of a single residential use: Elm Grove Heights, a proposed 75-unit independent senior apartment community that will feature a mix of one and two-bedroom apartment units, a clubroom with a full kitchen, an on-site leasing office, tenant storage, and heated underground parking. Elm Grove Heights will not offer services or meals to residents. The facility will operate like a traditional apartment community, except that the units will be rented to households consisting exclusively of residents aged 62 and better. While Elm Grove Heights will not provide medical assistance or other services, Horizon Management Services (“HMS”) will have an on-site property manager who will manage operations and coordinate resident activities to promote social engagement. HMS currently manages over 2,200 units of independent senior housing and our portfolio is over 98% occupied.⁴

Relationship to the Zoning Code and Adopted Master Plan:

As a residential use, Elm Grove Heights will depart from the Village’s Future Land Use Plan, which slates our site for commercial use. Multifamily is permitted by conditional use under the existing zoning district (B-3), but the scale of Elm Grove Heights requires that we request a re-zoning to RM-2 with a Planned Development Overlay.

The PDO statute further requests that the Statement include the following 6 requirements:⁵

[1] Total area to be included in the PDO District, area of open space, the proposed number of dwelling units, together with the proposed residential unit density and details of supporting calculations in accordance with this § 335-30, projected population analysis with details that support the assumptions used to calculate same, requirements for and availability of municipal or school district services and any other similar data pertinent to a comprehensive evaluation of the proposed development.

Total Area:

87,094 square feet - just under 2 acres.

⁴ HMS’ complete multifamily portfolio is almost 3,000 units, also operating at 98% occupancy.

⁵ Village of Elm Grove Code of Ordinances, Section 335-30(G)(2)(a)[1]-[6].

Open Space:

The site’s northern 1/3rd consists of natural vegetation and a creek. We are proposing to leave this area entirely undisturbed to preserve the site’s natural features.

Proposed # of Dwelling Units:

75 units. 37.5 units per acre (75 units / 2 acres).

Projected Population Analysis:

Horizon senior apartments have an average occupancy of 1.12 persons per unit. The below table outlines the average age and number of residents at four comparable independent living properties at our Woodland Ridge senior campus in Greenfield, WI.

Property	# of Units	Average Age	Age Below 70	71-80	81-90	Over 90	Total Residents	Residents Per Unit
Crestview	76	80	11	17	42	14	84	1.1
High Grove	60	79	8	24	31	9	72	1.2
Hillcrest	40	76	14	13	9	9	45	1.1
Prairie Hill	69	76	18	18	28	10	74	1.1
Totals	245		51	72	110	42	275	1.12
Percentages			19%	26%	40%	15%		

We therefore expect that Elm Grove Heights will contain approximately 84 residents (75 units * 1.12 residents per unit). We currently have an interest list for Elm Grove Heights of 72 people, 43 of which are Elm Grove residents.

School District Impact:

In accordance with the RM-2 zoning district, all residents must be over the age 62, so we do not expect any impact on school district. The property will pay real estate taxes to the school district, but will not be generating any students. We do, however, expect some indirect increase in the Elmbrook School District’s population resulting from turnover of Elm Grove’s housing stock. At least some Elm Grove seniors who move to Elm Grove Heights will sell their homes to young families with children who will attend Elm Grove public schools.

Municipal Service Impact:

We expect that some demand for municipal services will be generated by 75 units of housing. But as previously stated, we expect that many of our residents will be comprised of seniors who already reside in the Village, so we do not anticipate a significant increase in demand on municipal services.

[2] A general summary of the estimated cost of constructing public and private structures and site-related improvements, landscaping and special features.

Our current budget to purchase the land and building the project is \$15,250,000.

Our plan contemplates the extension of municipal water from the northeast corner of Elm Grove Road and Bluemound Road up to our site's eastern lot line. This will include the installation of two public fire hydrants: one at the southeastern corner of our site, and another just north of our building on the western side of the private drive (See Appendix 5 and the Stormwater Management and Utility Plan for exact locations). Current projections estimate the cost of these public improvements at \$110,000. This cost will be borne entirely by the project and it is included in our total development cost figure.

[3] Details about the manner in which the owners will participate in the formulation and execution of the development agreement.

Horizon owners will negotiate the development agreement with the Village. Horizon owners will also be investing in the project.

[4] Details concerning the organizational structure of the property owners' or management association proposed to be established for the purpose of providing any necessary continuing private services, implementation of the development agreement or administration of the project.

The project will be 100% owned by a single-asset limited liability company which will be controlled by Horizon owners. The owner LLC will contract directly with Horizon Development Group ("HDG"), Horizon Construction Group ("HCG"), and Horizon Management Services ("HMS") to develop, build, and manage the property. HMS will oversee operations, organize the resident social calendar, and ensure compliance with ownership's requirements in the development agreement, (e.g., verifying that all residents are 62 and over).

[5] Any proposed departures from the standards of development as set forth in the Village zoning ordinances other Village ordinances or applicable state or federal statutes or regulations.

Section 335-30(D)(2) allows PDO applications to request flexibility from "maximum building height, yard areas, lot dimensions, setbacks, and parking requirements" for the underlying district.

Density:

Base density in the RM-2 district is 16 units per acre,⁶ but projects may request an enhanced density of up to 38 units per acre as part of a Residential Planned Development Overlay.⁷ Elm Grove Heights is requesting an enhanced density of 37.5 units per acre. In granting a request for

⁶ Village of Elm Grove Code of Ordinances, Section 335-21.1(A)(1).

⁷ Village of Elm Grove Code of Ordinances, Section 335-21.1(C)(2).

enhanced density, code requires that the Trustees and Plan Commission consider a number of factors.⁸ We address each of these items in Section III(c).

Setbacks:

The minimum side-yard setback in the RM-2 district is 20 feet.⁹ Elm Grove Heights is proposing a 13.38-foot setback for the western property line. Front, rear, and eastern side-yard setbacks all comply with code.

Height

The maximum height for the principal structure in the RM-2 district is 36 feet.¹⁰ Elm Grove Heights is proposing a 51'6" structure.

Parking

Elderly multiple-family housing requires a minimum of 1.5 stalls per unit.¹¹ Elm Grove Heights is proposing 70 underground stalls (0.93/unit) and 18 surface stalls (0.24/unit) for an overall parking ratio of 1.17 stalls per unit (88 stalls / 75 units). Please see Appendix 7 to verify that this request is reasonable.

Underground Parking

Please see the attached documentation (Appendix 7) illustrating parking demand at 12 other independent senior properties in Horizon's portfolio. These properties have an average of 0.94 underground stalls per unit, with approximately 21.2% remaining vacant. As a result, we expect at least 14 of Elm Grove Heights 70 underground stalls to remain vacant (70 * 21.2%).

Surface Parking

In preparation for this submittal, we also conducted a surface stall usage study at Crest View, a 76-unit independent senior building at our Woodland Ridge campus in Greenfield.¹² The study indicated that, at any given time, an average of 6.3 surface stalls were occupied.

Overall Parking Demand

Our experience managing over 2,000 units of independent senior living makes us confident that the proposed ratio of 1.17 stalls/unit is more than adequate. As you can see from our parking analysis in Appendix 7, municipalities routinely approve independent senior parking ratios near 1.2 stalls/unit and that ratio is almost always more than is needed. The columns indicating

⁸ Village of Elm Grove Code of Ordinances, Section 335-30(F)(3).

⁹ Village of Elm Grove Code of Ordinances, Section 335-21.1(F)(2).

¹⁰ Village of Elm Grove Code of Ordinances, Section 335-21.1(G)(1)(a).

¹¹ Village of Elm Grove Code of Ordinances, Section 335-32(J).

¹² The study was conducted from 9:00am – 5:00pm on Wednesday, December 12th – Friday, December 14th and from 9:00am to 1:00pm on Saturday, December 15th.

“parking needed” purposefully overestimate the amount of parking needed by taking the occupied underground stalls and adding all surface stalls to that number. We know from our study that Crest View only needed an average of 6.3 surface stalls at any given time, so including 25 surface stalls in the “parking needed” calculation is more than conservative. But even by that conservative calculation, these 12 facilities only “need” an overall average ratio of 1 stall per unit, whereas Elm Grove Heights is proposing 1.17 stalls per unit. The below calculation applies the underground parking vacancy rate from Appendix 7 and the surface parking demand from our Crest View Study to illustrate the average expected parking vacancy at Elm Grove Heights as proposed:

Elm Grove Heights - Underground Vacancy Expectation:

- Underground Stalls – 70
- Horizon underground parking vacancy rate – 21.2%
- Expected underground vacancy – 14 stalls (70*21.2%)

Elm Grove Heights – Surface Parking Vacancy Expectation:

- Surface stalls – 18
- Average number of surface stalls occupied per Crest View Study – 6.3 (rounded up to 7)
- Expected surface vacancy – 11 stalls (18-7)

Total Vacant Stalls on Average:

- Underground – 14 stalls
- Surface – 11 stalls
- Total – 25 stalls

[6] A realistic development timetable, including all benchmark dates from commencement to completion of physical development of the proposed project.

Milestone	Projected Date for Completion
Obtain Entitlements	March 2019
Building Permit	June 2019
Construction Start	July 2019
Complete Construction	July 2020
Achieve Stabilization	June 2021

(b.) General Development Plan:

This section pairs with our architectural, civil, and landscaping design documents and addresses each of the code requirements for the PDO's General Development Plan.¹³

[1] A legal description of the boundaries of all property included in the proposed PDO District and its relationship to surrounding properties, including existing topography on the site with contours at no greater than two-foot intervals as part of an ALTA survey.

Legal Description:

Lot 2 of Certified Survey Map No. 8351, being a redivision of Parcel 2 of Certified Survey Map No. 5703, being a part of the Southeast ¼ of the Northwest ¼, the Southwest ¼ of the Northeast ¼, and the Northwest ¼ of the Southeast ¼ of Section 25, Town 7 North, Range 20 East, in the Village of Elm Grove, Waukesha County, Wisconsin.

Relationship to Surrounding Properties:

The Elm Grove Heights parcel is surrounded by a mix of office and multifamily uses. Please see the attached "Parcel Rezoning Map" (Appendix 8) for all adjacent uses.

Existing Topography:

Please see the attached ALTA and Existing Conditions Surveys illustrating the site's existing topography.

[2] A detailed site plan for the entire PDO District showing:

[a] The type, size, arrangement, including respective use(s) and location of any individual lots, building sites and proposed structures on each individual lot.

The PDO district will consist of 1 two-acre lot. The only structure on that lot will be the proposed 75-unit apartment building. Please see the attached site plan (Appendix 3) for additional details.

[b] The location of open space areas and areas reserved or dedicated for private or public uses, including, but not limited to, easements and drainageways.

The site's northern third consists of natural vegetation and contains a drainage easement. This area will remain undisturbed.

[c] Landscaping, exterior lighting and signage.

¹³ Code requirements for the General Development Plan can be found here: Village of Elm Grove Code of Ordinances, Section 335-30(G)(2)(b).

Landscaping and Lighting Plans:

Please see the attached Landscaping (Appendix 6) and Lighting Plans (Appendix 4).

Signage:

While we have yet to design specific signage for Elm Grove Heights, the Civil Site Plan (Appendix 3) illustrates the proposed location for signage. The Elm Grove Municipal Code limits signage in nonresidential districts to 1 sign per lot,¹⁴ but there is no such limitation for residential districts. The proposed RM-2 zoning will accommodate our plan for two signs - one for Elm Grove Heights and one for Emerald Woods. We are proposing to relocate the Emerald Woods sign from its existing location to the eastern side of the entry drive. The Elm Grove Heights sign will then be constructed where the Emerald Woods sign is currently located.

[d] The location of public and private roads, driveways and parking facilities and the calculations used to justify the number of spaces proposed.

Proposed Parking Ratio:

Overall Parking Ratio: 1.173 (88 stalls / 75 units)

- Underground stalls: 70 – 0.93 per unit (70 stalls / 75 units).
- Surface stalls: 18 – 0.24 per unit (18 stalls / 75 units).

Please see the attached parking submittal (Appendix 7) illustrating that the proposed ratio is more than adequate for 75 units of independent senior housing.

Public and Private Roads:

The site contains a single private drive that connects with Bluemound Road. Horizon is proposing to widen the existing 20-foot driveway to 26 feet at the entrance to Bluemound. We will then taper the 26' width gradually down to the existing 20 feet north of the Elm Grove Heights structure. This private drive will be shared by Emerald Woods and Elm Grove Heights.

In the conceptual review process, the development team was asked to think creatively about adding another point for ingress/egress. Unfortunately, none of the neighboring lots were willing to grant an easement for an additional access point and the Department of Transportation will not allow a second curb cut on Bluemound Road. While we understand the concern over having one access point for 174 units (99 units at Emerald Woods and 75 units at Elm Grove Heights), we are confident that one access point will not cause safety concerns. Our Woodland Ridge senior campus in Greenfield is located on a major arterial (W Howard Avenue) and has one access point for 366 units of senior housing.¹⁵ In 17 years, we have only seen one accident at the ingress/egress point.

¹⁴ Village of Elm Grove Code of Ordinances, Section 335-48(A)(1)(a).

¹⁵ This campus contains 245 units of independent senior living that are occupied by 275 residents. The remainder of the campus contains assisted living, memory care, market rate condominiums, and units set-aside for the deaf.

[e] The existing and proposed location of public and private sanitary sewer and water supply facilities.

Sanitary Sewer:

The Village has an easement for an existing sanitary sewer pipe that runs diagonally across the northern third of the site. Village staff has confirmed that Elm Grove Heights will be able to connect.

Water Supply Facilities:

Horizon will be extending municipal water from the northeast corner of Elm Grove Road and Bluemound Road. The water line will be a 12” PVC pipe that will connect to a public fire hydrant that we will install at the southeast corner of our lot. We will connect to the public water line via a 6” lateral that will extend to a second public fire hydrant at the northeast corner of our building on the west side of the private drive. The Elm Grove Fire Chief has indicated that the installation of the second public hydrant will provide a significant improvement to the Fire Department’s ability to lay a hose to fight fires at the neighboring properties (e.g.s Emerald Woods, Douglas Plaza).

See Stormwater Management & Utility Plan (Appendix 5) for precise locations of proposed hydrants and utilities.

[f] The existing and proposed location of all other public and private utilities or other easements.

Please see the attached Stormwater Management and Utility Plan (Appendix 5).

[g] Characteristics of soils related to contemplated specific uses.

Horizon commissioned a geotechnical subsurface investigations report that revealed various mixtures of clay, silt, sand, and gravel. The existing soil conditions are suitable to support the proposed 75-unit building and we anticipate typical site work costs.

[3] Anticipated uses of adjoining lands in regard to roads, surface water drainage and compatibility with existing adjacent land uses.

Please see the attached Surface Water Drainage Plan (Appendix 5).

[4] Architectural plans, elevation and perspective drawings and sketches illustrating the character and design of all proposed structures.

Please see the attached architectural plans from JLA (Appendix 1).

(c) Rationale for Enhanced Density

Elm Grove Heights is designed at a density of 37.5 units per acre (75 units / 2 acres). Pursuant to the RM-2 zoning district, the Board of Trustees may grant an “enhanced density” of up to 38 units per acre as part of the Residential PDO evaluation process.¹⁶ To be eligible for “enhanced density,” the PDO statute requires that the project be of “exceptionally high quality, comparable to the highest quality tier” of residential units in the Village.¹⁷ In considering a request for enhanced density, the Village Board of Trustees considers the criteria listed below. Our Petition addresses each standard in turn.

(1) *“Whether the project will provide better utilization of the land and better preservation of natural resources than would otherwise be realized if the site were developed either in conformity with the density requirements of the underlying district or as a PDO District without an enhanced density;”*

- High density residential will support the high cost to acquire and develop this parcel with a use that will maintain consistent occupancy. High traffic counts on Bluemound yield high land costs and high commercial rents, which together have produced many vacancies in commercial and retail properties on Bluemound. The Property is one of the only vacant parcels in the Village and is highly underutilized. While permitted uses in the B-3 district (e.g.s, hotels, motels, fitness center, retail, etc.) will face the same struggles to achieve feasibility and maintain occupancy, a residential use with enhanced density will support the high cost of developing this parcel. Elm Grove Heights will generate consistent, significant tax dollars with a minimal impact on Village resources.
- Senior housing is more compatible with the Emerald Woods Condominium Association (“EWCA”) to the north than other uses in the B-3 district (e.g.s, hotels, motels, fitness center, retail, etc.). The Elm Grove Heights property has granted an access easement to the EWCA and Wis DOT will not allow another curb cut for this location. As a result, the EWCA must share a single access point with whatever use develops this parcel. Independent senior housing is a low-impact use that pairs well with residential condominiums and will generate less traffic than other uses in the B-3 district.
- By granting a re-zoning and enhanced density, Elm Grove Heights will be able to achieve feasibility and bear the cost of requested public improvements. The Village has requested that Elm Grove Heights extend municipal water from the northeast corner of Bluemound and Elm Grove Roads. As discussed, the costs of developing parcels on Bluemound Road are already extraordinary and enhanced density will allow Elm Grove Heights to construct the requested public improvements. The extension of municipal water will benefit the Village long-term by providing surrounding businesses and condominium uses the option to

¹⁶ See Section 335-21.1(C)(2). The Village of Elm Grove Code of Ordinances.

¹⁷ See Section 335-30(F)(3)(a). The Village of Elm Grove Code of Ordinances.

connect to municipal water. In addition, we will be installing a fire hydrant at the north end of our development which will be in proximity to both Emerald Woods and Douglas Plaza Condominium developments. This greatly improved access to municipal water for fighting fires will increase the safety for both the condominium residents and for firefighters.

- The Elm Grove Heights plan maintains the greenspace along the northern third of the Property, with a setback of 179 feet from the nearest Emerald Woods building. This will remain a natural woodland which will protect the stream running through the Property.

(2) *“Whether the project makes adequate provision such that an increase in residential density will not have an unreasonable adverse effect on neighboring properties, existing and/or proposed public rights-of-way and/or municipal and other public services as a result of the type, intensity and frequency of the use(s) associated with the proposed project;”*

- Our design has many features to minimize the impact on Emerald Woods Condominium Association. (1) We are rebuilding and widening the shared access drive at no cost to Emerald Woods and will be sharing road maintenance costs in the future. (2) The widened entry drive will improve emergency vehicle access to our site and to Emerald Woods. (3) We will be constructing a service drive on the northern side of the our building that will assist with move-ins, fire department accessibility, and U-turns by service vehicles. (4) We will be installing stop signs at our motor court and garage exits with a warning indicator light at our garage exit to alert Emerald Woods residents to cars exiting our parking garage. (5) We are including wider tapers from the drive to the public right of way entrance on Bluemound Road to facilitate ingress/egress. (6) We will be installing improved entry drive street lighting to enhance safety. (7) We will be installing an attractive “Private Property” sign at the end of our property indicating that only owners and guests may enter the Emerald Woods Property. (8) We will be improving the landscaping along the east property line of Elm Grove Heights to screen the adjacent commercial use.
- Senior housing will have a lower impact on traffic than business or retail uses permitted under B-3. Bluemound Road is designed to support high volume traffic and, even at higher density, senior housing has a low-impact on surrounding properties. Horizon’s internal traffic statistics show an average of less than one auto trip per 12 hour day per apartment unit for comparable properties. Demographic data from Horizon’s 30 years of senior housing experience indicates that our average occupancy at Elm Grove Heights will be only 1.1 persons per unit, which will result in a minimal increase in traffic circulation. The average age of our residents at move in will be 76, and only about 75% will have cars. Finally, we contacted the Department of Transportation, who indicated that 75 units of senior housing would not requiring a traffic study due to low traffic volume generated.

- As for Village services, our pledge to extend municipal water will only make it easier for adjacent properties to connect to municipal water in the future through a cost-sharing agreement.

(3) “Whether the structures proposed for the project are harmonious with existing surrounding structures and land uses;”

- Currently, 18 parcels with multifamily uses or zoning exist within 1,000 feet of our location, including three adjacent parcels to the north, northwest, and northeast.
- Our architect, Dale Streitenberger, an Elm Grove resident, and a Principal with JLA Architects has studied the surrounding building carefully to ensure that the design of Elm Grove Heights is attractive and harmonious with the existing structures. The residential character of our design blends well with the surrounding multifamily uses and our anticipated building height is lower than the Building Trades Association building immediately to the west. Approaching traffic from the east will have a nearly identical aesthetic to the current view, and traffic approaching from the west will be unable to see our building until they pass the Building Trades Association building.

(4) *“Whether building materials have been selected and are proposed to be utilized in a manner that is harmonious with the natural environment and the general character of other buildings and structures in the vicinity of the proposed development;”*

- Our architect, JLA Architects has selected multiple materials which are harmonious with the surrounding building and which are comparable to other multifamily properties in the Village. The building materials will include ground face block to create a building base; two colors of brick masonry; long lasting cement board siding; extensive architectural detailing on the facades; metal roofing at the building entrance; and a residential style shingle roof.

(5) *“Whether the proposed project will result in the construction or upgrading of specific public infrastructure improvements that will benefit the public without cost to the Village;”*

- The Village is requesting that we connect to municipal water. Elm Grove Heights will pay for this at no cost to the Village. Connecting to municipal water will require us to extend a 12” PVC water line from the northeast corner of Bluemound and Elm Grove Road to our eastern lot line. Any future redevelopment of properties to our east will be able to connect to municipal water by entering a cost-sharing agreement with Elm Grove Heights’. In addition,

adjacent properties which are not currently connected to municipal water will be able to do so in the future.

- We will be installing a public fire hydrant at the north end of our development which will be a significant upgrade in the ability of the fire department to fight fires in the area.

(6) *“Whether the proposed project will enhance an existing structure that is deemed beneficial to the character of the neighborhood where it is situated.”*

- While not directly applicable, our project will redevelop one of the most underutilized parcels in the Village – a vacant lot on Bluemound which has been vacant for many years. Elm Grove Heights will be a very attractive building which will enhance the values of adjacent properties.

IV. PDO Evaluation Criteria

The Elm Grove Municipal Code lays out specific criteria for the Village Board and Plan Commission in their respective evaluations of a request for a Planned Development Overlay.¹⁸ We will address each in turn.

(1) The Village Plan Commission, in making its preliminary and final recommendation on the petition, and the Village Board, in making its determination, shall consider whether each of the following criteria are satisfied:

(a) Whether the petitioner(s) for the proposed Planned Development Overlay District has demonstrated:

[1] An intent and ability to begin the physical development of the PDO District within 18 months following the approval of the petition; and

As is demonstrated by the schedule illustrated in the re-zoning Petition, we intend to start construction within 4 months of obtaining entitlements. We have developed 88 housing projects in 34 years and we are confident that this schedule is reasonable.

[2] That the necessary financial resources to carry out the project in strict conformity with the development agreement have been obtained and committed.

Horizon has 34 years of experience in developing and financing senior housing. Our primary lenders - Old National Bank and Dubuque Bank & Trust –are both eager to finance this project. Typically, lenders and equity investors want to see that municipal entitlements are in place before funds are committed. Horizon has developed over 4,200 units of independent senior living across 78 projects.

Our track record as a developer speaks to our ability to construct and operate Elm Grove Heights in strict conformity with the development agreement. We are happy to provide references at the Village’s request.

(b) Whether the proposed Planned Development Overlay District is consistent in all respects with:

[1] The purpose of this section and the spirit and intent of this chapter; and

Consistency with Intent of Zoning Chapter:

The Elm Grove Zoning Code is intended to regulate and restrict the use of all structures, lands, and waters to promote the Village’s well-being.¹⁹ Elm Grove Heights is consistent with the

¹⁸ See Village of Elm Grove Code of Ordinances, Section 335-30(H)(1) & (2). See also Section 335-30(H)(3) for supplemental considerations for evaluating a Residential PDO request.

¹⁹ See Village of Elm Grove Code of Ordinances, Section 335-2 & 3.

zoning code’s intent because it is thoughtfully-designed and it will address one of the Village’s greatest housing needs.

Over 34% of Elm Grove’s population is already over the age of 64 and the US Census Bureau anticipates that the senior demographic will continue to expand as the baby boomer generation ages.²⁰ Despite an already robust senior population, there are no independent living options for seniors in the Village. Elm Grove Heights will allow Village seniors to sell their homes and remain in the community and it will position the Village to meet the housing demand for the expanding senior demographic.

Consistency with Intent of Planned Development Overlay Section:

The Elm Grove Municipal Code states that the PDO District is intended to utilize coordinated site planning efforts to provide design flexibility for high quality projects that are consistent with the use requirements of the underlying zoning district.²¹

Consistency with Use Restrictions:

An independent senior living community is consistent with the use restrictions of both the underlying and proposed zoning districts: multi-family is permitted by conditional use under current zoning (B-3) and independent senior living facilities are by right under the proposed zoning (RM-2).

Quality:

The PDO process guarantees that Elm Grove Heights will set the standard for residential quality. As part of our Residential PDO, we will be requesting enhanced density, which may only be awarded if the project “meets or exceeds” the highest quality residential comparable in the Village. We have designed Elm Grove Heights to meet or exceed the quality of Heritage Elm Grove and the Watermark Condominiums.

[2] The adopted Master Plan or any adopted component thereof.

The Village’s Future Land Use Plan slates our site for commercial use. We believe, however, that our request is consistent with the Village’s Comprehensive Plan because it addresses the need for independent senior housing and our use is complementary to the surrounding properties.

(2) The Village Plan Commission, in making its preliminary and final recommendations, and the Village Board, in making its decision on any proposed PDO District, shall consider the following criteria:

(a) The development will not be contrary to the general welfare and economic prosperity of the community.

²⁰ *An Aging Nation: The Older Population in the United States.* US Census Bureau. Pp. 2-4. The Comprehensive Plan for the Village of Elm Grove, Chapter 3: Housing. P. 24.

²¹ See Village of Elm Grove Code of Ordinances, Section 335-30(A).

Elm Grove Heights will have a positive economic impact on the Village by creating new tax revenue and jobs and promoting turnover of the existing housing stock. New construction and property management jobs will stimulate economic growth and the influx of workers will support local businesses. Village seniors will sell their homes to the next generation of Elm Grove's home owners.

Elm Grove Heights will also generate significant tax revenue and extend municipal water without requesting financial support.

(b) The proposed site is being provided with adequate drainage facilities for surface and storm waters.

Elm Grove Heights' stormwater and surface drainage facilities are designed to meet MMSD and state law requirements. They will ensure that storm waters are properly treated and released gradually into the drainage easement on the northern 1/3rd of the site. In addition, we will install curb and gutter along the newly-rebuilt entry drive that will significantly improve current surface drainage conditions. Please see the attached Stormwater and surface drainage plans (Appendix 5).

(c) The proposed site is accessible from public roads that are adequate to carry the traffic that can be expected to be generated by the proposed development.

Elm Grove Heights' will be located on Bluemound Road - a major arterial that is designed to handle a high volume of traffic. The Department of Transportation indicated that they are comfortable with Bluemound's ability to handle the traffic generated by 75 units of independent senior housing, and DOT will not require a traffic study.

(d) No undue constraint or burden will be imposed on public services and facilities (such as fire, EMT and police protection), street maintenance, maintenance of public areas near the proposed development and/or educational facilities.

Public Services:

We anticipate that the majority of Elm Grove Heights future residents will be comprised of existing Elm Grove residents who wish to remain in the community when they sell their homes. We therefore expect a minimal increase in demand for public services.

In addition, the building will feature the following fully-sprinklered for fire protection purposes. It will also be fully-accessible and will feature a large cab elevator.

Public Facilities:

By extending municipal water and installing two public hydrants, our design will improve the Fire Department's ability to fight fire in the surrounding area.

Public Maintenance:

The private drive on-site will be privately maintained.

The only public amenity in the surrounding area that may experience an increase in use is the Underwood Creek Trail. We expect that Elm Grove Heights residents will find proximity to the trail as an attractive amenity. However, the average age of residents at comparable Horizon properties is over 77. While our residents usually lead a fairly active lifestyle, we do not anticipate an undue increase in the Village’s maintenance responsibilities.

Educational Facilities:

We expect no impact on the Elmbrook School District.

(e) The private roads and driveways on the site of the proposed development are adequate to serve the users of the proposed development.

We are confident that the single private drive on-site will be adequate despite an increase in density. At Horizon’s Woodland Ridge senior campus in Greenfield, a single private drive serves over 400 residents (275 independent living residents) across 366 units and we have only seen one accident at that facility in 17 years. Elm Grove Heights’ private drive is currently 20’ wide and serves 99 units. We are proposing to widen the existing road from 20’ to 26’ to improve ingress/egress at Bluemound Road. While the drive will serve an additional 75 units, independent senior housing has a low per-unit occupancy and is a relatively low-impact use. We expect approximately 84 residents to occupy Elm Grove Heights and comparable Horizon properties only generate an average of 1 trip per-unit, per 12-hour period.

(f) Public sanitary sewerage facilities are adequately provided.

Village staff has indicated that Elm Grove Heights will be able to connect to the existing sanitary pipe on-site.

(g) The entire tract or lots to be included in a Planned Development Overlay District is subject to the terms and conditions of the development agreement, and the legal description encompasses said PDO District as a single area, shows all of its component lots and has been prepared to be recorded with the Register of Deeds for Waukesha County.

The PDO will encompass the entire Elm Grove Heights lot and it will be subject to the terms and conditions of the development agreement. As the PDO will consist of only one lot, the existing legal description already encompasses the PDO district as a single area, and it will be recorded with the Register of Deeds for Waukesha County.

(h) The proposed project will be adequately served by appropriate off-street parking.

As discussed, we are proposing an overall parking ratio of 1.17 stalls per unit. Section 335-32(J) of the Elm Grove Municipal Code requires 1.5 stalls per unit for Elderly multifamily housing. Please see the attached materials illustrating 12 comparable Horizon properties with similar parking ratios that have considerable parking vacancy.

(i) The architectural design, landscaping, control of lighting and general site development will result in an attractive and harmonious project compatible without unreasonably affecting the property values of the surrounding neighborhood.

Our design incorporates a number of techniques to blend with the architectural themes in the surrounding area. From a massing standpoint, the Building Trades Association to the west is actually 1.5 feet taller than Elm Grove Heights, and we chose to scale the building down to three stories along the private entry drive to emphasize a transition to east and enhance the residential aesthetic. We also chose a gabled, shingle style residential roof to mirror Emerald Woods. Finally, we intend to include ample landscaping along the east side of the entry drive to create a private, attractive approach for Elm Grove Heights and Emerald Woods residents.

Please see the attached design materials for evaluation.

(j) The locations for entrances and exits have been designated to prevent unnecessary interference with the safe and efficient movement of traffic on surrounding streets and that the development will not create an unreasonable adverse effect upon the general traffic pattern of the surrounding neighborhood.

The entrance to Elm Grove Heights will be at the existing curb cut approved by Wis DOT and Wis DOT will not allow a second curb cut. There is, however, a full “non-traffic” lane that residents will be able to use for ingress/egress.

As discussed, the Department of Transportation feels that 75 units of independent senior housing will not cause traffic concerns on Bluemound and they will not be requiring a traffic study. Our Woodland Ridge campus in Greenfield serves 366 units with a single, private drive. In our experience, the traffic volume generated by our use will not pose traffic concerns on the private drive or Bluemound Road.

(k) Provision has been made for the adequate and continuing operation and maintenance of all aspects of the project.

Horizon Management Services (“HMS”) currently manages almost 3,000 units in Wisconsin, Iowa, and Illinois and will serve as the property manager. HMS prides itself on meticulous, value-preserving management practices and their portfolio is over 98% occupied. Horizon’s involvement in the ownership and management of the property will ensure that we have a continued interest in the project’s success for years to come.

- (l) The proposed project has, where applicable, been examined with respect to its compatibility with the nonmandatory Downtown Overlay District Site Design Guidelines set forth in § 335-12G.*

The subject site is not located within the Downtown Overlay District.

- (3) In the case of a proposed PDO District with residential uses, the Village Plan Commission, in making its preliminary and final recommendations, and the Village Board, in making its decision on any proposed PDO District, shall also consider the following:*

- (a) Such development will provide an attractive residential environment of sustained desirability and economic stability.*

Our 34 years of experience has yielded a refined approach to developing senior housing that focuses on creating a community-oriented environment. With nearly 3,000 units in our portfolio, we are able to apply a data-driven approach to design and operations that creates an exciting place to live. In preparation for the entitlements process, Horizon conducted a senior housing survey to gauge interest for the proposed location. We have over 72 people on our interest list, 43 of whom are residents of Elm Grove.

- (b) The impact of the population composition of the project upon the school district's capacity to provide needed educational services.*

Senior housing will not have an impact on the Elmbrook School District's population. It will, however, generate property taxes that can be used to support Elmbrook's operations.

- (c) Permanent preservation of open space areas as shown on the approved site plan is ensured by the creation of appropriate easements and recorded deed restrictions.*

As discussed, the site's northern 1/3rd will remain undisturbed to preserve natural vegetation. This area already contains drainage and sanitary easements, but we are happy to enter into a new agreement with the Village to memorialize our intent to leave the area undisturbed.

- (d) The proposed mixture of uses produces a unified composite which is compatible within the underlying districts and which, as a total development entity, is compatible with the surrounding neighborhood.*

We are proposing an exclusively residential use that fits in well with the character of the surrounding area. There are 18 parcels of land within 1,000 feet that are zoned for multifamily, including several that front Bluemound Road.

V. Appendices

Table of Appendices

1. Proposed Building Plans and Existing Building Plans (Architectural)
 - a. Required components per the Elm Grove Development Submittal Checklist:
 - i. Scaled architectural plans showing all exterior elevations noting colors and materials;
 - ii. General floor plan for all new buildings;
 - iii. Drawings should provide sufficient detail to indicate the architectural design of the proposed buildings.

2. ALTA and Existing Conditions Surveys
 - a. Included Per Section 335-30(G)(2)(b)(1).

3. Proposed Site Plan
 - a. Required components per the Elm Grove Development Submittal Checklist:
 - i. Location and dimensions of proposed structures, including total building footprint area;
 - ii. Distance of structures to all lot lines;
 - iii. First floor elevations and first floor grades;
 - iv. Location and grade (measured at nearest building corners) of neighboring structures;
 - v. Adjacent properties and their uses;
 - vi. Proposed streets, driveway, sidewalks, and other pedestrian or vehicular circulation facilities, including widths;
 - vii. Parking areas including total number of parking spaces;
 - viii. Total acreage of the proposed building site;

4. Proposed Lighting Plan
 - a. Required components per the Elm Grove Development Submittal Checklist:
 - i. Lighting Plan including: location, height, design, type, and power of all exterior lighting.

5. Proposed Surface Water Plan & Stormwater Management
 - a. Requirements per the Elm Grove Development Submittal Checklist:
 - i. Surface water drainage plan illustrating how additional runoff caused by the new structure will be accommodated so as not to adversely impact neighboring properties;

- ii. Identify existing drainage conditions in gray-scale and proposed drainage conditions in black ink;
- iii. Topographic contours are to be shown in intervals not exceeding two feet;
- iv. Storm water management facilities;
- v. Location of construction erosion control

6. Landscape Plan

- a. Requirements per the Elm Grove Development Submittal Checklist:
 - i. Location of all new plantings and existing plant materials;
 - ii. List of the number, species, and size of plant materials at installation;
 - iii. Tree Inventory:
 - 1. Trees more than 12 inches in diameter at chest height on the property;
 - 2. Trees more than 6 inches in diameter on Village right-of-way;
 - 3. Trees that will be removed and trees that will remain.

7. Re-zoning Map Submitted to the Board of Trustees

- a. Requirements per the Elm Grove Development Submittal Checklist:
 - i. Plot plan where 1" = 100' showing:
 - 1. Area to be re-zoned;
 - 2. Location of property;
 - 3. Dimensions of property;
 - 4. Location and classification of existing, adjacent zoning districts;
 - 5. Location and existing use of properties within 300' of property to be re-zoned.



March 4, 2019

Mr. Tom Harrigan
Zoning/Planning Administrator
Village of Elm Grove
13600 Juneau Boulevard
Elm Grove, WI 53122

Re: Elm Grove Heights Request to:

1. Re-zone 13040 W Bluemound Road from B-3 to RM-2 with a Planned Development Overlay;
2. Amend the Comprehensive Plan.

Dear Mr. Harrigan,

Attached are updates to the Elm Grove Heights design and additional materials addressing questions from Village staff, the Village Engineer, and the Plan Commission.

1. Project Updates and Requested Information;
2. ALTA Survey;
3. Civil Index Sheet;
4. Existing Site and Demolition Plan;
5. Site Plan;
6. Grading and Erosion Control Plan (contains surface water drainage information);
7. Stormwater Management & Utility Plan;
8. Civil Plan C1.5 Details;
9. Fire Truck Turning Exhibit (Appendix 9)
10. Amended Extraordinary Parking Plan (Appendix 10);
11. Construction Sequence and Access Plan for Emerald Woods Condominium Association (Appendix 11);
12. Village Engineering Review and Itemized Responses (Appendix 12);

Thank you for your time and consideration.

Sincerely,
HORIZON DEVELOPMENT GROUP, INC.



Philip Schultz
Managing Partner

Project Updates and Requested Information:

Zoning Considerations from the Village Engineering Review:

Height and Setbacks:

The maximum height for a principal structure in the Rm-2 zoning district is 36'.¹ We are proposing a 51'6" structure and are requesting flexibility from the Rm-2 district's base height restriction as part of the Planned Development Overlay request. The highest portion of the Elm Grove Heights will be still be 1.5 feet lower than the roof of the building to the west.

The minimum front-yard setback in the Rm-2 district is 25 feet. We are proposing a front-yard setback of 27.67', which complies with the base restriction if flexibility is granted to the base height restriction.

We believe these requests are reasonable as the height and front-yard setback for the building immediately adjacent to the west are comparable. The Building Trades Association building has a comparable front-yard setback and is slightly taller than the height proposed for Elm Grove Heights.

The minimum side-yard setback in the Rm-2 zoning district is 20'.² We are proposing a 15' setback from the western property line and are requesting flexibility from the base side-yard setback requirement as part of the Planned Development Overlay request.

Signage:

Village staff confirmed that the Rm-2 zoning district qualifies as a residential zoning district. Section 335-48.B(11) limits one sign per frontage road in nonresidential districts, but no such restriction exists for residential districts. We are proposing two monument signs: one for Elm Grove Heights and one for Emerald Woods. The Emerald Woods sign will be relocated to the eastern side of the entry drive and the design will remain the same. Village staff has confirmed that Horizon can submit the proposed design for the Elm Grove Heights sign on March 14th for the Building Board's review on March 19th.

Amended Extraordinary Parking Plan (Appendix 10):

The Plan Commission requested that Horizon develop a plan for extraordinary demand for surface parking on holidays. This submittal includes an update to the Extraordinary Event

¹ Village Code of Ordinances, Section 335.21.1(E)(1)(a).

² Village Code of Ordinances, Section 335.21.1(F)(2)(a).

Parking Plan submitted to on February 12th, 2019. Since that time, Horizon has negotiated a parking agreement with the owner of the parcel adjacent to the west. Elm Grove Heights visitors will be able to utilize the 27 surface stalls that abut our parcel's western property line on holidays outside the regular course of business. Please see the amended Extraordinary Event Parking Plan (Appendix 10) for additional detail.

Senior Housing Deed Restriction:

At the Plan Commission meeting on January 7, 2019, the Village Attorney asked Horizon whether we would be open to including a deed restriction that guarantees every resident at Elm Grove Heights will be over the age of 62. The development agreement will include a provision that requires the requested deed restriction.

Fire Department Turnaround (Appendix 9):

Appendix 9 in the 2-12-2019 submittal demonstrates that the fire department turnaround accommodates the turning radius of 40' truck. Chief Selzer provided the specifications for the Village's fire engines and Excel Engineering has since verified that the turnaround will accommodate the Village's largest fire truck, which is 34' in length.

Construction Sequence and Access Plan for Emerald Woods Condominium Association (Appendix 11):

The Village Engineering Review requested an access plan for Emerald Woods during construction. The Horizon development team met with Excel Engineering and Horizon Construction Group to establish a construction sequence that maintains access for Emerald Woods throughout construction. Please see Appendix 11 for additional details.

Unit Mix Update and Sanitary Capacity:

During design, we updated our unit mix to include 24 one-bedroom and 51 two-bedroom apartments. The Village Engineering Review indicated that adequate sewer capacity exists for 22 one-bedrooms and 53 two-bedrooms. The unit mix update still complies with MMSD requirements because the increase in the number of one-bedrooms reduces the overall number of bedrooms and therefore reduces the potential sewage generated by Elm Grove Heights.

Enhanced Density Standard:

The Village Code of Ordinances requires that projects requesting enhanced density be designed to meet or exceed the highest quality comparable in the Village.³ On January 16th, the Building

³ See Section 335-21.1(C)(2).

Board unanimously approved the Elm Grove Heights design, exterior materials, and landscaping plan.

EXTRAORDINARY EVENT PARKING PLAN

Appendix 10
3-4-2019

The purpose of this parking plan is to provide adequate visitor parking at Elm Grove Heights in the unlikely event, such as Mother's Day, that more visitors with automobiles are at the property than the twenty surface parking spaces can accommodate.

Elm Grove Heights will be professionally managed by Horizon Management Services which will have an office at the property for the property manager. The property manager will monitor use of the parking court and if there are times during the year that result in heavy use of the visitor parking then the Extraordinary Event parking plan will be implemented.

One week prior to Mother's Day, Father's Day, Thanksgiving, Easter, Christmas Eve, and Christmas (Extraordinary Event) the property manager will survey the residents to determine who will be expecting visitors and at what times. If it is determined that more than fifteen cars may be in the 20 space parking lot in front of the building at one point in time, then the following extraordinary parking plan will be implemented.

OPTION A. It is anticipated, based on factual data from other Horizon properties, that between 10% and 20% of the underground parking spaces will not be occupied. This means that between 7 and 14 underground parking spaces will be vacant and available for visitor parking. The list of available underground visitor parking spaces will be posted outside the property manager's office. If these spaces are needed for overflow parking, then the Elm Grove Heights resident will open the parking garage door so that their visitor can park in a vacant underground parking space. This option will increase the total available visitor parking to between 27 and 34 parking spaces. Horizon parking data shows that this should be more than adequate parking for visitors.

OPTION B. If the Extraordinary Event surveys indicate that more parking is needed than can be accommodated through OPTION A, then visitors will be allowed to park in the surface parking spaces on the property immediately to the west of Elm Grove Heights per an agreement between Elm Grove Heights and the owner of the property known as the Building Trades building located at 500 Elm Grove Road. There is a public sidewalk between the Building Trades parking lot and Elm Grove Heights.

CONSTRUCTION SEQUENCE & CONDO ASSOCIATION ACCESS PLAN

Appendix 11

3-4-2019

The purpose of this plan is to provide a construction sequence that demonstrates adequate access for the Emerald Woods Condominium Association during the construction of Elm Grove Heights. The development team conducted a series of meetings with Excel Engineering to devise a construction sequence that will maintain access throughout the construction period for Emerald Woods.

Construction Sequence:

1. Install building foundation;
2. Backfill foundation and install precast;
3. Install stormwater system under parking lot and north of building, backfill trench, and install gravel road west of existing access drive;
4. Complete the building;
5. Rebuild eastern half of access drive;
6. Rebuild western half of access drive with water main;
7. Construct parking lot and fire department access drive.

PROPOSED DEVELOPMENT FOR:
ELM GROVE HEIGHTS
 13040 W. BLUEMOUND ROAD • ELM GROVE, WI

PROFESSIONAL SEAL

PRELIMINARY DATES

JUNE 20, 2018
 FEB. 20, 2019

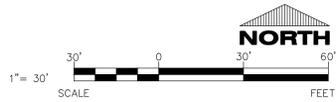
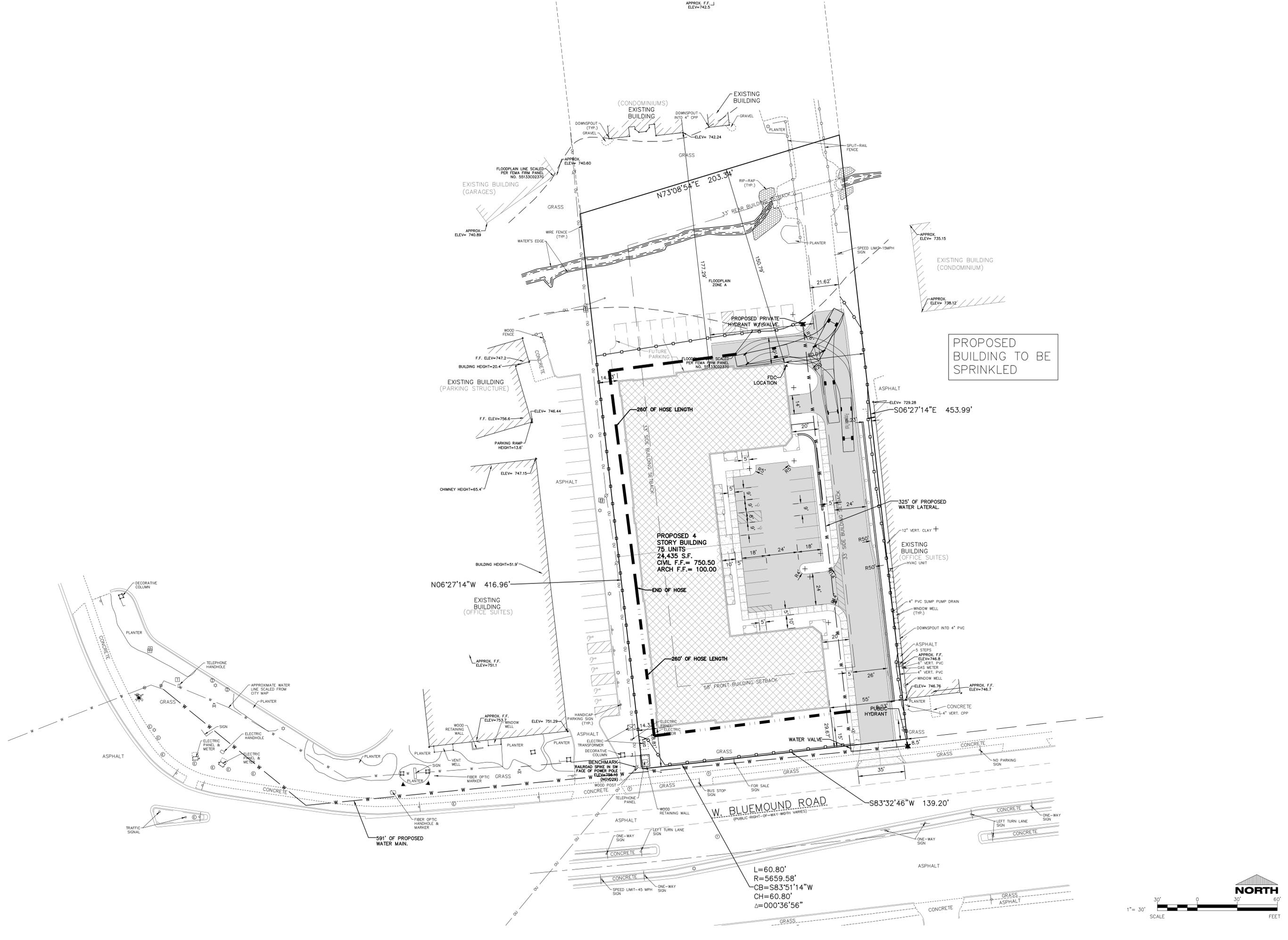
NOT FOR CONSTRUCTION

SHEET INFORMATION

FIRE DEPT. EXHIBIT -
 40 FT TRUCK

SHEET NUMBER

FD40



L=60.80'
 R=5659.58'
 CB=S83°51'14"W
 CH=60.80'
 Δ=000°36'56"

- 1 SHINGLE ROOF TYP.
- 2 METAL ROOF
- 3 MASONRY
- 4 GROUND FACE BLOCK
- 5 SIDING



**ELM GROVE HEIGHTS
CONCEPTUAL ELEVATIONS**

Appendix 1

DECEMBER 17, 2018

SCALE: 1:20



JLA
ARCHITECTS



Landscape Architecture and Urban Planning Design Consulting

- 1 SHINGLE ROOF TYP.
- 2 METAL ROOF
- 3 MASONRY
- 4 GROUND FACE BLOCK
- 5 SIDING



SOUTH ELEVATION



ELM GROVE HEIGHTS

- 1 SHINGLE ROOF TYP.
- 2 TRELLIS
- 3 MASONRY
- 4 GROUND FACE BLOCK
- 5 SIDING



ELM GROVE HEIGHTS
CONCEPTUAL ELEVATIONS

Appendix 1

DECEMBER 17, 2018

SCALE: 1:20



JLA
ARCHITECTS



Landscape Architecture and Master Planning Design Consulting

- 1 SHINGLE ROOF TYP.
- 2 METAL ROOF
- 3 MASONRY
- 4 GROUND FACE BLOCK
- 5 SIDING



NORTH ELEVATION



ELM GROVE HEIGHTS



JLA
ARCHITECTS

MADISON : MILWAUKEE
jla-ap.com

JLA PROJECT NUMBER: 18-0402



ELM GROVE HEIGHTS

PLAN COMMISSION
SUBMITTAL

PROGRESS DOCUMENTS

These documents reflect progress and intent and may be subject to change, including additional detail. These are not final construction documents and should not be used for final bidding or construction-related purposes.

DATE OF ISSUANCE FEBRUARY 12, 2019

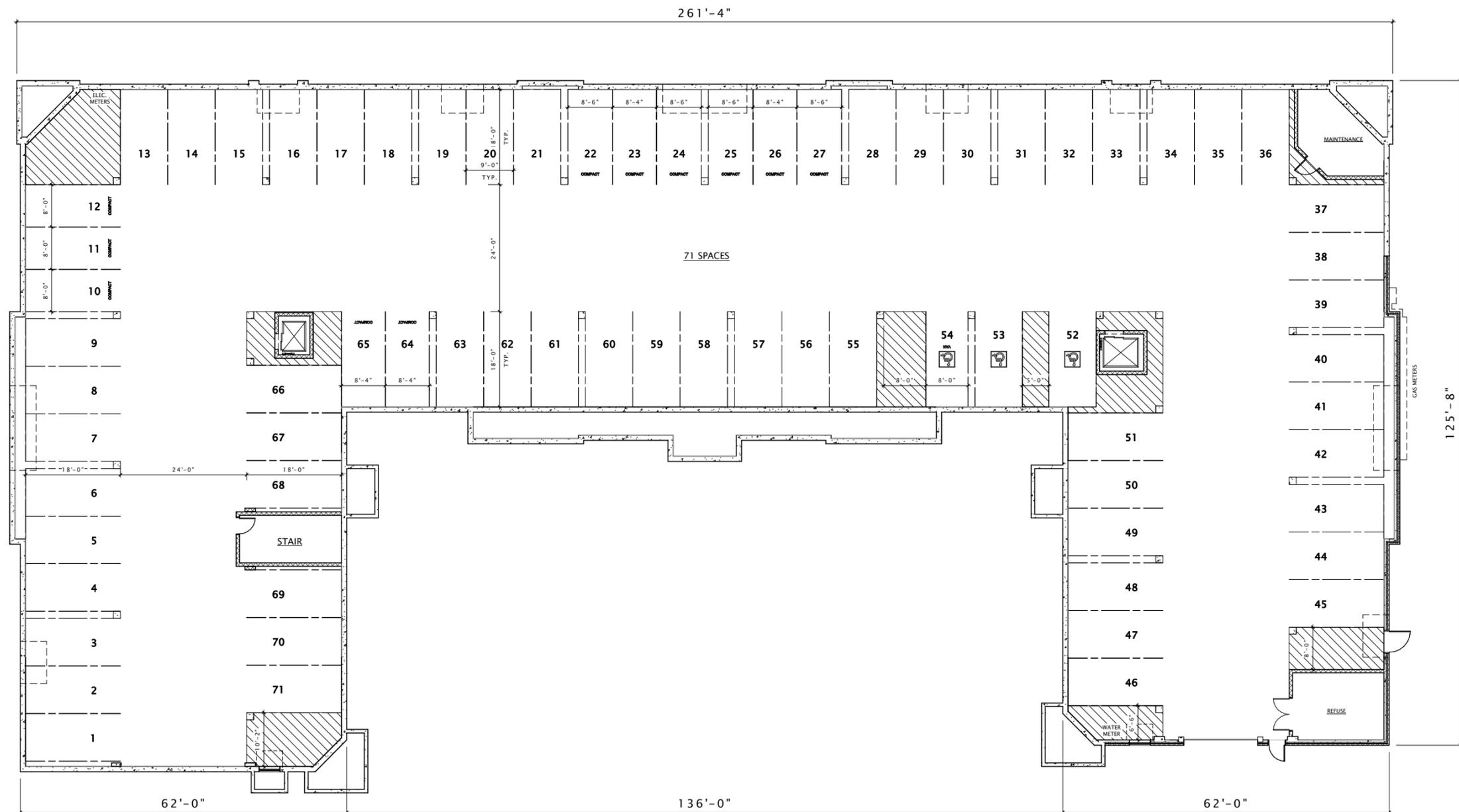
REVISION SCHEDULE		
Mark	Description	Date

SHEET TITLE

LOWER LEVEL PLAN

SHEET NUMBER

A100



19 LOWER LEVEL PLAN
3/32" = 1'-0"

DRAWING SCALE HALF SIZE @ 12 x 18





JLA
ARCHITECTS

MADISON : MILWAUKEE
jla-ap.com

JLA PROJECT NUMBER: 18-0402



ELM GROVE HEIGHTS

PLAN COMMISSION
SUBMITTAL

PROGRESS DOCUMENTS

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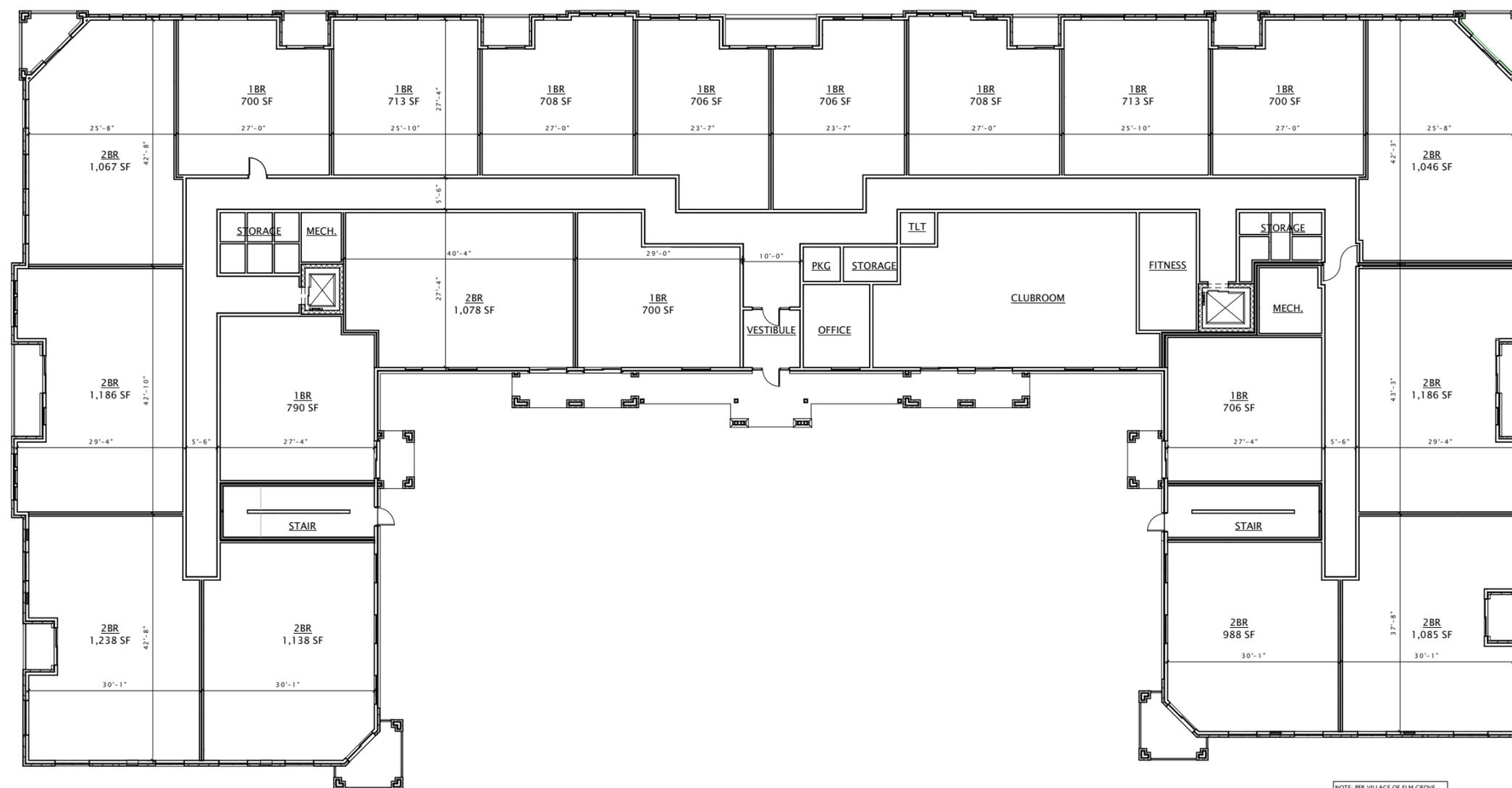
DATE OF ISSUANCE FEBRUARY 12, 2019

REVISION SCHEDULE		
Mark	Description	Date

SHEET TITLE
FIRST FLOOR PLAN

SHEET NUMBER

A101



19 FIRST FLOOR PLAN
3/32" = 1'-0"

DRAWING SCALE HALF SIZE @ 12 x 18





JLA
ARCHITECTS

MADISON : MILWAUKEE
jla-ap.com

JLA PROJECT NUMBER: 18-0402



ELM GROVE HEIGHTS

PLAN COMMISSION
SUBMITTAL

PROGRESS DOCUMENTS

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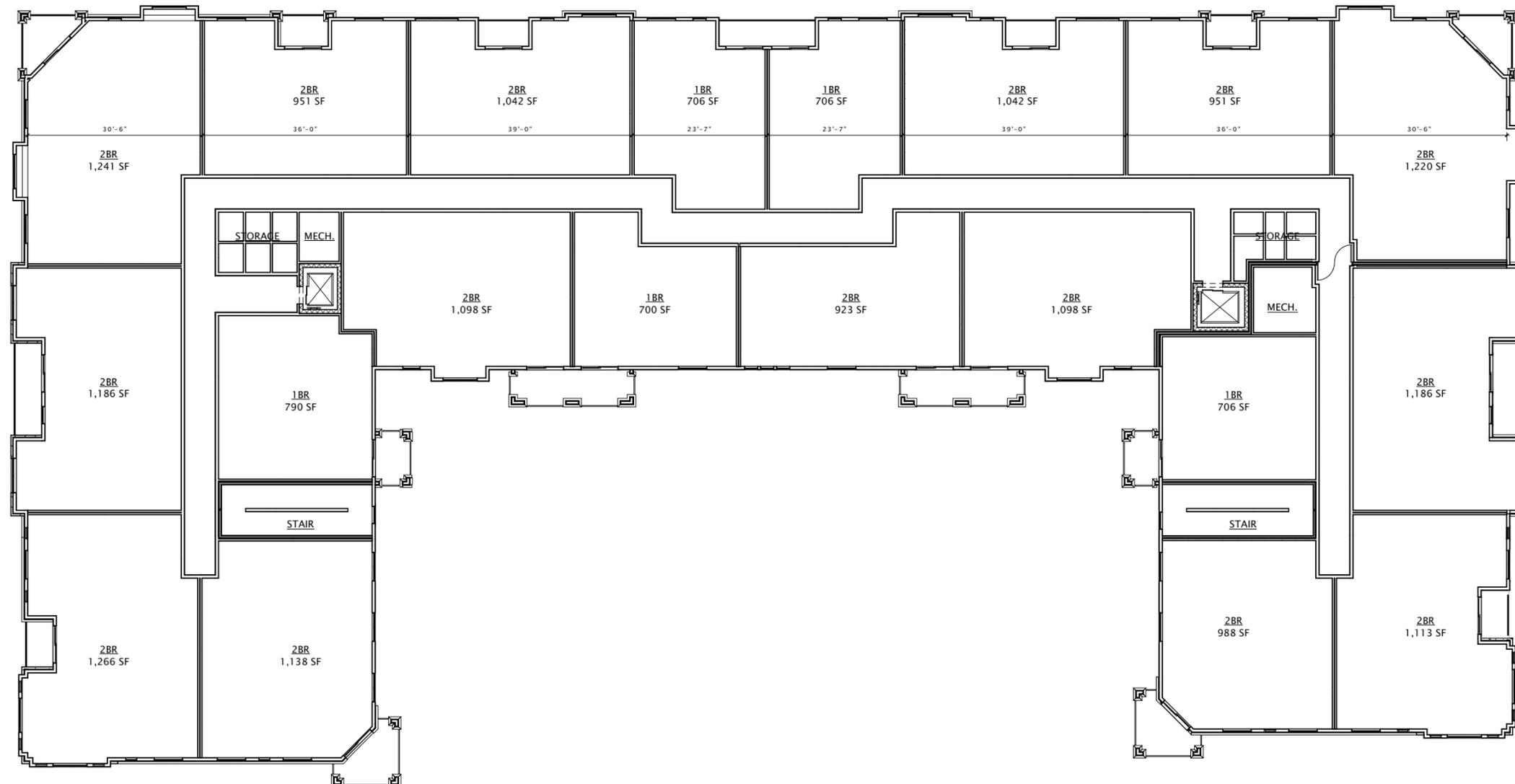
REVISION SCHEDULE		
Mark	Description	Date

SHEET TITLE

SECOND FLOOR PLAN

SHEET NUMBER

A102



NOTE: PER VILLAGE OF ELM GROVE ORDINANCE, MINIMUM 1 BEDROOM UNIT SIZE TO BE 700SF

DRAWINGS SCALE HALF SIZE @ 12 x 18

19 SECOND FLOOR PLAN
3/32" = 1'-0"





JLA
ARCHITECTS

MADISON : MILWAUKEE
jla-ap.com

JLA PROJECT NUMBER: 18-0402



ELM GROVE HEIGHTS

PLAN COMMISSION
SUBMITTAL

PROGRESS DOCUMENTS

These documents reflect progress and intent and may be subject to change, including additional detail. These are not final construction documents and should not be used for final bidding or construction-related purposes.

DATE OF ISSUANCE FEBRUARY 12, 2019

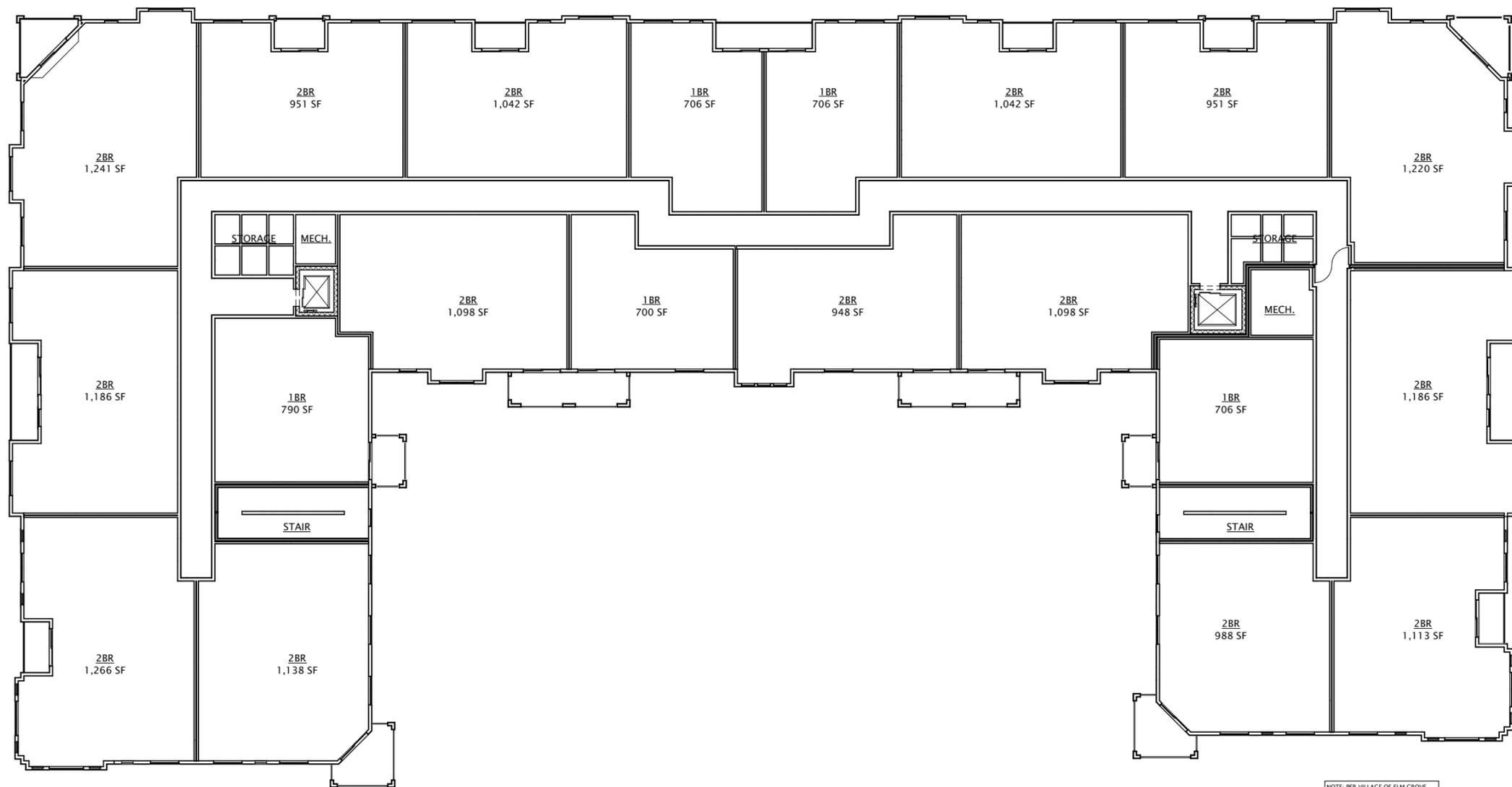
REVISION SCHEDULE		
Mark	Description	Date

SHEET TITLE

THIRD FLOOR PLAN

SHEET NUMBER

A103



NOTE: PER VILLAGE OF ELM GROVE ORDINANCE, MINIMUM 1 BEDROOM UNIT SIZE TO BE 700SF.

19 THIRD FLOOR PLAN
3/32" = 1'-0"





JLA
ARCHITECTS

MADISON : MILWAUKEE
jla-ap.com

JLA PROJECT NUMBER: 18-0402



ELM GROVE HEIGHTS

PLAN COMMISSION
SUBMITTAL

PROGRESS DOCUMENTS

These documents reflect progress and intent and may be subject to change, including additional detail. These are not final construction documents and should not be used for final bidding or construction-related purposes.

DATE OF ISSUANCE FEBRUARY 12, 2019

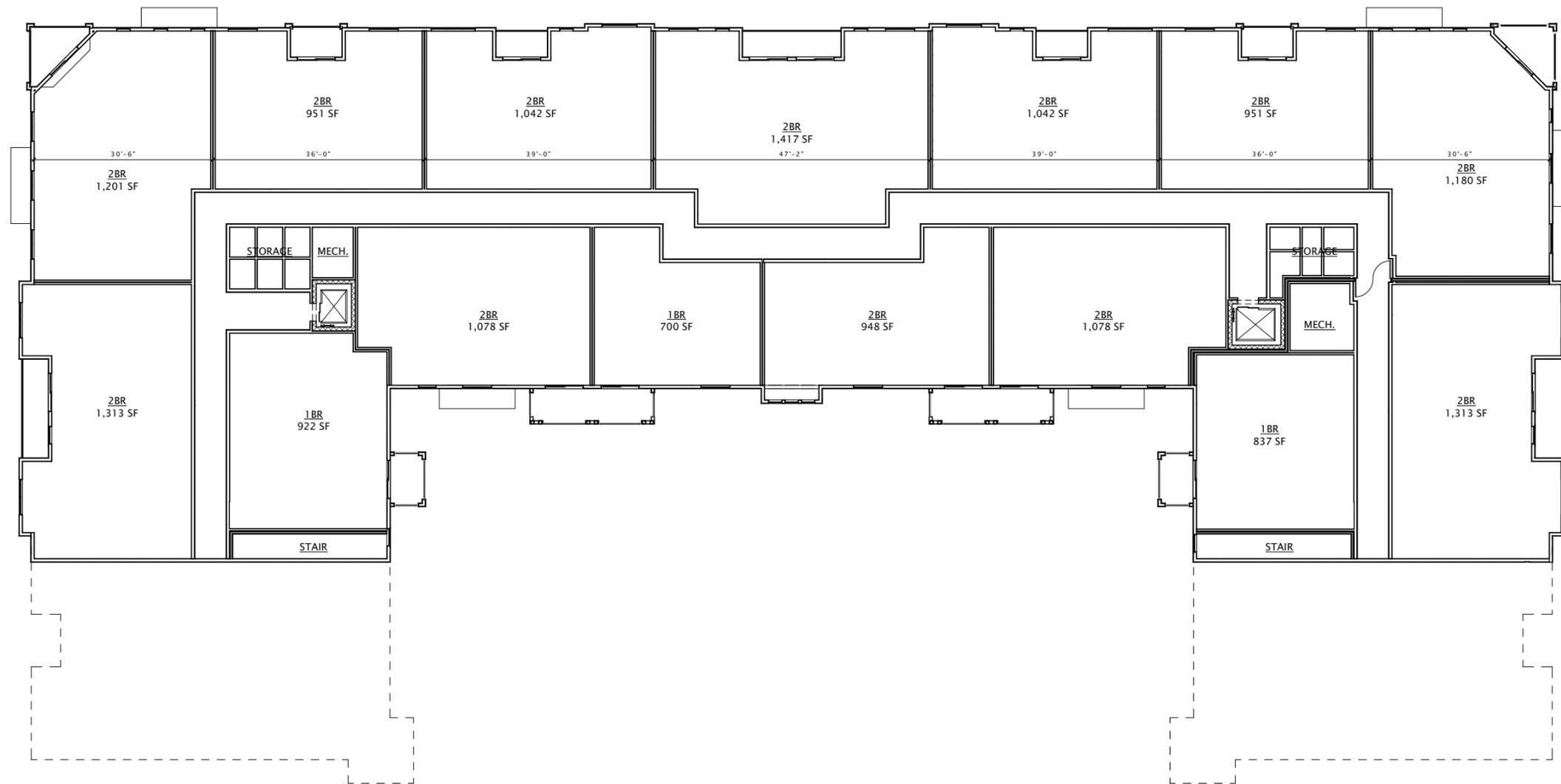
REVISION SCHEDULE		
Mark	Description	Date

SHEET TITLE

FOURTH FLOOR PLAN

SHEET NUMBER

A104



NOTE: PER VILLAGE OF ELM GROVE
ORDINANCE, MINIMUM 1 BEDROOM
UNIT SIZE TO BE 700SF

19 FOURTH FLOOR PLAN
3/32" = 1'-0"

DRAWING SCALE HALF SIZE @ 12 x 18



ALTA / NSPS LAND TITLE SURVEY



PROJECT INFORMATION
PROJECT NUMBER: 1818280

ALTA/NSPS LAND TITLE SURVEY
13040 BLUEMOUND ROAD • ELM GROVE, WI

PROFESSIONAL SEAL

SHEET DATES
ISSUE DATE: JUNE 8, 2018
REVISIONS: MAR. 4, 2019

SHEET INFORMATION
ALTA / NSPS
LAND TITLE SURVEY
SHEET NUMBER

AL
2018 © EXCEL ENGINEERING, INC.

SURVEYOR'S CERTIFICATE
ALTA / NSPS Land Title Survey

- To:
- (i) First American Title Insurance Company
 - (ii) Horizon Development Group, Inc., a Wisconsin corporation
 - (iii) Lamplighter Corporation of Elm Grove, a Wisconsin corporation

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1, 2, 3, 4, 6(a), 8, 11, 14, 16 & 17 of Table A thereof. The field work was completed on May 22, 2018.

Ryan Wilgreen, P.L.S. No. S-2647
ryan.w@excelengineer.com
Excel Engineering, Inc.
Fond du Lac, Wisconsin 54935
Project Number: 1818280

Date of Plat or Map: _____

LANDS DESCRIBED IN COMMITMENT NO. NCS-897909-MKE, PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY WITH A COMMITMENT DATE OF MARCH 30, 2018:

Lot 2 of Certified Survey Map No. 8351, being a redivision of Parcel 2 of Certified Survey Map No. 5703, being a part of the Southeast 1/4 of the Northwest 1/4, the Southwest 1/4 of the Northeast 1/4, and the Northeast 1/4 of the Southeast 1/4 of Section 25, Town 7 North, Range 20 East, in the Village of Elm Grove, Waukesha County, Wisconsin.

Property Address: 13040 W. Bluemound Road, Elm Grove, WI
Tax ID No.: EGV 1108980001

ALTA NOTES:

1. Bearings are referenced to the Wisconsin State Plane Coordinate System, South Zone. The North line of the Southeast 1/4 of Section 25-7-20, has a bearing of North 89°47'49" East.
2. Only the improvements that were visible from above ground at time of survey and through a normal search and walk through of the site are shown on the face of this plat. Lawn sprinkler systems, if any, are not shown on this survey.
3. Surface indications of utilities along with Digger's Hotline markings on the surveyed parcel have been shown. Offsite observations have not been made to determine the extent of utilities serving or existing on the property. Public records have not been provided for additional information. Controlled underground exploratory effort together with Digger's Hotline markings is recommended to determine the full extent of underground service and utility lines. Contact Digger's Hotline at 1-800-242-8511.
4. This survey may not reflect all utilities, or improvements, if such items are hidden by landscaping, or areas covered by such items as dumpsters or trailers.
5. The locations of the property lines shown on the face of this plat are based on the description and information furnished by the client, together with the title commitment. The parcel that is defined may not reflect actual ownership, but reflects what was surveyed. For ownership, consult your title company.
6. Based upon a review of the Federal Emergency Management Agency Flood Insurance Rate Map community panel 55133C0237G with a map revision date of November 5, 2014, a portion of the subject property falls within Zone "A" (special flood hazard areas with no base flood elevations determined), the remainder of the property falls within Zone "X" (unshaded-areas determined to be outside the 0.2% annual chance floodplain).
7. The property described hereon contains 2.000 acres (87,120 sq. ft.) of land, more or less.
8. **First American Title Insurance Company, Commitment No. NCS-897909-MKE, with a commitment date of March 30, 2018 has been reviewed in conjunction with the preparation of this survey. Notes related to the review of this title policy, Schedule B-II Exceptions are as follows:**
 - #9 Access restriction as set forth in Finding, Determination and Declaration Establishing Certain Controlled-Access Highways recorded August 10, 1951, in Volume 553, page 275, as Document No. 354772. As modified by Authorization for Access to or Across Controlled-Access Highway recorded October 25, 1983, Reel 572, Image 367, as Document No. 1234133. This document is for the approval of one driveway access point on the north side of U.S.H. "18" (W. Bluemound Road). Access restriction is noted on this survey.
 - #10 Utility Easement granted to Wisconsin Electric Power Company and Wisconsin Telephone Company recorded June 8, 1956, in Volume 707, page 192, as Document No. 439527. This document contains a general easement for the construction and maintenance of a line of utility poles. This document does not contain any specific width or location to depict on this survey. The utility poles described in this document exist along the westerly side of the subject property and have been noted and depicted on this survey.
 - #11 Drainage Easement by and between Adam Schweninger, Irma Schweninger, Isabel M. Schendel, Elmer Knaack, Lorraine J. Knaack, Yahr-Lange, Inc. and Suburbanair Inc. - WAWA recorded October 23, 1970, in Volume 1208, page 223, as Document No. 771782, as shown on Certified Survey Map No. 8351. Easement is depicted on this survey.
 - #12 Disclaimer of Rights Agreement by and between Nu-Life Corp. and John J. Lindner and Mary Lindner recorded December 22, 1986, Reel 838, page 13, as Document No. 1392174. This document is an agreement for a fence that encroaches onto the northwest corner of the subject property. Fence is noted and depicted on this survey.
 - #13 Disclaimer of Rights Agreement by and between Elm Grove Properties II and John J. Lindner and Mary Lindner recorded December 22, 1986, Reel 838, page 18, as Document No. 1392175. This document is an agreement for a 4'x4' concrete pad that encroaches onto east side of the subject property. Concrete pad is noted and depicted on this survey near the southeast corner of the subject property.
 - #14 Terms, conditions, restrictions and provisions relating to the use and maintenance of Easement Agreement for sanitary sewer and water distribution system by and between Lamplighter Corporation of Elm Grove, Building Trades United Pension Trust Fund and Village of Elm Grove recorded September 8, 1997, Reel 2499, Image 577, as Document No. 2243070. Easement is depicted on this survey.
 - #15 Terms, conditions, restrictions and provisions relating to the use and maintenance of Easement Agreement for pedestrian and vehicular ingress and egress, utilities, monument sign by and between Lamplighter Corporation of Elm Grove and Hawthorne Associates recorded September 8, 1997, Reel 2499, Image 583, as Document No. 2243071. Easements have been depicted on this survey.
 - #16 Terms, provisions, conditions, restrictions, obligations as set forth in Planned Development Overlay Agreement for Emerald Woods recorded May 13, 1998, Reel 2657, Image 264, as Document No. 2317847. This document affects the subject property but does not contain any easements to depict on this survey.
 - #17 Ameritech Exclusive Easement granted to Wisconsin Bell, Inc. a.k.a. Ameritech Wisconsin recorded May 27, 1998, Reel 2665, Image 156, as Document No. 2322659. Easements have been depicted on this survey.
 - #18 W.E.P.C.O. easement, sanitary sewer easements, drainage easement, apparent sanitary sewer easement, non exclusive easement for public or private road as set forth on Certified Survey Map No. 5703. The drainage easement and apparent sanitary sewer easement shown on this CSM affect the subject property but do not contain any dimensions to graphically depict on this survey. These same easements have been subsequently dimensioned on CSM No. 8351 and are shown on this survey as part of Schedule B-II, Item No. 19.
 - #19 Vision corner easement, notes, perpetual utility and ingress and egress easement, sanitary sewer easement, access easement for sanitary and water system maintenance as set forth on Certified Survey Map No. 8351. Easements have been depicted on this survey. Reference CSM No. 8351 for all other notes.
9. Other commitment items not specified hereon may not have been considered relevant to an ALTA/NSPS Land Title Survey, and have not been reviewed in conjunction with preparation of this plat (i.e. Annexation agreements, Leases, Mortgages, Liens, special assessments, covenants, trusts, unspecified or unrecorded rights).
10. In regards to ALTA/NSPS "Table A", Item No. 14, the intersection of W. Bluemound Road and Elm Grove Road is approximately 400 feet west of the subject property.
11. In regards to ALTA/NSPS "Table A", Item No. 16, at the time of this survey there was no visible sign of earth moving work, building construction, or building additions.
12. In regards to ALTA/NSPS "Table A", Item No. 17, no proposed changes to the street right-of-way lines have been disclosed by the Village of Elm Grove or the current Title Commitment.

TOTAL AREA
2.000 ACRES
87,120 SQ. FT.

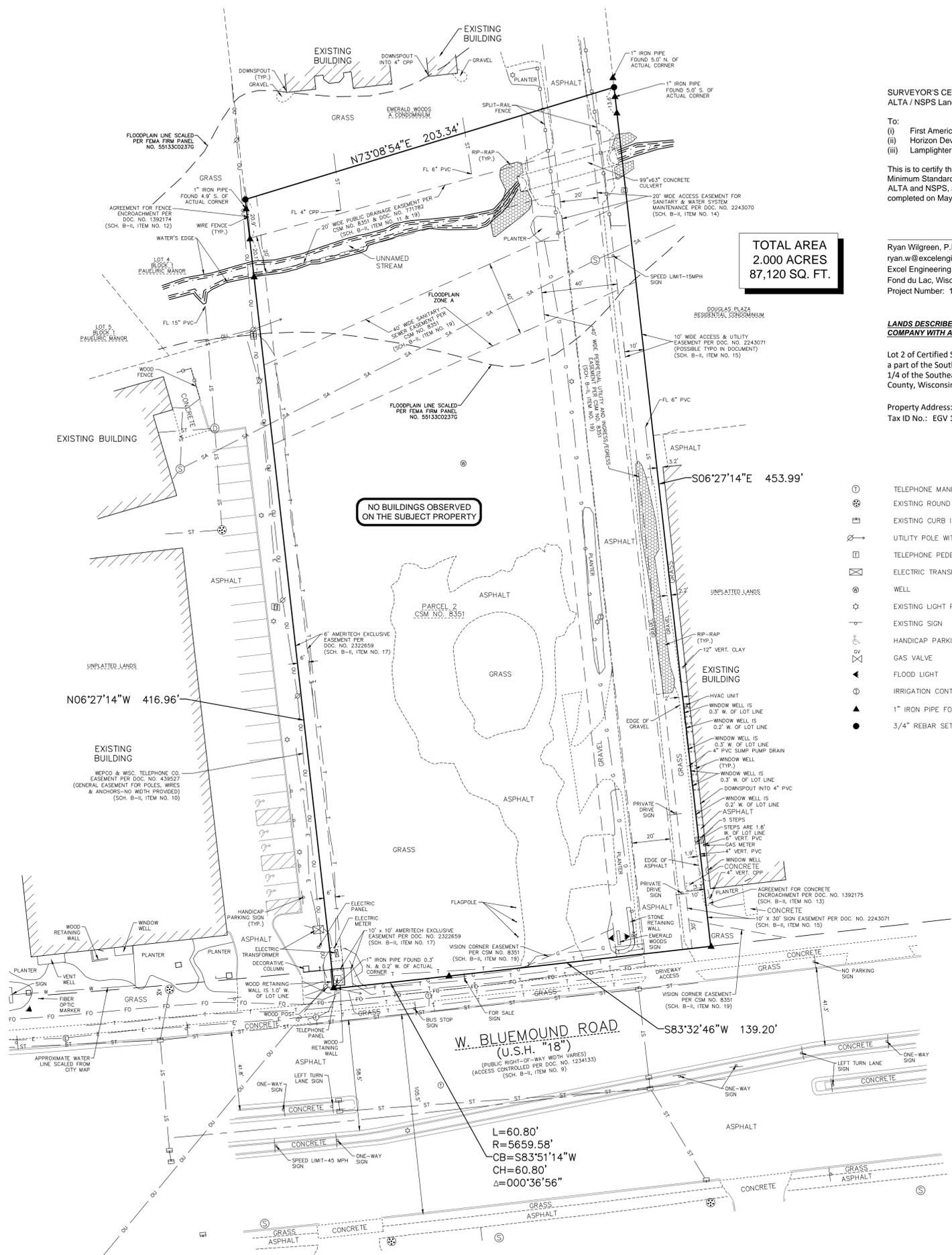
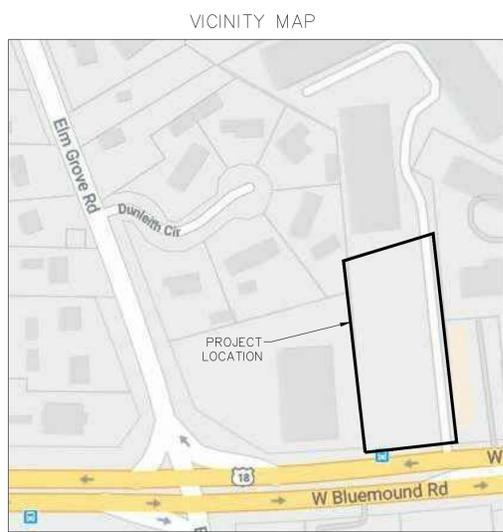
NO BUILDINGS OBSERVED ON THE SUBJECT PROPERTY

LEGEND:

⊕	TELEPHONE MANHOLE	— ST —	⊕	EXISTING STORM SEWER AND MANHOLE
⊗	EXISTING ROUND CATCH BASIN	— SA —	⊕	EXISTING SANITARY SEWER AND MANHOLE
⊖	EXISTING CURB INLET	— OU —	—	EXISTING OVERHEAD UTILITY LINE
⊙	UTILITY POLE WITH GUY WIRE	— FO —	—	EXISTING UNDERGROUND FIBER OPTIC LINE
⊚	TELEPHONE PEDESTAL	— E —	—	EXISTING UNDERGROUND ELECTRIC CABLE
⊛	ELECTRIC TRANSFORMER	— T —	—	EXISTING UNDERGROUND TELEPHONE CABLE
⊜	WELL	— G —	—	EXISTING UNDERGROUND GAS LINE
⊝	EXISTING LIGHT POLE	— C —	—	EXISTING CURB AND GUTTER
⊞	EXISTING SIGN	—	—	PROPERTY LINE
⊟	HANDICAP PARKING STALL	—	—	RIGHT-OF-WAY LINE
⊠	GAS VALVE	—	—	ADJACENT PROPERTY LINE
⊡	FLOOD LIGHT	—	—	
⊢	IRRIGATION CONTROL VALVE	—	—	
⊣	1" IRON PIPE FOUND	—	—	
⊤	3/4" REBAR SET	—	—	

NOTE:
SURFACE INDICATIONS OF UTILITIES ALONG WITH DIGGER'S HOTLINE MARKINGS ON THE SURVEYED PARCEL HAVE BEEN SHOWN. SIZES AND ELEVATION OF UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON FIELD MEASUREMENTS OF VISIBLE STRUCTURES IN COMBINATION WITH AVAILABLE DATA PROVIDED TO EXCEL ENGINEERING. EXCEL ENGINEERING MAKES NO GUARANTEE THAT ALL THE EXISTING UTILITIES IN THE SURVEYED AREA HAVE BEEN SHOWN NOR THAT THEY ARE IN THE EXACT LOCATION INDICATED. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES CRITICAL TO CONSTRUCTION.

CURRENT ZONING: B-3 Midrise Office and Professional District
Zoning classification was not provided by the client as part of this survey as required by ALTA Table A, Item No. 6(a).



PROPOSED DEVELOPMENT FOR ELM GROVE HEIGHTS

ELM GROVE, WISCONSIN

LEGEND

<ul style="list-style-type: none"> 1000.00 PROPOSED SPOT ELEVATIONS (LOW LINE OF CURB UNLESS OTHERWISE SPECIFIED) 1000.00 EG EXISTING GRADE SPOT ELEVATIONS 1000.00 TR PROPOSED SPOT ELEVATIONS (TOP OF RETAINING WALL, TOP OF SURFACE GRADE AT BOTTOM OF WALL) 1000.00 BR PROPOSED SPOT ELEVATIONS (TOP OF CURB, BOTTOM OF CURB) 1000.00 TC PROPOSED SPOT ELEVATIONS (TOP OF WALK, BOTTOM OF WALK) 1000.00 BW EXISTING WATER VALVE IN BOX PROPOSED WATER VALVE IN BOX EXISTING WATER VALVE IN MANHOLE EXISTING WATER SERVICE VALVE EXISTING TELEPHONE MANHOLE EXISTING ROUND CATCH BASIN PROPOSED ROUND CATCH BASIN EXISTING SQUARE CATCH BASIN EXISTING CURB INLET PROPOSED CURB INLET EXISTING UTILITY POLE EXISTING UTILITY POLE WITH GUY WIRE EXISTING STREET LIGHT EXISTING TELEPHONE PEDESTAL EXISTING ELECTRIC PEDESTAL EXISTING ELECTRIC BOX EXISTING CABLE TV PEDESTAL PROPOSED DRAINAGE FLOW 1-1/4" REBAR SET WEIGHING 4.30 LB/FT. 3/4" REBAR SET WEIGHING 1.50 LB/FT. 1-1/4" REBAR FOUND 3/4" REBAR FOUND 2" IRON PIPE FOUND 1" IRON PIPE FOUND EXISTING FLOOD LIGHT SECTION CORNER PROPOSED APRON ENDWALL EXISTING MARSH AREA EXISTING DECIDUOUS TREE WITH TRUNK DIAMETER 	<ul style="list-style-type: none"> EXISTING CONIFEROUS TREE EXISTING SHRUB EXISTING STUMP SOIL BORING EXISTING WELL PROPOSED WELL EXISTING LIGHT POLE EXISTING SIGN CENTER LINE EXISTING HANDICAP PARKING STALL PROPOSED HANDICAP PARKING STALL EXISTING GAS VALVE EXISTING WOODED AREA EXISTING HEDGE EXISTING CHAINLINK FENCE EXISTING WOOD FENCE EXISTING BARBED WIRE FENCE PROPERTY LINE EXISTING GUARD RAIL EXISTING STORM SEWER AND MANHOLE PROPOSED STORM SEWER AND MANHOLE EXISTING SANITARY SEWER AND MANHOLE PROPOSED SANITARY SEWER AND MANHOLE EXISTING WATER LINE AND HYDRANT PROPOSED WATER LINE AND HYDRANT EXISTING OVERHEAD UTILITY LINE EXISTING UNDERGROUND FIBER OPTIC LINE EXISTING UNDERGROUND ELECTRIC CABLE EXISTING UNDERGROUND TELEPHONE CABLE EXISTING UNDERGROUND GAS LINE PROPOSED CURB AND GUTTER EXISTING CURB AND GUTTER GRADING/SEEDING LIMITS RIGHT-OF-WAY LINE RAILROAD TRACKS EXISTING GROUND CONTOUR PROPOSED GROUND CONTOUR
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CIVIL SHEET INDEX

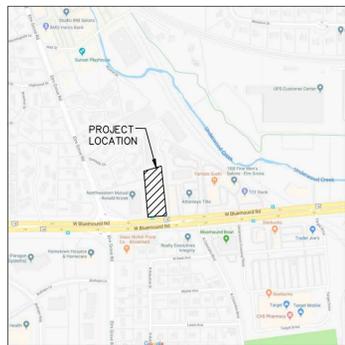
SHEET	SHEET TITLE
C1.0	CIVIL COVER AND SPECIFICATION SHEET
C1.1	EXISTING SITE AND DEMOLITION PLAN
C1.2	SITE PLAN
C1.3	GRADING AND EROSION CONTROL PLAN
C1.4	STORMWATER MANAGEMENT AND UTILITY PLAN
C1.5	DETAILS
PXP	SITE PHOTOMETRIC PLAN

TO OBTAIN LOCATION OF PARTICIPATING UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE 1-800-242-8511

TOLL FREE
TELEPHONE (414) 259-0947
TDD (FOR THE HEARING IMPAIRED) 1-800-542-2289

WISCONSIN STATUTE 182.017(1974) REQUIRES MINIMUM OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE



PROJECT LOCATION MAP

CONSTRUCTION STAKING SERVICES

CONSTRUCTION STAKING SHALL BE COMPLETED BY EXCEL ENGINEERING AS REQUESTED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. CONTRACTOR TO CONTACT RYAN WILGREEN AT 920-926-9800 TO GET STAKING PRICE TO INCLUDE IN BID TO OWNER. PAYMENT OF STAKING COSTS ABOVE AND BEYOND THE BASE PRICE DUE TO RESTAKING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR, NOT THE OWNER. CAD DRAWING FILES AND SURVEY CONTROL WILL NOT BE PROVIDED FOR STAKING PURPOSES.

GENERAL PROJECT NOTES

- ALL DRIVEWAYS AND CURB CUTS TO BE CONSTRUCTED ACCORDING TO LOCAL AND WISDOT REQUIREMENTS. CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL WORK IN ROW PERMITS.
- CONTRACTOR TO CONTACT EXCEL ENGINEERING TO COMPLETE AS-BUILT SURVEY OF STORMWATER FACILITIES FOLLOWING COMPLETION OF THE UNDERGROUND SYSTEM.

PLAN SPECIFICATIONS (BASED ON CSI FORMAT)

DIVISION 31 EARTH WORK

31 10 00 SITE CLEARING (DEMOLITION)

- CONTRACTOR SHALL CALL DIGGERS HOTLINE AND CONDUCT A PRIVATE UTILITY LOCATE AS REQUIRED TO ENSURE THAT ALL UTILITIES HAVE BEEN LOCATED BEFORE STARTING SITE DEMOLITION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
- DEMOLITION PLAN IS AN OVERVIEW OF DEMOLITION TO TAKE PLACE ON SITE. CONTRACTOR TO FIELD VERIFY EXISTING SITE CONDITIONS PRIOR TO BIDDING. CONTRACTOR SHALL REMOVE, REPLACE, OR DEMOLISH ALL ITEMS AS NEEDED DURING CONSTRUCTION.
- CONTRACTOR TO PROTECT EXISTING IMPROVEMENTS THAT ARE SCHEDULED TO REMAIN. ANY DAMAGE TO EXISTING FACILITIES SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.
- ALL CONCRETE NOTED TO BE REMOVED SHALL BE REMOVED TO THE NEAREST CONTROL JOINT.

31 20 00 EARTH MOVING

- CONTRACTOR SHALL CALL DIGGERS HOTLINE AND CONDUCT A PRIVATE UTILITY LOCATE AS REQUIRED TO ENSURE THAT ALL UTILITIES HAVE BEEN LOCATED BEFORE STARTING EXCAVATION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
- PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT FOR ALL EXCAVATION, GRADING, FILL AND BACKFILL WORK AS REQUIRED TO COMPLETE THE GENERAL CONSTRUCTION WORK. ALL EXCAVATION AND BACKFILL FOR ELECTRICALS AND MECHANICALS ARE THE RESPONSIBILITY OF THE RESPECTIVE CONTRACTOR.
- ALL ORGANIC TOPSOIL INSIDE THE BUILDING AREA, UNDER PAVED AREAS, AND SITE FILL AREAS SHALL BE REMOVED. PROOF ROLL SUBGRADES BEFORE PLACING FILL WITH HEAVY PNEUMATIC-TIRED EQUIPMENT, SUCH AS A FULLY-LOADED TANDEM AXLE DUMP TRUCK, TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. CONTRACTOR SHALL VERIFY TOPSOIL DEPTHS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REVIEW AND FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND ACCOUNT FOR EXISTING CONDITIONS PRIOR TO SUBMITTING BID FOR THE PROJECT. EXCESS MATERIALS SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY LOCAL ZONING REQUIREMENTS.
- PLACE AND COMPACT FILL MATERIAL IN LAYERS TO REQUIRED ELEVATIONS. UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT LAYER OR BACKFILL LAYER BEFORE COMPACTION AS REFERENCED TO ACHIEVE SPECIFIED DRY DENSITY. REMOVE AND REPLACE, OR SCARIFY AND AIR DRY, OTHERWISE SATISFACTORY SOIL MATERIAL THAT IS TOO WET TO COMPACT TO SPECIFIED DRY DENSITY.
- PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 6" IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4" IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
- COMPACT THE SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY ACCORDING TO ASTM D 1585. STANDARD PROCTER TEST. FILL MAY NOT BE PLACED ON FROZEN GROUND AND NO FROZEN MATERIALS MAY BE USED FOR BACK FILL. APPLY THE MORE STRINGENT REQUIREMENTS WHEN COMPARING BETWEEN THE FOLLOWING AND THE GEOTECHNICAL REPORT.
 - UNDER FOUNDATIONS, SUBGRADE, AND EACH LAYER OF BACKFILL OR FILL MATERIAL, TO NOT LESS THAN 95 PERCENT.
 - UNDER INTERIOR SLAB-ON-GRADE WHERE GROUNDWATER IS MORE THAN 3 FEET BELOW THE SLAB - PLACE A DRAINAGE COURSE LAYER OF 3/4" CRUSHED STONE, WITH 5% TO 12% FINES, PER THICKNESS INDICATED ON FOUNDATION PLANS ON PREPARED SUBGRADE. COMPACT THE SUBGRADE AND DRAINAGE COURSE TO NOT LESS THAN 95 PERCENT.
 - UNDER INTERIOR SLAB-ON-GRADE WHERE GROUNDWATER IS WITHIN 3 FEET OF THE SLAB SURFACE - PLACE A DRAINAGE COURSE LAYER OF CLEAN 3/4" CRUSHED STONE, WITH NO MORE THAN 5% FINES, PER THICKNESS INDICATED ON FOUNDATION PLANS ON PREPARED SUBGRADE. COMPACT THE SUBGRADE AND DRAINAGE COURSE TO NOT LESS THAN 95 PERCENT.
 - UNDER EXTERIOR CONCRETE AND ASPHALT PAVEMENTS - COMPACT THE SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL TO NOT LESS THAN 95 PERCENT.
 - UNDER LAWN OR UNPAVED AREAS - COMPACT SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL, TO NOT LESS THAN 95 PERCENT.

- CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS. IT IS SUGGESTED THAT THE GEOTECHNICAL FIRM USED TO PERFORM THE SUBSURFACE SOIL INVESTIGATION BE ENGAGED FOR THE FIELD QUALITY CONTROL TESTS. THE GEOTECHNICAL REPORT WAS PERFORMED BY AMERICAN ENGINEERING TESTING, INC.
- ALLOW THE TESTING AGENCY TO TEST AND INSPECT SUBGRADES AND EACH FILL OR BACKFILL LAYER. PROCEED WITH SUBSEQUENT EARTHWORK ONLY AFTER TEST RESULTS FOR PREVIOUSLY COMPLETED WORK COMPLY WITH REQUIREMENTS. PROVIDE ONE TEST FOR EVERY 2000 SQUARE FEET OF PAVED AREA OR BUILDING SLAB, ONE TEST FOR EACH SPREAD FOOTING, AND ONE TEST FOR EVERY 60 LINEAR FEET OF WALL STRIP FOOTING.
- WHEN THE TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS HAVE NOT ACHIEVED DEGREE OF COMPACTION SPECIFIED, SCARIFY AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS OBTAINED.
- THE BUILDING SITE SHALL BE GRADED TO THE FINISHED GRADE INDICATED ON THE PLANS. THE FINISHED GRADE SHALL BE GRADED TO WITHIN 0.10' OF REQUIRED EARTHWORK ELEVATIONS ASSUMING POSITIVE DRAINAGE IS MAINTAINED IN ACCORDANCE WITH THE GRADING PLAN.

31 30 00 EROSION CONTROL/STORMWATER MANAGEMENT

- THE DESIGN ENGINEER SHALL PREPARE A SITE SPECIFIC EROSION CONTROL AND A STORMWATER MANAGEMENT PLAN PURSUANT TO NR 216.46 AND NR 216.47. THE DESIGN ENGINEER SHALL ALSO FILE A CONSTRUCTION NOTICE OF INTENT WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES PURSUANT TO NR 216.43 OR TO AN AUTHORIZED LOCAL PROGRAM PURSUANT TO NR 216.415 TO OBTAIN COVERAGE UNDER THE GENERAL WIPES STORM WATER PERMIT.
- THE CONTRACTOR SHALL KEEP THE NOTICE OF INTENT PERMIT, APPROVED EROSION CONTROL AND STORMWATER MANAGEMENT PLANS, AND PLAN AMENDMENTS ON THE CONSTRUCTION SITE AT ALL TIMES UNTIL PERMIT COVERAGE IS TERMINATED.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL EROSION CONTROL PERMITS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING THE MONITORING, MAINTENANCE, AND REPORTING REQUIREMENTS OF NR 216.48. INSPECTIONS OF IMPLEMENTED EROSION AND SEDIMENT CONTROL, BEST MANAGEMENT PRACTICES MUST AT A MINIMUM BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS AFTER A PRECIPITATION EVENT OF 0.5" OR GREATER. A PRECIPITATION EVENT MAY BE CONSIDERED TO BE THE TOTAL AMOUNT OF PRECIPITATION RECORDED IN ANY CONTINUOUS 24-HOUR PERIOD. THE CONTRACTOR SHALL REPAIR OR REPLACE EROSION AND SEDIMENT CONTROL AS NECESSARY WITHIN 24 HOURS OF AN INSPECTION OR AFTER A DEPARTMENT NOTIFICATION WHERE REPAIR OR REPLACEMENT IS REQUESTED.
- THE CONTRACTOR SHALL MAINTAIN, AT THE CONSTRUCTION SITE, WEEKLY WRITTEN REPORTS OF ALL INSPECTIONS CONDUCTED. WISCONSIN DNR CONSTRUCTION SITE INSPECTION REPORT FORM 3400-187 SHALL BE USED. WEEKLY INSPECTION REPORTS SHALL INCLUDE ALL OF THE FOLLOWING:
 - THE DATE, TIME, AND EXACT LOCATION OF THE CONSTRUCTION SITE INSPECTION.
 - THE NAME OF THE INDIVIDUAL WHO PERFORMED THE INSPECTION.
 - AN ASSESSMENT OF THE CONDITION OF THE EROSION AND SEDIMENT CONTROL.
 - A DESCRIPTION OF ANY EROSION AND SEDIMENT CONTROL IMPLEMENTATION AND MAINTENANCE PERFORMANCE.
 - A DESCRIPTION OF THE PRESENT PHASE OF LAND DISTURBING CONSTRUCTION ACTIVITY AT THE CONSTRUCTION SITE.
- EROSION AND SEDIMENT CONTROL IMPLEMENTED DURING CONSTRUCTION SHALL STRICTLY COMPLY WITH THE GUIDELINES AND REQUIREMENTS SET FORTH IN WISCONSIN ADMINISTRATIVE CODE (W.A.C.) NR 151. THE STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES RUNOFF MANAGEMENT PERFORMANCE STANDARDS, TECHNICAL STANDARDS PUBLISHED BY THE WISCONSIN DNR SHALL ALSO BE UTILIZED TO IMPLEMENT THE REQUIRED PERFORMANCE STANDARDS. THE METHODS AND TYPES OF EROSION CONTROL WILL BE DEPENDENT ON THE LOCATION AND TYPE OF WORK INVOLVED. ALL SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION, AND INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL. BELOW IS A LIST OF EROSION AND SEDIMENT CONTROL, BEST MANAGEMENT PRACTICES TO ACHIEVE THE PERFORMANCE STANDARDS REQUIRED.
 - SILT FENCE SHALL BE PLACED ON SITE AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. SILT FENCE SHALL ALSO BE PROVIDED AROUND THE PERIMETER OF ALL SOIL STOCKPILES. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1066.
 - DITCH CHECKS SHALL BE PROVIDED TO REDUCE THE VELOCITY OF WATER FLOWING IN DITCH BOTTOMS. PLACE AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1062.

- STONE TRACKING PADS SHALL BE PLACED AT ALL CONSTRUCTION SITE ENTRANCES AND SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE CONSTRUCTION SITE. SEE THE EROSION CONTROL PLAN FOR LOCATION. THE AGGREGATE USED SHALL BE 3 TO 6 INCH CLEAR GRAD OR WASHED STONE, AND SHALL BE PLACED IN A LAYER AT LEAST 12 INCHES THICK. THE STONE SHALL BE UNDERLAIN WITH A WISDOT TYPE R GEOTEXTILE FABRIC. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE ACCESS POINT, AND SHALL BE A MINIMUM OF 30 FEET LONG. SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1057.
- STORM DRAIN INLET PROTECTION SHALL BE PROVIDED FOR ALL NEW AND DOWNSTREAM STORM CATCH BASINS AND CURB INLETS. TYPE B OR C PROTECTION SHOULD BE PROVIDED AND SHALL BE IN CONFORMANCE WITH WISCONSIN DNR TECHNICAL STANDARD 1060.
- DUST CONTROL MEASURES SHALL BE PROVIDED TO REDUCE OR PREVENT THE SURFACE AND AIRBORNE DUST DURING CONSTRUCTION. CONTROL MEASURES INCLUDE APPLYING MULCH AND ESTABLISHING VEGETATION, WATER SPRAYING, SURFACE ROUGHENING, APPLYING POLYMERS, SPRAY-ON TACKIFIERS, CHLORIDES, AND BARRIERS. SOME SITES MAY REQUIRE AN APPROACH THAT UTILIZES A COMBINATION OF MEASURES FOR DUST CONTROL. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1068.
- THE USE, STORAGE, AND DISPOSAL OF CHEMICALS, CEMENT, AND OTHER COMPOUNDS AND MATERIALS USED ON SITE SHALL BE MANAGED DURING THE CONSTRUCTION PERIOD TO PREVENT THEIR TRANSPORT BY RUNOFF INTO WATERS OF THE STATE.
- CONTRACTOR SHALL PROVIDE AN OPEN AGGREGATE CONCRETE TRUCK WASHOUT AREA ON SITE. CONTRACTOR TO ENSURE THAT CONCRETE WASHOUT SHALL BE CONTAINED TO THIS DESIGNATED AREA AND NOT BE ALLOWED TO RUN INTO STORM INLETS OR INTO THE OVERLAND STORMWATER DRAINAGE SYSTEM. WASHOUT AREA SHALL BE REMOVED UPON COMPLETION OF CONSTRUCTION. TEMPORARY SITE RESTORATION SHALL TAKE PLACE IN ALL DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH LAND DISTURBING ACTIVITIES WILL NOT BE PERFORMED FOR A PERIOD GREATER THAN 14 DAYS AND REQUIRES VEGETATIVE COVER FOR LESS THAN ONE YEAR. THIS TEMPORARY SITE RESTORATION REQUIREMENT ALSO APPLIES TO SOIL STOCKPILES. PERMANENT RESTORATION APPLIES TO AREAS WHERE PERENNIAL VEGETATIVE COVER IS NEEDED TO PERMANENTLY STABILIZE AREAS OF EXPOSED SOIL. PERMANENT STABILIZATION SHALL OCCUR WITHIN 3 WORKING DAYS OF FINAL GRADE OR FILL. MULCH AND VEGETATION SHALL BE IN GENERAL CONFORMANCE WITH TECHNICAL STANDARDS 1058 AND 1059 AND SHALL MEET THE SPECIFICATIONS FOUND IN THE LANDSCAPING AND SITE STABILIZATION SECTION OF THIS CONSTRUCTION DOCUMENT. ANY SOIL EROSION THAT OCCURS AFTER FINAL GRADING AND/OR FINAL STABILIZATION MUST BE CORRECTED IMMEDIATELY.
- IF SITE DEWATERING IS REQUIRED TO REMOVE SEDIMENT FROM CONSTRUCTION SITE STORMWATER PRIOR TO DISCHARGING OFF-SITE OR TO WATERS OF THE STATE, FOLLOW PROCEDURES FOUND IN TECHNICAL STANDARD 1061.
- ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION WORK OR A STORM EVENT SHALL BE CLEANED UP BY THE END OF EACH WORKING DAY. FLUSHING SHALL NOT BE ALLOWED.
- EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL THE AREA(S) SERVED HAVE ESTABLISHED VEGETATIVE COVER.
- ON THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL PROVIDE THE OWNER COPIES OF THE BEST MANAGEMENT PRACTICES HAVE BEEN REMOVED. THE CONTRACTOR SHALL FILE A CONSTRUCTION NOTICE OF TERMINATION WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES.
- AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL PROVIDE TWO COPIES OF THE EROSION CONTROL AND STORM WATER MANAGEMENT PLANS, AMENDMENTS TO PLANS, SUPPORTING PLAN DATA, AND CONSTRUCTION SITE EROSION CONTROL INSPECTION REPORTS. THE OWNER SHALL RETAIN THESE FOR A PERIOD OF 3 YEARS FROM THE DATE OF TERMINATING COVERAGE UNDER WIPES GENERAL PERMIT.
- ALL POST CONSTRUCTION STORMWATER MANAGEMENT BEST MANAGEMENT PRACTICES SHALL BE CONSTRUCTED BEFORE THE SITE HAS UNDERGONE FINAL STABILIZATION.

DIVISION 32 EXTERIOR IMPROVEMENTS

32 10 00 AGGREGATE BASE & ASPHALT PAVEMENT

- CONTRACTOR TO PROVIDE COMPACTED AGGREGATE BASE AND HOT MIX ASPHALT PAVEMENT WHERE INDICATED ON THE PLANS. ALL AGGREGATE PROVIDED MUST COMPLY WITH SPECIFICATION 305 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. PROVIDE HOT MIX ASPHALT MIXTURE TYPES PER SECTION 400 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. CONTRACTOR TO PROVIDE AGGREGATE BASE AND HOT MIX ASPHALT PAVEMENT TYPES AND DEPTHS AS INDICATED BELOW.

STANDARD ASPHALT PAVING	HEAVY ASPHALT PAVING
1-1/2" SURFACE COURSE (5 1/2 SB-28)	1-1/2" SURFACE COURSE (5 1/2 SB-28)
2" BINDER COURSE (3 1/2 SB-28)	2-1/2" BINDER COURSE (3 1/2 SB-28)
10" OF 1-1/4" CRUSHED AGGREGATE	12" OF 1-1/4" CRUSHED AGGREGATE
- CONTRACTOR TO COMPACT THE AGGREGATE BASE, ASPHALT BINDER COURSE, AND ASPHALT SURFACE COURSE TO AN AVERAGE DENSITY PER WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. THE CLEANOUT SHALL EXTEND JUST ABOVE THE SURFACE GRADE IN DESIGN SURFACE GRADES WITH POSITIVE DRAINAGE BEING MAINTAINED IN ACCORDANCE WITH DESIGN PLANS. A MINIMUM OF 1% SLOPE SHALL BE MAINTAINED IN ALL ASPHALT PAVEMENT AREA.
- HOT MIX ASPHALT CONSTRUCTION TO BE PROVIDED PER MORE STRINGENT REQUIREMENTS OF GEOTECHNICAL REPORT OR CONSTRUCTION DOCUMENTS.
- CONTRACTOR TO PROVIDE 4" WIDE (YELLOW OR WHITE) PAINTED STRIPING FOR PARKING STALLS, TRAFFIC LANES, AND NO PARKING AREAS. YELLOW OR WHITE PAINTED STRIPING SHALL ALSO BE PROVIDED FOR H.C. ACCESSIBLE SYMBOLS, TRAFFIC ARROWS, AND TRAFFIC MESSAGES.

32 20 00 CONCRETE AND AGGREGATE BASE

- CONTRACTOR TO PROVIDE CRUSHED AGGREGATE BASE AND CONCRETE WHERE INDICATED ON THE PLANS.
- ALL AGGREGATE PROVIDED MUST COMPLY WITH SECTION 305 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. ALL AGGREGATE PLACED MUST BE COMPACTED TO AN AVERAGE DENSITY PER WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- DESIGN AND CONSTRUCTION OF ALL CAST-IN-PLACE EXTERIOR CONCRETE FLAT WORK SHALL CONFORM TO ACI 330R-08.
- EXTERIOR CONCRETE FLAT WORK CONSTRUCTION TO BE PROVIDED PER MORE STRINGENT REQUIREMENTS OF THE GEOTECHNICAL REPORT OR THIS SPECIFICATION. CONCRETE FLAT WORK CONSTRUCTION IS AS FOLLOWS:
 - SIDEWALK CONCRETE - 4" OF CONCRETE OVER 4" OF 3/4" CRUSHED AGGREGATE BASE. CONSTRUCTION JOINTS SHALL CONSIST OF 1/8" DEEP TYPED JOINT WHERE INDICATED ON THE PLANS.
 - DRIVEWAY APRON CONCRETE - 6" OF CONCRETE OVER 6" OF 3/4" CRUSHED AGGREGATE. CONCRETE SHALL BE REINFORCED WITH #3@12 20X6 9 W/W.F. CONSTRUCTION JOINTS SHALL BE SAWCUT 1/5" IN DEPTH AND BE SPACED A MAXIMUM OF 15' ON CENTER.
 - SLUMP MIXES SHALL BE IN ACCORDANCE WITH ASTM C94
 - STRENGTH TO BE MINIMUM OF 4,000 PSI FOR EXTERIOR CONCRETE.
 - SLUMP SHALL NOT EXCEED 4" FOR EXTERIOR CONCRETE FLAT WORK.
 - SLUMP SHALL BE 2.5" OR LESS FOR SLURF-FORMED CURBS AND GUTTER.
 - SLUMP SHALL BE BETWEEN 1.5" TO 3" FOR EXTERIOR CURB AND GUTTER.
 - ALL EXTERIOR CONCRETE SHALL BE AIR ENTRAINED WITH 4% TO 7% AIR CONTENT, NO OTHER ADMIXTURES SHALL BE USED WITHOUT APPROVAL OF EXCEL ENGINEERING, INC. CALCIUM CHLORIDE SHALL NOT BE USED.
 - MAXIMUM AGGREGATE SIZE FOR ALL EXTERIOR CONCRETE SHALL BE 0.75 INCHES.
 - VERIFY EQUIPMENT CONCRETE PAD SIZES WITH RESPECTIVE CONTRACTORS. PADS SHALL HAVE FIBER-MESH 300 FIBERS AT A RATE OF 1.5 LBS/CU. YD. OR 6 X 6 W/4 X W/4 WELDED WIRE MESH WITH MINIMUM 1 INCH COVER. EQUIPMENT PADS SHALL BE 3.5 INCHES THICK WITH 1 INCH CHAMFER UNLESS SPECIFIED OTHERWISE. COORDINATE ADDITIONAL PAD REQUIREMENTS WITH RESPECTIVE CONTRACTOR.
 - ALL CONCRETE FLAT WORK SURFACES AND CONCRETE CURB FLOWLINE SHALL BE CONSTRUCTED TO WITHIN 0.05" OF DESIGN SURFACE AND FLOWLINE GRADERS ASSUMING POSITIVE DRAINAGE IS MAINTAINED IN ACCORDANCE WITH THE DESIGN PLANS.
 - CONCRETE FLAT WORK SHALL HAVE CONSTRUCTION JOINTS OR SAW CUT JOINTS PLACED AS INDICATED ON THE PLANS OR PER THIS SPECIFICATION. SAWCUTS SHALL BE DONE AS SOON AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER CONCRETE IS PLACED. CONCRETE CURBS AND GUTTER JOINTING SHALL BE PLACED EVERY 10' OR CLOSER (6" MIN.). ALL EXTERIOR CONCRETE SHALL HAVE A LIGHT BROOM FINISH UNLESS NOTED OTHERWISE. A UNIFORM COAT OF A HIGH SOLIDS CURING COMPOUND MEETING ASTM C309 SHOULD BE APPLIED TO ALL EXPOSED CONCRETE SURFACES. ALL CONCRETE IS TO BE CURED FOR 7 DAYS. EXTERIOR CONCRETE SHALL BE SEPARATED FROM BUILDINGS WITH CONTINUOUS 0.5 INCH FIBER EXPANSION JOINT AND/OR 0.25 INCH FIBER EXPANSION JOINT AT DECORATIVE MASONRY UNITS.
 - ALL REINFORCING BARS SHALL BE ASTM A615 GRADE 60. THICKNESS OF CONCRETE COVER OVER

- CONCRETE SHALL BE NOT LESS THAN 3" WHERE CONCRETE IS DEPOSITED AGAINST THE GROUND WITHOUT THE USE OF FORMS AND NOT LESS THAN 1.5" IN ALL OTHER LOCATIONS. ALL REINFORCING SHALL BE LAPPED 36 INCHES FOR UP TO #6 BARS OR 48 INCHES FOR UP TO #10 BARS OR AS NOTED ON THE DRAWINGS AND EXTENDED AROUND CORNERS WITH CORNER BARS. PLACING AND DETAILING OF STEEL REINFORCING AND REINFORCING SUPPORTS SHALL BE IN ACCORDANCE WITH CRSI AND ACI MANUAL AND STANDARD PRACTICES. THE REINFORCING SHALL NOT BE PAINTED AND MUST BE FREE OF GREASE, OIL, DIRT OR DEEP RUST WHEN PLACED IN THE WORK. ALL WELDED WIRE FABRIC SHALL MEET THE REQUIREMENTS OF ASTM A 185. WELDED WIRE FABRIC SHALL BE PLACED 2" FROM TOP OF SLAB, UNLESS INDICATED OTHERWISE.
- CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO SAMPLE MATERIALS, PERFORM TESTS, AND SUBMIT TEST REPORTS DURING CONSTRUCTION. TESTS WILL BE PERFORMED ACCORDING TO ACI 301. CAST AND LABORATORY CURE ONE SET OF FOUR STANDARD CYLINDERS FOR EACH COMPOSITE SAMPLE FOR EACH DAY POUR OF EACH CONCRETE MIX EXCEEDING 5 CU. YD. BUT LESS THAN 25 CU. YD. PLUS ONE SET FOR EACH ADDITIONAL 50 CU. YD. OR FRACTION THEREOF. PERFORM COMPRESSIVE STRENGTH TESTS ACCORDING TO ASTM C 39. TEST TWO SPECIMENS AT 7 DAYS AND TWO SPECIMENS AT 28 DAYS. PERFORM SLUMP TESTING ACCORDING TO ASTM C 143. PROVIDE ONE TEST AT POINT OF PLACEMENT FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIX. PERFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE.
- PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLOR OR HOT TEMPERATURES. IN HOT, DRY, AND WINDY WEATHER, APPLY AN EVAPORATION-CONTROL COMPOUND ACCORDING TO MANUFACTURER'S INSTRUCTIONS AFTER SCREEDING AND BULL-FLOATING, BUT BEFORE POWER FLOATING AND TROWELLING.
- LIMIT MAXIMUM WATER-CEMENTIOUS RATIO OF CONCRETE EXPOSED TO FREEZING, THAWING AND DEICING SALTS TO 0.45.
- TEST RESULTS WILL BE REPORTED IN WRITING TO THE DESIGN ENGINEER, READY-MIX PRODUCER, AND CONTRACTOR WITHIN 24 HOURS AFTER TESTS. REPORTS OF COMPRESSIVE STRENGTH TESTS SHALL CONTAIN THE PROJECT IDENTIFICATION NAME AND NUMBER, DATE OF CONCRETE PLACEMENT, NAME OF CONCRETE TESTING SERVICE, CONCRETE TYPE AND CLASS, LOCATION OF CONCRETE BATCH IN STRUCTURE, DESIGN COMPRESSIVE STRENGTH AT 28 DAYS, CONCRETE MIX PROPORTIONS AND MATERIALS, COMPRESSIVE BREAKING STRENGTH AND TYPE OF BREAK FOR BOTH 7-DAY TESTS AND 28-DAY TESTS.
- CONTRACTOR TO PROVIDE 4" WIDE (YELLOW OR WHITE) PAINTED STRIPING FOR PARKING STALLS, TRAFFIC LANES, AND NO PARKING AREAS. (YELLOW OR WHITE) PAINT MARKINGS SHALL ALSO BE PROVIDED FOR H.C. ACCESSIBLE SYMBOLS, TRAFFIC ARROWS, AND TRAFFIC MESSAGES.

32 30 00 LANDSCAPING AND SITE STABILIZATION

- TOPSOIL - CONTRACTOR TO PROVIDE A MINIMUM OF 6" OF TOPSOIL FOR ALL DISTURBED OPEN AREAS. REUSE SURFACE SOIL STOCKPILED ON SITE AND SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN QUANTITIES ARE INSUFFICIENT. PROVIDE SOIL ANALYSIS BY A QUALIFIED SOIL TESTING LABORATORY AS REQUIRED TO VERIFY THE SUITABILITY OF SOIL TO BE USED AS TOPSOIL, AND TO DETERMINE THE NECESSARY SOIL AMENDMENTS. TEST SOIL FOR PRESENCE OF ATRAZINE AND INFORM EXCEL ENGINEERING, INC. IF PRESENT PRIOR TO BIDDING PROJECT. TOPSOIL SHALL HAVE A PH RANGE OF 5.5 TO 6, CONTAIN A MINIMUM OF 5% PERCENT ORGANIC MATERIAL CONTENT, AND SHALL BE FREE OF STONES 1 INCH OR LARGER IN DIAMETER. ALL MATERIALS HARMFUL TO PLANT GROWTH SHALL ALSO BE REMOVED.
- TOPSOIL INSTALLATION - LOOSEN SUBGRADE TO A MINIMUM DEPTH OF 6 INCHES AND REMOVE STONES LARGER THAN 1" IN DIAMETER. ALSO REMOVE ANY STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER AND DISPOSE OF THEM OFF THE PROPERTY. SPREAD TOPSOIL TO A DEPTH OF 6" BUT NOT LESS THAN WHAT IS REQUIRED TO MEET FINISHED GRADES AFTER LIGHT ROLLING AND NATURAL SETTLEMENT. DO NOT SPREAD TOPSOIL IF SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET. GRADE PLANTING AREAS TO A SMOOTH UNIFORM SURFACE. PLANE WITH LOOSE, UNIFORM FINE TEXTURE. GRADE TO WITHIN 0.05 FEET OF FINISHED GRADE ELEVATION.
- EROSION MATTING:
 - CONTRACTOR TO PROVIDE EROSION CONTROL MATTING (NORTH AMERICAN GREEN S150) OR EQUIVALENT ON ALL SLOPES THAT ARE 4:1 AND GREATER OUTSIDE OF STORMWATER CONVEYANCE SWALES AND STORMWATER MANAGEMENT BASINS.
 - CONTRACTOR TO PROVIDE EROSION MATTING (NORTH AMERICAN GREEN C125) OR EQUIVALENT IN ALL SWALE BOTTOMS AND SIDE SLOPES AS WELL AS STORMWATER MANAGEMENT BASIN BOTTOMS AND SIDE SLOPES AS REQUIRED.
- RIE PIP - ALL RIP RAP ASSOCIATED WITH STORMWATER MANAGEMENT AND STORMWATER CONVEYANCE, AS DELINEATED ON THE PLANS, SHALL BE CONSTRUCTED WITH THE TOP OF RIP RAP MATCHING THE PROPOSED ADJACENT GRADE ELEVATIONS. PLACEMENT OF RIP RAP ABOVE THE PROPOSED ADJACENT GRADE ELEVATIONS IS NOT ACCEPTABLE. ALL RIP RAP SHALL BE PLACED OVER A WIRE FILTER FABRIC PER SECTION 645 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURAL CONSTRUCTION.

DIVISION 33 UTILITIES

33 10 00 SITE UTILITIES

- CONTRACTOR TO FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES ON SITE. CONTRACTOR TO VERIFY PIPE LOCATIONS, SIZES, AND DEPTHS AT POINT OF PROPOSED CONNECTIONS AND VERIFY PROPOSED UTILITY ROUTES ARE CLEAR PER CODES OF ALL EXISTING UTILITIES AND OTHER OBSTRUCTIONS PRIOR TO CONSTRUCTION. COSTS INCURRED FOR FAILURE TO DO SO SHALL BE THE CONTRACTORS RESPONSIBILITY.
- ALL PROPOSED SANITARY PIPE SHALL BE SDR-35 PVC.
- CLEANOUTS SHALL BE PROVIDED FOR THE SANITARY SERVICE AT LOCATIONS INDICATED ON THE UTILITY PLAN. THE CLEANOUT SHALL CONSIST OF A COMBINATION WYE FITTING IN LINE WITH THE SANITARY SERVICE WITH THE CLEANOUT LEG OF THE COMBINATION WYE FACING STRAIGHT UP. THE CLEANOUT SHALL CONSIST OF A 6" VERTICAL PVC PIPE WITH A WATER TIGHT REMOVABLE CLEANOUT PLUS: AN 8" PVC FROST SLEEVE SHALL BE PROVIDED. THE BOTTOM OF THE FROST SLEEVE SHALL TERMINATE 12" ABOVE THE TOP OF THE SANITARY LATERAL OR AT LEAST 6" BELOW THE PREDICTED FROST DEPTH, WHICHEVER IS DEEPER. THE CLEANOUT SHALL EXTEND JUST ABOVE THE SURFACE GRADE IN LAWN OR LANDSCAPE AREAS WITH THE FROST SLEEVE TERMINATING AT THE GRADE SURFACE. THE CLEANOUT SHALL EXTEND TO 4 INCHES BELOW SURFACE GRADE IN PAVED SURFACES WITH A ZURN (Z-1474-N) HEAVY DUTY CLEANOUT HOUSING PLACED OVER THE TOP OF THE CLEANOUT FLUSH WITH THE SURFACE GRADE. IN PAVED SURFACES, THE FROST SLEEVE SHALL TERMINATE IN A CONCRETE PAD AT LEAST 6" THICK AND EXTENDING AT LEAST 9" FROM THE SLEEVE ON ALL SIDES, SLOPING AWAY FROM THE SLEEVE. THE CLEANOUT HOUSING SHALL BE CONSTRUCTED PER MANUFACTURERS REQUIREMENTS.
- ALL PROPOSED WATER PIPES SHALL BE 200 PSI FOR PIPE DIAMETERS OF 4" OR LESS, 200 PSI FOR PIPE DIAMETERS OF 6" THROUGH 12", AND 200 PSI FOR PIPE DIAMETERS OF 14" THROUGH 36". 6" MINIMUM COVER SHALL BE PROVIDED OVER ALL WATER PIPING UNLESS OTHERWISE SPECIFIED.
- ALL PROPOSED HDPE STORM PIPE SHALL BE IN ACCORDANCE WITH ASTM F2048. ALL CONCRETE STORM PIPING SHALL BE IN ACCORDANCE WITH ASTM C14 AND ASTM C76. SEE UTILITY PLANS FOR ALL STORM PIPE MATERIAL TYPES TO BE USED. PIPE SHALL BE PLACED MIN. 3" HORIZONTALLY FROM FOUNDATION WALLS.
- SANITARY, STORM, AND WATER UTILITY PIPE INVERTS SHALL BE CONSTRUCTED WITHIN 0.10' OF DESIGN INVERT ELEVATIONS ASSUMING PIPE SLOPE AND SEPARATION IS MAINTAINED PER THE UTILITY DESIGN PLANS AND STATE REQUIREMENTS.
- SITE UTILITY CONTRACTOR SHALL RUN SANITARY SERVICE TO A POINT WHICH IS A MINIMUM OF 6' FROM THE EXTERIOR WALL OF THE FOUNDATION. SITE UTILITY CONTRACTOR SHALL RUN WATER SERVICE TO A POINT WITHIN THE FOUNDATION SPECIFIED BY THE PLUMBING PLANS. CONTRACTOR TO CUT AND CAP WATER SERVICE 12" ABOVE FINISHED FLOOR ELEVATION.
- ALL UTILITIES SHALL BE INSTALLED WITH PLASTIC COATED TRACER WIRE (10 TO 14 GAUGE SOD COPPER, OR COPPER COATED STEEL WIRE). PLASTIC WIRE MAY BE TAPED TO PLASTIC WATER OR SEWER PIPE. IF ATTACHED, THE TRACER WIRE SHALL BE SECURED EVERY 6" TO 20 FEET AND AT ALL BENDS. TRACER WIRE SHALL HAVE ACCESS POINTS AT LEAST EVERY 300 FEET.
- ALL UTILITIES SHALL BE INSTALLED PER STATE, LOCAL, AND INDUSTRY STANDARDS. WATER, SANITARY, AND STORM SEWER SHALL BE INSTALLED PER STANDARD SPECIFICATION FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. THE DESIGN ENGINEER SHALL BE RESPONSIBLE FOR OBTAINING STATE PLUMBING REVIEW APPROVAL. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL OTHER PERMITS REQUIRED TO INSTALL WATER, SANITARY AND STORM SEWER.
- SEE PLANS FOR ALL OTHER UTILITY SPECIFICATIONS AND DETAILS.

CONSTRUCTION SEQUENCE

PHASE	TYPE OF ACTION
1. PRE-CONSTRUCTION ACTION	<ol style="list-style-type: none"> CONTRACTOR TO CALL DIGGERS HOTLINE AT A MINIMUM OF 3 DAYS PRIOR TO CONSTRUCTION. PLACE ALL SILT FENCE. CONSTRUCT TRACKING STONE ENTRANCES AND ANY TEMPORARY CONSTRUCTION ROADWAYS. PERMANENT STORMWATER CONVEYANCE SYSTEMS. CONSTRUCT TEMPORARY TEMPORARY STORMWATER CONVEYANCE SYSTEMS AS NEEDED. STABILIZE ALL TEMPORARY AND PERMANENT EROSION CONTROL AND STORMWATER CONVEYANCE SYSTEMS BEFORE TOPSOIL CAN BE STRIPPED.
2. CONSTRUCTION ACTION	<ol style="list-style-type: none"> SITE DEMOLITION AS REQUIRED. STRIP AND RELOCATE TOPSOIL TO THE DESIGNATED TOPSOIL STOCKPILE, LOCATION BY OWNER. BEGIN MASS EARTH WORK FOR THE BUILDING PAD AND PAVEMENT AREAS. DIG AND POUR ALL BUILDING FOOTINGS. CONSTRUCT UNDERGROUND STORMWATER SYSTEMS, ANY REMAINING STORMWATER CONVEYANCE SYSTEMS, AND INSTALL ALL OTHER UTILITIES ON SITE. PLACE GRAVEL FOR ALL PROPOSED PAVEMENT AREAS, INCLUDING FIRE LANES. TOPSOIL, SEED, AND MULCH ALL DISTURBED AREAS OUTSIDE THE BUILDING AND PROPOSED PAVEMENT AREAS. CONSTRUCT BUILDING. PAVE DRIVEWAYS AND PARKING AREAS. TOPSOIL, SEED, AND MULCH ALL OTHER DISTURBED AREAS. PLACE EROSION MATTING AND RIP RAP.
3. POST CONSTRUCTION ACTION	<ol style="list-style-type: none"> CONTRACTOR TO REMOVE TEMPORARY EROSION CONTROL MEASURES UPON SITE STABILIZATION. SEE THE POST CONSTRUCTION MAINTENANCE PLAN FOR PERMANENT STORMWATER MANAGEMENT SYSTEMS.

CONTRACTOR TO FOLLOW THE EROSION CONTROL SPECIFICATIONS FOR CONSTRUCTION EROSION CONTROL INSPECTION AND MAINTENANCE.

ALL EROSION CONTROL CALLED OUT ON C1.3 SHALL BE INSTALLED PRIOR TO THE START OF THE CONSTRUCTION ACTION

ARCHITECTS • ENGINEERS • SURVEYORS

100 CAMELOT DRIVE
FOND DU LAC, WI 54935
PHONE: (920) 926-9800
WWW.EXCELENGINEER.COM

PROJECT INFORMATION

PROJECT NUMBER 1818280

PROPOSED DEVELOPMENT FOR:
ELM GROVE HEIGHTS
13040 W. BLUEMOUND ROAD • ELM GROVE, WI

PROFESSIONAL SEAL

JASON DAYE
38777-006
FOND DU LAC, WISCONSIN

PRELIMINARY DATES

DEC. 13, 2018
MAR. 4, 2019

NOTE: SURFACE INDICATIONS OF UTILITIES ALONG WITH DIGGER'S HOTLINE MARKINGS ON THE SURVEYED PARCEL HAVE BEEN SHOWN. SIZES AND ELEVATION OF UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON FIELD MEASUREMENTS OF VISIBLE STRUCTURES IN COMBINATION WITH AVAILABLE DATA PROVIDED TO EXCEL ENGINEERING. EXCEL ENGINEERING MAKES NO GUARANTEE THAT ALL THE EXISTING UTILITIES IN THE SURVEYED AREA HAVE BEEN SHOWN NOR THAT THEY ARE IN THE EXACT LOCATION INDICATED. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES CRITICAL TO CONSTRUCTION.

NOTE: PROPERTY LINES AND EASEMENTS SHOWN ON THIS PLAN WERE DRAFTED FROM INFORMATION CONTAINED IN TITLE COMMITMENT NO. NCS-897909-MKE, BY FIRST AMERICAN TITLE INSURANCE COMPANY, DATED MARCH 30, 2018.

PROJECT INFORMATION
 PROJECT NUMBER 1818280

PROPOSED DEVELOPMENT FOR:
ELM GROVE HEIGHTS
 13040 W. BLUEMOUND ROAD • ELM GROVE, WI

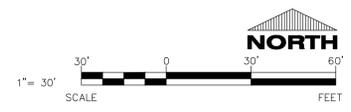
PROFESSIONAL SEAL

PRELIMINARY DATES
 MAR. 4, 2019

NOT FOR CONSTRUCTION

SHEET INFORMATION
 EXISTING SITE AND DEMOLITION PLAN
 SHEET NUMBER

C1.1



SITE INFORMATION:

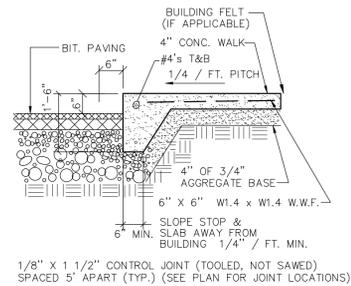
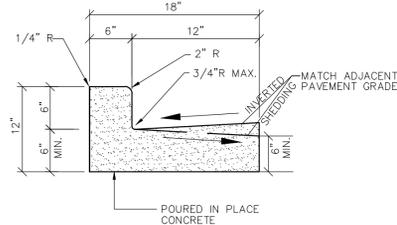
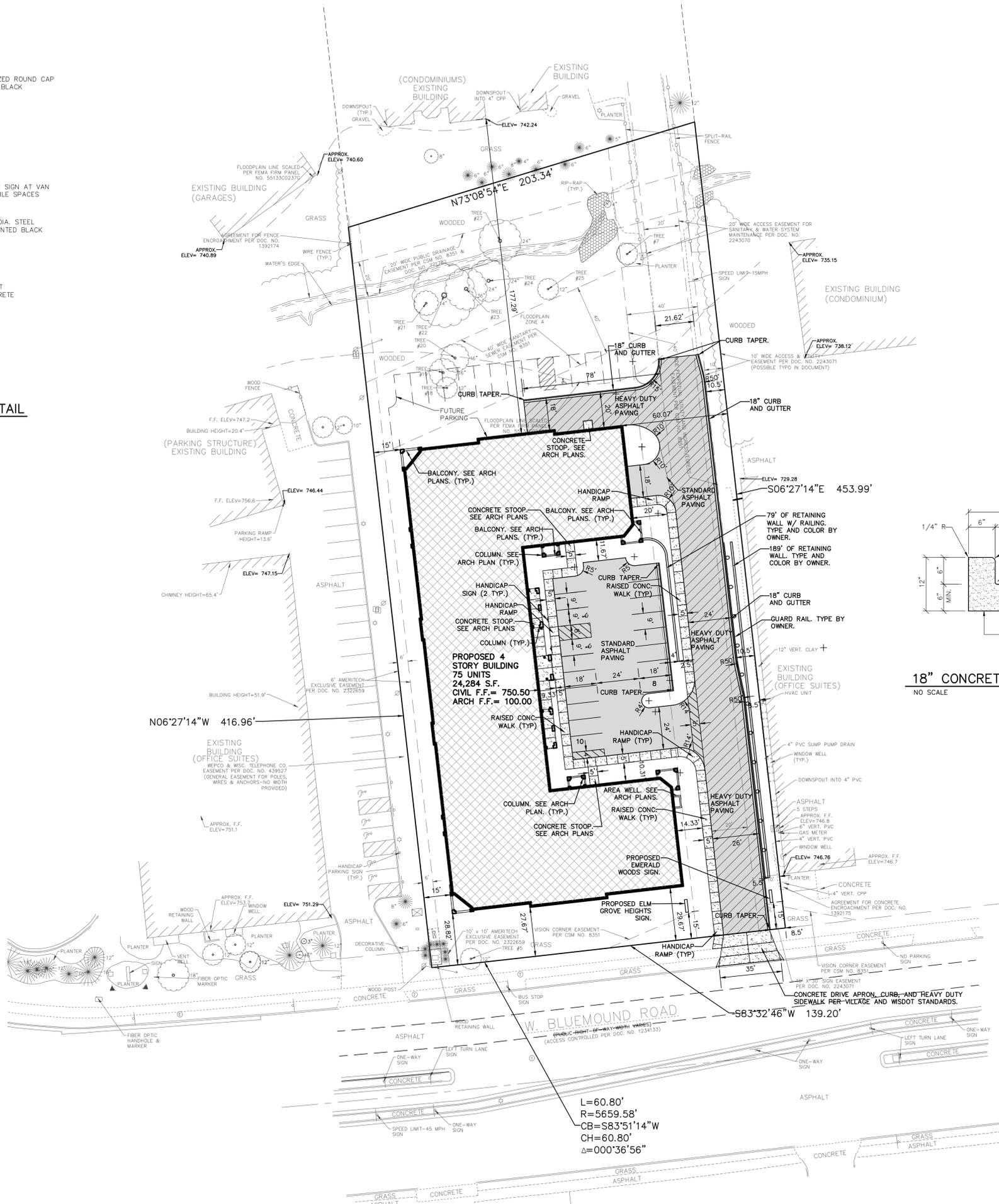
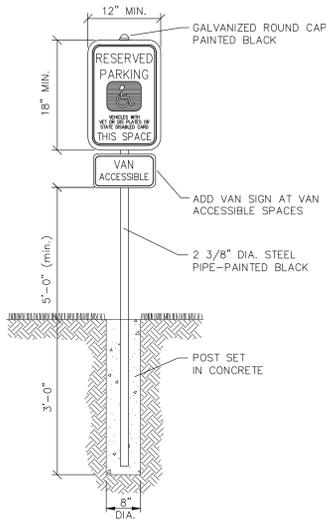
PROPERTY AREA: AREA = 87,094 S.F. (2.0 ACRES).
EXISTING ZONING: B-3 (MID-RISE OFFICE & PROFESSIONAL DISTRICT)
PROPOSED ZONING: RM-2 WITH PLANNED DEVELOPMENT OVERLAY
PROPOSED USE: SENIOR APARTMENTS
AREA OF SITE DISTURBANCE: 61,900 S.F. (1.42 ACRES)
PROPOSED BUILDING HEIGHT 51'-6" (MAX. HEIGHT 36')
PARKING REQUIRED: 1.1 SPACES PER DWELLING UNIT (83 SPACES REQ.)
PARKING PROVIDED: 18 SPACES ABOVE GRADE (2 H.C. ACCESSIBLE)
71 STALLS UNDER PROPOSED BUILDING (3 H.C. ACCESSIBLE)
89 STALLS TOTAL (1.19 STALLS/ UNIT)

EXISTING SITE DATA

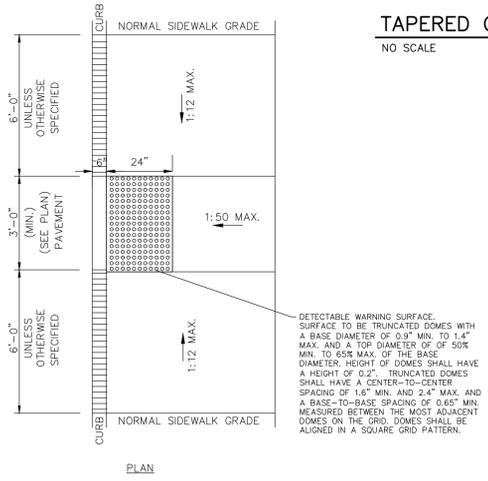
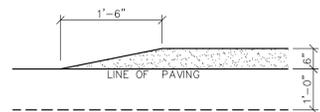
	AREA (AC)	AREA (SF)	RATIO
PROJECT SITE	2.00	87,094	
BUILDING FLOOR AREA	0.00	0	0.0%
PAVEMENT (ASP. & CONC.)	0.50	21,892	25.1%
TOTAL IMPERVIOUS	0.50	21,892	25.1%
LANDSCAPE/ OPEN SPACE	1.50	65,202	74.9%

PROPOSED SITE DATA

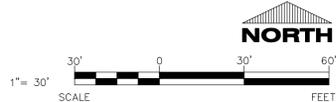
	AREA (AC)	AREA (SF)	RATIO
PROJECT SITE	2.00	87,094	
BUILDING FLOOR AREA	0.57	24,750	28.4%
PAVEMENT (ASP. & CONC.)	0.53	23,299	26.8%
TOTAL IMPERVIOUS	1.10	48,049	55.2%
LANDSCAPE/ OPEN SPACE	0.90	39,045	44.8%

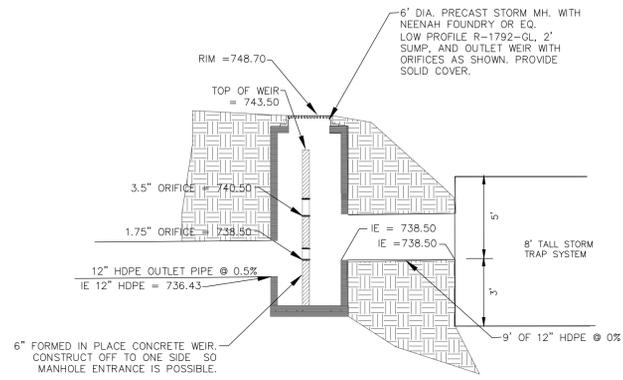


NOTE:
ALL SIDEWALKS SHALL MEET ADAAG STANDARDS

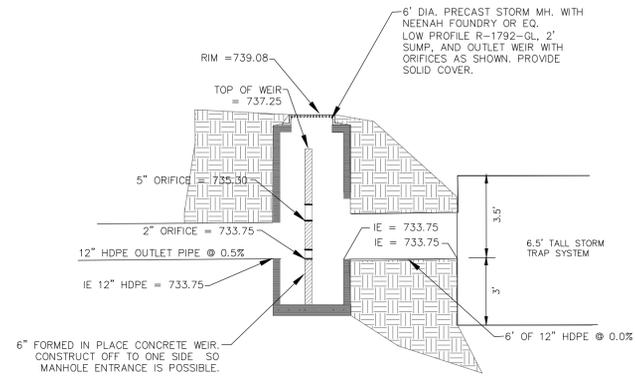


NOTE:
ALL RAMPS SHALL MEET ADAAG STANDARDS

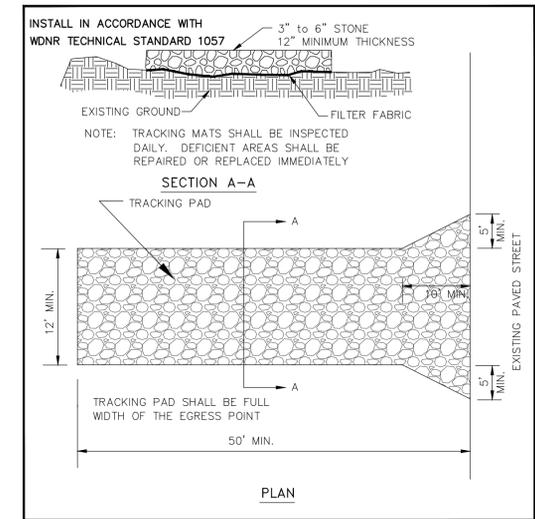




OUTLET STRUCTURE A DETAIL
NO SCALE



OUTLET STRUCTURE B DETAIL
NO SCALE



TRACKPAD DETAILS
NO SCALE

PROPOSED DEVELOPMENT FOR:
ELM GROVE HEIGHTS
 13040 W. BLUEMOUND ROAD • ELM GROVE, WI

PROFESSIONAL SEAL

PRELIMINARY DATES

MAR. 4, 2019

NOT FOR CONSTRUCTION

SITE INFORMATION

USDA PLANT HARDINESS ZONE	5b (-15 to -10 Degrees F)
LOT ZONING	RM-2 w/ Planned Development Overlay
LOT AREA	87,094 SQ. FT. (2.0 Acres)
SITE BUILDING AREA	24,726 SQ. FT.
IMPERVIOUS (Paved) AREA	
TOTAL IMPERVIOUS AREA	
TOTAL GREENSPACE	
SITE LANDSCAPE PERCENTAGE	
TOTAL PARKING STALLS	18 STALLS Above Grade

EXISTING CONDITIONS GENERAL NOTES

- INFORMATION PERTAINING TO EXISTING CONDITIONS GIVEN ON THESE LANDSCAPE DRAWINGS REPRESENTS TO THE BEST OF OUR KNOWLEDGE THE ACTUAL EXISTING FIELD CONDITIONS. INSITE LANDSCAPE DESIGN, INC. MAKES NO WARRANTY AS TO THEIR ACCURACY. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS IMPERATIVE TO THEIR NEW WORK. REPORT ANY DISCREPANCIES BETWEEN THE DRAWINGS AND FIELD CONDITIONS TO THE LANDSCAPE ARCHITECT FOR REVIEW. ANY WORK PERFORMED PRIOR TO RESOLUTION OF DISCREPANCIES BY THE LANDSCAPE ARCHITECT IS SUBJECT TO REMOVAL AND REPLACEMENT AT NO ADDITIONAL COST TO THE CONTRACTOR.
- THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THIS PLAN ARE APPROXIMATE. THERE MAY BE UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA OF DISTURBANCE THAT ARE NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES.
- VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AND ALIGNMENT OF WALLS. BRING ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECTS ATTENTION PRIOR TO FABRICATION / CONSTRUCTION BEGINS.
- VERIFY LOCATION OF ACCESS PANELS w/ MECHANICAL AND ELECTRICAL EQUIPMENT FOR ACCESSIBILITY OF MECHANICAL & ELECTRICAL ITEMS.
- INSITE LANDSCAPE DESIGN, INC. ASSUMES NO RESPONSIBILITY FOR DAMAGES, LIABILITY OR COSTS RESULTING FROM CHANGES OR ALTERATIONS MADE TO THIS PLAN WITHOUT THE EXPRESSED WRITTEN CONSENT OF INSITE LANDSCAPE DESIGN, INC.

DESIGN COMPLIANCE: THIS LANDSCAPE PLAN IS ACCURATE AND IN COPLAINACE WITH THE VILLAGE OF ELM GROVE LANDSCAPE REQUIREMENTS SET FOR IN SECTION 335-88 LANDSCAPE AND SCREENING

CONTRACTOR NOTE: THE LANDSCAPE CONTRACTOR/GENERAL CONTRACTOR ARE RESPONSIBLE TO INSTALL THE LANDSCAPE AS PER THE APPROVED PLAN. IF ANY CHANGES OR DEVIATIONS ARE MADE FROM THE THIS APPROVED PLAN, THE LANDSCAPE CONTRACTOR / GENERAL CONTRACTOR ARE RESPONSIBLE FOR UPDATING THE PLANS ACCORDINGLY AND SUBMITTING THOSE REVISED PLANS FOR APPROVAL AND "SIGN OFF" WITH THE VILLAGE OF ELM GROVE. THE LANDSCAPE CONTRACTOR / GENERAL CONTRACTOR ARE ALSO RESPONSIBLE FOR VERIFYING THAT ANY PLANT MATERIAL SUBSTITUTIONS OR MODIFICATIONS THAT ARE MADE TO THE APPROVED LANDSCAPE DESIGN DOCUMENTS WILL NOT CHANGE OR ALTER ANY OF THE REQUIRED SUPPORTING LANDSCAPE REQUIREMENT CALCULATIONS. UPON COMPLETION OF THE CONSTRUCTION PROJECT AND FILE THAT AFFIDAVIT WITH THE VILLAGE OF ELM GROVE

LANDSCAPE PLAN GENERAL NOTES

1.* *PLANT MATERIAL SHOWN ON LANDSCAPE PLAN IS DEPICTED AT MATURE GROWTH. * *

- AT LEAST SEVENTY-TWO HOURS PRIOR TO ANY EXCAVATION, CONTRACTOR SHALL VERIFY UTILITY LOCATIONS AS GIVEN BY THE ELECTRIC, GAS, TELEPHONE, WATER, SEWER, AND CABLE TELEVISION COMPANIES, UTILITIES OR ENTITIES. REVIEW WITH OWNER'S REPRESENTATIVE SITE MECHANICAL, SITE ELECTRICAL AND LIGHTING, SITE GRADING AND DRAINAGE, SITE IRRIGATION AND ALL OTHER DRAWINGS PERTAINING TO UNDERGROUND UTILITY LOCATIONS. RECORD SET OF INFORMATION THE SAME AS IN POSSESSION OF OWNER'S REPRESENTATIVE. ALSO REVIEW OWNER'S "MARK SETS" OF ALL OF THESE DRAWINGS IN POSSESSION OF THE CONTRACTOR OR OWNER. MARK ALL SUCH UTILITIES ON THE SITE PRIOR TO COMMENCING. COORDINATE WITH OWNER BEFORE AND DURING CONSTRUCTION. REPAIR ANY DAMAGE TO ANY SYSTEM THAT IS CAUSED BY LANDSCAPE CONTRACTOR AT NO COST TO OWNER.
- ALL PLANTINGS SPECIFIED FOR THE ELM GROVE HEIGHTS PROJECT PLANTING TABLES SHALL COMPLY WITH STANDARDS AS DESCRIBED IN AMERICAN STANDARD OF NURSERY STOCK ANSI Z60.1 2014 AND ANSI STANDARDS FOR PLANTING 2012.
- ALL DEVIATIONS FROM THE APPROVED ELM GROVE HEIGHTS PROJECT PLANS SHALL BE NOTED ON THE RECORD DRAWINGS BY THE CONTRACTOR AND MAY BE EXECUTED ONLY WITH PRIOR APPROVAL FROM THE LANDSCAPE ARCHITECT AND OWNER'S REPRESENTATIVE. VERBAL AGREEMENTS OR REVISIONS WITHOUT A CHANGE ORDER WILL NOT BE RECOGNIZED BY LANDSCAPE ARCHITECT AND OWNER.
- ALL PLANTS MUST BE BID AND SELECTED PER THE SPECIES SPECIFIED ON THE PLANS. THE SIZES OF PLANT MATERIAL LISTED HEREIN IS A MINIMUM ACCEPTABLE SIZE. ADDITIONALLY, IF EXCESSIVE PRUNING REDUCES THE CROWN THE PLANT SHALL BE REPLACED.
- PROTECT PUBLIC FROM CONSTRUCTION WITH BARRIERS AND BARRICADES.
- ALL AREAS THAT WERE DISTURBED DURING CONSTRUCTION AND AREAS NOT COVERED WITH PAVEMENT, BUILDING, PLANTING BEDS, OR TREE PITS ARE TO BE TOPSOILED 3" DEEP (MIN.) AND SHALL BE SODDED/SEEDED WITH SPECIFIED LAWN GRASS. LANDSCAPE CONTRACTOR SHALL INCLUDE COST PER SQUARE YARD FOR ADDITIONAL SEED OPERATIONS AS MAY BE POSSIBLY REQUIRED TO REESTABLISH ADJACENT TURF GRASS AREAS WHICH MAY BECOME DAMAGED DURING THE CONSTRUCTION PROCESS OR TO REPAIR DAMAGE DONE BY OTHERS.
- CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL MATERIALS, TOOLS, EQUIPMENT, LABOR, AND PLANTS NECESSARY FOR PROPER PLANTING AND INSTALLATION OF ALL LANDSCAPE MATERIAL.
- QUANTITIES ON PLANT MATERIALS LIST ARE FOR CONVENIENCE OF BIDDING ONLY. CONTRACTOR IS RESPONSIBLE FOR ALL PLANTS SHOWN ON LANDSCAPE PLANS AND COVERAGE OF ALL AREAS DELINEATED. THE PLANS ARE TO SUPERSEDE THE PLANT LIST IN ALL CASES.
- CONTRACTOR IS RESPONSIBLE FOR ALL ESTIMATING AND BIDDING. ALL AREAS, QUANTITIES MATERIALS SHOULD BE FIELD VERIFIED WITH SITE CONDITIONS.
- WHERE DISCREPANCIES OCCUR BETWEEN THE LANDSCAPE PLANS AND/OR ARCHITECTURAL AND/OR THE CIVIL DRAWINGS (AND ANY OTHER SITE DRAWINGS) THE DISCREPANCIES MUST BE BROUGHT TO THE LANDSCAPE ARCHITECTS ATTENTION FOR COORDINATION AND RESOLUTION.
- ALL DISEASED, NOXIOUS OR INAPPROPRIATE MATERIALS SHALL BE REMOVED FROM THE PROPOSED SITE PRIOR TO THE START OF CONSTRUCTION AND DURING THE MAINTENANCE PERIOD.
- GENERAL CONTRACTOR SHALL LEAVE THE SITE FREE OF CONSTRUCTION DEBRIS.
- ALL LAWN AND PLANTING AREAS SHALL SLOPE TO DRAIN A MINIMUM OF 2% UNLESS NOTED OTHERWISE AND REVIEWED WITH OWNER'S REPRESENTATIVE FOR FINAL APPROVAL.
- FINISH GRADES FOR SHRUB AND GROUND COVER AREAS SHALL BE HELD 1" BELOW TOP OF ADJACENT PAVEMENTS AND CURBS, UNLESS NOTED OTHERWISE ON THE PLANS. REFER TO LSP1.2 FOR FURTHER INFORMATION.
- ALL PERENNIAL, ANNUAL AND GROUND COVER AREAS TO RECEIVE A BLEND OF ORGANIC SOIL AMENDMENTS PRIOR TO PLANTING. TILL THE FOLLOWING MATERIALS INTO EXISTING TOPSOIL TO A DEPTH OF APPROXIMATELY 8". A DEPTH OF 12" IN TREE PITS. PROPORTIONS AND QUANTITIES MAY REQUIRE ADJUSTMENT DEPENDING ON THE CONDITION OF EXISTING SOIL. REFER TO LSP1.2 FOR FURTHER INFORMATION.
PER EVERY 100 SQUARE FEET ADD:
ONE - 2 CUBIC FOOT BALE OF PEAT MOSS, 2 POUNDS OF 5-10-5 GARDEN FERTILIZER, 1/4 CUBIC YARD OF COMPOSTED MANURE OR OTHER COMPOSTED, ORGANIC MATERIAL
- ALL SHRUBS TO BE POCKET PLANTED WITH A 50/50 MIX OF COMPOSTED, ORGANIC MATERIAL AND EXISTING SOIL. INSTALL TOPSOIL INTO ALL BEDS AS NEEDED TO ACHIEVE PROPER GRADE. REMOVE ALL EXCESSIVE GRAVEL, CLAY AND STONES. REFER TO LSP1.2 FOR FURTHER INFORMATION.
- PLANT ALL TREES SLIGHTLY HIGHER THAN FINISHED GRADE AT ROOT FLARE. BACK FILL HOLE WITH 2/3 EXISTING TOPSOIL AND ORGANIC SOIL AMENDMENTS SPECIFIED IN NOTE 15. AVOID ANY AIR POCKETS. DISCARD ANY GRAVEL CLAY OR STONES. REFER TO LSP1.2 FOR FURTHER INFORMATION.
- ALL TREES TO BE INSTALLED, STAKED AND GUYED ACCORDING TO DETAILS. REFER TO ANSI STANDARDS FOR PLANTING 2012 AND DETAILS ON LSP1.2 FOR FURTHER INFORMATION.
- PROVIDE A 4'-0" - 5'-0" DIAMETER MULCH RING ALL LAWN TREES.
- ALL PLANTINGS TO BE WATERED AT THE TIME OF PLANTING, THROUGHOUT CONSTRUCTION AND UPON COMPLETION OF PROJECT AS REQUIRED.
- WHERE SPECIFIED, ALL PLANT BEDS, PITS AND TREE RINGS ARE TO RECEIVE A MINIMUM OF 2-3" DRESSING OF SHREDED HARDWOOD OAK BARK MULCH SHAVINGS FREE OF GROWTH, WEEDS, FOREIGN MATTER DETRIMENTAL TO PLANT LIFE OR GERMINATION INHIBITING INGREDIENTS. LANDSCAPE CONTRACTOR TO PROVIDE A SAMPLE TO OWNER FOR APPROVAL. CONTRACTOR TO TAKE CARE WITH INSTALLATION NOT TO DAMAGE OR COVER PLANTS. REFER TO LSP1.2 FOR FURTHER INFORMATION.
- LAWN INSTALLATION: CONTRACTOR TO FURNISH AND PREPARE TOPSOIL (3" MIN) AND SEED BED (REMOVE ALL STONES 1" OR LARGER), APPLY STARTER FERTILIZER AND SEED UNIFORMLY. PROVIDE A MULCH COVERING SUITABLE TO GERMINATE AND ESTABLISH TURF. EROSION CONTROL MESH SHOULD BE USED IN SWALES AND STEEP GRADES WHERE APPLICABLE. METHODS OF INSTALLATION MAY VARY AT THE DISCRETION OF CONTRACTOR. IT IS HIS/HER RESPONSIBILITY TO ESTABLISH AND GUARANTEE A SMOOTH, UNIFORM, QUALITY TURF. IF STRAW MULCH IS USED AS A COVERING, A TACKIFIER MAY BE NECESSARY TO AVOID WIND DAMAGE.
- REQUIRED SEED MIXES:
DELUXE 50 GRASS SEED MIX REINDER'S (800) 785-3301
20% KENTUCKY BLUE GRASS
15% NEWPORT KENTUCKY BLUE GRASS
15% SR 2100 Kentucky Bluegrass
25% Creeping Red Fescue
15% Replicator Perennial Ryegrass
10% Fiesta 4 Perennial Ryegrass
APPLY AT A RATE OF 200 POUNDS PER ACRE. REFER TO SUPPLIERS SPECIFICATIONS & INSTALLATION CUT SHEETS FOR FURTHER INFORMATION
NO-MOW LOW GROW GRASS SEED MIX REINDER'S
45% SPARTAN HARD FESCUE
40% AZAY SHEEP FESCUE
15% TRANSIT ANNUAL RYE GRASS
APPLY AT A RATE OF 175 POUNDS PER ACRE.
REFER TO SUPPLIERS SPECIFICATIONS AND INSTALLATION CUT SHEETS FOR FURTHER INFORMATION
STORMWATER / BIOINFILTRATION FROM AGRECOL
ACTING AS A NATURAL BIOFILTER, THESE PLANTS CAPTURE STORMWATER RUNOFF. THEY ARE WELL-ADAPTED TO THE FLUCTUATING WATER LEVELS AND POOR WATER QUALITY COMMONLY ASSOCIATED WITH STORMWATER RETENTION AREAS AND DETENTION BASINS.
GRASSES, SEDGES & RUSHES: COMMON BURR SEDGE, COMMON HOP SEDGE, BROWN FOX SEDGE, VIRGINIA WILD RYE, FOWL MANNA GRASS, DUDLEY'S RUSH, RICE CUT GRASS, SWITCHGRASS, FOWL BLUEGRASS, DARK-GREEN BULRUSH, WOOL GRASS, GREAT BULRUSH, PRAIRIE CORDGRASS
WILDFLOWERS: MUD PLANTAIN, MARSH (RED) MILKWEED, NEW ENGLAND ASTER, WILD SENNA, SPOTTED JOE PYE WEED, BONESET, SAWTOOTH SUNFLOWER, MARSH BLAZING STAR, MONKEY FLOWER, WILD BERGAMOT, WILD QUININE, DITCH STONECROP, MOUNTAIN MINT, BLACK-EYED SUSAN, SWEET BLACK-EYED SUSAN, CUP PLANT, RIDDELL'S GOLDENROD, BLUE VERVAIN, IRONWEED
APPLY AT A RATE OF 6 POUNDS PER ACRE.
REFER TO SUPPLIERS SPECIFICATIONS AND INSTALLATION CUT SHEETS FOR FURTHER INFORMATION
- CONTRACTOR TO FURNISH AND PREPARE TOPSOIL (4" MIN) AND SEED BED (REMOVE ALL STONES 1" OR LARGER), APPLY STARTER FERTILIZER AND SEED UNIFORMLY.
METHOD OF INSTALLATION BE SEEDED BY BROADCAST SPREADER METHOD: ALL SEEDING OPERATIONS SHALL BE PERFORMED IN SUCH A MANNER THAT THE SEED IS APPLIED IN THE SPECIFIED QUANTITIES EVENLY DISTRIBUTED THROUGHOUT THE AREA SOWN AND UNIFORMLY TEXTURED LAWN. IN THE DESIGNATED TURF GRASS AREAS, APPLICATION FERTILIZER SHALL BE PLACED AT A MINIMUM OF 80 POUNDS PER ACRE AND SEED AT A MINIMUM OF 200 POUNDS PER ACRE. IT IS HIS/HER RESPONSIBILITY TO ESTABLISH AND GUARANTEE A SMOOTH, UNIFORM, QUALITY TURF.
PROVIDE A 100% BIODEGRADABLE WOOD FIBER EROSION CONTROL BLANKET AND E-STAPLE®. A 100% BIODEGRADABLE TURF STAPLE FOR ALL SLOPED SEEDED AREAS SUCH THAT IT PROVIDES TEMPORARY PROTECTION FOR TURF GRASS SEED AND TOPSOIL DURING THE GERMINATION AND ROOT SYSTEM DEVELOPMENT STAGE. SPECIFIED BLANKET: CURLEX I CL BLANKET AND E-STAPLE FROM AMERICAN EXCELSIOR COMPANY - LOCAL SUPPLIER; REINDER'S (800) 785-3301. A CURLEX EROSION CONTROL MATTING AND E-STAPLES SHOULD BE USED IN SWALES AND STEEP GRADES WITH SLOPES GREATER THAN THREE (3) FEET HORIZONTAL TO ONE (1) FOOT VERTICAL RISE AND WHERE APPLICABLE.
- DURING THE INITIAL "30 DAY MAINTENANCE PERIOD" THE LANDSCAPE CONTRACTOR IS REQUIRED TO PROVIDE AND ON-GOING PLEASANT VISUAL ENVIRONMENT WHEREAS ANY PLANT WHICH IS NOT RESPONDING TO TRANSPLANTING OR THRIVING SHALL IMMEDIATELY BE REPLACED. NEW LAWNS SHALL WATERED AND REPAIRED AND WEEDS MUST CONSTANTLY BE REMOVED, NO EXCEPTIONS WILL BE GRANTED.
- ALL NEWLY PLANTED TREES AND SHRUBS ARE TO RECEIVE AN APPLICATION OF AN ANTI-TRANSPIRANT SPRAY THAT WILL EFFECTIVELY REDUCE THE WATER LOSS OF TRANSPIRATION OF PLANT MATERIAL AND REDUCE THE STRESS OF TRANSPLANTATION. IT IS RECOMMENDED AS PART OF THE ONGOING MAINTENANCE THAT ANY BROADLEAF EVERGREEN AND CONIFEROUS TREE AND SHRUBS (EXCLUDING ARBORVITAE) RECEIVE AN APPLICATION OF AN ANTI-DESICCANT SPRAY TO REDUCE THE LOSS OF MOISTURE DUE TO WINTER DESICCATION.
- MAINTENANCE: THE OWNER SHALL TEND AND MAINTAIN ALL PLANT MATERIALS IN A HEALTHY GROWING CONDITION AS PER THE APPROVED PLAN. PLANTINGS SHALL BE REPLACED WHEN NECESSARY AND KEPT FREE FROM REFUSE & DEBRIS. ALL PLANTING MATERIAL WHICH IS DYING OR DAMAGED BEYOND RECOVERY SHALL BE REPLACED WITHIN SIX (6) MONTHS OR BY THE NEXT PLANTING SEASON, WHICHEVER COMES FIRST.
- LANDSCAPE / SITE DEMOLITION CONTRACTOR TO VERIFY LOCATIONS OF EXISTING TREES AND SHRUBS BE SALVAGED AND CLEARLY TAG THEM WITH MARKING TAPE AND CONSTRUCTION FENCE.
- LANDSCAPE / SITE DEMOLITION CONTRACTOR TO VERIFY LOCATIONS OF EXISTING TREES AND SHRUBS TO BE RELOCATED. ALL PLANT MATERIAL TO BE RELOCATED IS TO BE CLEARLY TAGGED WITH MARKING TAPE MOVED BEFORE AND SITE DEMOLITION IS TO BEGIN.
- ALTERNATE BID: DESIGN IRRIGATION SYSTEM TO BE DESIGNED FOR A OVERLAPPING ZONED SPRINKLER HEAD SYSTEM IN ALL LAWN & ISLAND AREAS AND A DRIP SYSTEM FOR ALL FOUNDATION PLANTING AREAS.



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Project:

ELM GROVE HEIGHTS

13040 W. Bluemound Road
Elm Grove, WI 53122

Issuance and Revisions:

Date	Number	Description
04/12/18		Client Review Submittal
05/07/18		Client Review Submittal
12/11/18		Client Review Submittal
12/13/18		Plan Commission Submittal
02/26/19		Plan Commission Submittal
03/12/19		Revisions

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Sheet Title:

PROPOSED LANDSCAPE PLAN
GENERAL NOTES & SPECIFICATIONS

Date of Drawing:	03/12/19
Scale:	NTS
Drawn By:	MCD
Job Number:	L18-038
Sheet Number:	

LSP1.0



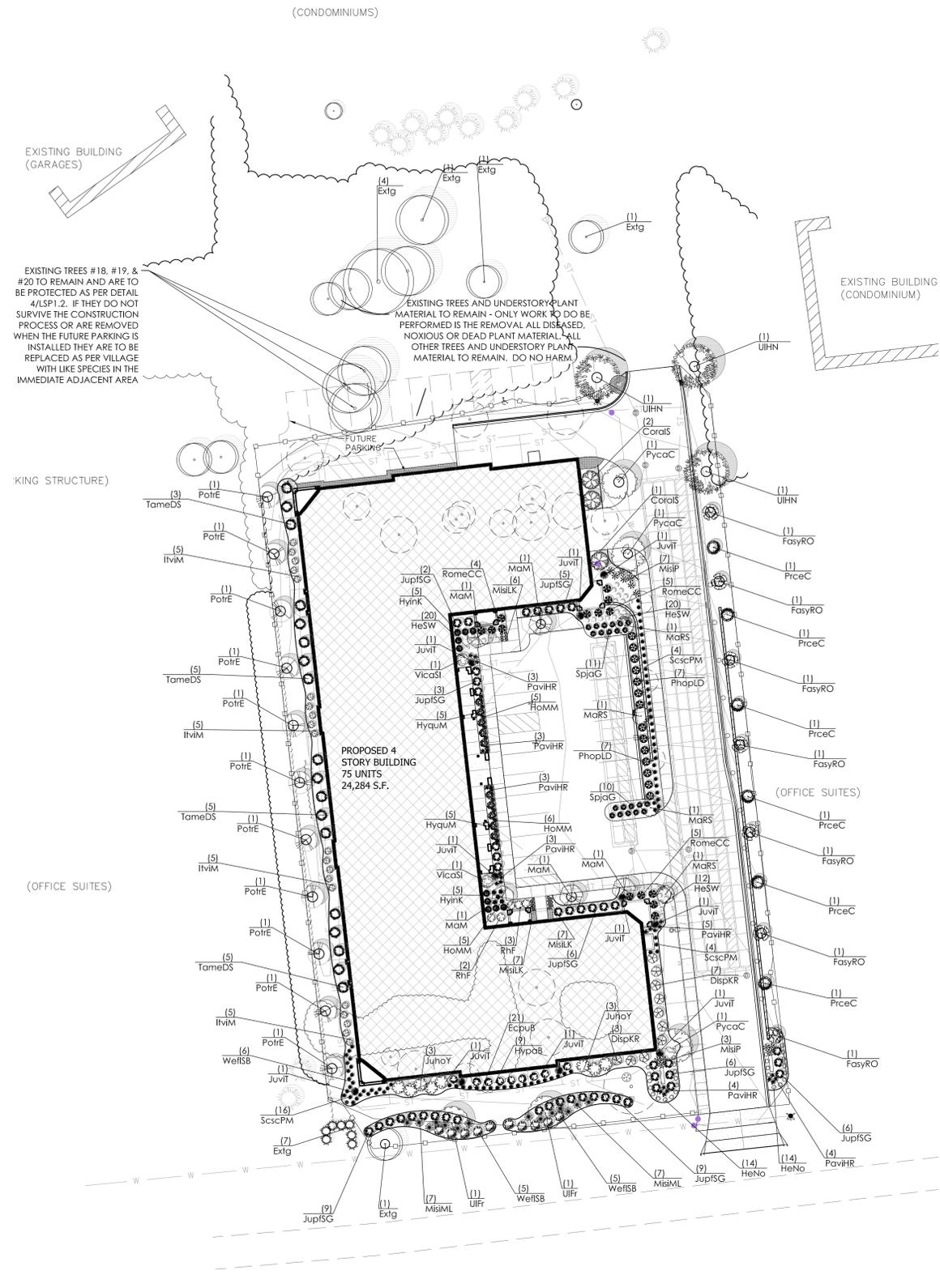
UNDERGROUND SEWER AND UTILITY INFORMATION AS SHOWN IS OBTAINED FROM THE RECORDS OF MUNICIPALITY AND LOCAL UTILITY COMPANIES. THE ACCURACY OF WHICH CAN NOT BE GUARANTEED OR CERTIFIED TO.

TO OBTAIN LOCATION OF PARTICIPANT'S UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN CALL THE MILWAUKEE UTILITY ALERT NETWORK (800)-242-8511, (262) 432-7910 (871) 500-9592 www.DiggersOnThe.com OR

Know what's below. Call before you dig.

NOT FOR CONSTRUCTION - PRELIMINARY - FOR ESTIMATING AND REVIEW ONLY - DO NOT SCALE THESE DRAWINGS- These documents reflect progress & intent & may be subject to change, including additional notes and detail. These are not final construction documents and should not be used for final bidding or construction-related purposes.

L18-038 - ELM GROVE HEIGHTS - 03/12/2019



Proposed Plant Material Table

Quantity	Code Name	Symbol	Scientific Name	Common Name	Planting Size	Comments
7	FasyRO	☉	Fagus sylvatica 'Red Obelisk'	Red Obelisk Beech	2'-Cal - B&B	
4	MaRS	☉	Malus 'JFS KW213MX'	Raspberry Spear Crabapple	2'-Cal - B&B	
5	MaM	☉	Malus 'Marilee'	Marilee Flowering Crab	2'-Cal - B&B	
11	PotrE	☉	Populus tremula 'Erecta'	Columnar Swedish Aspen	2'-Cal - B&B	
6	PrceC	☉	Prunus cerasifera 'Cipriozam'	Crimson Pointe Flowering Plum	2'-Cal - B&B	
3	PycaC	☉	Pyrus calleryana 'Chanticleer'	Chanticleer Pear	2 1/2'-Cal - B&B	
3	UIHN	☉	Ulmus 'New Horizon'	New Horizon Elm	2 1/2'-Cal - B&B	
2	UIFr	☉	Ulmus [carpinifolia x parvifolia] 'Frontier'	Frontier Elm	2 1/2'-Cal - B&B	
17	Extg	☉	Existing to Remain	Existing to Remain	Existing	

Broadleaf Deciduous Tree To Be Removed

Quantity	Code Name	Symbol	Scientific Name	Common Name	Planting Size	Comments
1	Extg	☉	Existing to be Removed, Tree #10	Existing to be Removed	Existing - 36" Caliper	
1	Extg	☉	Existing to be Removed, Tree #11	Existing to be Removed	Existing - 14" Caliper	
1	Extg	☉	Existing to be Removed, Tree #4, #5, #9, #11, #12, #13, #14, #16, #17, #29	Existing to be Removed	Existing - 12" Caliper	
1	Extg	☉	Existing to be Removed, Tree #8	Existing to be Removed	Existing - 20" Caliper	
1	Extg	☉	Existing to be Removed, Tree #6, #34	Existing to be Removed	Existing - 6" Caliper	
1	Extg	☉	Existing to be Removed, Tree #2, #3, #6, #15, #26	Existing to be Removed	Existing - 18" Caliper	
1	Extg	☉	Existing to be Removed, Tree #28	Existing to be Removed	Existing - 18" Caliper	
1	Extg	☉	Existing to be Removed, Tree #29	Existing to be Removed	Existing - 18" Caliper	
1	Extg	☉	Existing to be Removed, Tree #30	Existing to be Removed	Existing - 8" Caliper	
1	Extg	☉	Existing to be Removed, Tree #31, #32	Existing to be Removed	Existing - 10" Caliper	

Conifer Evergreen Tree

Quantity	Code Name	Symbol	Scientific Name	Common Name	Planting Size	Comments
10	JuviT	☉	Juniperus virginiana taylor	Taylor Redcedar	5' - 6' - B&B	
6	Extg	☉	Existing to Remain	Existing to Remain	Existing	

Conifer Evergreen Tree To Be Removed

Quantity	Code Name	Symbol	Scientific Name	Common Name	Planting Size	Comments
1	Extg	☉	Existing to be Removed, Tree #33	Existing to be Removed	Existing - 8" Caliper	

Broadleaf Deciduous Shrub

Quantity	Code Name	Symbol	Scientific Name	Common Name	Planting Size	Comments
3	CoratS	☉	Cornus racemosa x amomum 'J.N. Red Storm'	Irish Seltzer Dogwood	2' - 3' - B&B	
10	DispKR	☉	Diervilla splendens 'G2X885411'	Kodiak Red Diervilla	18" - Cont	
9	HypaB	☉	Hydrangea paniculata 'Bobo'	Bobo Hardy Hydrangea	18" - 24" - Cont	
10	HyqUM	☉	Hydrangea quercifolia 'Munchkin'	Munchkin Oakleaf Hydrangea	18" - Cont	
10	HyinK	☉	Hypericum x inodorum 'KOLCHAR'	FloralBerry Chardonay St. John's Wort	18" - Cont	
20	IvIM	☉	Itea virginica 'Merlot'	Merlot Sweetspire	18" - Cont	
14	PhopLD	☉	Physocarpus opulifolius 'Donna May'	Little Devil Ninebark	18" - Cont	
14	RomeCC	☉	Rosa 'Meiriansis'	Candy Cane Cocktail Rose	18" - Cont	
21	SpjaG	☉	Spiraea japonica 'Galen'	Double Play Artist Spirea	18" - Cont	
2	VicaSl	☉	Viburnum carlesii 'J.N. Select A'	Spice Island Koreanspice viburnum	24" - 30" - Cont	
10	WellSB	☉	Weigela florida 'Bokrasopin'	Sonic Bloom Pink Reblooming Weigela	18" - Cont	

Broadleaf Evergreen Shrub

Quantity	Code Name	Symbol	Scientific Name	Common Name	Planting Size	Comments
5	RhF	☉	Rhododendron x 'Firestorm'	Firestorm Rhododendron	18" - Cont	

Conifer Evergreen Shrub

Quantity	Code Name	Symbol	Scientific Name	Common Name	Planting Size	Comments
8	JuhoY	☉	Juniperus horizontalis 'Youngstown'	Youngstown Andorra Juniper	18" - 24" - Cont	
46	JupISG	☉	Juniperus x pfitzeriana 'MonSan'	Sea of Gold Juniper	18" - 24" - B&B	
18	TameDS	☉	Taxus x media 'Densformis Select'	Select Dense Spreading Yew	18" - 24" - B&B	

Perennial Grass

Quantity	Code Name	Symbol	Scientific Name	Common Name	Planting Size	Comments
20	MisLK	☉	Miscanthus sinensis 'Little Kitten'	Little Kitten Maiden Grass	1-Gal - Cont	
14	MisIML	☉	Miscanthus sinensis 'Morning Light'	Morning Light Maiden Grass	1-Gal - Cont	
13	MisIP	☉	Miscanthus sinensis 'Purpureocens'	Purple Silver Grass	1-Gal - Cont	
25	PaviHR	☉	Panicum virgatum 'Hot Rod'	Hot Rod Switch Grass	1-Gal - Cont	
63	ScscPM	☉	Schizanthus scoparium 'Prairie Munchkin'	Prairie Munchkin Little Bluestem	1-Gal - Cont	

Perennial

Quantity	Code Name	Symbol	Scientific Name	Common Name	Planting Size	Comments
19	EcpuB	☉	Echinacea x purpurea 'Balsanery'	Double Scoop Cranberry Echinacea	4 1/2" pot	
28	HeNo	☉	Hemerocallis x 'Nosferatu'	Trophytaker Nosferatu Daylily	4 1/2" pot	
43	HeSW	☉	Hemerocallis x 'Swirling Water'	Swirling Water Daylily	4 1/2" pot	
16	HoMM	☉	Hosta x 'Minuteman'	Minuteman Plantain Lily	1-Gal - Cont	

Comments
1. Male Only

1 PROPOSED LANDSCAPE PLAN

SCALE: 1" = 30'-0"
North

TO OBTAIN LOCATION OF PARTICIPANT'S UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN
DIGGERS HOT LINE
WISCONSIN STATUTE 182.0175 (1974) REQUIRES A MINIMUM OF 3 DAYS NOTICE BEFORE YOU EXCAVATE (NOT INCLUDING SATURDAY, SUNDAY OR LEGAL HOLIDAYS)

UNDERGROUND SEWER AND UTILITY INFORMATION AS SHOWN IS OBTAINED FROM THE RECORDS OF MUNICIPALITY AND LOCAL UTILITY COMPANIES. THE ACCURACY OF WHICH CAN NOT BE GUARANTEED OR CERTIFIED.
THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THIS SURVEY ARE APPROXIMATE. THERE MAY BE OTHER UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

TO OBTAIN LOCATION OF PARTICIPANT'S UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN CALL THE MILWAUKEE UTILITY ALERT NETWORK
(800) 242-8511, (262) 432-7910
(877) 500-9592
www.DiggerHotline.com
OR
811
Know what's below.
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ELM GROVE HEIGHTS
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Elm Grove, WI 53122

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02/26/19		Plan Commission Submittal
03/12/19		Revisions

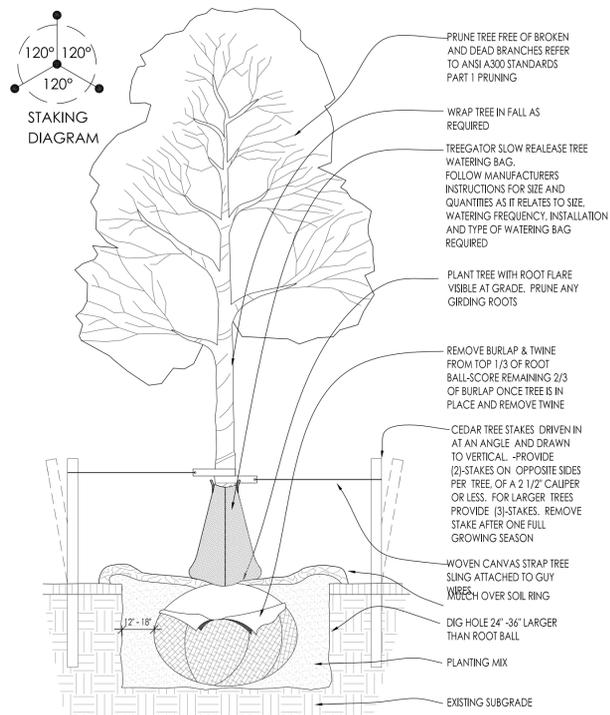
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Sheet Title:
PROPOSED LANDSCAPE PLAN,
GENERAL NOTES,
AND PLANT MATERIAL TABLE

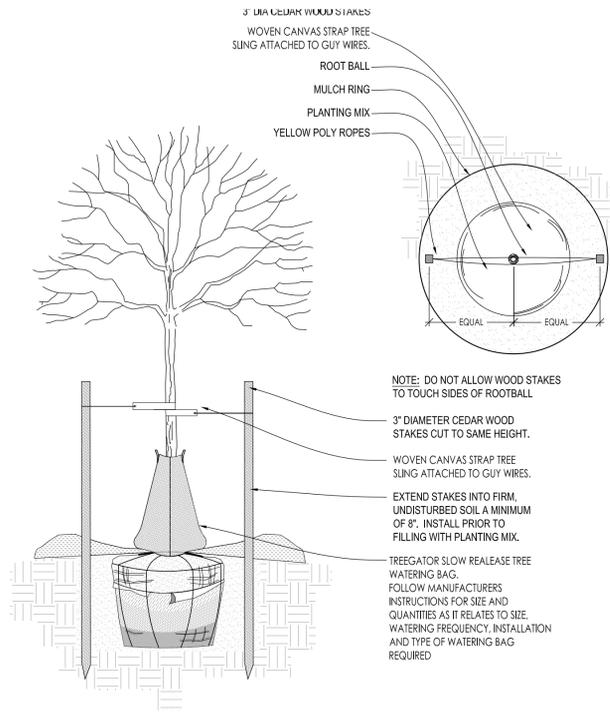
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Scale: 1" = 30'-0"
Drawn By: MCD
Job Number: L18-038
Sheet Number:

LSP1.1

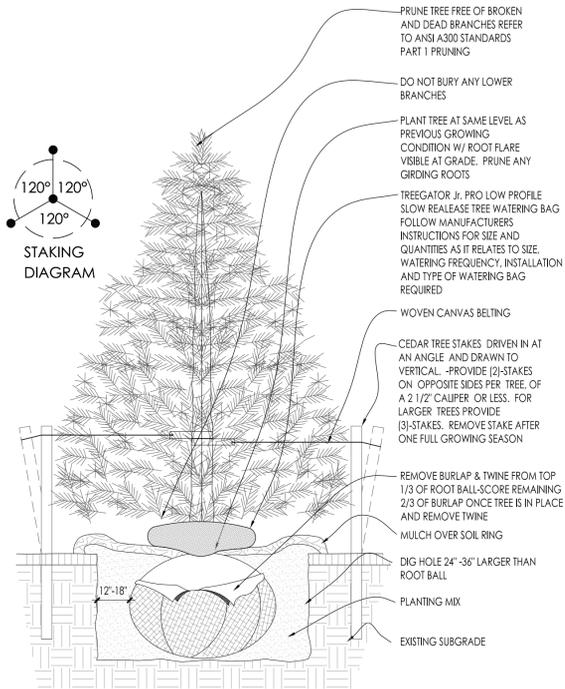
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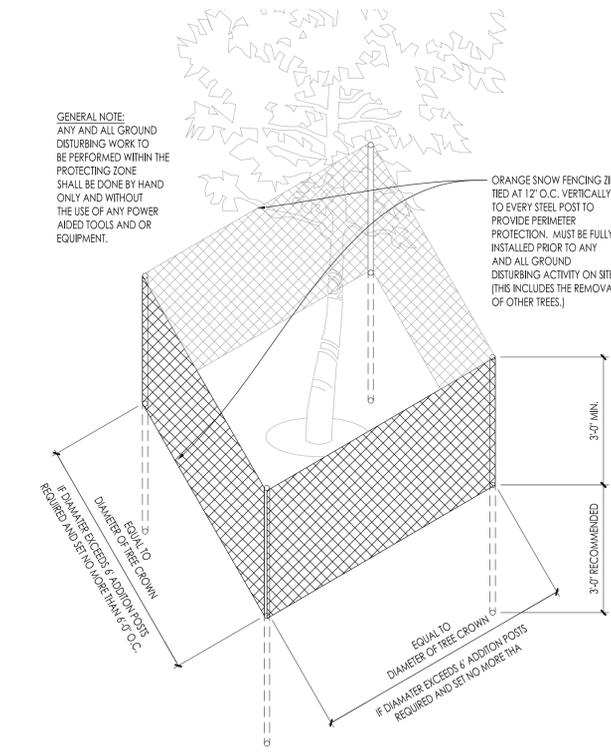
1 DECIDUOUS TREE PLANTING DETAIL SCALE: NONE



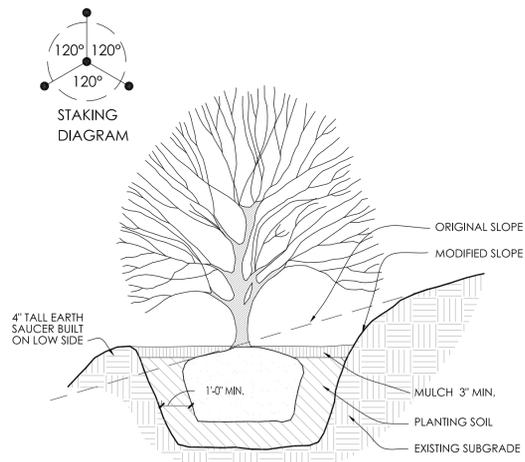
2 DECIDUOUS TREE STAKING PARKING ISLAND/RESTRICTED AREAS SCALE: NONE



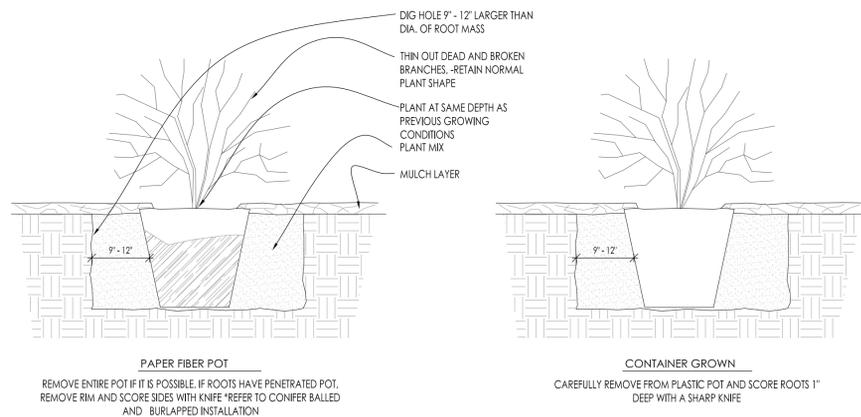
3 CONIFEROUS TREE PLANTING DETAIL SCALE: NONE



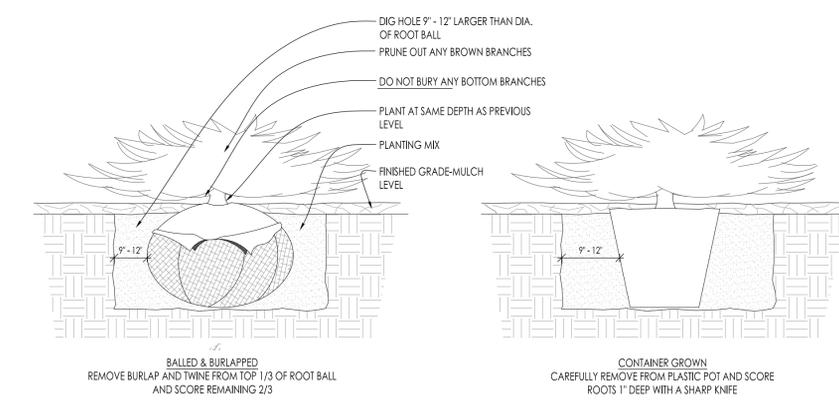
4 EXISTING TREE PROTECTION DETAIL SCALE: NONE



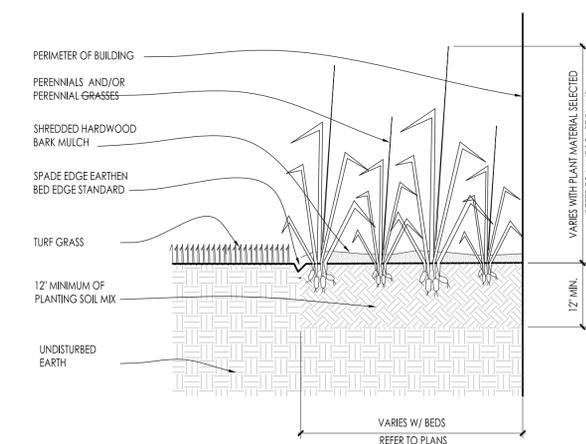
5 SLOPE PLANTING DETAIL SCALE: NONE



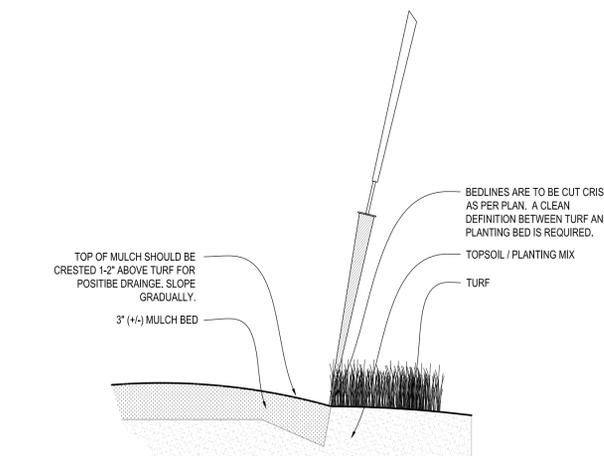
6 DECIDUOUS SHRUB PLANTING DETAIL SCALE: NONE



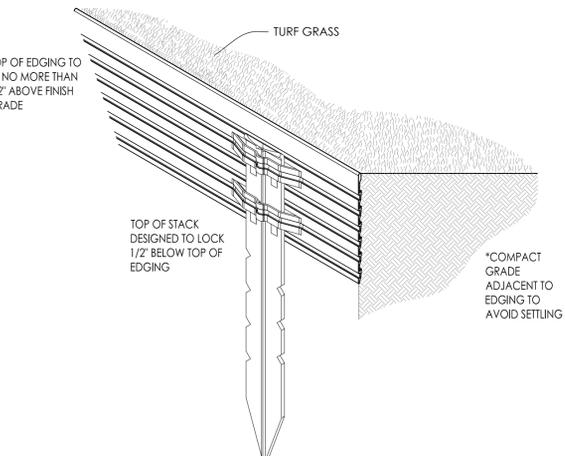
7 CONIFEROUS SHRUB PLANTING DETAIL SCALE: NONE



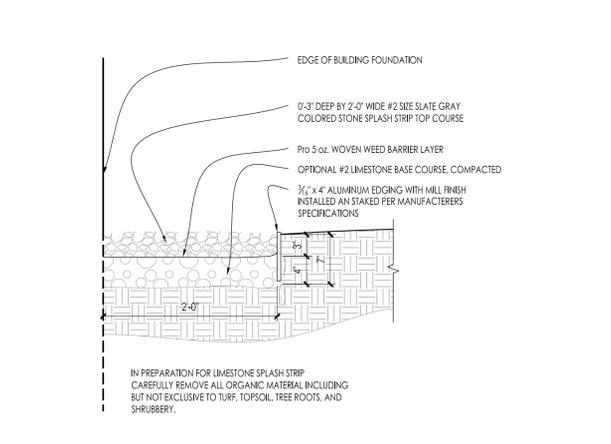
8 PERENNIAL BED PLANTING DETAIL SCALE: NONE



9 SPADE EDGE PLANT BED EDGE DETAIL SCALE: NONE



10 METAL LANDSCAPE EDGING DETAIL SCALE: 1/2" = 1'-0"



11 COMPACTED GRAVEL SPLASH STRIP SCALE: 1" = 1'-0"

Project:
ELM GROVE HEIGHTS
13040 W. Bluemound Road
Elm Grove, WI 53122

Issuance and Revisions:

Date	Number	Description
04/12/18		Client Review Submittal
05/07/18		Client Review Submittal
12/11/18		Client Review Submittal
12/13/18		Plan Commission Submittal
02/26/19		Plan Commission Submittal
03/12/19		Revisions

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Sheet Title:
PROPOSED LANDSCAPE PLAN, PLANTING DETAILS

Date of Drawing: 03/12/19
Scale: As Noted
Drawn By: MCD
Job Number: L18-038
Sheet Number:

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ELM GROVE HEIGHTS

Proposed Signage Plan

March 14, 2019

The Elm Grove Heights lot will contain the following signage:

1. 15 MPH speed limit sign on the eastern side of the access drive;
2. Stop signs at the exit to the motor court and underground parking;
3. Elm Grove Heights directional sign at entrance to motor court;
4. Sign reading "Emerald Woods owners and guests only beyond this point" on east side of entry drive prior to bridge;
5. The attached monument sign as illustrated on the Civil Site Plan submitted on 3-4-2019;
6. The existing Emerald Woods sign relocated to the eastern side of the entry drive as illustrated on the Civil Site Plan submitted on 3-4-2019;
 - a. Horizon will pay to relocate the sign, in addition to the electrical and sprinkler systems servicing the sign.
7. Truck turnaround sign on the west side of the drive immediately to the south of the service drive north of the building;



SILVER LEAF
SIGNS AND GRAPHICS

NOTICEABLY DIFFERENT

Client: Elm Grove Heights

Job Type: Monument Sign

- Non-illuminated
- Double Sided

Dimensions: 3x5'

- Mounted to brick foundation by 2"x2" square steel posts

Quantity: 1

Materials & Specs:

- HDU
- Limestone
- Brick
- Font: Copperplate

Colors:

- PMS 350C
- PMS 7527 U
- GoldLeaf

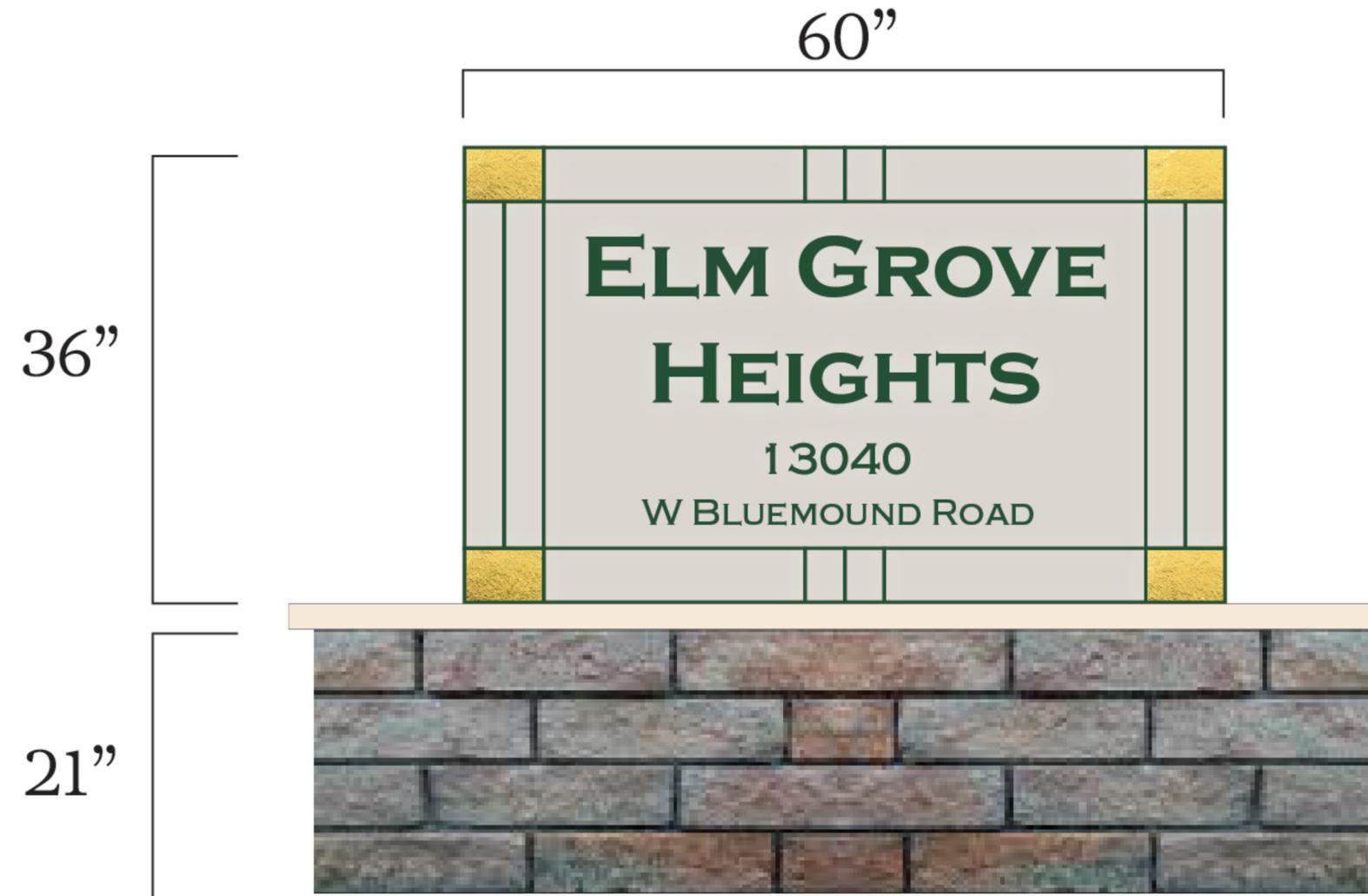
Representative: Brian Green

Designer: Kylee

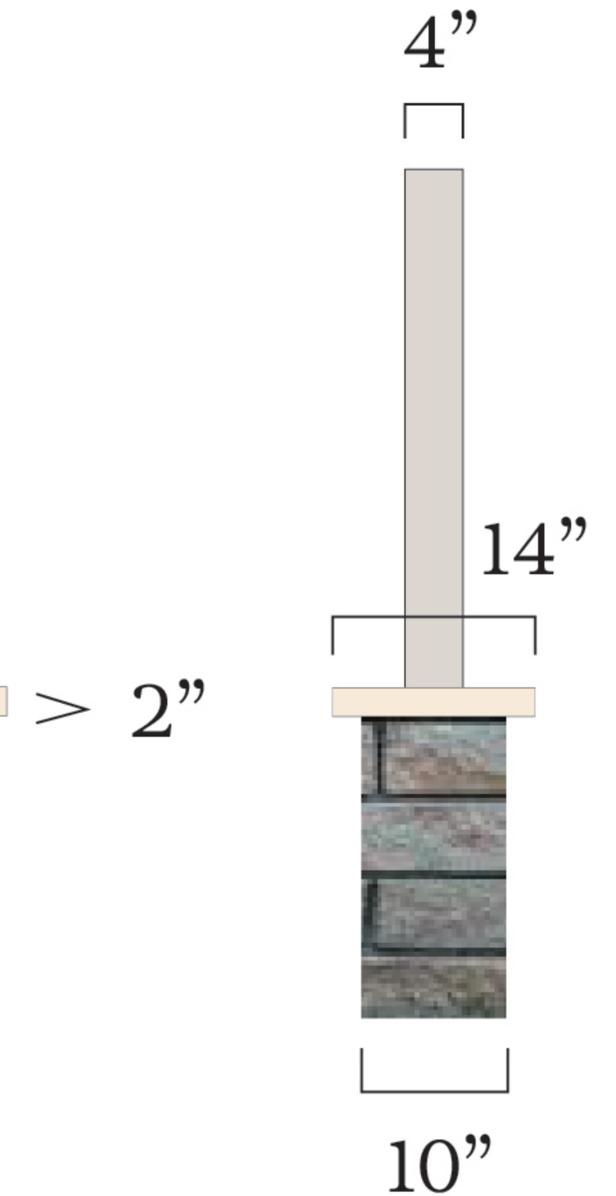
Date: 3-11-19

Version: For Review

Front View



Side View



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APPROVED

REVISE & RESUBMIT

