

**GENOA CHARTER TOWNSHIP  
PLANNING COMMISSION  
PUBLIC HEARING  
APRIL 11, 2022  
6:30 P.M.  
AGENDA**

**CALL TO ORDER:**

**PLEDGE OF ALLEGIANCE:**

**APPROVAL OF AGENDA:**

**DECLARATION OF CONFLICT OF INTEREST:**

**CALL TO THE PUBLIC:** *(Note: The Board reserves the right to not begin new business after 10:00 p.m.)*

**OLD BUSINESS:**

**OPEN PUBLIC HEARING #1...** Consideration of two special use applications, environmental impact assessment and site plan for a proposed 19,843 sq. ft. church and sports field in the Low Density Residential (LDR) district and a special land use for site grading and storage within the wetland protection setback located at 3850 Golf Club Road, southwest corner of Golf Club Road and Latson Road. The request is petitioned by Bible Baptist Church.

- A. Recommendation of Special Use Application (Church)
- B. Recommendation of Special Use Application (Grading in wetland protection setback)
- C. Recommendation of Environmental Impact Assessment (3-16-22)
- D. Recommendation of Site Plan (3-16-22)

**NEW BUSINESS:**

**OPEN PUBLIC HEARING # 2...** Consideration of an amendment to the Summerfield Pointe Planned Unit Development Agreement, preliminary condominium site plan and environmental impact assessment to convert the project from (140-units) attached condominiums to single family detached homes (108-units). The project is located on Lawson Drive, North of Grand River Avenue. The request is petitioned by Healy Homes of Summerfield, LLC.

- A. Recommendation of PUD Agreement Amendment
- B. Recommendation of Environmental Impact Assessment (3-9-22)
- C. Recommendation of Preliminary Site Condominium Plan (3-23-22)

**OPEN PUBLIC HEARING #3...** Consideration of a site plan and environmental impact assessment for 136 apartment units within 17 buildings located north of the intersection of Whitehorse Drive and Arundell Drive. The property is located within the Lorenzen Planned Unit Development and was previously approved for 137 apartment units. The request is petitioned by Elevate Property Partners, LLC.

- A. Recommendation of Environmental Impact Assessment (1-17-22)
- B. Recommendation of Site Plan (3-23-22)

**ADMINISTRATIVE BUSINESS:**

- *Staff Report*
- *Approval of March 28, 2022 Planning Commission meeting minutes*
- *Member discussion*
- *Adjournment*



**GENOA CHARTER TOWNSHIP**  
**Application for Site Plan Review**

**TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:**

APPLICANT NAME & ADDRESS: Bible Baptist Church 2258 E. Highland Rd. Howell, MI 48843  
*If applicant is not the owner, a letter of Authorization from Property Owner is needed.*

OWNER'S NAME & ADDRESS: Bible Baptist Church c/o Pastor Tim Christoson, address same as above

SITE ADDRESS: 3850 Golf Club Road Howell, MI PARCEL #(s): 4711-05-200-002

APPLICANT PHONE: (517 ) 715-9223 OWNER PHONE: ( ) SAME

OWNER EMAIL: tim.christoson@howellchurch.org

LOCATION AND BRIEF DESCRIPTION OF SITE: Site is located on the SW corner of Latson Rd & Golf Club Rd.  
The north side of the site contains a 3+/- acre pond and single-family residence. The site is zoned LDR. The south side of the site contains  
steep topography and vegetation. The northern property line is the northern limits of Genoa Township. To the east of the site is Latson  
Rd and RR/RPUD zoning. To the south is an existing subdivision with MPUD zoning. To the west is single family homes in RR zoning.

BRIEF STATEMENT OF PROPOSED USE: This site plan is for a Phase 1 of Bible Baptist Church's campus. The Phase 1  
church campus contains a 506-seat church sanctuary with associated site access, parking, a soccer field (for church recreation use), and  
utility infrastructure to support the facility.

THE FOLLOWING BUILDINGS ARE PROPOSED: The proposed building is a church building approximately  
19,843 square feet in size.

**I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.**

BY: TIM CHRISTOSON

ADDRESS: TIM CHRISTOSON, BEC, 2258 E. HIGHLAND RD., HOWELL, MI 48843



**Contact Information** - Review Letters and Correspondence shall be forwarded to the following:

1.) Scott Tousignant, P. E. of Boss Engineering at scottt@bosseng.com  
Name Business Affiliation E-mail Address

**FEE EXCEEDANCE AGREEMENT**

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE: T. Christenson DATE: 1/28/2022  
PRINT NAME: TIM CHRISTENSON PHONE: 517-715-9233  
ADDRESS: 2258 E. HIGHLAND RD, HOWELL, MI 48843



# GENOA CHARTER TOWNSHIP

## Special Land Use Application

This application **must** be accompanied by a site plan review application and the associated submittal requirements. (The Zoning Official may allow a less detailed sketch plan for a change in use.)

APPLICANT NAME & ADDRESS: Bible Baptist Church c/o Pastor Tim Christoson, 2258 E. Highland Rd., Howell, MI 48843  
*Submit a letter of Authorization from Property Owner if application is signed by Acting Agent.*

APPLICANT PHONE: ( 517) 715-9233 EMAIL: tim.christoson@howellchurch.org

OWNER NAME & ADDRESS: Same As Above

SITE ADDRESS: 3850 Golf Club Road, Howell, MI 48843 PARCEL #(s): 4711-05-200-002

OWNER PHONE: (517 ) 715-9233 EMAIL: tim.christoson@howellchurch.org

### Location and brief description of site and surroundings:

Site is located on the southwest corner of LAton Road and Golf Club Road and is zoned LDR. The north side of teh site contains a 3 acre + pond and single-family residence; the south side of the site contains steep topography and trees; the northern property line is the northern limits of Genoa Township. On the east by Latson Road is zone RR and RPU zoning; to the south is an existing subdivision in MUPUD zoning; and on the west are single family residences in RR zoning.

### Proposed Use:

The site plans is for a Phase 1 of Bible Baptist Church' campus. The purpose of this special use is specifically for the encroachments into the Townships 25' natural features setbacks with grading as well as the placement of a retaining wall and storm water structures.

### Describe how your request meets the Zoning Ordinance General Review Standards (section 19.03):

- a. Describe how the use will be compatible and in accordance with the goals, objectives, and policies of the Genoa Township Comprehensive Plan and subarea plans, and will promote the Statement of Purpose of the zoning district in which the use is proposed.

The special use of encroachment within the natural features setback is in accordance with the goals of the Master Plan and Zoning district as it does not burden public infrastructure, it preserves the natural resources by ensuring no encroachment within the wetland limits, encroachment in the setback has no impact on generating excess traffic, nor does it interfere with utilization of single family dwellings in the district.

- b. Describe how the use will be designed, constructed, operated, and maintained to be compatible with, and not significantly alter, the existing or intended character of the general vicinity.

As stated above, the disturbances do not occur within the wetlands, only the wetland setbacks. Historically, the property has been maintained(cut grass) up to the edge of the wetlands at the north end of the site. The proposed plan, once constructed, will return these areas back to a condition with similar vegetative grass cover. The character of the area is maintained by avoiding construction encroaching within the wetland limits.

- c. How will the use be served adequately by essential public facilities and services such as highways, streets, police and fire protection, drainage structures, water and sewage facilities, refuse disposal and schools?

Special Use for encroachment into the 25' natural features setback does not impact any of the above mentioned services other than drainage structures. Included in the encroachment of the natural features setbacks are the drainage structures necessary to carry out the storm water management for the development.

- d. Will the use involve any uses, activities, processes, or materials potentially detrimental to the natural environment, public health, safety, or welfare by reason of excessive production of traffic, noise, vibration, smoke, fumes, odors, glare, or other such nuisance? If so, how will the impacts be mitigated?

Encroachment of the natural features setbacks has no impact on traffic, noise, vibration, smoke, fumes, odors, glare, etc.

- e. Does the use have specific criteria as listed in the Zoning Ordinance (sections 3.03.02, 7.02.02, & 8.02.02)? If so, describe how the criteria are met.

The special use for encroachment in the natural features setback does not have specific criteria listed in the Zoning Ordinance in Sections 3.03.02, 7.02.02, or 8.02.02.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I AGREE TO DESIGN, CONSTRUCT AND OPERATE, AND MAINTAIN THESE PREMISES AND THE BUILDINGS, STRUCTURES, AND FACILITIES WHICH ARE GOVERNED BY THIS PERMIT IN ACCORDANCE WITH THE STATED REQUIREMENTS OF THE GENOA TOWNSHIP ZONING ORDINANCE, AND SUCH ADDITIONAL LIMITS AND SAFEGUARDS AS MAY BE MADE A PART OF THIS PERMIT.

THE UNDERSIGNED Tim Christoson STATES THAT THEY ARE THE FREE OWNER OF THE PROPERTY OF PROPERTIES DESCRIBED ABOVE AND MAKES APPLICATION FOR THIS SPECIAL LAND USE PERMIT.

BY: Tim Christoson

ADDRESS: 2258 E. Highland Rd, Howell, MI 48843

**Contact Information** - Review Letters and Correspondence shall be forwarded to the following:

Scott Tousignant, PE of Boss Engineering at scottt@bosseng.com  
Name Business Affiliation Email

**FEE EXCEEDANCE AGREEMENT**

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE: Tim Christoson DATE: 3/16/2022

PRINT NAME: Tim Christoson PHONE: 517-715-9233



# GENOA CHARTER TOWNSHIP

## Special Land Use Application

This application **must** be accompanied by a site plan review application and the associated submittal requirements. (The Zoning Official may allow a less detailed sketch plan for a change in use.)

APPLICANT NAME & ADDRESS: \_\_\_\_\_  
*Submit a letter of Authorization from Property Owner if application is signed by Acting Agent.*

APPLICANT PHONE: (\_\_\_\_) \_\_\_\_\_ EMAIL: \_\_\_\_\_

OWNER NAME & ADDRESS: \_\_\_\_\_

SITE ADDRESS: \_\_\_\_\_ PARCEL #(s): \_\_\_\_\_

OWNER PHONE: (\_\_\_\_) \_\_\_\_\_ EMAIL: \_\_\_\_\_

Location and brief description of site and surroundings:

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Proposed Use:

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Describe how your request meets the Zoning Ordinance General Review Standards (section 19.03):

a. Describe how the use will be compatible and in accordance with the goals, objectives, and policies of the Genoa Township Comprehensive Plan and subarea plans, and will promote the Statement of Purpose of the zoning district in which the use is proposed.

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b. Describe how the use will be designed, constructed, operated, and maintained to be compatible with, and not significantly alter, the existing or intended character of the general vicinity.

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c. How will the use be served adequately by essential public facilities and services such as highways, streets, police and fire protection, drainage structures, water and sewage facilities, refuse disposal and schools?

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d. Will the use involve any uses, activities, processes, or materials potentially detrimental to the natural environment, public health, safety, or welfare by reason of excessive production of traffic, noise, vibration, smoke, fumes, odors, glare, or other such nuisance? If so, how will the impacts be mitigated?

No. A traffic impact study is being conducted to determine the traffic impact on Golf Club Road to determine any necessary road improvements needed to support this development. The site will not generate smoke, odor, fumes, or glare that are detrimental to the environment, public health, safety or welfare of the community or natural resources. Traffic will be at the level of a typical church operation.

e. Does the use have specific criteria as listed in the Zoning Ordinance (sections 3.03.02, 7.02.02, & 8.02.02)? If so, describe how the criteria are met.

3.03.02 (L) Requires minimum lot are of 3 acres with additional acreage per 100 seats. This site is 46.5 ac +/-; Max building height is 35 ft or 2 stories, this building does not exceed that; Off-street parking adjacent to residential districts requires minimum parking lot setback of 50 feet with a continuous obscuring wall/fence/landscape area at least 4 ft in height. A 4 ft tall hedge is provided at the south end of the parking lot in addition to existing mature vegetation.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I AGREE TO DESIGN, CONSTRUCT AND OPERATE, AND MAINTAIN THESE PREMISES AND THE BUILDINGS, STRUCTURES, AND FACILITIES WHICH ARE GOVERNED BY THIS PERMIT IN ACCORDANCE WITH THE STATED REQUIREMENTS OF THE GENOA TOWNSHIP ZONING ORDINANCE, AND SUCH ADDITIONAL LIMITS AND SAFEGUARDS AS MAY BE MADE A PART OF THIS PERMIT.

THE UNDERSIGNED TIM CHRISTOPSON STATES THAT THEY ARE THE FREE OWNER OF THE PROPERTY OF PROPERTIES DESCRIBED ABOVE AND MAKES APPLICATION FOR THIS SPECIAL LAND USE PERMIT.

BY: TIM CHRISTOPSON, PASTOR OF BIRCH BAPTIST CHURCH

ADDRESS: 2258 E. HIGHLAND RD., HOWELL, MI 48843

**Contact Information** - Review Letters and Correspondence shall be forwarded to the following:

Scott Tousignant, P.E. of Boss Engineering at scottt@bosseng.com  
Name Business Affiliation Email

**FEE EXCEEDANCE AGREEMENT**

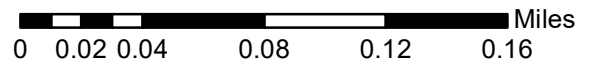
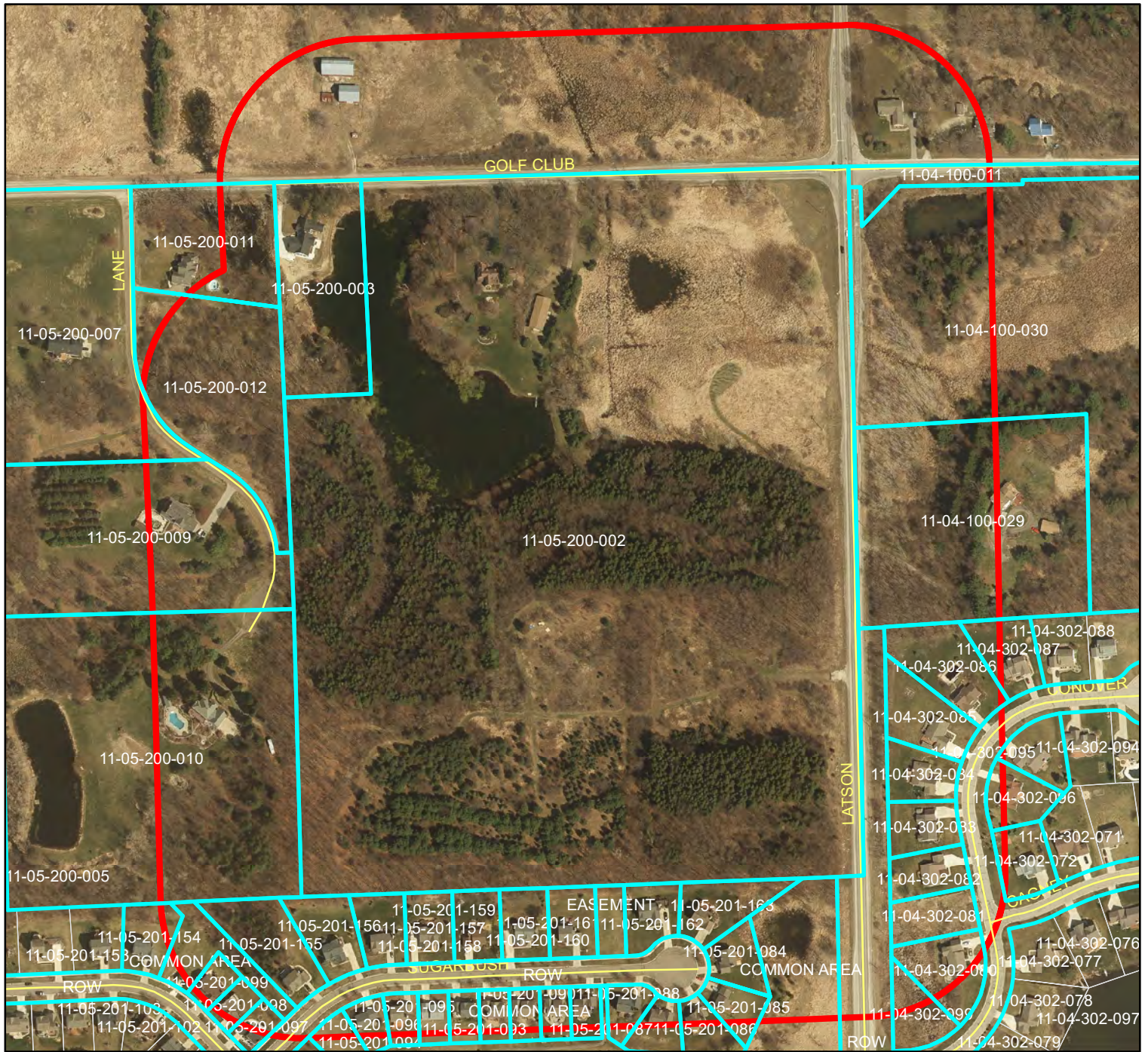
As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE: Tim Clem DATE: 1/28/2022

PRINT NAME: TIM CHRISTOPSON PHONE: 517-715-9233



# 300 Foot Buffer for Noticing



Special Use: Bible Baptist

Address: 2258 E. Highland Road

Parcel: 4711-05-200-002

Meeting Date: March 14, 2022



**GENOA CHARTER TOWNSHIP  
PLANNING COMMISSION  
PUBLIC HEARING  
MARCH 14, 2022  
6:30 P.M.  
MINUTES**

CALL TO ORDER: Chairman Grajek called the meeting of the Genoa Charter Township Planning Commission to order at 6:30 p.m. Present were Chris Grajek, Jim Mortensen, Marianne McCreary, Eric Rauch, Glynis McBain, Jeff Dhaenens, and Tim Chouinard. Also present was Kelly VanMarter, Community Development Director/Asst. Township Manager, Brian Borden of Safebuilt, and Shelby Byrne of Tetra Tech.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

APPROVAL OF AGENDA:

Chairman Grajek advised that after reviewing the documents provided by the applicant for Item #4 on tonight's agenda, he has come to the conclusion that the applicant has failed to submit the required Special Land Use application for grading in the natural features setback. Therefore, he is asking for a motion to postpone this item indefinitely due to an incomplete application and associated public notice for the required Special Land use for grading in the natural features setback. The applicant must submit the proper applications in accordance with the review schedule to be placed on a future agenda. He asked for Planning Commission members for their input.

Commissioner Mortensen agrees.

The applicant stated that their application has been through two review letters and the need for this document was not stated. Ms. VanMarter stated that it was in both review letters from the Township Planner.

Commissioner Rauch questioned where this is noted in the review letters. Ms. VanMarter stated that in the Township Planner's review letter in tonight's packet it is listed in A.1.e and f, which states "The project includes grading and structures (drive, retaining wall, parking lot, and softball/baseball field) that encroach into the 25-foot natural feature setback. As such, a separate special land use review/approval is needed" and "The Township may wish to withhold a finding related to the impact criterion until such time as the natural feature setback encroachments can be fully evaluated."

**Moved** by Commissioner McCreary, seconded by Commissioner Mortensen, to approve tonight's agenda with the postponement of Agenda Item #4 - special use application, environmental impact assessment and site plan for a proposed 19,843 sq. ft. church and sports field located at 3850 Golf Club Road, southwest corner of Golf Club Road and Latson Road by Bible Baptist Church. **The motion carried unanimously with Commissioner McBain abstaining due to conflict of interest.**

DECLARATION OF CONFLICT OF INTEREST: None



April 7, 2022

Planning Commission  
Genoa Township  
2911 Dorr Road  
Brighton, Michigan 48116

<b>Attention:</b>	Kelly Van Marter, AICP Planning Director and Assistant Township Manager
<b>Subject:</b>	Bible Baptist Church – Special Land Use and Site Plan Review #3
<b>Location:</b>	3850 Golf Club Road – southwest corner of Latson and Golf Club Roads
<b>Zoning:</b>	LDR Low Density Residential District

Dear Commissioners:

At the Township’s request, we have reviewed the revised submittal from Bible Baptist Church requesting special land use and site plan review/approval for a new church and activities within the natural feature setback (site plan dated 3/16/22).

**A. Summary**

**1. Special Land Use standards of Section 19.03:**

- a. In order to find that the church is compatible with the Master Plan, the Township needs to find that the project is consistent with the goals of the Plan.
- b. We suggest noise mitigation be required for the auditorium portion of the proposed building.
- c. The activities within the natural feature setback are necessary for access and stormwater management and/or will not result in adverse impacts upon the wetland areas.
- d. An EGLE permit has been obtained for work along and within the wetland areas.
- e. The applicant must address any comments provided by the Township Engineer and Brighton Area Fire Authority.

**2. Use Requirements of Section 3.03.02(1):**

- a. The use requirements are met.

**3. Site Plan Review:**

- a. The façade facing Latson Road is comprised simply of metal siding.
- b. In terms of design and materials, the rear façade is not “comparable to the front façade.”
- c. The applicant should be prepared to present building material and color samples (and/or a color rendering) to the Commission.
- d. The Township may allow a performance guarantee in lieu of pathway construction at this time.
- e. The landscape plan is deficient by 2 parking lot trees.
- f. The Planning Commission may allow existing vegetation in lieu of new greenbelt plantings.





*Aerial view of site and surroundings (looking north)*

## **B. Proposal/Process**

The applicant proposes to develop the 46.5-acre site with a 19,843 square foot church building with 506 seats in the main auditorium, as well as 2 recreational fields (soccer and softball/baseball).

The plans also identify a future Phase 2 (building and parking lots), though these items are not addressed in this review. If/when the applicant seeks to develop Phase 2, the applicable procedures and regulations of the Zoning Ordinance must be followed.

Churches, temples, and similar places of worship are allowed with special land use approval in the LDR District. Such uses are also subject to the requirements of Section 3.03.02(1).

Additionally, there are elements of the project that encroach into the natural feature setback. These encroachments require an additional special land use review/approval.

Procedurally, the Planning Commission is to review the special land uses, site plan, and Environmental Impact Assessment, and provide a recommendation on each to the Township Board following a public hearing.

The Township Board has final review/approval authority over each aspect.

## **C. Special Land Use Review**

Section 19.03 of the Zoning Ordinance identifies the review criteria for all special land uses, as follows:

- 1. Master Plan.** The Township Master Plan and Future Land Use Map identify the site and properties to the east and west as Low Density Residential.

This category is intended for “single family residential use, located on the fringe between the rural residential and the more urbanized areas of the Township.” However, there is no reference institutional uses, such as churches, temples, and similar places of worship.

As such, the Township will need to find that the proposed use aligns with the Plan's goals, which include (but are not limited to) the following:

- Accommodate a variety of land uses that are located in a logical pattern and complement community goals, the surrounding land uses, environment, capacity of roads and the sanitary sewer, and public water system capabilities.
- Provide land owners with reasonable use of their land in a manner that is compatible with adjacent uses and the overall land use plan for the Township and the capacity of infrastructure.
- Promote harmonious and organized development consistent with adjacent land uses.
- Achieve high quality site and building design that contributes to strong neighborhoods, vital shopping districts, and desirable employment centers.
- Preserve the "quality of life" in Genoa Township by retaining significant, sensitive natural amenities such as water bodies, wetlands, slopes, mature trees and natural ecosystem.
- Encourage integration of natural features such as woodlands and wetlands into site development as aesthetic and functional features.

2. **Compatibility.** There is an existing residence and a large accessory building on the property (to the northwest along Golf Club Road), though the subject site is otherwise undeveloped.

The surrounding area includes single-family residences at various densities.

The submittal materials reference preservation of existing wooded areas to the south and west to provide buffering from existing residential uses.

Sheet 2 of the revised submittal identifies 6 large trees in these areas (5 to the south and 1 to the west) that will be protected.

Based on the limits of disturbance (depicted on Sheet 3), the westerly 450 feet of the property will remain undisturbed.

Lastly, in response to questions posed in our previous review letter, the applicant has indicated that church operations will include 2 worship services on Sunday mornings, 1 weeknight activity for youth groups and miscellaneous small group bible studies during the week.

Given the building design with double doors and windows along the south side of the auditorium, we suggest mitigation be required to prevent noise impacts for the adjacent residential uses.

3. **Public Facilities and Services.** Vehicular access will be provided to/from Golf Club Road, while utility connections are proposed via the Latson Road right-of-way.

The applicant must address any comments provided by the Township Engineer and/or Brighton Area Fire Authority with respect to this criterion.

4. **Impacts.** The primary concerns under this criterion are related to traffic and sensitive natural features (wetlands).

Traffic: The revised submittal includes a traffic impact study (dated March 2022) that is subject to technical review by the Township Engineer. However, we provide the following excerpts from the summary/conclusions of the study for the Commission's consideration:

- Currently, approaches and movements operate at a Level of Service (LOS) D or better.
- As a result of the project, approaches and movements will continue to operate at a LOS D or better.

- No off-site roadway or traffic control improvements are required.
- A left turn lane and right turn taper are warranted at the driveway's intersection with Golf Club Road.

The revised site plan includes the improvements noted in the traffic study.

Natural Feature Setbacks. Section 13.02.04 establishes a 25-foot undisturbed area around regulated wetlands unless special land use approval is granted for encroachment. Furthermore, no activities are allowed within 10 feet of a regulated wetland, unless specifically approved by the Planning Commission.

As previously noted, the project includes encroachments into the setback for grading, stormwater structures, and portions of the driveway (including a retaining wall).

The revised submittal includes a detailed drawing of the proposed encroachments for both the northerly and southerly portions of the site (Sheet 13).

There are 7 areas where grading occurs within the 25-foot setback – 3 in the northerly portion and 4 in the southerly. 5 of these areas are also within 10 feet of the wetland boundary.

These encroachments will be reseeded after disturbance and returned to their pre-development condition.

The stormwater plan also includes 5 structures within the required setback/at the edge of the wetland boundary. These activities have been permitted by EGLE.

Lastly, the driveway encroaches into the 25-foot setback in 4 location – 3 in the northerly portion and 1 in the southerly. The primary encroachment in the northerly area also includes a retaining wall that is within 10 feet of the wetland boundary.

Given the location of the wetlands, site topography, and current conditions on Latson Road, encroachments are necessary to construct a driveway to/from Golf Club Road. Notes on Sheet 13 also indicate that the driveway has been designed to minimize disturbance of the natural feature setback area.

In summary, the proposed encroachments are necessary for access and stormwater management and/or do not result in a significant adverse impact upon the wetland areas. Furthermore, where necessary, the activities have been permitted by EGLE.

- 5. Mitigation.** Should additional concerns arise as part of the review process, the Township may require improvements to mitigate potential adverse impacts.

#### **D. Use Requirements**

Section 3.03.02(l) identifies the use requirements applicable to churches, temples, and similar places of worship, as follows:

- 1. Minimum lot area shall be three (3) acres plus an additional fifteen thousand (15,000) square feet for each one hundred (100) persons of seating capacity.**

The notes on Sheet 4 identify a seating capacity of 506, which results in a minimum lot area requirement of 4 to 5 acres. The 46.5-acre site greatly exceeds the minimum lot area required by this criterion.

- 2. Buildings of greater than the maximum height allowed in Section 3.04, Dimensional Standards, may be allowed provided front, side and rear yards are increased above the minimum required yards by one foot for each foot of building height that exceeds the maximum height allowed. The maximum height of a steeple shall be sixty (60) feet.**

The proposed building has a maximum height of 26'-8", which is within the maximum allowed in the LDR (35').

- 3. Wherever an off-street parking area is adjacent to a residential district, there shall be a minimum parking lot setback of fifty (50) feet with a continuous obscuring wall, fence and/or landscaped area at least four (4) feet in height shall be provided. The Township Board may reduce this buffer based on the provision of landscaping, the presence of existing trees or in consideration of topographic conditions.**

At its nearest, the southerly drive aisle/parking lot provides a 98.5-foot setback from the residential district adjacent to the south.

The revised landscape plan includes 36 tightly spaced Arborvitae (4-foot tall at time of planting) immediately south of this drive aisle. The plans also note an "existing vegetative buffer" in this area that is to be preserved.

- 4. Private schools and child day care centers may be allowed as an accessory use to churches, temples and similar places of worship where the site has access to a paved public roadway.**

The revised submittal materials note that neither a private school nor child care center are proposed as part of this project.

#### **E. Site Plan Review**

- 1. Dimensional Requirements.** The location of the proposed building and parking lots comply with the applicable dimensional requirements of the LDR District.
- 2. Building Materials and Design.** Building materials include a stone veneer at the building entrance, wood (or wood-grain) siding, and 3 types of metal siding (2 with vertical alignment and 1 with horizontal).

Though the material standards of Section 12.01 do not apply to single-family residential districts, the remaining design standards do. This includes a requirement that "building walls over 100 feet in length shall be broken up with varying building lines, windows, architectural accents and trees."

Additionally, "building rear facades shall be constructed to a finished quality comparable to the front façade."

Each building face is at least 100 feet in length, though the façade facing Latson Road is comprised simply of metal siding. Meanwhile, the rear façade is entirely metal, the larger portion having only vertical siding, and is not "comparable to the front façade."

The applicant should be prepared to present material and color samples (and/or a color rendering) to the Commission for their review.

- 3. Pedestrian Circulation.** In accordance with Section 12.05, an 8-foot wide bike path is required along county primary roads, as designated on the Pathways Plan (which also notes a planned path along this portion of Latson Road).

In response, the applicant has indicated that the Road Commission has future right-of-way improvements planned, which will impact construction at this time. As such, the Township may allow a performance guarantee in lieu of pathway construction.

- 4. Vehicular Circulation.** Vehicular access is proposed to/from Golf Club Road. The driveway includes deceleration and acceleration lanes for eastbound traffic.

The circulation pattern includes two-way travel, with sufficient drive aisle widths provided throughout the site.

The applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority with respect to vehicular circulation.

- 5. Parking.** Based on the number of seats noted in the main unit of worship (506), Section 14.04 requires a total of 169 parking spaces.

The proposed site plan provides 187 spaces, including the required number of barrier-free spaces (6 required; 8 provided). Proper dimensions are also provided, and details note the use of looped striping (as required).

- 6. Landscaping.** The revised landscape plan has been reviewed for compliance with the standards of Section 12.02, as shown in the following table:

Standard	Required	Proposed	Notes
Front yard greenbelt (Golf Club)	20' width 27 canopy trees	+20' width Existing vegetation	Notes state that presence of wetland precludes new plantings.
Front yard greenbelt (Latson)	20' width 40 canopy trees	+20' width Existing vegetation	Notes state existing woodland buffer to remain in lieu of new plantings.
Parking lot	16 canopy trees 1550 SF internal landscaped area	14 canopy trees 5,145 SF internal landscaped area	Deficient by 2 canopy trees
Detention pond	4 trees 39 shrubs	4 trees 39 shrubs	Requirements met

The Planning Commission may allow existing vegetation to remain in lieu of new plantings, per Section 12.02.13.

- 7. Exterior Lighting.** The revised lighting plan includes 19 light poles along the driveway and throughout the parking lot, along with 2 wall mounted fixtures on the rear of the building. In response to comments from our initial review letter, the applicant has confirmed that appropriate shielding will be provided and that the soccer field will not be illuminated.

Details note the use of downward-directed LED fixtures. Pole fixtures are mounted at a height of 20 feet, while the wall units are mounted at 15 feet.

Maximum photometric readings on-site (7.3) and along property lines (0.0) comply with Ordinance standards.

Lastly, the applicant has noted that site lighting will be placed on timer controls so they are turned off when there are no activities occurring.

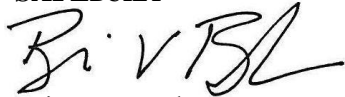
- 8. Impact Assessment.** The submittal includes a revised Impact Assessment (most recently dated March 16, 2022). The revised Assessment includes information regarding the natural feature setbacks and the findings from the traffic study.

In summary, the Assessment notes that the proposed project is not expected to have an adverse impact upon natural features, stormwater, surrounding land uses, public services/utilities, or traffic and pedestrians.

Should you have any questions concerning this matter, please do not hesitate to contact our office.

Respectfully,

**SAFE BUILT**

A handwritten signature in black ink, appearing to read "B. V. Borden". The signature is stylized and cursive.

Brian V. Borden, AICP  
Michigan Planning Manager



April 5, 2022

Ms. Kelly Van Marter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

**Re: Bible Baptist  
Site Plan Review No. 3**

Dear Ms. Van Marter:

Tetra Tech conducted a third review of the proposed Bible Baptist site plan last dated March 13, 2022. The plans were prepared by Boss Engineering on behalf of Bible Baptist Church. The development is located on 46.5 acres in the southwest quadrant of the Golf Club Road and Latson Road intersection. The Petitioner is proposing a 19,843 square foot church in the southeast corner of the property. The proposed site includes a 1,400-foot driveway, on-site storm sewer and storage, parking improvements, and municipal water main and sanitary sewer improvements. We offer the following comments:

#### **GENERAL**

1. The proposed entrance on Golf Club Road will need to be approved by the Livingston County Road Commission and approval should be provided to the Township prior to site plan approval.
2. The Petitioner provided a traffic impact study for the proposed development. The traffic impact study recommended that a left-turn lane and right-turn taper be constructed on Golf Club Road at the proposed driveway, and the site plan correctly includes the recommendations of the study.
3. The plan proposes a commercial drive with a dead-end that is approximately 1,400 feet long. If the property is further developed in the future, the Petitioner will need to work with the Township to determine if the driveway will need to be considered a private road.

#### **SANITARY AND WATER SERVICES**

1. The proposed 19,843 square foot church will be 2.58 REUs per the Township REU table that assigns 0.13 REU per 1,000 square feet for churches. This number of REUs should be used to determine the tap fee required for the proposed development. In the future, if the church is expanded, additional tap fees will be required.
2. After final site plan approval, the Petitioner will be required to submit construction plans to MHOG Sewer and Water Authority for review and approval.
3. The Petitioner is proposing a dead-end water main with a stub to the south for potential future connection to the existing 8-inch water main on Sugarbush Drive. The petitioner has included a 25-foot utility easement to the edge of the property to facilitate this future connection.

**Ms. Kelly Van Marter**  
**Re: Bible Baptist Church**  
**Site Plan Review No. 3**  
**April 5, 2022**  
**Page 2**

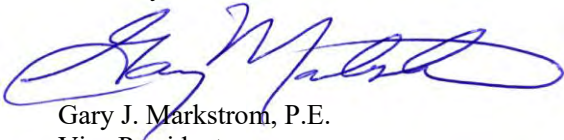
4. The Petitioner is proposing an on-site lift station and force main that will discharge to the existing 8-inch HDPE force main on the west side of Latson Road. Addition detail should be provided for the lift station during the construction plan review process and the lift station and force main connection will need to be coordinated with MHOG Sewer and Water Authority.

#### **DRAINAGE AND GRADING**

1. Two stretches of 18-inch pipe have proposed slopes of 3 percent, which is greater than the max allowable slope of 2.84 percent. The proposed pipes should be revised to ensure that the proposed storm sewer does not exceed that maximum allowable velocity of 10 feet per second.

We recommend the petitioner address the above comments prior to approval.

Sincerely,



Gary J. Markstrom, P.E.  
Vice President



Shelby Byrne  
Project Engineer





# BRIGHTON AREA FIRE AUTHORITY

615 W. Grand River Ave.  
Brighton, MI 48116  
o: 810-229-6640 f: 810-229-1619

April 6, 2022

Kelly VanMarter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

RE: Bible Baptist Church Special Use  
3850 Golf Club Rd.  
Genoa Twp., MI

Dear Kelly:

The Brighton Area Fire Department has reviewed the above-mentioned site plan. The plans were received for review on March 22, 2022 and the drawings are dated February 1, 2022 with latest revisions dated March 16, 2022. The project is based on the redevelopment of an existing vacant parcel to a new A-3 19,843 square foot church facility. The plan review is based on the requirements of the International Fire Code (IFC) 2021 edition.

**All previous comments have been corrected or acknowledged in this submission. Phase II will require an independent review for proper access. The proposed Phase II emergency access shown is not compliant with the fire code.**

Additional comments will be given during the building plan review process (specific to the building plans and occupancy). The applicant is reminded that the fire authority must review the fire protection systems submittals (sprinkler & alarm) prior to permit issuance by the Building Department and that the authority will also review the building plans for life safety requirements in conjunction with the Building Department.

If you have any questions about the comments on this plan review please contact me at 810-229-6640.

Cordially,

A handwritten signature in black ink, appearing to read "R. Boisvert".

Rick Boisvert, CFPS  
Fire Marshal

cc: Amy Ruthig [amy@genoa.org](mailto:amy@genoa.org)

**From:** [Patricia Murphy](#)  
**To:** [Kelly VanMarter](#)  
**Subject:** Hearing re Bible Baptist on Latson and Golf Club, please add my concerns  
**Date:** Tuesday, March 8, 2022 9:38:53 AM

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to Planning Director Kelly VanMarter and Planning Commission:

My name is Patricia Murphy, 139 Lakeshore Vista, Howell. I reside in the Lakeshore Pointe sub. The sub has one and only exit/entrance road is Golf Club. I am out of town, unable to attend the March 14 hearing, so am sending this email so that my concerns can be heard. I am a Christian myself, but my concerns are about the proposal, not the church.

Lakeshore Pointe sub has **248** homes, most with **two** vehicles. Our only way to enter and exit is Golf Club. Exiting, particularly, is **extremely dangerous**. **Golf Club traffic does not slow down and cannot be seen** coming down from Latson at **50+MPH**. We cannot see them nor they us. Exiting at present onto Golf Club from our sub takes courage, a fast step on the gas and a prayer.

**The increased traffic from the Bible Baptist project will two will gravely increase the danger. It will make entering and exiting from our sub even more dangerous. It will be impossible to safely exit our sub.**

GPS and WAZE etc routes Golf Club to Latson to the freeway 96, Meijer's, Walmart, Kohl's etc. It is the route residents use. Once again **more traffic on this stretch of Golf Club, from Latson to Grand River, will make exiting and entering our sub hazardous, if not impossible.**

Golf Club is two lanes and not able to accommodate heavy traffic. **Bible Baptist project phase one alone, will not only host Sunday and Wednesday services (186 parking spots, 500 seat auditorium) but large gatherings, events etc)** Golf Club was not created to handle such heavy traffic! It will not be safe.

**So I ask the planning commission:**

**??Has an outside consulting unbiased Firm, not linked in any relationship to Boss engineering, been hired to study and report on the total impact of this project on the community?**

**??Has a thorough traffic study been done, not only on the Latson/Golf Club corner but on the stretch of Golf Club from Latson down to Grand River? From Chemung Hills golf course, Eager Rd, and our Lakeshore Pointe sub in both North and South directions?**

If a **complete study** has not yet been done and made available to the commission and to residents, no action can be taken on this project proposal. **The safety of the community and impact on its residents is paramount. My concerns are not about religion. My concerns are about lives and safe roads.**

**And although Bible Baptist submits this phase one, its label "phase one" demands that future development plans already written and posted on their website also be given some weight in the decision of the planning commission. the sake and safety, of the community and present residents, voters and taxpayers needs to be insured.**

Thank you for taking time to consider my concerns.  
Sincerely, Patricia Murphy  
139 Lakeshore Vista, Howell  
C248.770.3552

Sent from Patricia Murphy's I pad

## Kelly VanMarter

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**From:** Jeff Hawk <jhawk@comcast.net>  
**Sent:** Friday, March 11, 2022 10:09 AM  
**To:** Kelly VanMarter; Jeff Dhaenens  
**Subject:** Genoa Bible Baptist Church Project

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Good Morning Genoa Board,

I am writing with concerns over the proposed church plans that are submitted for your approval. The main concern is not that the church is being built, it is more about where they chose to place the development. With 45 acres to use that could have created a very sufficient natural barrier between them and the subdivision to the south. Below are a couple screenshots that illustrate my concern including a proposal that will improve the reception of the project.

In screenshot 1, they call for a 60' setback and 50' clearance from the edge of my property line and their parking lot with lights and garbage dumpster. Their design calls to Maintain Existing Vegetative barrier. The issue with this is there is No Barrier, currently there is a Mowed Walking/Driving path through the property that is 50' wide. The dense row of large Pine Trees start at 50' from my line which means they will all be removed for the project. Their call out in Screenshot 2 to maintain the Dense 30-60' wide buffer is incorrect. The only thing between them and my back patio is my row of trees that are bare 6 months out of the year providing no natural barrier.

If I were to install a fence along the my yard, that would provide very little relief as the church property is significantly elevated from my property and the parking lot lights would pollute my peaceful back porch.

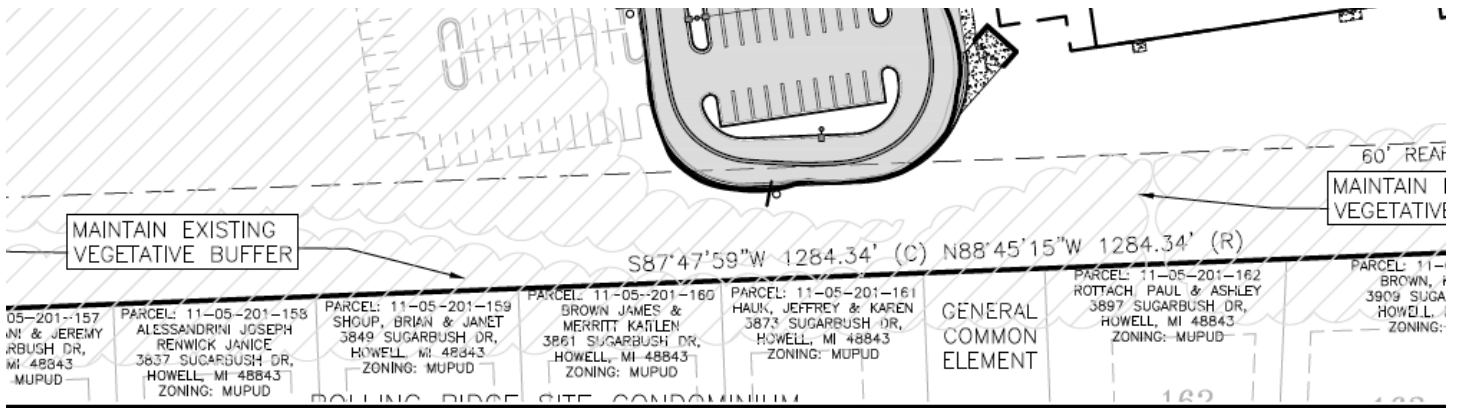
My proposal for the project would be to increase the gap from our back property line from 50 Feet to 50 yards. This would seem to save the church money on their entrance road project. The natural barrier created by the dense existing Pine trees should provide a reasonable natural noise and light barrier to allow both parties a comfortable environment. Screenshot 3 seems to show enough variance to allow this change. With a worst case scenario of relocating the soccer field to somewhere else in the 45 acres.

If the Board Members would like to walk the property with me or have additional pictures provided, I would be happy to assist.

Jeff Hawk

248-756-2488

Screenshot 1.



Screenshot 2.

5. LANDSCAPE BUFFERS

GREENBELTS ALONG THE RIGHT-OF-WAY AND A LANDSCAPED BUFFER ZONE BASED ON ADJACENT ZONING SHALL BE PROVIDED AS REQUIRED IN SECTION 12.02.

**REQUIRED:** GREENBELT ALONG R.O.W. 20' WIDE, 1 CANOPY TREE FOR EVERY 40 LINEAR FEET OF FRONTAGE

**PROVIDED:** LOCATION OF EXISTING WETLAND TO THE NORTH ALONG GOLF CLUB DR. PREVENTS PLANTING OF TREES ALONG R.O.W. EXISTING WOODLAND BUFFER ALONG LATSON ROAD R.O.W. TO REMAIN.

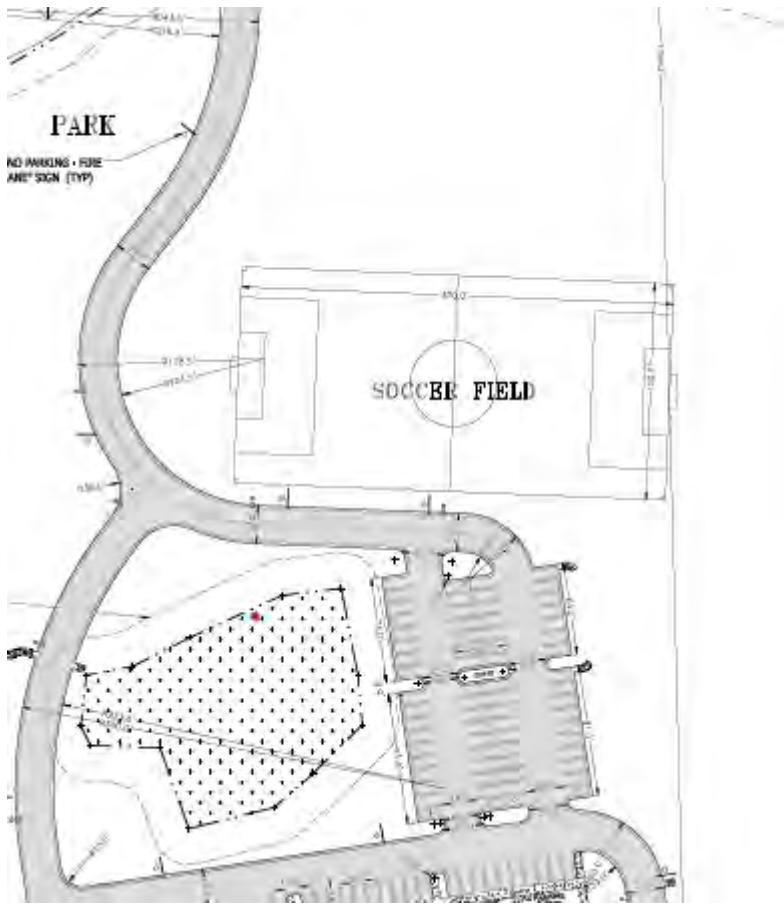
**REQUIRED:** BUFFER TO MIXED USE PUD DISTRICT TO THE SOUTH

**PROVIDED:** DENSE EXISTING 30'–60' WIDE BUFFER TO ADJACENT ZONING AT THE SOUTH WILL REMAIN. PLANTING ROW OF PLANTINGS ALONG THE SOUTHERN END OF THE SOUTHWEST PARKING LOT ADJACENT TO THE RESIDENTIAL TO THE SOUTH WHERE THE EXISTING VEGETATION REMAINING IS 30' WIDE.

**REQUIRED:** BUFFER TO RURAL RESIDENTIAL DISTRICT TO THE WEST

**PROVIDED:** ADJACENT ZONING TO WEST IS SCREENED BY EXISTING WOODLANDS THROUGHOUT THE SITE (SEE OVERALL SITE PLAN SHEET 4)

Screenshot 3.



**From:** [Paul Rottach](#)  
**To:** [Kelly VanMarter](#)  
**Subject:** Proposed Site Plan for Church on Latson and Golf Club  
**Date:** Friday, March 11, 2022 5:36:16 PM

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Good morning,

I hope all is well with everyone. I am writing with concerns regarding the proposed church plans behind my house. I have two concerns; one is the closeness of the building and parking lots with lighting to my home and two is water drainage and run-off from the property.

I understand that the property is being developed and I have come to terms with it. However, I would ask that proper and sufficient natural barrier between my home and the building, parking lot, dumpsters and outdoor lighting please be considered. The closeness of the proposed site plan does not reflect accurately the natural barriers in place. Not only is it not a dense barrier as stated in the site plan, it removes the pine trees and the hill placing everything within a very close distance of my home and other homes as well.

The current placement will create a constant lighting nuisance to multiple adjoining properties. I believe that if someone from the board would come to my home and look, they would understand that what is being proposed is not accurately depicted in the site plan.

Also, Water run off is not properly being discussed. As seen in the pictures I have provided, there is a water runoff and accumulation issue on and around this property. Not only on Golf Club Rd but on my property as well, I am deeply concerned that once this building is built, that my basement will begin to flood. I believe that it is appropriate to have my concerns documented and addressed.

Lastly, I understand that this site is being developed, however, I ask that the new landowners think of the neighborly thing to do before they build. They are coming into a new neighborhood, and I would like to be supportive of my new neighbors.

Thank you,

Paul Rottach

248-804-4611

Pmr13@yahoo.com









**From:** [Beth](#)  
**To:** [Kelly VanMarter](#)  
**Subject:** Church build golf club and Latson  
**Date:** Sunday, March 13, 2022 2:50:17 PM

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Good afternoon. I am writing with concern over the proposed church build on the corner of Golf Club and Latson. My concern is with the traffic that will most definitely increase by building on this land? As a resident who's neighborhood sits on Golf Club, over the last 2-5 years the increase in traffic on this road has been huge. Attempting to make a left turn out of your subdivision at any time of day has become very difficult and dangerous. Even more so with golf club and eager being a way to avoid golf club and Latson to get to m59. When first moving yo the area we were taken by how it was a nice two lane road that didn't see a ton of traffic. How is the addition of this building going to increase that traffic, Specifically with the driveway dumping church goers into golf club? How is the township planning to address these small two lane roads not made to handle the influx of traffic that has happened?

The amount of traffic that is on Latson and golf club during any time of the day is also increasing by the week. The area is dangerous seeing multiple accidents with traffic consistently backed up in every single direction. The limited site distance coming over the hill to the light on golf club causes many to have to make sudden stops for a red light not seen until the last minute.

Is there plans for future build on that site for housing? The last thing we need in this area is more housing. How are the wetlands being addressed and protected on that parcel?

We moved away from the metro detroit area to get away from the constant development on every corner of the city. Where you can look around and there are zero fields, wetlands, or empty parcels of land left. We fear we didn't move far enough west at this point the way the area is being developed at such a rapid rate.

I hope all the concerns of those of us who live in the area are taken into consideration with this proposal as it will greatly affect our day to day lives.

Thank you for your time

Beth O'Dea

Sent from my iPhone



**From:** [Lisa](#)  
**To:** [Kelly VanMarter](#)  
**Subject:** Bible Baptist Church  
**Date:** Monday, March 14, 2022 10:14:45 AM

---

Good Morning -

I'm writing to you regarding my concerns of plans for the Bible Baptist Church on Latson, south of Golf Club.

I'm sorry I can't attend tonight's meeting due to health issues, but wanted to voice my concerns.

My understanding of the plans is to have the entrance/exit of the church on to Golf Club road? We live in Lakeshore Pointe and already face traffic issues trying to turn in and out of our neighborhood. It's a blind curve and with cars going 45+ mph, it's very dangerous. Our concern is this situation will only get worse with increase in traffic along Golf Club road.

My first concern is the over development of this corridor as is. There is plenty of open property for the church to consider that does not sit on a major road, like Latson, that is already struggling to keep up with current development and heavy flow of traffic.

If the proposal went through, then we ask that planning commission consider that the flow of traffic from the church enters and exits with a Light on to Latson road, NOT Golf Club.

Lastly, if plans proceed as is, then we ask at bare minimum, the planning commission insists on lowering the speed on Golf Club to 35mph. and installs a light at Golf Club and Eager road to help mitigate traffic concerns. There has been plenty of accidents at this intersection to warrant this concern.

Thank you for your time. I appreciate you listening and considering our concerns.

Lisa (& Dean) Norton  
20+ year residents

## Kelly VanMarter

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**From:** Michael Siterlet <mgsiterlet@gmail.com>  
**Sent:** Wednesday, April 6, 2022 7:39 AM  
**To:** Kelly VanMarter  
**Subject:** Issues to Consider Bible Baptist Church Development - Golf Club Rd

Hello Kelly,

Prior to next week's planning meeting (Monday, April 11, 2022) Eileen and I wanted to provide you and the Planning Board Members with a list of issues we have with the development being proposed by Bible Baptist Church.

As you may recall, we share common appurtenances to both our properties connected to Crescent Lake. The appurtenances we are referring to are the beautiful views created by the lake and connected landscape - the pines and hardwoods boarding the lake.

Back in 1984 the Pasinski family sold the property to the Boss family with a stipulation that the Boss family, their successors and assignee's, recognize and maintain the features associated with the lake that are clearly appurtenances to both properties. Proofs of these stipulations are provided in the form of the recorded easements (at Liber 432, page 461, Livingston County Records). A copy has been provided to Genoa Township Planning in past correspondence. If additional copies are needed please let me know.

We realize that some board members may believe the issue concerning the property easements are private matters that go beyond the responsibilities of a planning board, however we feel, critical to the decision making process, (either private or public), all information connected with the effects of a proposed development are important. In our opinion, any impact that affects a plan, whether private or public, needs to be considered at all levels.

Like many existing property owners, we also believe Genoa Township is very unique when compared to the other surrounding communities' due to its lakes and natural environmental characteristics.

The land adjacent to the intersection of Latson and Golf Club Road not only is environmentally sensitive when considering the volume of water that flows through it and how it is filtered, the current variety of living species depend on it. The land also provides a relief, a relief from many of the negative impacts that have been created by past developments in surrounding communities.

Although Eileen and I plan to be at Monday's meeting to discuss our concerns in more detail, the list below provides a briefing on what our concerns entail.

Points we would like Discussed;

1. That any approval of the Preliminary Site Plan for the church includes a requirement noting existing Easements and restrictions on the plans. Any final approved Site Plan must include the required amendments to the existing Easements. All parties connected with the appurtenances understand, agree and accept the changes to the Easements.

2. The Impact Assessment provided does not clearly address the impact of the development on the lake's water level and surrounding drainage - what if it fails?

3. Traffic; we have concerns with both existing and future traffic and its impact on our health and safety. The additional traffic volume on Golf Club Road, a road that has little or no enforced speed and noise controls is already at unbearable levels.

The original preliminary site plan approval by the Genoa Planning Board was for a private drive that would access a 10 unit Condo Development from Golf Club Rd. not for a church with 400 plus congregants.

Current noise levels at our home on Golf Club Road, adjacent to the proposed church entrance, have increased significantly. The results of increased cars and commercial vehicles traveling Golf Club Road at greater speeds have also increased noise levels that exceed 75 Db.

Prior to the meeting, feel free to contact me with any concerns or comments. If not, we are looking forward to the meeting.

Thanks,

Michael & Eileen Siterlet

3780 Golf Club Rd

Howell, Michigan

810 533-3780

# GENOA TOWNSHIP IMPACT ASSESSMENT

Prepared for:

**Owner / Applicant  
Bible Baptist Church  
2258 E. Highland Rd.  
Howell, Michigan 48843**

Prepared by:

**Jennifer M. Austin, PLA**



3121 E. Grand River Howell, MI 48843  
517.546.4836 fax 517.548.1670  
[www.bosseng.com](http://www.bosseng.com)

**February 1, 2022**

Revised: February 23, 2022  
Revised: March 16, 2022

## INTRODUCTION

The purpose of this Impact Assessment (IA) Report is to show the effect that the proposed church campus development has on various factors in the general vicinity of the use. The format used for presentation of this report conforms to the Submittal Requirements for Impact Assessment/Impact Statement Guidelines in accordance with Section 13.05 of the published Zoning Ordinance for Genoa Township, Livingston County, Michigan.

## DISCUSSION ITEMS

- A. Name(s) and address(es) of person(s) responsible for preparation of the Impact Assessment and a brief statement of their qualifications.

Prepared by:

Jennifer M. Austin, PLA  
Professional Landscape Architect and Project Manager  
Boss Engineering  
3121 E Grand River  
Howell, MI 48843

Prepared for:

Owner/Applicant:  
Bible Baptist Church  
2258 E. Highland Rd.  
Howell, MI 48843

- B. Description of the site, including existing structures, man-made facilities, and natural features, all-inclusive to within 10' of the property boundary.***

The project site is on parcel # 4711-05-200-002 in the NE ¼ of Section 5, Genoa Township, Livingston County, MI, and which the parcel at the southwest corner of Golf Club Road and Latson Road.

The subject site is bordered:

- To the north is the Genoa Township-Oceola Township line along Golf Club Road. The northern half of the subject property contains a 3+/- acre pond, a wetland and single family residence.
- To the east are RR and RPUD zoning on the opposite side of Latson Road.
- To the south is MUPUD zoning which contains the Rolling Ridge site condominium.
- To the west is RR zoning with single family residences.

Current zoning of the subject site is Low Density Residential (LDR), 1 unit/acre. This new zoning designation was approved by the Genoa Township Planning Commission at the July 20, 2020 meeting. Sewer and Water are along entire the Easterly line (Latson Road) of the subject parcel and accessible at the Southerly property line at Sugarbush Drive.

- C. Impact on natural features: A written description of the environmental characteristics of the site prior to development, i.e., topography, soils, vegetative cover, drainage, streams, creeks or ponds.**

### **GENERAL OVERVIEW**

#### **AREA 1**

The Northwesterly 10 acres of the site are the location of the existing residence. This area consists of two parts: The House, located on the top of a gently rolling hill, and the pond adjacent to the house along the southerly and westerly portions. The private entrance road to the proposed church campus will cross the easterly portion of this area.

#### **AREA 2**

The Northeasterly 10 acres of the site are relatively flat of which approximately 5 acres is a wetland. There are 2 man-made ditches within this wetland that flow northerly under Golf Club Road into a small wetland in Oceola Township. Stormwater management for this project will mostly be managed in this area by forebays to filter stormwater before discharge into the wetlands and/or pond.

#### **AREA 3**

The Southerly 26+ acres are gently sloped to moderately steep slopes. The entire area is heavily wooded with a mixture of evergreens and hardwoods. The northerly portion of Area 3 flows naturally north to the existing lake and/or the existing wetland. The southerly portion of Area 3 flows generally southeast into an existing drainage area along Latson Road.

The church campus and a portion of the driveway will be located in this area. Clearing of trees will be kept to a minimum by use of curb and gutter for the commercial drive.

### **WETLAND SETBACKS**

The regulated wetlands on-site contain a 25-foot wetland setback per Township Ordinance. The proposed development includes grading within the 25-foot wetland setback at the east wetland, the open water pond as well as for the two upland wetland pockets. Also included within the wetland setbacks are a retaining wall and multiple storm water structures. The areas of disturbance within the setback on the east wetland and the open water pond will have no impact on the wetlands. Currently, the land is maintained up to the wetland limits in these areas with grass, in which the 25' is open. The disturbance will not disrupt crucial vegetation in this instance and the area will be reseeded with grass post construction, consistent with its pre-development condition. Given the location of the wetlands and their proximity to each other, as well as their proximity to other existing structures on site, in order for the commercial drive to run southerly to access the developable portion of the parcel, work within the setback will be required.

There are two upland pocket wetlands near the proposed church and parking lots. Disturbance is proposed to occur within the 25' wetland setback on both upland wetland pockets. Based on the topography and visual inspection, the eastern upland wetland has very minimal water ponding as water typically flows through this area to ultimately pond at the western upland wetland pocket. The wetland vegetation quality is low, and the minimal trees within the wetland limits are dead. The wetland is of low quality and grading within the setback of this wetland does not impact the overall stormwater management on the site. Water is continuing to be directed to the western of the two upland wetland pockets, prior to discharging northerly towards the existing pond on-site.



The retaining wall located within the wetland setback is proposed to limit disturbance and avoid disturbance within the wetland limits. The proposed drainage structures proposed within the wetland setbacks are utilized for the sites storm water management system. Water is being directed in a manner consistent with the current overall drainage patterns on the site.

#### SPECIFIC OVERVIEW

The soils and natural features throughout the site are specified on the Existing Conditions and Natural Features Sheets 2 and 3.

***D. Impact on storm water management: description of soil erosion control measures during construction.***

The preliminary site plan indicates stormwater management forebay and mechanical pretreatment units to be constructed during the infrastructure construction. These forebays and mechanical pretreatment units will pre-treat the stormwater prior to discharge to the pond and wetland at the north half of the site. The discharges and pond storage is permitted in MDEGLE permit WRP026826. The detailed construction plans will be reviewed by the Township Engineer and the Soil Erosion Control permit will be reviewed and issued by the Livingston County Drain Commissioner. Silt fence will be used to stop erosion from impacting the wetlands.

***E. Impact on surrounding land use: Description of proposed usage and other man-made facilities; how it conforms to existing and potential development patterns. Effects of added lighting, noise or air pollution which could negatively impact adjacent properties.***

Phase I of this project will include a commercial drive approach on Golf Club Road, proceeding southerly to the church campus at the southeast corner of the parcel. This development will have little, if any, impact on the northerly 15 acres of the site. The development will require maintaining a significant portion of the existing forested property along the west, east and south property lines. These natural buffers will minimize lighting and noise to existing developed, adjacent properties. The low-density residential development will have no air pollution impact.

***F. Impact on public facilities and services: Description of number of residents, employees, patrons, and impact on general services, i.e., schools, police, fire.***

The Site Plan for this phased development is for a 506-seat church sanctuary and associated parking, a new commercial driveway, a soccer field, and stormwater forebay in Phase I. Phase II will allow for an expansion of the church with approximately 500 more seats and associated parking, a potential new access drive off Latson Road, and potentially five single-family low-density residential lots.

The church will require connecting to water and sewer along Latson Road. Police and fire protection services, and schools should not be impacted by this church project.

***G. Impact on public utilities: description of public utilities serving the project, i.e., water, sanitary sewer, and storm drainage system. Expected flows projected in residential units.***

As noted above, the church will need to connect to the public sanitary and MHOG water along Latson Road for Phase I. A watermain easement will be provided to the southern property line for potential future looping with the existing Rolling Ridge development.

The stormwater management plan utilizes enclosed pipe and open swales to transmit water to either a mechanical pretreatment unit (for the primary stormwater management treating the majority of the developed site) and a forebay for the remainder of the storm water runoff on the north end of the site. The forebay and mechanical pretreatment unit filter runoff prior to release into the existing pond and wetlands that are on site.

**H. Storage or handling of any hazardous materials: Description of any hazardous materials used, stored, or disposed of on-site.**

No storing or handling of any hazardous materials is expected for this church campus.

**I. Impact on traffic and pedestrians: Description of traffic volumes to be generated and their effect on the area.**

A traffic study has been prepared for this site. The summary of the study is that all intersections currently operate at an LOS D or better during all peak hours and minor increases in delay will not be discernible. The required improvements to the Road network and proposed site approach are the following:

- 1) A center left turn lane and a right turn lane on Golf Club Road will be required.
- 2) If the church expands in Phase II, then a right turn lane would be needed on the proposed drive approach at Golf Club Road.
- 3) If a Laston Road approach is not installed, then special timing plans for the intersection of Latson Road and Golf Club Road associated with the Sunday service times should be coordinated with the LCRC. Should a Latson Road entrance be constructed, the signalization timing change is not warranted.

The Traffic Impact Study utilized the ITE Trip Generation Manual, 11<sup>th</sup> Edition, Church Land Use. The site trip generation for the 506-seat church is shown in the tables below and was extracted from the Traffic Impact Study.

Table 6: Phase I ITE Site Trip Generation

Land Use	ITE Code	Amount	Units	Average Daily Traffic	AM Peak Hour			PM Peak Hour			SUN Peak Hour		
					In	Out	Total	In	Out	Total	In	Out	Total
Church	560	506	Seats	454	21	14	35	23	28	51	121	125	246

Table 7: Phase I Sunday Site Trip Generation

Land Use	ITE Code	Amount	Units	SUN INBOUND Peak			SUN OUTBOUND PEAK		
				In	Out	Total	In	Out	Total
Church	560	506	Seats	121	25	146	24	125	149

The traffic study is to be submitted to the LCRC for review and approval in conjunction with the proposed project. The Livingston County Road Commission will be required to review and approve the commercial driveway approach at Golf Club Road as it relates to their standards and findings within the traffic study. At this time, the project plans include:

- 1) extending the Golf Club Road center left turn lane through the proposed approach on Golf Club Road,

- 2) providing a right turn(deceleration) lane and taper on the Golf Club Road approach,
- 3) providing a right turn lane on the approach as would be required in the Phase II traffic recommendations.

***J. Special provisions: Deed restrictions, protective covenants, etc.***

There is a document addressing shared maintenance and access to the existing pond on the subject property between Bible Baptist Church and the adjacent owner to the northwest to allow maintenance activities on the pond operations.

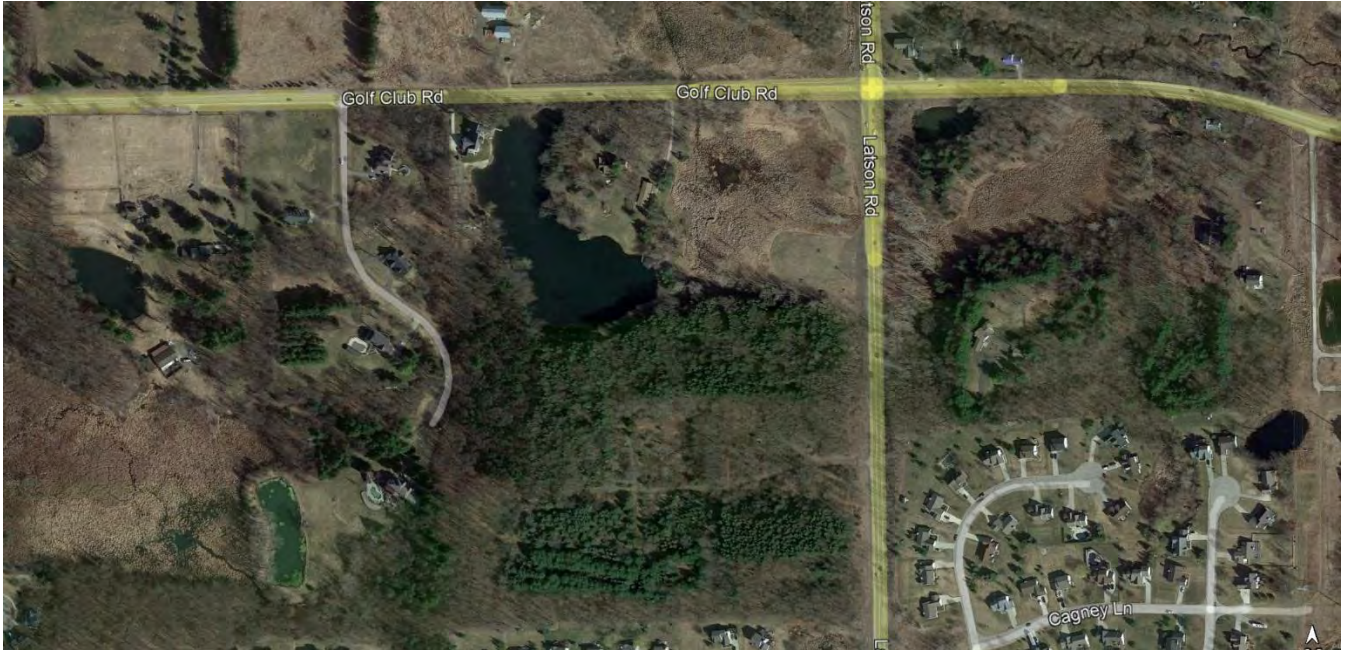
***K. Description of all sources:***

- Genoa Township Zoning Ordinance
- “Soil Survey of Livingston County Michigan” Soil Conservation Services, USDA
- Bible Baptist Church Traffic Impact Study – prepared by Bergmann



# BIBLE BAPTIST CHURCH TRAFFIC IMPACT STUDY

Genoa Township, Michigan



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March, 2022



**BIBLE BAPTIST**  
C H U R C H



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**KV - The Appendix documents were left out of the packet due to the number of pages. Please let staff know if you want to see the full document and it will be provided.**





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## 1.0 Executive Summary

This report presents the methodologies, analyses, results, and recommendations of a Traffic Impact Study (TIS) for the proposed Bible Baptist Church in Genoa Township, Livingston County, Michigan. The project site is located in the southwest quadrant of the Latson Road & Golf Club Road intersection and is currently vacant. The proposed development plans include construction of a new church over two phases. Phase I would construct a 506-seat church with site access provided via a single driveway to Golf Club Road. Phase II would include an approximately 500-seat expansion with potential for a new right-in-right-out driveway to Latson Road.

The purpose of this study is to identify the traffic related impacts, if any, of the proposed project on the adjacent road network. This study was conducted in accordance with accepted traffic engineering practice and guidelines published by the Institute of Transportation Engineers (ITE) and applicable agency standards. Analysis of existing conditions indicate that all approaches and movements at the signalized intersection of Latson Road & Golf Club Road currently operate acceptably at a LOS D or better during the peak hours and will continue to operate acceptably in 2023 and 2026 no-build conditions.

Traffic volumes that are expected to be generated by the development for Phase I and Phase II were forecast based on the rates and equations published by ITE in *Trip Generation* as summarized in the table below. These trips were assigned to the study road network based on existing peak hour traffic patterns, zip code data provided by the Church for existing members, and ITE methodologies. These trips were added to the no-build traffic volumes to calculate the future build traffic volumes with the proposed development for each Phase.

Phase	ITE Code	Amount	Units	Average Daily Traffic	AM Peak Hour			PM Peak Hour			SUN IN Peak			SUN OUT Peak		
					In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
Phase I	560	506	Seats	454	21	14	35	23	28	51	121	25	146	24	125	149
Phase II	560	1,000	Seats	913	42	28	70	45	55	100	249	52	301	50	259	309

The Conclusions related to this Traffic Impact Study and relative analyses are as follows:

1. At the time of this study, traffic volumes throughout the State of Michigan were impacted by restrictions in place associated with the COVID pandemic. Therefore, historic turning movement count data collected in April, 2019 was utilized to validate baseline traffic volumes for this study.
2. All approaches and movements at the study intersection of Latson Road & Golf Club Road currently operate acceptably at a LOS D or better during all peak hours.
3. Church time-of-day patterns and traffic volumes indicate approximately 80% of outbound traffic occurs in the first 30-minutes after service ends while approximately 85% of inbound traffic occurs in the 30-minutes prior to the service start time. Therefore, separate inbound and outbound analysis scenarios were completed as there will be minimal overlap between inbound and outbound traffic based on the one-hour separation between services.
4. All approaches and movements at the study intersection of Latson Road & Golf Club Road would continue to operate acceptably in the 2023 and 2026 no-build scenarios during all peak hours.
5. In accordance with LCRC standards, a left-turn lane and right-turn taper are warranted at the proposed site driveway to Golf Club Road under Phase I build conditions.
6. The 2023 Phase I build conditions analysis indicate that the proposed development will not have a significant impact on the adjacent road network. All approaches and movements at the intersection of Latson Road & Golf Club Road will continue to operate at a LOS D or better during all peak hours and minor increases in delay will not be discernable. Additionally, all approaches and movements at the proposed site driveway to Golf Club Road will operate acceptably. Therefore, the proposed development does not require any off-site roadway or traffic control improvements under Phase I build conditions.



7. In accordance with LCRC standards, a right-turn lane would be warranted at the proposed site driveway to Golf Club Road under Phase II build conditions.
8. The 2026 Phase II Alternative A build conditions analysis indicate the EB through/right-turn movement and WB left-turn movement at the signalized intersection of Latson Road & Golf Club Road would be reduced to a LOS F during the Sunday outbound peak 15-minute period. Additionally, the STOP controlled egress site driveway approach to Golf Club Road will operate at a LOS E or F during both the Sunday inbound and outbound peak 15-minute periods.
9. In order to improve traffic operations in the 2026 Phase II Alternative A build conditions, special Sunday timing plans during service times should be provided at the intersection of Latson Road & Golf Club Road.
10. In accordance with LCRC standards, a right-turn taper would be warranted at the proposed site driveway to Latson Road under Phase II Alternative B build conditions.
11. The 2026 Phase II Alternative B build conditions analysis indicate all approaches and movements at the intersection of Latson Road & Golf Club Road will continue to operate at a LOS D or better during all peak hours. At the proposed site driveways to Golf Club Road and Latson Road all approaches, and movements will operate acceptably at a LOS C or better during the weekday peak hours; however, the STOP controlled egress site driveway approaches to Golf Club Road and Latson Road will operate at a LOS F during the outbound peak 15-minute period.
12. Review of network simulations indicate a long vehicle queue on the site driveway approach to Golf Club Road during the outbound peak 15-minute period; however, the duration and length of this queue is reduced as compared to Alternative A. On the site driveway approach to Latson Road, the 95<sup>th</sup> percentile queue length is calculated to be 152 feet (six vehicles), which is not significant given the intensity of traffic utilizing this approach over a short duration of time. Therefore, the proposed development does not require any off-site roadway or traffic control improvements under Phase II Alternative B build conditions.
13. Queues from the signalized intersection of Latson Road & Golf Club Road would not block the site driveways to Golf Club Road or Latson Road under either Phase I or Phase II build conditions. Additionally, there will be no left-turn conflict along Golf Club Road between EB left turns at Latson Road and WB left turns at the proposed site driveway.
14. Site access Alternative B is recommended under Phase II build conditions as it would provide improved traffic operations for egress traffic from the site and reduce traffic impacts to the Latson Road & Golf Club Road intersection.

Based on the results of this study, the following improvements are recommended:

#### ***2023 Phase I Conditions***

1. Construct left-turn lane and right-turn taper at proposed driveway to Golf Club Road.

#### ***2026 Phase II Alternative A Conditions***

1. Construct right-turn lane at proposed driveway to Golf Club Road.
2. Install special timing plans at intersection of Latson Road & Golf Club Road associated with Sunday service times.

#### ***2026 Phase II Alternative B Conditions***

1. Construct right-turn lane at proposed driveway to Golf Club Road.
2. Construct right-turn taper at proposed driveway to Latson Road.



## 2.0 Project Overview

This report presents the methodologies, analyses, results, and recommendations of a Traffic Impact Study (TIS) for the proposed Bible Baptist Church in Genoa Township, Livingston County, Michigan. The project site is located in the southwest quadrant of the Latson Road & Golf Club Road intersection as shown on **Figure 1**, and is currently vacant. The proposed development plans include construction of a new church over two phases. Phase I would construct a 506-seat church with site access provided via a single driveway to Golf Club Road. Phase II would include an approximately 500-seat expansion with potential for a new right-in-right-out driveway to Latson Road.

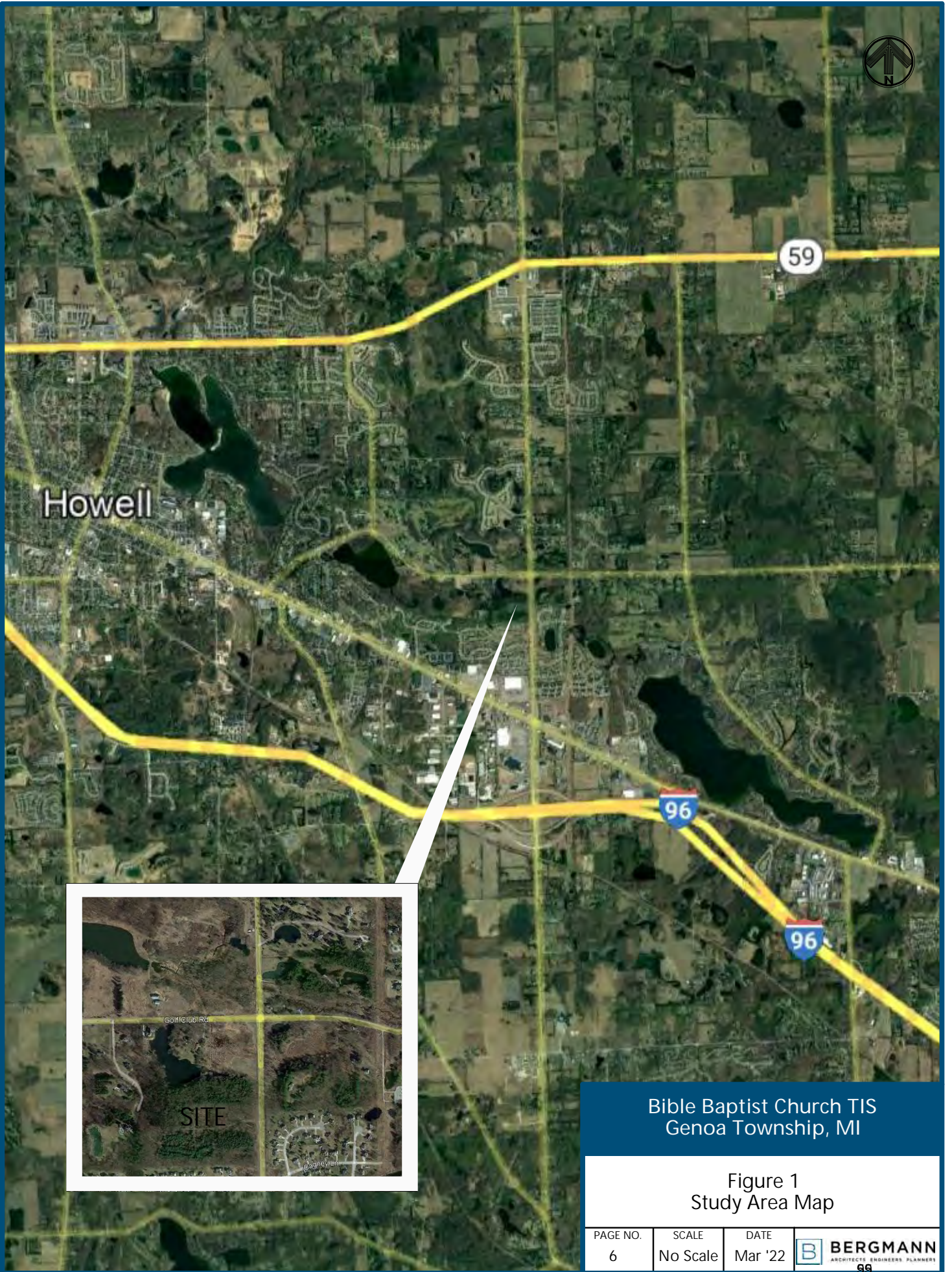
Proposed Phase I site operations will include Sunday Church services beginning at 9:00 AM and 11:00 AM in addition to children's activities, small groups, youth ministry, and other meetings occurring during the week. Upon completion of Phase II only one Sunday service is planned to be held at 10:30 AM with no changes to weekday activities. No weekday childcare or school is planned as part of the proposed Church. This TIS will address existing and future traffic conditions during the weekday AM (7:00 AM to 9:00 AM) and PM (4:00 PM to 6:00 PM) peak hours as well as the peak hour during Sunday service times.

Latson Road and Golf Club Road are under jurisdiction of the Livingston County Road Commission (LCRC); whereby access permitting will be subject to LCRC review and standards. Additionally, the project is subject to Township review and standards through the site plan approval process. In accordance with Township and LCRC standards a Traffic Impact Study (TIS) has been required for the project.

The purpose of this study is to identify the traffic related impacts, if any, of the proposed project on the adjacent road network. This study therefore includes analysis of the site access points as well as key off-site intersections surrounding the site. Analysis of the site access points will determine appropriate lane configurations as well as traffic control to process site traffic safely and efficiently. Key off-site intersections are analyzed to determine if new site-generated traffic passing through these locations would require improvements to mitigate any impacted traffic operations.

The scope of this study was developed based on Bergmann's knowledge of the study area, understanding of the development program, accepted traffic engineering practice and information published by the Institute of Transportation Engineers (ITE). Additionally, Bergmann solicited input regarding the proposed scope of work from LCRC. The study analyses were completed using Synchro and SimTraffic, Version 11 traffic analysis software and in accordance with the methodologies and practices published by ITE and the applicable requirements of LCRC. This report is intended for use by LCRC and the Township to guide decisions related to development project approvals, access permitting, and identifying future roadway improvement needs.





Howell

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Bible Baptist Church TIS  
Genoa Township, MI

Figure 1  
Study Area Map

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## 3.0 Roadway Data

### 3.1 EXISTING ROAD NETWORK

The study intersections are identified below, and the existing lane use, and traffic control is shown on **Figure 2**. Further details on the study roadways are summarized in **Table 1**.

#### 3.1.1 Study Intersections

- Latson Road & Golf Club Road (signalized); and
- The proposed site access drive(s) (unsignalized).

**Table 1: Roadway Summary**

Roadway Data	Latson Road	Golf Club Road
Functional Class	Minor Arterial	Major Collector
Direction	N - S	E - W
Speed Limit (mph)	55	55
Jurisdiction	LCRC	LCRC
Cross Section	2-Lane	2-Lane
AADT	22,300	7,400
AM Peak Hour Volume	1,400	555
PM Peak Hour Volume	1,915	820

At the intersection of Latson Road & Golf Club Road, a left-turn lane, through lane, and right-turn lane are provided on the NB and SB Latson Road approaches. On the EB and WB Golf Club Road approaches a left-turn lane and shared through / right-turn lane are provided. The intersection is traffic signal controlled with permissive-protected left-turn phasing provided for the NB approach. Vehicle actuation is provided for all movements at the intersection. No marked crosswalks or pedestrian signals are provided for any legs of the intersection.

#### 3.1.2 Existing Traffic Data

Historic 24-hour turning movement volumes at the intersection of Latson Road & Golf Club Road were obtained from LCRC for all days between November 11<sup>th</sup> and December 9<sup>th</sup>, 2021. During this time period, traffic volumes throughout the State of Michigan were impacted by restrictions in place associated with the COVID pandemic. Therefore, historic turning movement count data collected at the intersection on April 2<sup>nd</sup>, 2019 was also provided by LCRC. Traffic volume data are included in **Appendix A** and baseline traffic volumes were established as detailed in the subsequent sections.

#### Peak Hour Factors

All data were aggregated in 15-minute intervals to establish the current peak hour traffic volumes and peak hour factors (PHFs). Weekday PHFs at the study intersections were calculated by approach based on the requirements of MDOT's *Electronic Traffic Control Device Guidelines*. However, given the strong peaking characteristics of churches associated with service start and end times, PHFs were calculated by movement during the Sunday analysis periods. In order to determine the PHFs at the proposed site driveways, traffic volumes collected at three existing churches in southeast Michigan were reviewed and indicate an average PHF of 0.45 and 0.40 for entering and exiting traffic, respectively. Therefore, these PHFs were utilized for entering and exiting traffic movements at the site driveways for the Sunday analysis periods. For the weekday analysis periods, a PHF of 0.92 was utilized as traffic associated with weekday uses is less concentrated and more spread-out throughout the hour. For the Sunday build analysis scenarios, PHFs at the intersection of Latson Road & Golf Club Road were recalculated for movements to





and from the site by conservatively assuming the peak 15-minutes associated with Church traffic would coincide with the existing peak 15-minutes at the intersection.

### Heavy Vehicle Percentage

Commercial truck percentages from the April, 2019 turning movement count were utilized during the weekday AM and PM peak hour and calculated by approach. For the Sunday analysis periods a default commercial truck percentage of 2% was utilized as truck data was not available.

### Weekday Volumes

Weekday (Monday – Friday) AM and PM peak hour volumes were calculated for all days between November 11<sup>th</sup> and December 9<sup>th</sup>. This data was reviewed and any days which did not represent normal travel volumes and conditions were removed. The remaining days were averaged together to establish 2021 peak hour volumes. The 2021 peak hour volume was then compared to the pre-COVID 2019 turning movement count to determine if any volume adjustments were necessary. This comparison indicates similar overall traffic volumes at the intersection; however, some of the turning movement patterns have changed, particularly along the NB approach during the PM peak hour.

Commuting patterns through this area favor traffic traveling to the south and east during the morning peak hour and traffic traveling to the north and west during the afternoon peak hour. In mid to late 2019 improvements were made at the M-59 & Eager Road intersection which included widening of the Eager Road approaches to provide left turn lanes and installation of a traffic signal. This improved operations and safety for left turns at the intersection and made the shorter route of Golf Club Road to Eager Road more viable for traffic traveling from Latson Road south of Golf Club Road wishing to travel west on M-59. As such the shift in traffic patterns along the NB approach during the PM peak hour is likely attributed to these improvements.

Therefore, baseline traffic volumes for this study were established by taking the higher of the two volumes between the 2021 average and April, 2019 count for all turning movements during the peak hours with the exception of the NB approach during the PM peak hour. For this approach, the higher 2019 total approach volume was utilized and applied to the 2021 turning movement proportions along the approach. The resulting baseline weekday peak hour volumes are summarized on **Figure 3**.

### Sunday Volumes

For Phase I, the peak hour will occur between services from 10:00 AM to 11:00 AM when vehicles from the first service are leaving and vehicles for the second service are arriving. For Phase II, the peak hour will occur after the lone service from 11:30 AM to 12:30 PM. Therefore, Sunday traffic volume data between 9:45 AM and 11:45 AM was utilized to establish Phase I peak hour volumes and traffic volume data between 11:30 AM and 1:00 PM was utilized to establish Phase II peak hour volumes and account for any potential shifts of service times in the future.

Peak hour volumes for each phase were calculated for all Sundays between November 11<sup>th</sup> and December 9<sup>th</sup>. Data was reviewed and any days which did not represent normal travel volumes and conditions were removed. Baseline traffic volumes were then conservatively established by taking the highest volume amongst all Sundays for each turning movement at the intersection. The resulting baseline Sunday peak hour volumes are summarized on **Figure 4**.

### 3.1.3 Analysis Methodologies

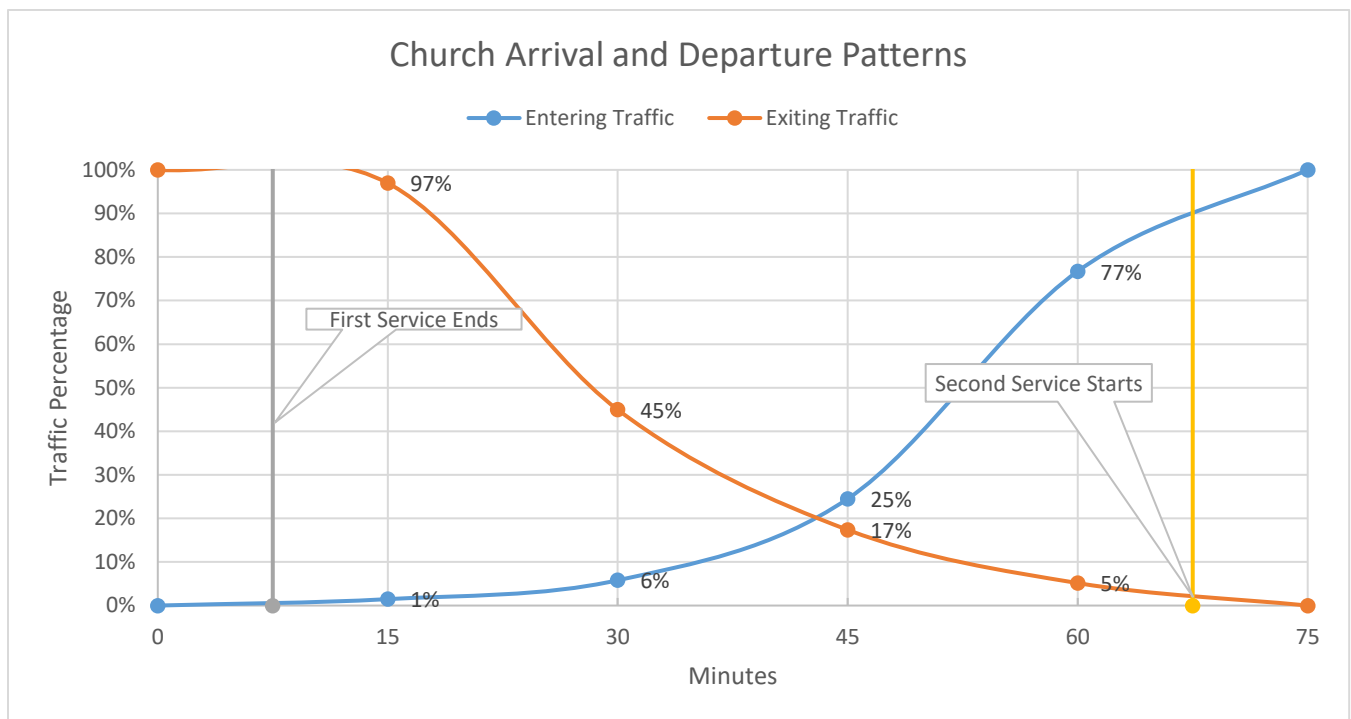
The performance of the study intersections was evaluated through a qualitative measure of operating conditions called Levels of Service (LOS). Six LOS are defined with letter designations from A to F with LOS A representing minimal delay, and LOS F indicating failing conditions. Typically, LOS D is considered acceptable in suburban/urban areas.



The LOS measurement for both signalized and unsignalized intersections is average control delay, which is quantified in terms of seconds of delay per vehicle. Control delay includes deceleration delay, stopped delay, queue move-up delay, and acceleration delay. The LOS criteria for unsignalized and signalized intersections taken from the HCM are included in **Appendix B**.

The operational analyses of all study intersections were performed using Synchro, Version 11 traffic analysis software. Synchro 11 is a software package used for modeling, optimizing, and simulating traffic systems. The LOS and delay calculations are based on the procedures and methodologies outlined in the Transportation Research Board’s *Highway Capacity Manual, 6<sup>th</sup> Edition* (HCM6) which sets forth nationally accepted standards regarding traffic operations and capacity analysis.

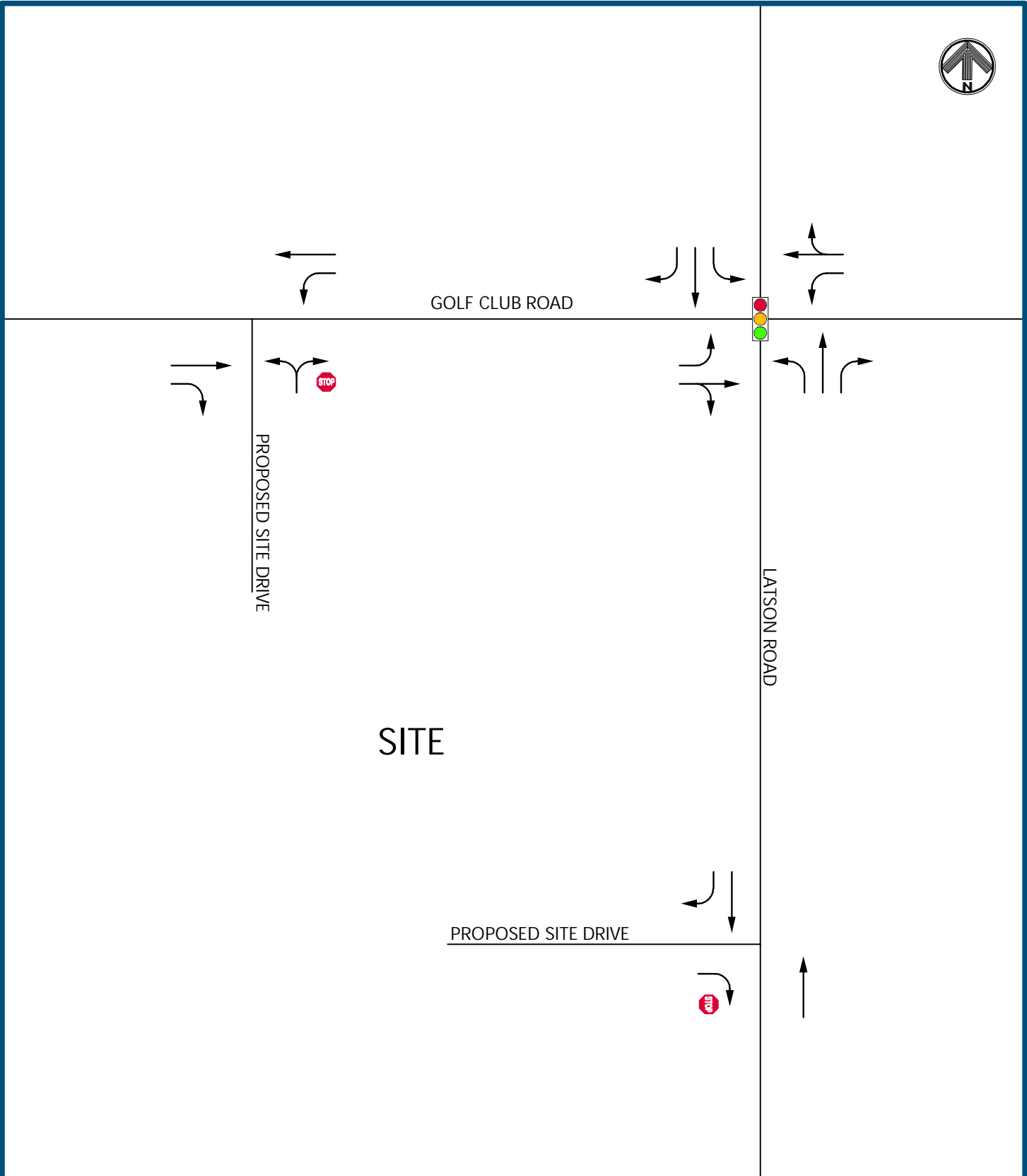
In accordance with the HCM6, the capacity analysis is based on an evaluation of the peak 15-min period during the hour. Church time-of-day patterns and traffic volumes from three churches in southeast Michigan are summarized in **Chart 1** and indicate approximately 80% of outbound traffic occurs in the first 30-minutes after service has ended while approximately 85% of inbound traffic occurs in the 30-minutes prior to the service start time. Based on the proposed one-hour separation between the end of the first service and beginning of the second service, there will be minimal overlap between entering and exiting traffic volumes in the peak 15-minutes associated with each service. As such, analysis of a single time period with all forecast inbound and outbound traffic and application of PHFs previously identified would provide an overprediction of demand and delay.



**Chart 1: Church Arrival and Departure Patterns**


In order to analyze two different 15-minute intervals, a separate inbound and outbound analysis scenario was completed for Phase I. For each scenario, only 20% of traffic in the non-peak direction was assumed to overlap with the peak direction being analyzed. This same approach was utilized for the Phase II analysis and accounts for a second Phase II service in the future should one ever be added.

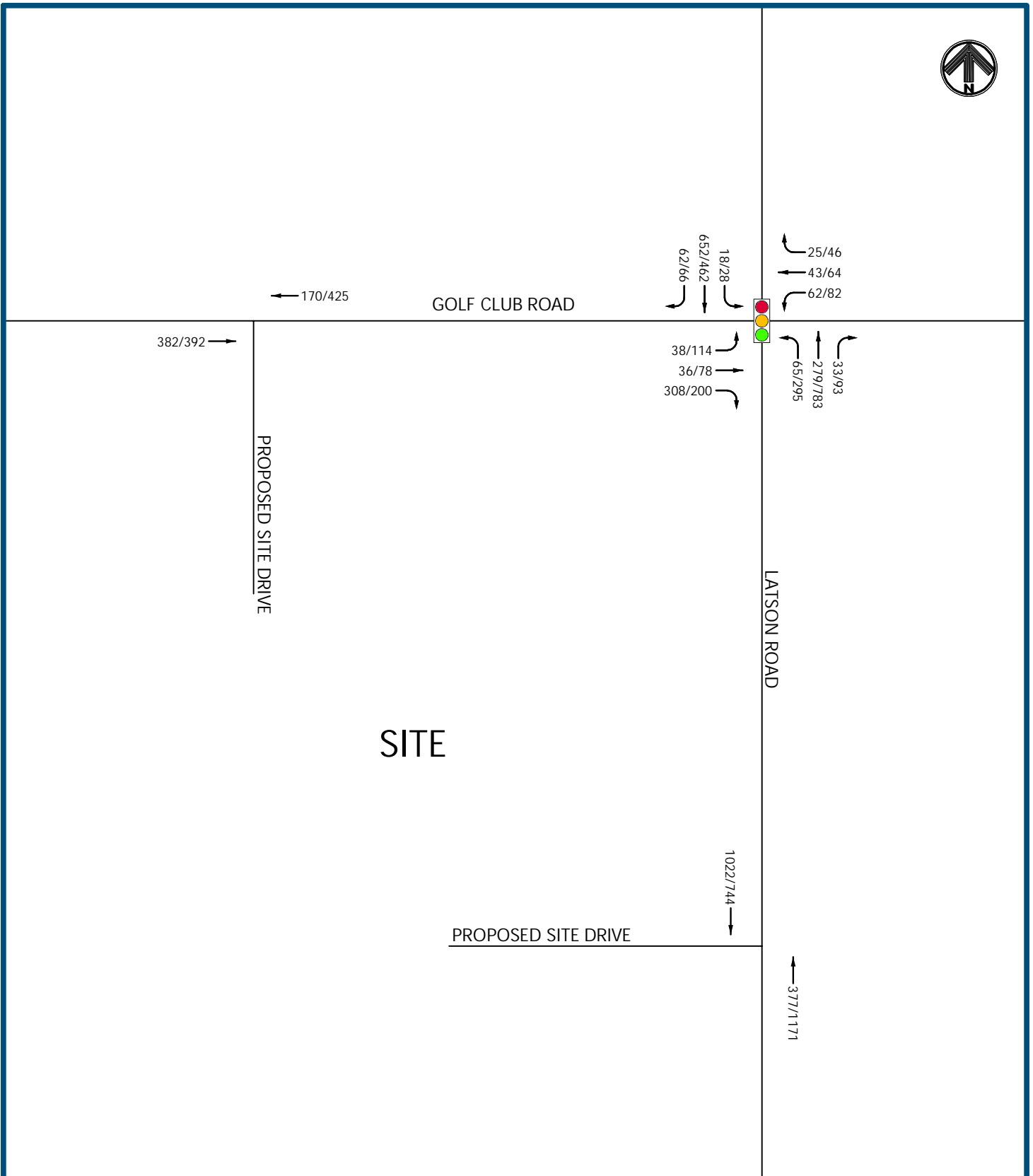
Queue length calculations were conducted using SimTraffic, Version 11 software. The existing conditions SimTraffic models were calibrated in accordance with the procedures outlined in the MDOT *Electronic Traffic Control Device Guidelines*.



Bible Baptist Church TIS  
Genoa Township, MI

Figure 2  
Lane Use and Traffic Control


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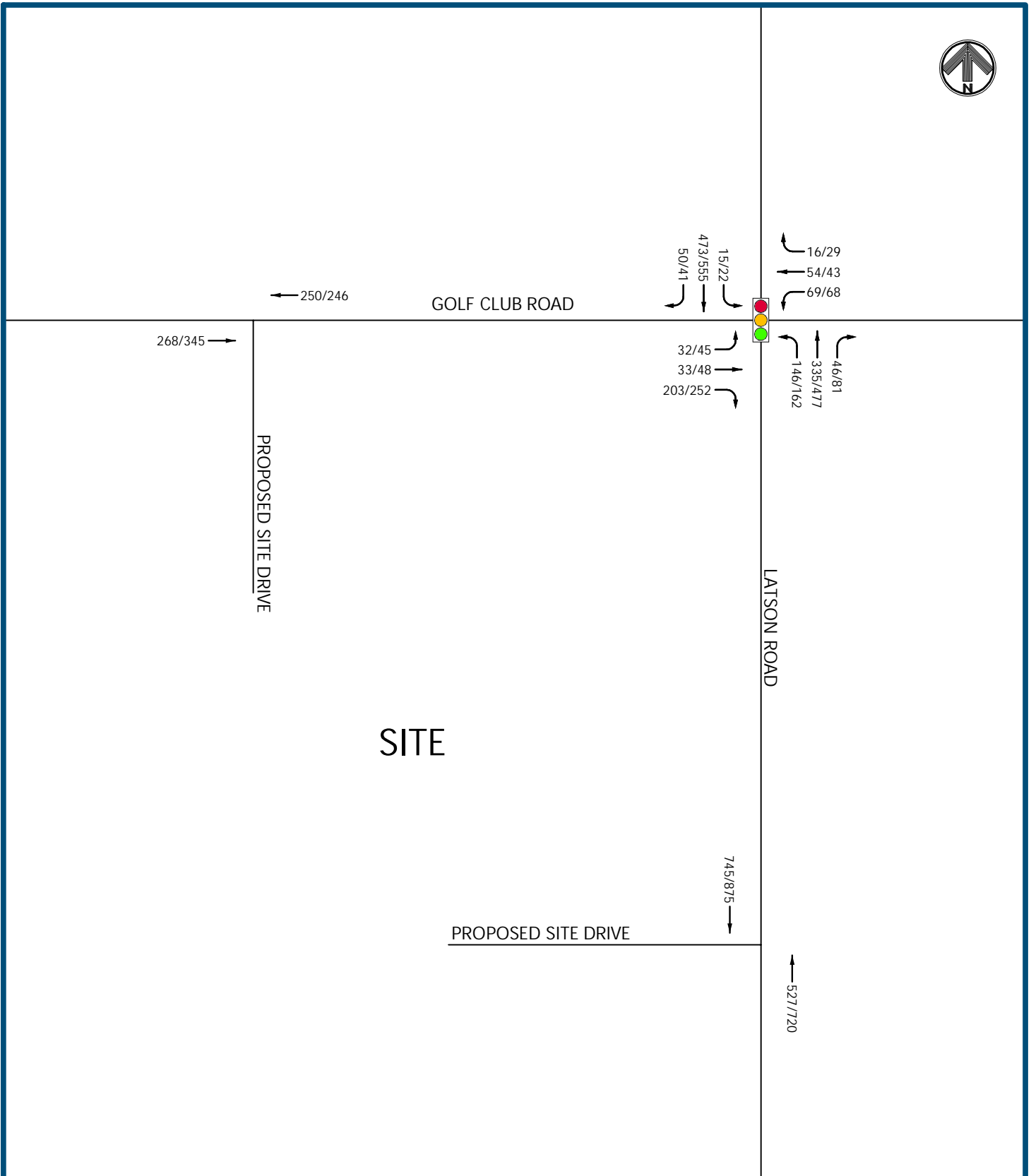


###/### AM/PM PEAK HOUR VOLUME

Bible Baptist Church TIS  
Genoa Township, MI

Figure 3  
Existing Weekday Traffic Volumes

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###/### SUN PHASE I/SUN PHASE II PEAK HOUR VOLUME

**Bible Baptist Church TIS  
Genoa Township, MI**

**Figure 4  
Existing Sunday Traffic Volumes**

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## 4.0 Existing Traffic Conditions Analysis

### 4.1 EXISTING TRAFFIC CONDITIONS

Existing peak hour vehicle delays and LOS were calculated at the study intersections based on the existing lane configurations and traffic control shown on **Figure 2**, the existing traffic volumes shown on **Figure 3**, and the methodologies presented in the HCM6.

The HCM6 methodology conservatively assumes a right-turn-on-red flow rate of zero vehicles in cases where it is not explicitly known from field data. As the EB Golf Club Road approach has a high-volume of right-turning vehicles and low volume of through vehicles, field reviews were conducted to determine a right-turn-on-red flow rate. During field reviews, between two and three vehicles per cycle were observed turning right on red for this approach during the AM and SUN peak hour and between one and two vehicles per cycle were observed turning right on red during the PM peak hour. Therefore, based on the field observations and the intersection cycle length currently in operation during the peak periods, a right-turn-on-red flow rate of 75 vehicles per hour was utilized for the AM and SUN peak hour and 50 vehicles per hour was utilized during the PM peak hour.

Simulations of the study network were also observed using SimTraffic, in order to identify potential issues related to vehicle queuing, traffic flow between intersections, and the overall study network. The results of the analysis of existing conditions are presented in **Appendix B**, summarized in **Table 2** and described in further detail below.

**Table 2: Existing 2021 Traffic Conditions**

Intersection	Control	Approach	Movement	Existing Conditions							
				AM Peak		PM Peak		SUN Phase I		SUN Phase II	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Latson Road & Golf Club Road	Signal	EB	Left	23.0	C	26.4	C	20.9	C	22.6	C
			Thru/Right	30.2	C	26.4	C	21.1	C	23.5	C
		WB	Left	34.6	C	32.6	C	25.2	C	29.0	C
			Thru/Right	21.2	C	21.3	C	19.1	B	20.3	C
		NB	Left	16.0	B	22.4	C	12.8	B	15.1	B
			Thru	9.1	A	14.5	B	7.4	A	9.2	A
			Right	7.7	A	8.0	A	6.0	A	7.0	A
		SB	Left	13.3	B	24.7	C	12.6	B	14.1	B
			Thru	24.7	C	25.8	C	19.0	C	21.6	C
			Right	13.6	B	17.8	B	12.9	B	14.0	B
		<b>Overall</b>				<b>21.9</b>	<b>C</b>	<b>20.8</b>	<b>C</b>	<b>15.5</b>	<b>B</b>

The results of the existing conditions analysis indicate that all approaches and movements at the intersection of Latson Road & Golf Club Road currently operate acceptably at a LOS C or better during the peak hours. Observation of peak hour simulations also indicate acceptable traffic operations during the peak hours with vehicles processed during each signal cycle and significant vehicle queues are not observed. Furthermore, SimTraffic vehicle delays for the EB shared through/right-turn lane are calculated to be 20.6, 27.0, 13.1, and 17.9 seconds per vehicle during the AM, PM, SUN Phase I, and SUN Phase II peak hours, respectively, validating the field reviews and right-turn-on-red flow rates utilized for this approach.

## 5.0 No-Build Traffic Conditions Analysis

Traffic impact studies typically include an evaluation of traffic operations in the future as they would be without the proposed development. This no-build condition serves to identify any mitigation that may be required, regardless of the project, and as a baseline for comparison of future buildout conditions. This scenario is comprised of existing traffic conditions, plus ambient traffic growth, plus traffic from approved developments in the study area that have





yet to be constructed. At the time of the 2021 traffic counts the following developments were identified within the study area and immediate vicinity that have yet to be constructed or were currently under construction:

1. Versa Mixed-Use Development
2. Westbury Phase II Residential Development

The vehicle trips that would be generated by the background developments were assigned to the study intersections based on the respective traffic study completed for each development. Where a traffic study was not completed for the development or the traffic study did not include the same intersections as this study, the number of vehicle trips was forecast based on data published by ITE in *Trip Generation, 11<sup>th</sup> Edition* and assigned to the study road network based on existing traffic patterns.

In addition to background developments, an ambient growth factor is applied to existing traffic volumes to account for future projects in the study area and population increases, as well as growth in regular traffic volumes due to development projects outside the study area. The recent construction of the I-96 & Latson Road interchange has resulted in significant changes in traffic patterns throughout the study area. As a result, historical traffic volumes do not provide an accurate representation of traffic growth in the area. Therefore, publicly available data from the Southeast Michigan Council of Governments (SEMCOG), including population and employment forecasts for Genoa Township were referenced.

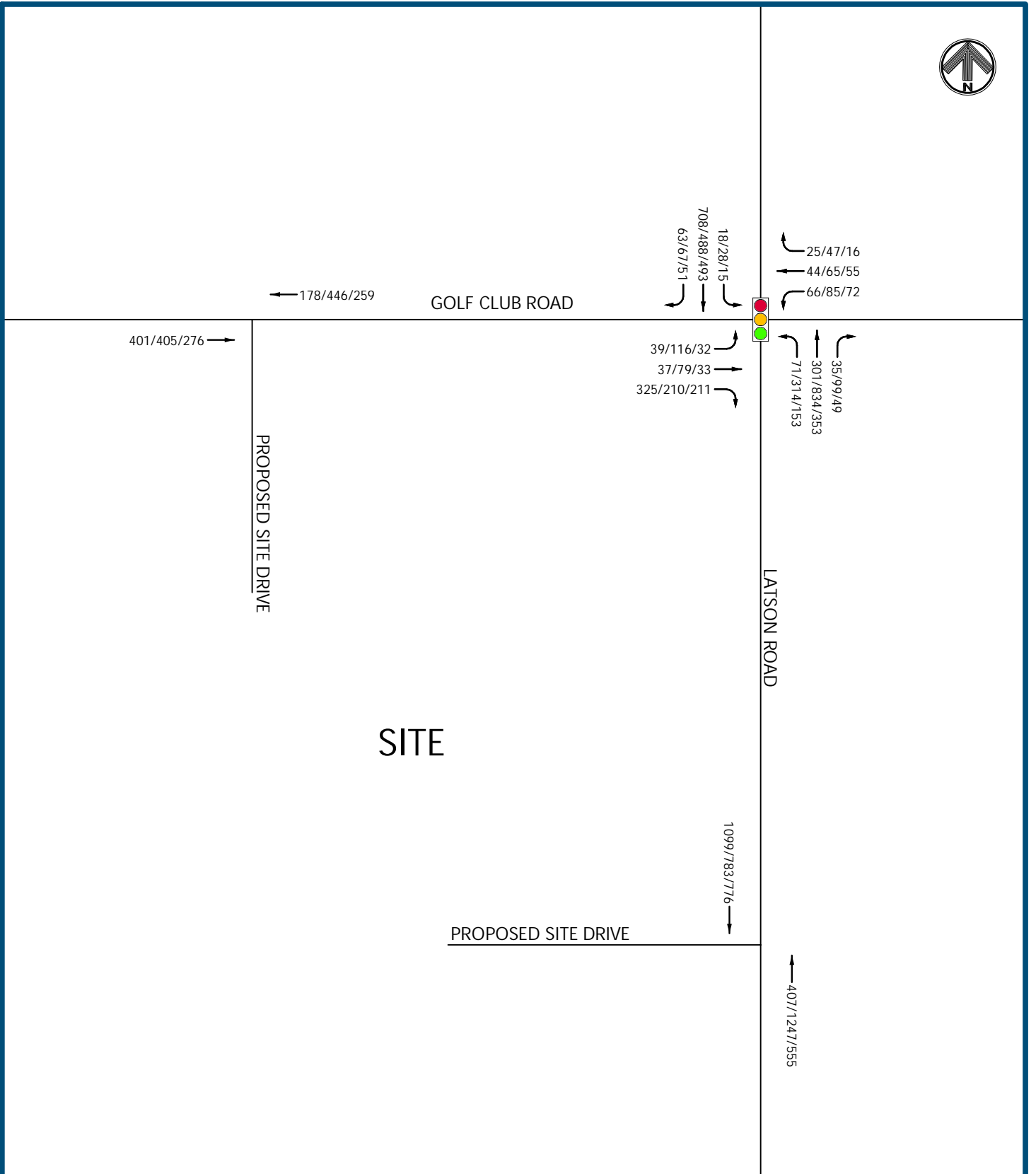
Table 3: SEMCOG Community Annual Growth Summary

Community	Measure	2015	2045	Growth
Genoa Township	Employment	12,072	13,534	0.38%
	Population	20,815	32,907	1.54%
Howell	Employment	10,365	11,527	0.35%
	Population	9,489	11,256	0.57%
Brighton	Employment	10,791	12,425	0.47%
	Population	17,791	21,883	0.69%
Brighton Township	Employment	10,772	12,986	0.63%
	Population	7,444	12,127	1.64%
<b>AVERAGE</b>				<b>0.78%</b>

The SEMCOG data indicates annual population and employment growths ranging from 0.35% to 1.64% between 2015 and 2045 as shown in **Table 3**. Therefore, an ambient background growth rate of 0.75% per year was utilized for this study. The ambient growth rate and trips from the background developments were applied to the existing 2021 traffic volumes to forecast the future 2023 and 2026 no-build traffic volumes **without the proposed development**. The resultant 2023 and 2026 no-build traffic volumes are summarized on **Figure 5** and **Figure 6**, respectively.

### 5.1 2023 NO-BUILD TRAFFIC CONDITIONS

2023 no-build peak hour vehicle delays and LOS were calculated at the study intersections based on the existing lane configurations and traffic control shown on **Figure 2**, the 2023 no-build traffic volumes shown on **Figure 5**, and the methodologies presented in the HCM6. The results of the analysis of 2023 no-build conditions are presented in **Appendix C**, summarized in **Table 4** and described in further detail below.



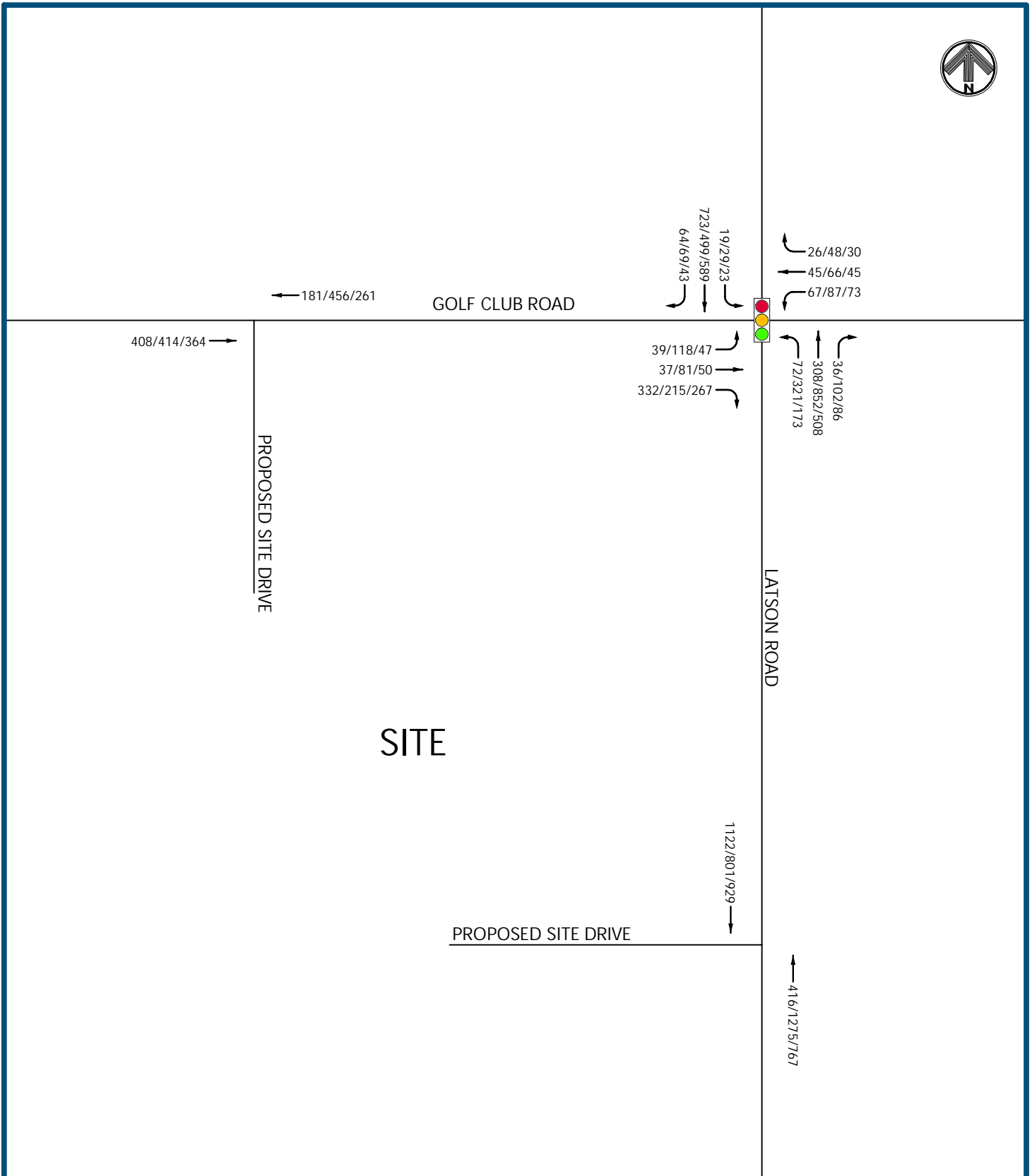
SITE

Bible Baptist Church TIS  
Genoa Township, MI

Figure 5  
2023 Phase I No-Build Traffic Volumes

###/###/### AM/PM/SUN PEAK HOUR VOLUME

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###/### AM/PM/SUN PEAK HOUR VOLUME

Bible Baptist Church TIS  
Genoa Township, MI

Figure 6  
2026 Phase II No-Build Traffic Volumes

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Table 4: 2023 No-Build Traffic Conditions

Intersection	Control	Approach	Movement	AM Peak				PM Peak				SUN Peak			
				Existing		No-Build		Existing		No-Build		Existing		No-Build	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Latson Road & Golf Club Road	Signal	EB	Left	23.0	C	25.2	C	26.4	C	28.1	C	20.9	C	21.4	C
			Thru/Right	30.2	C	38.5	D	26.4	C	29.4	C	21.1	C	21.7	C
		WB	Left	34.6	C	41.6	D	32.6	C	35.8	D	25.2	C	26.2	C
			Thru/Right	21.2	C	23.1	C	21.3	C	22.5	C	19.1	B	19.6	B
		NB	Left	16.0	B	17.0	B	22.4	C	26.9	C	12.8	B	13.6	B
			Thru	9.1	A	8.8	A	14.5	B	15.7	B	7.4	A	7.8	A
			Right	7.7	A	7.3	A	8.0	A	7.9	A	6.0	A	6.2	A
		SB	Left	13.3	B	12.7	B	24.7	C	27.2	C	12.6	B	13.0	B
			Thru	24.7	C	27.0	C	25.8	C	26.5	C	19.0	C	20.0	C
			Right	13.6	B	13.0	B	17.8	B	17.9	B	12.9	B	13.2	B
<b>Overall</b>				<b>21.9</b>	<b>C</b>	<b>24.8</b>	<b>C</b>	<b>20.8</b>	<b>C</b>	<b>22.5</b>	<b>C</b>	<b>15.5</b>	<b>B</b>	<b>16.2</b>	<b>B</b>

The results of the 2023 no-build conditions analysis indicate that all approaches and movements at the intersection of Latson Road & Golf Club Road will continue to operate acceptably at a LOS D or better during the peak hours. Observation of network simulations also indicate acceptable traffic operations during the peak hours with vehicles processed during each signal cycle and significant vehicle queues are not observed.

### 5.2 2026 NO-BUILD TRAFFIC CONDITIONS

2026 no-build peak hour vehicle delays and LOS were calculated at the study intersections based on the existing lane configurations and traffic control shown on Figure 2, the 2026 no-build traffic volumes shown on Figure 6, and the methodologies presented in the HCM6. The results of the analysis of 2026 no-build conditions are presented in Appendix C, summarized in Table 5 and described in further detail below.

Table 5: 2026 No-Build Traffic Conditions

Intersection	Control	Approach	Movement	AM Peak				PM Peak				SUN Peak			
				Existing		No-Build		Existing		No-Build		Existing		No-Build	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Latson Road & Golf Club Road	Signal	EB	Left	23.0	C	25.8	C	26.4	C	29.0	C	22.6	C	24.1	C
			Thru/Right	30.2	C	42.4	D	26.4	C	31.4	C	23.5	C	25.7	C
		WB	Left	34.6	C	45.6	D	32.6	C	38.5	D	29.0	C	32.0	C
			Thru/Right	21.2	C	23.7	C	21.3	C	23.1	C	20.3	C	21.6	C
		NB	Left	16.0	B	17.3	B	22.4	C	29.1	C	15.1	B	17.0	B
			Thru	9.1	A	8.7	A	14.5	B	16.1	B	9.2	A	10.0	B
			Right	7.7	A	7.2	A	8.0	A	7.8	A	7.0	A	7.5	A
		SB	Left	13.3	B	12.6	B	24.7	C	28.1	C	14.1	B	14.8	B
			Thru	24.7	C	27.6	C	25.8	C	26.6	C	21.6	C	23.4	C
			Right	13.6	B	12.9	B	17.8	B	17.8	B	14.0	B	14.7	B
<b>Overall</b>				<b>21.9</b>	<b>C</b>	<b>26.0</b>	<b>C</b>	<b>20.8</b>	<b>C</b>	<b>23.4</b>	<b>C</b>	<b>17.1</b>	<b>B</b>	<b>18.6</b>	<b>B</b>

The results of the 2026 no-build conditions analysis indicate that all approaches and movements at the intersection of Latson Road & Golf Club Road will continue to operate acceptably at a LOS D or better during the peak hours. Observation of network simulations also indicate acceptable traffic operations during the peak hours with vehicles processed during each signal cycle and significant vehicle queues are not observed.



## 6.0 2023 Phase I Build Conditions Analysis

Phase I of the development plan is proposed to include a 506-seat church with site access provided via a single driveway to Golf Club Road.

### 6.1 SITE TRIP GENERATION

The number of AM, PM, and SUN peak hour vehicle trips that would be generated by the proposed development was forecast based on data published by ITE in *Trip Generation, 11<sup>th</sup> Edition*. The ITE land use that most closely matches the operations of the proposed development is *Land Use #560, Church*. The ITE trip generation forecast for the Sunday peak hour indicates an almost equal number of entering and exiting trips. This indicates that the data was likely collected at churches with multiple service times where the peak hour occurs between services. The ITE trip generation forecast for Phase I is summarized in **Table 6**.

**Table 6: Phase I ITE Site Trip Generation**

Land Use	ITE Code	Amount	Units	Average Daily Traffic	AM Peak Hour			PM Peak Hour			SUN Peak Hour		
					In	Out	Total	In	Out	Total	In	Out	Total
Church	560	506	Seats	454	21	14	35	23	28	51	121	125	246

As Phase I is proposed to include two services, this data provides a good forecast of Phase I operations; however, as previously discussed, there will be minimal overlap between entering and exiting traffic volumes in the peak 15-minutes based on the one-hour separation between the end of the first service and beginning of the second service. Analysis of a single time period with all forecast inbound and outbound traffic and application of PHFs previously identified would provide an overprediction of demand and delay. Therefore, separate inbound and outbound analysis scenarios were analyzed. For each scenario, only 20% of traffic in the non-peak direction was assumed to overlap with the peak direction being analyzed. The resulting Phase I site trip generation forecast utilized for each Sunday analysis scenario is summarized in **Table 7**.

**Table 7: Phase I Sunday Site Trip Generation**

Land Use	ITE Code	Amount	Units	SUN INBOUND Peak			SUN OUTBOUND PEAK		
				In	Out	Total	In	Out	Total
Church	560	506	Seats	121	25	146	24	125	149

### 6.2 TRAFFIC ASSIGNMENTS

The vehicle trips that would be generated by the proposed development were assigned to the study road network based on existing peak hour traffic patterns, zip code data provided by the Church for existing members, and ITE methodologies. These methods indicate that new trips will return to their direction of origin. The zip code data was reviewed in combination with available routes to/from the proposed site. The resulting trip distribution utilized in this study is summarized in **Table 8**.

**Table 8: Site Trip Distribution**

To/From	Via	AM/PM/SUN
North	Latson Road	15%
South	Latson Road	30%
East	Golf Club Road	5%
West	Golf Club Road	50%
<b>TOTAL</b>		<b>100%</b>

As only one driveway is proposed for Phase I, all trips were assigned to enter and exit the site via Golf Club Road. The site-generated vehicle trips were assigned to the study network as shown on **Figure 7**. These trips were added



to the 2023 no-build traffic volumes shown on **Figure 5** to calculate the future build traffic volumes shown on **Figure 8**.

### 6.3 AUXILIARY LANE ANALYSIS

In order to determine the configuration of the proposed site driveway with Golf Club Road, warrants for right and left-turn lanes were evaluated in accordance with the LCRC *Specifications and Administrative Rules Regulating Driveways, Road Approaches, Banners and Parades on and Over Highways*. LCRC does not publish warranting criteria for right-turn lanes, so the MDOT right-turn lane warrant outlined in Section 1.1.4 of the *Geometric Design Guidance* was utilized. Evaluation of the forecast site traffic volume assignments versus warranting criteria indicate a left turn lane and right-turn taper only is warranted at the proposed site driveway to Golf Club Road under Phase I. Due to the required length of storage and taper, the left turn lane for the site driveway should tie in full width to the existing left turn lane at the Latson Road intersection. The applicable warrant evaluations are included in **Appendix D**.

### 6.4 2023 PHASE I BUILD TRAFFIC CONDITIONS

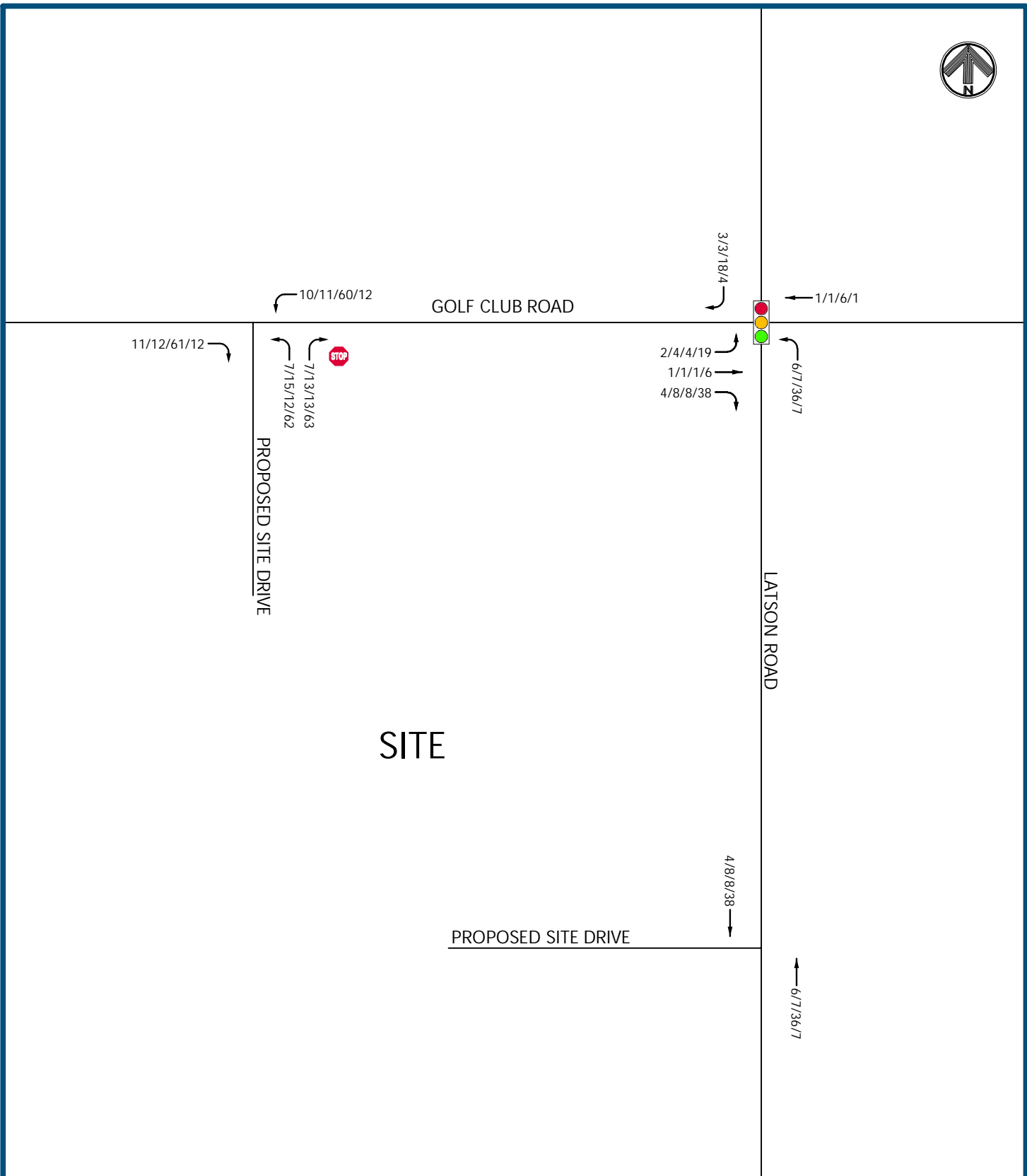
Future 2023 phase I build peak hour vehicle delays and LOS *with the proposed development* were calculated based on existing lane configurations and traffic control shown on **Figure 2**, 2023 build traffic volumes shown on **Figure 8**, and HCM methodologies. SimTraffic simulations were also utilized to evaluate traffic flow and vehicle queues throughout the study network. The 2023 phase I build conditions results are included in **Appendix D** and summarized in **Table 9** and **Table 10**.

The results of the build conditions analysis indicate that the proposed development will not have a significant impact on the adjacent road network. All approaches and movements at the signalized intersection of Latson Road & Golf Club Road will continue to operate at a LOS D or better during all peak hour analysis scenarios and minor increases in delay will not be discernable. Additionally, all approaches and movements at the proposed site driveway to Golf Club Road will operate acceptably at a LOS C or better.

**Table 9: 2023 Phase I Build Traffic Conditions - Weekday**

Intersection	Control	Approach	Movement	AM Peak				PM Peak			
				No-Build		Phase I Build		No-Build		Phase I Build	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Latson Road & Golf Club Road	Signal	EB	Left	25.2	C	25.7	C	28.1	C	28.6	C
			Thru/Right	38.5	D	40.1	D	29.4	C	31.0	C
		WB	Left	41.6	D	43.0	D	35.8	D	37.6	D
			Thru/Right	23.1	C	23.2	C	22.5	C	22.7	C
		NB	Left	17.0	B	17.2	B	26.9	C	28.2	C
			Thru	8.8	A	8.8	A	15.7	B	15.6	B
			Right	7.3	A	7.3	A	7.9	A	7.9	A
		SB	Left	12.7	B	12.8	B	27.2	C	27.1	C
			Thru	27.0	C	27.1	C	26.5	C	26.6	C
			Right	13.0	B	13.1	B	17.9	B	18.0	B
<b>Overall</b>				<b>24.8</b>	<b>C</b>	<b>25.2</b>	<b>C</b>	<b>22.5</b>	<b>C</b>	<b>23.0</b>	<b>C</b>
Golf Club Road & Site Drive	STOP (Minor)	EB	Thru/Right	Free		Free		Free		Free	
		WB	Left			8.4	A			8.6	A
			Thru	Free		Free		Free		Free	
		NB	Left/Right			13.0	B			17.0	C






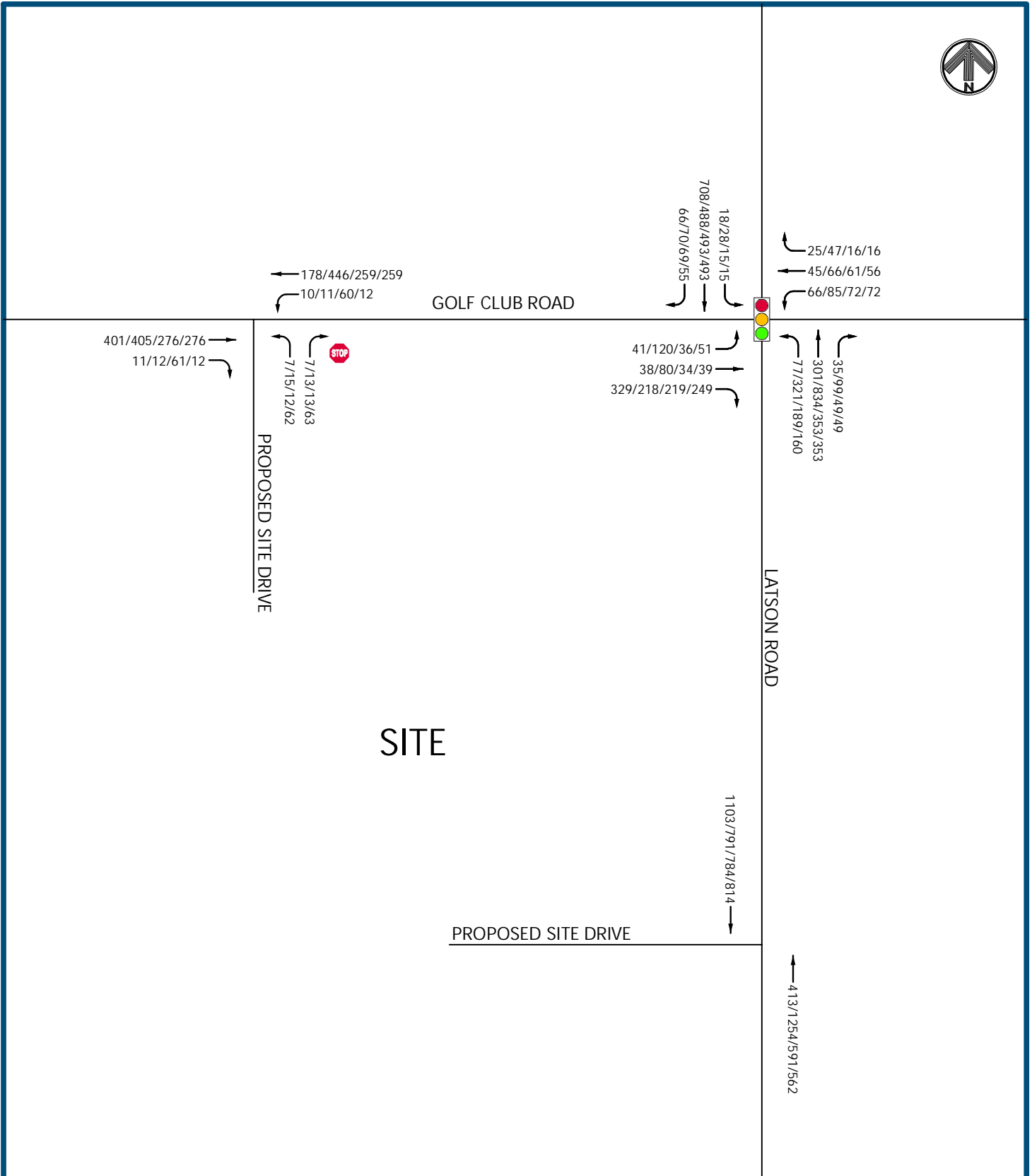
SITE

Bible Baptist Church TIS  
Genoa Township, MI

Figure 7  
Phase I Site Generated Traffic Volumes

###/###/###/### AM/PM/SUN IN/SUN OUT PEAK HOUR VOLUME

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Bible Baptist Church TIS  
Genoa Township, MI

Figure 8  
2023 Phase I Build Traffic Volumes

###/###/###/### AM/PM/SUN IN/SUN OUT PEAK HOUR VOLUME


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Table 10: 2023 Phase I Build Traffic Conditions - Sunday

Intersection	Control	Approach	Movement	SUN Peak					
				No-Build		Build INBOUND		Build OUTBOUND	
				Delay	LOS	Delay	LOS	Delay	LOS
Latson Road & Golf Club Road	Signal	EB	Left	21.4	C	24.9	C	24.1	C
			Thru/Right	21.7	C	24.7	C	26.6	C
		WB	Left	26.2	C	30.5	C	32.5	C
			Thru/Right	19.6	B	22.1	C	20.6	C
		NB	Left	13.6	B	19.5	B	18.2	B
			Thru	7.8	A	8.2	A	9.9	A
			Right	6.2	A	6.6	A	8.0	A
		SB	Left	13.0	B	15.2	B	16.3	B
			Thru	20.0	C	23.3	C	25.0	C
			Right	13.2	B	16.2	B	17.0	B
<b>Overall</b>				<b>16.2</b>	<b>B</b>	<b>19.0</b>	<b>B</b>	<b>20.4</b>	<b>C</b>
Golf Club Road & Site Drive	STOP (Minor)	EB	Thru/Right	Free		Free		Free	
			Left			8.8	A	8.1	A
		WB	Thru	Free		Free		Free	
			Left/Right			16.2	C	23.4	C

Review of peak hour simulations also indicate future build traffic operations which are similar to no-build conditions with significant vehicle queues not observed. Vehicle queue lengths from the signalized intersection of Latson Road & Golf Club Road were also calculated and evaluated with respect to the proposed driveway located approximately 650 feet west of Latson Road. The results of this evaluation indicate a 95<sup>th</sup> percentile queue length of 237 feet or less during all peak hours for the EB approach which would not extend back past the proposed site driveway. Additionally, the EB left-turn movement from Golf Club Road onto Latson Road and WB left-turn movement into the proposed site driveway would experience a combined 95<sup>th</sup> percentile queue length of 161 feet or less during the peak hours which would not result in any left-turn conflict. Therefore, the proposed development does not require any off-site roadway or traffic control improvements under Phase I build conditions.

## 7.0 2026 Phase II Build Conditions Analysis

Phase II of the development plan is proposed to expand the church to 1,000 seats. The following two site access alternatives were analyzed for Phase II:

1. Alternative A: Site access provided via a single driveway to Golf Club Road.
2. Alternative B: Site access provided via one driveway to Golf Club Road and a right-in-right-out driveway to Latson Road.

### 7.1 SITE TRIP GENERATION

The number of AM, PM, and SUN peak hour vehicle trips that would be generated by the proposed development was forecast utilizing the methodologies and assumptions discussed for Phase I. The ITE trip generation forecast for Phase II is summarized in Table 11.

Table 11: Phase II ITE Site Trip Generation

Land Use	ITE Code	Amount	Units	Average Daily Traffic	AM Peak Hour			PM Peak Hour			SUN Peak Hour		
					In	Out	Total	In	Out	Total	In	Out	Total
Church	560	1,000	Seats	913	42	28	70	45	55	100	249	259	508



Phase II is planned to only include one service at this time; however, a second service may be added at some point in the future. Therefore, separate inbound and outbound analysis scenarios were once again analyzed for Phase II. For each scenario, only 20% of traffic in the non-peak direction was assumed to overlap with the peak direction being analyzed. The resulting Phase II site trip generation forecast utilized for each Sunday analysis scenario is summarized in **Table 12**.

**Table 12: Phase I Sunday Site Trip Generation**

Land Use	ITE Code	Amount	Units	SUN IN Peak Hour			SUN OUT Peak Hour		
				In	Out	Total	In	Out	Total
Church	560	1,000	Seats	249	52	301	50	259	309

## 7.2 TRAFFIC ASSIGNMENTS

The vehicle trips that would be generated by the proposed development were assigned to the study road network based on the trip distribution methodologies and assumptions developed for Phase I and summarized in **Table 8**. For Phase II Alternative A, all trips were assigned to enter and exit the site via Golf Club Road. For Phase II Alternative B, all egress traffic to the south on Latson Road was assigned to utilize the RIRO driveway. All remaining outbound traffic was assigned to the Golf Club Road driveway. For inbound, all traffic from the north was assigned to the RIRO driveway while all traffic from the south, east, and west was assigned to the Golf Club Road driveway. The site-generated vehicle trips were assigned to the study network as shown on **Figure 9** and **Figure 10**. These trips were added to the 2026 no-build traffic volumes shown on **Figure 6** to calculate the future Phase II build traffic volumes shown on **Figure 11** and **Figure 12**.

## 7.3 AUXILIARY LANE ANALYSIS

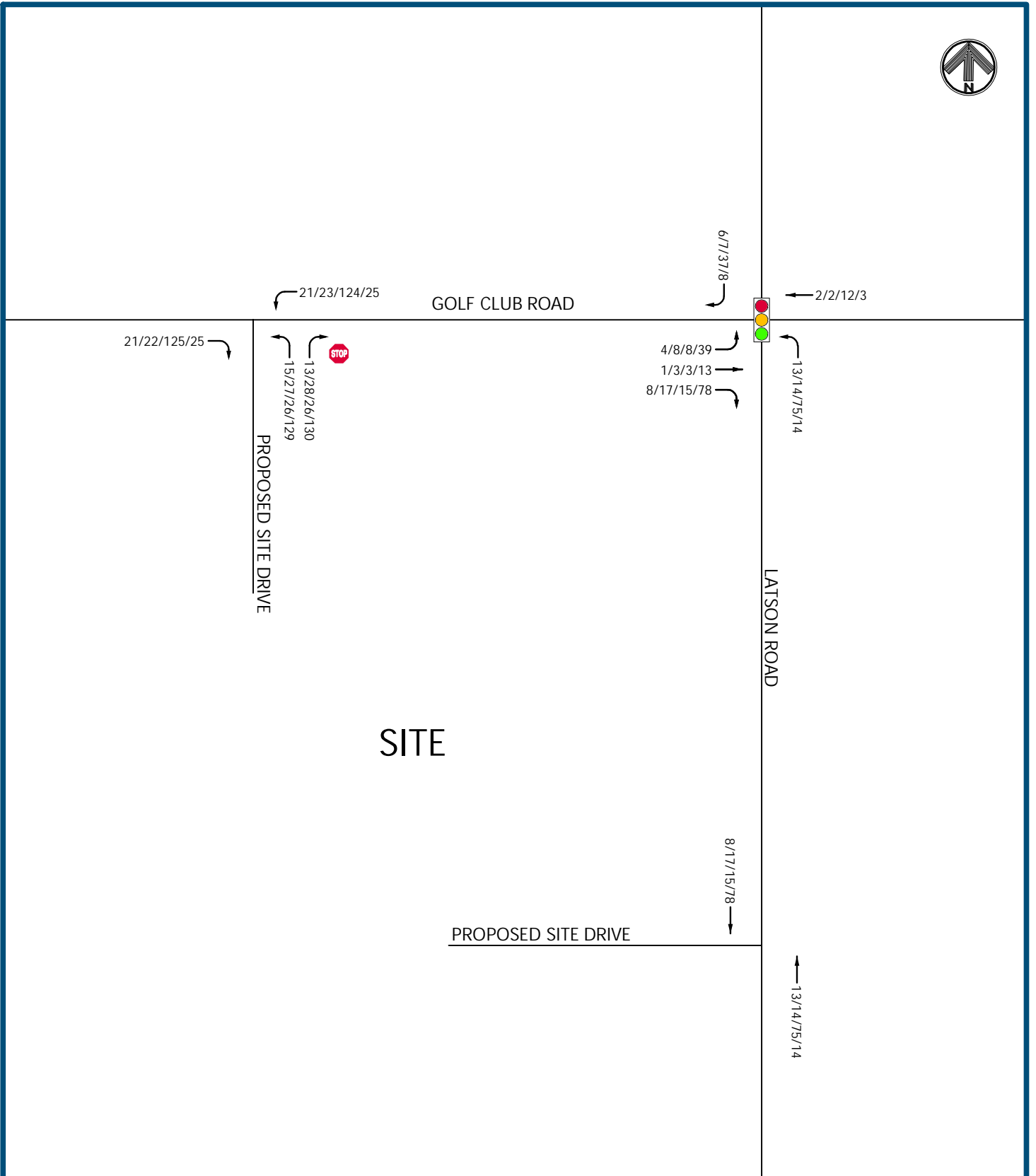
In order to determine the configuration of the proposed site driveway(s) with Golf Club Road and Latson Road, warrants for right-turn lanes were evaluated for each Phase II site access alternative in accordance with the *LCRC Specifications and Administrative Rules Regulating Driveways, Road Approaches, Banners and Parades on and Over Highways*. Evaluation of the forecast site traffic volume assignments versus warranting criteria indicate a right turn lane would be warranted at the Golf Club Road driveway under both site access alternatives. At the Latson Road driveway, a right-turn taper only would be warranted under Alternative B. The applicable warrant evaluations are included in **Appendix E**.

## 7.4 2026 PHASE II BUILD TRAFFIC CONDITIONS – ALTERNATIVE A

Future 2026 Phase II Alternative A build peak hour vehicle delays and LOS *with the proposed development* were calculated based on existing lane configurations and traffic control shown on **Figure 2**, 2026 build traffic volumes shown on **Figure 11**, and HCM methodologies. SimTraffic simulations were also utilized to evaluate traffic flow and vehicle queues throughout the study network. The 2026 Phase II Alternative A build conditions results are included in **Appendix E** and summarized in **Table 13** and **Table 14**.

The results of the build conditions analysis indicate that the proposed development will not have a significant impact on the adjacent road network during the weekday peak hours. All approaches and movements at the signalized intersection of Latson Road & Golf Club Road will continue to operate at a LOS D or better and minor increases in delay will not be discernable. Additionally, all approaches and movements at the proposed site driveway to Golf Club Road will operate acceptably at a LOS C or better during the weekday peak hours.

During the Sunday peak hours, the EB through/right-turn movement and WB left-turn movement at the signalized intersection of Latson Road & Golf Club Road would be reduced to a LOS F during the outbound peak 15-minute period. Additionally, the STOP controlled egress site driveway approach to Golf Club Road will operate at a LOS E or F during both the inbound and outbound peak 15-minute periods.



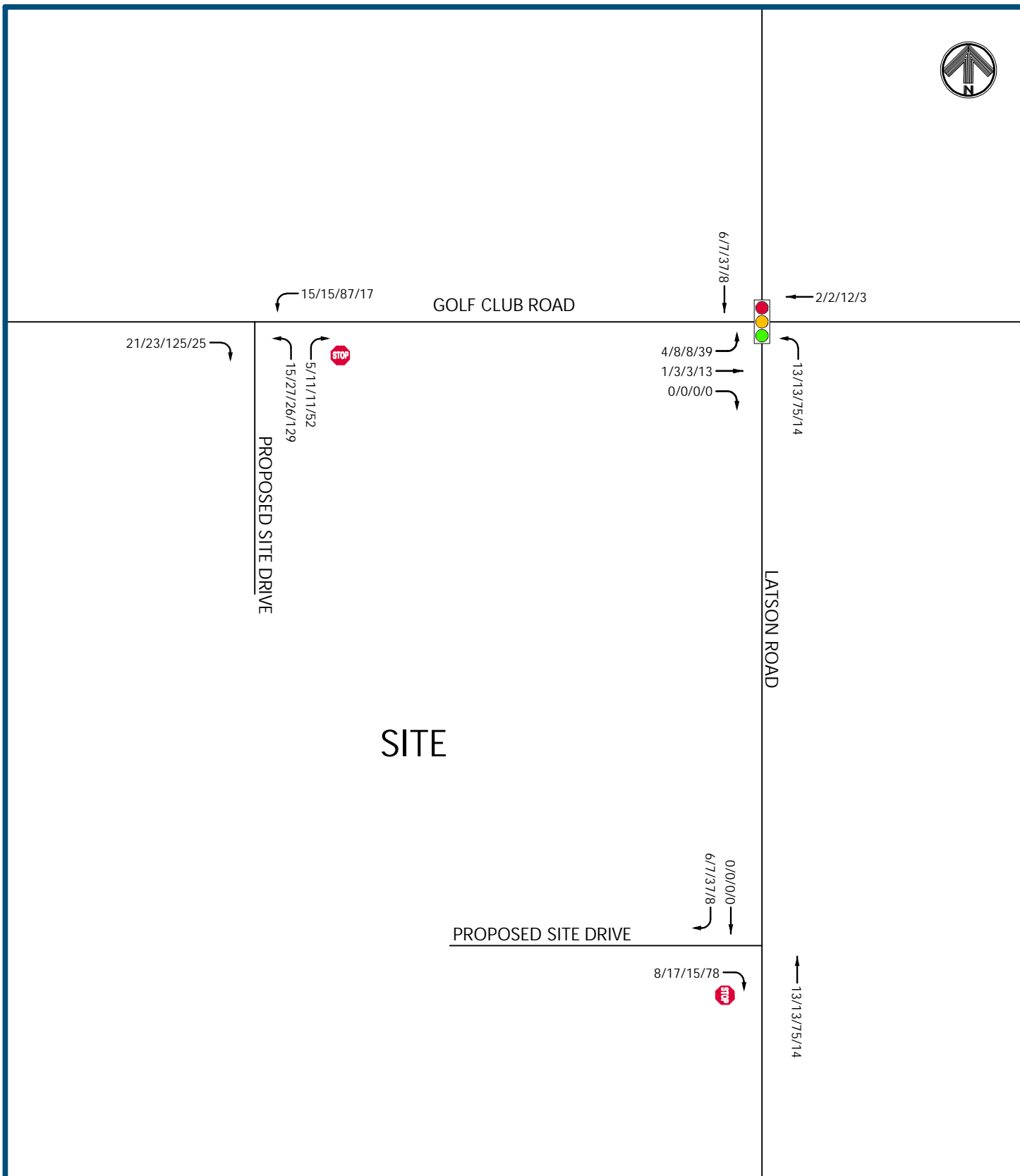
SITE

Bible Baptist Church TIS  
Genoa Township, MI

Figure 9  
Phase II Site Generated Traffic  
Volumes - Alternative A

###/###/###/### AM/PM/SUN IN/SUN OUT PEAK HOUR VOLUME


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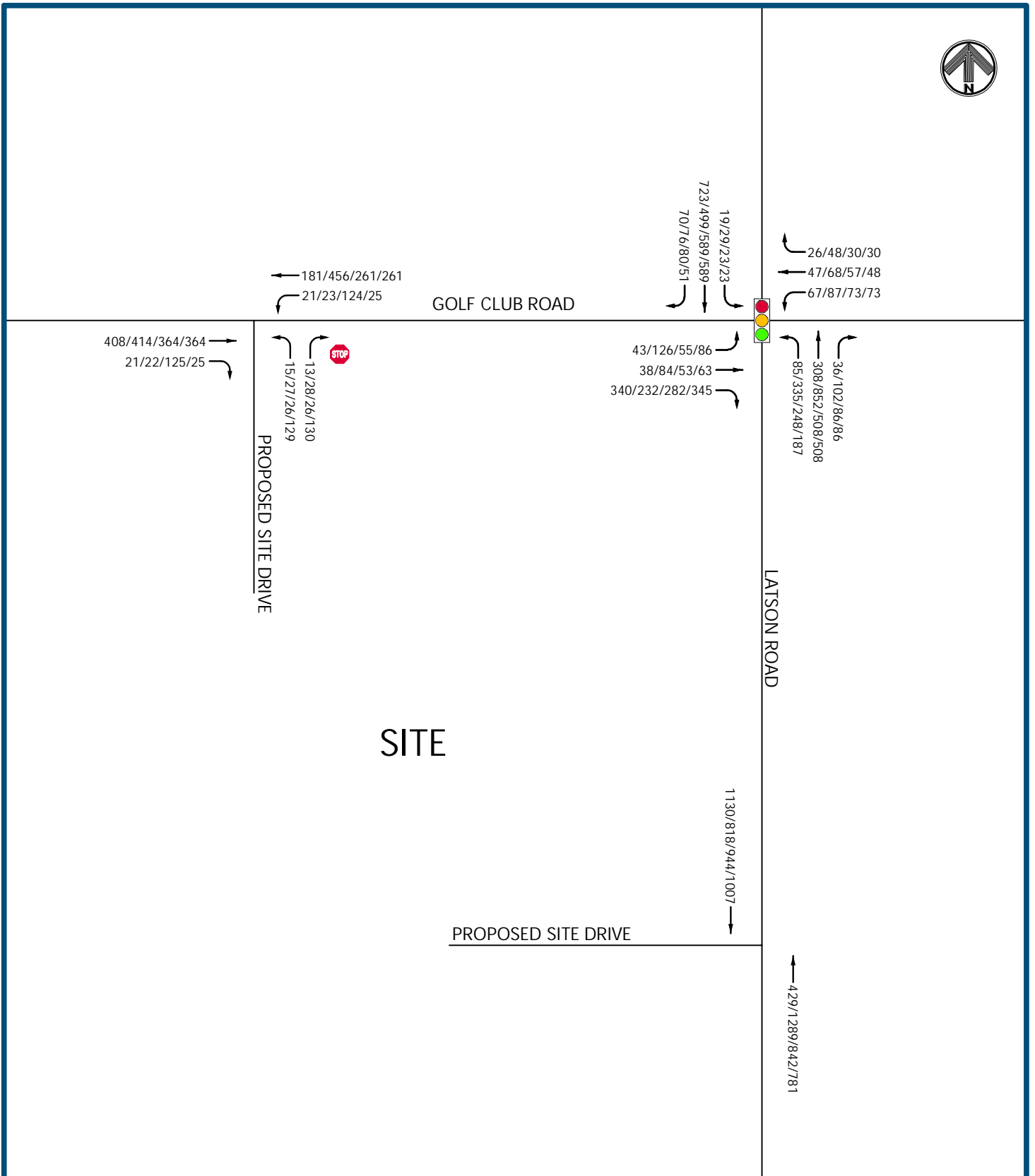
Bible Baptist Church TIS  
Genoa Township, MI

Figure 10  
Phase II Site Generated Traffic  
Volumes - Alternative B

###/###/###/### AM/PM/SUN IN/SUN OUT PEAK HOUR VOLUME

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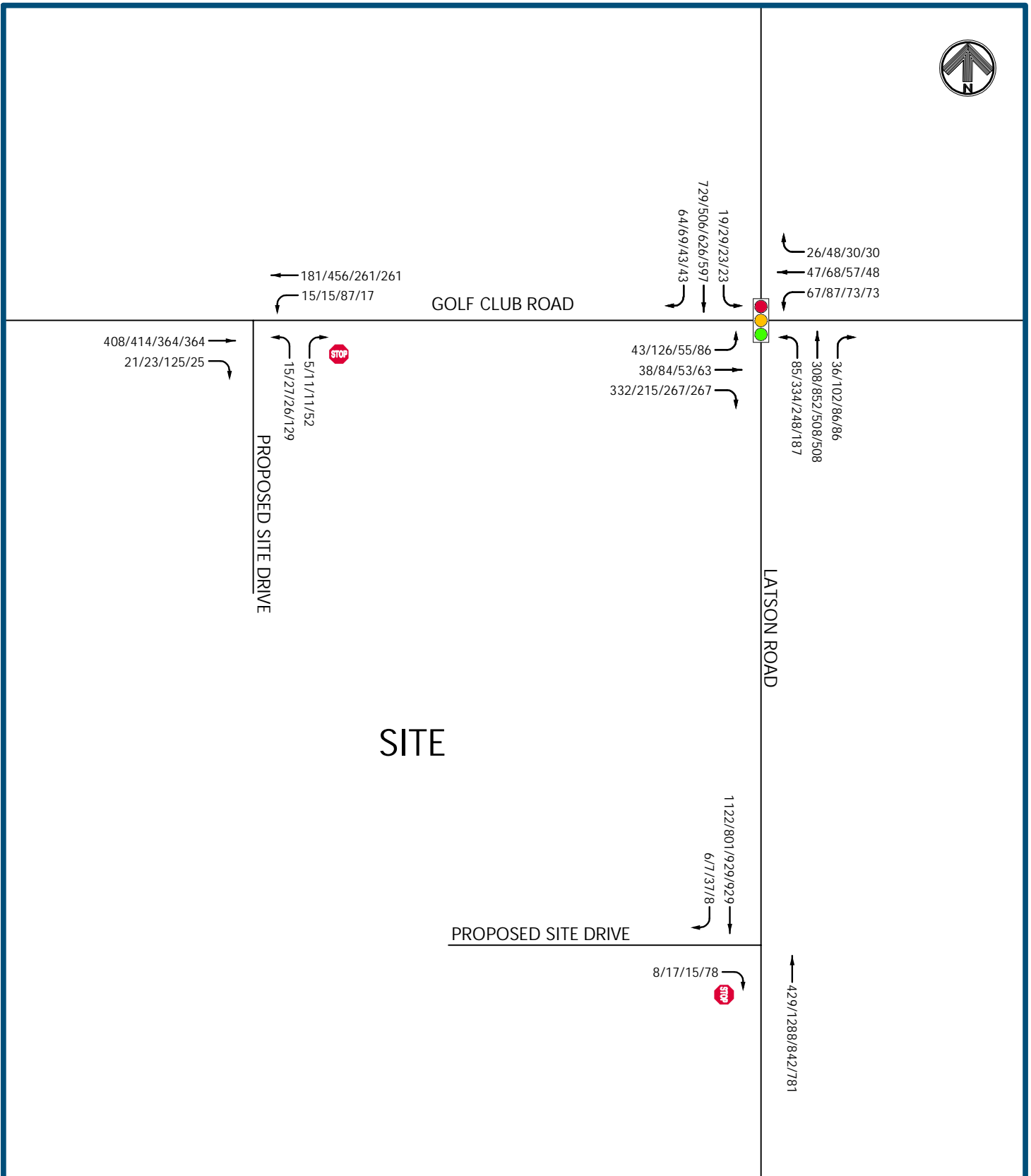


**Bible Baptist Church TIS  
Genoa Township, MI**

**Figure 11  
2026 Phase II Build Traffic  
Volumes - Alternative A**

###/###/###/### AM/PM/SUN IN/SUN OUT PEAK HOUR VOLUME

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SITE

**Bible Baptist Church TIS  
Genoa Township, MI**

**Figure 12  
2026 Phase II Build Traffic  
Volumes - Alternative B**

###/###/###/### AM/PM/SUN IN/SUN OUT PEAK HOUR VOLUME


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Table 13: 2026 Phase II Build Traffic Conditions – Alternative A – Weekday

Intersection	Control	Approach	Movement	AM Peak				PM Peak			
				No-Build		Build – ALT A		No-Build		Build – ALT A	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Latson Road & Golf Club Road	Signal	EB	Left	25.8	C	26.2	C	29.0	C	29.9	C
			Thru/Right	42.4	D	46.4	D	31.4	C	35.6	D
		WB	Left	45.6	D	50.0	D	38.5	D	43.9	D
			Thru/Right	23.7	C	23.9	C	23.1	C	23.5	C
		NB	Left	17.3	B	17.8	B	29.1	C	31.8	C
			Thru	8.7	A	8.7	A	16.1	B	16.0	B
			Right	7.2	A	7.2	A	7.8	A	7.7	A
		SB	Left	12.6	B	12.7	B	28.1	C	27.8	C
			Thru	27.6	C	27.8	C	26.6	C	26.8	C
			Right	12.9	B	13.0	B	17.8	B	18.1	B
<b>Overall</b>				<b>26.0</b>	<b>C</b>	<b>27.0</b>	<b>C</b>	<b>23.4</b>	<b>C</b>	<b>24.6</b>	<b>C</b>
Golf Club Road & Site Drive	STOP (Minor)	EB	Thru/Right	Free		Free		Free		Free	
			Left			8.5	A			8.7	A
		WB	Thru	Free		Free		Free		Free	
			Left/Right			13.8	B			18.8	C

Table 14: 2026 Phase II Build Traffic Conditions – Alternative A – Sunday

Intersection	Control	Approach	Movement	SUN Phase II – ALT A					
				No-Build		Build INBOUND		Build OUTBOUND	
				Delay	LOS	Delay	LOS	Delay	LOS
Latson Road & Golf Club Road	Signal	EB	Left	24.1	C	29.6	C	27.9	C
			Thru/Right	25.7	C	34.7	C	81.4	F
		WB	Left	32.0	C	41.5	D	134.7	F
			Thru/Right	21.6	C	25.5	C	22.4	C
		NB	Left	17.0	B	40.2	D	19.7	B
			Thru	10.0	B	9.9	A	10.6	B
			Right	7.5	A	7.4	A	7.9	A
		SB	Left	14.8	B	17.2	B	15.9	B
			Thru	23.4	C	28.3	C	25.6	C
			Right	14.7	B	18.1	B	16.0	B
<b>Overall</b>				<b>18.6</b>	<b>B</b>	<b>25.4</b>	<b>C</b>	<b>35.1</b>	<b>D</b>
Golf Club Road & Site Drive	STOP (Minor)	EB	Thru/Right	Free		Free		Free	
			Left			10.6	B	8.4	A
		WB	Thru	Free		Free		Free	
			Left/Right			48.3	E	284.6	F

Review of the peak hour simulations indicate future build traffic operations which are similar to no-build conditions during the weekday peak hours with vehicle queues processed during each signal cycle and significant vehicle queues not observed. During the Sunday peak hour, brief periods of moderate vehicle queues are observed at the signalized intersection of Latson Road & Golf Club Road for movements to and from the site; however, these queues dissipate quickly and are not present throughout the duration of the peak hour. Long delays and queues are also observed for the STOP controlled egress site driveway approach during the outbound peak 15-minute period which is typical of Churches. This queue also dissipates quickly and is not present throughout the duration of the peak hour.



Vehicle queue lengths from the signalized intersection of Latson Road & Golf Club Road were also calculated and evaluated with respect to the proposed driveway. The results of this evaluation indicate a 95<sup>th</sup> percentile queue length of 334 feet or less during all peak hours for the EB approach which would not extend back past the proposed site driveway. Additionally, the EB left-turn movement from Golf Club Road onto Latson Road and WB left-turn movement into the proposed site driveway would experience a combined 95<sup>th</sup> percentile queue length of 189 feet or less during the peak hours which would not result in any left turn conflict.

### 7.5 2026 PHASE II BUILD TRAFFIC CONDITIONS WITH IMPROVEMENTS – ALTERNATIVE A

In order to improve traffic operations in the Phase II Alternative A build conditions, signal cycle length and timing adjustments were investigated at the intersection of Latson Road & Golf Club Road. The results of this analysis indicate that with optimized timings at the intersection, all approaches and movements would operate acceptably at a LOS D or better during the outbound peak 15-minutes as shown in **Table 15**. Therefore, special Sunday timing plans during service times may be necessary with Phase II build conditions Alternative A and should be coordinated with LCRC.

**Table 15: 2026 Phase II Build Traffic Conditions with Improvements– Alternative A**

Intersection	Control	Approach	Movement	SUN Phase II – Alternative A					
				No-Build		Build Out		Build Out IMP	
				Delay	LOS	Delay	LOS	Delay	LOS
Latson Road & Golf Club Road	Signal	EB	Left	24.1	C	27.9	C	26.1	C
			Thru/Right	25.7	C	81.4	F	33.1	C
		WB	Left	32.0	C	134.7	F	44.6	D
			Thru/Right	21.6	C	22.4	C	21.1	C
		NB	Left	17.0	B	19.7	B	52.1	D
			Thru	10.0	B	10.6	B	16.9	B
			Right	7.5	A	7.9	A	12.6	B
		SB	Left	14.8	B	15.9	B	24.0	C
			Thru	23.4	C	25.6	C	44.3	D
			Right	14.7	B	16.0	B	21.3	C
		Overall			18.6	B	35.1	D	32.1

### 7.6 2026 PHASE II BUILD TRAFFIC CONDITIONS – ALTERNATIVE B

Future 2026 Phase II Alternative B build peak hour vehicle delays and LOS *with the proposed development* were calculated based on existing lane configurations and traffic control shown on **Figure 2**, 2026 build traffic volumes shown on **Figure 12**, and HCM methodologies. SimTraffic simulations were also utilized to evaluate traffic flow and vehicle queues throughout the study network. The 2026 Phase II Alternative B build conditions results are included in **Appendix F** and summarized in **Table 16** and **Table 17**.

The results of the Phase II Alternative B build conditions analysis indicate that the proposed development would not have a significant impact on the adjacent road network during the weekday or Sunday peak hours. All approaches and movements at the signalized intersection of Latson Road & Golf Club Road would continue to operate at a LOS D or better. At the proposed site driveways to Golf Club Road and Latson Road all approaches, and movements will operate acceptably at a LOS C or better during the weekday peak hours; however, the STOP controlled egress site driveway approaches to Golf Club Road and Latson Road will operate at a LOS F during the outbound peak 15-minute period.



Table 16: 2026 Phase II Build Traffic Conditions – Alternative B – Weekday

Intersection	Control	Approach	Movement	AM Peak				PM Peak				
				No-Build		Build – ALT B		No-Build		Build – ALT B		
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	
Latson Road & Golf Club Road	Signal	EB	Left	25.8	C	26.4	C	29.0	C	30.2	C	
			Thru/Right	42.4	D	44.1	D	31.4	C	32.8	C	
		WB	Left	45.6	D	47.7	D	38.5	D	40.4	D	
			Thru/Right	23.7	C	24.1	C	23.1	C	23.7	C	
		NB	Left	17.3	B	17.9	B	29.1	C	32.3	C	
			Thru	8.7	A	8.6	A	16.1	B	15.9	B	
			Right	7.2	A	7.1	A	7.8	A	7.7	A	
		SB	Left	12.6	B	12.6	B	28.1	C	27.7	C	
			Thru	27.6	C	28.1	C	26.6	C	26.8	C	
			Right	12.9	B	12.9	B	17.8	B	17.9	B	
<b>Overall</b>				<b>26.0</b>	<b>C</b>	<b>26.6</b>	<b>C</b>	<b>23.4</b>	<b>C</b>	<b>24.2</b>	<b>C</b>	
Golf Club Road & Site Drive	STOP (Minor)	EB	Thru/Right	Free		Free		Free		Free		
			Left			8.5	A			8.7	A	
		WB	Thru	Free		Free		Free		Free		
			Left/Right			14.2	B			20.0	C	
Latson Road & Site Drive	STOP (Minor)	EB	Right			23.2	C			17.1	C	
			NB	Thru	Free		Free		Free		Free	
				Thru/Right	Free		Free		Free		Free	

Table 17: 2026 Phase II Build Traffic Conditions – Alternative B – Sunday

Intersection	Control	Approach	Movement	SUN Phase II – ALT B						
				No-Build		Build INBOUND		Build OUTBOUND		
				Delay	LOS	Delay	LOS	Delay	LOS	
Latson Road & Golf Club Road	Signal	EB	Left	24.1	C	32.9	C	29.8	C	
			Thru/Right	25.7	C	35.9	D	30.9	C	
		WB	Left	32.0	C	43.6	D	37.2	D	
			Thru/Right	21.6	C	28.3	C	23.9	C	
		NB	Left	17.0	B	53.8	D	21.3	C	
			Thru	10.0	B	9.3	A	10.2	B	
			Right	7.5	A	6.9	A	7.6	A	
		SB	Left	14.8	B	16.4	B	15.3	B	
			Thru	23.4	C	32.1	C	27.2	C	
			Right	14.7	B	16.2	B	15.2	B	
<b>Overall</b>				<b>18.6</b>	<b>B</b>	<b>29.0</b>	<b>C</b>	<b>22.0</b>	<b>C</b>	
Golf Club Road & Site Drive	STOP (Minor)	EB	Thru/Right	Free		Free		Free		
			Left			10.0	B	8.4	A	
		WB	Thru	Free		Free		Free		
Left/Right				31.9	D	136.9	F			
Latson Road & Site Drive	STOP (Minor)	EB	Right			19.5	C	54.2	F	
			NB	Thru	Free		Free		Free	
				Thru/Right	Free		Free		Free	

Review of the peak hour simulations indicate future build traffic operations which are similar to no-build conditions during the weekday peak hours with vehicle queues processed during each signal cycle and significant vehicle queues not observed. During the Sunday peak hour, brief periods of moderate vehicle queues are observed at the



signalized intersection of Latson Road & Golf Club Road for the NB left-turn movement; however, this queue dissipates quickly and is not present throughout the duration of the peak hour. On the site driveway approach to Golf Club Road, a long vehicle queue is observed during the outbound peak 15-minute period; however, the duration and length of this queue is reduced as compared to Alternative A. On the site driveway approach to Latson Road, the 95<sup>th</sup> percentile queue length is calculated to be 152 feet (six vehicles), which is not significant given the intensity of traffic utilizing this approach over a short duration of time.

Vehicle queue lengths from the signalized intersection of Latson Road & Golf Club Road were also calculated and evaluated with respect to the proposed driveways. The results of this evaluation indicate a 95<sup>th</sup> percentile queue length of 357 feet and 477 feet or less during all peak hours for the EB and NB approaches, respectively, which would not extend back past the proposed site driveways. Additionally, the EB left-turn movement from Golf Club Road onto Latson Road and WB left-turn movement into the proposed site driveway would experience a combined 95<sup>th</sup> percentile queue length of 221 feet or less during the peak hours which would be adequately stored in the center lane for left turns. Therefore, the proposed development does not require any off-site roadway or traffic control improvements under Phase II Alternative B build conditions.

Based on the results of the two site access alternatives, Alternative B is recommended for Phase II of the development. This alternative would provide improved traffic operations for egress traffic from the site and reduce traffic impacts to the Latson Road & Golf Club Road intersection.

## 8.0 Conclusions and Recommendations

The Conclusions related to this Traffic Impact Study and relative analyses are as follows:

1. At the time of this study, traffic volumes throughout the State of Michigan were impacted by restrictions in place associated with the COVID pandemic. Therefore, historic turning movement count data collected in April, 2019 was utilized to validate baseline traffic volumes for this study.
2. All approaches and movements at the study intersection of Latson Road & Golf Club Road currently operate acceptably at a LOS D or better during all peak hours.
3. Church time-of-day patterns and traffic volumes indicate approximately 80% of outbound traffic occurs in the first 30-minutes after service ends while approximately 85% of inbound traffic occurs in the 30-minutes prior to the service start time. Therefore, separate inbound and outbound analysis scenarios were completed as there will be minimal overlap between inbound and outbound traffic based on the one-hour separation between services.
4. All approaches and movements at the study intersection of Latson Road & Golf Club Road would continue to operate acceptably in the 2023 and 2026 no-build scenarios during all peak hours.
5. In accordance with LCRC standards, a left-turn lane and right-turn taper are warranted at the proposed site driveway to Golf Club Road under Phase I build conditions.
6. The 2023 Phase I build conditions analysis indicate that the proposed development will not have a significant impact on the adjacent road network. All approaches and movements at the intersection of Latson Road & Golf Club Road will continue to operate at a LOS D or better during all peak hours and minor increases in delay will not be discernable. Additionally, all approaches and movements at the proposed site driveway to Golf Club Road will operate acceptably. Therefore, the proposed development does not require any off-site roadway or traffic control improvements under Phase I build conditions.
7. In accordance with LCRC standards, a right-turn lane would be warranted at the proposed site driveway to Golf Club Road under Phase II build conditions.





8. The 2026 Phase II Alternative A build conditions analysis indicate the EB through/right-turn movement and WB left-turn movement at the signalized intersection of Latson Road & Golf Club Road would be reduced to a LOS F during the Sunday outbound peak 15-minute period. Additionally, the STOP controlled egress site driveway approach to Golf Club Road will operate at a LOS E or F during both the Sunday inbound and outbound peak 15-minute periods.
9. In order to improve traffic operations in the 2026 Phase II Alternative A build conditions, special Sunday timing plans during service times should be provided at the intersection of Latson Road & Golf Club Road.
10. In accordance with LCRC standards, a right-turn taper would be warranted at the proposed site driveway to Latson Road under Phase II Alternative B build conditions.
11. The 2026 Phase II Alternative B build conditions analysis indicate all approaches and movements at the intersection of Latson Road & Golf Club Road will continue to operate at a LOS D or better during all peak hours. At the proposed site driveways to Golf Club Road and Latson Road all approaches, and movements will operate acceptably at a LOS C or better during the weekday peak hours; however, the STOP controlled egress site driveway approaches to Golf Club Road and Latson Road will operate at a LOS F during the outbound peak 15-minute period.
12. Review of network simulations indicate a long vehicle queue on the site driveway approach to Golf Club Road during the outbound peak 15-minute period; however, the duration and length of this queue is reduced as compared to Alternative A. On the site driveway approach to Latson Road, the 95<sup>th</sup> percentile queue length is calculated to be 152 feet (six vehicles), which is not significant given the intensity of traffic utilizing this approach over a short duration of time. Therefore, the proposed development does not require any off-site roadway or traffic control improvements under Phase II Alternative B build conditions.
13. Queues from the signalized intersection of Latson Road & Golf Club Road would not block the site driveways to Golf Club Road or Latson Road under either Phase I or Phase II build conditions. Additionally, there will be no left-turn conflict along Golf Club Road between EB left turns at Latson Road and WB left turns at the proposed site driveway.
14. Site access Alternative B is recommended under Phase II build conditions as it would provide improved traffic operations for egress traffic from the site and reduce traffic impacts to the Latson Road & Golf Club Road intersection.

Based on the results of this study, the following improvements are recommended:

***2023 Phase I Conditions***

1. Construct left-turn lane and right-turn taper at proposed driveway to Golf Club Road.

***2026 Phase II Alternative A Conditions***

1. Construct right-turn lane at proposed driveway to Golf Club Road.
2. Install special timing plans at intersection of Latson Road & Golf Club Road associated with Sunday service times.

***2026 Phase II Alternative B Conditions***

1. Construct right-turn lane at proposed driveway to Golf Club Road.
2. Construct right-turn taper at proposed driveway to Latson Road.



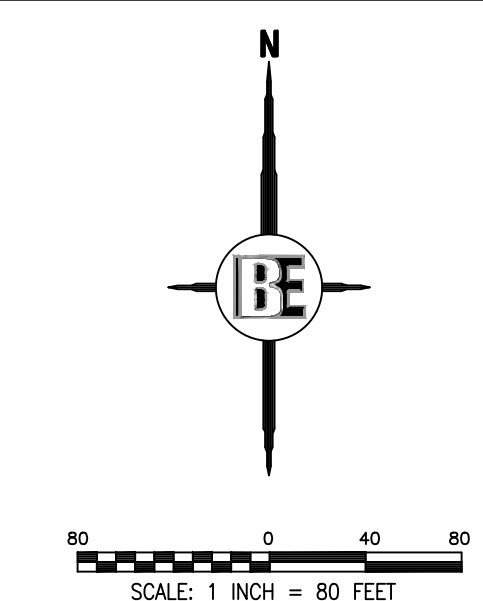
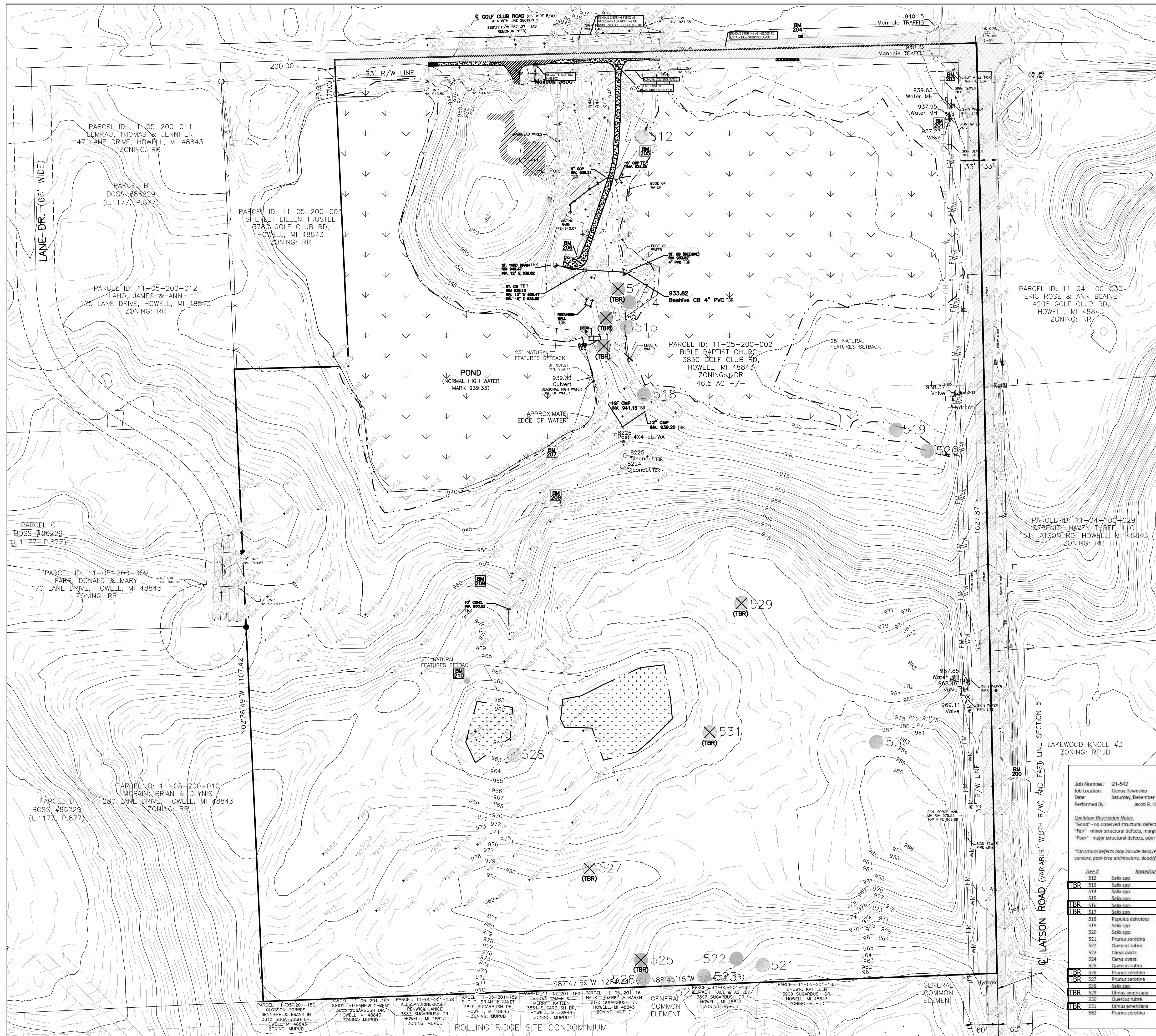
## Appendix A – Traffic Count Data

THE APPENDIX DOCUMENTS ARE AVAILABLE UPON REQUEST.  
Please contact Kelly VanMarter at [kelly@genoa.org](mailto:kelly@genoa.org) or 810-227-5225 to  
request a copy.









- LEGEND**
- 900 EXISTING CONTOUR
  - EXISTING SPOT ELEVATION
  - POWER POLE
  - GUY WIRE
  - LIGHT POLE
  - HYDRANT
  - WATER GATE VALVE
  - WATER MANHOLE
  - MANHOLE
  - STORM CATCH BASIN (SQUARE)
  - STORM INVERT
  - TELEPHONE RISER
  - CABLE TV RISER
  - U.G. CABLE TV MARKER
  - MAILBOX
  - SIGN
  - DECIDUOUS TREE
  - CONIFEROUS TREE
  - STEEL ROD OR PIPE FOUND
  - WOOD LATH SET
  - SECTION CORNER
  - TO BE REMOVED

- GENERAL SURVEY NOTES:**
- WETLANDS FLAGGED AND TIED OUT BY BOSS ENGINEERING SPRING 2019.
  - BEARINGS ARE BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE.
  - SUBSURFACE UTILITIES NOT LOCATED FOR THIS SURVEY MAY EXIST. IT IS THE RESPONSIBILITY OF THE OWNER OF THE RESPECTIVE UTILITY TO ACCURATELY LOCATE SUCH UTILITIES.
  - EASEMENTS OR RESTRICTIONS OF RECORD NOT DEPICTED ON THIS DRAWING MAY EXIST.
  - ELEVATIONS WERE ESTABLISHED FROM GPS OBSERVATION, AND USING OPUS POST-PROCESS SYSTEM. (NAVD88 DATUM)
  - CONTOURS ARE SHOWN AT 1 FOOT INTERVALS.
  - THE LOCATIONS OF STORM SEWER, SANITARY SEWER & WATERMAIN, AS SHOWN ON THIS DRAWING ARE APPROXIMATE. THE LOCATIONS ARE BASED ON PHYSICAL FIELD LOCATIONS OF STRUCTURES.
  - ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY, THE COUNTY, AND THE STATE OF MICHIGAN.
  - ALLOW THREE WORKING DAYS BEFORE YOU DIG, CALL MISS DIG TOLL FREE 1-800-482-7171.

- SITE BENCHMARKS (NAVD88 DATUM):**
- BM #200 = NAIL/TAG W/S P.POLE E/S LASTON RD. 785'± NORTH OF CONVER G.T. ELEV.=971.41
  - BM #201 = ARROW ON HYD W/S OF LASTON RD. 135'± SOUTH OF GOLF CLUB RD.. ELEV.=939.50
  - BM #203 = FD. R.R. E/S OF GUY POLE W/S OF LASTON RD. 44'± SOUTH OF GOLF CLUB RD.. ELEV.=942.12
  - BM #205 = PK NAIL/TAG W/S 40" WILLOW TREE 170'± SOUTH OF GOLF CLUB RD. & 160'± NORTH OF BARN. ELEV.=935.10
  - BM #206 = LANDSCAPE SPIKE SET S/E CORNER OF POLE BARN. ELEV.=940.32
  - BM #207 = PK NAIL/TAG S/S 12" MAPLE TREE S/S OF POND. ELEV.=945.31
  - BM #208 = PK NAIL/TAG SET 10" PINE TREE 50'± EAST OF TWO TRACK RUNNING N&S & 150'± SOUTH OF POND, N/S OF TWO TRACK RUNNING E&W. ELEV.=954.73
  - BM #209 = PK NAIL/TAG S/S 12" ELM TREE 142'± SOUTH OF POND. ELEV.=959.69
  - BM #210 = PK NAIL/TAG E/S 8" PINE TREE 330'± SOUTH OF POND. ELEV.=966.83

**TOPOGRAPHIC SURVEY NOTE:**  
 TOPOGRAPHIC SURVEY OF GOLF CLUB ROAD AND LATSON ROAD PREPARED BY BOSS ENGINEERING.  
 TOPOGRAPHY FOR THE SUBJECT SITE IS GENERATED FROM THE LIVINGSTON COUNTY GIS TOPO.

**Inventory of Significant Trees within Project Area**

Job Number: 21-542 Bible Baptist Church  
 Job Location: Genoa Township  
 Date: Saturday, December 11, 2021  
 Performed By: Jacob R. Hamilton Forestry Registration No. 46119

**Condition Description Notes:**  
 "Good" - no observed structural defects  
 "Fair" - minor structural defects, marginal form, some insect activity noted  
 "Poor" - major structural defects, poor form, insect infestation

\*Structural defects may include decayed wood, cracks, root problems, weak branch unions, cankers, poor tree architecture, dead/fallen branches due to various causes.

Tree #	Botanical Name	Common Name	Dia.	Type	Other Dia.	Condition	Comments
TBR 512	Salix spp.	Willow Sp.	53			Good	
TBR 513	Salix spp.	Willow Sp.	37			Poor	Major lean, cankers, epicormic branching
TBR 514	Salix spp.	Willow Sp.	41			Fair	Leaning
TBR 515	Salix spp.	Willow Sp.	36	Twin	20	Good	Leaning
TBR 516	Salix spp.	Willow Sp.	36			Good	
TBR 517	Salix spp.	Willow Sp.	37			Fair	Lost large twin, canker
TBR 518	Populus deltoides	Eastern Cottonwood	24			Good	
TBR 519	Salix spp.	Willow Sp.	38			Good	
TBR 520	Salix spp.	Willow Sp.	25			Good	
TBR 521	Prunus serotina	Black Cherry	35			Good	
TBR 522	Quercus rubra	Red Oak	26			Good	
TBR 523	Carya ovata	Shagbark Hickory	25			Good	
TBR 524	Carya ovata	Shagbark Hickory	32			Good	
TBR 525	Quercus rubra	Red Oak	24			Good	
TBR 526	Prunus serotina	Black Cherry	34			Poor	Major canker, dieback
TBR 527	Prunus serotina	Black Cherry	26			Good	
TBR 528	Salix spp.	Willow Sp.	38			Good	
TBR 529	Ulmus americana	American Elm	24			Good	
TBR 530	Quercus rubra	Red Oak	26			Good	
TBR 531	Ulmus americana	American Elm	27			Good	
TBR 532	Prunus serotina	Black Cherry	31			Poor	Major dieback, canker rot, lost limbs

**BOSS Engineering**  
 Engineers Surveyors Planners Landscape Architects  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI. 48843  
 517.546.4836 FAX 517.548.1670

**BIBLE BAPTIST CHURCH**  
 BIBLE BAPTIST CHURCH  
 2258 EAST HIGHLAND ROAD  
 HOWELL, MI 48843  
 517-715-9233

PROJECT: BIBLE BAPTIST CHURCH  
 PREPARED FOR: BIBLE BAPTIST CHURCH  
 DATE: 3/16/22  
 2/25/22

DESIGNED BY: ST  
 DRAWN BY: JS  
 CHECKED BY:

SCALE 1" = 80'  
 JOB NO. 21-542  
 DATE 2/1/2022  
 SHEET NO. 2

**EXISTING CONDITIONS & DEMOLITION PLAN**



**NATURAL FEATURES NARRATIVE:**

SEVERAL NATURAL FEATURES WERE IDENTIFIED DURING AN ON-SITE VISIT TO THE PROPERTY ON AUGUST 23, 2019 THAT INCLUDE WETLANDS AND A VARIETY OF WOODLAND STANDS. BELOW IS A BRIEF DESCRIPTION OF EACH NATURAL FEATURE, LABELED AS ZONES "A" THROUGH "V". ALTHOUGH THE TOTAL SITE IS MEASURED AT 46.88 ACRES, THE ZONES DESCRIBED BELOW ARE APPROXIMATELY 41.11 ACRES WHEN ADDED TOGETHER. NOTE THAT EACH ZONE IS MEASURED TO AN APPROXIMATE SIZE AND THAT ZONES ARE SEPARATED BY A PATH THAT IS ROUGHLY 12' WIDE AND IS NOT ACCOUNTED FOR IN THE CALCULATIONS.

**ZONE "A"**  
AN ESTIMATED 4.62 ACRE "FRESHWATER POND" AS DESCRIBED BY THE NATIONAL WETLANDS INVENTORY, IS POSITIONED ON SITE AND CONTIGUES ONTO THE NEIGHBORING LOT TO THE WEST. THE ON-SITE ACREAGE IS ESTIMATED TO BE 3.88 ACRES. THE POND EDGE IS MOWN LAWN AND HAS A SOUTHERN BORDER OF NORWAY MAPLE TREES, AND A WESTERN BORDER OF BLACK CHERRY, AMERICAN ELM, VARIOUS OAKS AND SPRUCE TREES. SIZES RANGING FROM 4-18" AT DBH WITH TREES BEING SPACED AN AVERAGE OF 12' APART. THE POND COLLECTS STORMWATER FROM ROUGHLY 9 ACRES OF LAND FROM THE WEST AND SOUTH, WITH SLOPES RANGING FROM 10-20%.

**ZONE "B"**  
AT APPROXIMATELY 0.9 ACRES IN SIZE, THIS ZONE IS COMPOSED OF WAWASEE LOAM SOILS WITH SLOPES BETWEEN 6-12%. TREE SPECIES INCLUDE AN EQUAL MIX OF BLACK WALNUT, BLACK CHERRY, AMERICAN ELM, COTTONWOOD, AND BITTERNUT HICKORY SIZES RANGING FROM 6"-30" AND AVERAGING ABOUT 10" DBH. THE UNDERSTORY IS MOSTLY NON-EXISTENT BUT CONTAINS A SCATTERING OF HONEYSUCKLE AND VARIOUS PATCHES OF HERBACEOUS MATERIAL. AN ADDITIONAL AND APPROXIMATE 2.17 ACRES OF MANAGED PRIVATE PROPERTY IS FOUND TO THE WEST AND SOUTH OF THIS ZONE AND CONTAINS WAWASEE LOAM SOIL THAT SLOPES AT 6-12% TOWARDS THE POND IN ZONE "A". A PORTION OF VEGETATION IN THIS AREA WILL BE REMOVED FOR THE DRIVEWAY AND/OR RETAINING WALLS.

**ZONE "C"**  
ZONE "C" IS A SMALL WOODLAND POCKET APPROXIMATELY 0.17 ACRES IN SIZE IS COMPOSED OF BLACK LOCUST, VARIOUS LARGE WILLOWS, AND BOXELDERS. TREES RANGE FROM 4-22" AT DBH. THIS POCKET IS IN A FLAT AREA THAT BORDERS FRESHWATER EMERGENT WETLANDS TO THE EAST, AND CONTAINS CARLISLE MUCK SOILS, WHICH ARE HYDRIC IN NATURE.

**ZONE "D"**  
ZONE "D" IS SET WITHIN A MANAGED SPACE NEXT TO AN OUTBUILDING, IS APPROXIMATELY 0.13 ACRES IN SIZE, AND HAS MOWN LAWN AS AN UNDERSTORY. SOILS ARE COMPOSED OF WAWASEE LOAMS AND THERE IS A STAND OF MATURE NORWAY SPRUCE TREES THAT ARE ROUGHLY 12" AT DBH AND SPACED OUT ABOUT 10-15' APART. A PORTION OF VEGETATION IN THIS AREA WILL BE REMOVED FOR THE DRIVEWAY AND/OR RETAINING WALLS.

**ZONE "E"**  
A FRESHWATER EMERGENT WETLAND THAT IS APPROXIMATELY 5.45 ACRES IN SIZE WAS IDENTIFIED IN ZONE "E". THE AREA IS COMPOSED OF CARLISLE MUCK SOILS AND IS DOMINATED BY REED CANARY GRASS, PHRAGMITES, BROADLEAF CATTAIL, AND A VARIETY OF FORBES AND RUSHES. THIS WETLAND COLLECTS A LARGE AMOUNT OF STORMWATER RUNOFF FROM THE CONIFER STAND TO THE SOUTH, AND FROM THE ADJACENT ROAD SYSTEMS, MANICURED LAWN, BORDERS THE NORTHERN AND EASTERN EDGES OF THIS ZONE AND MAKE UP APPROXIMATELY 1.22 ACRES.

**ZONE "F"**  
ZONE "F" IS ANOTHER MANAGED AREA WITH MANICURED LAWN THAT IS APPROXIMATELY 0.43 ACRES IN SIZE AND HAS A SERIES OF NORWAY SPRUCE TREES PLANTED IN A DOUBLE ROW. THE TREES ARE ROUGHLY 12" AT DBH AND SPACED ROUGHLY 15' APART. SOILS ARE WAWASEE LOAMS AND SLOPING EAST TOWARDS THE WETLAND IN ZONE "E". AT THE EASTERN EDGE OF THIS ZONE, THERE ARE SEVERAL LARGE WILLOW TREES AND BLACK WALNUTS, SOME OF WHICH MAY QUALIFY AS LANDMARK TREES. A PORTION OF VEGETATION IN THIS AREA WILL BE REMOVED FOR THE DRIVEWAY AND/OR RETAINING WALLS.

**ZONE "G"**  
ZONE "G" IS A FILL AREA OF APPROXIMATELY 1.16 ACRES THAT WAS FORMERLY USED AS A SPORTS FIELD. IT HAS SINCE BECOME OVERGROWN WITH A VARIETY OF MEADOW FORBES AND GRASSES.

**ZONE "H"**  
ZONE "H" IS AN APPROXIMATELY 0.07 ACRE FRESHWATER EMERGENT FORESTED WETLAND. THERE ARE POCKETS OF LARGE COTTONWOOD TREES AND WILLOWS WITH SOME SEDGES AND WETLAND FORBES WITHIN THE DELINEATED AREA. THIS ZONE COLLECTS STORMWATER RUNOFF FROM THE SOUTHERN HILLSIDE OF THE PROPERTY AND SLOWLY DRAINS WATER TO THE WEST INTO THE LARGER WETLAND IN ZONE "E".

**ZONE "I"**  
ZONE "I" IS A LARGE AREA, APPROXIMATELY 7.63 ACRES IN SIZE, AND COMPOSED ALMOST ENTIRELY OF NORWAY SPRUCE TREES RANGING FROM 5-18" AT DBH, SPACED 10-15' APART, AND MAKE UP ROUGHLY 90% OF THE TREE POPULATION. THE REMAINING 10% OF TREE COVER IS COMPOSED OF BLACK CHERRY, BLACK LOCUST, RED OAK, AND AMERICAN ELM. ALL OF WHICH ARE BETWEEN 6-18" AT DBH. THE UNDERSTORY IS ALMOST NON-EXISTENT. THE EASTERN 75% OF THIS ZONE IS COMPOSED OF MIAMI LOAM SOILS WITH SLOPES RANGING FROM 20-35%, AND THE WESTERN 25% IS A FOX-BOYER COMPLEX WITH SLOPES RANGING FROM 12-18%. A PORTION OF VEGETATION IN THIS AREA WILL BE REMOVED FOR THE DRIVEWAY AND/OR SOCCER FIELD.

**ZONE "J"**  
ZONE "J" IS APPROXIMATELY 2.38 ACRES IN SIZE AND IS A SLIGHT TRANSITION FROM THE ZONE "I" CONIFEROUS COMMUNITY TO A MORE DECIDUOUS FOREST STAND. THE DOMINANT SPECIES HERE ARE RED AND WHITE OAK, SHAGBARK AND BITTERNUT HICKORY, BLACK CHERRY, AND AMERICAN ELM. THERE ARE SEVERAL LARGE NORWAY SPRUCE TREES, BUT THEY ARE NO LONGER THE DOMINANT SPECIES. ALL OF THESE TREES ARE MATURE AND ARE 6-18" AT DBH AND SPACED ROUGHLY 10' APART. AN UNDERSTORY OF GREEN ASH, HICKORY, AND HONEYSUCKLE IS PRESENT, THOUGH NOT OVERBEARING. SOILS ARE A FOX-BOYER COMPLEX WITH 18-25% SLOPES THAT DRAIN TO THE LARGE POND IN ZONE "A".

**ZONE "K"**  
ZONE "K" IS APPROXIMATELY 2.85 ACRES IN SIZE AND BORDERS MUCH OF THE SOUTHERN AND WESTERN BOUNDARIES OF THE SITE. THIS FOREST STAND IS ALMOST ENTIRELY DECIDUOUS AND CONTAINS MATURE RED OAKS, BLACK CHERRY, AMERICAN ELM, HICKORY, AND VARIOUS MAPLE TREES RANGING FROM 5-18" AT DBH. THOUGH THERE ARE SEVERAL LANDMARK TREES IN THIS ZONE THAT MUST BE NOTED. THE TREES ARE SPACED ROUGHLY 15' APART. THE SOILS ARE MIAMI LOAMS WITH 18-25% SLOPES THAT SHED WATER TOWARDS THE SOUTHERN BOUNDARIES OF THE SITE.

**ZONES "L", "M", "N"**  
THESE THREE ZONES MAKE UP A LARGER OPEN SPACE, APPROXIMATELY 1.68 ACRES IN SIZE AND IS ALMOST ENTIRELY FREE OF TREE SPECIES. INSTEAD, THE AREA IS POPULATED WITH A DOMINANCE OF GREY DOGWOOD SHRUBS, VARIOUS MEADOW FORBES, GRASSES, AND VINES. THERE ARE A FEW LARGED BUT DEAD ELM TREES AT THE EASTERN EDGE OF ZONE "N", AND SEVERAL NORWAY MAPLE TREES AT THE NORTHERN PORTION OF ZONE "N". THE LAND IS MUCH FLATTER IN THIS AREA WHERE SOILS ARE A FOX-BOYER COMPLEX WITH SLOPES AT 2-6% THAT GENTLY DRAIN TO THE WEST. A PORTION OF VEGETATION IN THIS AREA WILL BE REMOVED FOR THE DRIVEWAY AND/OR PARKING.

**ZONES "O" AND "P"**  
THESE ZONES MAKE UP APPROXIMATELY 1.31 ACRES OF THE SITE AND ARE LARGE STANDS OF DECIDUOUS TREES THAT INCLUDE SHAGBARK AND BITTERNUT HICKORY, AMERICAN ELM, BLACK CHERRY, AND BLACK LOCUST. THE TREES ARE SPACED ROUGHLY 15' APART AND RANGE FROM 4-12" AT DBH. THOUGH THERE ARE SEVERAL LANDMARK TREES IN THIS AREA THAT MUST BE NOTED. THESE ZONES ARE AT ONE OF THE HIGHEST POINTS OF THE SITE WITH WAWASEE LOAMS SLOPING 2-6% TO THE WEST. A PORTION OF VEGETATION IN THIS AREA WILL BE REMOVED FOR PARKING.

**ZONE "Q"**  
THIS ZONE IS APPROXIMATELY 1.57 ACRES IN SIZE AND HAS A DOMINANCE OF BLACK LOCUST TREES THAT MAKE UP 70% OF THE FOREST STAND. THE REMAINING TREE SPECIES ARE AMERICAN ELM, BLACK CHERRY, AND HICKORY. ALL TREES ARE MATURE RANGING FROM 5-18" AT DBH AND SPACED 15' APART ON AVERAGE. THE EASTERN EDGE OF THIS ZONE IS SLOPING STEEPLY AT 25-35% TO THE EAST TOWARDS LATSON ROAD AND TO THE NORTH TOWARDS ZONE "H". THE WESTERN AND SOUTHERN PORTIONS OF ZONE "Q" ARE RELATIVELY FLAT. THE SOILS ARE A MIX OF WAWASEE LOAMS AND MIAMI LOAMS.

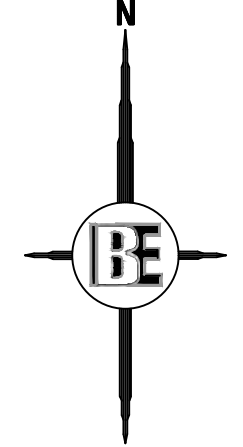
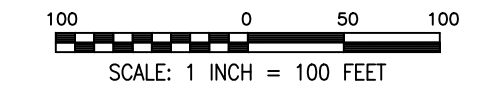
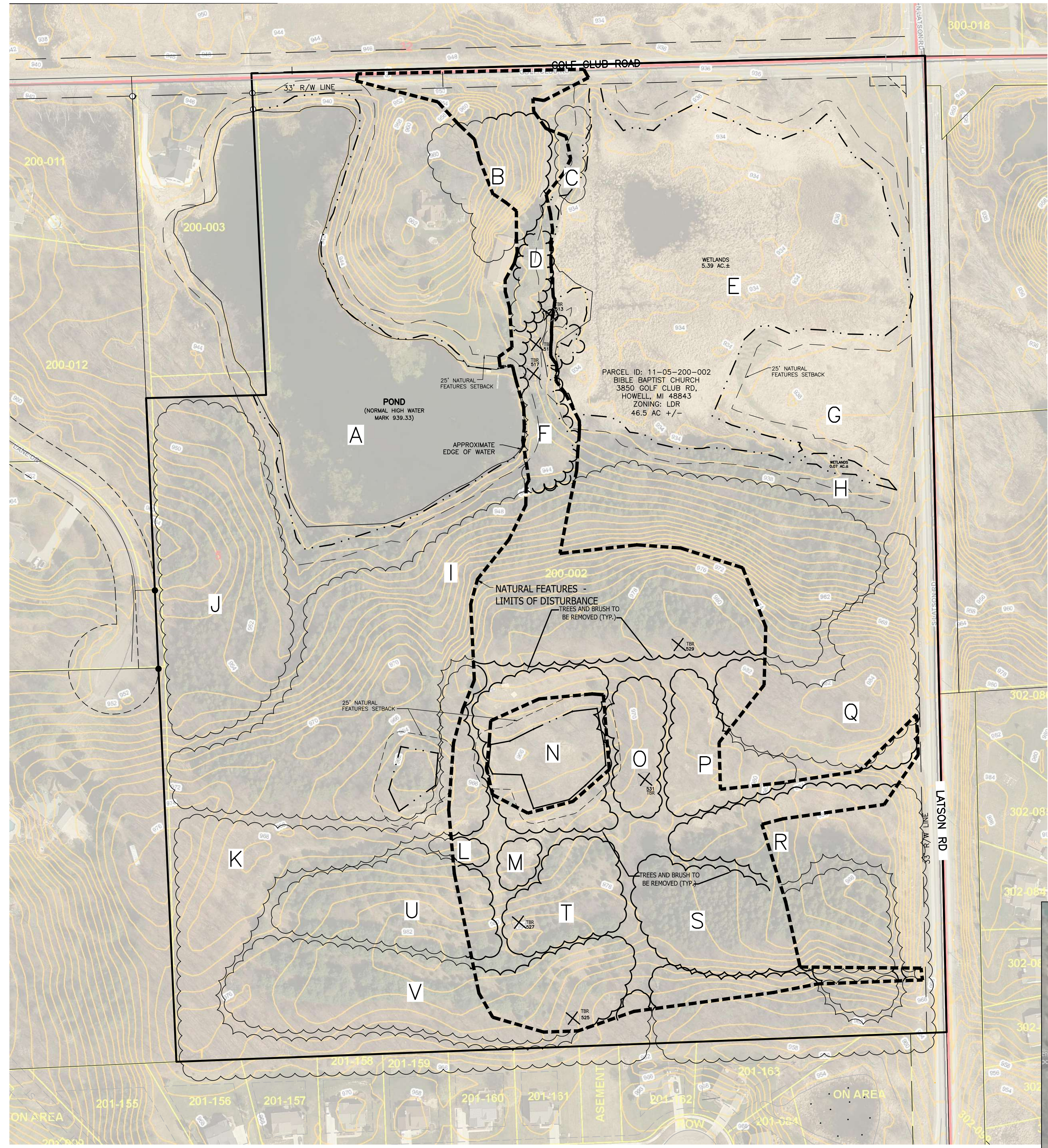
**ZONE "R"**  
SIMILAR TO ZONE "Q", ZONE "R", WHICH IS APPROXIMATELY 2.60 ACRES IN SIZE, IS DOMINATED BY BLACK LOCUST TREES WHICH MAKE UP 70% OF THE FOREST STAND, WHILE THE REMAINING 30% COVER IS COMPOSED OF AMERICAN ELM, BLACK LOCUST, AND BLACK CHERRY TREES. ALL TREES RANGE FROM 4-18" AT DBH AND AVERAGE ABOUT 10" AT DBH SPACED ROUGHLY 15' APART. THE UNDERSTORY IS MADE UP OF SEVERAL DECIDUOUS SAPLINGS AND SOME HONEYSUCKLE, BUT OTHERWISE OPEN. STEEP SLOPES OF 25-35% RUN EAST TOWARDS LATSON ROAD, WHILE THE SOUTHERN EDGE OF THIS ZONE SLOPES MORE GENTLY TO THE SOUTH AT ROUGHLY 10%. THE SOILS ARE A MIX OF MIAMI LOAM AND WAWASEE LOAM. A PORTION OF VEGETATION IN THIS AREA WILL BE REMOVED FOR PARKING.

**ZONE "S"**  
SIZED AT APPROXIMATELY 1.73 ACRES, ZONE "S" IS A LARGE CONIFER STAND COMPOSED MOSTLY OF NORWAY SPRUCE TREES. THE SOUTHERN PORTION OF THIS ZONE IS PLANTED WITH ROWS OF WHITE FIR TREES. ALL TREES IN THIS AREA ARE BETWEEN 4-18" AT DBH AND PLANTED BETWEEN 6-12' APART ON AVERAGE. THE LANDSCAPE SLOPES GENTLY TO THE WEST AT ROUGHLY 2-6%. THE SOILS ARE MOSTLY WAWASEE LOAMS, THOUGH THE SOUTHERN PORTION IS A FOX-BOYER COMPLEX SOIL. A PORTION OF VEGETATION IN THIS AREA WILL BE REMOVED FOR CHURCH BUILDING.

**ZONE "T"**  
ZONE "T" IS A SMALLER AND MORE OPEN AREA THAT IS APPROXIMATELY 0.64 ACRES IN SIZE. IT IS POPULATED WITH YOUNGER FRASIER FIR AND SCOTCH PINE TREES THAT ARE NOT MUCH LARGER THAN 8" AT DBH. GRASSES AND FORBES OCCUPY THE SPACES IN BETWEEN. THIS ZONE HAS A MIX OF FOX-BOYER COMPLEX SOILS, AND WAWASEE LOAMS THAT SLOPE TO THE NORTHEAST AT ROUGHLY 2-6%. A PORTION OF VEGETATION IN THIS AREA WILL BE REMOVED FOR PARKING AND THE CHURCH BUILDING.

**ZONE "U"**  
ZONE "U" IS APPROXIMATELY 1.10 ACRES IN SIZE AND POPULATED WITH SCOTCH PINE TREES AND SEVERAL NORWAY SPRUCE TREES THAT RANGE BETWEEN 6-12" AT DBH AND ARE SPACED ABOUT 15' APART. SOILS ARE MIAMI LOAMS AND FOX-BOYER COMPLEX SOILS THAT SLOPE TO THE NORTH AT ABOUT 12%. THE UNDERSTORY IS MINIMAL, THOUGH SOME SMALLER DECIDUOUS SPECIES ARE SPROUTING. A PORTION OF VEGETATION IN THIS AREA WILL BE REMOVED FOR PARKING.

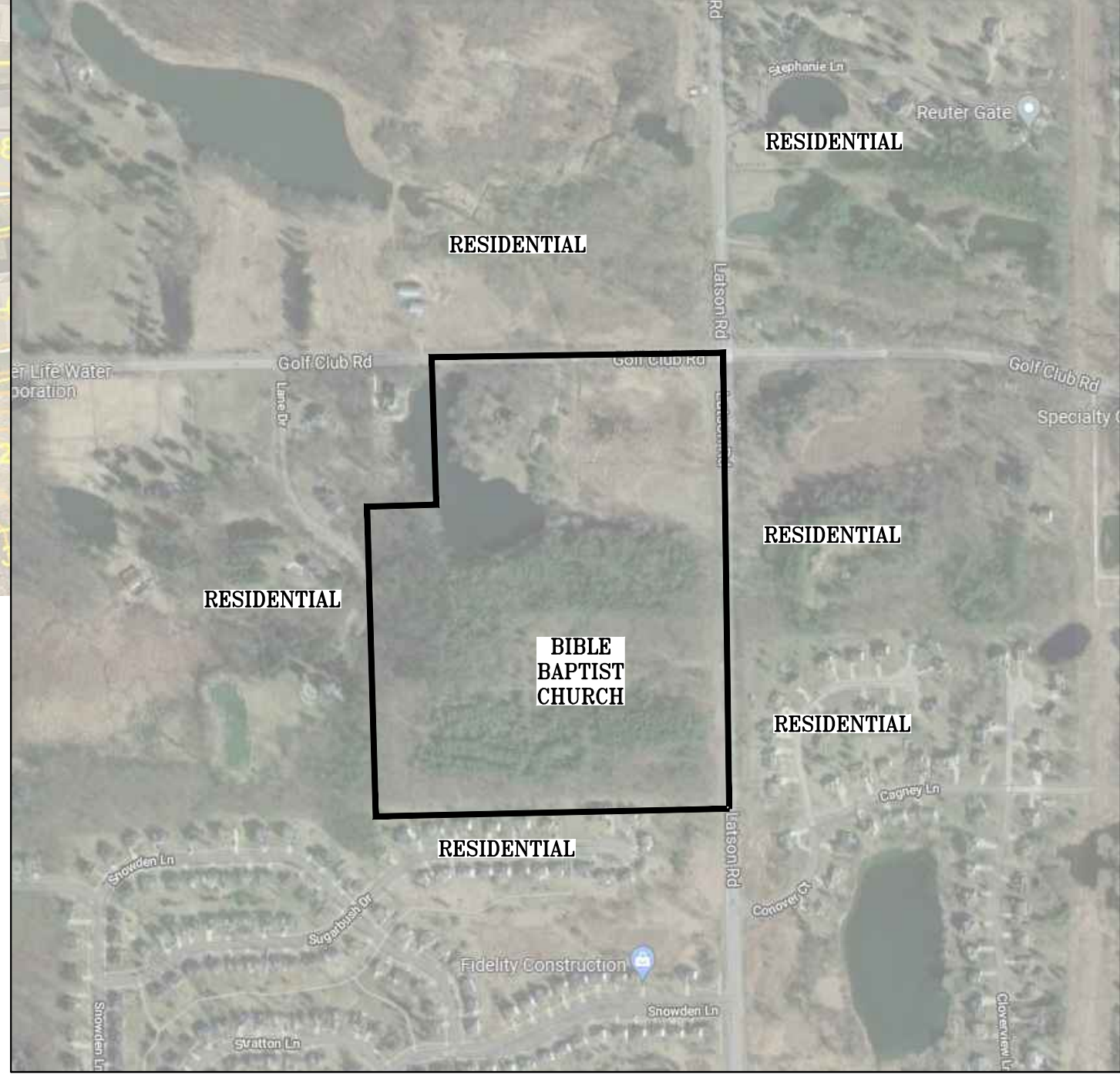
**ZONE "V"**  
ZONE "V" IS APPROXIMATELY 2.04 ACRES IN SIZE AND POPULATED WITH WHITE PINE TREES THAT ARE PLANTED IN ROWS ON THE SOUTHERN EDGE, WITH A MIX OF SCOTCH PINE AND WHITE PINE ON THE NORTHERN PORTION. THESE TREES ARE BETWEEN 6-18" AT DBH AND SPACED 15' APART WITH NO UNDERSTORY OBSERVED. THE TREES ARE PLANTED ON A RIDGE WITH MIAMI LOAM SOILS TO THE SOUTH, AND FOX-BOYER COMPLEX SOILS TO THE NORTH WITH SLOPES RANGING FROM 2-6%. A PORTION OF VEGETATION IN THIS AREA WILL BE REMOVED FOR PARKING.



**SOIL CLASSIFICATION**  
ACCORDING TO USDA NRCS WEB SOIL SURVEY DATA:

Map Unit Symbol	Map Unit Name
Cc	Carlsle muck, 0 to 2 percent slopes
FvB	Fox-Boyer complex, 2 to 6 percent slopes
FvD	Fox-Boyer complex, 12 to 18 percent slopes
FvE	Fox-Boyer complex, 18 to 25 percent slopes
MoB	Wawasee loam, 2 to 6 percent slopes
MoC	Wawasee loam, 6 to 12 percent slopes
MoD	Miami loam, 12 to 18 percent slopes
MoF	Miami loam, 25 to 35 percent slopes
W	Water
Totals for Area of Interest	

**SURROUNDING AREAS MAP**



THE INFORMATION SHOWN ON THIS MAP WAS OBTAINED FROM THE NATIONAL WETLANDS INVENTORY (NWI) AND THE NATIONAL NATURAL FEATURES INVENTORY (NNFI). THESE DATA WERE OBTAINED FROM THE NATIONAL WETLANDS INVENTORY (NWI) AND THE NATIONAL NATURAL FEATURES INVENTORY (NNFI). THE INFORMATION IS PROVIDED AS A SERVICE TO THE CLIENT AND IS NOT A GUARANTEE OF ACCURACY. THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. BEBOSS ENGINEERING, INC. 3121 E. GRAND RIVER AVE. HOWELL, MI 48843. TEL: 517-546-4836. FAX: 517-548-1670.

**BEBOSS Engineering**  
Engineers Surveyors Planners Landscape Architects  
3121 E. GRAND RIVER AVE.  
HOWELL, MI 48843  
517-546-4836 FAX 517-548-1670

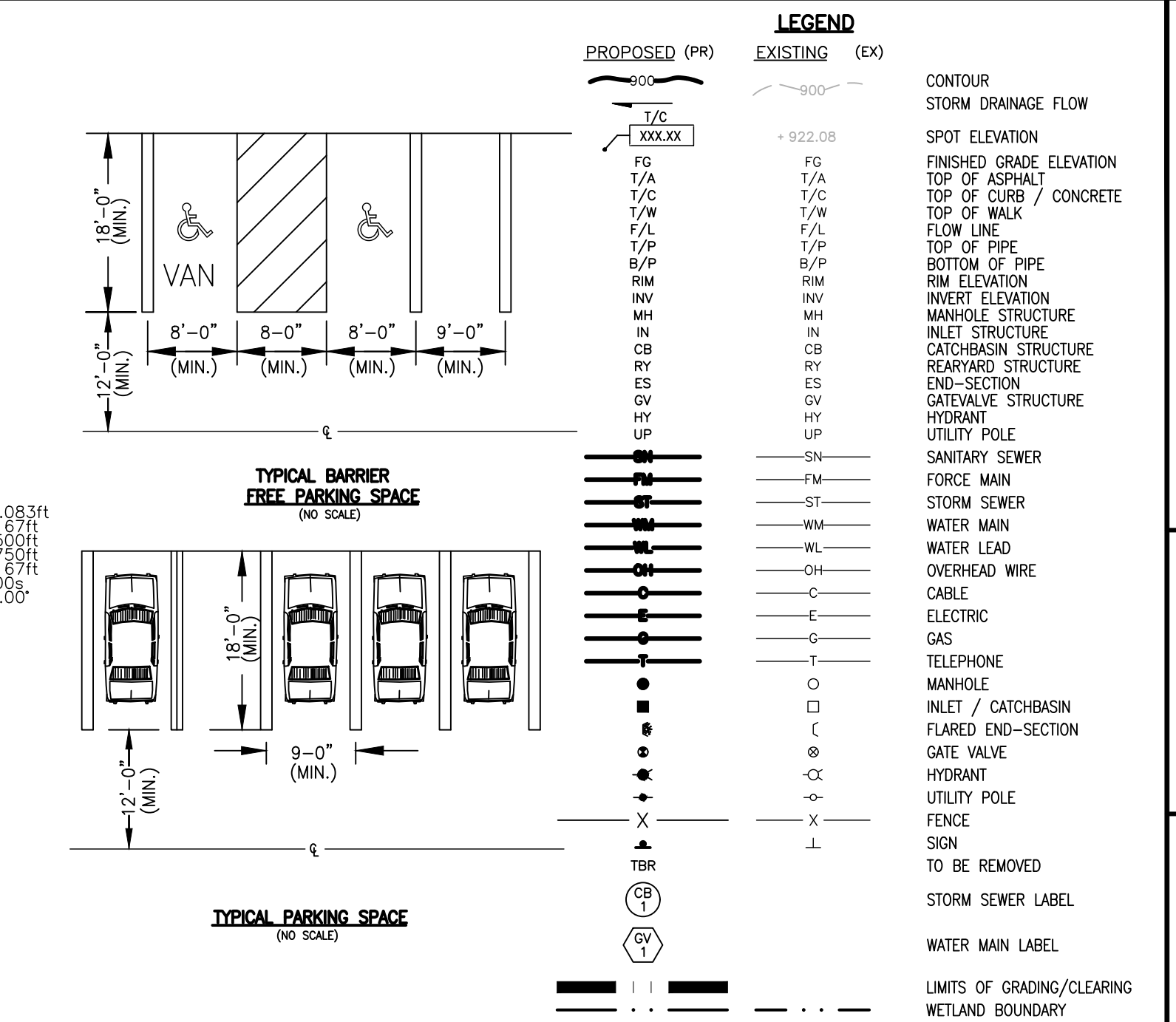
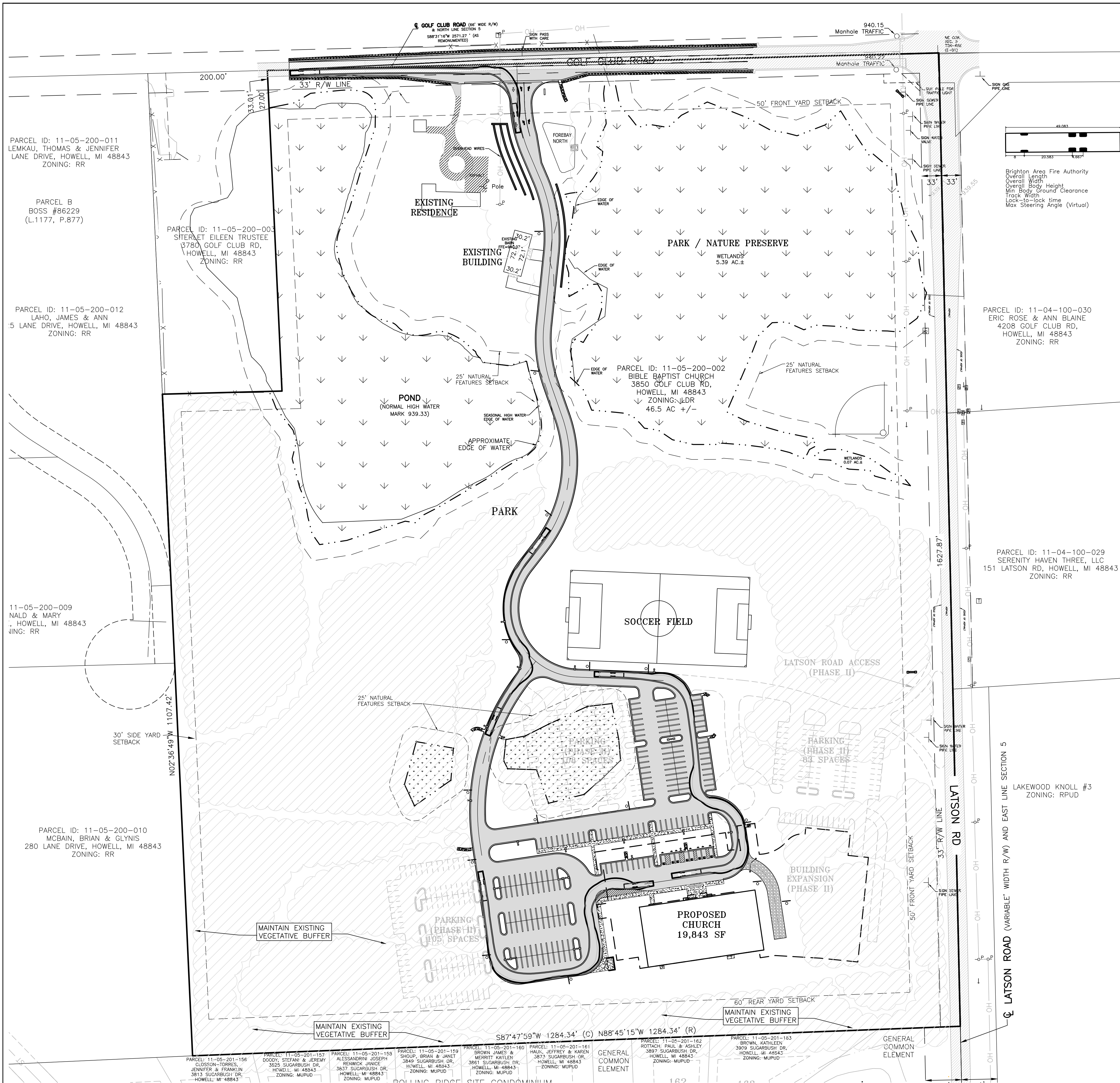
**BIBLE BAPTIST CHURCH**  
PREPARED FOR  
**BIBLE BAPTIST CHURCH**  
2258 EAST HIGHLAND ROAD  
HOWELL, MI 48843  
517-715-9233

**NATURAL FEATURES PLAN**

DESIGNED BY:	JH
DRAWN BY:	JS
CHECKED BY:	
SCALE:	1" = 100'
JOB NO.:	21-542
DATE:	2/1/2022
SHEET NO.:	3

PROJECT: BIBLE BAPTIST CHURCH  
DATE: 3/16/22  
REVISION PER: 2/23/22





**SITE DETAILS**

PARCEL # 4711-05-200-002  
 3850 GOLF CLUB RD.  
 HOWELL, MI 48843  
 46.5 AC +/-  
 GENOA TOWNSHIP

ZONING DISTRICT: LDR (LOW DENSITY RESIDENTIAL)  
 PROPOSED USE: CHURCH (SPECIAL USE REQUIRED)

MAX. LOT COVERAGE: N/A

MINIMUM LOT AREA FOR CHURCHES: 3 ACRES, PLUS 15,000 SF FOR EACH 100 PERSONS OF SEATING CAPACITY

MAX. BUILDING HEIGHT: 2 STORIES / 35 FEET; IF GREATER THEN FRONT, SIDE AND REAR YARDS ARE INCREASED ABOVE THE MINIMUM REQUIRED YARDS BY ONE FOOT FOR EACH FOOT OF BUILDING HEIGHT THAT EXCEEDS THE MAXIMUM HEIGHT ALLOWED. THE MAX HEIGHT OF A STEEPLE SHALL BE 60 FEET.

**SETBACKS FOR LDR**

REQUIRED	PROVIDED
FRONT: 50' (MEASURED FROM THE RIGHT OF WAY)	1358'
SIDE: SMALLEST SIDE 30', 60' FOR BOTH	292.4'
REAR: 60'	118'

NATURAL FEATURES SETBACK: 25' FROM ALL REGULATED WETLANDS, PONDS, STREAMS SUBJECT TO SECTION 13.02

LANDSCAPE BUFFERS: GREENBELTS ALONG THE RIGHT-OF-WAY AND A LANDSCAPED BUFFER ZONE BASED ON ADJACENT ZONING SHALL BE PROVIDED AS REQUIRED IN SECTION 12.02. SEE SHEET 6.

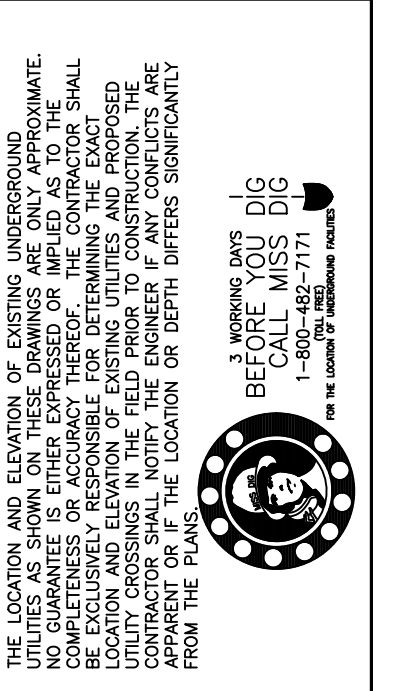
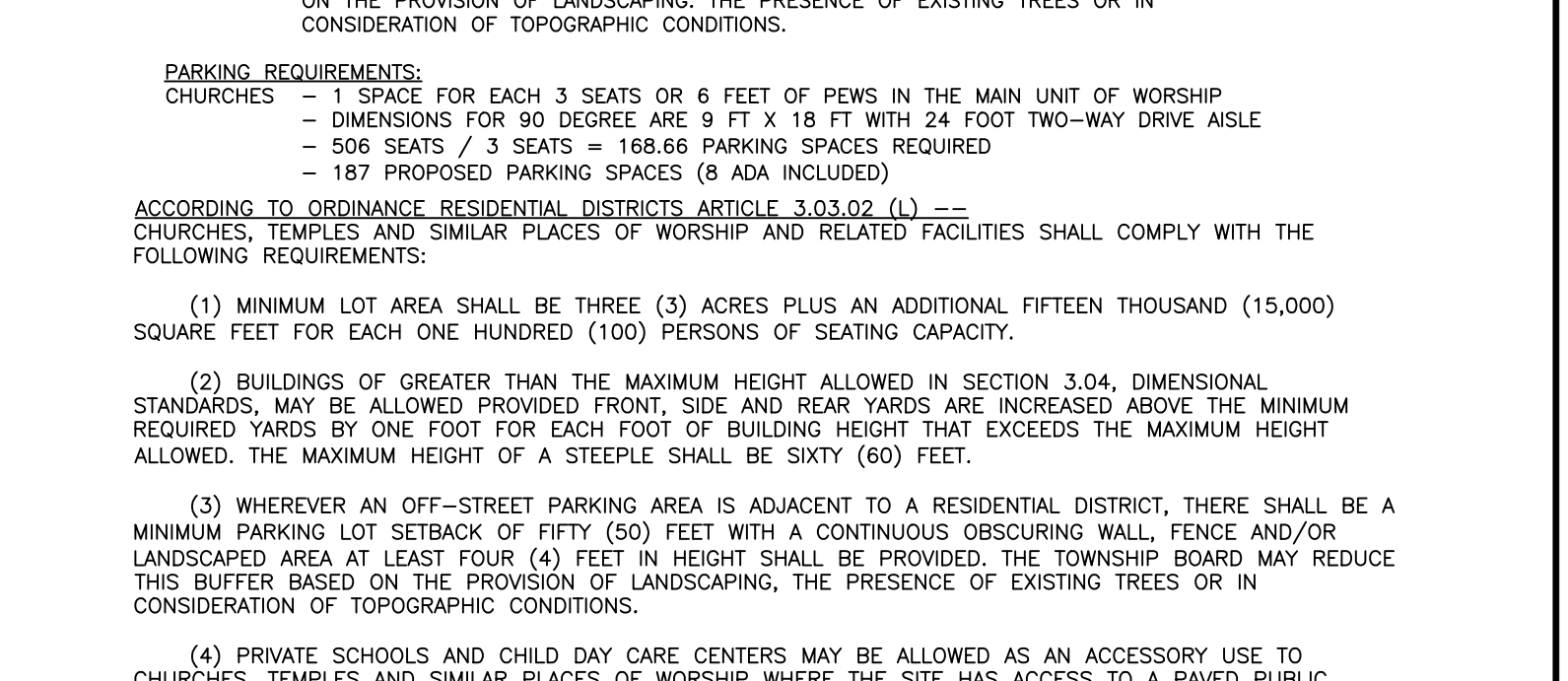
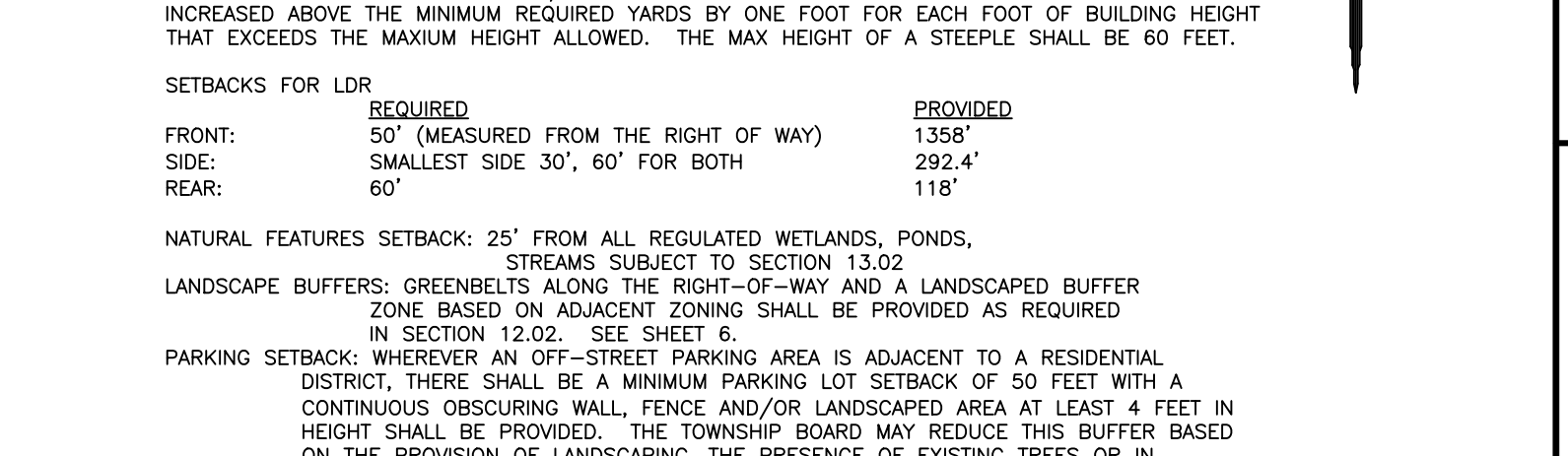
PARKING SETBACK: WHEREVER AN OFF-STREET PARKING AREA IS ADJACENT TO A RESIDENTIAL DISTRICT, THERE SHALL BE A MINIMUM PARKING LOT SETBACK OF 50 FEET WITH A CONTINUOUS OBTUSING WALL, FENCE AND/OR LANDSCAPED AREA AT LEAST 4 FEET IN HEIGHT SHALL BE PROVIDED. THE TOWNSHIP BOARD MAY REDUCE THIS BUFFER BASED ON THE PROVISION OF LANDSCAPING, THE PRESENCE OF EXISTING TREES OR IN CONSIDERATION OF TOPOGRAPHIC CONDITIONS.

**PARKING REQUIREMENTS:**

- CHURCHES - 1 SPACE FOR EACH 3 SEATS OR 6 FEET OF PEWS IN THE MAIN UNIT OF WORSHIP
- DIMENSIONS FOR 90 DEGREE ARE 9 FT X 18 FT WITH 24 FOOT TWO-WAY DRIVE ANGLE
- 508 SEATS / 3 SEATS = 168.86 PARKING SPACES REQUIRED
- 187 PROPOSED PARKING SPACES (8 ADA INCLUDED)

ACCORDING TO ORDINANCE RESIDENTIAL DISTRICTS ARTICLE 3.03.02 (L) - CHURCHES, TEMPLES AND SIMILAR PLACES OF WORSHIP AND RELATED FACILITIES SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:

- (1) MINIMUM LOT AREA SHALL BE THREE (3) ACRES PLUS AN ADDITIONAL FIFTEEN THOUSAND (15,000) SQUARE FEET FOR EACH ONE HUNDRED (100) PERSONS OF SEATING CAPACITY.
- (2) BUILDINGS OF GREATER THAN THE MAXIMUM HEIGHT ALLOWED IN SECTION 3.04, DIMENSIONAL STANDARDS, MAY BE ALLOWED PROVIDED FRONT, SIDE AND REAR YARDS ARE INCREASED ABOVE THE MINIMUM REQUIRED YARDS BY ONE FOOT FOR EACH FOOT OF BUILDING HEIGHT THAT EXCEEDS THE MAXIMUM HEIGHT ALLOWED. THE MAXIMUM HEIGHT OF A STEEPLE SHALL BE SIXTY (60) FEET.
- (3) WHEREVER AN OFF-STREET PARKING AREA IS ADJACENT TO A RESIDENTIAL DISTRICT, THERE SHALL BE A MINIMUM PARKING LOT SETBACK OF FIFTY (50) FEET WITH A CONTINUOUS OBTUSING WALL, FENCE AND/OR LANDSCAPED AREA AT LEAST FOUR (4) FEET IN HEIGHT SHALL BE PROVIDED. THE TOWNSHIP BOARD MAY REDUCE THIS BUFFER BASED ON THE PROVISION OF LANDSCAPING, THE PRESENCE OF EXISTING TREES OR IN CONSIDERATION OF TOPOGRAPHIC CONDITIONS.
- (4) PRIVATE SCHOOLS AND CHILD DAY CARE CENTERS MAY BE ALLOWED AS AN ACCESSORY USE TO CHURCHES, TEMPLES AND SIMILAR PLACES OF WORSHIP WHERE THE SITE HAS ACCESS TO A PAVED PUBLIC ROADWAY.



**BEBOSS Engineering**  
 Engineers Surveyors Planners Landscape Architects  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI. 48843  
 517.546.4836 FAX 517.548.1670

PROJECT	PREPARED FOR	TITLE
BIBLE BAPTIST CHURCH	BIBLE BAPTIST CHURCH	OVERALL SITE PLAN
	2258 EAST HIGHLAND ROAD	
	HOWELL, MI 48843	
	517-715-9233	

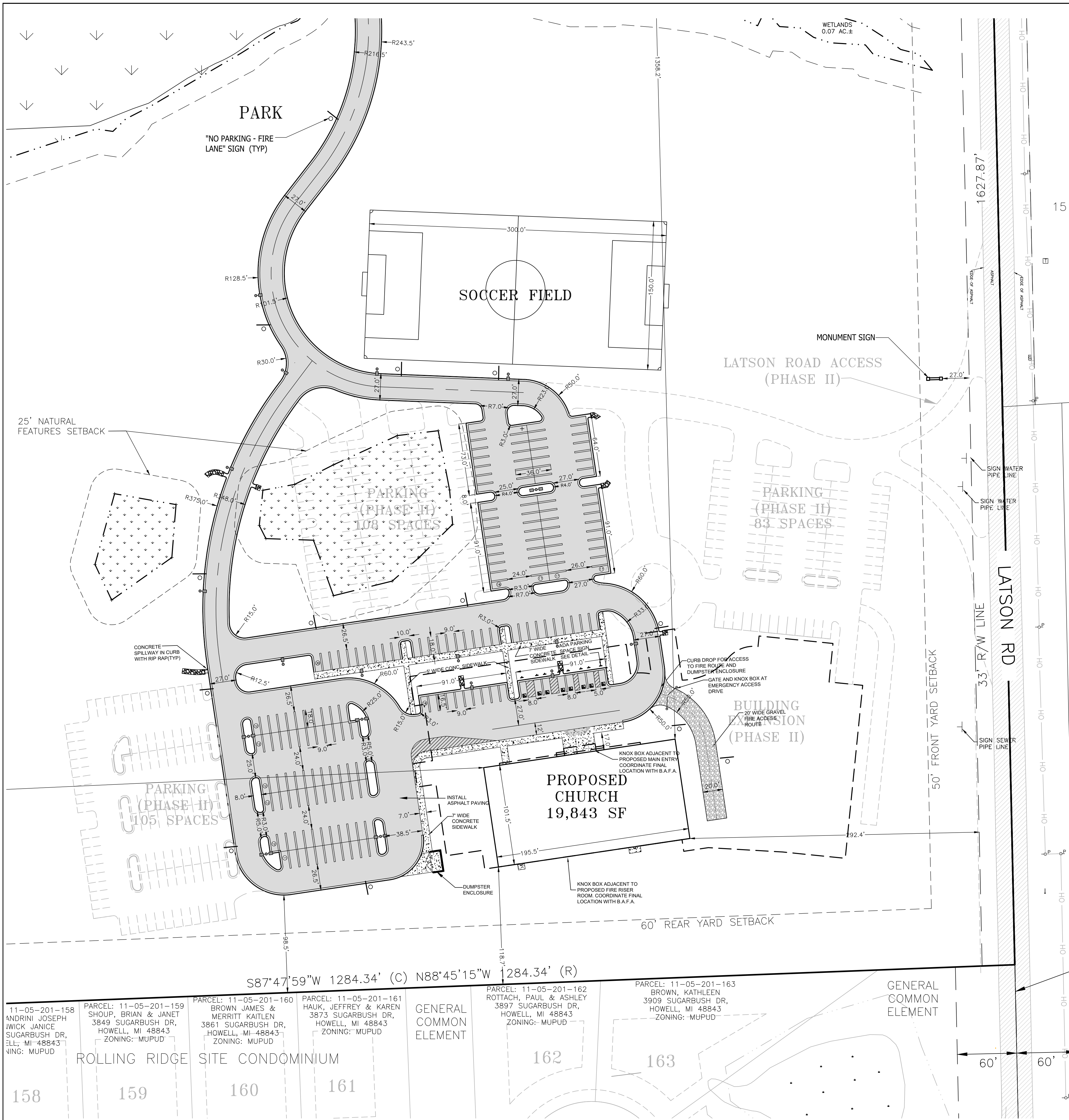
  

NO	BY	REVISION PER	DATE
1	ST	PER TWP REVIEW	3/15/22
2	ST	PER TWP REVIEW	2/23/22
1	ST	NO	

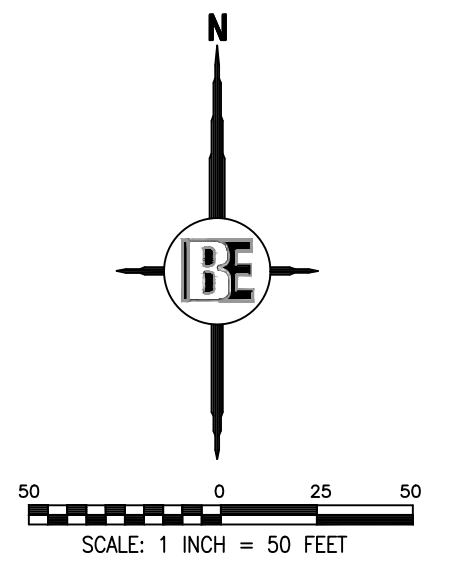
DESIGNED BY: ST  
 DRAWN BY: JS  
 CHECKED BY:

SCALE: 1" = 80'  
 JOB NO. 21-542  
 DATE 2/1/2022  
 SHEET NO. 4





PARCEL ID: 11-04-100-029  
 SERENITY HAVEN THREE, LLC  
 151 LATSON RD, HOWELL, MI 48843  
 ZONING: RR

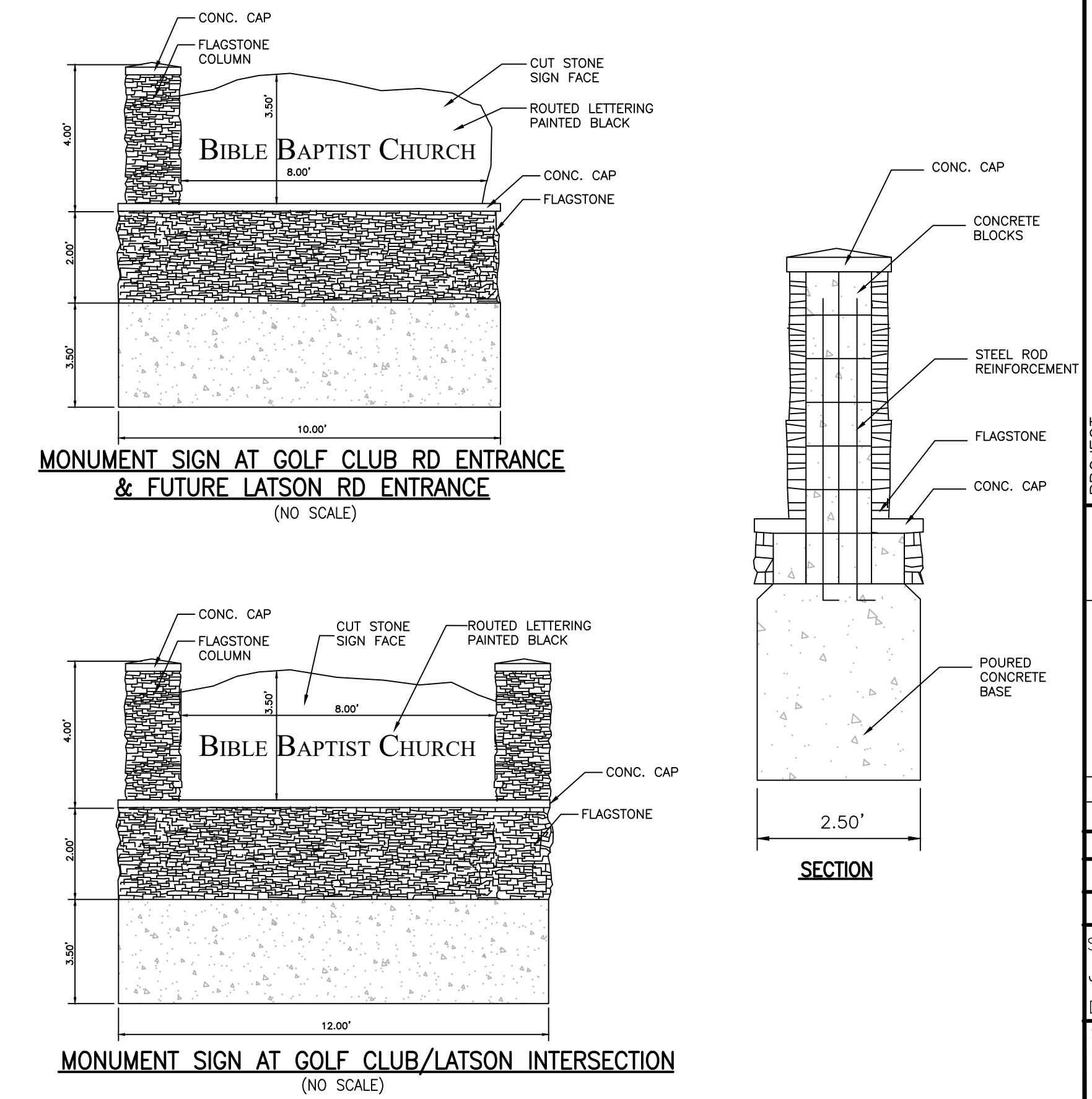


PROPOSED (PR)	EXISTING (EX)
FG	FG
T/A	T/A
T/W	T/W
F/L	F/L
T/P	T/P
B/P	B/P
RM	RM
INV	INV
MH	MH
IN	IN
CB	CB
RY	RY
ES	ES
GV	GV
HY	HY
UP	UP
SN	SN
FM	FM
ST	ST
WM	WM
WL	WL
OH	OH
C	C
E	E
G	G
T	T
O	O
□	□
○	○
⊗	⊗
⊙	⊙
⊕	⊕
⊖	⊖
X	X
TBR	TBR
⊕	⊕
⊖	⊖
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**GENERAL NOTES**

- ALL OUTDOOR LIGHTS SHALL BE SHIELDED TO REDUCE GLARE AND SHALL BE ARRANGED TO NOT INTERFERE WITH THE VISION OF PERSONS ON ADJACENT ROADWAYS OR ADJACENT PROPERTY.
- ALL SIGNS SHALL MEET LOCAL MUNICIPALITY ORDINANCE REQUIREMENTS.
- FUTURE ACCESS DRIVE FROM LATSON ROAD TO CONFORM TO B.A.F.A.'S ACCESS STANDARDS.
- THE CHURCH SHALL INCLUDE THE BUILDING ADDRESS A MINIMUM 6" HIGH LETTERS OF CONTRASTING COLORS AND BE CLEARLY VISIBLE FROM THE STREET. THE LOCATION AND SIZE SHALL BE VERIFIED PRIOR TO INSTALLATION.
- ONE SIDE OF THE STREET SHALL BE MARKED AS A FIRE LANE AND SHALL HAVE APPROPRIATE SIGNAGE.
- ACCESS ROADS TO THE SITE SHALL BE PROVIDED AND MAINTAINED DURING CONSTRUCTION.
- ACCESS ROADS SHALL BE CONSTRUCTED TO BE CAPABLE OF SUPPORTING THE IMPOSED LOAD OF FIRE APPARATUS WEIGHING AT LEAST 84,000 POUNDS.
- A MINIMUM VERTICAL CLEARANCE OF 13.5 FEET SHALL BE MAINTAINED THROUGHOUT THE SITE. THIS INCLUDES ENCROACHMENTS FROM LARGE TREE CANOPIES, LIGHTING, ETC.
- DURING THE CONSTRUCTION PROCESS, THE BUILDING WILL BE EVALUATED FOR EMERGENCY RESPONDER RADIO SIGNAL STRENGTH. IF COVERAGE IS FOUND TO BE QUESTIONABLE OR INADEQUATE, AN APPROVED CONTRACTOR SHALL BE HIRED TO PERFORM A GRID TEST OF THE FACILITY. IF THE SIGNAL STRENGTH COVERAGE IS FOUND TO BE NON-COMPLIANT, AN APPROVED EMERGENCY RESPONDER RADIO COVERAGE SYSTEM SHALL BE PROVIDED IN THE BUILDING.
- SITE LIGHTING SHALL BE PLACED ON TIMERS TO BE OFF DURING NON-USE HOURS TO THE EXTENT POSSIBLE WHILE MAINTAINING SITE SAFETY.

LAKWOOD KNOLL #3  
 ZONING: RPUD



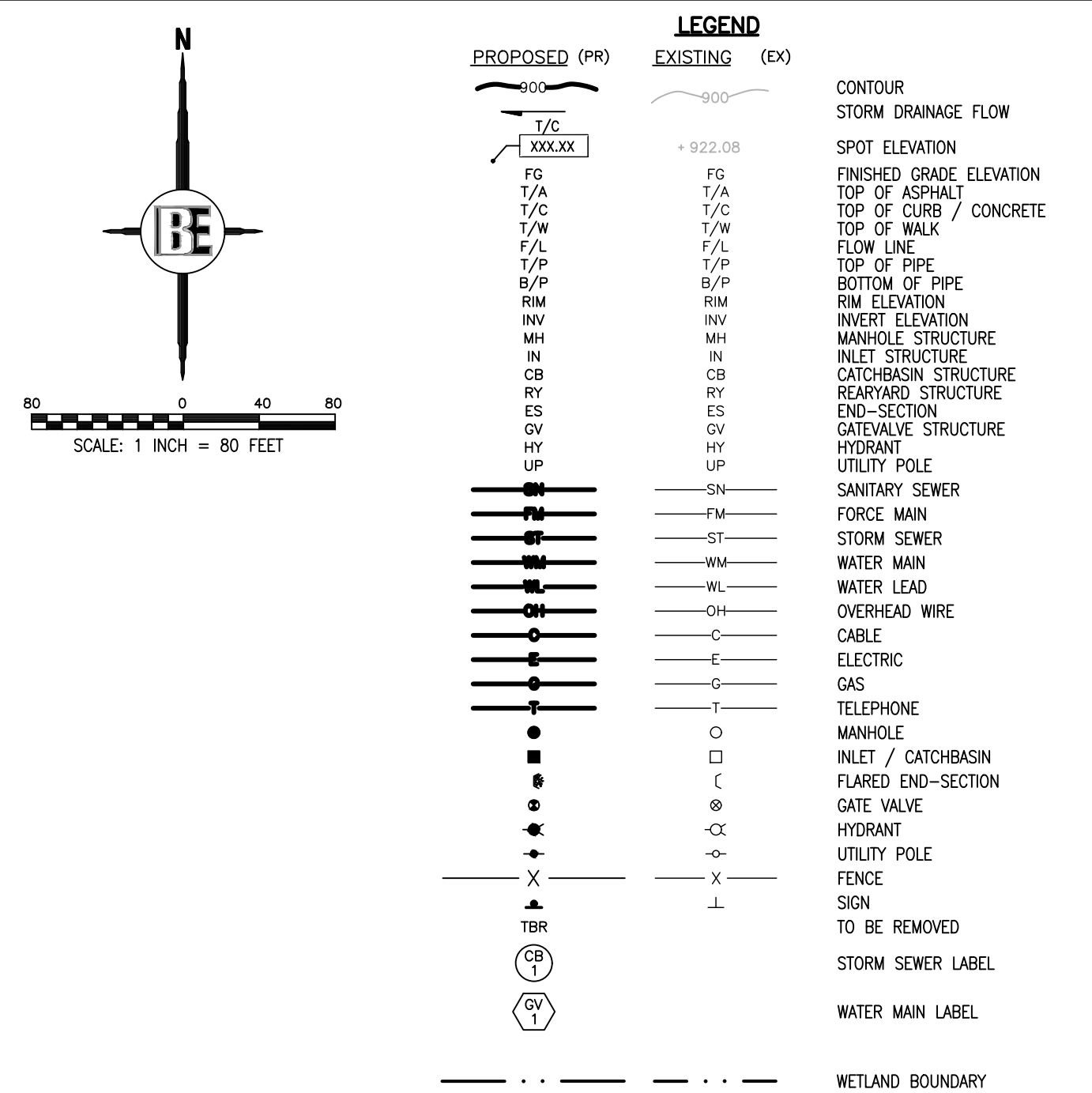
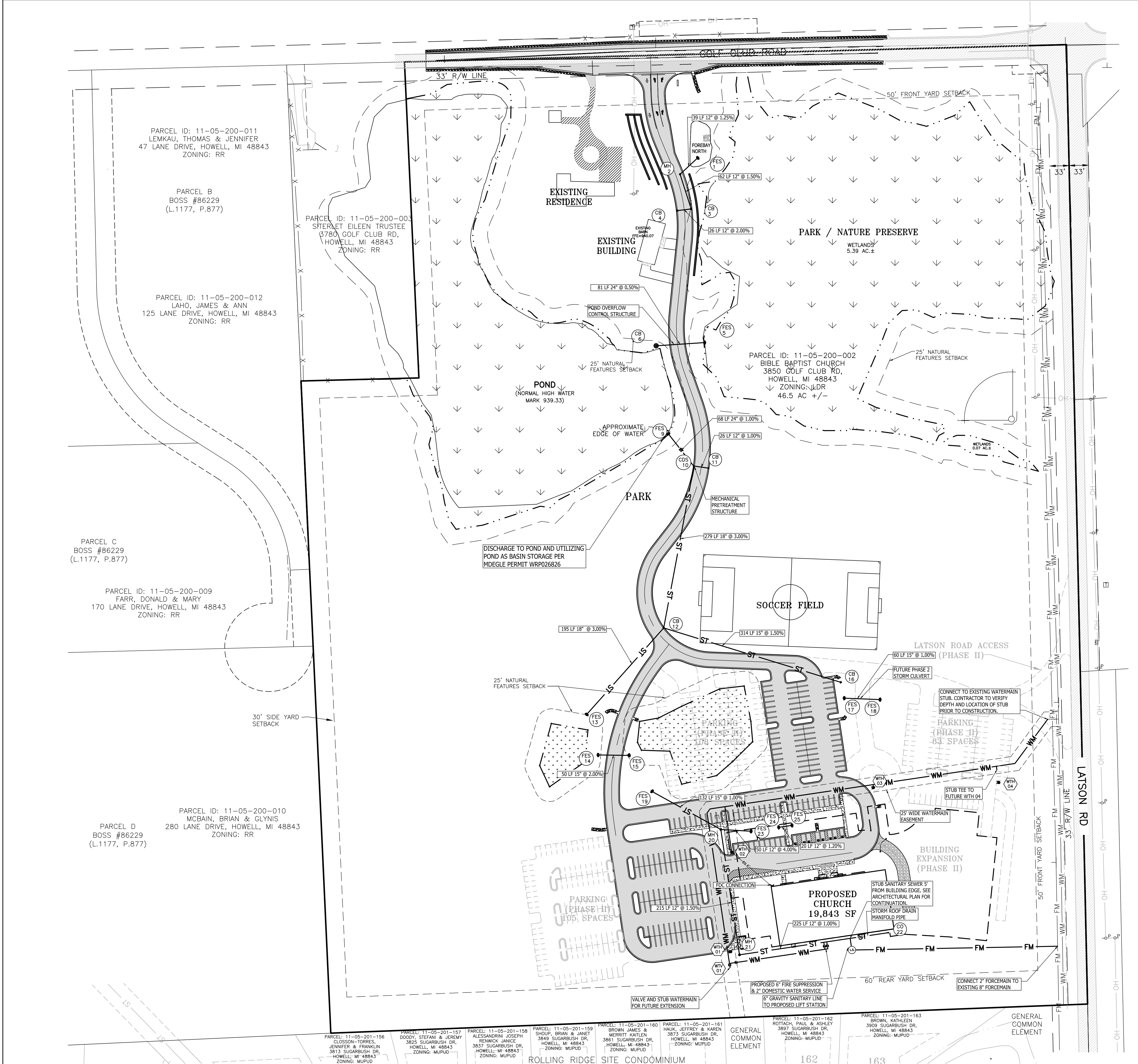
BEFORE YOU DIG  
 CALL MISS DIG  
 1-800-487-3874

**BEBOSS**  
 Engineering  
 Planners Landscape Architects  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI. 48843  
 517.546.4836 FAX 517.548.1670

PROJECT	BIBLE BAPTIST CHURCH		
PREPARED FOR	BIBLE BAPTIST CHURCH 2258 EAST HIGHLAND ROAD HOWELL, MI 48843 517-715-9233		
TITLE	CHURCH CAMPUS SITE PLAN		
DESIGNED BY:	ST	DATE	3/15/22
DRAWN BY:	JS	DATE	2/23/22
CHECKED BY:		DATE	
SCALE	1" = 50'		
JOB NO.	21-542		
DATE	2/01/2022		
SHEET NO.	5		

11-05-201-158 ANDRINI, JOSEPH  
 11-05-201-159 SHOUP, BRIAN & JANET  
 11-05-201-160 BROWN, JAMES & MERRITT, KAITLEN  
 11-05-201-161 HAUKE, JEFFREY & KAREN  
 11-05-201-162 ROTTACH, PAUL & ASHLEY  
 11-05-201-163 BROWN, KATHLEEN  
 11-05-201-164 ROTTACH, PAUL & ASHLEY





- NOTES**
1. A WATERMAIN PERMIT (ACT 399) SHALL BE OBTAINED PRIOR TO CONSTRUCTION.
  2. ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF GENOA TOWNSHIP, LIVINGSTON COUNTY, AND THE STATE OF MICHIGAN.
  3. THREE WORKING DAYS BEFORE YOU DIG, CALL MISS DIG TOLL FREE 1-800-482-7171.
  4. ALL LENGTHS SHOWN ARE FROM E TO E OF STRUCTURE OR FROM E OF STRUCTURE TO DISCHARGE END OF FLARED END SECTION.
  5. ALL STORM SEWER UNDER THE ROADBED AND WITHIN GREEN SPACE SHALL BE ADS HP WITH WATERTIGHT PREMIUM JOINTS, UNLESS OTHERWISE NOTED ON PLAN.
  6. ALL OPEN INLET OR OUTLET END OF STORM SEWER AND CULVERTS SHALL INCLUDE PREFAB FLARED-END SECTION AND MINIMUM 15 SQ. YD. OF PLAIN COBLESTONE RIP-RAP (6 INCH MIN. SIZE), UNLESS OTHERWISE SPECIFIED.
  7. APPROPRIATE SOIL EROSION CONTROL MEASURES SHALL BE ESTABLISHED PRIOR TO BEGINNING CONSTRUCTION AND CONTINUOUSLY MAINTAINED BY CONTRACTOR UNTIL VEGETATION HAS BEEN RE-ESTABLISHED.
  8. ALL CATCH BASIN RIM ELEVATIONS ARE AT FLOW LINE.
  9. ALL CURB SHALL BE "HIGH BACK" CURB. ENTRANCE SHALL BE "B2" CURB, UNLESS OTHERWISE NOTED.
  10. FOR ALL WORK WITHIN ROAD RIGHT-OF-WAY, SEE STANDARDS AND SPECIFICATIONS, LIVINGSTON COUNTY ROAD COMMISSION STANDARD DETAILS FOR RESIDENTIAL STREETS.
  11. MINIMUM 10' HORIZONTAL SEPARATION AND 18" VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN UTILITIES AT ALL TIMES. A CONCRETE COLLAR SHALL BE USED WHEREVER THE MINIMUM 18" VERTICAL SEPARATION CANNOT BE MET BETWEEN STORM SEWER AND SANITARY MAIN. SEE STORM SEWER CONSTRUCTION DETAIL SHEET FOR CONCRETE COLLAR DETAIL.
  12. SEE STANDARDS AND SPECIFICATIONS ON WATER MAIN STANDARD NOTES AND WATER MAIN STANDARD DETAILS SHEETS.
  13. WATER MAIN SHALL BE 8" DUCTILE IRON PIPE CLASS 52.
  14. WATER MAIN SHALL HAVE MINIMUM 5 1/2 FEET OF COVER AND MAX 8 1/2" COVER.
  15. HYDRANTS AT CURB TO BE A MINIMUM OF 3' & MAXIMUM 10' OFF BACK OF CURB (TYP.)
  16. PER MHOQ STANDARDS, GATE VALVES AND BOXES ARE TO BE UTILIZED ON WATERMAIN 12 INCHES AND SMALLER.
  17. A FULL PIPE LENGTH (20') IS TO BE INSTALLED AT ALL WATERMAIN PIPE CROSSINGS, CENTERED UNDER THE CONFLICTING PIPE.
  18. ALL PIPE THAT IS TO BE INSTALLED ABOVE THE EXISTING GROUND SHALL BE BACKFILLED WITH ENGINEERING FILL COMPACTED TO 95% MAX DRY UNIT WEIGHT.

STORM STRUCTURE TABLE	
STRUCTURE NAME	STRUCTURE DETAILS
CB3 480	RIM = 938.86 SUMP = 2'
COVER TYPE 'C' 2' SUMP	12" INV IN = 933.92 12" INV OUT = 933.92
CB4 240	RIM = 938.86 SUMP = 2'
COVER TYPE 'C' 2' SUMP	12" INV IN = 934.44 12" INV OUT = 934.44
CB6 240	RIM = 940.50 SUMP = 2'
COVER TYPE 'GRATE' 2' SUMP	24" INV IN = 935.27 24" INV OUT = 935.27
CB11 240	RIM = 946.48 SUMP = 2'
COVER TYPE 'C' 2' SUMP	12" INV IN = 942.48 12" INV OUT = 942.48
CB12 480	RIM = 964.42 SUMP = 2'
COVER TYPE 'C' 2' SUMP	18" INV IN = 959.45 15" INV IN = 960.15 21" INV OUT = 953.45
CB16 480	RIM = 970.00 SUMP = 2'
COVER TYPE 'E' 2' SUMP	15" INV IN = 964.86 15" INV OUT = 964.86
CD510 960	RIM = 961.65 SUMP = 6'
COVER TYPE 'C' 6' SUMP	21" INV IN = 945.08 12" INV IN = 942.74 24" INV OUT = 941.68
CO22 240	RIM = 979.80 SUMP = 2'
COVER TYPE 'A' 2' SUMP	12" INV IN = 975.80 12" INV OUT = 975.80
FES1	18" INV IN = 932.50
FES5	24" INV IN = 934.86
FES9	24" INV IN = 941.00
FES13	18" INV OUT = 965.30
FES14	15" INV IN = 964.00
FES15	15" INV OUT = 965.00
FES17	15" INV IN = 971.00

STORM STRUCTURE TABLE	
STRUCTURE NAME	STRUCTURE DETAILS
FES18	15" INV OUT = 971.60
FES19	15" INV IN = 968.00
FES23	12" INV OUT = 975.27
FES24	12" INV IN = 976.28
FES25	12" INV OUT = 976.52
MH2 480	RIM = 939.42 SUMP = 0'
COVER TYPE 'A' 0' SUMP	12" INV IN = 932.99 18" INV OUT = 932.99
MH20 480	RIM = 978.94 SUMP = 2'
COVER TYPE 'A' 2' SUMP	12" INV IN = 973.27 12" INV IN = 970.02 15" INV OUT = 969.32
MH21 480	RIM = 979.00 SUMP = 2'
COVER TYPE 'A' 2' SUMP	12" INV IN = 973.25 12" INV OUT = 973.25

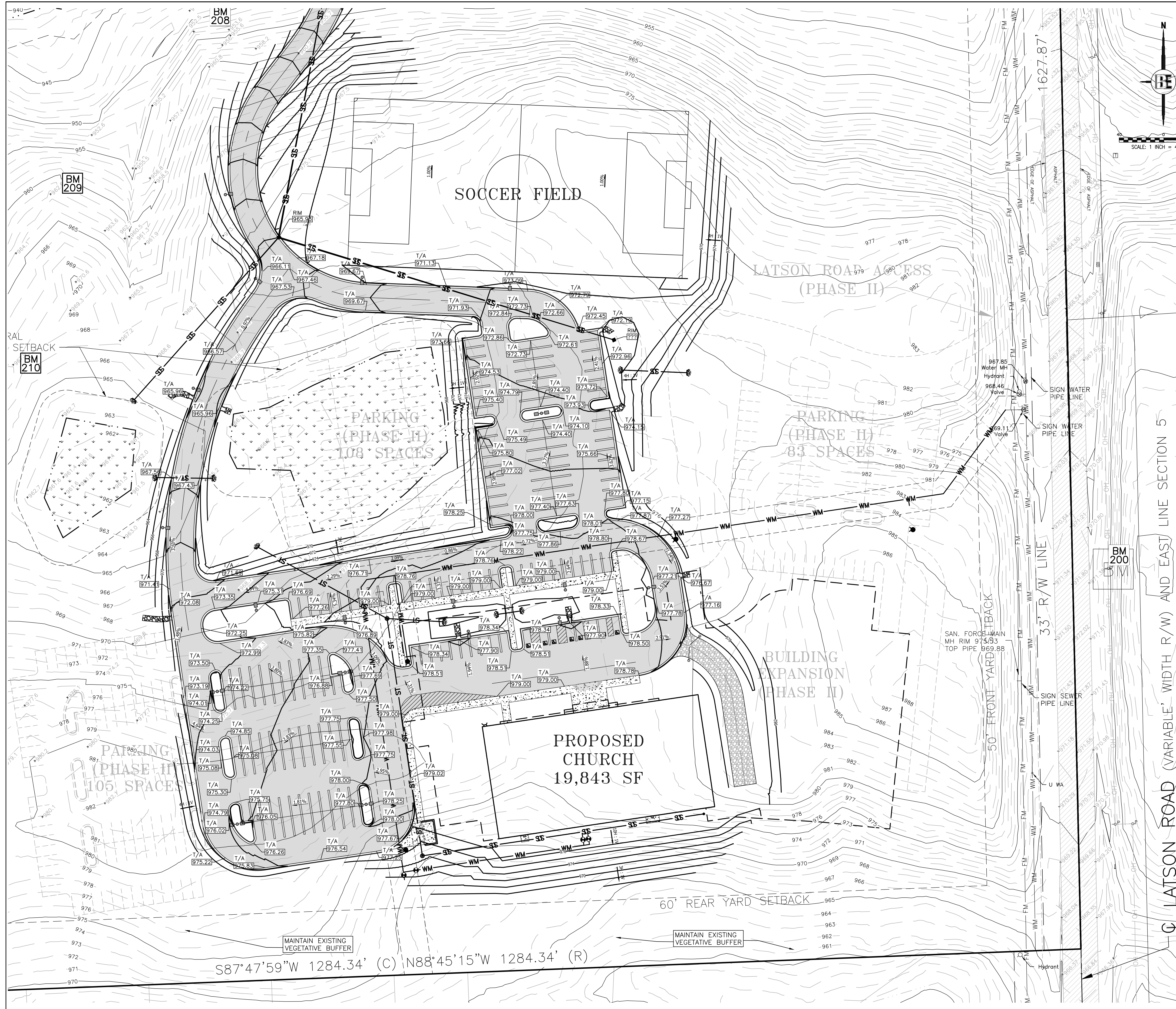
**BEBOSS Engineering**  
Engineers Surveyors Planners Landscape Architects  
3121 E. GRAND RIVER AVE.  
HOWELL, MI. 48843  
517.546.4836 FAX 517.548.1670

**BIBLE BAPTIST CHURCH**  
BIBLE BAPTIST CHURCH  
2258 EAST HIGHLAND ROAD  
HOWELL, MI 48843  
517-715-9233

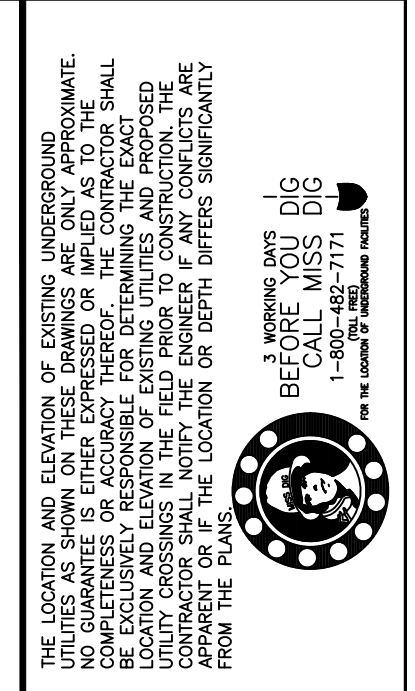
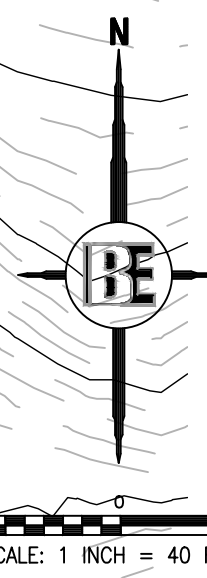
**UTILITY PLAN**

PROJECT	DATE
DESIGNED BY: ST	3/15/22
DRAWN BY: JS	2/23/22
CHECKED BY:	
SCALE	1" = 80'
JOB NO.	21-542
DATE	2/1/2022
SHEET NO.	6





PROPOSED (PR)	EXISTING (EX)	LEGEND
—	—	CONTOUR
—	—	STORM DRAINAGE FLOW
—	—	SPOT ELEVATION
—	—	FINISHED GRADE ELEVATION
—	—	TOP OF ASPHALT
—	—	TOP OF CURB / CONCRETE
—	—	TOP OF WALK
—	—	T/W
—	—	F/L
—	—	FLOW LINE
—	—	T/P
—	—	BOTTOM OF PIPE
—	—	B/P
—	—	RIM
—	—	INVERT ELEVATION
—	—	MANHOLE STRUCTURE
—	—	INLET STRUCTURE
—	—	CATCHBASIN STRUCTURE
—	—	REARWARD STRUCTURE
—	—	END-SECTION
—	—	GATEVALVE STRUCTURE
—	—	HYDRANT STRUCTURE
—	—	UTILITY POLE
—	—	SANITARY SEWER
—	—	FORC MAIN
—	—	STORM SEWER
—	—	WATER MAIN
—	—	WATER LEAD
—	—	OVERHEAD WIRE
—	—	CABLE
—	—	ELECTRIC
—	—	GAS
—	—	TELEPHONE
—	—	MANHOLE
—	—	INLET / CATCHBASIN
—	—	FLARED END-SECTION
—	—	GATE VALVE
—	—	HYDRANT
—	—	UTILITY POLE
—	—	FENCE
—	—	SIGN
—	—	TO BE REMOVED
—	—	STORM SEWER LABEL
—	—	WATER MAIN LABEL
—	—	WETLAND BOUNDARY
—	—	LIMITS OF CLEARANCE/DISTURBANCE



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**BIBLE BAPTIST CHURCH**  
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 2258 EAST HIGHLAND ROAD  
 HOWELL, MI 48843  
 517-715-9233

PROJECT	PREPARED FOR	TITLE
BIBLE BAPTIST CHURCH	BIBLE BAPTIST CHURCH	GRADING PLAN

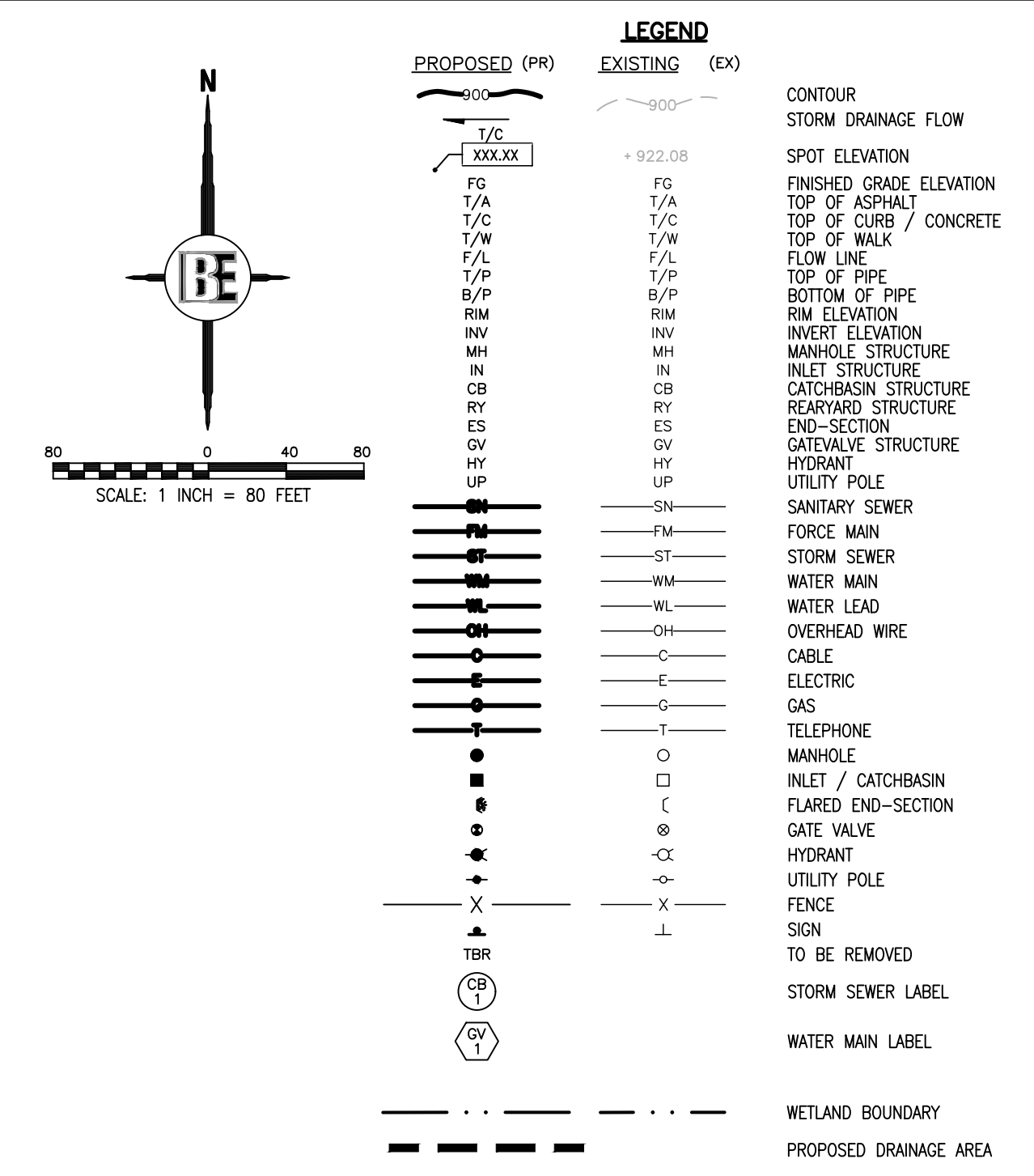
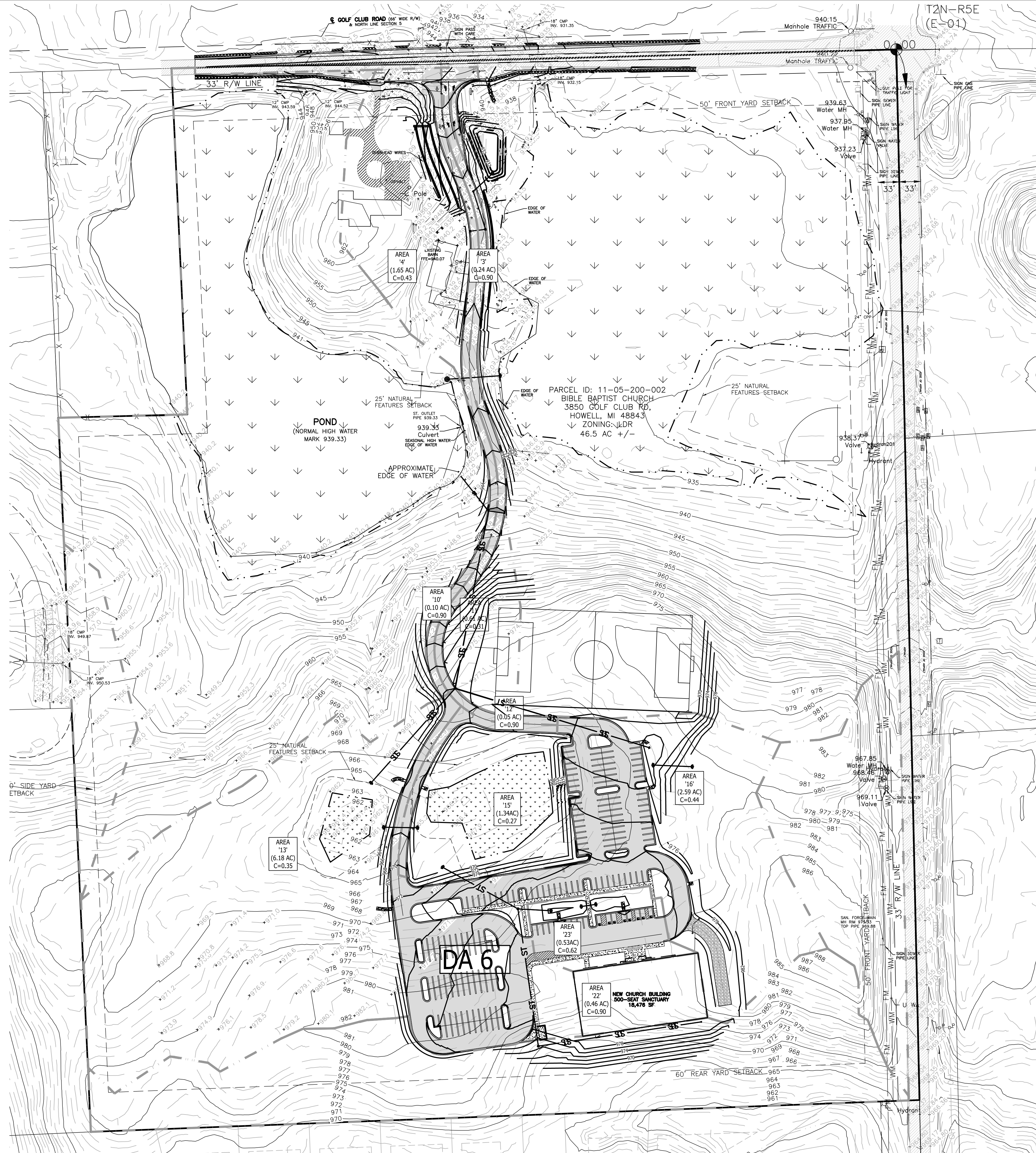
NO	BY	DATE	REVISION PER
1	ST	3/15/22	
2	ST	2/23/22	

DESIGNED BY: ST  
 DRAWN BY: JS  
 CHECKED BY:  
 SCALE: 1" = 40'  
 JOB NO. 21-542  
 DATE 12/01/2021  
 SHEET NO. 7

**SITE BENCHMARKS (NAVD88 DATUM):**  
 -BM #200 = NAIL/TAG W/S P.POLE E/S LASTON RD. 785'± NORTH OF CONOVER CT. ELEV.=971.41  
 -BM #201 = ARROW ON HYD W/S OF LASTON RD. 135'± SOUTH OF GOLF CLUB RD. ELEV.=939.50  
 -BM #203 = FD. R.R. E/S OF GUY POLE W/S OF LASTON RD. 44'± SOUTH OF GOLF CLUB RD. ELEV.=942.12  
 -BM #205 = PK NAIL/TAG W/S 40" WILLOW TREE 170'± SOUTH OF GOLF CLUB RD. & 160'± NORTH OF BARN. ELEV.=935.10  
 -BM #206 = LANDSCAPE SPIKE SET S/E CORNER OF POLE BARN. ELEV.=940.32  
 -BM #207 = PK NAIL/TAG S/S 12" MAPLE TREE S/S OF POND. ELEV.=945.31  
 -BM #208 = PK NAIL/TAG SET 10" PINE TREE 50'± EAST OF TWO TRACK RUNNING M&S & 150'± SOUTH OF POND, N/S OF TWO TRACK RUNNING E&W. ELEV.=954.73  
 -BM #209 = PK NAIL/TAG S/S 12" ELM TREE 142'± SOUTH OF POND. ELEV.=959.69  
 -BM #210 = PK NAIL/TAG E/S 8" PINE TREE 330'± SOUTH OF POND. ELEV.=966.83

S87°47'59"W 1284.34' (C) N88°45'15"W 1284.34' (R)





THE INFORMATION ON THIS PLAN IS THE PROPERTY OF BEBOSS ENGINEERING ARCHITECTS. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. BEBOSS ENGINEERING ARCHITECTS SHALL BE SOLELY RESPONSIBLE FOR OBTAINING THE NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL AGENCIES. THE USER OF THIS PLAN SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL AGENCIES. BEBOSS ENGINEERING ARCHITECTS SHALL NOT BE RESPONSIBLE FOR ANY DAMAGE TO PERSONS OR PROPERTY ARISING FROM THE USE OF THIS PLAN.

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**BEBOSS**  
 Engineering  
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 517.546.4836 FAX 517.548.1670

PROJECT	BIBLE BAPTIST CHURCH		
PREPARED FOR	BIBLE BAPTIST CHURCH 2258 EAST HIGHLAND ROAD HOWELL, MI 48843 517-715-9233		
TITLE	DRAINAGE PLAN		
DATE	3/15/22	REVISION PER	DATE
DESIGNED BY:	ST	PER TWP REVIEW	3/15/22
DRAWN BY:	JS	PER W/P REVIEW	2/23/22
CHECKED BY:	JS	NO BY:	
SCALE	1" = 80'		
JOB NO.	21-542		
DATE	2/1/2022		
SHEET NO.	8		

**DRAINAGE NARRATIVE:**  
 PRE-DEVELOPMENT:  
 IN GENERAL, THE SITE SLOPES NORTHERLY TOWARDS AN EXISTING OPEN WATER POND AND WETLAND AT THE NORTH PORTION OF THE PROPERTY. WATER FROM THE POND AND WETLAND AT THE NORTH PORTION OF THE PROPERTY WILL DISCHARGE TO THE EAST WETLAND AND THEN RUNS NORTHERLY UNDERNEATH GOLF CLUB ROAD. A SMALL PORTION OF THE PROPERTY SLOPES EASTERLY DIRECTLY TO LATSON ROAD RIGHT OF WAY AS WELL AS SOME AREA SLOPING DIRECTLY SOUTHERLY TO THE EXISTING ROLLING RIDGE SITE CONDO.

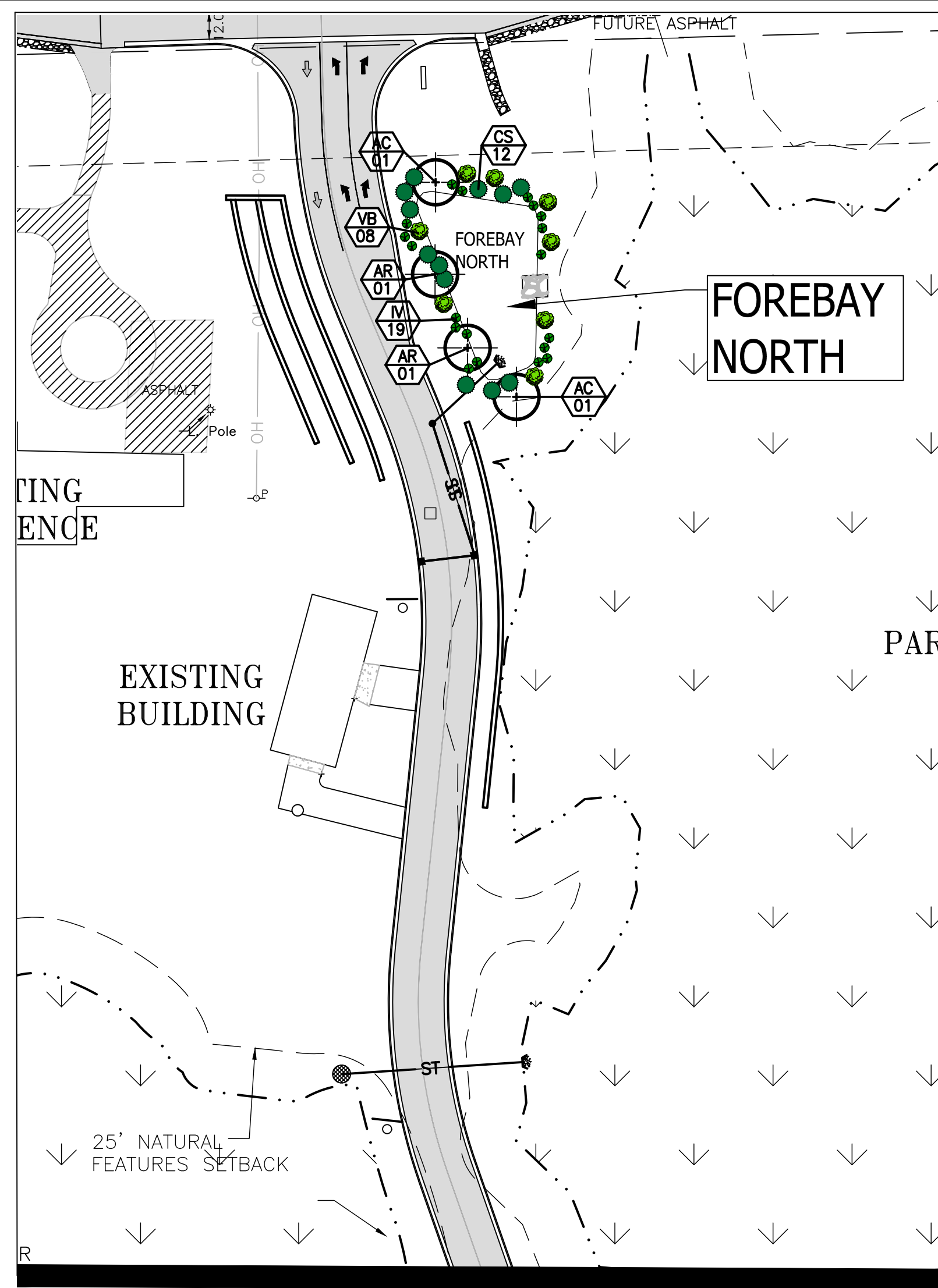
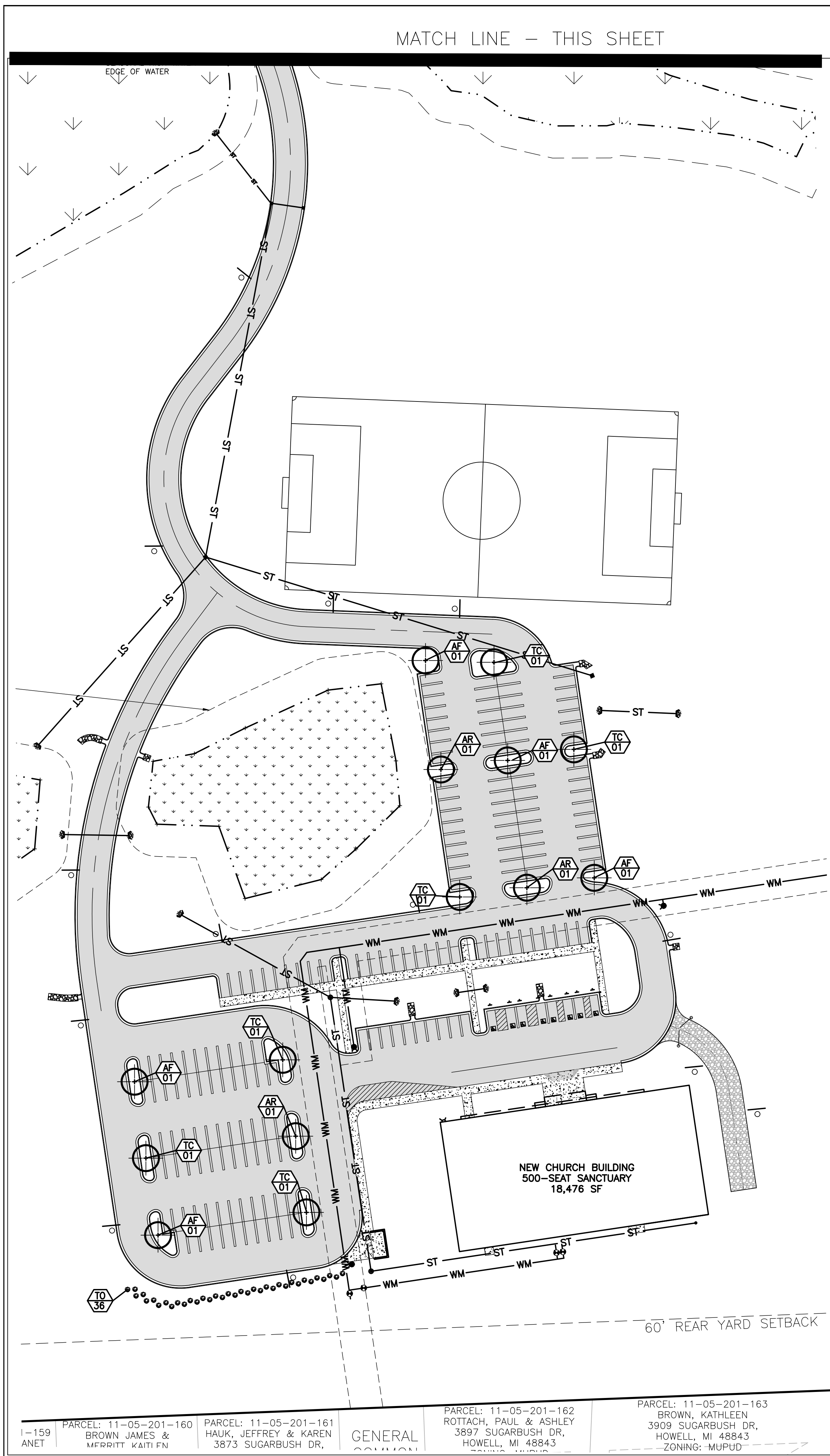
POST-DEVELOPMENT:  
 THE OVERALL DRAINAGE PATTERNS ON THE SITE AFTER DEVELOPMENT REMAIN GENERALLY THE SAME. THERE WILL A REDUCTION IN DRAINAGE AREA DIRECTLY DISCHARGING TO THE ROLLING RIDGE SITE CONDO TO THE SOUTH. THE DIRECT DRAINAGE TO LATSON ROAD RIGHT OF WAY WILL REMAIN UNCHANGED. THE PROPOSED CHURCH AND ALL IMPERVIOUS SURFACES WILL BE DIRECTED VIA A COMBINATION OF ENCLOSED STORM SEWER AS WELL AS OPEN SWALES NORTHERLY TO A MECHANICAL PRETREATMENT UNIT. THE MECHANICAL PRETREATMENT UNIT WILL TREAT THE STORMWATER FROM THE FIRST FLUSH PER NEW LCRC STANDARDS AND DISCHARGE TO THE EXISTING POND ON THE NORTHWEST PORTION OF THE PROPERTY. STORAGE IS WITHIN THE OPEN WATER POND PRIOR TO DISCHARGE INTO THE EAST WETLAND, WHICH IS PERMITTED UNDER MDEGLE PERMIT #WRP026826. THERE IS A NORTH FOREBAY WHOSE DRAINAGE AREAS IS LIMITED TO THE NORTHERN PORTION OF THE PROPOSED COMMERCIAL DRIVE. THIS NORTHERN FOREBAY DISCHARGES DIRECTLY TO THE EAST WETLAND AND IS PERMITTED UNDER MDEGLE PERMIT #WRP026826.

FUTURE DEVELOPMENT:  
 THE PLANS FOR A CHURCH EXPANSION ARE ANTICIPATED AT A LATER DATE, WITH A REASONABLE EXPECTED LAYOUT PROVIDED AT THIS TIME FOR THE FUTURE EXPANSION. SINCE THIS FUTURE EXPANSION IS KNOWN, THE STORM SEWER CALCULATIONS AND FOREBAY/MECHANICAL PRETREATMENT UNITS HAVE BEEN SIZED ACCORDINGLY TO ACCOUNT FOR FUTURE CHURCH DEVELOPMENT, THUS MITIGATING UNNECESSARY DISTURBANCE DURING THE EXPANSION PROJECT AS WAS THE CASE IN THE POST-DEVELOPED CONDITION. THE DRAINAGE AREA DISCHARGING DIRECTLY TO THE ROLLING RIDGE SITE CONDO TO THE SOUTH WILL BE REDUCED YET AGAIN IN THE FUTURE CONDITION. THE DRAINAGE TO THE LATSON ROAD RIGHT OF WAY WILL NEED TO BE APPROVED BY LCRC.



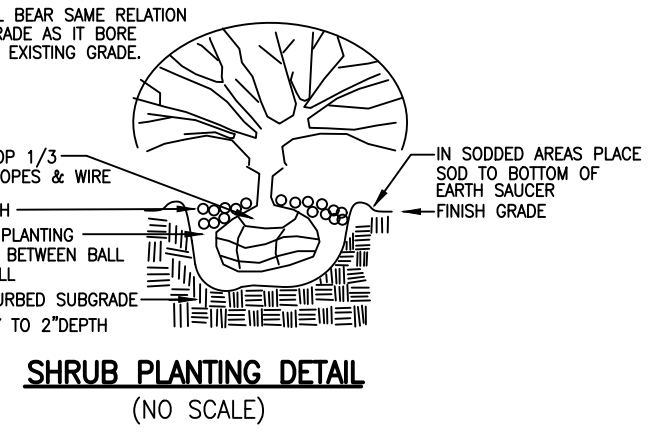
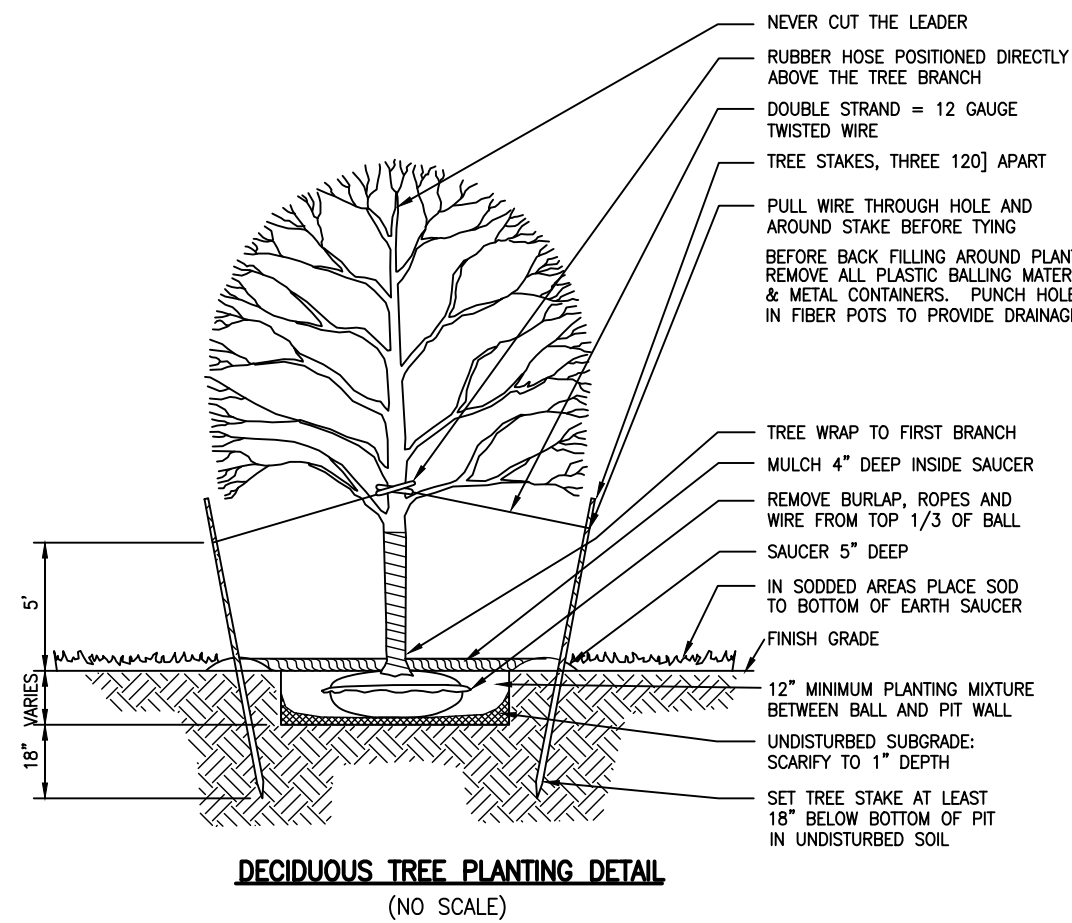






**GENERAL LANDSCAPE NOTES:**

- ALL PLANT MATERIAL SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE GOVERNING MUNICIPALITY AND SHALL BE NURSERY GROWN. ALL SIZES AND MEASUREMENTS SHALL CONFORM TO ANSI Z60 STANDARDS. ALL PLANT MATERIAL SHALL BE OF SELECTED SPECIMEN QUALITY AND HAVE A NORMAL HABIT OF GROWTH. ALL PLANT MATERIAL IS SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT.
- ALL PLANT MATERIALS SHALL BE BALLED AND BURLAPPED STOCK OR CONTAINER STOCK. NO BARE ROOT STOCK IS PERMITTED. ALL PLANT BALLS SHALL BE FIRM, INTACT AND SECURELY WRAPPED AND BOUND.
- ALL PLANT BEDS SHALL BE EXCAVATED OF ALL BUILDING MATERIALS AND OTHER EXTRANEIOUS OBJECTS AND POOR SOILS TO A MINIMUM DEPTH OF 12 INCHES AND BACKFILLED TO GRADE WITH PLANTING MIX (SEE BELOW).
- PLANTING MIXTURE SHALL CONSIST OF 4 PARTS TOPSOIL FROM ON SITE, 1 PART PEAT, AND 5 POUNDS OF SUPERPHOSPHATE PER CUBIC YARD OF MIX. INGREDIENTS SHALL BE THOROUGHLY BLENDED TO A UNIFORM CONSISTENCY.
- ALL PLANT BEDS AND INDIVIDUAL PLANTS SHALL BE MULCHED WITH A 3 INCH LAYER OF SHREDDED BARK MULCH.
- ALL PLANTS AND PLANT BEDS SHALL BE THOROUGHLY WATERED UPON COMPLETION OF PLANTING AND STAKING OPERATIONS.
- THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF 1 YEAR FROM THE DATE THE WORK IS ACCEPTED, IN WRITING, BY THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL REPLACE, WITHOUT COST TO THE OWNER, WITHIN A SPECIFIED PERIOD TIME, ALL DEAD PLANTS, AND ALL PLANTS NOT IN A VIGOROUS, THRIVING CONDITION, AS DETERMINED BY THE LANDSCAPE ARCHITECT DURING AND AT THE END OF THE GUARANTEE PERIOD. REPLACEMENT STOCK SHALL CONFORM TO THE ORIGINAL REQUIREMENTS.
- ALL LANDSCAPE BEDS SHALL BE EDGED WITH BLACK ALUMINUM EDGING, 1/8" X 4". INSTALL PER MANUFACTURER'S INSTRUCTIONS. ALL EDGING SHALL BE INSTALLED IN STRAIGHT LINES OR SMOOTH CURVES WITHOUT IRREGULARITIES.
- SOD SHALL BE DENSE, WELL ROOTED TURF, FREE OF WEEDS. IT SHALL BE COMPRISED OF A BLEND OF AT LEAST TWO KENTUCKY BLUEGRASSES AND ONE FESCUE. IT SHALL HAVE A UNIFORM THICKNESS OF 3/4 INCH, AND CUT IN UNIFORM STRIPS NOT LESS THAN 10 INCHES BY 18 INCHES. SOD SHALL BE KEPT MOIST AND LAD WITHIN 36 HOURS AFTER CUTTING.  
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE OF LUMPS AND DEPRESSIONS. ANY PART OF THE AREA THAT FAILS TO SHOW A UNIFORM GERMINATION SHALL BE RESEEDED AND SUCH RESEEDING SHALL CONTINUE UNTIL A DENSE LAWN IS ESTABLISHED. DAMAGE TO SEED AREAS RESULTING FROM EROSION SHALL BE REPAIRED BY THE CONTRACTOR.
- ALL AREAS OF THE SITE THAT BECOME DISTURBED DURING CONSTRUCTION AND ARE NOT TO BE PAVED, STONED, LANDSCAPED, OR SODDED SHALL BE SEEDED AND MULCHED.  
SEED MIXTURE SHALL BE AS FOLLOWS:  
KENTUCKY BLUEGRASS (CHOOSE 3 VARIETIES: ADELPHI, RUGBY, GLADE OR PARADE) 30%  
RUBY RED OR DAWSON RED FINE FESCUE 30%  
ATLANTA RED FESCUE 20%  
PENNSYLVANIA PERENNIAL RYE 20%  
THE ABOVE SEED MIXTURE SHALL BE SOWN AT A RATE OF 250 POUNDS PER ACRE. PRIOR TO SEEDING, THE TOPSOIL LAYER SHALL BE FERTILIZED WITH A COMMERCIAL FERTILIZER WITH A 10-0-10 ANALYSIS:  
10% NITROGEN: A MINIMUM OF 25% FROM A UREA-FORMALDEHYDE SOURCE  
0% PHOSPHATE  
10% POTASH: SOURCE TO BE POTASSIUM SULFATE OR POTASSIUM NITRATE.  
THE FIRST FERTILIZER APPLICATION SHALL BE AT A RATE OF 10 POUNDS OF BULK FERTILIZER PER 1000 SQUARE FEET.  
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE OF LUMPS AND DEPRESSIONS. ANY PART OF THE AREA THAT FAILS TO SHOW A UNIFORM GERMINATION SHALL BE RESEEDED AND SUCH RESEEDING SHALL CONTINUE UNTIL A DENSE LAWN IS ESTABLISHED. DAMAGE TO SEED AREAS RESULTING FROM EROSION SHALL BE REPAIRED BY THE CONTRACTOR.
- ALL PLANT MATERIALS SHALL BE FREE OF WEEDS, INSECTS AND DISEASE.



**LEGEND**

PROPOSED (PR)	EXISTING (EX)	LANDSCAPE LEGEND
900	+922.08	CONTOUR
T/C		STORM DRAINAGE FLOW
FG	FG	SPOT ELEVATION
T/A	T/A	FINISHED GRADE ELEVATION
T/W	T/W	TOP OF ASPHALT
F/L	F/L	TOP OF CURB / CONCRETE
T/P	T/P	TOP OF WALK
B/P	B/P	FLOW LINE
RM	RM	TOP OF PIPE
INV	INV	BOTTOM OF PIPE
MH	MH	RM ELEVATION
IN	IN	INVERT ELEVATION
CB	CB	MANHOLE STRUCTURE
RY	RY	INLET STRUCTURE
ES	ES	CATCHBASIN STRUCTURE
GV	GV	REAR YARD STRUCTURE
HY	HY	END-SECTION GATEVALVE STRUCTURE
UP	UP	HYDRANT
SN	SN	UTILITY POLE
FM	FM	SANITARY SEWER
ST	ST	FORCE MAIN
WM	WM	STORM SEWER
WE	WE	WATER MAIN
OH	OH	WATER LEAD
C	C	OVERHEAD WIRE
E	E	CABLE
G	G	ELECTRIC
T	T	GAS
Ø	Ø	TELEPHONE
□	□	MANHOLE
⊠	⊠	INLET / CATCHBASIN
⊞	⊞	FLARED END-SECTION
⊘	⊘	GATE VALVE
⊙	⊙	HYDRANT
⊚	⊚	UTILITY POLE
X	X	FENCE
TBR	TBR	SIGN
⊕	⊕	TO BE REMOVED
⊖	⊖	STORM SEWER LABEL
⊗	⊗	WATER MAIN LABEL
⊘	⊘	WETLAND BOUNDARY
		EXISTING DECIDUOUS TREE
		EXISTING EVERGREEN TREE
		PROPOSED DECIDUOUS TREE
		PROP. LARGE DECIDUOUS SHRUB
		PROP. MEDIUM/LARGE DECID. SHRUB
		PROP. SMALL DECIDUOUS SHRUB
		PROP. SMALL EVERGREEN SHRUB

- LANDSCAPE REQUIREMENTS PER ORDINANCE AND CALCULATIONS**
- MULTIPLE MATURE TREES OVER THREE (3) INCHES CALIPER AND IN GOOD CONDITION ALONG THE DRIVEWAY TO REMAIN.
  - DETENTION/RETENTION POND LANDSCAPING
    - FREE FORM AS POSSIBLE, SIDE SLOPES NOT TO EXCEED 1:2 FOOT VERTICAL FOR EVERY THREE FEET HORIZONTAL.
    - DECIDUOUS SHADE OR EVERGREEN TREE AND 10 SHRUBS FOR EVERY FIFTY LINEAL FEET OF POND PERIMETER AS MEASURED ALONG THE TOP OF THE BANK ELEVATION. LANDSCAPE TO BE LIMITED TO ABOVE FREEBOARD LEVEL.  
REQUIRED FOREBAY NORTH: 193 LF/50=3.86 TREES AND 3.86\*10=38.6 SHRUBS PROVIDED FOREBAY NORTH: 4 TREES AND 39 SHRUBS
  - REQUIRED PARKING AREA LANDSCAPING
    - AREAS CONTAINING TEN OR MORE PARKING SPACES SHALL BE PROVIDED WITH LANDSCAPING -- 101 THROUGH 200 SPACES: 1 CANOPY TREE AND 100 SF OF LANDSCAPED AREA PER 12 SPACES.  
REQUIRED: 186 SPACES / 12 = 15.5 TREES AND 1,550 SF LANDSCAPED AREA PROVIDED: 16 TREES, AND 5,145 SF LANDSCAPED AREA
  - PARKING SETBACK: WHEREVER AN OFF-STREET PARKING AREA IS ADJACENT TO A RESIDENTIAL DISTRICT, THERE SHALL BE A MINIMUM PARKING LOT SETBACK OF 50 FEET WITH A CONTINUOUS OBSCURING WALL, FENCE AND/OR LANDSCAPED AREA AT LEAST 4 FEET IN HEIGHT SHALL BE PROVIDED. THE TOWNSHIP BOARD MAY REDUCE THIS BUFFER BASED ON THE PROVISION OF LANDSCAPING, THE PRESENCE OF EXISTING TREES OR IN CONSIDERATION OF TOPOGRAPHIC CONDITIONS.  
PROVIDED: 36 SHRUBS PLANTED AT 4' TALL AT SOUTH EDGE OF PARKING LOT.
  - LANDSCAPE BUFFERS
    - GREENBELTS ALONG THE RIGHT-OF-WAY AND A LANDSCAPED BUFFER ZONE BASED ON ADJACENT ZONING SHALL BE PROVIDED AS REQUIRED IN SECTION 12.02.  
REQUIRED: GREENBELT ALONG R.O.W. 20' WIDE, 1 CANOPY TREE FOR EVERY 40 LINEAR FEET OF FRONTAGE.  
PROVIDED: LOCATION OF EXISTING WETLAND TO THE NORTH ALONG GOLF CLUB DR. PREVENTS PLANTING OF TREES ALONG R.O.W. EXISTING WOODLAND BUFFER ALONG LATSON ROAD R.O.W. TO REMAIN.  
REQUIRED: BUFFER TO MIXED USE PLUD DISTRICT TO THE SOUTH  
PROVIDED: DENSE EXISTING 30'-60' WIDE BUFFER TO ADJACENT ZONING AT THE SOUTH WILL REMAIN. PLANTING ROW OF PLANTINGS ALONG THE SOUTHERN END OF THE SOUTHWEST PARKING LOT ADJACENT TO THE RESIDENTIAL TO THE SOUTH WHERE THE EXISTING VEGETATION REMAINING IS 30' WIDE.  
REQUIRED: BUFFER TO RURAL RESIDENTIAL DISTRICT TO THE WEST  
PROVIDED: ADJACENT ZONING TO WEST IS SCREENED BY EXISTING WOODLANDS THROUGHOUT THE SITE (SEE OVERALL SITE PLAN SHEET 4)

**FOREBAY NORTH PLANT LIST**

KEY	QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	REMARK
<b>TREES</b>					
AC	02	Amelanchier canadensis	Serviceberry	2.5" cal.	B-B
AR	02	Acer rubrum 'October Glory'	Red Maple 'October Glory'	2.5" cal.	B-B
<b>SHRUBS</b>					
CS	12	Cornus sericea	Red Osier Dogwood	30" ht.	B-B
IV	19	Ilex verticillata	Winterberry	24" ht.	B-B
VB	8	Viburnum trilobum	American cranberrybush viburnum	30" ht.	B-B

**PLANT LIST**

KEY	QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	REMARK
<b>TREES</b>					
AF	05	Acer x freemanii	Autumn Blaze Maple	2.5" cal.	B-B
AR	03	Acer rubrum 'October Glory'	Red Maple 'October Glory'	2.5" cal.	B-B
TC	06	Tilia cordata	Little-leaf Linden	2.5" cal.	B-B
<b>SHRUBS</b>					
TO	36	Thuja Occidentalis 'Nigra'	Black Arborvitae	48" ht.	B-B

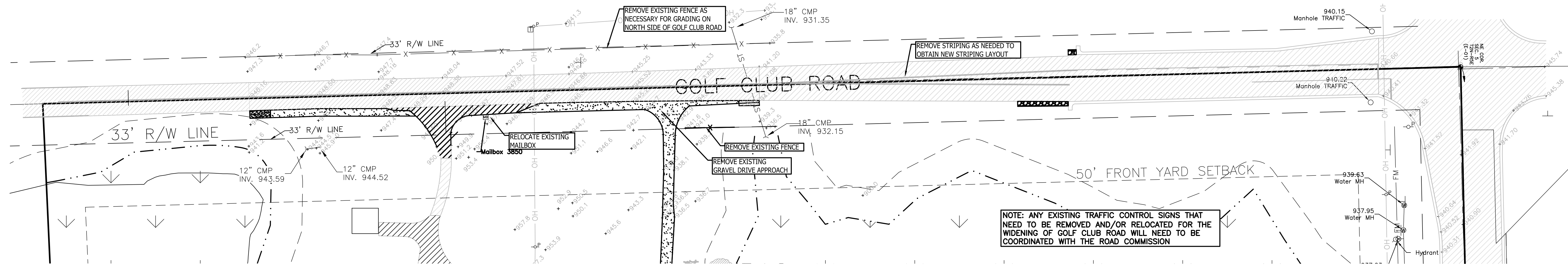
BEBOSS Engineering  
Engineers Surveyors Planners Landscape Architects  
3121 E. GRAND RIVER AVE.  
HOWELL, MI. 48843  
517-546-4836 FAX 517-548-1670

PROJECT: PHASE I BIBLE BAPTIST CHURCH CAMPUS  
PREPARED FOR: BIBLE BAPTIST CHURCH  
2258 EAST HIGHLAND ROAD  
HOWELL, MI 48843  
517-715-9233  
TITLE: LANDSCAPE PLAN

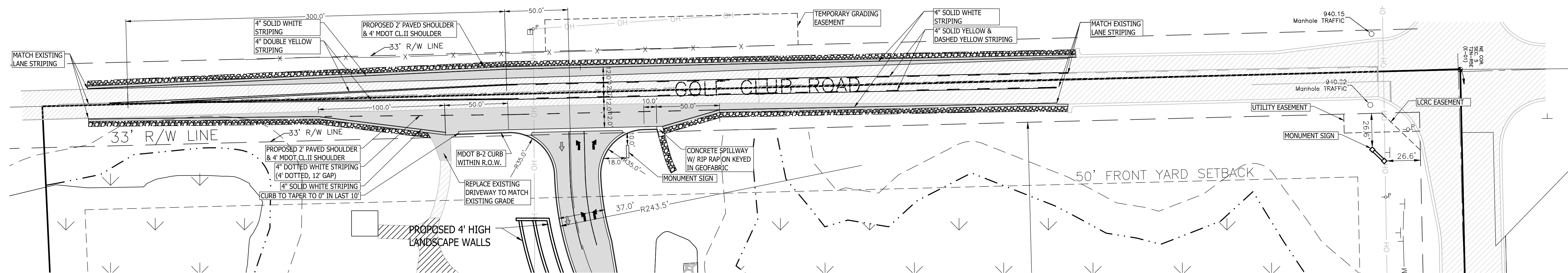
NO.	BY	REVISION PER	DATE
1	ST	PER TWP REVIEW	3/16/22
2	ST	PER TWP REVIEW	2/23/22
NO.	BY	REVISION PER	DATE

DESIGNED BY: JA  
DRAWN BY: JA  
CHECKED BY: ST  
SCALE: 1" = 50'  
JOB NO. 21-542  
DATE 2/1/2022  
SHEET NO. 10

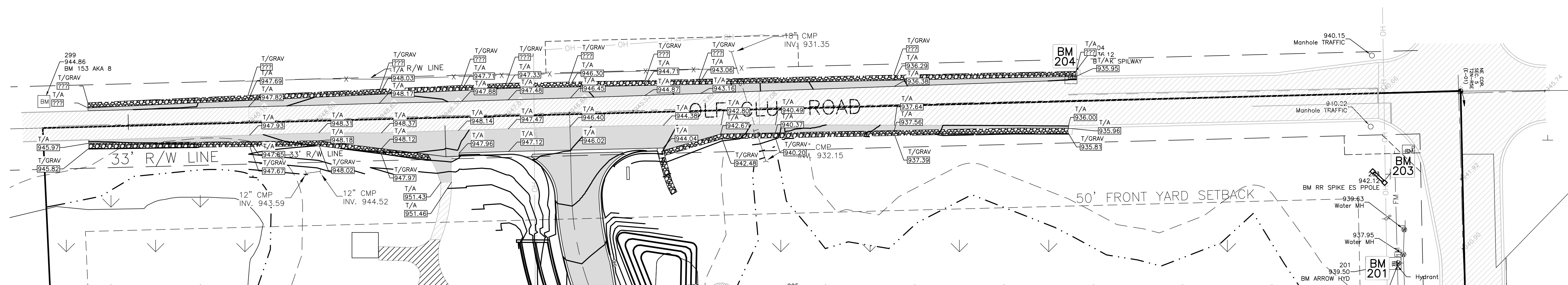




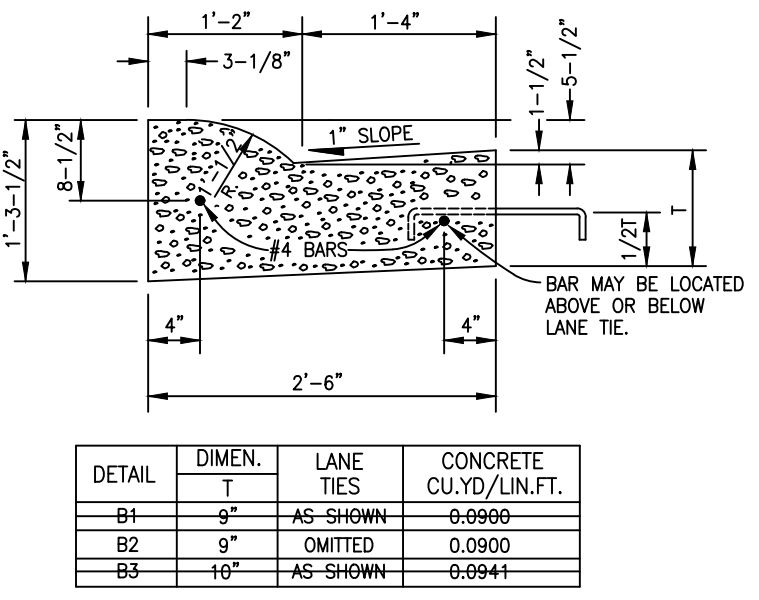
**EXISTING CONDITIONS & DEMOLITION PLAN**  
SCALE: 1" = 40'



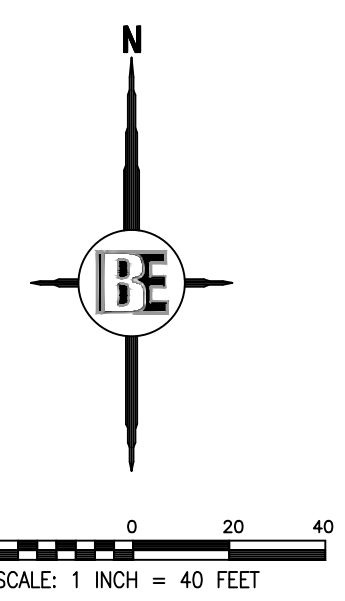
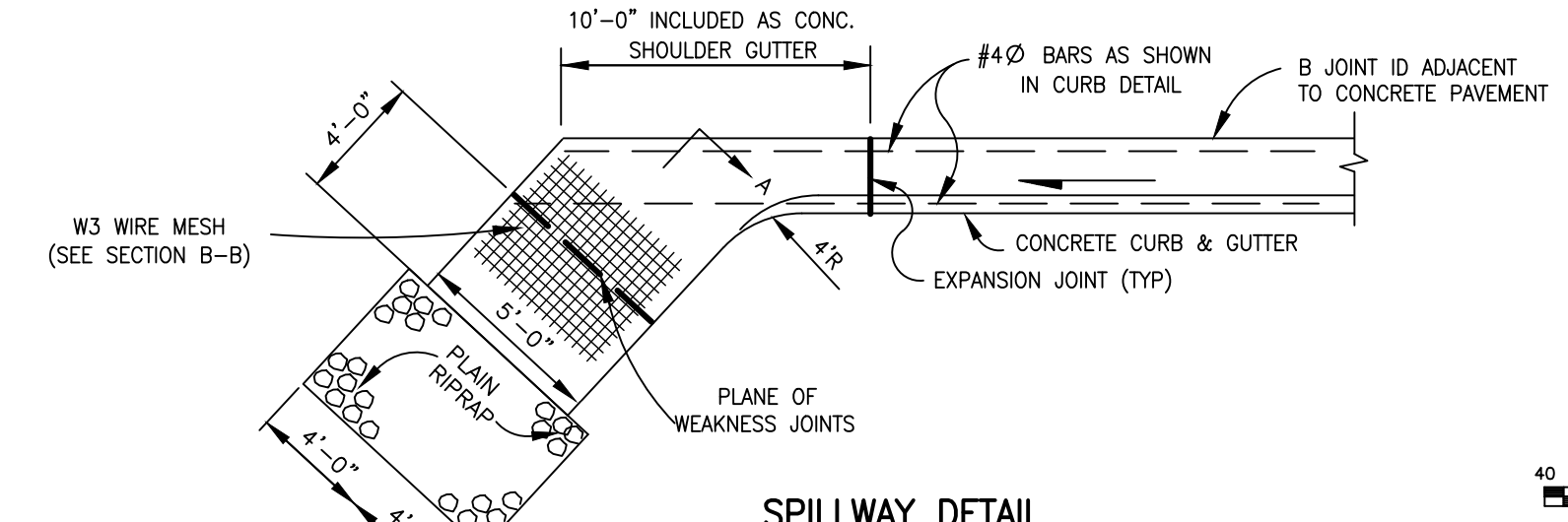
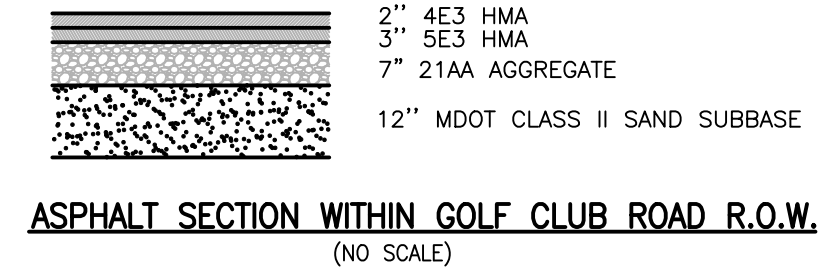
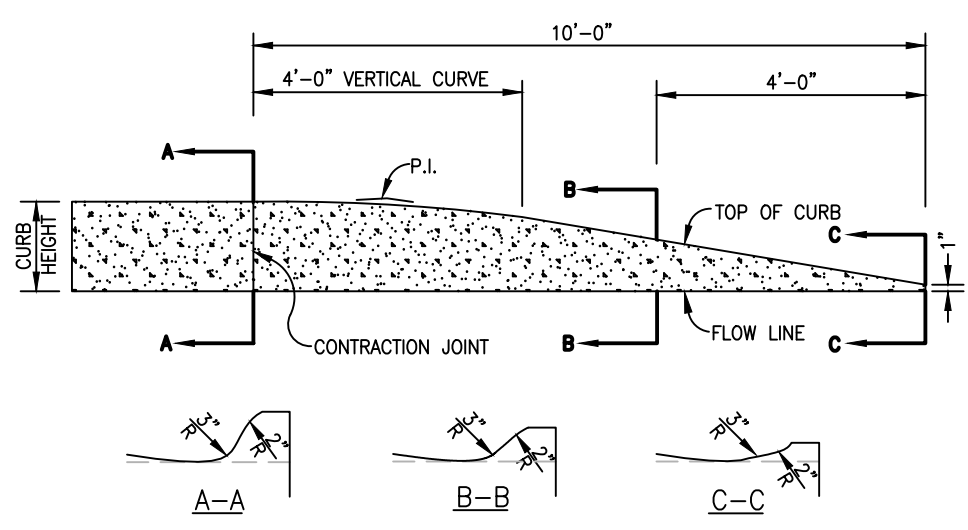
**GOLF CLUB RD APPROACH PLAN**  
SCALE: 1" = 40'



**GOLF CLUB RD GRADING PLAN**  
SCALE: 1" = 40'



DETAIL	DIMEN.	LANE TIES	CONCRETE CU.YD/LIN.FT.
B1	9"	AS-SHOWN	0.0900
B2	9"	OMITTED	0.0900
B3	10"	AS-SHOWN	0.0941



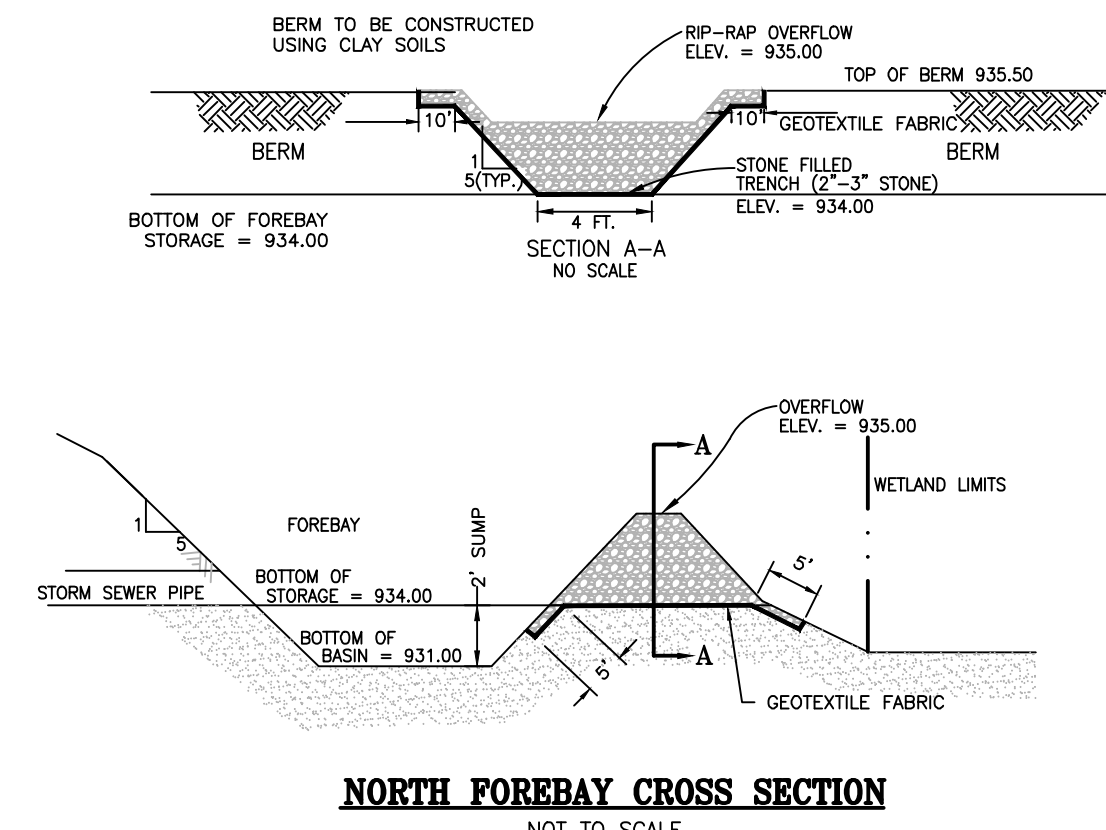
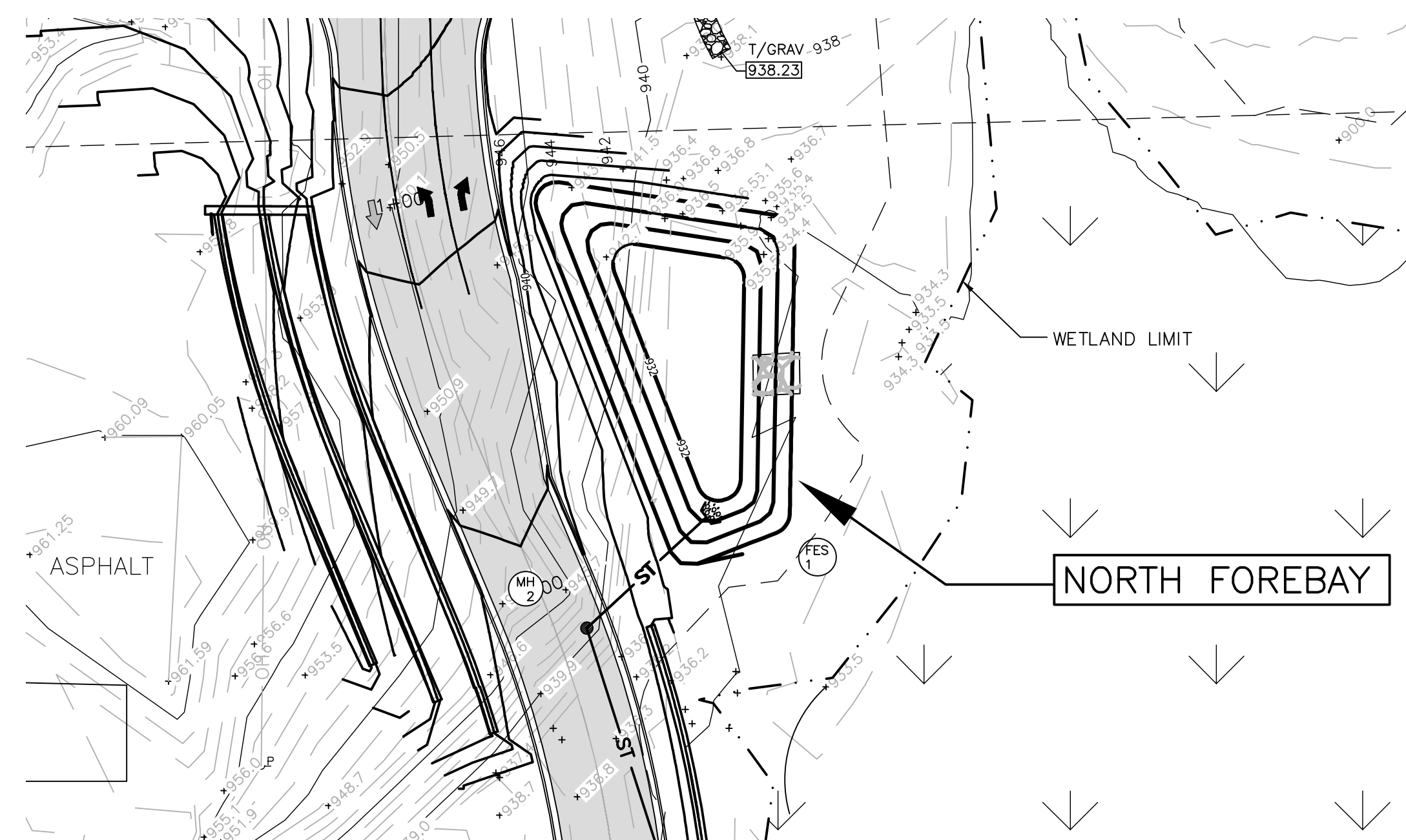
PROPOSED (PR)		EXISTING (EX)	
900	900	900	900
T/C	T/A	T/A	T/A
FG	FG	FG	FG
T/A	T/A	T/A	T/A
T/C	T/C	T/C	T/C
UP	UP	UP	UP
OH	OH	OH	OH
X	X	X	X
TBR	TBR	TBR	TBR
922.08	922.08	922.08	922.08
CONTOUR	CONTOUR	CONTOUR	CONTOUR
STORM DRAINAGE FLOW	STORM DRAINAGE FLOW	STORM DRAINAGE FLOW	STORM DRAINAGE FLOW
SPOT ELEVATION	SPOT ELEVATION	SPOT ELEVATION	SPOT ELEVATION
FINISHED GRADE ELEVATION	FINISHED GRADE ELEVATION	FINISHED GRADE ELEVATION	FINISHED GRADE ELEVATION
TOP OF ASPHALT	TOP OF ASPHALT	TOP OF ASPHALT	TOP OF ASPHALT
TOP OF CURB / CONCRETE	TOP OF CURB / CONCRETE	TOP OF CURB / CONCRETE	TOP OF CURB / CONCRETE
UTILITY POLE	UTILITY POLE	UTILITY POLE	UTILITY POLE
OVERHEAD WIRE	OVERHEAD WIRE	OVERHEAD WIRE	OVERHEAD WIRE
UTILITY POLE	UTILITY POLE	UTILITY POLE	UTILITY POLE
FENCE	FENCE	FENCE	FENCE
SIGN	SIGN	SIGN	SIGN
TO BE REMOVED	TO BE REMOVED	TO BE REMOVED	TO BE REMOVED
LIMITS OF GRADING/CLEARING	LIMITS OF GRADING/CLEARING	LIMITS OF GRADING/CLEARING	LIMITS OF GRADING/CLEARING
WETLAND BOUNDARY	WETLAND BOUNDARY	WETLAND BOUNDARY	WETLAND BOUNDARY
GRAVEL	GRAVEL	GRAVEL	GRAVEL
ASPHALT	ASPHALT	ASPHALT	ASPHALT

THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL UTILITIES AS SHOWN ON THESE DRAWINGS. THE USER APPROVING THESE DRAWINGS OR PRINTS THEREOF SHALL BE RESPONSIBLE FOR OBTAINING THE EXACT UTILITY CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY PERMITS FROM THE PUBLIC OR OTHER AGENCIES AS REQUIRED.

**BEBOSS Engineering**  
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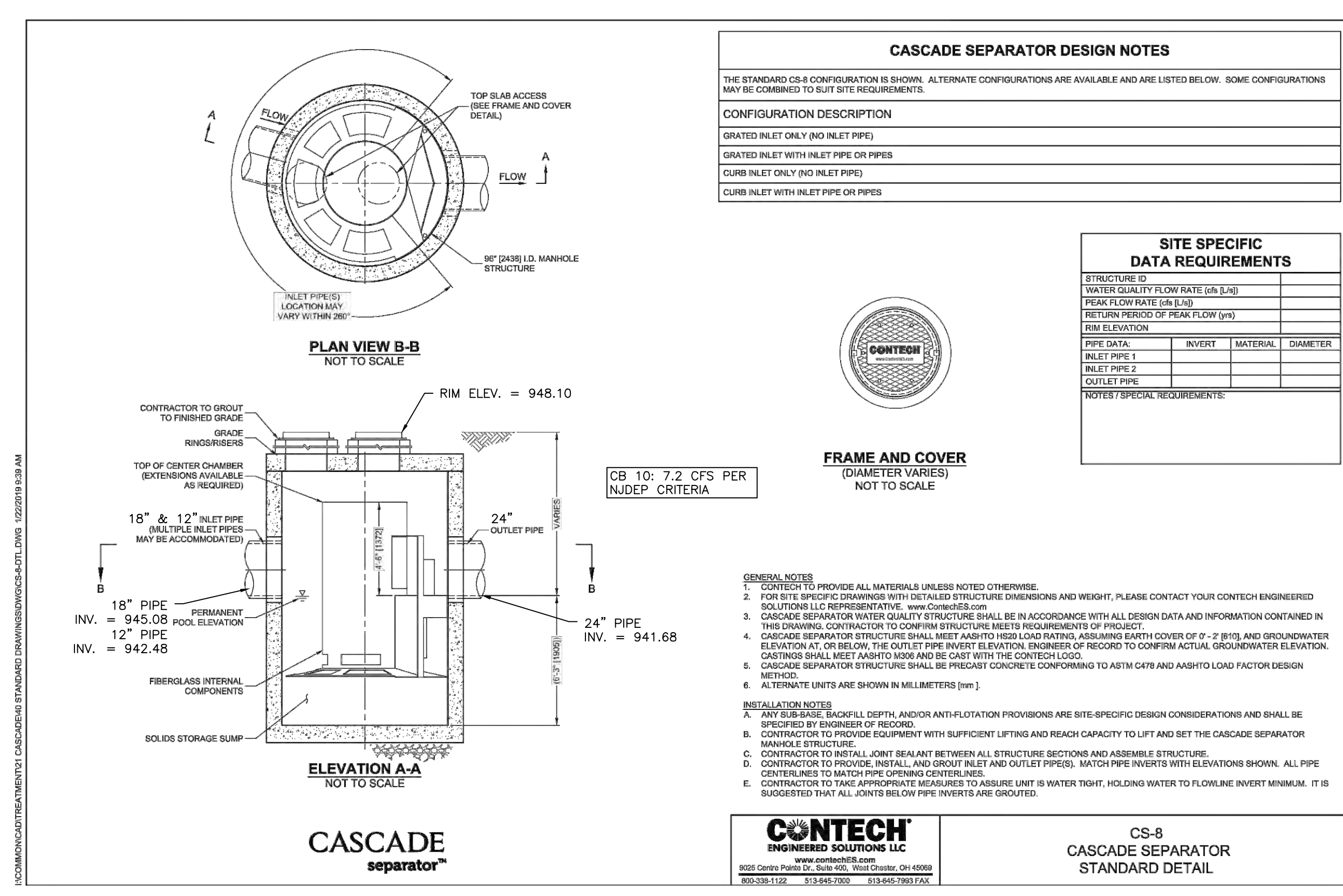
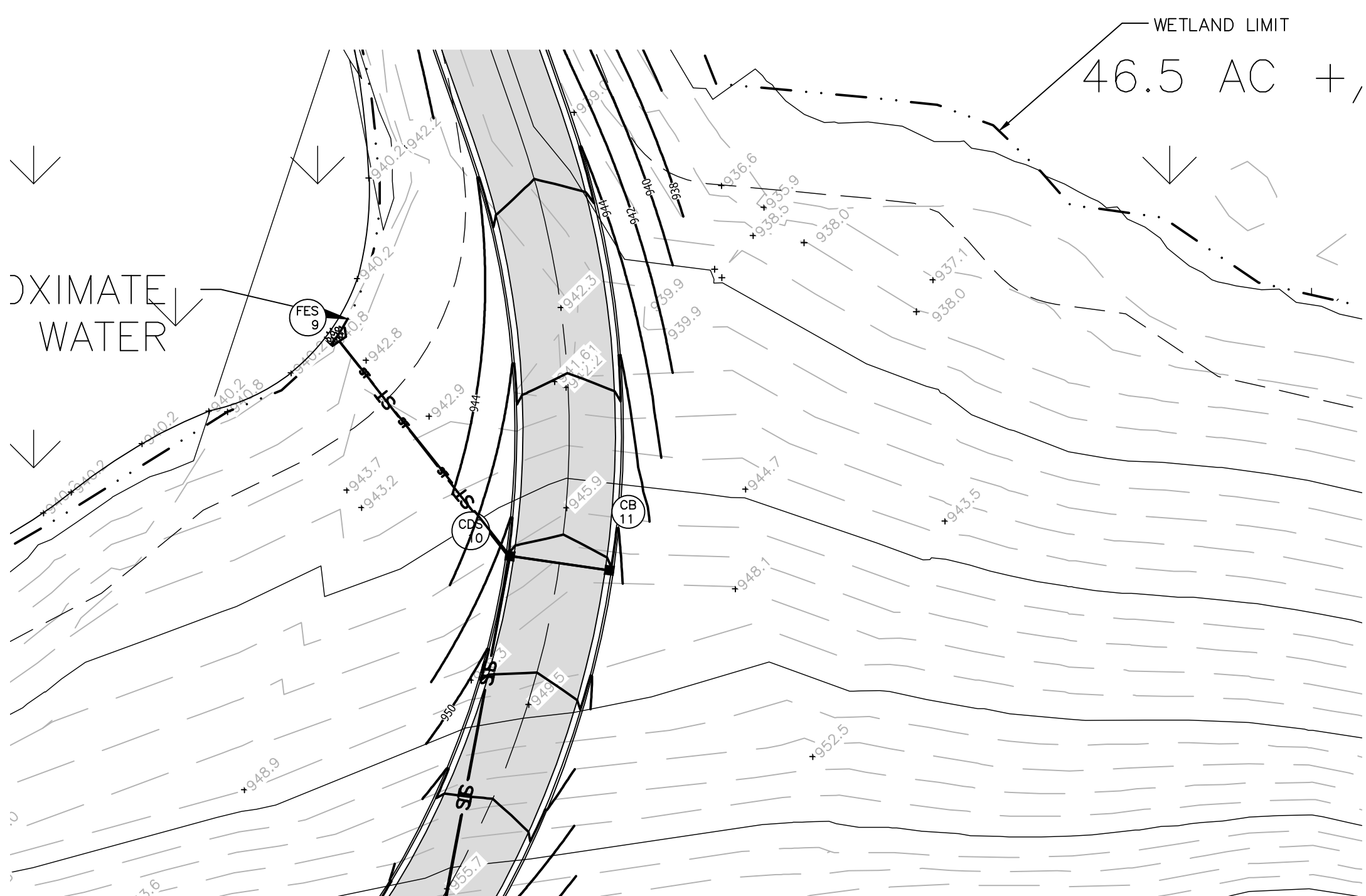
PROJECT	BIBLE BAPTIST CHURCH
PREPARED FOR	BIBLE BAPTIST CHURCH
	2258 EAST HIGHLAND ROAD
	HOWELL, MI 48843
	517-715-9233
TITLE	GOLF CLUB ROAD APPROACH
DATE	3/16/22
REVISION PER	2/23/22
NO BY	

DESIGNED BY: ST  
DRAWN BY: JS  
CHECKED BY: ST  
SCALE: 1" = 40'  
JOB NO. 21-542  
DATE 2/1/2022  
SHEET NO. 11



**LIVINGSTON COUNTY DETENTION BASIN CALCULATIONS - NORTH FOREBAY**

AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS
0.75	0.9	0.68
0.10	0.7	0.07
1.16	0.2	0.23
<b>COMPOUND C:</b>		<b>0.47</b>
<b>TOTAL DRAINAGE AREA:</b>		<b>1.89 ACRES</b>
<b>WATER QUALITY VOLUME</b>		
$V_{wq} = 3.630(C/A)$		<b>3226 CF</b>
<b>FOREBAY STORAGE VOLUME PROVIDED:</b>		
ELEV.	AREA	CUMULATIVE VOLUME
935	3913	3491
934	2988	2444
933	2063	1632
932	1780	0
931	0	0



**LIVINGSTON COUNTY DETENTION BASIN CALCULATIONS**

AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS
3.60	0.9	3.24
3.50	0.9	3.15
5.72	0.2	1.14
<b>COMPOUND C:</b>		<b>0.59</b>
<b>TOTAL DRAINAGE AREA:</b>		<b>12.83 ACRES</b>
<b>WATER QUALITY VOLUME</b>		
$V_{wq} = 3.630(C/A)$		<b>27478 CF</b>
<b>CHANNEL PROTECTION VOLUME</b>		
$V_{CPRC} = 4.719(C/A)$		<b>35721 CF</b>
<b>CHANNEL PROTECTION RATE CONTROL VOLUME</b>		
$V_{CPRC} = 6.897(C/A)$		<b>52208 CF</b>
<b>EXTENDED DETENTION OUTLET RATE</b>		
$V_{ed} = (1.112)^2 \times (3560)(C/A)(F) =$	52208 CF	
$Q_{ed} = V_{ed}(48hr)$	0.302 CFS	
$H_{ed} = V_{ed}(4.800)(H)^{1/2}$	5.8	1" HOLES
$H =$	3.5 FT	
$ELEV_{ed} =$	945.49	
<b>100-YEAR POST CONSTRUCTION INLET RATE</b>		
$Q_{100in} = (C/A) 30.2033 \times 10^3 \times (T_p + 9.1747)^{0.8888}$	48.25 CFS	
<b>100-YEAR ALLOWABLE OUTLET RATE</b>		
$Q_{DRAIN} = 0.2(A)$	2.566 CFS	
$Q_{VRR} = 1.1025 - 0.205LN(A)$	0.580 CFS	
$Q_{100out} = \text{LESSER OF } Q_{DRAIN} \text{ \& } Q_{VRR}$	0.580 CFS	
<b>100-YEAR DETENTION VOLUME</b>		
$R = 0.206 - 15 \ln(Q_{100in}/Q_{100out})$	0.6461	
$V_{100in} = 18985(C/A)$	143711 CF	
$V_{100out} = V_{100in} \times R \times V_{ed}$	92653 CF	

FROM	TO	ACRES	RUNOFF COEFF	EQUIV. AREA	INTEN-SITY	TIME OF CONC.	ADDL. RUNOFF	RUNOFF	PIPE LENGTH	PIPE DIA.	VELOCITY	HYDRAULIC GRADIENT	ACTUAL SLOPE	MANNING'S FLOW CAPACITY	MANNING'S VELOCITY	TIME	HG ELEV UPPER END	HG ELEV LOWER END	RIM ELEV UPPER END	INVERT UPPER END	INVERT LOWER END	DROP DISTANCE	RIM-INV	RIM-HG	PIPE COVER	FLOW THRU
		A	C	A * C	I	T <sub>c</sub>	Q	Q	(LF)	(IN)	(FPS)	%	USED	CF	(FT/SEC)	(MIN)						(FT)	>1	>2.687		COVER
4	3	1.6535	0.41	0.6762	4.38	15.00	2.96	2.96	26	12	3.77	0.69%	2.00%	5.05	6.43	0.07	935.24	934.72	938.80	934.44	933.92	4.36	3.56	3.36	2.96	
3	2	0.2401	0.90	0.2161	4.37	15.07	3.90	3.90	62	12	4.97	1.19%	1.50%	4.38	5.57	0.19	934.72	933.79	938.80	933.92	932.99	4.88	4.08	3.88	0.94	
2	1	0	0.00	0	4.35	15.2524	3.90	3.90	39	12	4.97	1.19%	1.25%	3.99	5.09	0.13	933.79	933.30	939.42	932.99	932.50	6.43	5.63	5.43	0.00	
6	5	0	0.00	0	4.38	15.00	0.00	0.00	81	24	0.00	0.00%	0.50%	16.04	5.11	0.26	936.87	936.46	940.50	935.27	934.86	5.23	3.63	3.23	0.00	
22	21	0.4555	0.90	0.41	4.38	15.00	1.79	1.79	255	12	2.28	0.25%	1.00%	3.57	4.55	0.93	976.60	974.05	979.75	975.80	973.25	0.50	3.95	3.15	2.95	1.79
21	20	0	0.00	0	4.28	15.93	1.79	1.79	215	12	2.28	0.25%	1.50%	4.38	5.57	0.64	974.05	970.82	979.00	973.25	970.02	0.50	5.75	4.95	4.75	0.00
20	19	0	0.00	0	4.21	16.58	1.53	3.32	132	15	2.71	0.26%	1.00%	6.48	5.28	0.42	970.32	969.00	979.02	969.32	968.00	9.70	8.70	8.45	0.00	
25	24	0.2975	0.59	0.1748	4.38	15.00	0.76	0.76	20	12	0.97	0.05%	1.20%	3.91	4.98	0.07	977.32	977.08	976.27	976.52	976.28	-0.25	-1.05	-1.25	0.76	
23	20	0.5949	0.59	0.3496	4.38	15.00	1.53	1.53	50	12	1.95	0.18%	4.00%	7.14	9.10	0.09	976.07	974.07	975.27	975.27	973.27	3.75	0.00	-0.80	-1.00	1.53
15	14	1.3414	0.27	0.3576	4.38	15.00	3.32	4.89	50	15	3.98	0.57%	2.00%	9.16	7.46	0.11	966.00	965.00	968.00	965.00	964.00	3.00	2.00	1.75	1.56	
13	12	6.3413	0.37	2.3322	4.38	15.00	4.89	15.09	195	18	8.54	2.05%	3.00%	18.24	10.32	0.31	966.53	960.68	964.33	965.33	959.48	6.00	-1.00	-2.20	-2.60	10.20
12	10	0.0548	0.80	0.0439	4.34	15.31	5.03	20.33	279	18	11.51	3.73%	3.00%	18.24	10.32	0.45	956.71	946.31	966.00	963.48	945.11	3.00	12.52	9.29	11.02	0.21
10	9	0.1024	0.80	0.0822	4.35	15.19	0.85	21.59	71	24	6.87	0.91%	1.00%	22.68	7.22	0.16	943.31	942.60	948.10	941.71	941.00	6.39	4.79	4.39	0.40	
11	10	0.6251	0.31	0.195	4.38	15.00	0.85	0.85	26	12	1.09	0.06%	1.00%	3.57	4.55	0.10	943.57	943.31	948.10	942.77	942.51	5.33	4.53	4.33	0.85	
18	17	0	0.00	0	4.38	15.00	0.00	0.00	60	15	0.00	0.00%	1.00%	6.48	5.28	0.19	972.60	972.00	971.60	971.60	971.00	0.00	-1.00	-1.25	0.00	
16	12	2.5924	0.44	1.1497	4.38	15.00	5.03	5.03	314	15	4.10	0.60%	1.50%	7.93	6.46	0.81	965.89	961.18	970.00	964.89	960.18	6.50	5.11	4.11	3.86	5.03

**BEBOSS Engineering**  
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**BIBLE BAPTIST CHURCH**  
**BIBLE BAPTIST CHURCH**  
 2258 EAST HIGHLAND ROAD  
 HOWELL, MI 48843  
 517-715-9233

**FOREBAY DETAILS**

PROJECT: BIBLE BAPTIST CHURCH  
 PREPARED FOR: BIBLE BAPTIST CHURCH  
 DATE: 3/15/22  
 TITLE: FOREBAY DETAILS  
 DESIGNED BY: ST  
 DRAWN BY: JS  
 CHECKED BY:  
 SCALE: 1" = 30'  
 JOB NO.: 21-542  
 DATE: 2/1/2022  
 SHEET NO.: 12



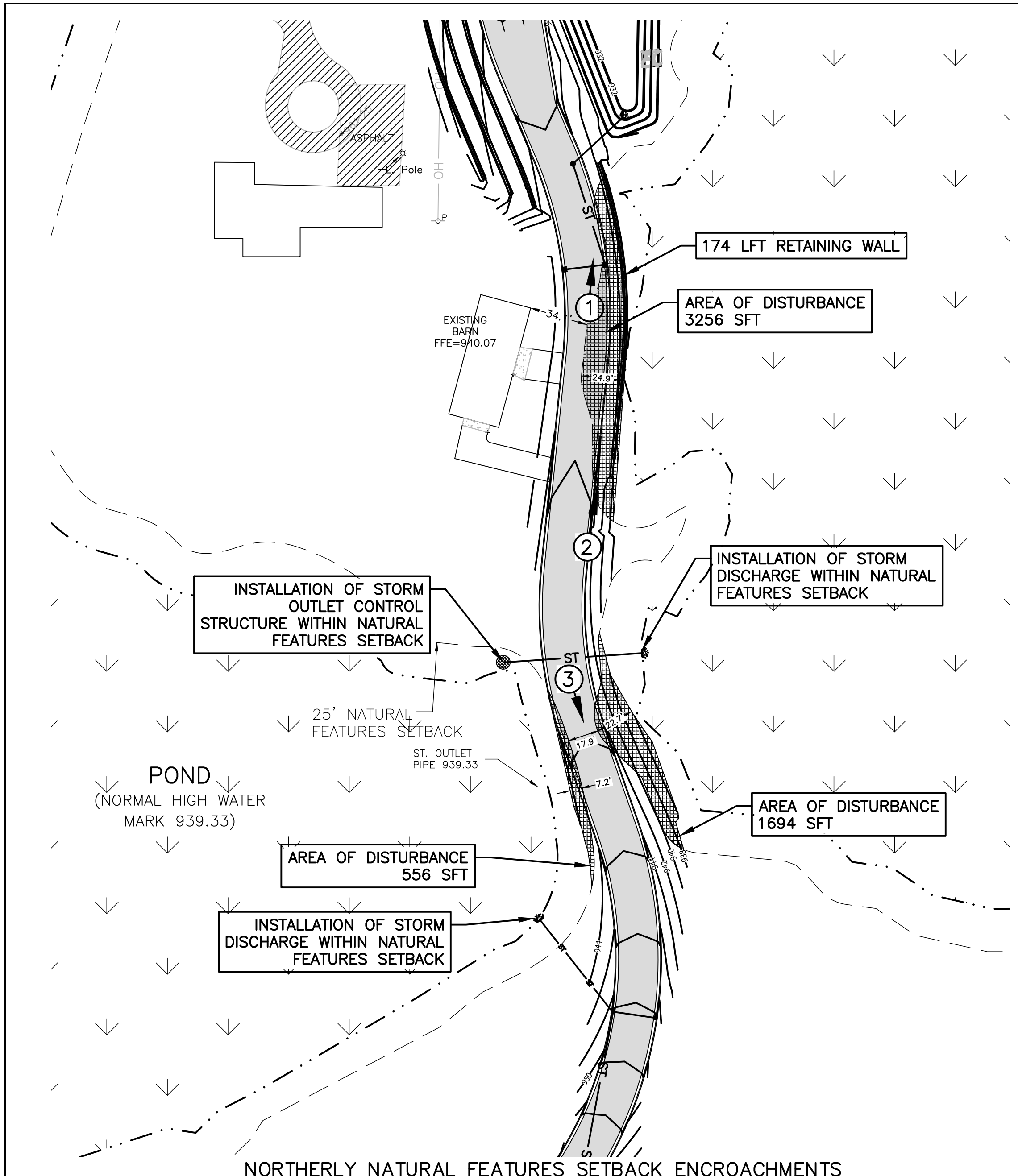


PHOTO 1 – FACING NORTHERLY TOWARD GOLF CLUB ROAD



PHOTO 5 – FACING NORTHERLY TOWARD GOLF CLUB ROAD



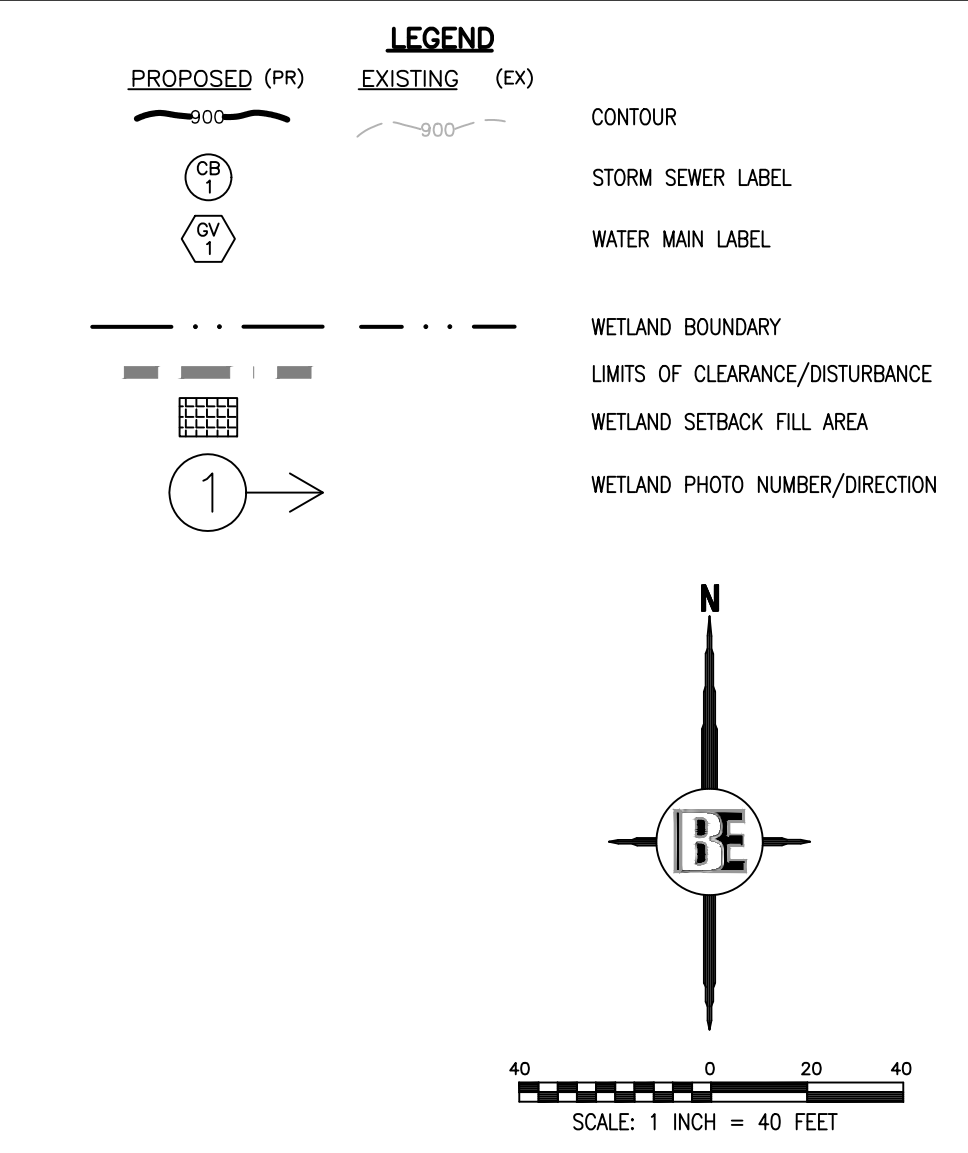
PHOTO 2 – FACING NORTHERLY TOWARD GOLF CLUB ROAD



PHOTO 3 – FACING SOUTHERLY



PHOTO 4 – FACING NORTHERLY



**NATURAL FEATURES SETBACK DISTURBANCE NARRATIVE:**

**SOUTH SIDE:**  
 DESCRIPTION:  
 ON THE SOUTH SIDE OF THE DEVELOPMENT, THERE ARE FOUR AREAS OF NATURAL FEATURES SETBACK DISTURBANCES FOR GRADING ACTIVITIES AND TWO ENCROACHMENTS FOR INSTALLATION OF STORM SEWER CONTROL STRUCTURES AND END SECTIONS. PARKING LOT ACCESS DRIVE AND SPILLWAY IS ALSO LOCATED WITHIN THE EASTERN UPLAND WETLAND POCKET SETBACK. THE FOUR AREAS OF GRADING DISTURBANCE VARY IN WIDTH WITH THE WIDEST AREA BEING APPROXIMATELY 22' WITHIN THE SETBACK. THE LOCATION OF THE TWO STORM WATER END SECTIONS ARE LOCATED JUST WITHIN THE NATURAL FEATURES SETBACK.

**NECESSITY:**  
 THE TWO GRADING DISTURBANCE AREAS ON THE WEST ARE DUE TO THE APPROXIMATELY 36' OF HORIZONTAL SPACE BETWEEN THE TWO WETLAND SETBACKS. THIS DRIVE IS 27' WIDE FROM BACK OF CURB TO BACK OF CURB. THE DISTURBANCE AREAS IS NECESSARY TO GRADE DOWN FROM THIS DRIVE TO THE EXISTING GRADE. THE SLOPES IN THIS STRETCH OF DRIVE HAVE BEEN MAXIMIZED IN ORDER TO MINIMIZE THE FILL/ENCROACHMENT NEEDED. IT WAS DETERMINED THAT DUE TO THE HYDROLOGY OF THE WESTERN UPLAND WETLAND POCKET COLLECTING THE WATER PRIOR TO AN EXISTING PIPED DISCHARGE TO THE NORTH, THAT THIS WETLAND IS OF MORE IMPORTANCE TO MINIMIZE ENCROACHMENT THAT IS THE EASTERN UPLAND WETLAND POCKET. FOR THIS REASON, THE ACCESS DRIVE WAS LOCATED SUCH THAT IT PRIMARILY ENCROACHES ON THE EASTERN UPLAND WETLAND SETBACK.

**THE TWO REMAINING ENCROACHMENTS FROM GRADING ARE ALSO NECESSARY DUE TO TOPOGRAPHIC CONSTRAINTS. EVEN THOUGH THE SOUTH SIDE OF THE SITE IS MOST PRACTICAL TO DEVELOP, THERE STILL REMAINS SOME CHALLENGING TOPOGRAPHIC CONDITIONS IN THIS AREA. THE PROPOSED ELEVATIONS OF THE SITE ARE APPROPRIATE IN TERMS OF ACCOMMODATING THE SITES TOPOGRAPHIC CONDITIONS IN ITS ENTIRETY. TO AVOID THESE TWO ENCROACHMENTS ON THE WEST WETLAND WOULD REQUIRE EITHER SIGNIFICANT ALTERATIONS TO THE PARKING LOT (WHICH COULD AFFECT THE OVERALL SITE CIRCULATION) AS WELL AS REQUIRE THE PROPOSED CHURCH BUILDING TO BE SHIFTED SOUTHERLY. THE LATTER IS NOT PREFERABLE EITHER AS THE CHURCH IS SEEKING TO MAINTAIN AS LARGE A NATURAL BUFFER AS FEASIBLE TO THE ADJACENT RESIDENTIAL PARCELS TO THE SOUTH.**

**IMPACT:**  
 THESE TWO UPLAND WETLANDS ARE LOW QUALITY WETLANDS AS DETERMINED DURING THE WETLAND DELINEATION. THE WESTERN WETLAND POCKET CONTAINS DEADFALL AND MOWED PATHS WITHIN PORTIONS OF ITS WETLAND SETBACK WHILE THE EASTERN WETLAND CONTAINS PRIMARILY BRUSH AND SOME MOWED TRAILS. GIVEN THE WETLANDS ARE LOW QUALITY AND DISTURBANCE IS LIMITED TO WITHIN THE SETBACK AND NOT WITHIN THE WETLAND, THE NATURE OF THE WETLAND IS STILL BEING PRESERVED. A SIGNIFICANT AMOUNT OF SITE AREA IS BEING PRESERVED WHICH PROVIDES A NATURE CORRIDOR FOR WILDLIFE ON THE SITE.

**HYDROLOGY:**  
 THE WESTERN OF THE TWO WETLANDS IS A LOW POCKET THAT COLLECTS WATER FROM THE SOUTHERN PORTION OF THIS PARCEL. THERE IS AN EXISTING DRAIN PIPE THAT DRAINS THE WATER FROM THIS WESTERN WETLAND POCKET AND DRAINS IT NORTHERLY TOWARDS THE POND AT THE NORTHWEST QUADRANT OF THE PARCEL. THE EASTERN OF THESE TWO WETLANDS IS A FLOW THROUGH WETLAND. THERE IS A NATURAL WIDE 'DRAW' OF TOPOGRAPHY THROUGH THE AREA THAT DIRECTS WATER TOWARDS THE WESTERN WETLAND POCKET.

**WITH THE CONSTRUCTION OF THE PROPOSED DRIVE AND PARKING LOTS, THE EASTERN OF THE TWO WETLANDS WILL BE SURROUNDED BY DEVELOPMENT. THIS DOES REDUCE THE AREA DRAINING THROUGH IT BY APPROXIMATELY 2.7 ACRES. BUT AGAIN, THE PRIMARY HYDROLOGY FOR THIS EASTERN WETLAND IS CONVEYING WATER TOWARDS THE WESTERN WETLAND POCKET, WHICH IT WILL CONTINUE TO DO VIA A STORM CULVERT UNDERNEATH THE DRIVE. THE WESTERN WETLAND POCKET WILL STILL COLLECT STORM WATER AND BE ABLE TO POND TO AN ELEVATION OF THE PROPOSED END SECTION OUTLET. THIS NEW END SECTION WILL DIRECT STORM WATER NORTHERLY TO THE POND IN THE NORTHWEST, AS IT CURRENTLY DOES. THESE UPLAND WETLAND AREAS ARE BEING UTILIZED IN A MANNER THAT IS CONSISTENT WITH THE DESIRED APPROACH/INTENT OF THE NEW LDCO STORM WATER STANDARDS WHERE INFILTRATION IS ENCOURAGED PRIOR TO DETENTION SYSTEMS VIA THE USE OF POCKET AREA, OPEN DITCHES, BIOSWALES, ETC.**

**NATURAL FEATURES SETBACK DISTURBANCE NARRATIVE:**

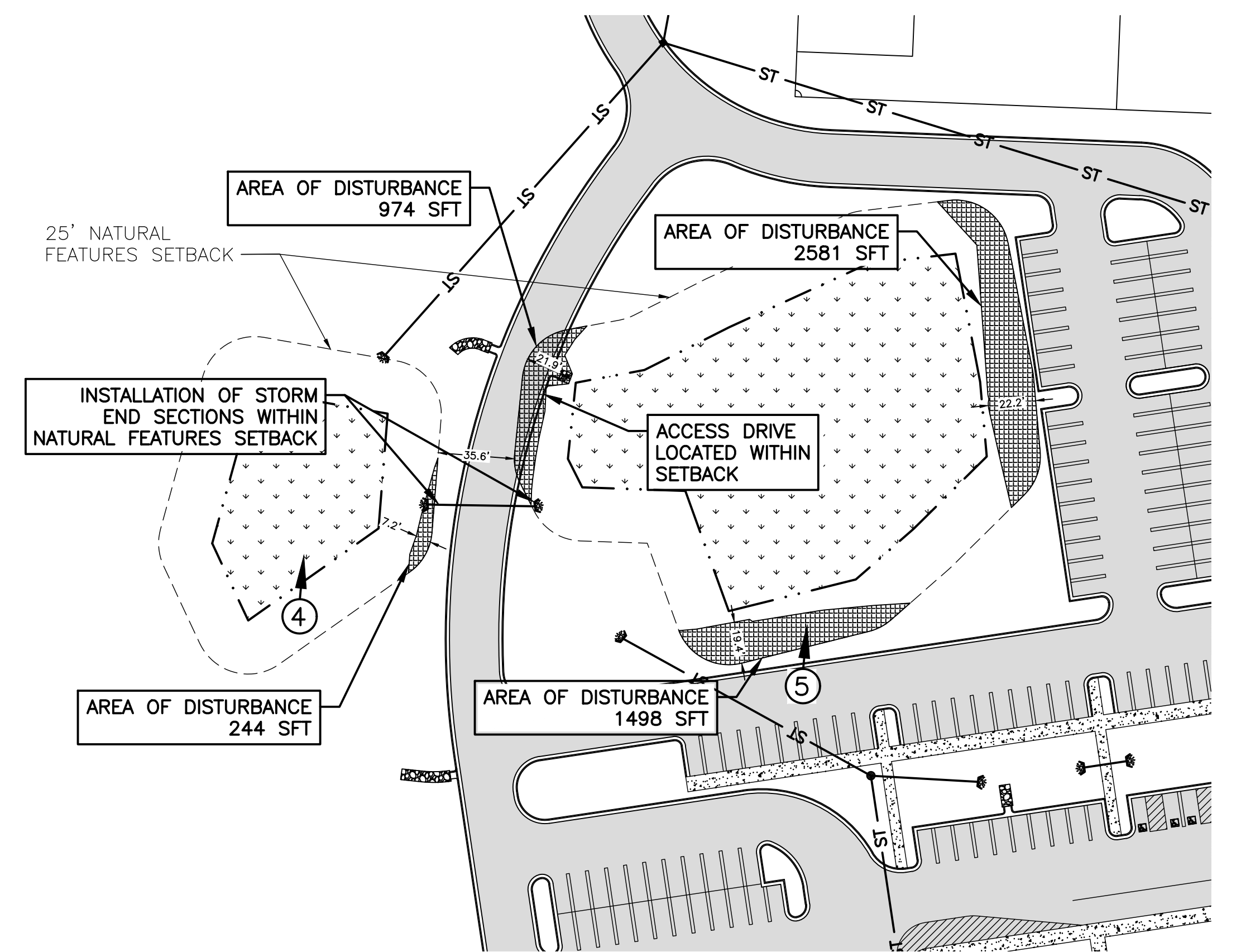
**NORTH SIDE:**  
 DESCRIPTION:  
 ON THE NORTH SIDE OF THE DEVELOPMENT, THERE ARE THREE AREAS OF NATURAL FEATURES SETBACK DISTURBANCES FOR GRADING ACTIVITIES AND THREE ENCROACHMENTS FOR INSTALLATION OF STORM SEWER CONTROL STRUCTURES AND END SECTIONS. THE THREE AREAS OF GRADING DISTURBANCE VARY IN WIDTH WITH THE WIDEST AREA THE FULL WIDTH OF THE SETBACK. THE LOCATION OF THE THREE CONTROL STRUCTURE/END SECTIONS ALL OCCUR AT THE EDGE OF THE WETLAND AND THUS HAVE A 25' ENCROACHMENT INTO THE NATURAL FEATURES SETBACK. LASTLY, THERE IS A PROPOSED RETAINING WALL LOCATED WITHIN THE NATURAL FEATURES SETBACK AND IS LOCATED AT THE EDGE OF THE WETLAND.

**NECESSITY:**  
 EACH OF THESE NATURAL FEATURES SETBACK DISTURBANCE AREAS ARE NECESSARY FOR ACCESS TO THE APPROXIMATELY 18 ACRES OF DEVELOPABLE PROPERTY AT THE SOUTH END OF THE PARCEL. THERE IS APPROXIMATELY 34' OF SEPARATION FROM THE EXISTING BARN STRUCTURE AND EXISTING WETLAND SETBACK AND ONLY 17.9' BETWEEN THE TWO WETLAND SETBACK LINES AT THE POND. THERE SIMPLY IS NOT ENOUGH HORIZONTAL SPACE TO LOCATE A DRIVE WITHOUT DISTURBANCE AT THESE LOCATIONS. THE GRADE WAS MATCHED AS CLOSELY AS IS FEASIBLE TO MINIMIZE THE ENCROACHMENT.

**THE THREE ENCROACHMENTS FOR THE STORM WATER OUTLET CONTROL STRUCTURE AND END SECTIONS ARE NEEDED FOR THE REQUIRED SITES STORM WATER MANAGEMENT SYSTEM. GIVEN THE TOPOGRAPHY OF THE SITE, THE END SECTIONS NEED TO BE LOCATED CLOSELY TO THE WETLAND LOCATIONS TO MINIMIZE CHANCES OF EROSION ON SLOPES BETWEEN THE END SECTIONS AND THE WETLAND/POND. UTILIZATION OF THE POND FOR DETENTION STORAGE AS WELL AS THE STORM WATER DISCHARGE LOCATIONS AND STRUCTURES HAVE BEEN APPROVED BY MDELE IN PERMIT WR026826. THE RETAINING WALL WITHIN THE WETLAND SETBACK IS NECESSARY TO AVOID GRADING/FILL WITHIN THE WETLAND AREA.**

**IMPACT:**  
 AS YOU CAN SEE IN THE PICTURES ON THIS SHEET, THE GROUNDS HAVE HISTORICALLY BEEN MAINTAINED TO THE EDGE OF THE WETLAND WITH GRASS. THERE IS NO EXISTING VEGETATION BUFFER/TRANSITION TO THE WETLAND. SINCE THIS IS THE CASE, ONLY GRASS AREAS ARE BEING DISTURBED. ONCE THE PROPOSED DISTURBANCES ARE CONSTRUCTED, THE GROUND WILL BE RESEED WITH GRASS AND RETURNED TO ITS CURRENT GROUND COVER. THUS THERE IS NO LONG TERM IMPACT TO THE WETLANDS DUE TO THESE DISTURBANCES. IN THE SHORT TERM, THE SITE WILL BE REQUIRED TO OBTAIN A COUNTY SESC PERMIT AND NPDES PERMIT TO CONTROL SOIL EROSION ON SITE DURING CONSTRUCTION, AGAIN TO MINIMIZE IMPACTS TO THE WETLAND. ALSO, THE STORM WATER MANAGEMENT SYSTEM CONTAINS PRE-TREATMENT OF STORM WATER PRIOR TO DISCHARGE INTO THE EXISTING POND/DETENTION BASIN TO ENSURE WATER QUALITY STANDARDS ARE MET PER MDELE AND COUNTY REQUIREMENTS.

**HYDROLOGY:**  
 HYDROLOGY IS BEING MAINTAINED ON SITE. STORM WATER ON THE SOUTHERN PORTION OF THE SITE FLOWS TO THE WETLAND POCKET TO THE WEST OF THE PROPOSED PARKING LOT. THIS WETLAND CONTAINS AN EXISTING DRAIN TILE THAT DIRECTS STORM WATER NORTHERLY TO THE EXISTING POND. THE STORM WATER IN THE POND CURRENTLY DISCHARGES THROUGH AN EXISTING OUTLET PIPE DISCHARGING TO THE WETLAND ON THE NORTHEAST QUADRANT OF THE SITE. THE PROPOSED DIRECTION OF STORM WATER FLOW MAINTAINS THIS DRAINAGE PATTERN. UTILIZING THE EXISTING POND AS DETENTION STORAGE IS PERMITTED PER MDELE PERMIT WR026826.



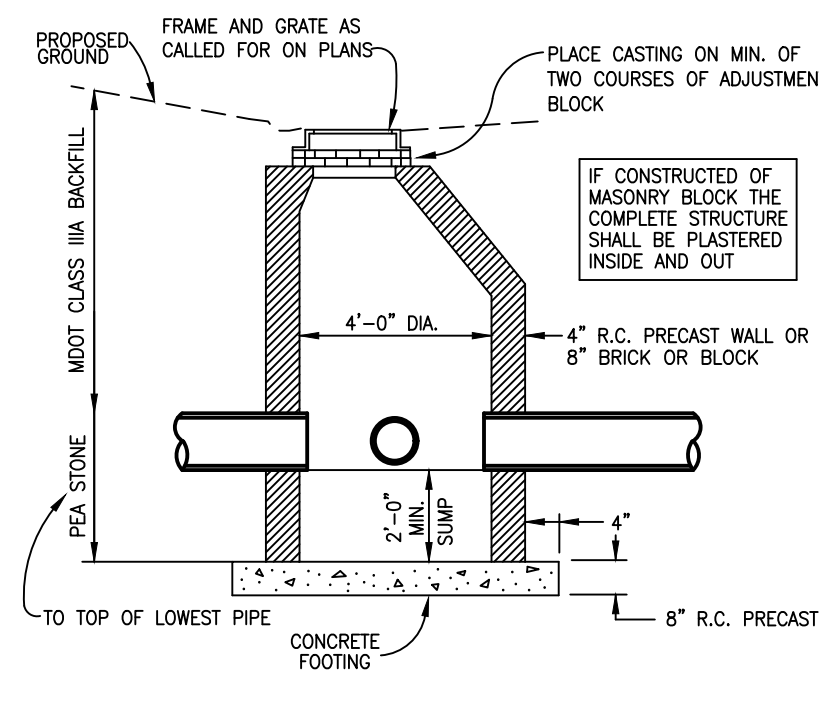
THE INFORMATION SHOWN ON THIS PLAN WAS OBTAINED FROM SURVEYING INSTRUMENTS AND FIELD NOTES. THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION SHOWN ON THIS PLAN. BE & E ENGINEERING, INC. IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

BE & E ENGINEERING, INC.  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI 48843  
 517-546-4836 FAX 517-548-1670

**BE & E Engineering**  
 Engineers Surveyors Planners Landscape Architects  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI 48843  
 517-546-4836 FAX 517-548-1670

PROJECT	BIBLE BAPTIST CHURCH
PREPARED FOR	BIBLE BAPTIST CHURCH 2258 EAST HIGHLAND ROAD HOWELL, MI 48843 517-715-9233
TITLE	NATURAL FEATURES SETBACK DISTURBANCE
DESIGNED BY:	ST
DRAWN BY:	MD
CHECKED BY:	
SCALE	1" = 50'
JOB NO.	21-542
DATE	12/01/2021
SHEET NO.	13

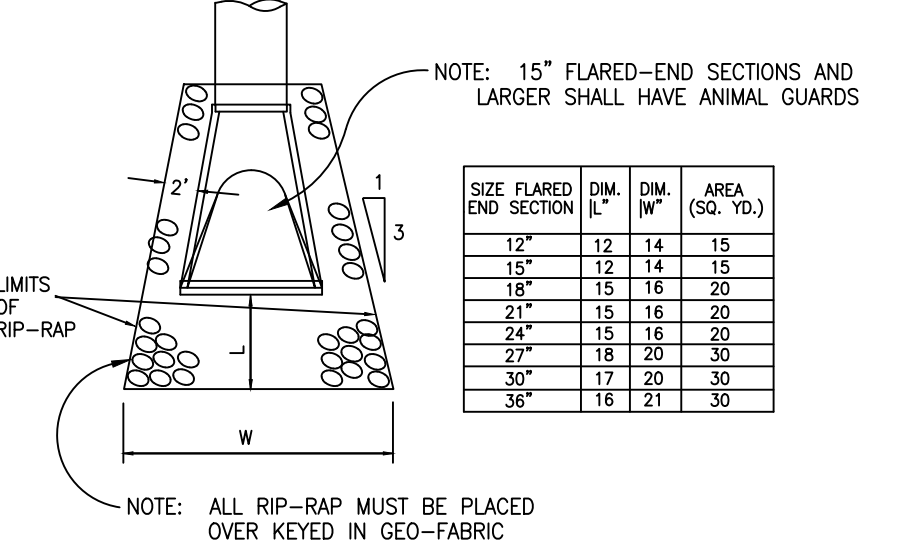
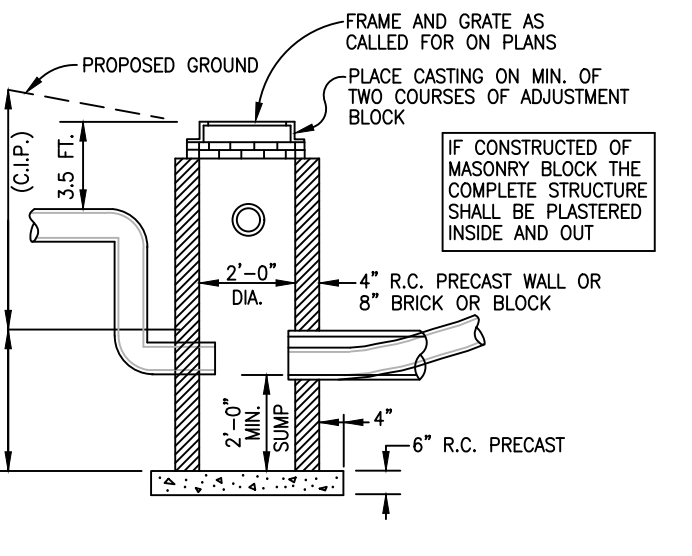




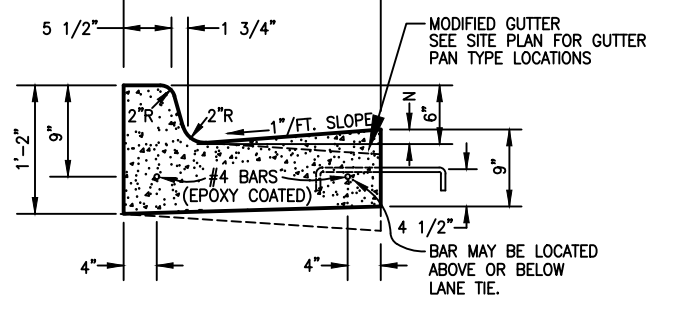
**INSTALL SUBDRAINS AT ALL CATCH BASINS LOCATED WITHIN ROADWAY**

(1) 4 L.F. (MIN.) 6" PERFORATED P.V.C. PIPE WRAPPED WITH GEOTEXTILE FABRIC PLACED AT LOWEST INVERT PARALLEL TO ROAD OR LINE OF PIPE. BACK-FILLED WITH PEA STONE ONE FOOT ABOVE PIPE.

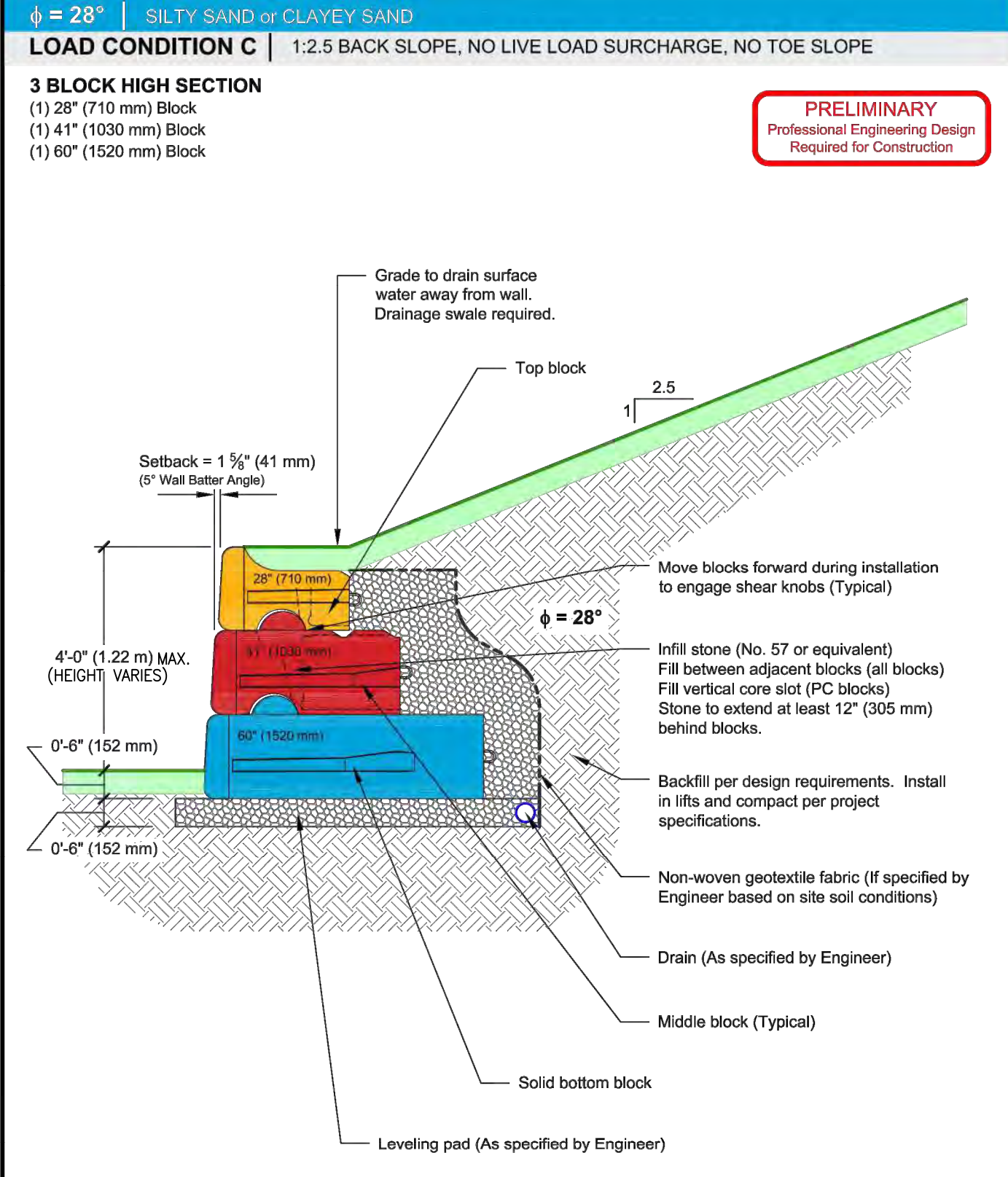
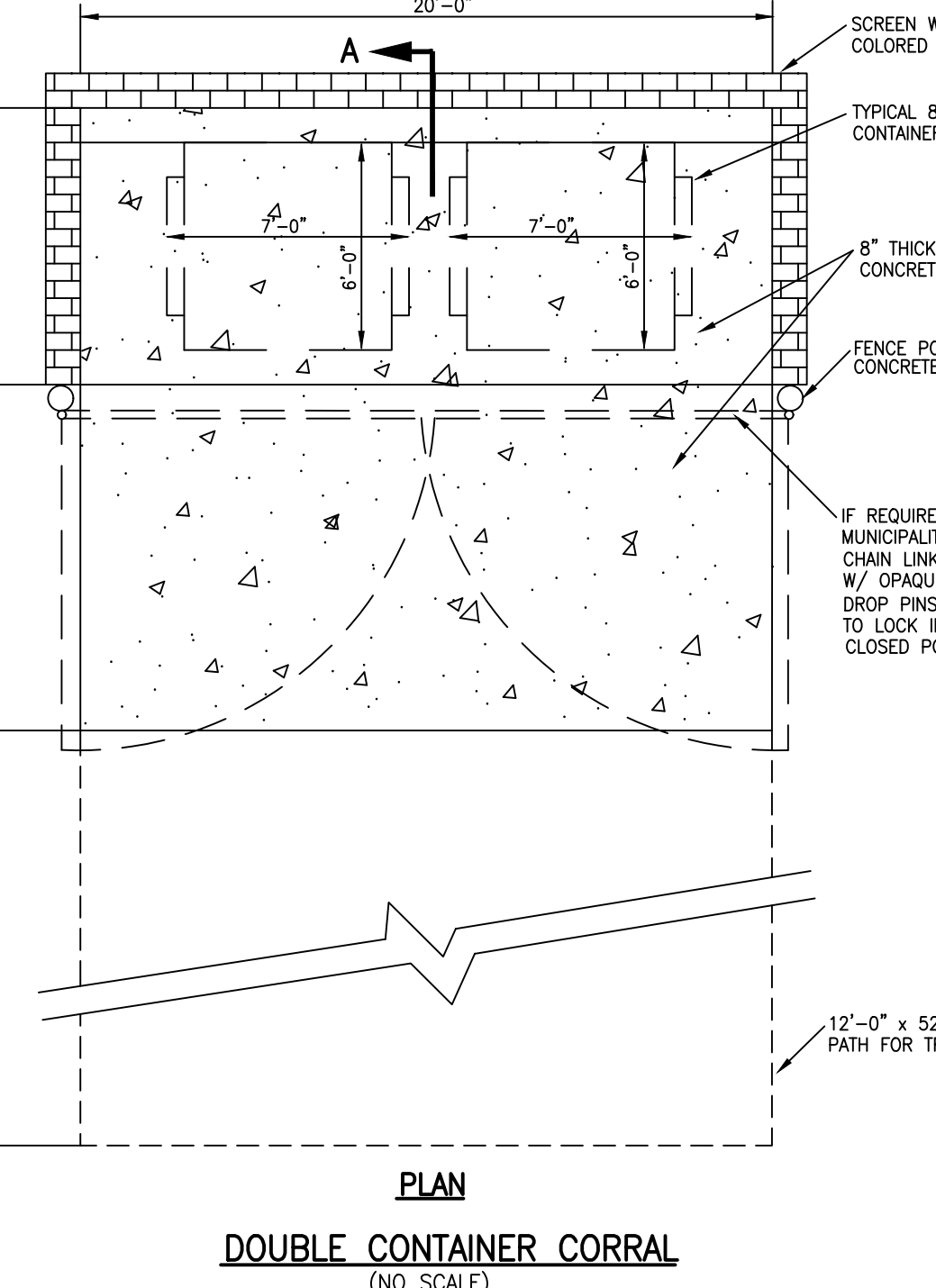
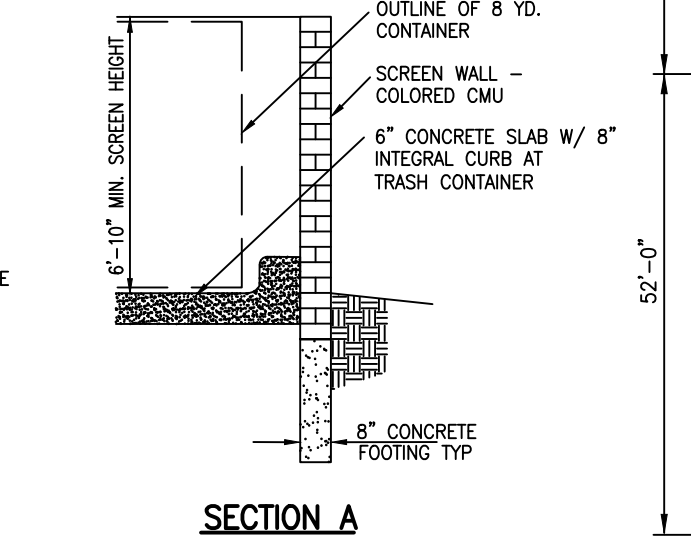
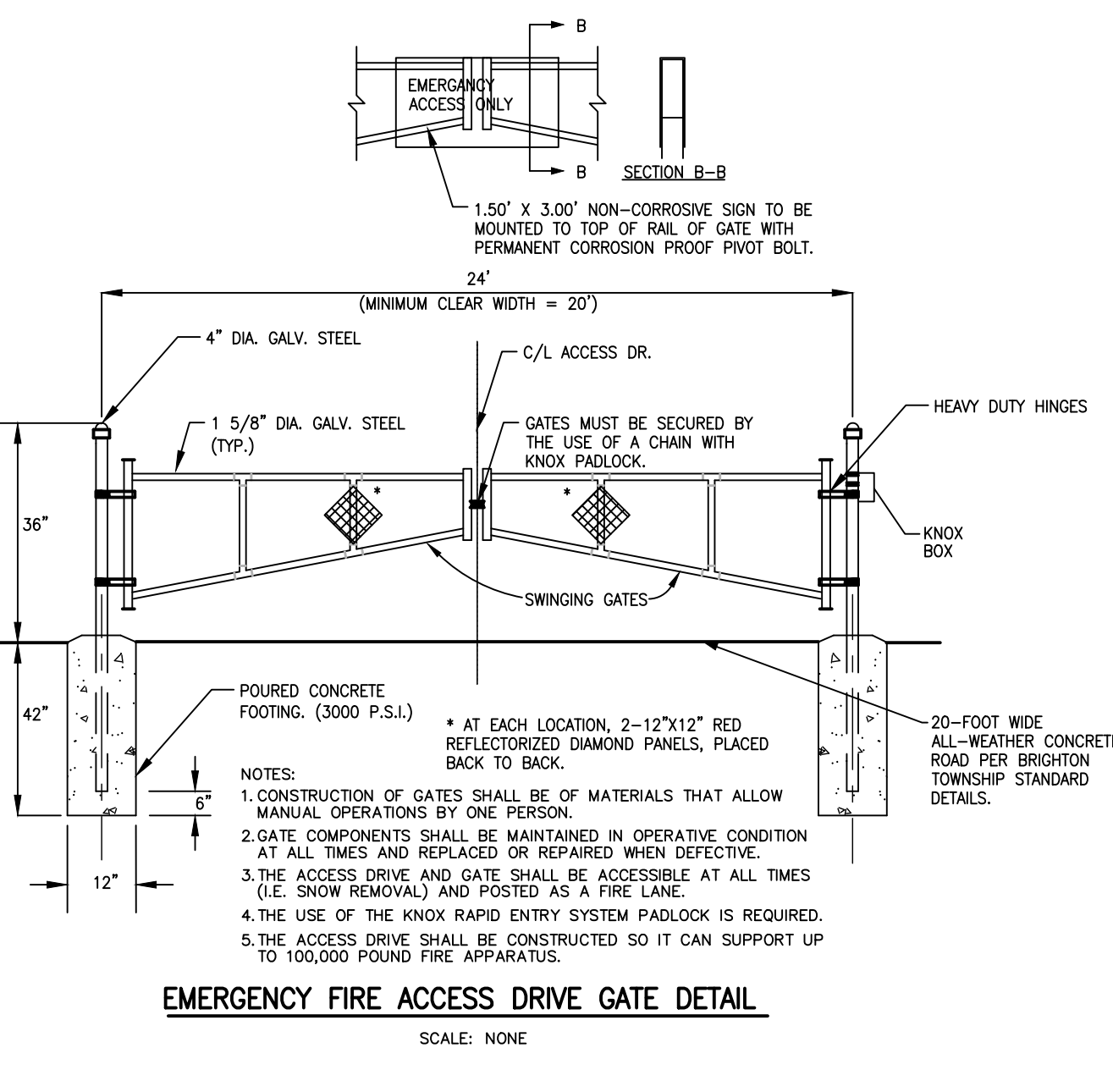
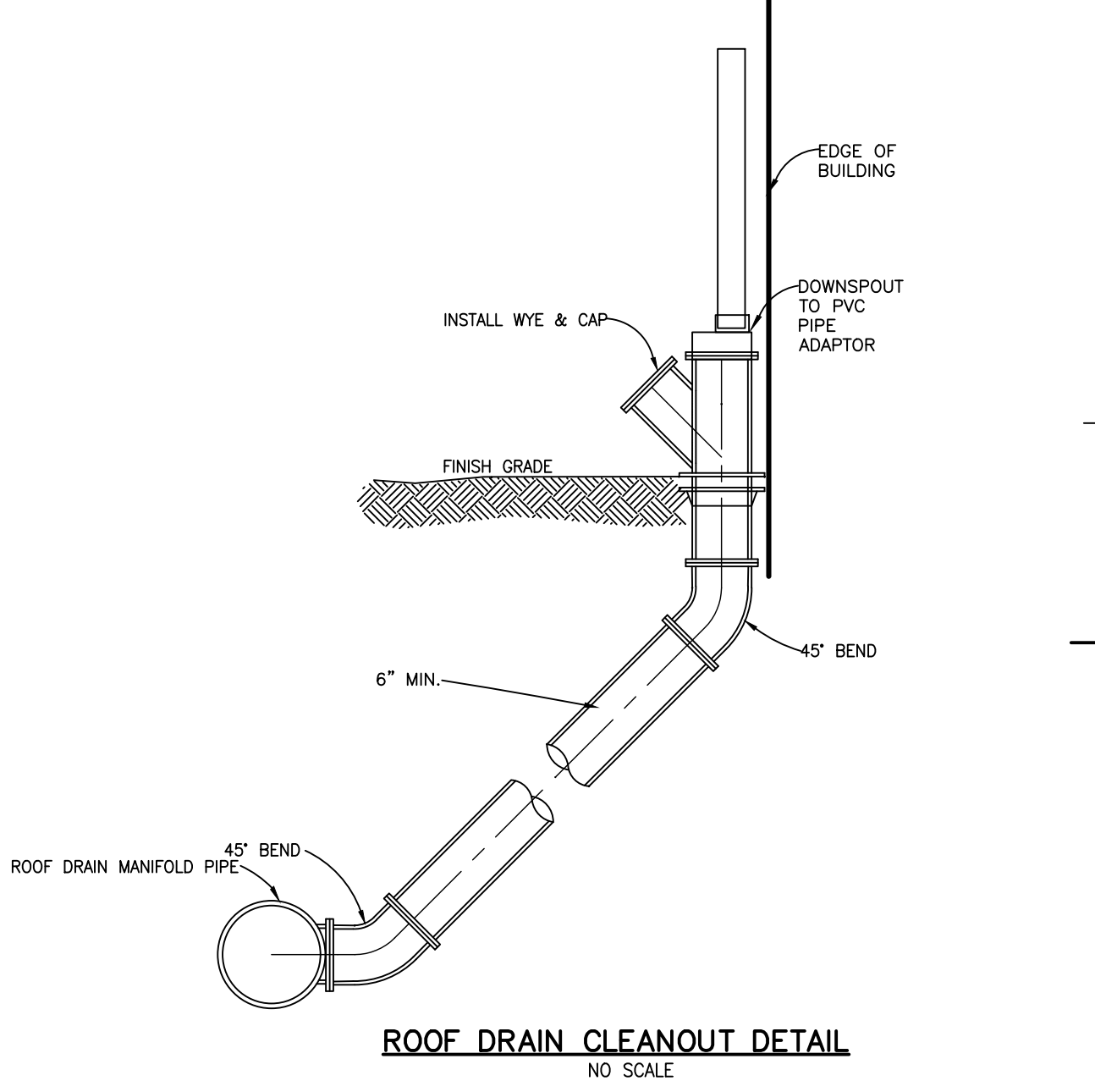
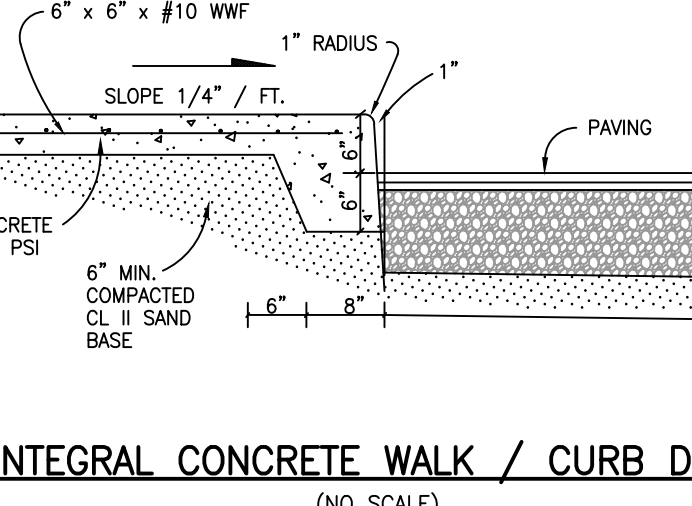
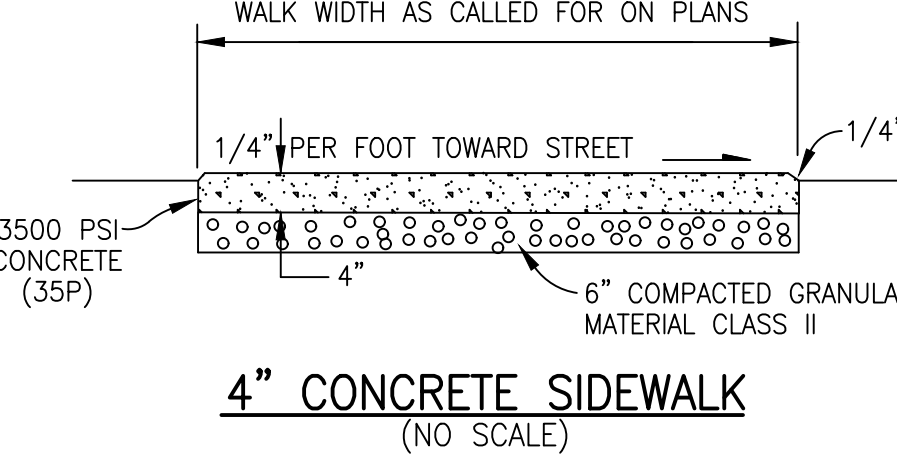
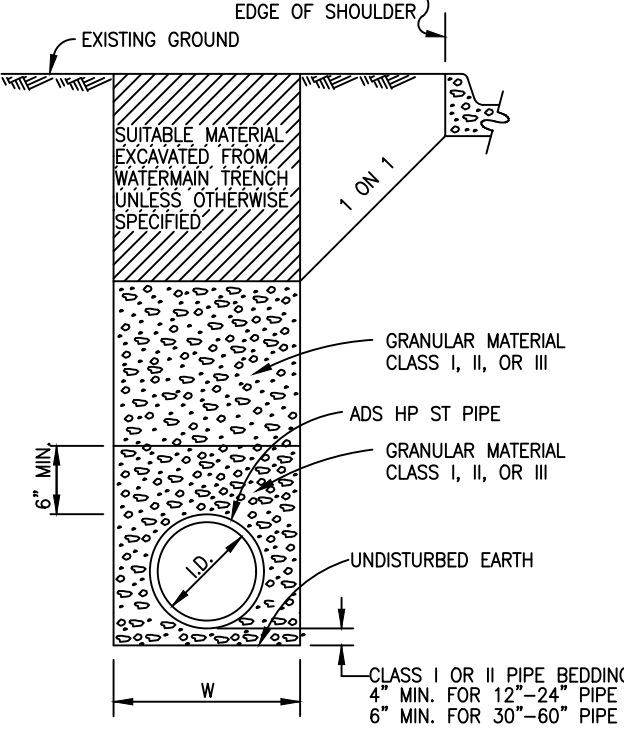
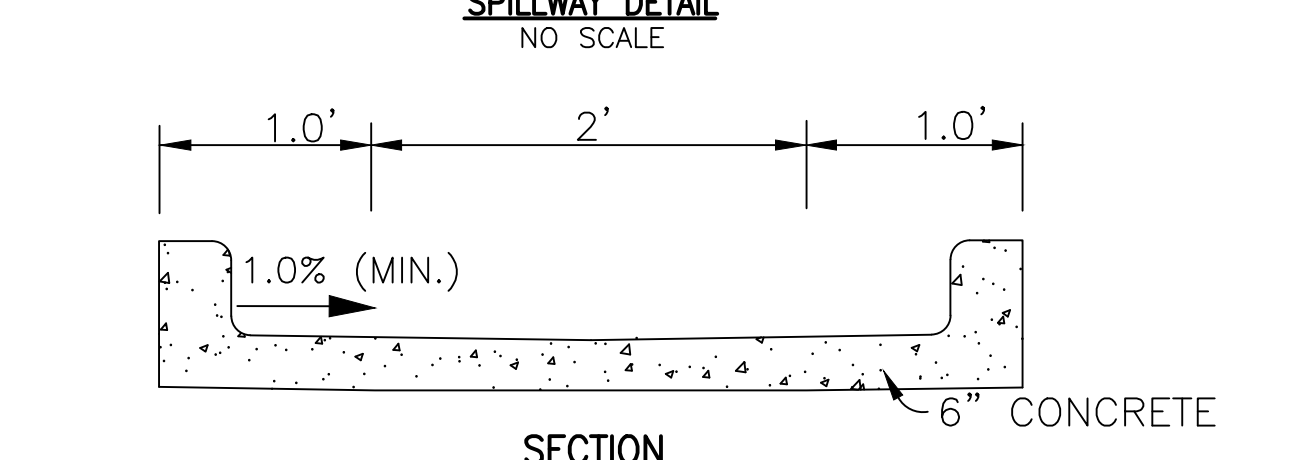
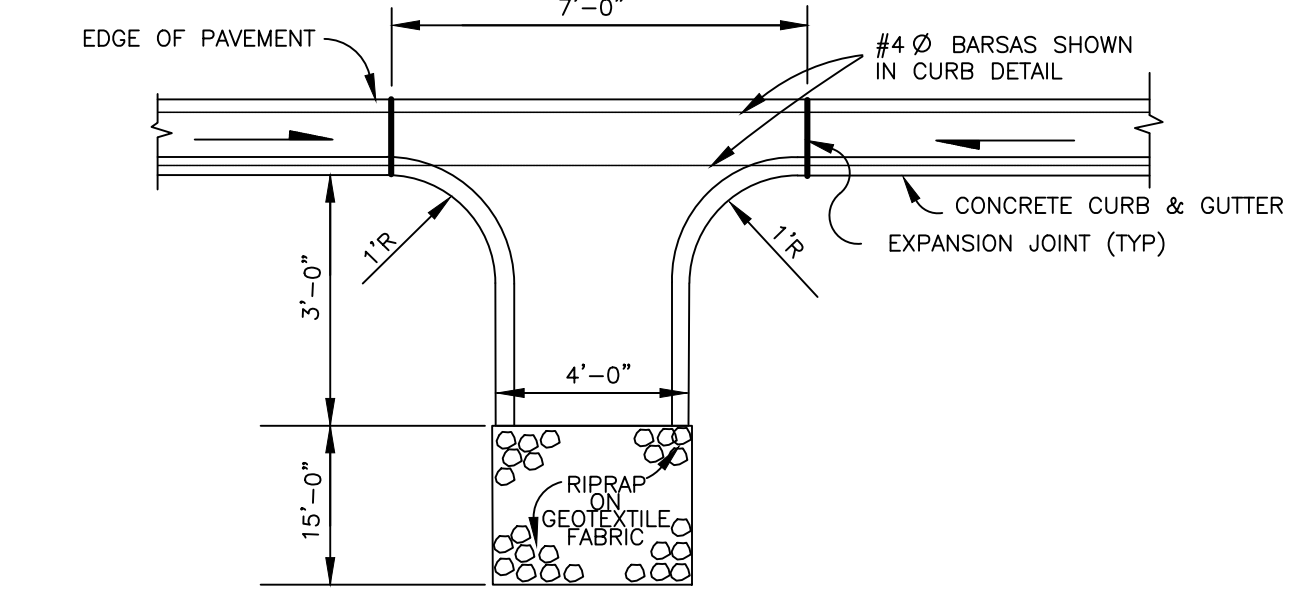
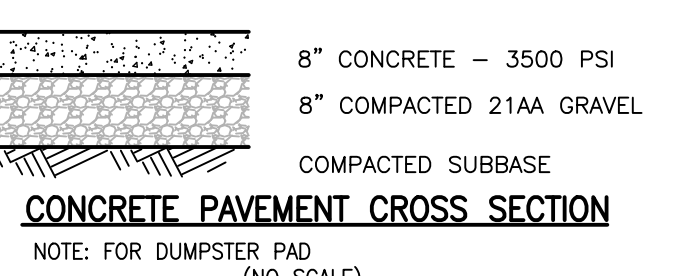
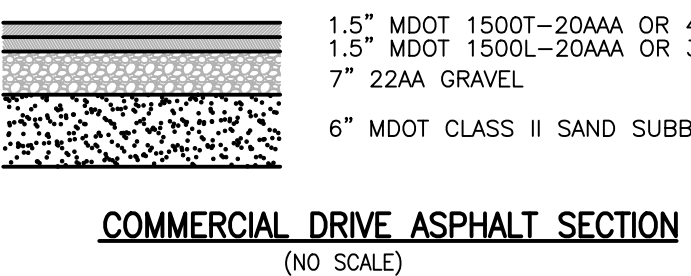
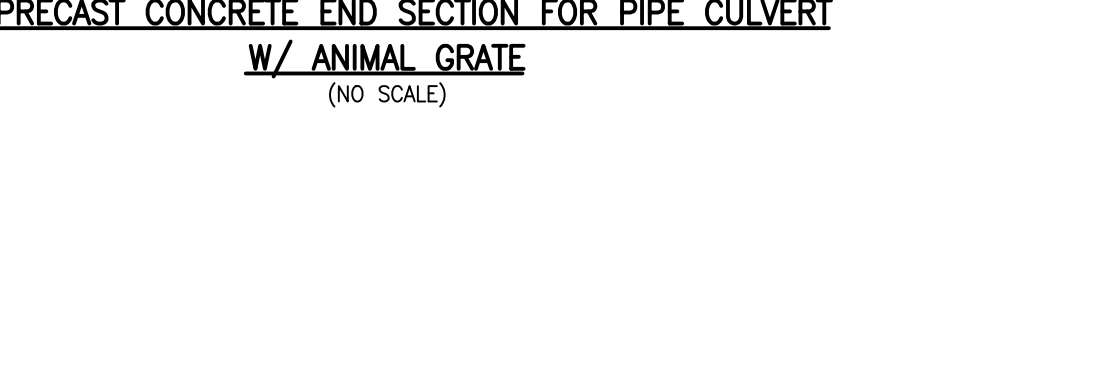
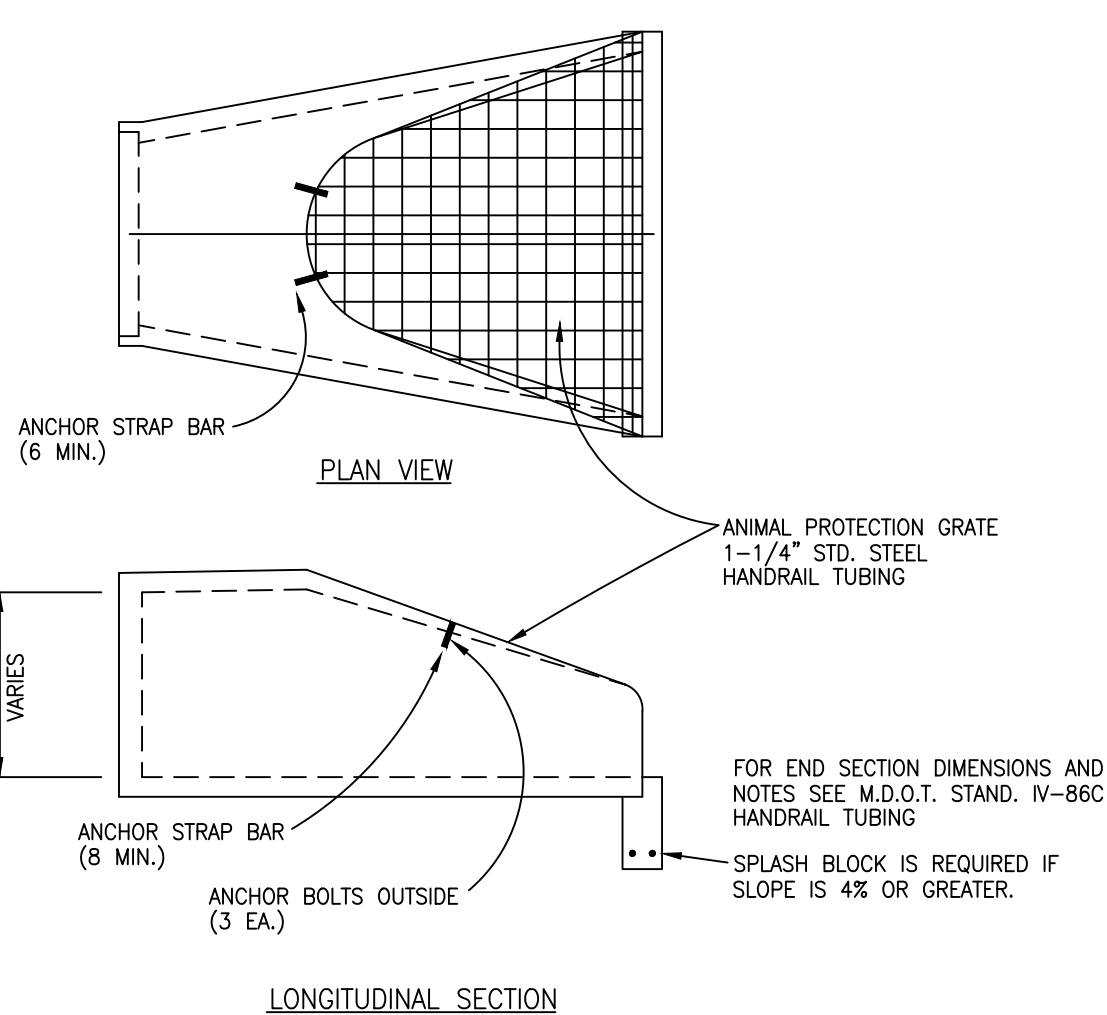
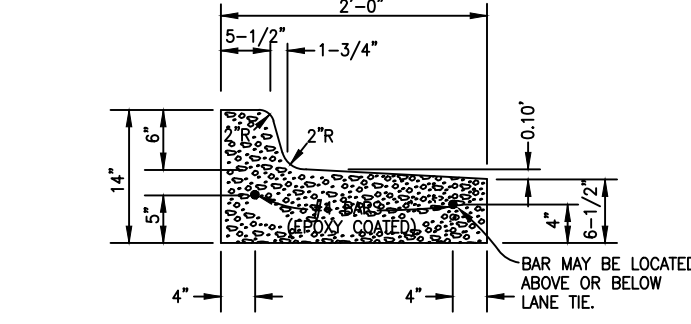
(2) AT LOWPOINT CATCH BASINS 20 L.F. (MIN.) OF 6" PERFORATED P.V.C. PIPE WRAPPED WITH GEOTEXTILE FABRIC, STARTING AT LOWEST INVERT AND CONTINUING AT 3.5 FT. BELOW ROADWAY, PARALLEL TO ROAD. (BOTH DIRECTIONS) BACK-FILLED WITH PEA STONE TO THE SUBBASE.



STRUCTURE FRAMES & COVERS					
COVER	TYPE	USE	MANUFACTURER OR EQUAL		TYPE OF COVER OR GRATE
			EAST JORDAN	NEENAH	
A	MH	ALL	1120	R-1415	VENTED
B	CB & INLET	TYPE B2 CURB	7085	R-3038-A	
K	CB & INLET	TYPE C & F CURB	7045	R-3031-B	FLAT GRATE WITH VERT. 4" OPEN THROAT
C	CB & INLET	VALLEY CURB	7065	R-3034-B	
D	CB & INLET	PARKING LOTS	1020-M1 5105-M1	R-2560-D	FLAT GRATE
E	CB & INLET	LAWN AREA OR DITCH	1020-01		BEEHIVE GRATE 4" HIGH



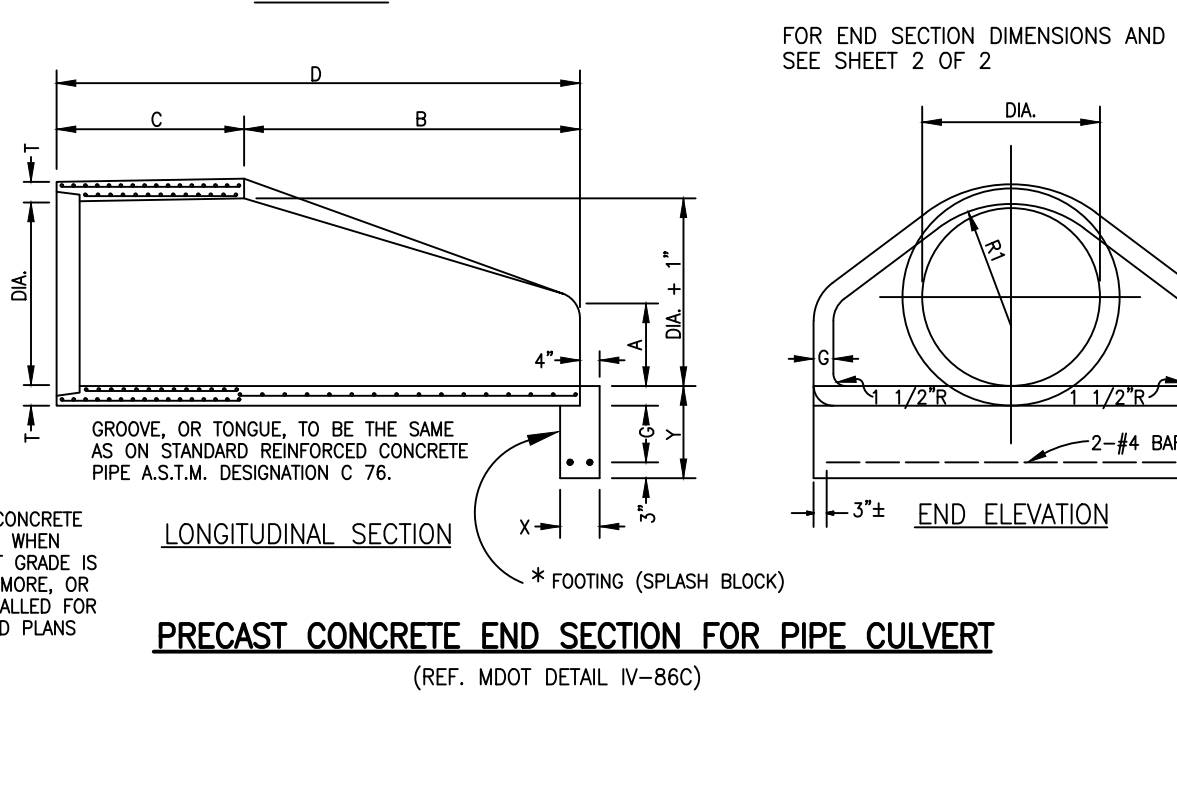
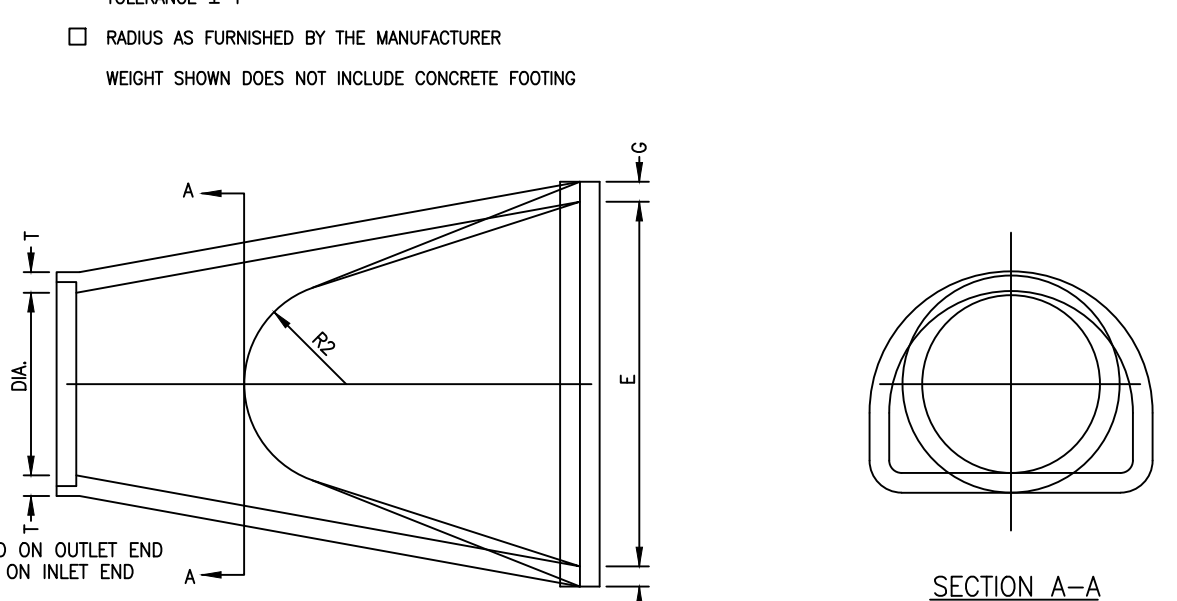
DETAIL	DIMENSIONS	LANE TIES	CONCRETE (CU.YD./LIN.FT.)
F1	1'-0"	7/8" AS SHOWN	0.0484
F2	1'-0"	7/8" OMITTED	0.0484
F3	2'-0"	1 7/8" AS SHOWN	0.0610
F4	2'-0"	1 7/8" OMITTED	0.0610
F5	2'-0"	1 7/8" AS SHOWN	0.0737
F6	2'-0"	1 7/8" OMITTED	0.0737



DATE	DESCRIPTION
June 10, 2015	1:2.5 Back Slope, No Live Load Surcharge, No Toe Slope
1 of 1	

**RED-ROCK**  
65481 US 31 SOUTH CHARLEVOIX, MI 49720  
(269) 222-8400 ext 3100 • engineers@red-rock.com  
www.red-rock.com

DIA.	T (MIN.)	A (MIN.)	B*	C*	D*	E*	G	R1	R2	X	Y	APPROX. WT. LBS.
12"	2"	5"	23"	51"	74"	24"	2"	10-1/8"	9"	8"	18"	800
15"	2-1/4"	7"	27"	48"	75"	30"	2-1/4"	12-1/2"	11"	8"	18"	1100
18"	2-1/2"	11"	25"	49"	74"	36"	2-1/2"	15-1/2"	12"	8"	18"	1300
21"	2-3/4"	11"	33"	42"	75"	42"	2-3/4"	16-1/8"	13"	8"	18"	1500
24"	3"	12"	43"	32"	75"	48"	3"	16-3/16"	14"	8"	18"	1800
30"	3-1/2"	14"	53"	22"	75"	60"	3-1/2"	18-1/2"	15"	8"	18"	2400
36"	4"	17"	62"	37"	99"	72"	4"	24-5/16"	20"	8"	18"	4200
42"	4-1/2"	22"	62"	37"	99"	78"	4-1/2"	27-1/2"	22"	10"	24"	5600
48"	5"	24"	72"	26"	98"	84"	5"	28-1/2"	22"	10"	24"	7400
54"	5-1/2"	27"	65"	33-1/4"-35"	98-1/4"-100"	90"	5"			10"	24"	8040
60"	6"	30"	60"	39"	99"	96"	6"			12"	24"	8730
66"	6-1/2"	24"	72"-78"	21"-27"	99"	102"	5-1/2"			12"	24"	10,830
72"	7"	24"	78"	21"	99"	108"	6"			12"	24"	12,320
78"	7-1/2"	24"	78"	21"	99"	114"	6-1/2"			12"	24"	14,430
84"	8"	36"	90-1/2"	21"	111-1/2"	120"	6-1/2"			12"	24"	18,160



BEFORE ANY DIGGING OR CONSTRUCTION, CALL MISSISSIPPI STATE POLICE AT 1-800-368-3333 TO LOCATE UTILITIES. BE RESPONSIBLE FOR OBTAINING THE EXACT LOCATION OF UTILITIES. BE RESPONSIBLE FOR OBTAINING THE EXACT LOCATION OF UTILITIES. BE RESPONSIBLE FOR OBTAINING THE EXACT LOCATION OF UTILITIES.

**REBOSS Engineering**  
Engineers Surveyors Planners Landscape Architects  
3121 E. GRAND RIVER AVE.  
HOWELL, MI 48843  
517-546-4836 FAX 517-548-1670

**BIBLE BAPTIST CHURCH**  
**BIBLE BAPTIST CHURCH**  
2258 EAST HIGHLAND ROAD  
HOWELL, MI 48843  
517-715-9233

DESIGNED BY:	NO SCALE
JT	
DRAWN BY:	JS
CHECKED BY:	
SCALE:	NO SCALE
JOB NO.:	21-542
DATE:	2/2/2022
SHEET NO.:	14

**REVISION PER DATE**

NO	BY	DATE
2	ST	3/16/22
1	ST	2/23/22
NO	BY	



THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION PROVIDED HEREON. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

**BEFORE YOU DIG**  
CALL MISSISSIPPI  
800-452-7171

**BEBOSS**  
Engineering  
Engineers Surveyors Planners Landscape Architects  
3121 E. GRAND RIVER AVE.  
HOWELL, MI. 48843  
517.546.4836 FAX 517.548.1670

**BIBLE BAPTIST CHURCH**  
**BIBLE BAPTIST CHURCH**  
2258 EAST HIGHLAND ROAD  
HOWELL, MI 48843  
517-715-9233

**MARION HOWELL OCEOLA GENOA**  
Sewer and Water Authority

PROJECT: BIBLE BAPTIST CHURCH  
PREPARED FOR: BIBLE BAPTIST CHURCH  
2258 EAST HIGHLAND ROAD  
HOWELL, MI 48843  
517-715-9233

DESIGNED BY: ST  
DRAWN BY: JS  
CHECKED BY:

SCALE: NONE  
JOB NO. 21-542  
DATE 12/01/2021  
SHEET NO. 15

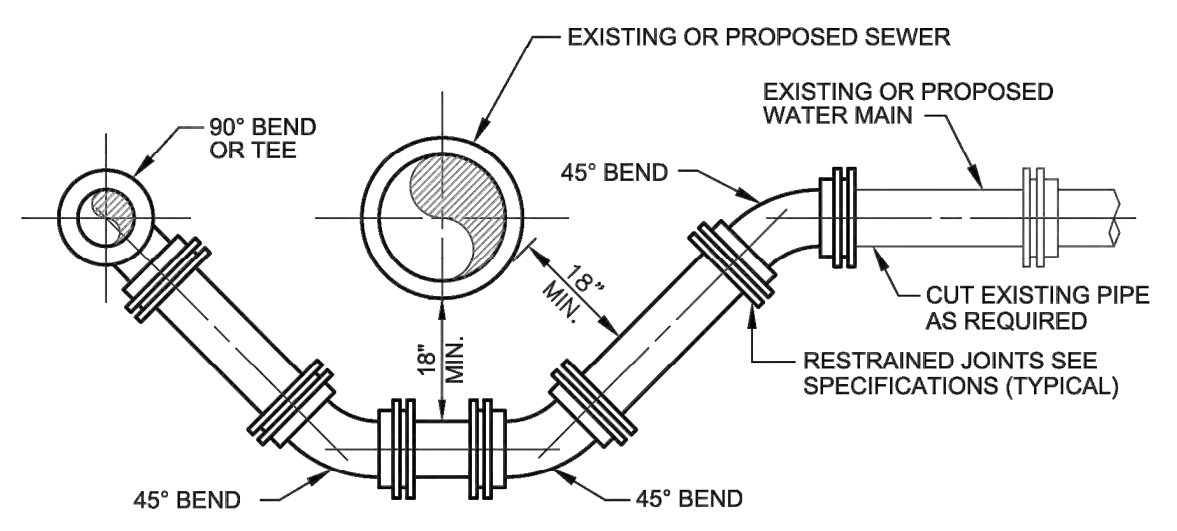
BOSS Engineering

**PIPE RESTRAINT SCHEDULE**

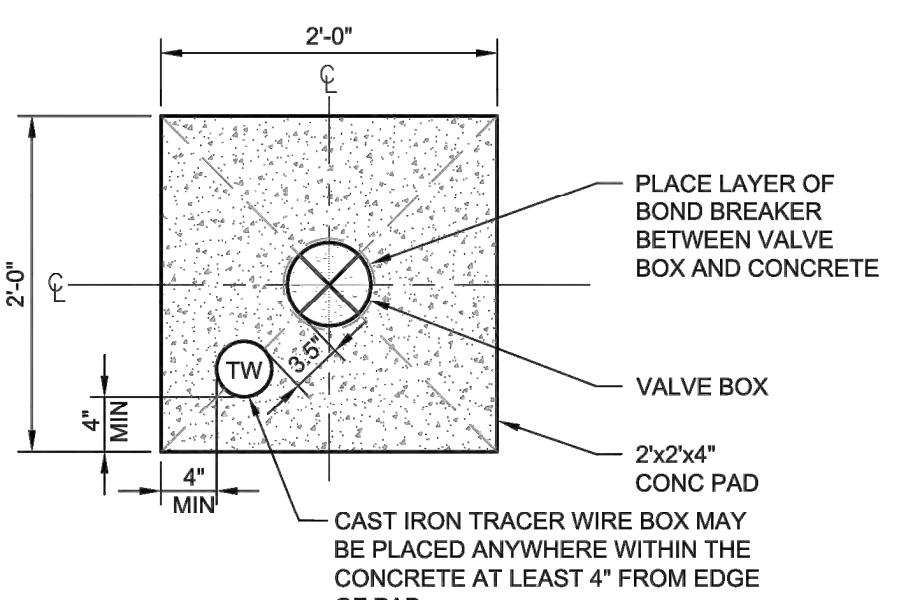
GROUND BURIED PRESSURE PIPE - POLYETHYLENE ENCASED DUCTILE IRON PIPE

PIPE DIAMETER	TEES, 90° BENDS	45° BENDS	22-1/2° BENDS	11-1/4° BENDS	DEAD ENDS	REDUCERS (ONE SIZE REDUCTION)*	REDUCERS (TWO SIZE REDUCTION)*
4	13	5	3	1	40	--	--
6	19	8	4	2	58	31	--
8	24	10	5	2	75	30	70
12	34	14	7	3	107	57	116
16	43	18	9	4	139	59	137
20	52	22	10	5	169	59	134
24	61	25	12	6	199	60	132
30	73	30	15	7	242	85	168
36	84	35	17	8	281	84	168

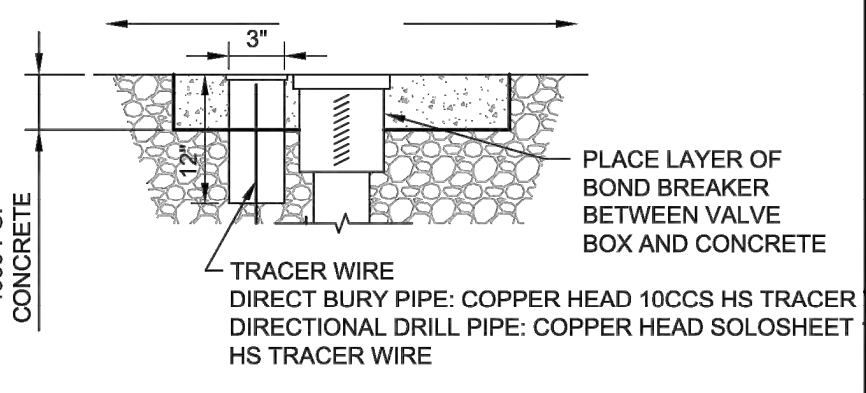
- LENGTHS OF PIPE RESTRAINT ARE GIVEN IN FEET.
  - IF REQUIRED PIPE DIAMETER IS NOT LISTED IN THIS TABLE, THE NEXT LARGEST PIPE DIAMETER SHALL BE USED.
  - THIS TABLE IS BASED ON A TEST PRESSURE OF 180 PSI (OPERATING PRESSURE PLUS WATER HAMMER. FOR OTHER TEST PRESSURES, ALL VALUES TO BE INCREASED OR DECREASED PROPORTIONALLY.
  - THE VALUES PROVIDED OF RESTRAINT LENGTH ARE IN EACH DIRECTION FROM THE POINT OF DEFLECTION OR TERMINATION EXCEPT FOR TEES, AT WHICH ONLY THE BRANCH IN THE DIRECTION OF THE STEM.
  - IF THE RODS ARE USED, USE FOUR RODS MINIMUM AND ADD 1/8-INCH TO BAR DIAMETER AS CORROSION ALLOWANCE.
  - SIZE REDUCTION IS BASED UPON THE PIPE DIAMETER SHOWN IN THIS TABLE.
- BASED UPON: INTERNAL PRESSURE: 180  
PIPE DEPTH: 5  
BEDDING CLASS: TYPE 4  
SOIL TYPE: GOOD SAND  
SAFETY FACTOR: 2



**WATER MAIN UTILITY OFFSET**

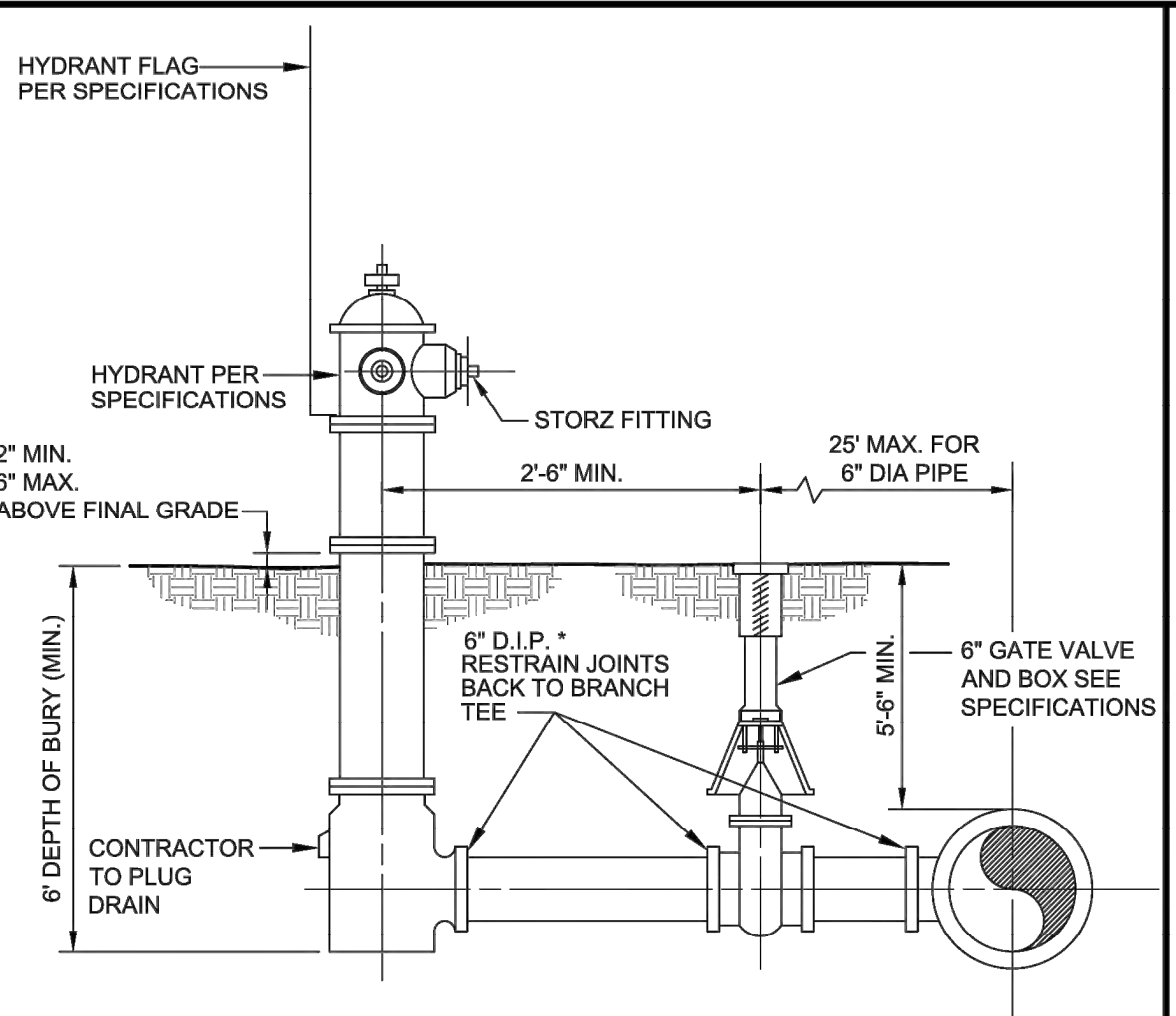


NOTE: ALL BOXES & ADJOINING TW BOXES SHALL BE ENCASED IN A CONC. PAD UNLESS OTHERWISE DETERMINED BY MHOG.



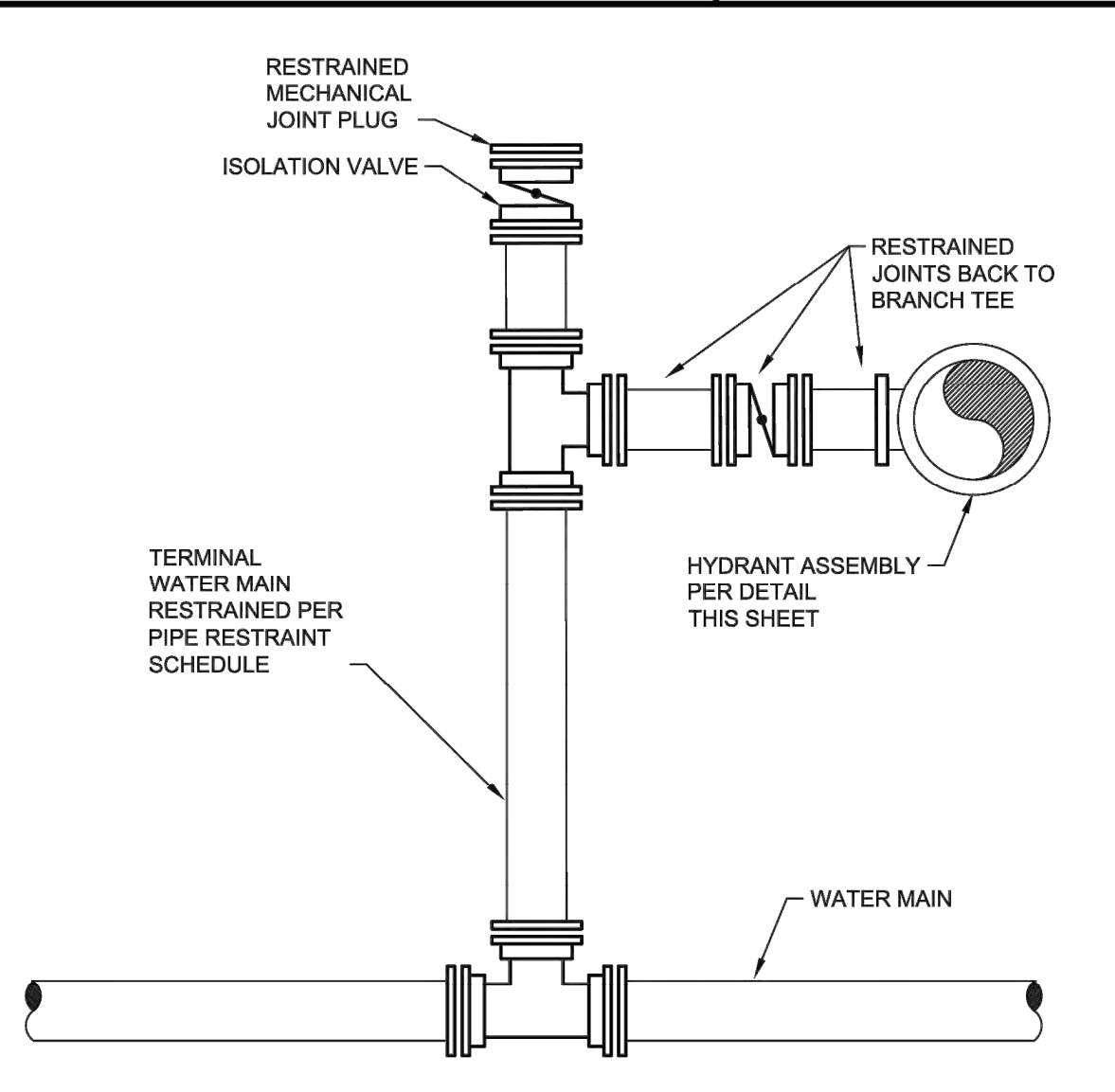
- NOTE:
- TRACER WIRE BOXES LOCATED WITHOUT A VALVE BOX ONLY REQUIRE AN 18" X 18" CONCRETE PAD.
  - TRACER WIRE BOX SHALL HAVE A LOCKING LID W/STANDARD AWWA PENTAGON KEY.
  - TRACER WIRE BOX SHALL BE COPPERHEAD RB14TP IN ASPHALT INSTALLATIONS AND CD14TP FOR ALL OTHER INSTALLATIONS.

**PLAN**  
**VALVE/TRACER WIRE BOX IN CONCRETE DETAIL**  
NO SCALE

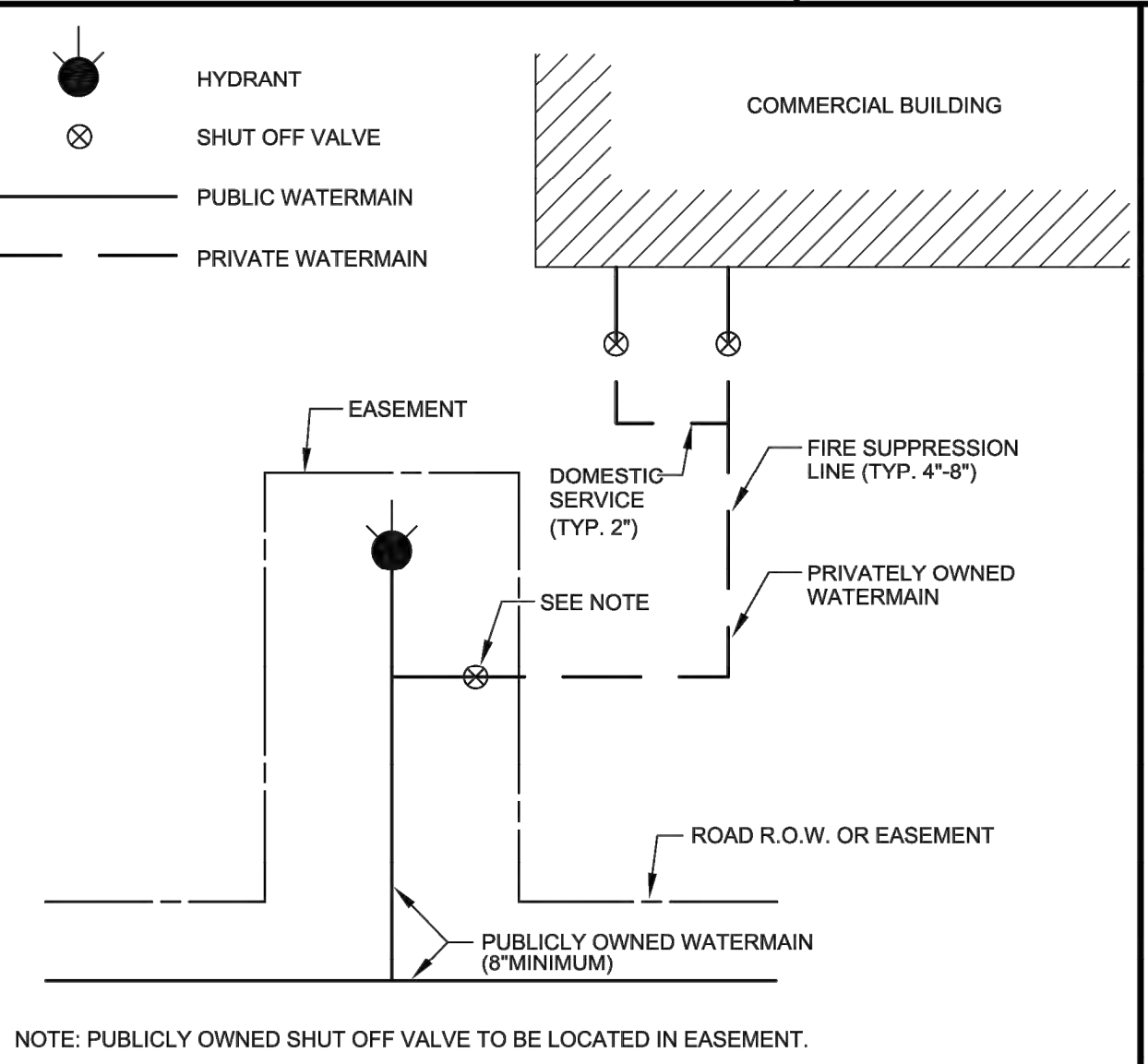


\* THE LENGTH OF 6" PIPE FROM THE MAIN TO THE HYDRANT ASSEMBLY CANNOT EXCEED 25'. ANY PIPE OVER 25 FEET SHALL BE 8" DIAMETER MINIMUM AND DESIGNED PER MHOG SPECIFICATIONS.

**FIRE HYDRANT ASSEMBLY**

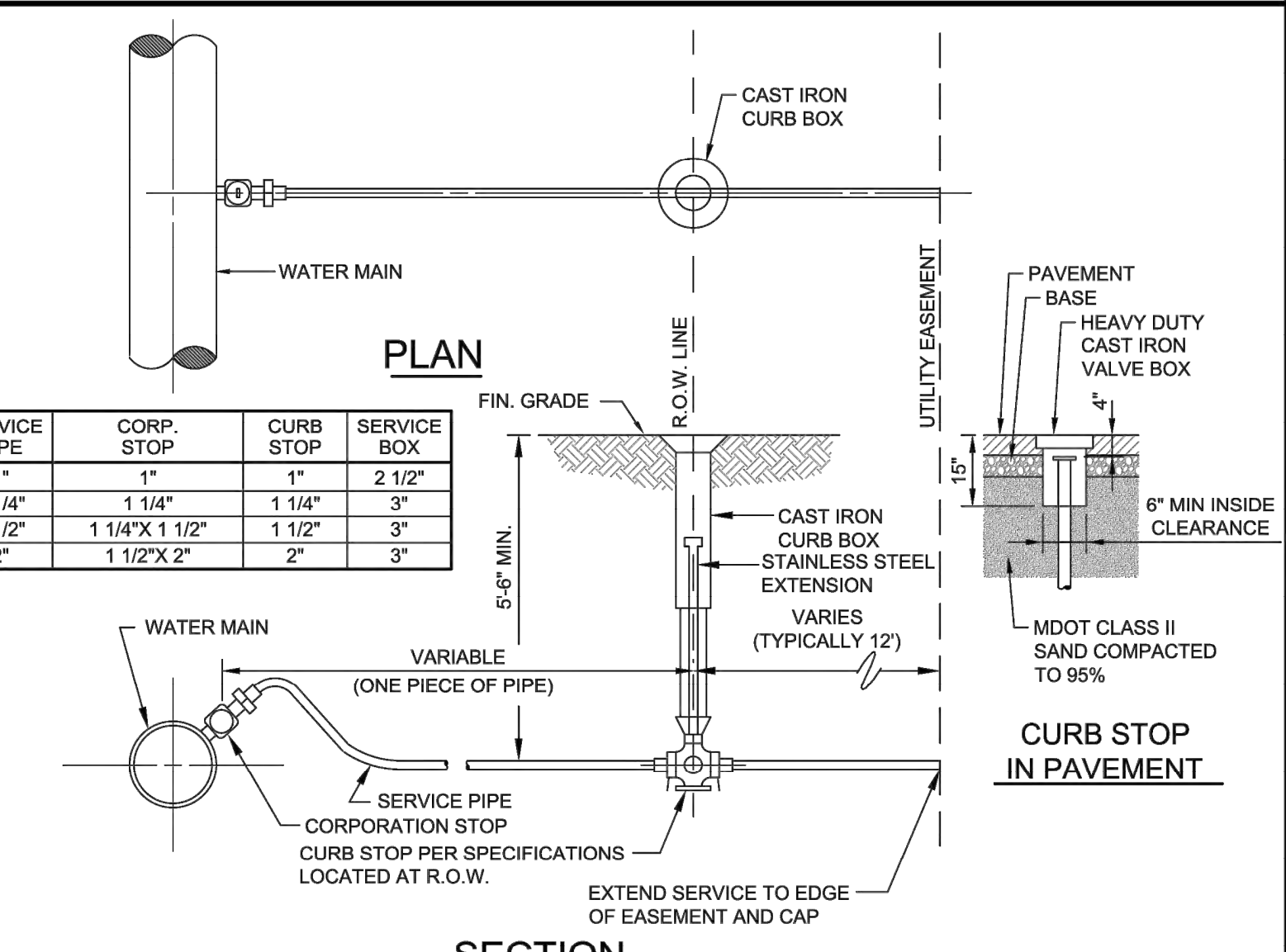


**TERMINAL HYDRANT DETAIL**



NOTE: PUBLICLY OWNED SHUT OFF VALVE TO BE LOCATED IN EASEMENT.

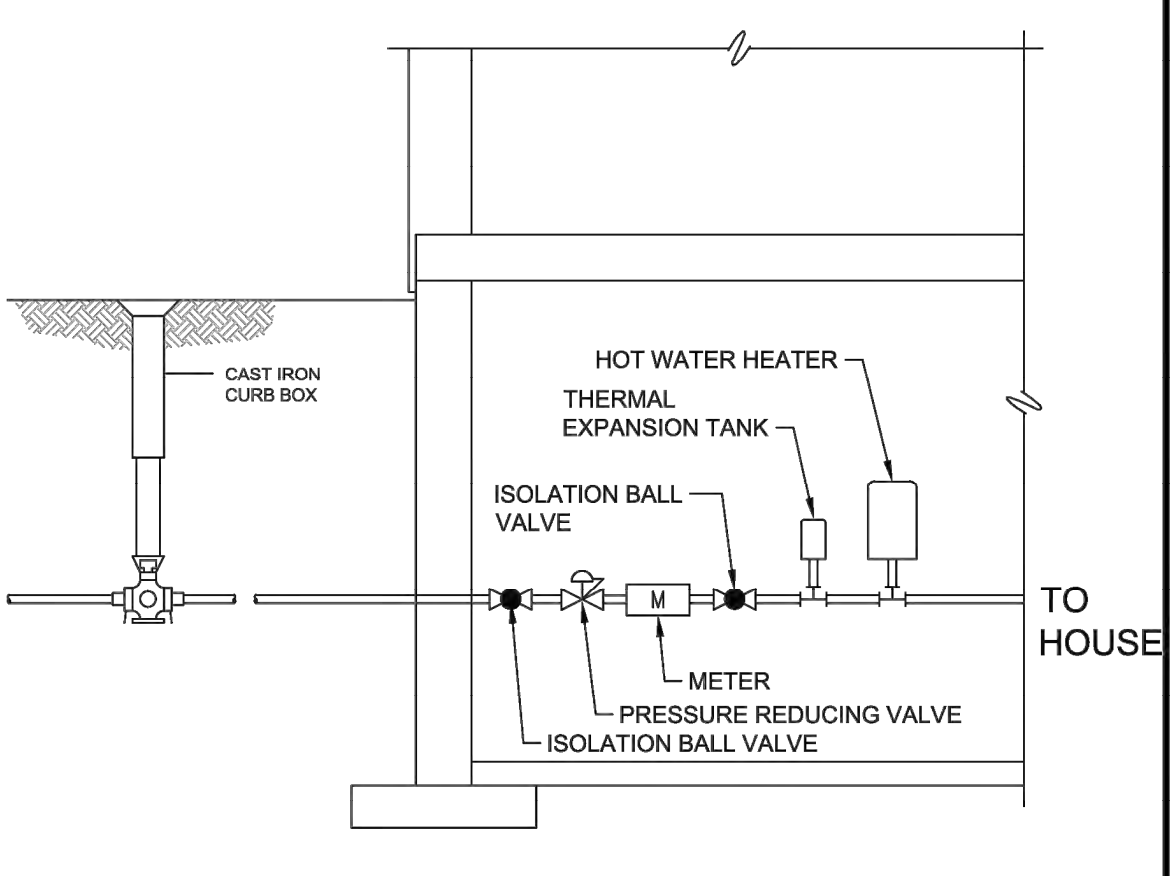
**COMMERCIAL BUILDING WATER SERVICE LAYOUT**



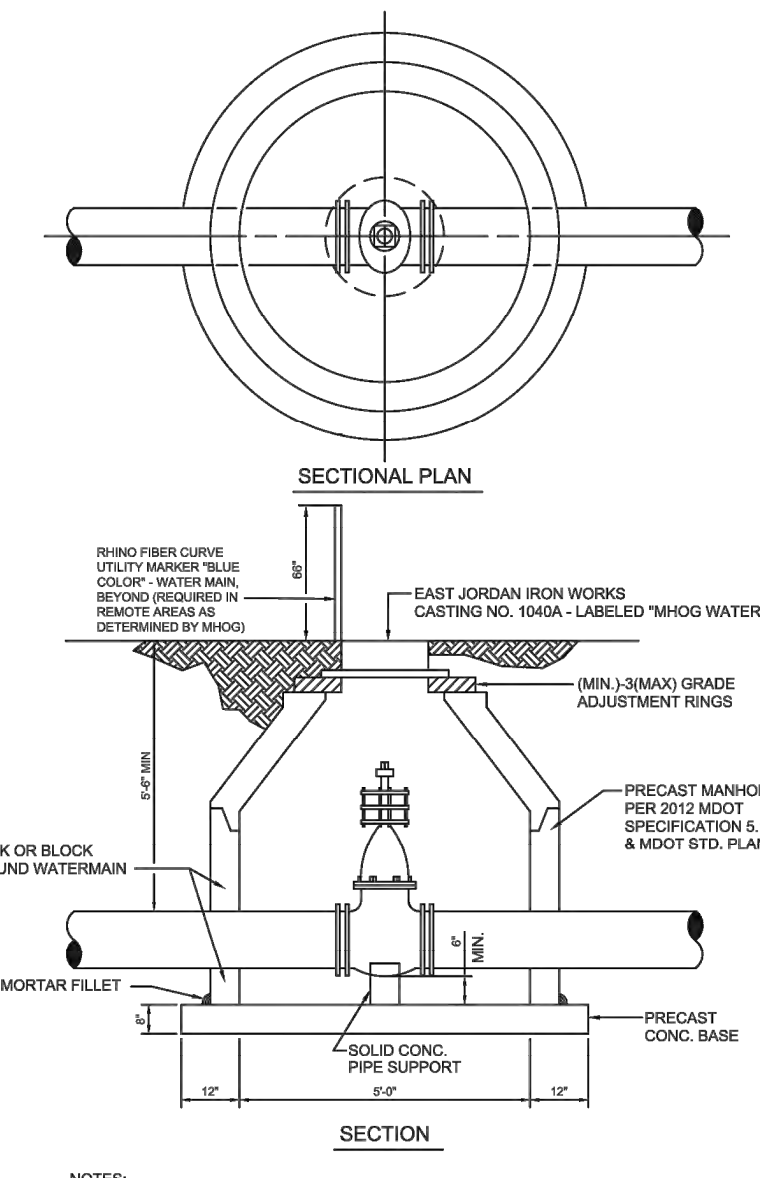
**PLAN**

SERVICE PIPE	CORP. STOP	CURB STOP	SERVICE BOX
1"	1"	1"	2 1/2"
1 1/4"	1 1/4"	1 1/4"	3"
1 1/2"	1 1/2"	1 1/2"	3"
2"	1 1/2" X 2"	2"	3"

**SECTION**  
**WATER SERVICE LATERAL**

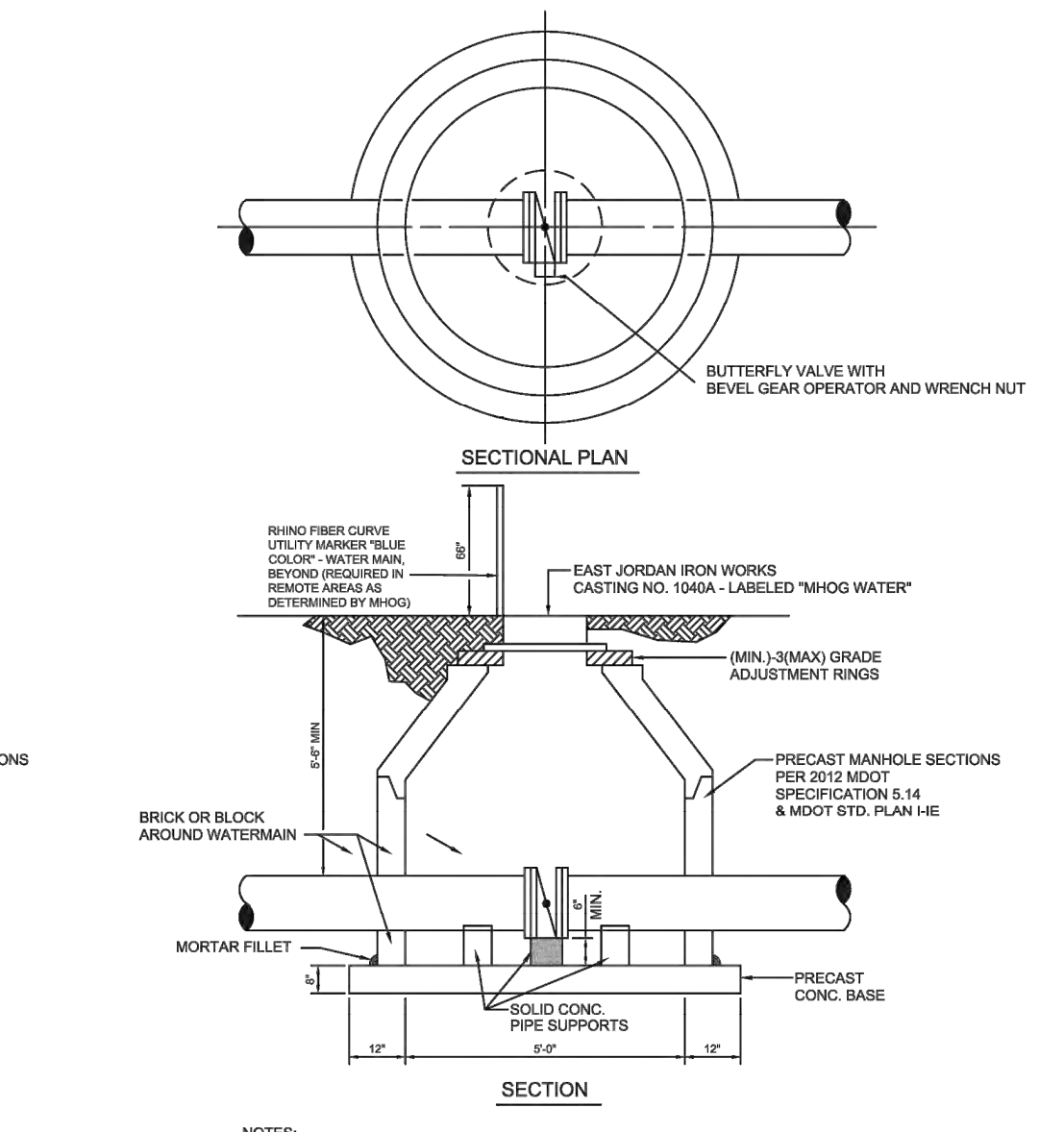


**PRIVATE RESIDENCE PRESSURE REDUCING VALVE (PRV)**



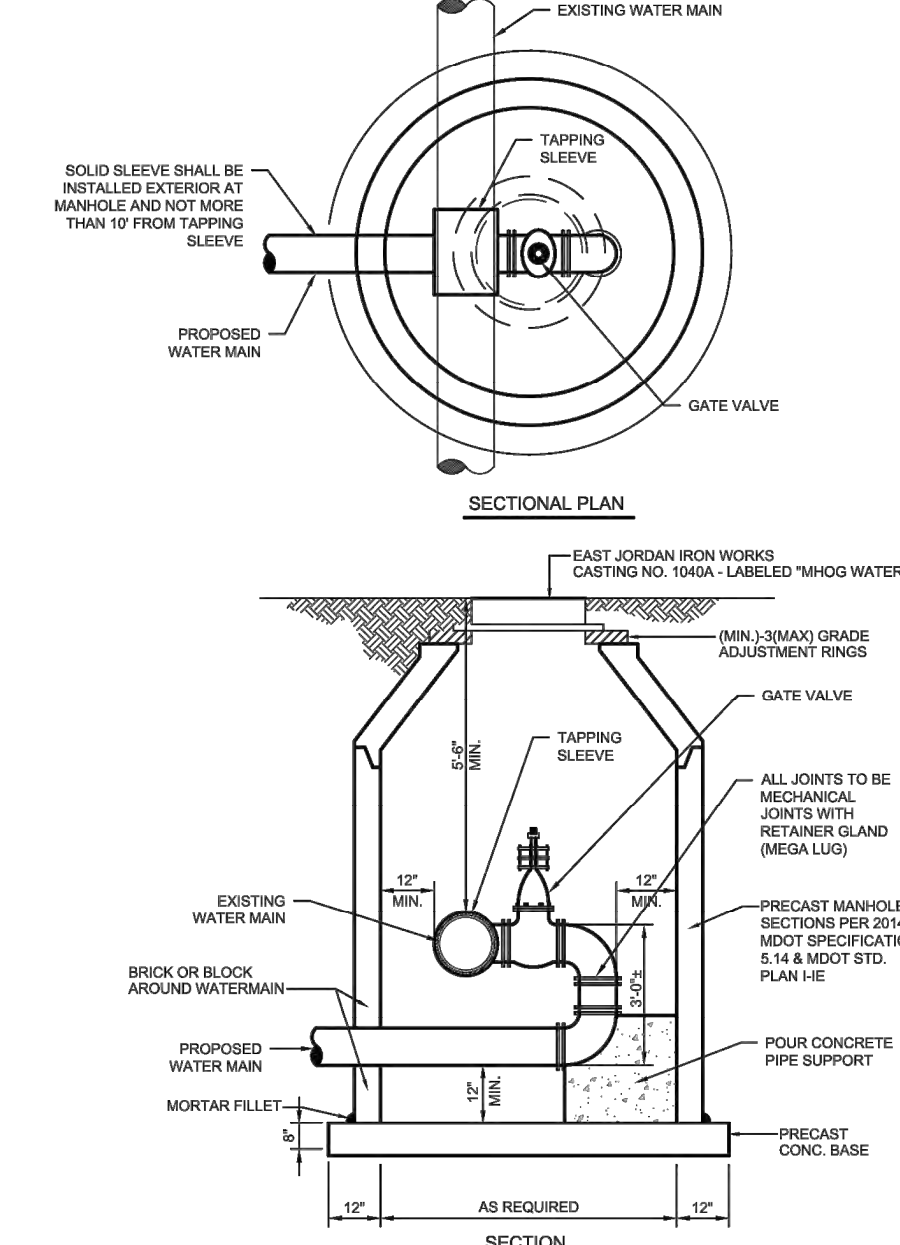
NOTES:  
1. ALL LIFT HOLES AND JOINTS SHALL BE MORTARED BOTH INSIDE AND OUTSIDE.  
2. BLOCK MANHOLES TO BE USED ONLY WITH ENGINEER'S PERMISSION.  
3. NO STEPS PERMITTED.

**VALVE AND GATE WELL**



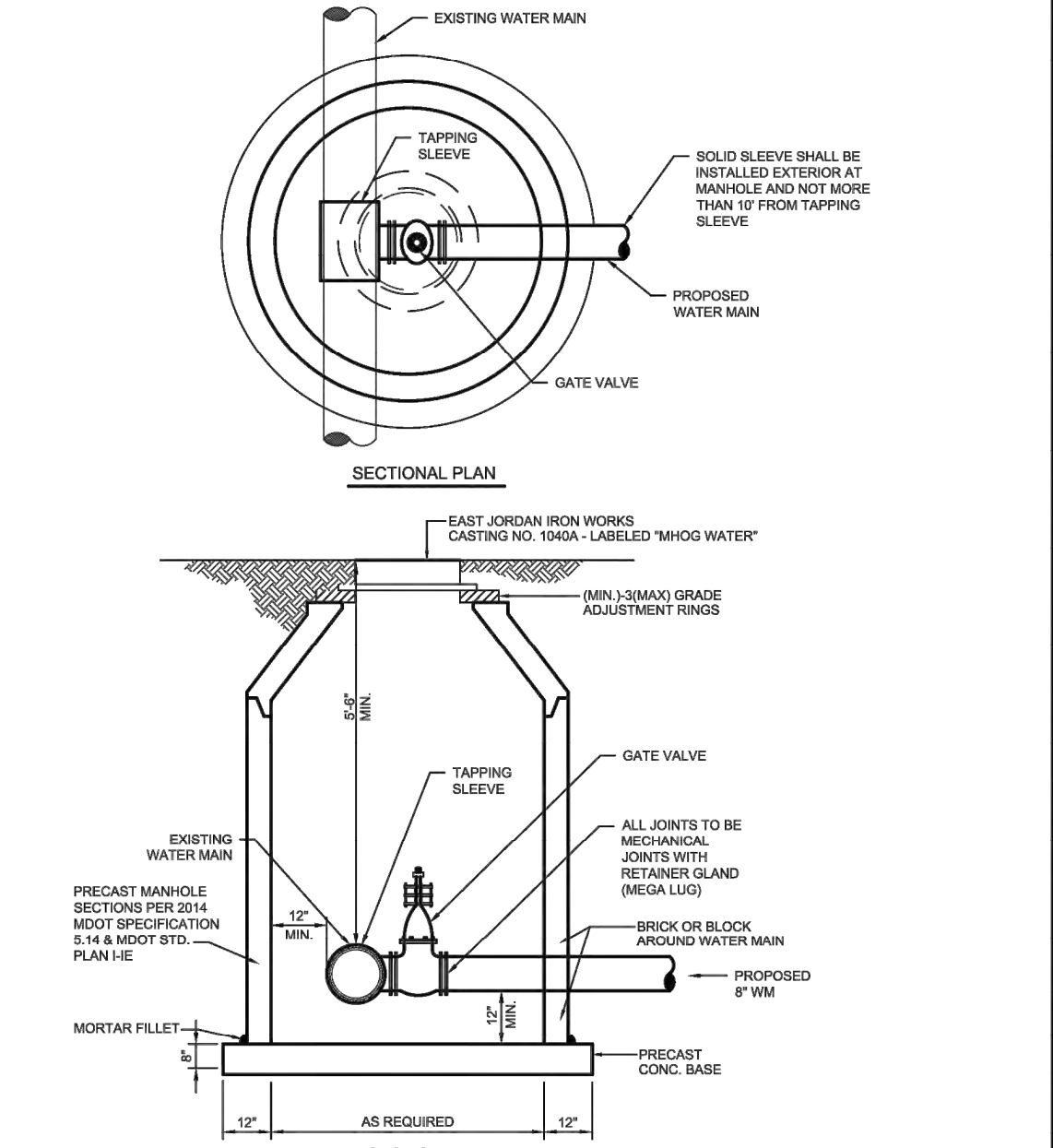
NOTES:  
1. ALL LIFT HOLES AND JOINTS SHALL BE MORTARED BOTH INSIDE AND OUTSIDE.  
2. BLOCK MANHOLES TO BE USED ONLY WITH ENGINEER'S PERMISSION.  
3. NO STEPS PERMITTED.

**BUTTERFLY VALVE AND WELL**



NOTES:  
1. ALL LIFT HOLES AND JOINTS SHALL BE MORTARED BOTH INSIDE AND OUTSIDE.  
2. BLOCK MANHOLES TO BE USED ONLY WITH ENGINEER'S PERMISSION.  
3. NO STEPS PERMITTED.

**REVERSE TAP GATE WELL**



NOTES:  
1. ALL LIFT HOLES AND JOINTS SHALL BE MORTARED BOTH INSIDE AND OUTSIDE.  
2. BLOCK MANHOLES TO BE USED ONLY WITH ENGINEER'S PERMISSION.  
3. NO STEPS PERMITTED.

**REGULAR TAP GATE WELL**



**MARION HOWELL OCEOLA GENOA**  
Sewer and Water Authority

Scale: NONE  
Issued Date: JANUARY - 2014  
UPDATED: MAY 2015  
UPDATED: FEBRUARY 2016  
UPDATED: APRIL 2016  
UPDATED: OCTOBER 2017  
UPDATED: FEBRUARY 2019

STANDARD DETAILS

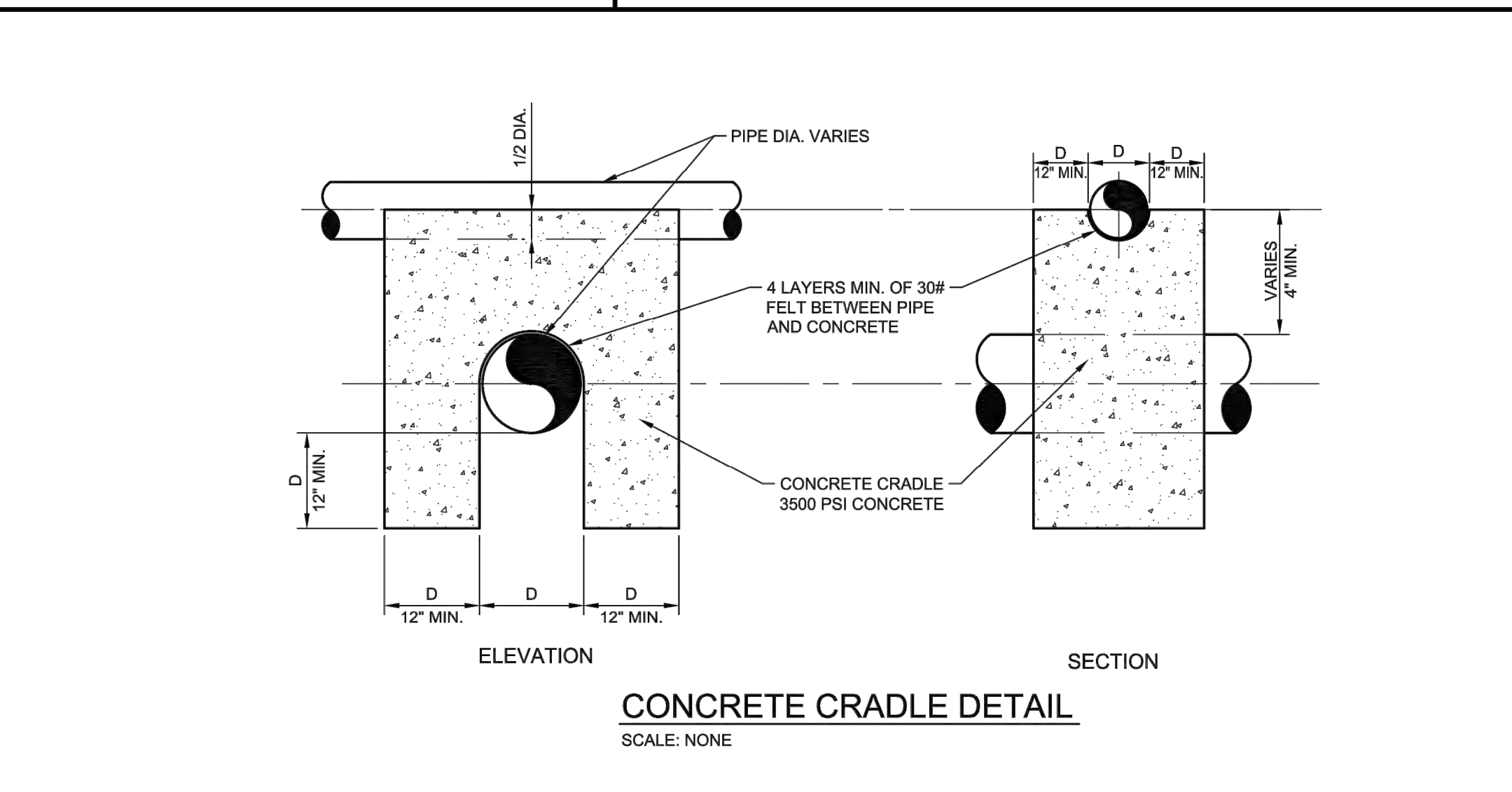
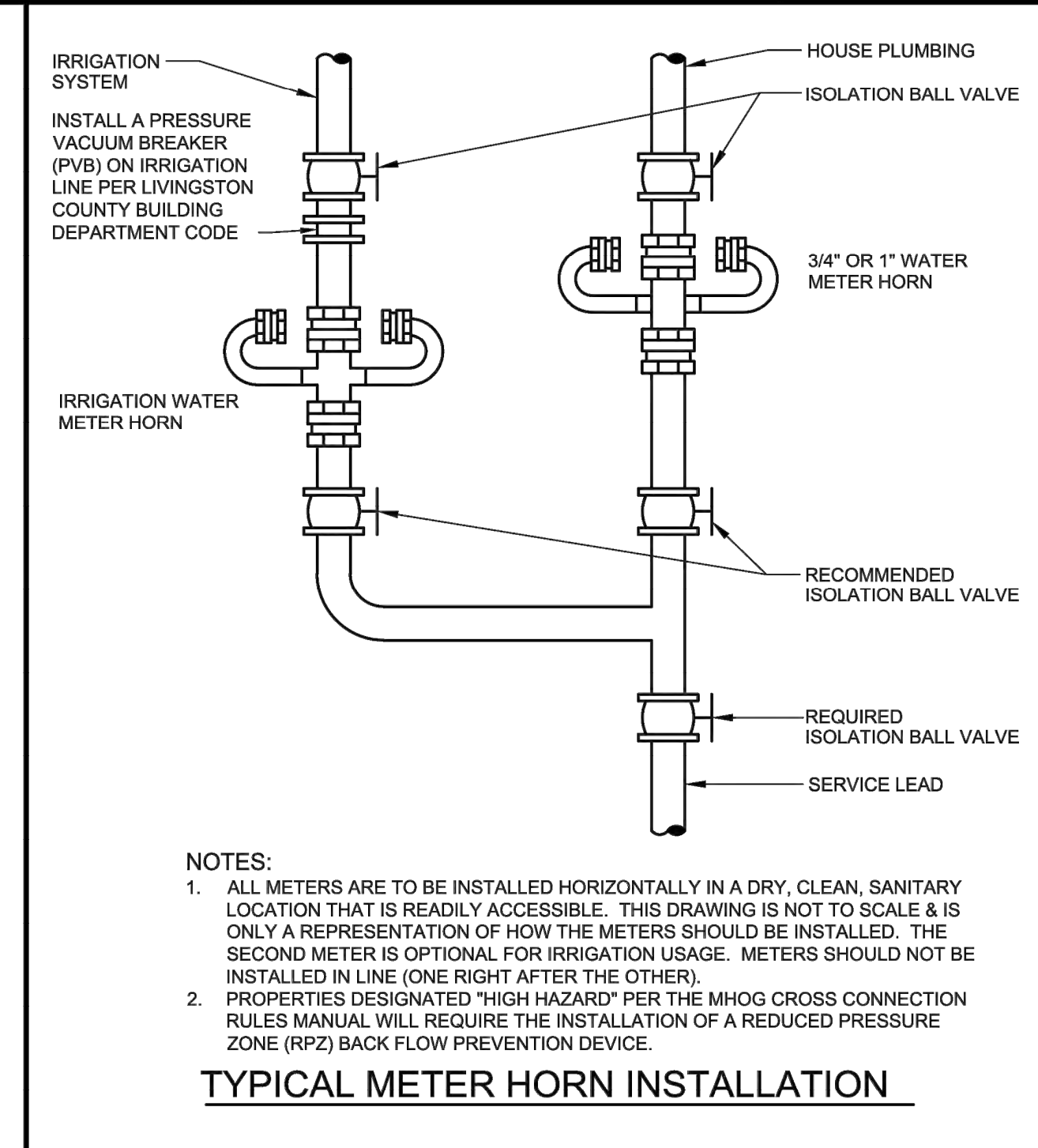
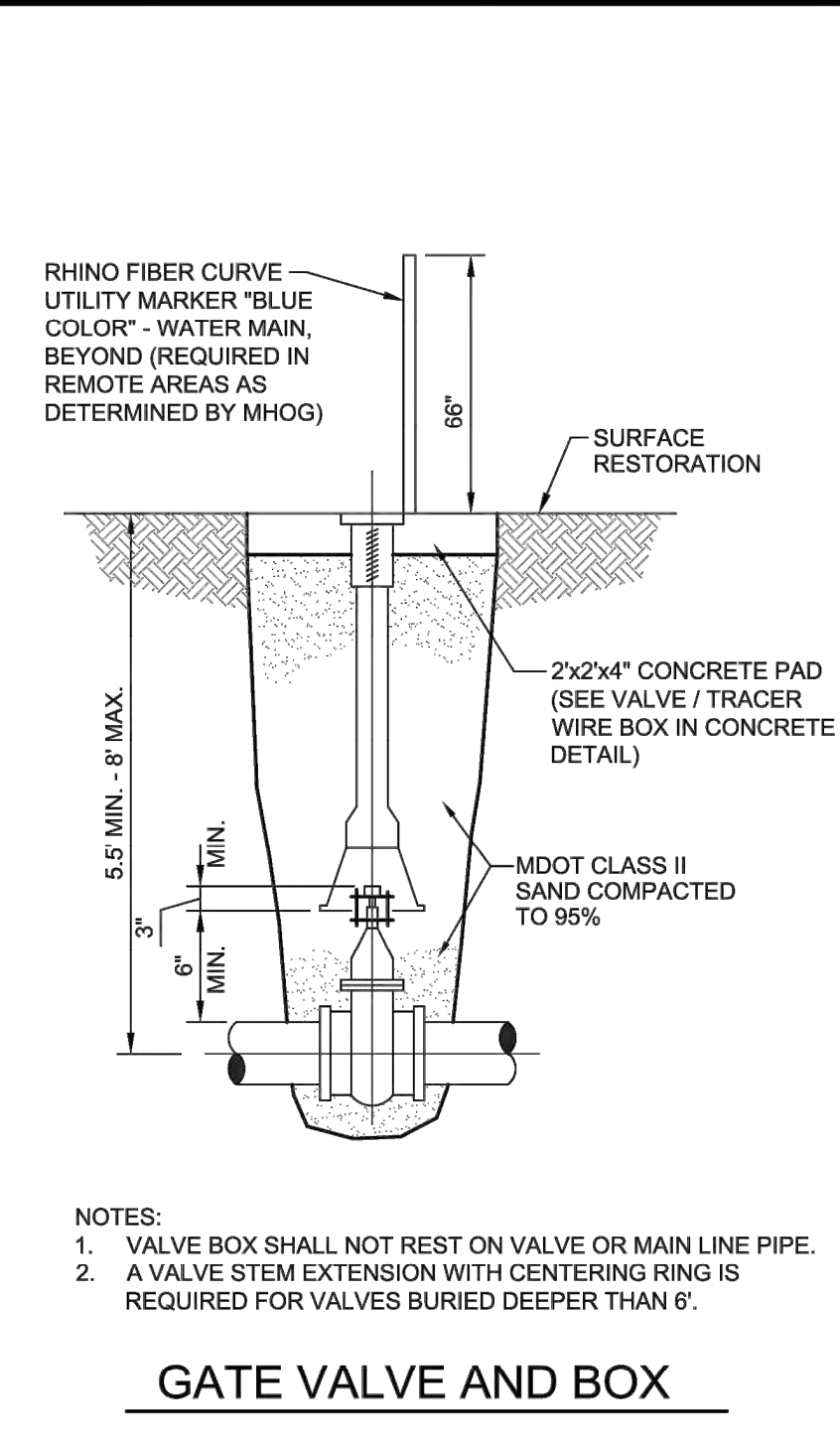
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Friday, February 8, 2019 9:13:59 AM DRAWING: P:\IER\12719200-12719-00\CAD\SheetFiles\Mhog.ssd.DWG

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

K  
J  
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H  
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C  
B  
A



**MARION HOWELL OCEOLA GENOA**  
Sewer and Water Authority

Scale: NONE

Issued Date: JANUARY - 2014

UPDATED: MAY 2015  
UPDATED: FEBRUARY 2016  
UPDATED: APRIL 2016  
UPDATED: OCTOBER 2017  
UPDATED: FEBRUARY 2019

THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES AS SHOWN ON THESE DRAWINGS. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL GOVERNMENT. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL GOVERNMENT. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL GOVERNMENT.

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3121 E. GRAND RIVER AVE.  
HOWELL, MI. 48843

517.546.4836 FAX 517.548.1670

PROJECT	BIBLE BAPTIST CHURCH	
PREPARED FOR	BIBLE BAPTIST CHURCH 2258 EAST HIGHLAND ROAD HOWELL, MI 48843 517-715-9233	
TITLE	MHOG STANDARD WATERMAIN DETAILS (2)	
DESIGNED BY:	ST	
DRAWN BY:	JS	
CHECKED BY:		
SCALE		
JOB NO.	21-542	
DATE	2/1/2022	
SHEET NO.	16	
REVISION	PER	DATE
NO BY	PER TWP REVIEW	3/16/22
	PER TWP REVIEW	2/23/22
	REVISION PER	







**D-Series Size 1 LED Area Luminaire**

**Specifications**

EPA: 1.07 ft<sup>2</sup>/watt  
 Length: 22" (559 mm)  
 Width: 11" (279 mm)  
 Height H1: 7-1/2" (190 mm)  
 Height H2: 3-1/2" (89 mm)  
 Weight (max): 27 lbs (12 kg)

**Introduction**

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficiency, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.



**Specifications**

**Luminaire**

Height: 8-1/2" (216 mm)  
 Width: 17" (430 mm)  
 Depth: 10-3/16" (268 mm)  
 Weight: 20 lbs (9 kg)

**Capable Luminaire**

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency.
- This luminaire is A+ Certified when ordered with DTL controls marked by a shaded background. DTL, DLI equipped luminaires meet the A+ specification for luminaire to photocell interoperability.
- This luminaire is part of an A+ Certified solution for ROAM™ or SPant™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background.

**Ordering Information** EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX1 LED	DSX1 LED	Light Output	Color	Beam	Mount	Notes
DSX1 LED	Forward optics P1 P2 P3 P4 P5 P6 P7 P8 P9 P10 P11	30K 40K 50K	3000K 4000K 5000K	T5 T5S T5S T5S T5S T5S T5S T5S T5S T5S T5S	1500' 1500' 1500'	Shipped included

DSX1 LED	DSX1 LED	Light Output	Color	Beam	Mount	Notes
DSX1 LED	Shipped installed	30K 40K 50K	3000K 4000K 5000K	T5 T5S T5S T5S T5S T5S T5S T5S T5S T5S T5S	1500' 1500' 1500'	Shipped installed

LITHONIA LIGHTING COMMERCIAL OUTDOOR One Lithonia Way • Cary, Georgia 30012 • Phone: 1-800-355-5589 (378) • © 2011-2021 Acuity Brands Lighting, Inc. All rights reserved. WST LED Rev. 11/2021

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Lumens Per Lamp	Light Loss Factor	Wattage
A	A	5	Lithonia Lighting	DSX1 LED P4 40K T5W MVOLT	DSX1 LED P4 40K T5W MVOLT	LED	14943	0.9	250
B	B	8	Lithonia Lighting	DSX1 LED P4 40K T2M MVOLT	DSX1 LED P4 40K T2M MVOLT	LED	14457	0.9	125
C	C	6	Lithonia Lighting	DSX1 LED P4 40K TTFM MVOLT	DSX1 LED P4 40K TTFM MVOLT	LED	14487	0.9	125
D	D	2	Lithonia Lighting	WST LED P2 40K VW MVOLT	WST LED P2 40K VW MVOLT	LED	3511	0.9	25

Description	Symbol	Avg	Max	Min	Avg/Min	Max/Min
Grade @ 0'	+	0.4 fc	7.3 fc	0.0 fc	N/A	N/A
North Parking and Drives	✕	1.7 fc	4.9 fc	0.3 fc	5.7:1	16.3:1
Property Line	+	0.0 fc	0.0 fc	0.0 fc	N/A	N/A
South Parking	✕	2.1 fc	5.3 fc	0.5 fc	4.2:1	10.6:1

- General Note**
- SEE DRAWING FOR LUMINAIRE MOUNTING HEIGHT.
  - CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' - 0'
  - LIGHTING ALTERNATES REQUIRE NEW PHOTOMETRIC CALCULATION AND RESUBMISSION TO CITY FOR APPROVAL.

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

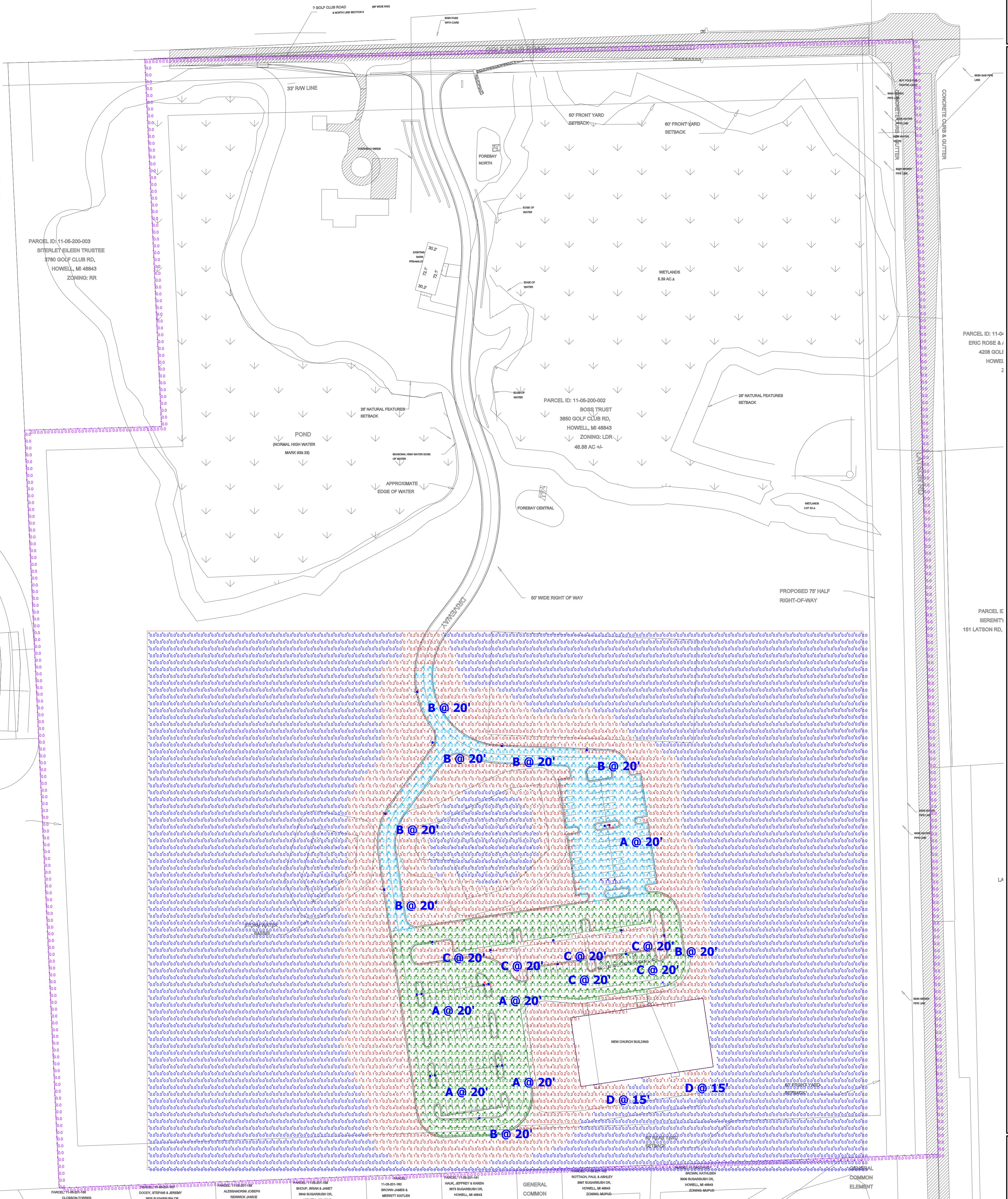
THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIREMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT ASG@GASSERBUSH.COM OR 734-266-6705.

FOR ORDERING INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.



BIBLE BAPTIST CHURCH  
 PHOTO METRIC PLAN  
 PREPARED FOR: BOSS ENGINEERING  
 GASSER BUSH ASSOCIATES  
 WWW.GASSERBUSH.COM

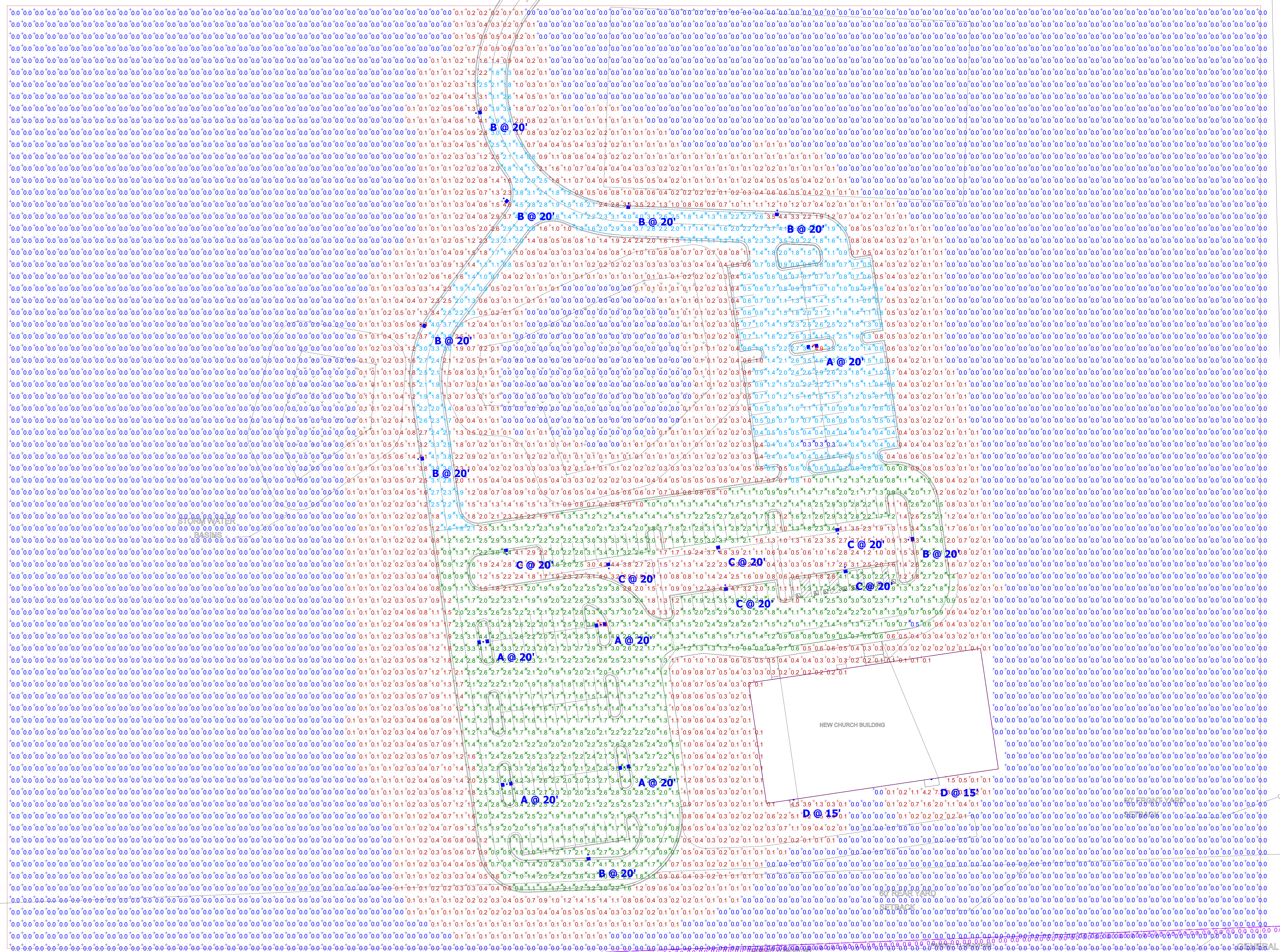




151 L

PROPOSED 75' HALF RIGHT-OF-WAY

50' WIDE RIGHT OF WAY

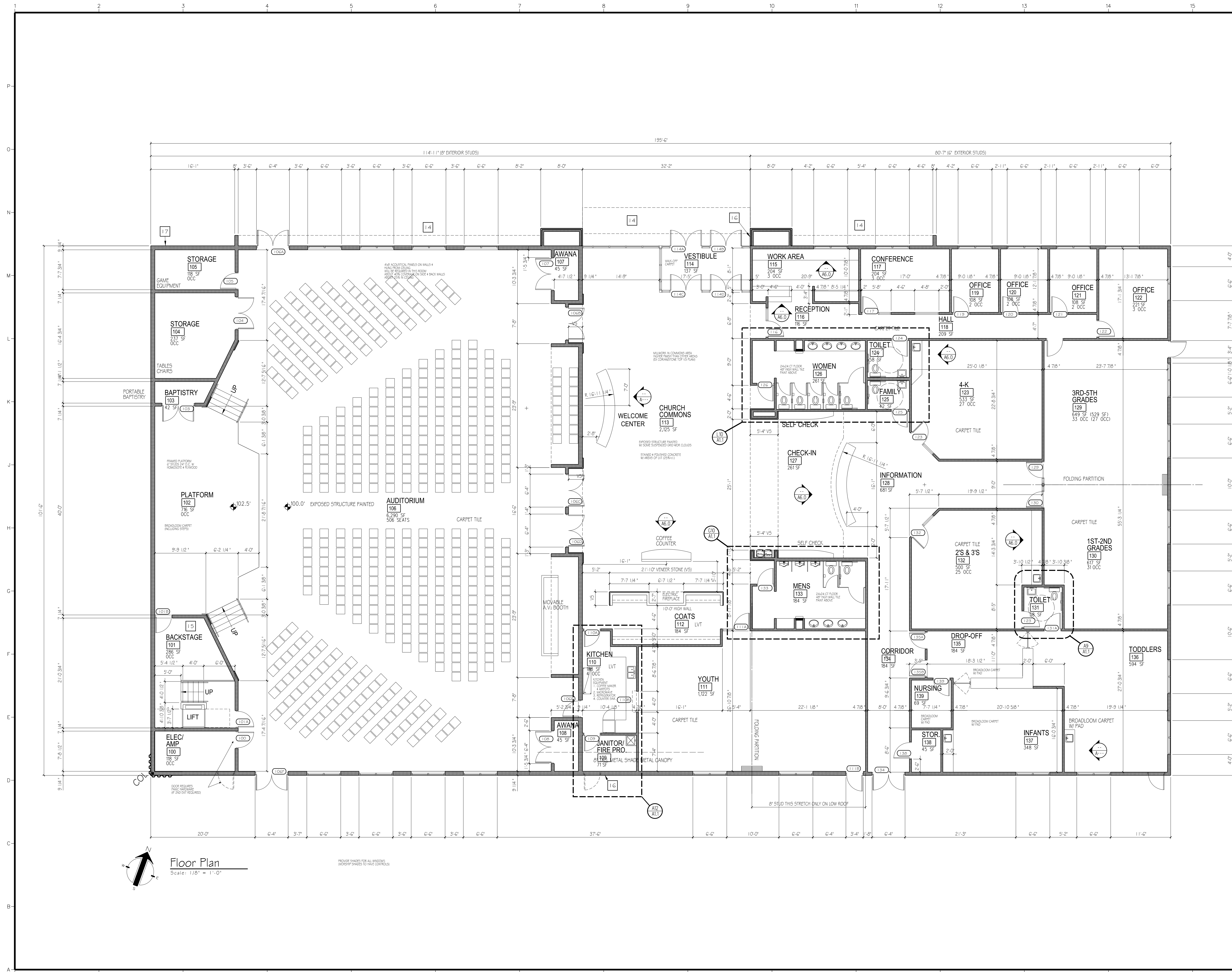


PARCEL: 11-05-201-158 DOODY, STEFANI & JEREMY 3825 SUGARBUSH DR, HOWELL, MI 48843 ZONING: MUPUD	PARCEL: 11-05-201-159 ALESSANDRINI JOSEPH RENWICK JANICE 3857 SUGARBUSH DR, HOWELL, MI 48843 ZONING: MUPUD	PARCEL: 11-05-201-160 SHOUP, BRIAN & JANET 3848 SUGARBUSH DR, HOWELL, MI 48843 ZONING: MUPUD	PARCEL: 11-05-201-161 BROWN JAMES & MERRITT KATLEN 3861 SUGARBUSH DR, HOWELL, MI 48843 ZONING: MUPUD	PARCEL: 11-05-201-162 HAIK, JEFFREY & KAREN 3873 SUGARBUSH DR, HOWELL, MI 48843 ZONING: MUPUD	PARCEL: 11-05-201-163 ROTTACH, PAUL & ASHLEY 3887 SUGARBUSH DR, HOWELL, MI 48843 ZONING: MUPUD	PARCEL: 11-05-201-164 BROWN, KATHLEEN 3909 SUGARBUSH DR, HOWELL, MI 48843 ZONING: MUPUD
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BIBLE BAPTIST CHURCH  
 PHOTO METRIC PLAN  
 PREPARED FOR: BOSS ENGINEERING  
 GASSER BUSH ASSOCIATES  
 WWW.GASSERBUSH.COM

Designer  
 DS  
 Date  
 01/26/2022  
 Scale  
 Not to Scale  
 Drawing No.  
 #22-1359 V1  
 2 of 2





### GENERAL NOTES

- ALL DIMENSIONS ARE TO FACE OF FINISHED SURFACE OR COLUMN CENTER LINE UNLESS NOTED OTHERWISE
- COORDINATE W/ MECH. & ELEC DRAWINGS FOR ALL FLOOR/WALL/ROOF PENETRATIONS NOT SHOWN ON ARCHITECTURAL PLANS, COORDINATE WITH C.M.
- FIELD PAINT ALL MECHANICAL GRILLES & CABINETS TO MATCH ADJACENT SURFACES
- SITE DATUM: MAIN LEVEL FINISH FLOOR  
ASSUMED = 100'-0"  
ACTUAL = 100'-X"
- PROVIDE BLOCKING IN WALLS FOR ALL HANDRAILS, CABINETS, BRACKETS, AVL EQUIPMENT AS REQUIRED (PROVIDE NON-COM WHERE REQUIRED)
- PROVIDE FIRESTOPPING AS REQUIRED AT ALL PENETRATIONS OF RATED ASSEMBLIES
- PROVIDE PROPER FLASHING AT ALL PENETRATIONS, DOORS, WINDOWS, & DISSIMILAR MATERIAL JOINTS

### KEY NOTES

- 36" GRAB BAR
- 42" GRAB BAR
- 1 1/2" VERTICAL GRAB BAR
- TOILET PAPER DISPENSER
- PAPER TOWEL DISPENSER
- RECESSED PAPER TOWEL DISPENSER & DISPOSAL UNIT
- FEMININE NAPKIN DISPOSAL
- 2x3 FRAMED MIRROR
- FRAMELESS MIRROR- SEE ELEVATION FOR SIZE
- URINAL SCREEN W/ CONT BRACKET
- BABY CHANGER
- COAT ROD & SHIELD- MOUNT ROD @ 5'-4" AFF BULKHEAD ABOVE
- SEE REFLECTED CEILING PLAN
- CANOPY ABOVE
- FIRE EXTINGUISHER W/ BRACKET
- KNOX BOX
- FIRE DEPARTMENT CONNECTION

### WALL TYPES

- NOTE: REFER TO SECTIONS & DETAILS FOR EXTERIOR WALLS
- A** 5/8" GYPSUM WALLBOARD  
3 5/8" METAL STUDS @ 16" O.C.  
3" ACOUSTICAL BLANKETS  
5/8" GYPSUM WALLBOARD  
6" STUDS @ A1
  - B** 5/8" GYPSUM WALLBOARD  
3 5/8" METAL STUDS @ 16" O.C.  
5/8" GYPSUM WALLBOARD  
6" STUDS @ B1
  - C** 5/8" GYPSUM WALLBOARD  
3 5/8" METAL STUDS @ 16" O.C.  
(ALL SHAFT WALLS & BULKHEADS)
  - D**

- NOTES:
- REFER TO STRUCTURAL DRAWING FOR CROSS BRACING LOCATIONS
  - GYPSUM WALLBOARD TO EXTEND DECK ABOVE CEILING UNLESS NOTED OTHERWISE
  - ALL EXPOSED CHW CORNERS TO BE BULLNOSE CORNERS
  - ALL WALLS TO BE EXTENDED TIGHT TO STRUCTURE ABOVE W/ SLIP TRACK U.N.O.
  - ALL WOOD FRAMING & SHEATHING IN A-HIB CONSTRUCTION IS REQUIRED TO BE NON-COMBUSTIBLE
  - PROVIDE DAMPERS AS REQUIRED IN ALL RATED ASSEMBLIES, COORDINATE WITH MECHANICAL CONTRACTOR
  - PROVIDE CONTROL JOINTS IN GYPSUM WALLBOARD 30'-0" O.C. MAX AT ALL WALLS
  - WATER RESISTANT GYPSUM WALLBOARD IN TOILET ROOMS & KITCHENS FROM FLOOR TO 4'-0" AFF MIN

Mark	Description	Date
	FOR INITIAL BUDGETING	01/04/22
	SITE PLAN APPROVAL	01/24/22
	30% BUDGETING	02/28/22

Building Design & Documentation © 2021-2023 Jeffrey Parker Architects Inc.

**Jeffrey Parker**  
architects

ARCHITECTURE PLANNING ENGINEERING  
855 28th Street SE  
Grand Rapids MI 49508  
Phone: 616-241-0090  
Fax: 616-241-0098

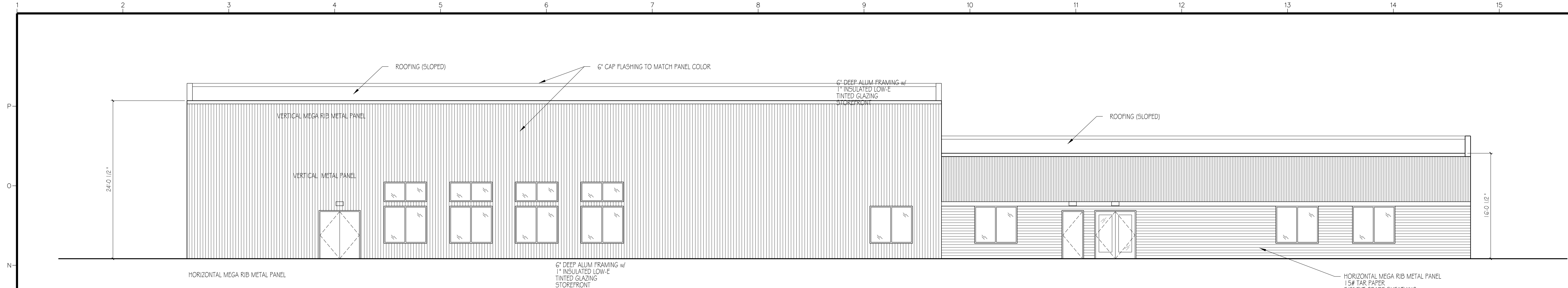
New Facility For:  
**Bible Baptist Church**  
Howell, Michigan

Floor Plan	
Issued	Drawing No.
Project No. 21111	<b>A1.0</b>

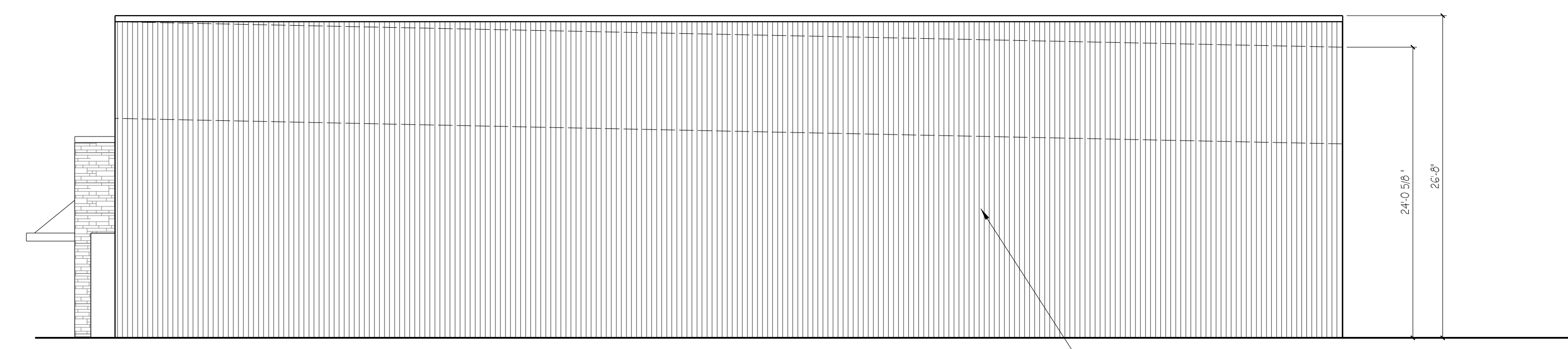


Floor Plan  
Scale: 1/8" = 1'-0"

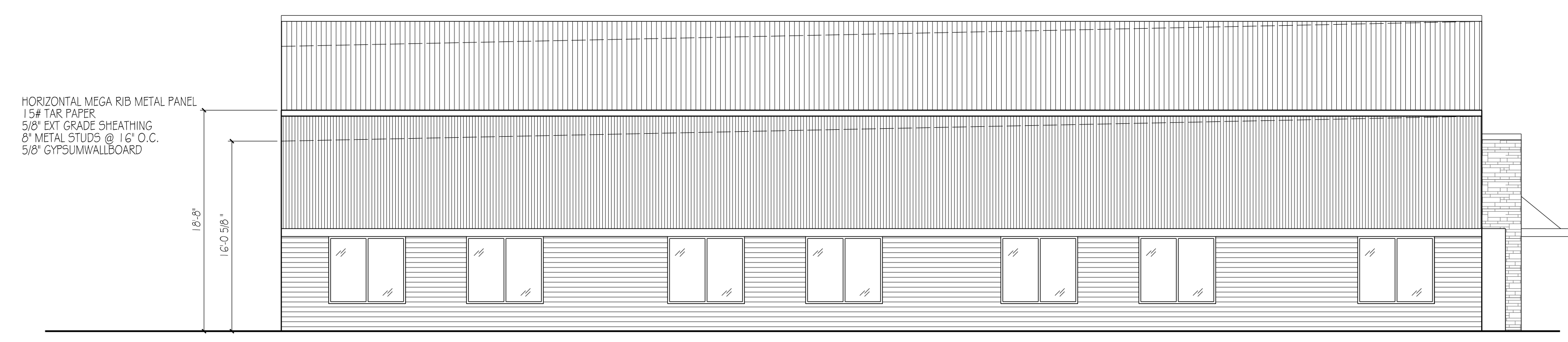
PROVIDE HANDS FOR ALL BRIDGES, (WHERE APPLICABLE TO WALL CONNECTIONS)



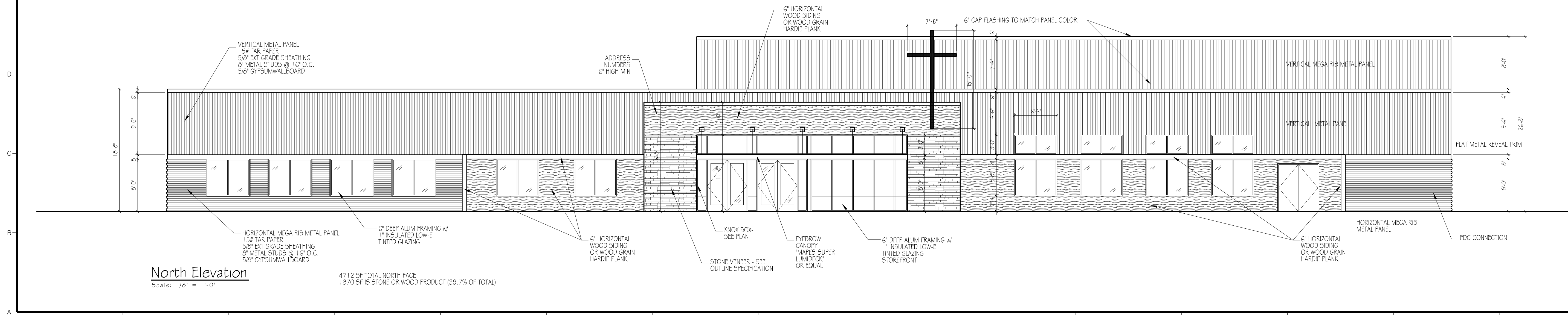
**South Elevation**  
Scale: 1/8" = 1'-0"



**East Elevation**  
Scale: 1/8" = 1'-0"



**West Elevation**  
Scale: 1/8" = 1'-0"



**North Elevation**  
Scale: 1/8" = 1'-0"

4712 SF TOTAL NORTH FACE  
1870 SF IS STONE OR WOOD PRODUCT (39.7% OF TOTAL)

Mark	Description	Date
	FOR INITIAL BUDGETING	01/04/22
	SITE PLAN APPROVAL	01/24/22
	30% BUDGETING	02/28/22

Building Design & Documentation © 2021-2023 Jeffrey Parker Architects Inc.

**Jeffrey Parker**  
architects

ARCHITECTURE PLANNING ENGINEERING

855 28th Street SE  
Grand Rapids MI 49508

Phone: 616-241-0090  
Fax: 616-241-0098

New Facility For:  
**Bible Baptist Church**  
Howell, Michigan

Exterior Elevations	
Issued	Drawing No.
Project No. 21111	<b>A3.0</b>

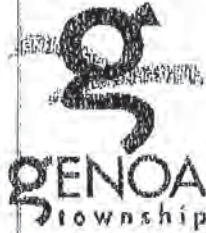




BIBLE BAPTIST CHURCH







**GENOA CHARTER TOWNSHIP**  
**Application for Site Plan Review**

**TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:**

APPLICANT NAME & ADDRESS: Healy Homes at Summerfield LLC, 3696 Sleeth rd. Commerce Mich, 48382  
*If applicant is not the owner, a letter of Authorization from Property Owner is needed.*

OWNER'S NAME & ADDRESS: Healy Homes at Summerfield, 3696 Sleeth rd, Commerce, Mich, 48382

SITE ADDRESS: Lawson and Grand River PARCEL #(s): 34711-04-400-014,015,018

APPLICANT PHONE: (248) 694-1699 OWNER PHONE: (248) 921-2102

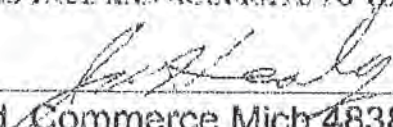
OWNER EMAIL: healyhomes@comcast.net

LOCATION AND BRIEF DESCRIPTION OF SITE: Lawson road north of Grand River  
Adjacent to Some existing attached condominiums

BRIEF STATEMENT OF PROPOSED USE: To build 108 single family homes in place of  
140 attached condominiums.

THE FOLLOWING BUILDINGS ARE PROPOSED: 108 Single family homes

**I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.**

BY: Jack Healy 

ADDRESS: 3696 Sleeth rd, Commerce Mich 48382



**Contact Information** - Review Letters and Correspondence shall be forwarded to the following:

1.) Desine of Engineer at FERNANDO  
Name JACK Healy Business Affiliation OWNER HEALY HOMES E-mail Address jes@desine.com

**FEE EXCEEDANCE AGREEMENT**

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE: *Jack Healy* DATE: \_\_\_\_\_  
 PRINT NAME: Jack Healy PHONE: 248 921 2102  
 ADDRESS: 3696 sleeth rd. Commerce Mich 48382



# GENOA CHARTER TOWNSHIP APPLICATION Planned Unit Development (PUD)

APPLICANT NAME: Healy Homes at Summerfield LLC

APPLICANT EMAIL: healyhomes@comcast.net

APPLICANT ADDRESS & PHONE: 32696 Sleeth Rd, Commerce Twp., 48362 (248) 684-1699

OWNER'S NAME: Jack Healy

OWNER ADDRESS & PHONE: Same as Applicant ( )

TAX CODE(S): 34711-04-400-014,015 & 016

### QUALIFYING CONDITIONS (To be filled out by applicant)

1. A PUD zoning classification may be initiated only by a petition.
2. It is desired and requested that the foregoing property be rezoned to the following type of PUD designation:
  - Residential Planned Unit Development (RPUD)
  - Planned Industrial District (PID)
  - Mixed Use Planned Unit Development (MUPUD)
  - Redevelopment Planned Unit Development (RDPUD)
  - Non-residential Planned Unit Development (NRPUD)
  - Town Center Planned Unit Development (TCPUD)
3. The planned unit development site shall be under the control of one owner or group of owners and shall be capable of being planned and developed as one integral unit.

EXPLAIN A new condominium association will be created for the proposed new units being developed.

4. The site shall have a minimum area of twenty (20) acres of contiguous land, provided such minimum may be reduced by the Township Board as follows:
  - A. The minimum area requirement may be reduced to five (5) acres for sites served by both public water and public sewer.
  - B. The minimum lot area may be waived for sites zoned for commercial use (NSD, GCD or RCD) where the site is occupied by a nonconforming commercial, office or industrial building, all buildings on such site are proposed to be removed and a new use permitted within the underlying zoning district is to be established. The Township Board shall only permit the PUD on the smaller site where it finds that the flexibility in dimensional standards is necessary to allow for innovative design in redeveloping the site and an existing blighted situation will be eliminated. A parallel plan shall be provided showing how the site could be redeveloped without the use of the PUD to allow the Planning Commission to evaluate whether the modifications to dimensional standards are the



minimum necessary to allow redevelopment of the site, while still meeting the spirit and intent of the ordinance.

- C. The PUD site plan shall provide one or more of the following benefits not possible under the standards of another zoning district, as determined by the Planning Commission:
- preservation of significant natural or historic features
  - a complementary mixture of uses or a variety of housing types
  - common open space for passive or active recreational use
  - mitigation to offset impacts
  - redevelopment of a nonconforming site where creative design can address unique site constraints.
- D. The site shall be served by public sewer and water. The Township may approve a residential PUD that is not served by public sewer or water, provided all lots shall be at least one (1) acre in area and the requirements of the County Health Department shall be met.

Size of property is 28.52 acres.

DESCRIBE BELOW HOW THE REQUESTED PUD DESIGNATION COMPLIES WITH AFOREMENTIONED MINIMUM LOT SIZE REQUIREMENTS.

*An amendment to the existing PUD for the approved Summerfield Estates is being requested.*

*The approved overall unit density has been reduced, attached condominiums have been replaced for 108 single family home units and open space & play areas have been provided.*

**STANDARDS FOR REZONING TO PLANNED UNIT DEVELOPMENT (RESPOND HERE OR WITHIN THE IMPACT STATEMENT)**

1. How would the PUD be consistent with the goals, policies and future land use map of the Genoa Township Master Plan, including any subarea or corridor studies. If conditions have changed since the Master Plan was adopted, the consistency with recent development trends in the area;

*The area proposed for development has already been approved to be developed for family residences.*

*The proposed development layout is consistent with the current zoning and development for the adjacent parcels on this area.*

2. The compatibility of all the potential uses in the PUD with surrounding uses and zoning in terms of land suitability, impacts on the environment, density, nature of use, traffic impacts, aesthetics, infrastructure and potential influence on property values;

*The proposed area of development is consistent with the current development surrounding the subject parcel. Existing area to the west is developed as condominiums with a vacant parcel on the SW property corner (Zoned:MUPUD). The existing Sunrise Park subdivision is located along East property line.*

3. The capacity of infrastructure and services sufficient to accommodate the uses permitted in the requested district without compromising the “health, safety and welfare” of the Township;

*All utilities will be provided for the proposed development area. Water main and sanitary sewer will be provided by MHOG. A sanitary manhole for vacant parcel along the West property line will be provided for future connection. An existing on-site detention basin will provide storm management.*

Electric provider: DTE Gas: Consumers Energy, Phone & Fiber Optic: AT&T

The applicant demands for the types of uses permitted in the P.L.D.

A drop on demand and a lack of financing for attached condominiums is driving the revision to single family homes for development.

**AFFIDAVIT**

The undersigned says that they are the Owner (owner, lessee, or other specified interest) involved in this petition and that the foregoing answers and statements hereth contained and the information herewith submitted are in all respects true and correct to the best of his/her knowledge and belief.

BY: Jack Healy *Jack Healy* 12/14/21

ADDRESS: 32696 Sleeth Rd, Commerce Twp., MI 48362

*Contact Information - Review Letters and Correspondence shall be forwarded to the following:*

<u>Jack Healy</u>	of <u>Healy Homes at Summerfield LLC</u>	at <u>healyhomes@comcast.net</u>
<small>NAME</small>	<small>Business Affiliation</small>	<small>E-mail</small>

**FEE EXCELLENCE AGREEMENT**

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

PROJECT NAME: Summerfield Pointe Estates

PROJECT LOCATON & DESCRIPTION: Genoa Township, Livingston County, MI

SIGNATURE: *Jack Healy* DATE: 12/14/21

PRINT NAME: Jack Healy PHONE: (248) 684-1699

COMPANY NAME & ADDRESS: Healy Homes at Summerfield LLC



GENOA TOWNSHIP  
APPLICATION FOR PRIVATE ROAD  
2911 Dorr Road, Brighton MI 48116 (810) 227-5225

A private road requiring approval of the Township shall be any road providing access to more than four dwelling units or two non-residential principal buildings. This does not include drives within a multiple family complex or parking lot aisles, but does include collector type roadways within such a development.

APPLICANT: *Healy Homes at Summerfield LLC*

OWNER ADDRESS: *32696 Sleeth Rd, Commerce Twp., 48362 (248) 684-1699*

SITE ADDRESS: *Lawson Drive. 1,300 ft. North of Grand River Ave. Intersection*

APPLICABILITY OF PUBLIC VS. PRIVATE ROAD STANDARDS

All private roads in Genoa Township shall be constructed to the standards of the Livingston County Road Commission unless the Planning Commission and Township Board determine your road qualifies under the following ordinance criteria:

1. Explain how there will be no need for the roadway to be dedicated as a public road in the future.

*SEE ATTACHED*

2. Explain how dedication of the road as a public street would not result in continuity in the public street system at the present time or in the future.

*SEE ATTACHED*

3. What uses (number of lots, number of residential units, number of buildings, etc) will have access from the private road. Will the expected traffic volumes along the roadway be below three hundred vehicles per average weekday, based on accepted trip generation figures?

*SEE ATTACHED*

4. Are there any significant natural features such as mature trees, natural slopes, wetlands or other water bodies would be preserved through construction and maintenance as a private road?

*SEE ATTACHED*

5. What financial and administrative mechanisms will be provided to ensure maintenance of the private road?

*SEE ATTACHED*

**AFFIDAVIT**

The undersigned says that they are the Owner (owner, lessee, or other specified interest) involved in this petition and that the foregoing answers and statements herein contained and the information herewith submitted are in all respects true and correct to the best of his/her knowledge and belief.

By: Jack Healy

Address: 32696 Sleeth Rd, Commerce Twp., 48362 Phone: (248) 684-1699

<b>Contact Information</b> - Review Letters and Correspondence shall be forwarded to the following:		
1.) <u>Fernando Abudeye</u>	of <u>Desine Inc.</u>	at ( <u>810</u> ) <u>227-9460</u>
<i>Name</i>	<i>Business Affiliation</i>	<i>Fax No.</i>

<b>FEE EXCEEDANCE AGREEMENT</b>	
As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.	
PROJECT NAME:	<u>Summerfield Pointe Estates</u>
PROJECT LOCATON & DESCRIPTION:	<u>Lawson Drive. 1,300 ft. North of Grand River Ave.</u> <u>Amendment to approved PUD plan</u>
SIGNATURE:	DATE:
PRINT NAME:	PHONE: <u>(248) 684-1699</u>
COMPANY NAME & ADDRESS:	<u>Healy Homes at Summerfield LLC</u>



APPLICABILITY OF PUBLIC VS. PRIVATE ROAD STANDARDS

1. Explain how there will be no need for the roadway to be dedicated as a public road in the future.  
*The proposed PUD will not impact the existing through traffic of the existing roads adjacent to the site (Lawson Drive, Whitehorse Drive & Grand River Ave.)  
 All future maintenance and improvements on this road will be done by the home owners association for the development.*

2. Explain how dedication of the road as a public street would not result in continuity in the public street system at the present time or in the future.  
*The proposed road will connect to an existing private road, Aster Blvd. within the adjacent Lakewood Knolls No. 2 PUD development. This connection does not provide continuity of the public street system.*

3. What uses (number of residential units, number of buildings, etc) will have access from the private road. Will the expected traffic volumes along the roadway be below three hundred vehicles per average weekday, based on accepted trip generation figures?  
*Per proposed traffic impact study analysis for "Stone Edge Pointe PUD" and dated August 31, 1999, the projected peak hour traffic for the development is expected in the P.M. hours with 102 vehicles entering, and 61 vehicles exiting.  
 A summary of the existing and proposed condominiums, and single-family homes is as follows:*

SUMMERFIELD POINTE PRIVATE ROAD ACCESS SUMMARY				
ROAD	TYPE OF UNIT	UNIT NUMBER	No. UNITS W/1 CAR GARAGE	No. UNITS W/2 CAR GARAGE
Summer Ridge Drive	Attached Condominium (Existing)	9-24, 29-52	40	0
Summer Ridge Drive	Attached Condominium (Proposed)	1-4	4	0
Summer Ridge Drive	Single Family Homes (Proposed)	6, 15-29, 30-49	0	36
$\Sigma =$			<b>44</b>	<b>72</b>
Lawson Drive	Attached Condominium (Existing)	5-8	4	0
Lawson Drive	Single Family Homes (Proposed)	1-5, 7-14, 50-108	0	72
$\Sigma =$			<b>4</b>	<b>144</b>

*A total of 72 single-family homes and 4 condominiums will have access to Lawson Drive, and 36 single-family homes and 48 condominiums will have access to Summer Ridge Drive.*


4. Are there any significant natural features such as mature trees, natural slopes, wetlands or others water bodies that would be preserved through construction and maintenance as a private road?  
*The proposed PUD amendment maintains the previously approved road layout. The overall geography of the site will be modified with as minimum fill as required to provide adequate utility ground cover and provide sewer service to the proposed units. Existing grades will be match at all property lines and at all construction limits of disturbance. Existing trees located outside of limits*

5. What financial and administrative mechanisms will be provided to ensure maintenance of the private road?

SEE ATTACHED

**AFFIDAVIT**

The undersigned says that they are the Owner (owner, lessee, or other specified interest) involved in this petition and that the foregoing answers and statements herein contained and the information herewith submitted are in all respects true and correct to the best of his/her knowledge and belief.

By: Jack Healy   
Address: 32696 Skeeth Rd, Commerce Twp., 48362 Phone: (248) 684-1699

**Contact Information** - Review Letters and Correspondence shall be forwarded to the following:

<u>1.) Fernando Abudeye</u>	of	<u>Desine Inc.</u>	at	<u>810,227-9460</u>
Name		Business Affiliation		Fax No.

**FEE EXCERDANCE AGREEMENT**

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

PROJECT NAME: Summerfield Pointe Estates

PROJECT LOCATON & DESCRIPTION: Lawson Drive, 1,300 ft. North of Grand River Ave.  
Amendment to approved PUD plan

SIGNATURE:  DATE: 3/22/2022

PRINT NAME: \_\_\_\_\_ PHONE: (248) 684-1699

COMPANY NAME & ADDRESS: Healy Homes at Summerfield LLC



**ALEXANDRA E. DIECK**  
ADIECK@BODMANLAW.COM  
734-930-2484

February 22, 2022

***VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED***

BODMAN PLC  
SUITE 400  
201 SOUTH DIVISION STREET  
ANN ARBOR, MICHIGAN 48104  
734-930-2494 FAX  
734-761-3780

Township of Genoa  
Township Clerk's Office  
2911 Dorr Rd, Brighton  
MI 48116

Environmental Health Programs Unit  
Attn: Onsite Wastewater Program  
Drinking Water and Municipal  
Assistance Division  
Michigan Department of Environmental  
Quality  
P.O. Box 30817  
Lansing, MI 48909-8311

**bodman**  
ATTORNEYS & COUNSELORS

Livingston County Drain Commissioner  
2300 E. Grand River Ave., #105  
Howell, MI 48843

Plat/Condominium Coordinator  
MDOT – Innovative Contracting Unit  
Design Division, 2nd Floor  
425 W. Ottawa St.  
P.O. Box 30050  
Lansing, MI 48909

Livingston County Road Commission  
3535 Grand Oaks Dr.  
Howell, MI 48843

**Re: Summerfield Pointe Estates  
in Township of Genoa, Livingston County, Michigan**

Dear Sir/Madam:

Pursuant to the Michigan Condominium Act, I enclose a Notice of Intent to Establish Summerfield Pointe Estates, a condominium with respect to property located in the Township of Genoa, Livingston County, Michigan.

If you have questions about the content of this Notice, please contact me.

Sincerely,

*Alexandra E. Dieck*

Alexandra E. Dieck

AED/az  
Enc.

DETROIT | TROY | ANN ARBOR | CHEBOYGAN | GRAND RAPIDS



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY  
DRINKING WATER AND ENVIRONMENTAL HEALTH DIVISION

**NOTICE OF INTENT TO ESTABLISH CONDOMINIUM PROJECT**

Issued under authority of Public Act 59 of 1978, as amended, Section 71

"Sec. 71. Not less than 10 days before taking reservations under a preliminary reservation agreement for a unit in a condominium project, recording a master deed for a project, or beginning construction of a project which is intended to be a condominium project at the time construction is begun, whichever is earliest, a written notice of proposed action shall be provided to each of the following:

- A. The appropriate city, village, township, or county.
- B. The appropriate county road commission and county drain commissioner.
- C. The Department of Environment, Great Lakes, and Energy.
- D. The state transportation department."

<b>Project Name:</b> Summerfield Pointe Estates	<b>County:</b> Livingston
<b>City/Township:</b> Genoa Charter Township	<b>Type of Development:</b> New Construction: <input checked="" type="radio"/> Conversion: <input type="radio"/>
<b>The Number of Units:</b> 108	<b>Total Property Size:</b>

Applicable rules and information can be found at Michigan.gov/EGLEOnsiteWastewater. The following request for information is intended to facilitate developer notification of proposed action to the Michigan Department of Environment, Great Lakes, and Energy (EGLE).

The completed form should be returned to:

Environmental Health Programs Unit  
Attn: Onsite Wastewater Program  
Drinking Water and Environmental Health Division  
Michigan Department of Environment, Great Lakes, and Energy  
P.O. Box 30817  
Lansing, Michigan 48909-8311

<b>Name and address of developer:</b> Healy Homes of Summerfield LLC 3696 Sleeth Road Commerce Township, Michigan 48382
<b>Name and address of firm preparing the condominium subdivision plan:</b> DESIGN INC. 2103 PLESS DR. BRIGHTON, MI 48116
<b>Legal description of property:</b>

**Wastewater System Information:**

A. The owner/developer will construct a public wastewater system to serve this project? Yes <input checked="" type="radio"/> No <input type="radio"/>
B. If yes, has the owner/developer obtained the necessary construction permit from EGLE? Yes <input type="radio"/> No <input checked="" type="radio"/> Permit Number:
C. This project will connect to an existing municipal wastewater treatment system and no new extension is required? Yes <input checked="" type="radio"/> No <input type="radio"/> Government Entity: M.H.O.G.



- D. Is an extension of an existing municipal wastewater treatment system needed to serve this project?  
 Yes  No
- E. If yes, has the municipality obtained a construction permit from EGLE?  
 Yes  No   
 Permit Number: \_\_\_\_\_

**Water System Information:**

- A. The owner/developer will construct a public water system to serve this project?  
 Yes  No
- B. If yes, will the water system serve more than 25 people or have more than 15 service connections?  
 Yes  No
- C. If yes, has the owner/developer obtained the necessary construction permit from EGLE?  
 Yes  No   
 Permit Number: \_\_\_\_\_
- D. This project will connect to an existing water main that is part of a municipal water system and no new water main extension is required?  
 Yes  No   
 Governmental Entity: M.H.O.B.
- E. Is an extension of an existing municipal water system needed to serve the project?  
 Yes  No
- F. If yes, has the municipality obtained a construction permit from EGLE?  
 Yes  No   
 Permit Number: \_\_\_\_\_

**Individual Onsite Sewage Disposal Systems and/or Individual Well Information:**

*In accordance with Section 71(a) of the Condominium Act, if public water and public sewers are not available and it is intended that the project will be served by individual onsite sewage disposal systems and/or individual wells, the developer shall submit three copies of the condominium subdivision plan to EGLE or local health department (LHD) that elects to maintain jurisdiction.*

- A. Project is intended to be served by individual onsite sewage disposal systems for each unit?  
 Yes  No   
 If yes, has the LHD completed their review of the project?  
 Yes  No
- B. Project is intended to be served by individual wells for each unit?  
 Yes  No   
 If yes, has the LHD completed their review of the project?  
 Yes  No
- C. The required plans will be filed with:  
 EGLE  
 Date plans will be filed: JUNE 2022 (TWP. APPROVAL IN PROCESS)  
 The LHD  
 Date plans will be filed: \_\_\_\_\_
- D. Has the form; Subdivision and Condominium Site Report (EGLE form EQP1755) been completed and submitted to the LHD for preliminary review if Onsite Sewage or Individual Well proposed? Yes  No

Name: Alexandra E. Dieck	Title: Agent
Signature: <u>Alexandra E. Dieck</u>	Date: December 30, 2021

**LEGAL DESCRIPTIONS SUBSEQUENT TO SURVEY**

**Reference:** "Summerfield Pointe," a part of the Southeast 1/4 and part of the Northeast 1/4 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, according to the Master Deed thereof, as recorded in Liber 4218, Page 874, Livingston County Records, as amended in Replat No. 1 as recorded in Document No. 2008R-028520 and \*Replat No. 2 as recorded in Document No. 2014R-006883, Livingston County Records, and designated as Livingston County Condominium Subdivision Plan No. 295, and as described in Act 59 of the Public Acts of 1978, as amended.

**OVERALL PARCEL 60.73± Acres**

**(Parcels 4711-04-400-013, 014, 015, 016 and "Summerfield Pointe" Replat #2 Combined)**

Part of the East 1/2 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; described as:

**BEGINNING** at the South 1/4 Corner of said Section 4;

thence along the North-South 1/4 line of Section 4 to following two courses:

- 1) N01°35'17"W 1366.11 feet and
- 2) N02°11'05"W 1525.13 feet

(recorded as N01°50'51"E 2890.65 feet) to the center of Section 4;

thence along the East-West 1/4 line of Section 4, N88°53'35"E 1177.52 feet (recorded as S87°40'06"E 1162.17 feet);

thence N01°06'25"W (recorded as N02°19'54"E) 16.05 feet;

thence S88°08'25"E (recorded as S84°42'06"E) 140.66 feet;

thence S10°02'44"W (recorded as S13°29'03"W) 81.90 feet;

thence S22°34'43"E 40.64 feet (recorded as S19°08'24"E 39.61 feet);

thence S01°33'04"E 373.67 feet (recorded as S01°53'15"W 374.11 feet);

thence S84°41'09"W (recorded as S88°06'46"W) 683.63 feet;

thence S01°59'18"E (recorded as S01°26'28"W) 400.04 feet;

thence S02°08'43"E 510.56 feet (recorded as S01°17'41"W 510.39 feet);

thence N84°03'00"E (recorded as N87°29'24"E) 79.92 feet;

thence along a line 10.00 feet West of and parallel to the Westerly line of "Sunrise Park", a subdivision recorded in Liber 2 of Plats, Page 23, Livingston County Records, S01°00'54"E 244.55 feet (recorded as S02°21'39"W 243.95 feet);

thence S01°39'07"E 226.89 feet (recorded as S01°45'17"W 227.42 feet);

thence N89°34'14"E (recorded as S87°01'22"E) 186.47 feet;

thence along the West line of said "Sunrise Park" the following three courses

- 1) S51°44'32"E (recorded as S48°20'08"E) 240.00 feet,
- 2) S41°02'02"E 146.55 feet (recorded as S37°37'38"E 146.14 feet) and
- 3) S01°47'25"E 385.18 feet (recorded as S01°42'54"W 386.00 feet);

thence S88°43'10"W 10.00 feet (recorded as N88°17'06"W 10.00 feet);

thence along a line 10 feet West of and parallel to the West line of said "Sunrise Park" the following two courses:

- 1) S01°43'30"E 241.29 feet (recorded as S1°42'54"W 241.14 feet) and
- 2) S14°28'55"E 48.77 feet (recorded as S11°13'33"E 48.86 feet);

thence along the South line of said Section 4, as previously surveyed, S86°50'35"W (recorded as N89°43'06"W) 473.99 feet;

thence along a line coincident with Lawson Drive the following three courses:

- 1) N05°38'45"W (recorded as N02°12'21"W) 150.00 feet,
- 2) S86°50'35"W (recorded as N89°43'06"W) 150.00 feet and
- 3) S05°38'45"E (recorded as S02°12'21"E) 150.00 feet;



thence along the South line of said Section 4, as previously surveyed, S86°50'35"W 546.06 feet (*recorded as N89°43'06"W 546.16 feet*) to the Point of Beginning.

Containing 60.73 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises..

**PARCEL 4711-04-400-013 22.22± Acres**  
**(Nature Preserve as recorded in Liber 3772, Page 940, Livingston County Records)**

Part of the East 1/2 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; described as:

Commencing at the South 1/4 Corner of said Section 4;

thence along the North-South 1/4 line of Section 4 to following two courses:

- 1) N01°35'17"W (recorded as N01°50'51"E) 1366.11 feet and
- 2) N02°11'05"W (recorded as N01°50'51"E) 569.39 feet to the **PLACE OF BEGINNING** and
- 3) N02°11'05"W (recorded as N01°50'51"E) 955.74 feet to the center of Section 4;

thence along the East-West 1/4 line of Section 4, N88°53'35"E 1177.52 feet (recorded as S87°40'06"E 1162.17 feet);

thence N01°06'25"W (recorded as N02°19'54"E) 16.05 feet;

thence S88°08'25"E (recorded as S84°42'06"E) 140.66 feet;

thence S10°02'44"W (recorded as S13°29'03"W) 81.90 feet;

thence S22°34'43"E 40.64 feet (recorded as S19°08'24"E 39.61 feet);

thence S01°33'04"E 373.67 feet (recorded as S01°53'15"W 374.11 feet);

thence S84°41'09"W (recorded as S88°06'46"W) 683.63 feet;

thence S01°59'18"E (recorded as S01°26'28"W) 400.04 feet;

thence S02°08'43"E (recorded as S01°17'41"W) 132.62 feet;

thence along the East line of a Nature Preserve as recorded in Liber 3772, Page 940, Livingston County Records, the following three courses:

- 1) S87°51'55"W (recorded as N88°42'19"W) 144.66 feet
- 2) N54°02'14"W (recorded as N50°36'28"W) 244.39 feet and
- 3) S82°05'20"W 291.13 feet (recorded as S85°31'06"W 285.32 feet) to the Place of Beginning.

Containing 22.22 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.



**PARCEL 4711-04-400-014 26.25± Acres**  
**(\*Part of Possible Expansion/Future Development Area "A")**

Part of the East 1/2 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan;  
described as:

**BEGINNING** at the South 1/4 Corner of said Section 4;

thence along the North-South 1/4 line of Section 4 to following two courses:

- 1) N01°35'17"W 1366.11 feet and
- 2) N02°11'05"W 569.39 feet  
(*recorded as N01°50'51"E 1936.02 feet*);

thence along the East line of a Nature Preserve as recorded in Liber 3772, Page 940, Livingston County  
Records, the following three courses:

- 1) N82°05'20"E 291.13 feet (*recorded as N85°31'06"E 285.32 feet*),
- 2) S54°02'14"E (*recorded as S50°36'28"E*) 244.39 feet and
- 3) N87°51'55"E (*recorded as S88°42'19"E*) 144.66 feet;

thence S02°08'43"E (*recorded as S01°17'41"W*) 377.94 feet;

thence N84°03'00"E (*recorded as N87°29'24"E*) 79.92 feet;

thence along a line 10.00 feet West of and parallel to the Westerly line of "Sunrise Park", a subdivision  
recorded in Liber 2 of Plats, Page 23, Livingston County Records, S01°00'54"E 244.55 feet (*recorded as*  
*S02°21'39"W 243.95 feet*);

thence S01°39'07"E 226.89 feet (*recorded as S01°45'17"W 227.42 feet*);

thence S67°21'52"W 79.51 feet (*recorded as S70°51'31"W 80.28 feet*);

thence S79°55'57"W (*recorded as S83°20'15"W*) 95.00 feet;

thence S03°24'18"E (*recorded as S00°00'00"W*) 97.26 feet;

thence S80°36'56"W (*recorded as S84°01'14"W*) 77.58 feet;

thence S09°28'23"E (*recorded as S06°04'05"E*) 130.52 feet;

thence S78°24'48"E 34.65 feet (*recorded as S75°00'30"E 34.93 feet*);

thence S12°42'26"E 416.34 feet (*recorded as S09°16'02"E 416.23 feet*);

thence Southeasterly 59.62 feet along the arc of a 200.00 foot radius curve to the right, through a central angle  
of 17°04'52" and having a chord bearing S04°10'00"E (*recorded as S00°43'36"E*) 59.40 feet;

thence S04°22'26"W (*recorded as S07°48'50"W*) 13.56 feet;

thence S80°11'15"W (*recorded as S83°37'39"W*) 60.77 feet;

thence S03°26'24"E (*recorded as S00°00'00"W*) 34.61 feet;

thence along the West line of Lawson Drive, S05°38'45"E (*recorded as S02°12'21"E*) 150.00 feet;

thence along the South line of Section 4, as previously surveyed, S86°50'35"W 546.06 feet (*recorded as*  
*N89°43'06"W 546.16 feet*) to the Point of Beginning.

Containing 26.25 acres of land, more or less. Subject to and together with all easements and restrictions  
affecting title to the above described premises.

**PARCEL No. 4711-04-400-015 1.13± Acres  
(\*Possible Expansion/Future Development Area "B")**

Part of the Southeast 1/4 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; described as:

Commencing at the South 1/4 Corner of said Section 4;

thence along the South line of Section 4, as previously surveyed, N86°50'35"E 546.06 feet (*recorded as S89°43'06"E 546.16 feet*);

thence along the West line of Lawson Drive, N05°38'45"W (*recorded as N02°12'21"W*) 150.00 feet;

thence N03°26'24"W (*recorded as N00°00'00"E*) 34.61 feet;

thence N80°11'15"E (*recorded as N83°37'39"E*) 60.77 feet;

thence N04°22'26"E (*recorded as N07°48'50"E*) 13.56 feet;

thence Northwesterly 59.62 feet along the arc of a 200.00 foot radius curve to the left, through a central angle of 17°04'52" and having a chord which bears N04°10'00"W (*recorded as N00°43'36"W*) 59.40 feet;

thence N12°42'26"W (*recorded as N09°16'02"W*) 159.13 feet;

thence N77°18'10"E (*recorded as N80°43'58"E*) 27.00 feet to the **POINT OF BEGINNING**;

thence N12°42'26"W (*recorded as N09°16'02"W*) 306.30 feet;

thence Northeasterly 30.26 feet along the arc of a 20.00 foot radius curve to the right, through a central angle of 86°41'26" (*recorded as 86°41'33"*) and having a chord bearing N30°27'50"E (*recorded as N34°04'44"E*) 27.46 feet;

thence Southeasterly 201.82 feet along the arc of a 289.00 foot radius curve to the right, through a central angle of 40°00'52" (*recorded as 40°00'44"*) and having a chord bearing S86°00'33"E (*recorded as S82°34'07"E*) 197.75 feet;

thence S23°59'50"W (*recorded as S27°26'14"W*) 147.43 feet;

thence S36°36'45"E (*recorded as S33°10'21"E*) 58.47 feet;

thence S12°42'26"E (*recorded as S09°16'02"E*) 97.80 feet;

thence S77°17'34"W (*recorded as S80°43'58"W*) 143.83 feet to the Point of Beginning.

Containing 1.13 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.



**PARCEL No. 4711-04-400-016 1.14± Acres  
(\*Possible Expansion/Future Development Area "C")**

Part of the Southeast 1/4 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; described as:

Commencing at the South 1/4 Corner of Section 4, thence along the South line of Section 4, N86°50'35"E (recorded as S89°43'05"E) 999.68 feet to the **POINT OF BEGINNING**;

thence N48°02'05"W (recorded as N44°35'46"W) 135.18 feet;

thence N41°10'45"E (recorded as N44°37'04"E) 9.00 feet;

thence N50°03'17"W (recorded as N46°36'58"W) 27.00 feet;

thence Northeasterly 123.38 feet along the arc of a 182.00 foot radius curve to the left, through a central angle of 38°50'28" (recorded as 38°50'33") and having a chord bearing N20°31'27"E (recorded as N23°57'46"E)

121.03 feet;

thence S84°58'30"E 227.08 feet (recorded as S81°32'11"E 227.01 feet);

thence along a line 10.00 feet West of and parallel to the Westerly line of said "Sunrise Park" the following two courses:

1) S01°43'30"E 151.43 feet (recorded as S01°42'54"W 151.38 feet) and

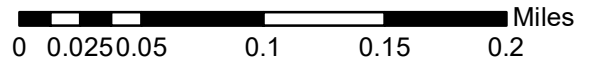
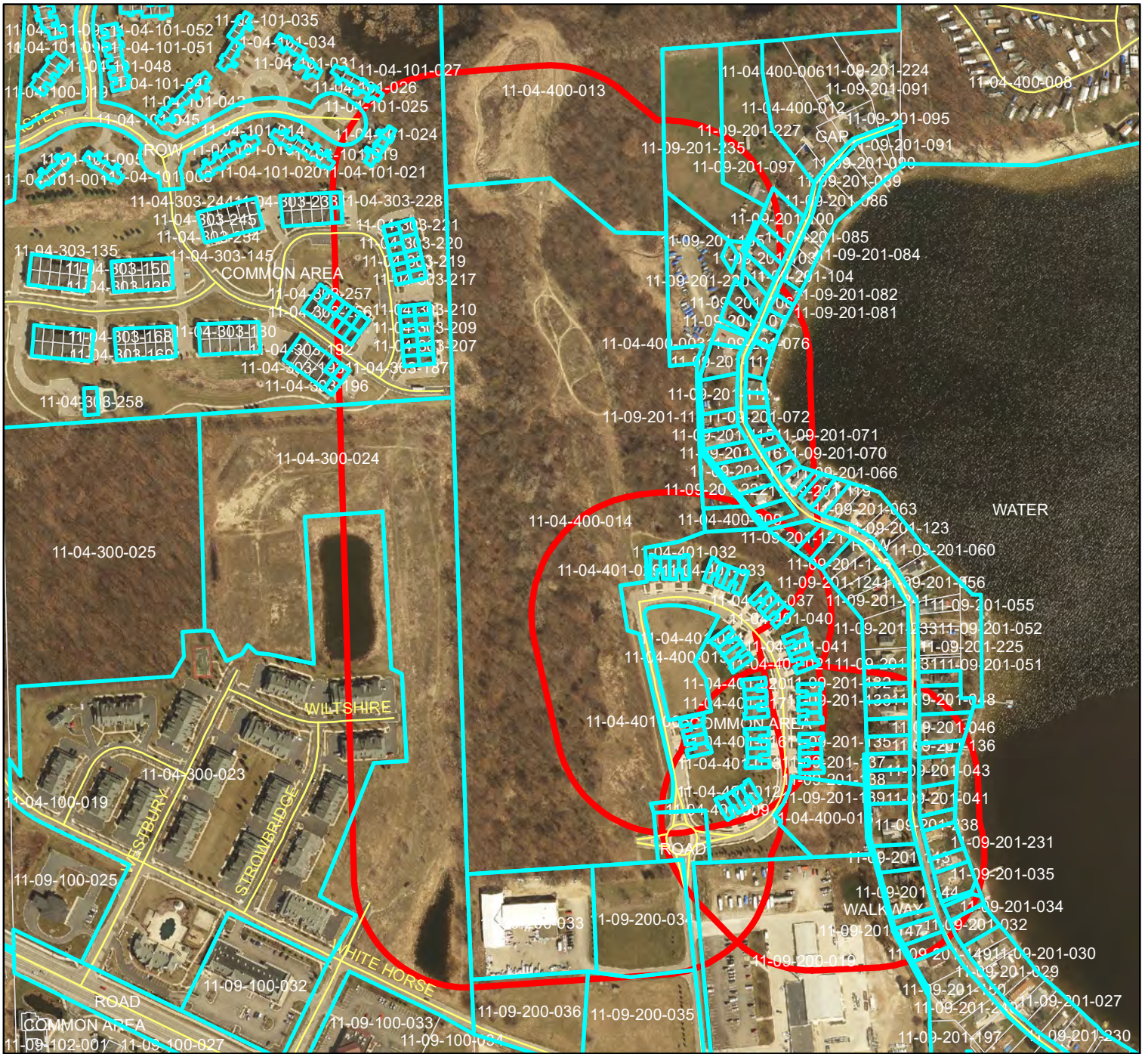
2) S14°28'55"E 48.77 feet (recorded as S11°13'33"E 48.86 feet);

thence along the South line of Section 4, S86°50'35"W 170.37 feet (recorded as N89°43'06"W 170.47 feet) to the Point of Beginning.

Containing 1.14 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.



# 300 Foot Buffer for Noticing



Site Plan Review: Healy Homes

Address: Lawson and Grand River

Parcels: 4711-04-400-014, -015, -018

Meeting Date: April 11, 2022



March 22, 2022





April 6, 2022

Planning Commission  
Genoa Township  
2911 Dorr Road  
Brighton, Michigan 48116

<b>Attention:</b>	Kelly Van Marter, AICP Planning Director and Assistant Township Manager
<b>Subject:</b>	Summerfield Pointe Estates – PUD Amendment and Preliminary Site Condominium Plan Review #2
<b>Location:</b>	Lawson Drive, north of Grand River Avenue
<b>Zoning:</b>	MUPUD Mixed Use Planned Unit Development

Dear Commissioners:

At the Township’s request, we have reviewed the revised submittal from Healy Homes requesting an amendment to the approved PUD for Summerfield Pointe Estates, as well as preliminary site condominium plan review (plans dated 3/23/22).

**A. Summary**

**1. PUD Amendment:**

- a. The applicant proposes to construct 108 detached residential units in lieu of the 140 attached units that are included in the approved PUD.
- b. Dimensional deviations are sought for lot width, lot area, and combination of side yard setbacks.
- c. The draft PUD Agreement should reference the MDR requirement for combination of side yard setbacks, as opposed to building spacing.
- d. The applicant must address the Township’s comments on the draft PUD Agreement.

**2. Preliminary Site Condominium Plan:**

- a. The applicant must address any comments provided by the Township Attorney on the draft condominium documents.
- b. The guest parking spaces that occupy a portion of proposed Unit 6 should be removed.
- c. Details are needed as to what restrictions are established by the proposed conservation easement.
- d. Details of the southeasterly open space must be added to the plans.
- e. The Commission should consider comments provided by the Township Engineer and/or Brighton Area Fire Authority.

**3. Private Road:**

- a. There is insufficient information to determine whether the Township may allow variation from public roadway standards.
- b. The submittal does not include a Private Road Maintenance Agreement.
- c. The required easement width is not provided.
- d. The dimensional requirements for medians do not appear to be met.
- e. The plans do not identify any street signs.
- f. Design details such as AASHTO standards, pavement, curb and gutter, grades, and curves, are subject to review by the Township Engineer.



*Aerial view of site and surroundings (looking east)*

## **B. Proposal/Process**

The applicant proposes to amend an approved PUD by constructing 108 detached residential site condominium units in lieu of 140 attached residential condominium units.

In accordance with Section 10.11, the PUD amendment requires review and recommendation by the Planning Commission, and final review/approval by the Township Board (including execution of an amended PUD Agreement).

Furthermore, site condominium plans require preliminary and final review/approval, both of which go before the Planning Commission for recommendation to the Township Board (including the private road plan).

In this instance, the Township may process the PUD amendment and preliminary site condominium plan simultaneously, though two separate actions should be taken.

Favorable consideration on the preliminary site condominium plan should be conditioned upon Township Board approval of the PUD amendment.

## **C. PUD Amendment**

The approved PUD calls for an additional 140 attached residential condominium units (beyond what is already constructed). At this time, the applicant seeks to amend the PUD to allow 108 detached residential site condominium units in lieu of the 140 attached units.

The plan and accompanying amendment to the PUD Agreement identify 4 phases that include construction of residential units, extension of Lawson Drive with a connection to Aster Boulevard, construction of Summer Ridge Drive, extension of necessary utilities, and open space areas.

The draft PUD Agreement includes dimensional standards and deviations sought for the proposed detached units.

Township staff provided the applicant with a number of comments to be addressed in the draft PUD Agreement. If the Commission considers a favorable recommendation, we suggest this be included as a condition.



**D. Preliminary Site Condominium Plan**

- 1. Submittal Requirements.** The initial submittal included the required condominium documents (master deed and by-laws). Consistent with past practice, the applicant must address any comments provided by the Township Attorney.

In response to comments raised in our initial review letter regarding compatibility of Units 1-6 and the existing attached residential, the applicant has added evergreen buffering along the rear of Units 1-3 and notes that the facades of the detached residential will match those of the attached.

Our only additional comment related to this item is that the guest parking spaces that occupy a portion of Unit 6 should be removed.

- 2. Dimensional Requirements.** The proposal identifies units ranging in area from 0.14 to 0.25-acres, with a minimum width of 55 feet.

The revised plan includes a table noting deviations sought from MDR lot width and area (75' and 10,000 SF, respectively).

The applicant also seeks to deviate from the combined side yard setback requirement, though this is stated as a spacing between buildings (14') in the draft PUD Agreement.

We request the applicant amend the draft Agreement to reference the combination of side yard setbacks (as opposed to building spacing) for consistency with the MDR requirements.

- 3. Buildings.** The revised submittal includes elevation drawings depicting 5 different home types, including multiple variations thereof.

The front facades are primarily brick, with horizontal siding depicted as accents. Side and rear elevations consist primarily of horizontal siding with a small amount brick around the base of each building type.

- 4. Pedestrian Circulation.** The plan includes 5-foot wide concrete sidewalks throughout the proposed development.

- 5. Vehicular Circulation.** The development includes extension of Lawson Drive, including a connection to Aster Boulevard, and construction of Summer Ridge Drive.

The proposed connection will align with a stub road already built on the adjacent development to the west. Per discussion with Township, this connection is a priority that is warranted for good planning practice, enhanced public safety, and to alleviate traffic congestion.

The Commission should consider any comments provided by the Township Engineer and/or Brighton Area Fire Authority with respect to the proposed roadway layout and design.

- 6. Landscaping.** Section 12.02.02 requires 2 street trees per unit (216 total). The revised landscape plan provides for 189 trees along the roadways and 67 trees within open space areas and/or as buffering (256 total trees).

- 7. Lighting.** The revised submittal notes that, aside from fixtures on the front of residences, no exterior site lighting is proposed.

- 8. Park/Open Space.** The submittal identifies 5 open space areas, including a conservation easement over a portion of the area along the east side of the development.

The revised submittal includes a drawing and legal description of the easement area; however, no details are included as to what the easement allows/restricts. This information must be provided.

The submittal includes landscaping in the open space areas, as well as a play structure within the northerly open space; however, no details are depicted for the area in the southeast portion of the site. This information needs to be added to the plans.

The open space areas are defined as common elements in the Master Deed, and are subject to maintenance by the Condominium Association.

- 9. Grading, Drainage, and Utilities.** We defer to the Township Engineer for review and comment on site engineering elements.

**E. Private Road Review**

The private road application has been reviewed for compliance with the standards of Section 15.05, as follows:

- 1. Public v. Private.** Section 15.05.01 requires that private roads be built to the standards of the Livingston County Road Commission, unless all of the following apply:

- There is no indication of a need for the roadway to be dedicated as a public road in the future.
- Dedication of the road as a public street would not result in continuity in the public street system at the present time or in the future.
- The expected traffic volumes along the roadway are not expected to exceed five hundred (500) vehicles per average weekday, based on accepted trip generation figures.
- Significant natural features such as mature trees, natural slopes, wetlands or other water bodies would be preserved through construction and maintenance as a private road.
- The property owners are providing financial and administrative mechanisms to ensure maintenance of the private road. A copy of a Private Road Maintenance Agreement shall be provided to the Township in a manner acceptable to the Township Attorney and approved by the Township Board.

There is no indication as to whether the roads being extended and/or connected to are public or private.

Additionally, 108 detached residential units will be expected to generate more than 500 trips per day.

Lastly, the submittal does not include the required Private Road Maintenance Agreement.

- 2. AASHTO Standards.** We defer to the Township Engineer as to whether these standards are met.
- 3. Easement Width.** Section 15.05.03 requires a 66-foot easement width, though the Commission may reduce the width to 50 feet when the following criteria are met:

- The width is determined to be adequate for the necessary pavement and utilities.
- Adequate clear sight distance can be maintained.
- There is no desire or reasonable expectation that the road, as shown could become a public street or potentially extended in the future.
- Is not expected to accommodate over three hundred (300) vehicle trips per average weekday based on accepted traffic generation figures.
- If, in addition to the above, the easement will only provide access to a maximum of four (4) single family lots or dwelling units, the width may be reduced to forty (40) feet.



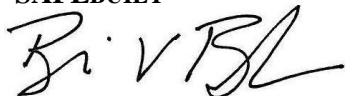
The cross-section on Sheet DT1 identifies a 30-foot easement width. As such, this standard is not met, and is not clear that the criteria to allow a reduction to 50 feet are met.

4. **Road Design.** These standards require a 30-foot roadway width, paved roadway, and curb and gutter. The proposal complies with these standards.
5. **Maximum Cul-de-sac Length.** The plan does not include the use of a cul-de-sac.
6. **Grades.** Road grades are subject to review/approval by the Township Engineer.
7. **Horizontal Curve.** Curves are subject to review/approval by the Township Engineer.
8. **Intersection.** The 3 intersections shown on the plan are at 90-degree angles, as required.
9. **Minimum Offsets.** These standards do not apply to the request.
10. **Boulevard Medians.** The plans depict 2 medians, though the dimensional requirements of this section do not appear to be met.
11. **Vertical Clearance.** The applicant must maintain a minimum clearance of 15 feet for any trees that overhang the paved roadway.
12. **Street Names.** Subject to review by Livingston County Road Commission.
13. **Signs.** The plans do not identify any street signs.
14. **Yard Setbacks.** The proposed easement does not abut the property line of an adjacent site.

Should you have any questions concerning this matter, please do not hesitate to contact our office.

Respectfully,

**SAFEBUILT**



Brian V. Borden, AICP

Michigan Planning Manager



April 4, 2022

Ms. Kelly Van Marter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

**Re: Summerfield Pointe Amendment  
Site Plan Review No. 2**

Dear Ms. Van Marter:

Tetra Tech conducted a second review of the proposed Summerfield Pointe site plan last dated March 23, 2022. The plans were prepared by Desine, Inc. on behalf of Healy Homes at Summerfield LLC. The development is located on 60 acres on the northwest side of the existing Summerfield Pointe development located on Lawson Drive. The Petitioner is proposing 108 single family units. The proposed site includes storm sewer and on-site detention, as well as sanitary sewer and water main improvements. We offer the following comments:

**GENERAL**

1. The general road layout for the proposed Summerfield Pointe development is essentially the same as the previously approved version with multi-family units. We have no engineering related concerns with single family units as opposed to multi-family units.
2. The proposed sidewalk cross section should be revised to show 6 inches of compacted CL II sand.
3. After final site plan approval, the Petitioner will be required to submit private road construction plans to the Township for review and approval.
4. After final site plan approval, the Petitioner will be required to submit construction plans to MHOG Sewer and Water Authority for review and approval.

**DRAINAGE AND GRADING**

1. The Livingston County Drain Commissioner is in the process of updating their design standards. The Petitioner has noted that they are pursuing approval from the Drain Commissioner and evidence of said approval should be provided to the Township prior to final site plan approval.

We recommend the above comments are addressed prior to final site plan approval.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Gary Markstrom'.

Gary J. Markstrom, P.E.  
Vice President

A handwritten signature in blue ink, appearing to read 'Shelby Byrne'.

Shelby Byrne  
Project Engineer





# BRIGHTON AREA FIRE AUTHORITY

615 W. Grand River Ave.  
Brighton, MI 48116  
o: 810-229-6640 f: 810-229-1619

April 5, 2022

Kelly VanMarter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

RE: Summerfield Pointe Amendment  
Genoa Twp., MI

Dear Kelly:

The Brighton Area Fire Department has reviewed the above-mentioned site plan. The plans were received for review on March 30, 2022, and the drawings are dated February 23, 2022 with a revision date of March 23, 2022. The project is a site plan based on completion of a previously planned residential development and reconstruction of the roadway leading to the development. The applicant is also requesting a modification from multi-family zoning to 108 single-family residential lots. The plan review is based on the requirements of the International Fire Code (IFC) 2021 edition.

**All previous review comments have been addressed on the recent submittal.**

Additional comments will be given when a complete submittal is provided. If you have any questions about the comments on this plan review please contact me at 810-229-6640.

Cordially,

A handwritten signature in black ink, appearing to read "R. Boisvert".

Rick Boisvert, FM, CFPS  
Fire Marshal

April 7, 2022

Genoa Township Planning Commission

2911 Dorr Road

Brighton, MI 48116

Re; Proposed Amendment to Summerfield Point PUD

Dear Chairperson Grajek,

I am representing the Summerfield Point Home Owners Association and wanted to communicate our thoughts/concerns regarding the proposed amendment. I have also attached a rudimentary sketch to help illustrate the following comments.

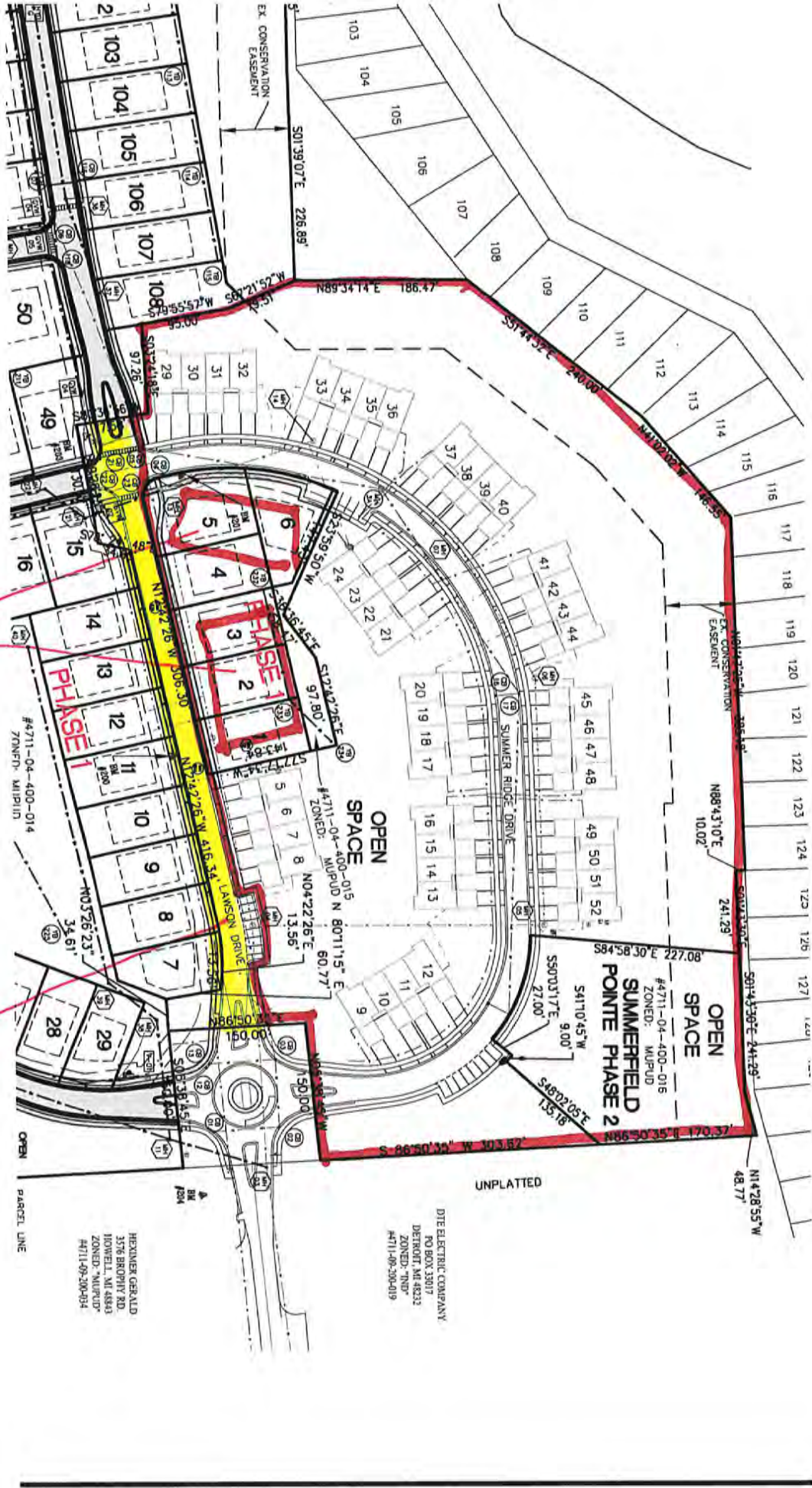
- 1) We would like to see two (2) additional 4-unit condominium buildings in the proposed Phase 1 lots 1 through 6. We feel strongly that single family homes directly integrated into our portion of 4-unit condos directly conflicts with the intent of the PUD. From a standpoint of sheer aesthetics and continuity, homes placed here would be odd and appear Unplanned.
- 2) Although not titled as a senior community, for all intents and purposes that's essentially what we are. Having individual homes so close to the back of our units means we're subject to individual homeowners lifestyle choices which could include random lawn mowing times, vehicle storage, outdoor back yard venues etc.
- 3) The existing Lawson Drive runs to the North end of our development and was installed 17 years ago. Typically a development road only receives a basecoat until complete then gets the topping once construction activity is complete. This stretch of Lawson should be re-paved by the developer as part of this development.
- 4) We understand that the additional phase of homes will operate under a separate Homeowners Association. We believe it could be complicated to determine the proportionate costs of future road maintenance for this shared portion of Lawson and the roundabout as well as difficult to collect associated fees. Which association would be responsible for the coordination/payment of this work. For these reasons, we think Lawson Drive should fall fully under the new associations responsibility.
- 5) We think it imperative that the developer construct the roads all the way back to and including the Astor connection stub prior to any homes being built. We have concerns that our single entry point could be blocked by construction equipment. There is a need to maintain access for emergency vehicles.

We appreciate your consideration with our concerns,

Gary Laundroche, President

  
Summerfield Point Homeowners Association





4-UNIT CONDOS

RESPONSIBILITY OF  
NEW ASSOCIATION

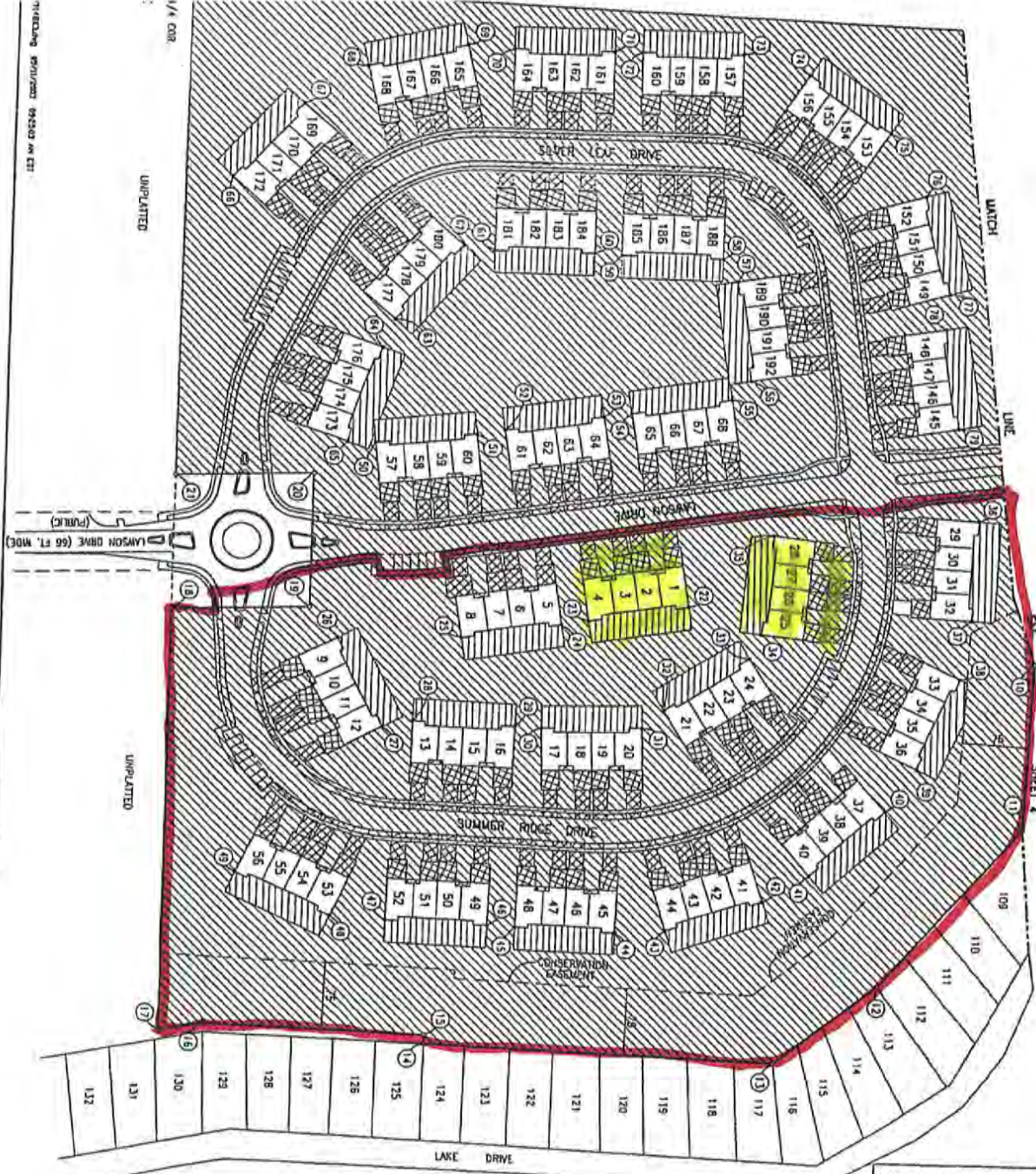
HEXNER GERALD  
 375 BROPHY RD  
 HOWELL, MI 48843  
 ZONED - MURPIN  
 #4711-04-200-014

DIE ELECTRIC COMPANY  
 PO BOX 13017  
 DETROIT, MI 48232  
 ZONED - TND  
 #4711-04-200-019



SITE PLAN

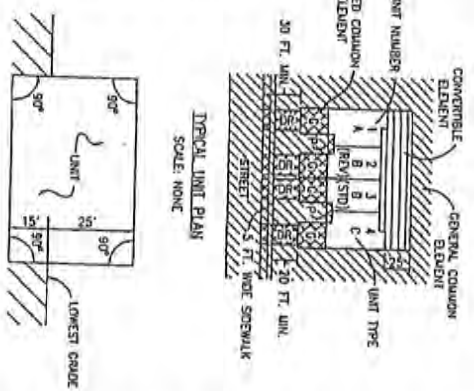
SCALE: 1 INCH = 60 FEET



"SUNRISE PARK" SUBDIVISION  
LIBER 2 OF PLATS, PG. 23, C.C.R.

NO.	NORTHING		EASTING	
	EXISTING	NO.	EXISTING	NO.
1	7322.86	12528.84	7956.01	13382.43
10	8276.68	13961.48	7966.42	13235.12
11	8268.98	13447.71	7960.05	13123.64
12	8107.43	13827.01	8209.06	13101.95
13	7991.69	13716.23	8204.04	13213.88
14	7902.67	13289.67	8193.31	13280.20
15	7808.14	13289.67	8146.23	13280.20
16	7719.54	13586.87	8111.79	13430.09
17	7631.21	13586.87	8077.45	13582.82
18	7542.88	13272.22	8043.11	13735.55
19	7454.54	13272.22	8008.77	13888.28
20	7366.21	13067.43	7974.43	14041.01
21	7277.88	13067.43	7940.09	14193.74
22	7189.54	12862.64	7905.75	14346.47
23	7101.21	12862.64	7871.41	14499.20
24	7012.88	12657.85	7837.07	14651.93
25	6924.54	12657.85	7802.73	14804.66
26	6836.21	12453.06	7768.39	14957.39
27	6747.88	12453.06	7734.05	15110.12
28	6659.54	12248.27	7699.71	15262.85
29	6571.21	12248.27	7665.37	15415.58
30	6482.88	12043.48	7631.03	15568.31
31	6394.54	12043.48	7596.69	15721.04
32	6306.21	11838.69	7562.35	15873.77

LIST OF COORDINATES



LEGEND

[Symbol]	UNIT NUMBER
[Symbol]	GENERAL COMMON ELEMENT
[Symbol]	LIMITED COMMON ELEMENT
[Symbol]	CONSERVABLE ELEMENT
[Symbol]	COORDINATE POINT W/ OCCUPATION NUMBER
[Symbol]	CONCRETE MONUMENT AT DIAMETER OF LIVING ENCLOSING 1/2" RIBBON ROAD
[Symbol]	POUCH - SEE TYPICAL UNIT PLAN
[Symbol]	(LIMITED COMMON ELEMENT)
[Symbol]	DRIVEWAY - SEE TYPICAL UNIT PLAN
[Symbol]	GRADE - SEE TYPICAL UNIT PLAN
[Symbol]	(LIMITED COMMON ELEMENT)

PROPOSED AS OF DATE 11, 2003  
UNITS 5-8 UNIT #16-11

CLIENT	HEALY HOMES AT SUMMERFIELD L.L.C.
PROJECT	SUMMERFIELD POINTS
TITLE	SITE PLAN

DATE: \_\_\_\_\_

REVISION: \_\_\_\_\_

BY: \_\_\_\_\_

DATE: \_\_\_\_\_

SCALE: 1" = 60'

NO. 91145-1

DATE: 11-11-03

**BOSS ENGINEERING**  
ENGINEERS & SURVEYORS + PLANNERS  
LANDSCAPE ARCHITECTS

1111 L. GRANT ROAD, SUITE 100, WILSON, NC 27157  
919.286.8888



## Kelly VanMarter

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**From:** Jamie <mcvicke4@att.net>  
**Sent:** Wednesday, March 30, 2022 2:26 PM  
**To:** Kelly VanMarter  
**Subject:** Public hearing-Summerfield pointe/Healy homes  
**Attachments:** HamptonRidge\_Summerfield Point.pdf

Hello Kelly,

I hope this email finds you well and that you are also ready for spring weather to officially stick around soon!

I received the mail notification of the 4/11 public hearing pertaining to a planning project within 300ft of my residence-Summerfield Pointe/Healy homes. I have attached a PDF tied to my points. I thank you in advance for taking time to review my lengthy email.

Concerns topics (with question points in blue font below):

- Privacy-tree canopy/property line/light pollution
- Traffic & Road condition expense-Aster Blvd road extension/connection

### **Privacy-Tree Canopy/property line/light pollution:**

While I am aware Summerfield Pointe phase one began almost 20yrs ago and the economic recession put a halt on the project, I understand the builder has intentions to now continue the development involving the remaining north parcel property that runs right up to the property line of the community I have owned a residence for the last 7years in Hampton ridge. I understand the builder now is looking to do single family homes instead of attached condominiums. I questioned how he could squeeze just over a 100 homes on the property, but then I drove through the builder's Lyon township development (Ashbury hills-starting at \$350k) and can now see the style of builder developing the neighboring property, and it is honestly disappointing from a natural mature landscape/tree canopy prospective.

The Lyon township subdivision has no mature trees within the community, just one small corner in the back, and the west side of homes literally back right up on top of a neighboring apartment complex with a buffer the width of a private road (It is cleared land with a fence and few short shrubs, but the balconies of apartments still look over the sight line, which would be similar to upper level units in our community). It concerns me this is possibly the intention of the project expansion and the impact it brings to Hampton ridge.

Reviewing the 2003 PUD for Summerfield Pointe's later phases, it discuss a small conservation of trees to the north east corner and nature preserve. The 2003 condominium plans show a road on the west part of Summerfield pointe that would back right up and run along the East part of the Hampton ridge community. I am not sure if the site plan would change so it is the backs of detached single homes instead of a road, but regardless my community now loses a sense of privacy, natural tree canopy and is subject to added light pollution from homes and cars (garage or street lights?).

Having reviewed the recent master plan packet from the Genoa township planning meeting held this week, I thought that protecting tree canopies is important for Genoa township. I drive through so many other cities and townships and these builders are annihilating clusters of mature trees to cram in cookie-cutter and tightly spaced homes with no mature tree cover (only planting landscaping bushes, decorative shrubs or trees that do not grow much, and adding small trees along the road).

The existing Summerfield pointe development only kept a thin and sparse line of mature trees to the east between the condominiums and sunset park houses—which you pretty much can see through to lake Chemung with how little density of trees was kept (which easily could be damaged by storms and completely remove any mature tree canopy on

that end). Am I to assume a similar tree line would be kept on the west along Hampton ridge? Keeping a thicker line of the tree canopy would dampen light pollution and add noise barrier protection. Currently with the tree canopy and thick line of trees, noise from Lake chemung boats can be heard, so thinning this barrier we currently have for homes is going to add to the noise in the area even more. Having no tree buffer on the west side of the development also removes privacy for my community. I feel the *sense of privacy and serene views in my community is at risk of being compromised for a builder to make the most profit by cramming in a lot of homes in a small area, and removing all existing mature trees and maybe planting a few smaller landscaping ones.*

PDF attachment Figure 1 is the original site plans. “Beautifully landscaped” which likely means small bushes and removal of mature trees to plant small ones along the road.

*Do you have any updated project plans (PUD) to show how much of the natural tree canopy/ landscaping would be removed to effectively build these homes?*

*Would it be a road running parallel and adjacent to Hampton Ridge buildings or the back of homes?*

*How much of the existing mature tree frontage is planned as a buffer between our communities?*

See the attached PDF figure 5 of my concerned possibility of this project expansion removing almost the entire canopy and tree line.

I am certain many owners in Hampton Ridge along this property line will want to know how drastic this landscaping change will be in the future. Many people in the last 5 years bought their units with the appeal of this wooded area and privacy being boasted on listings, and prices/values of these units are now at risk. These trees to the east of Hampton Ridge are one of the main tree canopies in the area to allow for natural wild life to shelter (many song birds, and sometimes deer have been spotted in it).

**Traffic and road condition expense-Aster Blvd road extension/connection:**

Currently Aster Blvd dead-ends along the tree/property line that would run along up to the area of the project’s development. My understanding from the 2003 PUD is there would be a continuation of Aster Blvd to connect to this phase extension of Summerfield Point (see figure 1).

I am heavily concerned about traffic coming into our community to access Latson. 100+ homes is a lot of possible added car traffic using our main private road.

Our annual Hampton Ridge October 2021 HOA meeting discussed the poor condition of our road and projected expensive costs to repair it. Many residents are fixed income and concerned about another increase to our dues, which already are at \$300/mon, or an assessment that would raise our taxes. Additionally, we already have issues with speeding vehicles (coming over from Lakewood Knoll to gain access to the Latson traffic light) which requires monitoring with the police, at the expense of our residents’ dues.

*Would Hampton ridge residents/HOA solely have the cost burden of road repairs due to an increase in traffic for connecting the neighboring Summerfield Pointe development?*

**SUMMARY:**

I understand the need for growth and middle housing in Genoa township, but there has already been substantial growth since the original PUD in 2003. At what point will mature tree canopies/wooded areas be better protected? The amount of light pollution and increased traffic in the Grand River/Latson area has made living in this particular area no longer appealing. I moved from Lansing 14 years ago and enjoyed my sense of privacy in this area of Genoa township, with the nearby charm of nature and woods, all while still having convenient access to businesses. However, over the recent years there’s been a loss of this tranquility with the views, as the trees are being torn down to put up walls.



I wish that there was more of an effort to protect the borders of properties with a decent density of mature trees that already exist. People currently living in these spaces won't live to see the newly planted trees add to the character, beauty and privacy, as it takes 30+ years to reach a maturity point that can be appreciated and replace the benefits lost by what was torn down to build.

Thank you for your time in reviewing my concerns and questions pertaining to this development. I plan to attend the meeting to hear additional information, but if you have any answers to my questions to share in advance I would appreciate it.

Sincerely,

~Jamie S  
Hampton Ridge resident

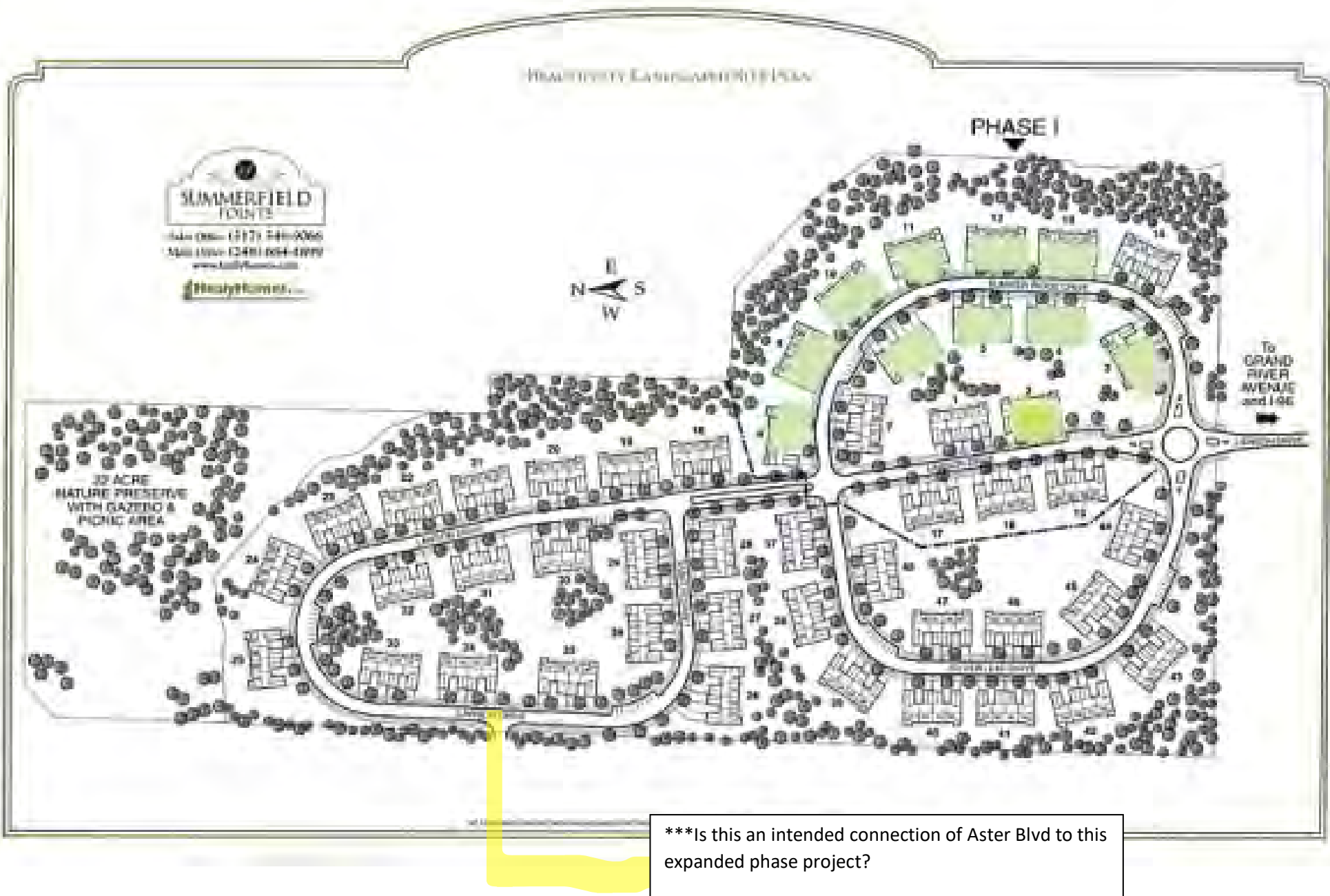


Figure 1- Initial plans for Summerfield Point (PUD early 2000s)

Only the Green shaded units have been built as of 2022







Figure 3 below left- Satellite ariel of ~52 detached homes project Healy Homes (Lyon township)



Figure 4 below right- Satellite ariel of existing phase 1 Summerfield point (Genoa Township), and the tree canopy/land that would be impacted between Hampton Ridge & project

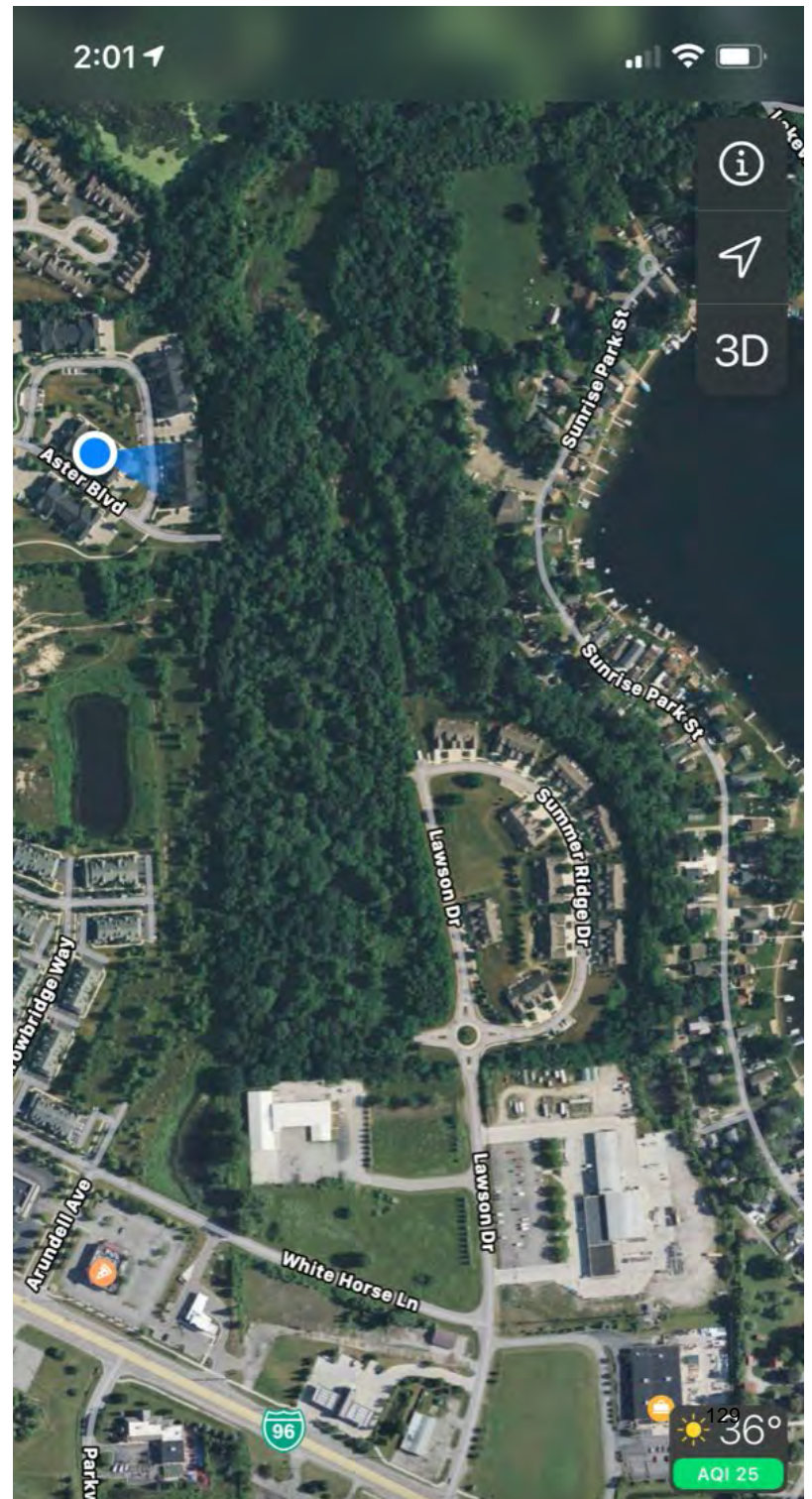


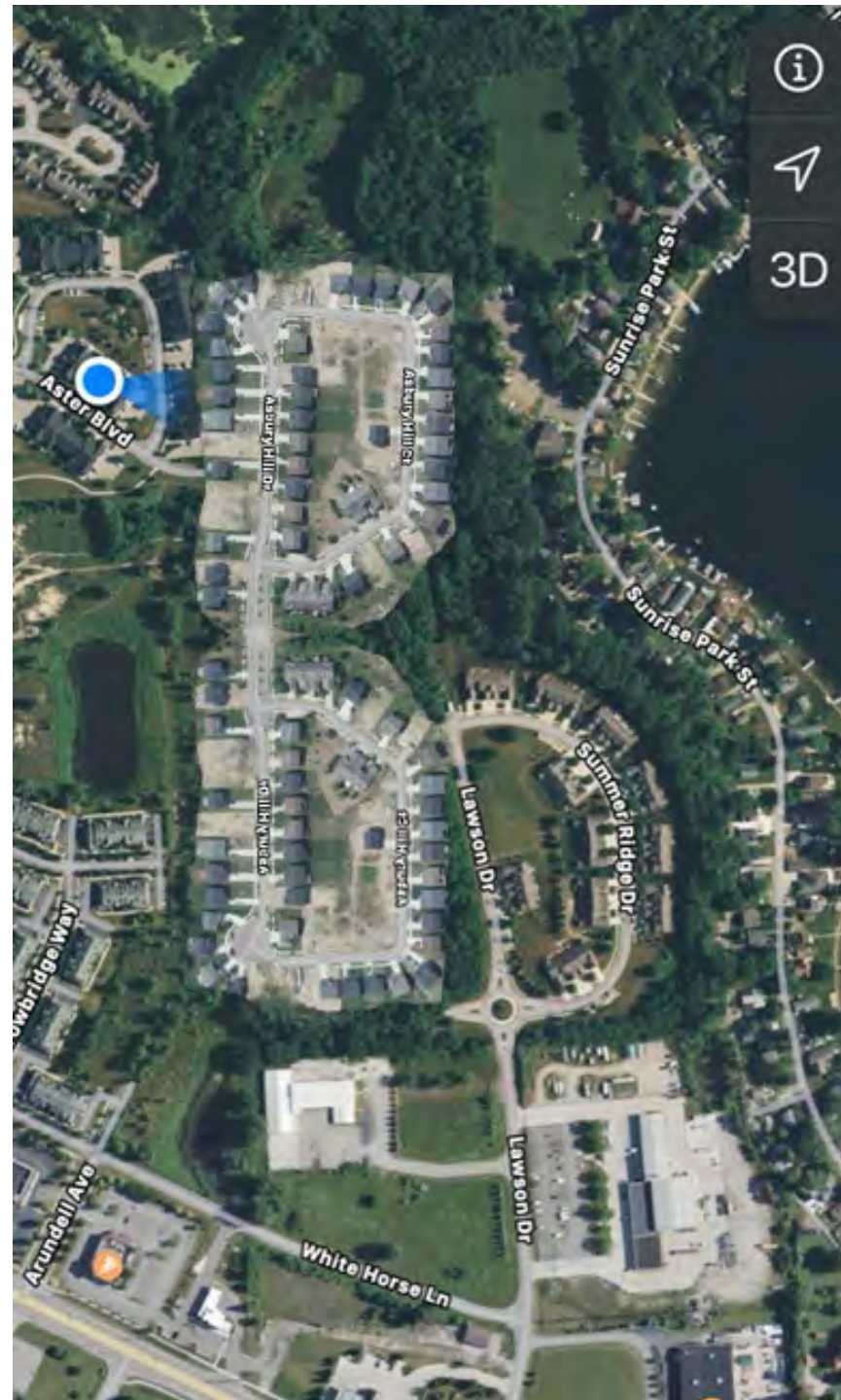


Figure 5-Right

Superimposing the ~52 detached home layout from Lyon township, it is assumed in order to fit ~108 homes in the land at Genoa Township to expand Summerfield Pointe, it would take over the tree canopy. These homes would stack right on top of the existing community of Hampton Ridge.

This assumes the builder wishes to maintain the 22acre nature preserve and picnic area for his neighborhood, as shown in figure 1.

Residents of Summerfield point possibly retain some tree canopy landscaping to enjoy, but likely at the expense of Hampton Ridge losing trees at the far east part of their community.



**AMENDED P.U.D. PLAN  
SUMMERFIELD POINTE ESTATES  
Genoa Township, Michigan  
Site Plan Application**

**IMPACT ASSESSMENT**

**Owner:**

Healy Homes at Summerfield, L.L.C.  
3696 Sleeth Road  
Commerce Township, Michigan 48382

**Prepared by:**

DESINE INC.  
2183 Pless Drive  
Brighton, Michigan 48114



**A. INTRODUCTION (Sec. 18.07.01)**

This impact assessment has been prepared pursuant to Article 18 – SITE PLAN REVIEW of the Zoning Ordinance for the Township of Genoa, Livingston County, Michigan. This assessment addresses the impact of the proposed amendment for 108 single family unit building additions on the surrounding community and, the economic condition and social environment of the Township.

This Impact Assessment has been prepared under the direction of Wayne Perry, P.E., DESINE INC., 2183 Pless Drive, Brighton, Michigan 48114. Mr. Perry is a licensed Civil Engineer, providing professional engineering services in Livingston County since 1988 with experience in private and municipal development including projects within Genoa Township and Livingston County.

**B. SITE LOCATION / DESCRIPTION (Sec. 18.07.02)**

The site is comprised of three parcels, containing a total of 28.52 acres of property, bordered on the North by a nature preserve, Summer Ridge & Sunset Park Condominiums on the East, Lawson Drive on the South and a vacant parcel zoned MUPUD to the West, as shown on Figure 1. The existing North and Southwesterly parcels are zoned “Mixed Use Planned Unit Development” (MUPUD) district, the Northwesterly Parcels are zoned “Residential Planned Unit Development” (RPUD) district, the Southeast Parcel is zoned “Industrial” (IND) district, and the East parcels being zoned “Lakeshore Resort Residential” (LRR) district.

The existing site is comprised of wooded vacant land along the West and, existing lawn areas for the central portion of the site and parcels situated on the East. Access to the site is by an existing road to the South, Lawson Drive. A new access route is proposed from Lawson Drive in the Northwest portion of the project, connecting to the existing Aster Blvd. The Existing Conditions Plan provides a detailed overview of the existing site features.

The Summerfield Pointe Estates PUD Site Plan depicts proposed site improvements to be constructed on the site. Improvements consist of 108 single family residential units in place of 140 attached condominiums provided on the approved PUD plan. These units are planned to be constructed in four (4) phases. Additionally, the site will feature access drives for each unit, open space and common yard areas, a common space for children’s playground and activities, landscaping & screening, an on-site storm water management system and related site improvements. Illumination is to be provided by each home owner following the current layout of the surrounding “Summer Ridge” condominiums.

Parking for each proposed unit is to be provided within garages. Public sanitary sewer, water utilities, electric, gas, phone and cable system services are to be provided. Utility easement plan sheets provide a detailed overview of the location and layout for the proposed easements on-site. Appurtenant features including lot lines, sidewalks and proposed access drives are also presented in the site plan.

Relevant adjacent uses include the Lake Trust Credit Union located to the Southwest and across Whitehorse Drive, a Sunoco gas station located due South and adjacent to Lawson Drive and, the DTE Service Center to the Southeast. Properties to the North, West and Southwest of the site are currently vacant. An aerial photograph depicting the proposed site improvements is provided in Figure 2 & Figure 3.

**C. IMPACT ON NATURAL FEATURES (Sec. 18.07.03)**

Existing soils on the property are primarily Wawasee loam. These soils are well drained soils found in till plains and moraines, with slopes of 2%-6%. Surface runoff is medium, permeability is moderately low and the soil erosion hazard is light. The Soils Map, shown in Figure 4, shows the locations of specific soil types as classified.

Soil classifications are prepared by the United States Department of Agriculture, Soil Conservation Service, and “Soil Survey of Livingston County”. On-site soils consist of the following:

**CONOVER LOAM (CvraaB):** CONOVER LOAMS are typically somewhat poorly drained soils found on till plains and moraines, with slopes of 0%-4%. Surface runoff is slow, permeability is moderately slow, and the erosion hazard is light.

**GILFORD SANDY LOAM (Gd):** GILFORD SANDY LOAMS are typically poorly drained soils found on sandy drift depressions and coarse-loamy drift over sandy and gravelly outwash, with slopes of 0%-2%. Surface runoff is very slow to ponded, permeability is moderate and the soil erosion hazard is light.

**HOUGHTON MUCK (Ho):** HOUGHTON MUCKSS are typically nearly level soils found in depression areas of lake plains, outwash plains, glacial drainage ways, and moraines, with soil slopes of 0% -1%. Surface runoff is very slow to ponded, permeability is moderately rapid, and the erosion hazard is moderate.

**WAWASEE LOAM (MoB):** WAWASEE LOAMS are typically well drained soils found in till plains and moraines, with slopes of 2%-6%. Surface runoff is medium, permeability is moderately low and the soil erosion hazard is light.

**WAWASEE LOAM (MoB):** WAWASEE LOAMS are typically well drained soils found in till plains and moraines, with slopes of 6%-12%. Surface runoff is high, permeability is moderate and the soil erosion hazard is light.

**MIAMI LOAM (MoD):** MIAMI LOAMS are typically well drained soils found in till plains and moraines, with soil slopes of 12%-18%. Surface runoff is medium, permeability is moderate and the soil erosion hazard is moderate.

**MIAMI LOAM (MoE):** MIAMI LOAMS are typically well drained soils found in till plains and moraines, with soil slopes of 18%-25%. Surface runoff is medium, permeability is moderate and the soil erosion hazard is moderate.



MIAMI LOAM (MoF): MIAMI LOAMS are typically well drained soils found in till plains and moraines, with soil slopes of 12%-18%. Surface runoff is medium, permeability is moderate and the soil erosion hazard is moderate.

SPINX-OAKVILLE LOAMY SAND (SvB): SPINX-OAKVILLE LOAMY SANDS are typically well drained soils found on till plains, outwash plains, and moraines, with soil slopes of 0%-6%. Surface runoff is slow; permeability is moderately rapid in the Spinks soil and is rapid in the Oakville soil. The erosion hazard is light.

The property contains a variety of natural features consisting of primarily wooded upland in the northwest portion of the property, with field grasses and shrub/scrub brush areas in the southerly and easterly portions. Wooded areas within the site are comprised of hardy, native species such as Oak, Hickory, Maple and Pine. Elm, Cottonwood, Willow, Poplar, Black Locust and other less desirable tree species are also present. The proposed improvements will require removal of existing trees within upland areas to allow for construction of the proposed roads, residential homes and improvements. These areas are depicted on the development plan. Trees outside of the unit limits and areas of construction will be preserved.

Existing topography of the site is generally flat to gently sloping terrain. The elevation of the property varies from an elevation of 997 at the Southwest property corner, to approximately 983 at the North portion of the site. Surface water drainage on the property generally flows to the North.

The proposed construction and improvements will require filling and grading in the Southwest and Northwest portion of the property. Development of this project will require earthwork to construct the proposed roads, and modify site grades with useable materials from the site, requiring the export of excess soil and importing of additional structural fill material. The proposed elevations and grading of the site mesh with the existing grades at the property lines. The limits of disturbance have been depicted on the grading plan.

Surface drainage characteristics on the property will be affected by the construction of the proposed drainage swales, roads, driveways, sidewalks and single family home units. Construction of the proposed improvements will reduce the permeable area of the property, resulting in an increase in the surface water runoff generated. The existing storm water management system will be modified to collect and control the surface water runoff, reducing the discharge rate from the property and increasing the infiltration of surface water runoff. Modifications will be required to the existing control structure located in the detention basin on-site, in order to restrict the discharge rate from the property to an agricultural runoff rate. The Utility Plan sheets provide a detailed overview of the storm water management site features and conditions.

The proposed changes and modifications to the surface drainage conditions will not

significantly impact local aquifer characteristics or groundwater recharge capacity. All surface water runoff from the site will be directed into the existing detention on-site. Reduction in the surface permeability will affect onsite infiltration, surface water flow path and duration. Surface water runoff from the development will be reduced and no significant impacts to adjacent properties are anticipated from the proposed construction and development of the site.

Landscaping is proposed for the developed portion of the site to reduce the visual impact of the proposed project. All proposed landscaping areas and plantings have been designed per the requirements of Genoa Township's current Zoning Ordinance and are intended to improve the aesthetics of the property. Within the developed portion of the site, areas not otherwise covered, shall have lawn or other vegetative surface cover established.

Upland wildlife habitats on the property include primarily small woodland, field grass and shrub/scrub brush areas. Wildlife supported in these areas are generally smaller woodland creatures, field animals, and birds. Larger animals, such as deer, may traverse the site. Wetland habitats on the property support a variety of wildlife including transient waterfowl and various small wetland animals. The wetland and water habitats will remain undisturbed during construction and development of the property.

The National Wetlands Inventory Plan prepared by the United States Department of the Interior, Fish and Wildlife Service indicates that there are two (2) freshwater emergent wetlands located North & Northeast of site, and one (1) freshwater forested/shrub wetland located Northwest of site. The Wetland Inventory Map, shown in Figure 6, shows the locations of specific wetland types surrounding the site.

**D. IMPACT ON STORM WATER MANAGEMENT (Sec. 18.07.04)**

The existing detention basin is located on the Northwest portion of the site. Side slopes for this basin meet or exceed one-foot-vertical to five-feet-horizontal as required by the Livingston County Drain Commissioner's office. No excavation or grading is proposed for the existing storm water detention basin to accommodate these improvements. Earthwork will be required to modify the existing and construct new underground storm water conveyance pipes, and direct storm water flow into the storm water collection system. This system will discharge surface water runoff generated by the development of the property to the existing sedimentation basin and detention basin. Site grading will mesh with existing grades on adjoining properties. No adverse impact to adjacent parcels is anticipated due to the construction and grading of the property.

Surface water runoff generated from all improved areas of the site will be collected by catch basins, conveyed through a storm sewer system, and discharged to the sedimentation and detention basin located on the North side of the property. Storm water will be detained within the basin during a storm event and slowly discharged from the basin through a new control structure proposed. Design for this control structure followed the design guidelines of the Livingston County Drain Commissioner.



Soil erosion and sedimentation are controlled by the Soil Erosion Control Act No. 347 of the Public Acts of 1972, as amended and is administered by the Livingston County Drain Commissioner. Silt fencing will be installed around a majority of the site during construction. The Contractor shall comply with all regulations including control during and after construction.

Impact on adjoining properties due to the construction of this site will be minimized by implementing soil erosion control methods. No adverse impact to adjacent properties due to surface water runoff will be created as a result of the proposed improvements.

**E. IMPACT ON SURROUNDING LAND USES (Sec. 18.07.05)**

Surrounding land uses to the Southwest of the site and located on the North side of White Horse Drive, are zoned Mixed-Use Planned Unit Development (MU-PUD). Current use consists of an industrial user and vacant property. Land to the Southeast is zoned Industrial (IND) and contains an industrial user “DTE Energy Howell”. Properties to the East are zoned Lakeshore Resort Residential (LRR) and to the Northwest, are zoned Residential Planned Unit Development.

The proposed Site Plan deviates from the approved PUD plan. The construction of 108 single family homes in place of 140 attached condominiums reduces the overall density for the site. No adverse impact to adjacent properties is anticipated due to construction of these improvements.

Ambient noise levels on and around the property are largely generated by sporadic vehicular traffic on Lawson Drive and homeowner activities such as lawn care maintenance. Daily activities within the proposed buildings are not anticipated to create an increase in the sound level in the area.

All site lighting is proposed to match the existing conditions of the Summer Ridge Condominiums on-site. Proposed building mounted fixtures will be shielded and down directed on the site.

Four types of architectural designs will be proposed for construction. The façades along the building front side elevation will be most visible from Lawson Drive. The materials for these units will resemble the adjacent Summer Ridge condominiums on the Southeast, and the Hampton Ridge condominiums to the Northwest. Brick and mortar are proposed for the front elevation along the main access road. Vinyl siding material is proposed for the rear and side elevations. A two car garage is proposed for each unit and ample space on each driveway allows for two cars to park along the proposed driveway for visitors.

A nature preserve to the north equivalent of 22.22 Ac., a 75 ft. wide conservation easement along the East property line of 3.73 Ac. and a total of 6.53 Ac. of common yard areas between the existing Summer Ridge condominiums & the proposed Summerfield Pointe Estates PUD, allow for an overall space area on-site equivalent to 53% open space.

The best quality woodlands and wetland are concentrated to the North of the site. Proposed areas to be developed will occur in existing open areas and where non-desirable tree species are located. When possible, quality trees such as Hickory and Maple varieties will be preserved.

The proposed use of the property does not create any significant emissions of smoke, airborne solids, odors, gases, vibrations, noise or glare discernable and substantially annoying or injurious to person and/or property beyond the lot lines. No significant change in air pollution is anticipated.

The Contractor shall be responsible for initiating and maintaining adequate dust control measures during and after construction until the project site is fully stabilized and a vegetative cover established. Dust control measures used during construction may consist of site watering, mulching of completed areas, installation of windbreak fencing, and application of chemical dust control materials. The site will comply with the performance standards contained in Section 13.05 of the Township Zoning Ordinance.

Soil erosion control measures such as silt fence, geotextile silt sack filters and construction track mats will be used during construction to control siltation and sedimentation from entering the storm water system and have an adverse impact on adjacent properties.

**F. IMPACT ON PUBLIC FACILITIES AND SERVICES (Sec. 18.07.06)**

The Livingston County Sheriff and Michigan State Police will provide Police protection. Public safety services required to accommodate the proposed use are anticipated to be minor.

The Brighton Area Fire Department as a part of an existing governmental agreement will provide fire protection service. Two existing fire hydrants are located along Lawson Drive West curblin. One situated just North of the existing roundabout, and the second located at the north intersection of Summer Ridge & Lawson Drive. Seven fire hydrants are proposed to be constructed per the proposed site plan to provide adequate fire protection capabilities. The building addresses will be located at the front of the units to meet the Fire Departments requirements. No significant change in fire protection services are anticipated as a result of the proposed plan modifications.

The property is accessed from Lawson Drive, and connecting to Grand River Ave. providing adequate access for emergency vehicles. A future connection to the existing Aster Blvd. on the Northwest corner of the site will provide an additional connection to Latson Road, further increasing the emergency vehicles access route to the site.

The proposed plan modifications will not create any direct adverse impact on the public schools.

**G. IMPACT ON PUBLIC UTILITIES (Sec 18.07.07)**

The property is presently within municipal sewer & water districts and the existing



Summer Ridge condominium buildings are connected to the municipal utilities.

Water service to the proposed units will be provided from a new 8” ductile iron water main extension to be constructed along the new Lawson Drive road. Domestic service leads are connected to this main to supply the service required. A total of nine (9) fire hydrants situated throughout the property will provide adequate fire suppression services on-site. Water main easement for repair, maintenance and access is provided for this extended water main on-site. Capacity is available within the existing water system to provide adequate service to this site.

Capacity is available within the existing sanitary sewer system to provide adequate service for the site. Sanitary sewer connections for the south portion of the site will be provided by connecting to the existing sewer lines for units 1 through 6, and by extending the sewer main for units 7 through 49. Sanitary sewer service to the North portion of the site will be provided by extending the existing sewer main situated on Hampton Ridge Condominiums and will provide service for units 50 through 108. A sanitary sewer manhole is proposed for construction at the west property line, between units 61 & 62 in order to provide future sanitary sewer service for the vacant parcel along the Southwest. Sanitary sewer easement for repair, maintenance and access is provided for the extended sewer main. The utility plans provide a detailed overview of these features.

The site is currently serviced by electric, gas, phone and cable systems located along Lawson Drive. A 10 foot wide easement for public utilities has been provided along Lawson drive in order to allow the future services required for the proposed units.

Delivery services are generally limited to parcel trucks, such as UPS, and similar single axle vehicles. These delivery service providers use available street parking temporarily while dropping off deliveries. No large vehicles accessing the site are expected for the development.

- H. STORAGE AND HANDLING OF ANY HAZARDOUS MATERIALS (Sec. 18.07.08)**  
The proposed residential use within the site will not use, store, generate and/or discharge potentially polluting materials. Small quantities of material such as cleaning products and chemicals may be stored in single family homes. No adverse effect is expected due to hazardous materials on-site.
- I. TRAFFIC IMPACT STUDY (Sec. 18.07.09)**  
For Traffic Impact Study, please see Municipal Partners Traffic Impact Study prepared and previously submitted under separate cover. No adverse impact on pedestrian traffic in the area is anticipated as a result of developing the proposed project.
- J. HISTORIC AND CULTURAL RESOURCES (Sec. 18.07.10)**  
The existing buildings on the property do not have any major historic significance on a local, regional or state level.

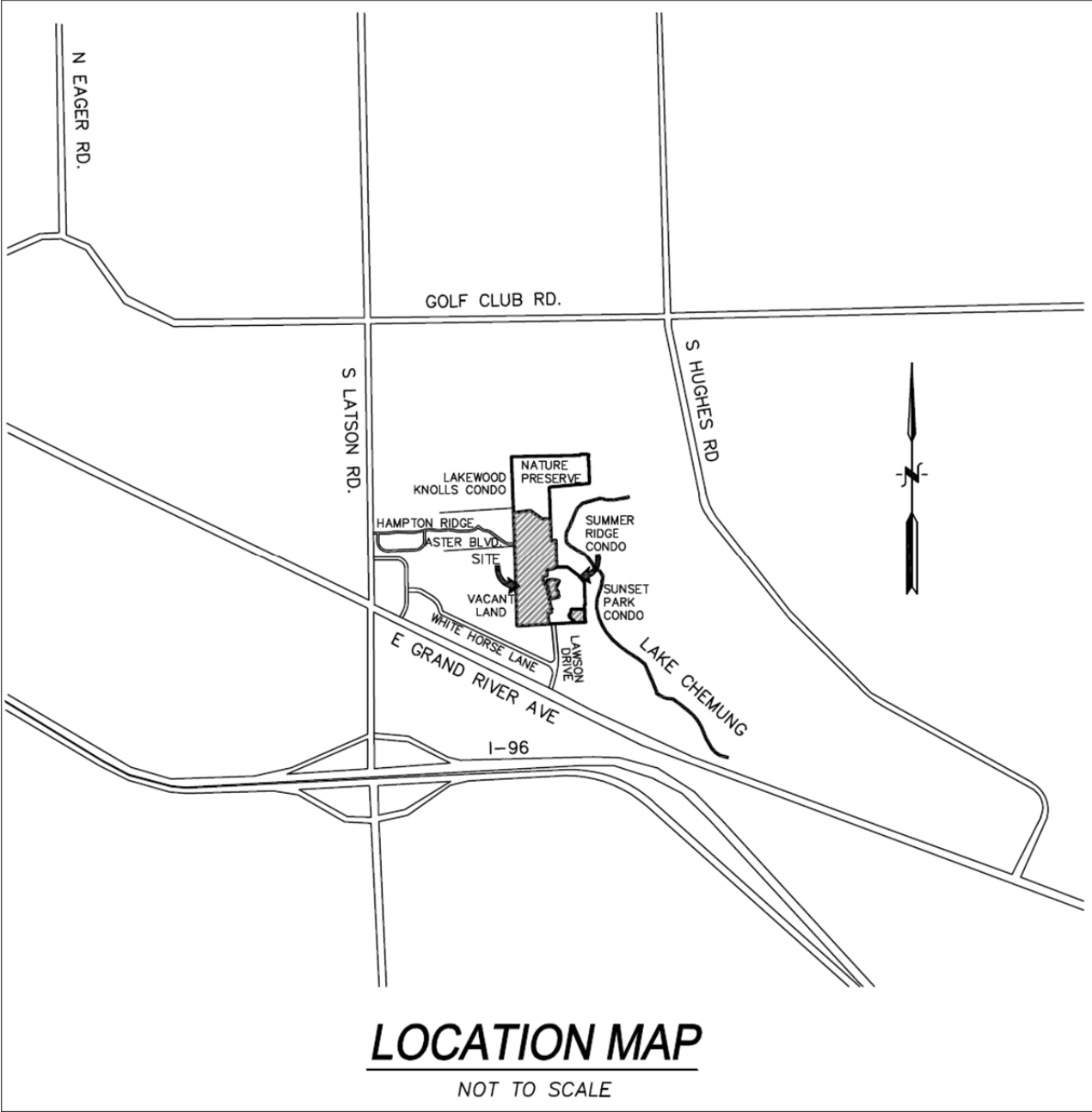
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**K. SPECIAL PROVISIONS**

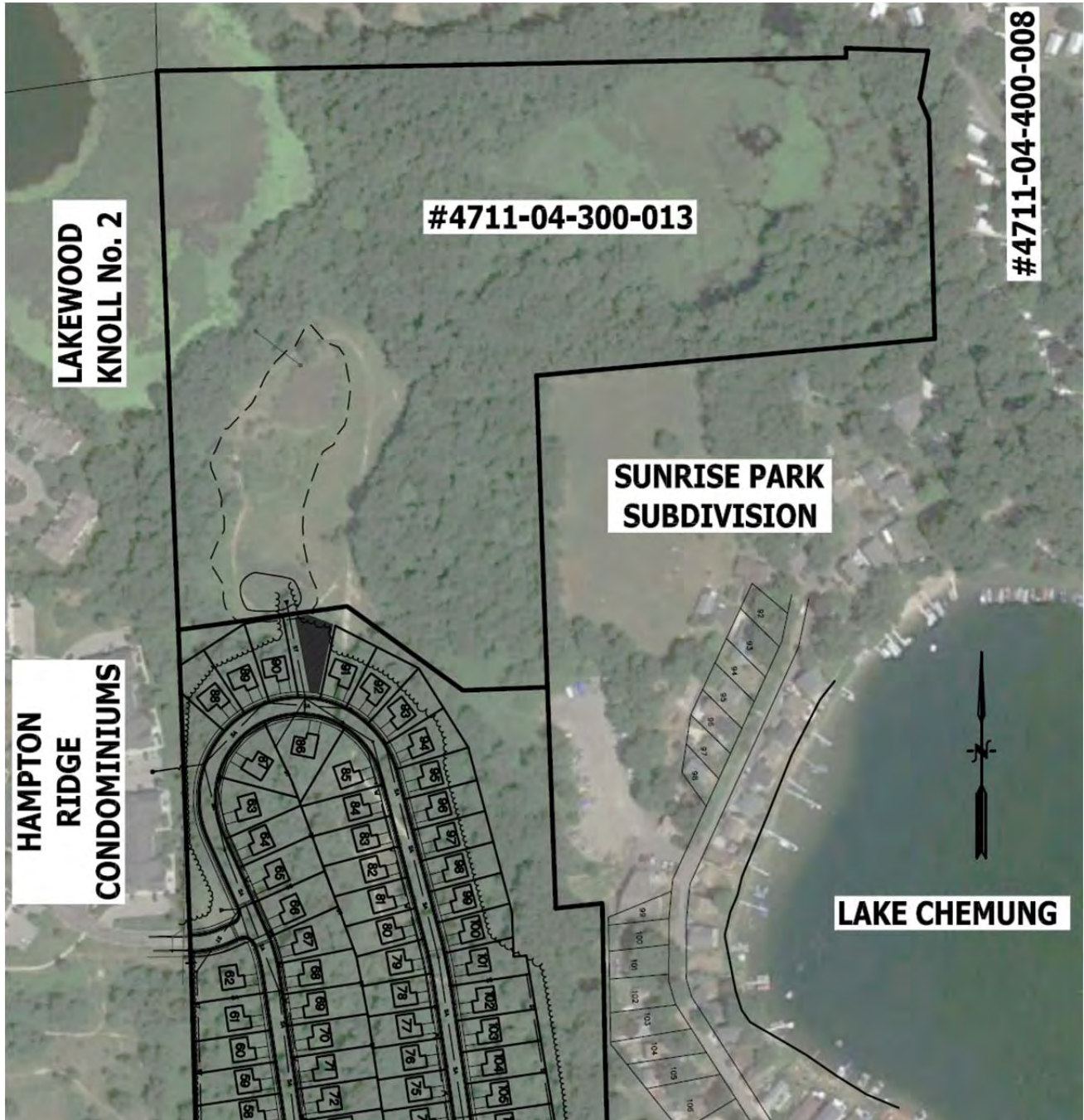
No special provisions or requirements are currently proposed for this facility.



FIGURE 1



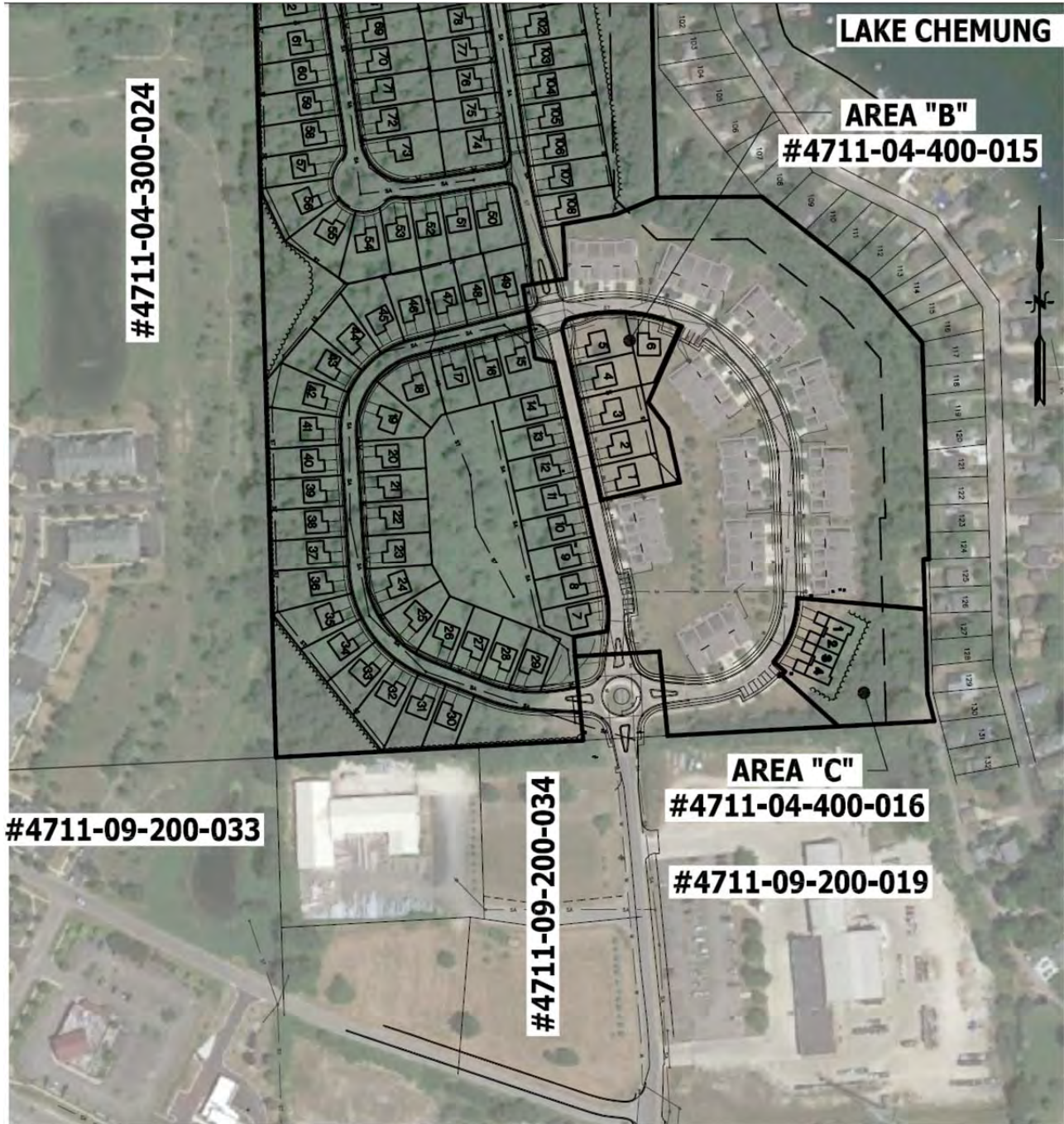
**FIGURE 2**



**SITE IMPROVEMENTS (NORTH)**  
**NOT TO SCALE**



**FIGURE 3**



**SITE IMPROVEMENTS (SOUTH)**  
**NOT TO SCALE**



**FIGURE 4**



**SOILS MAP**  
**(NOT TO SCALE)**

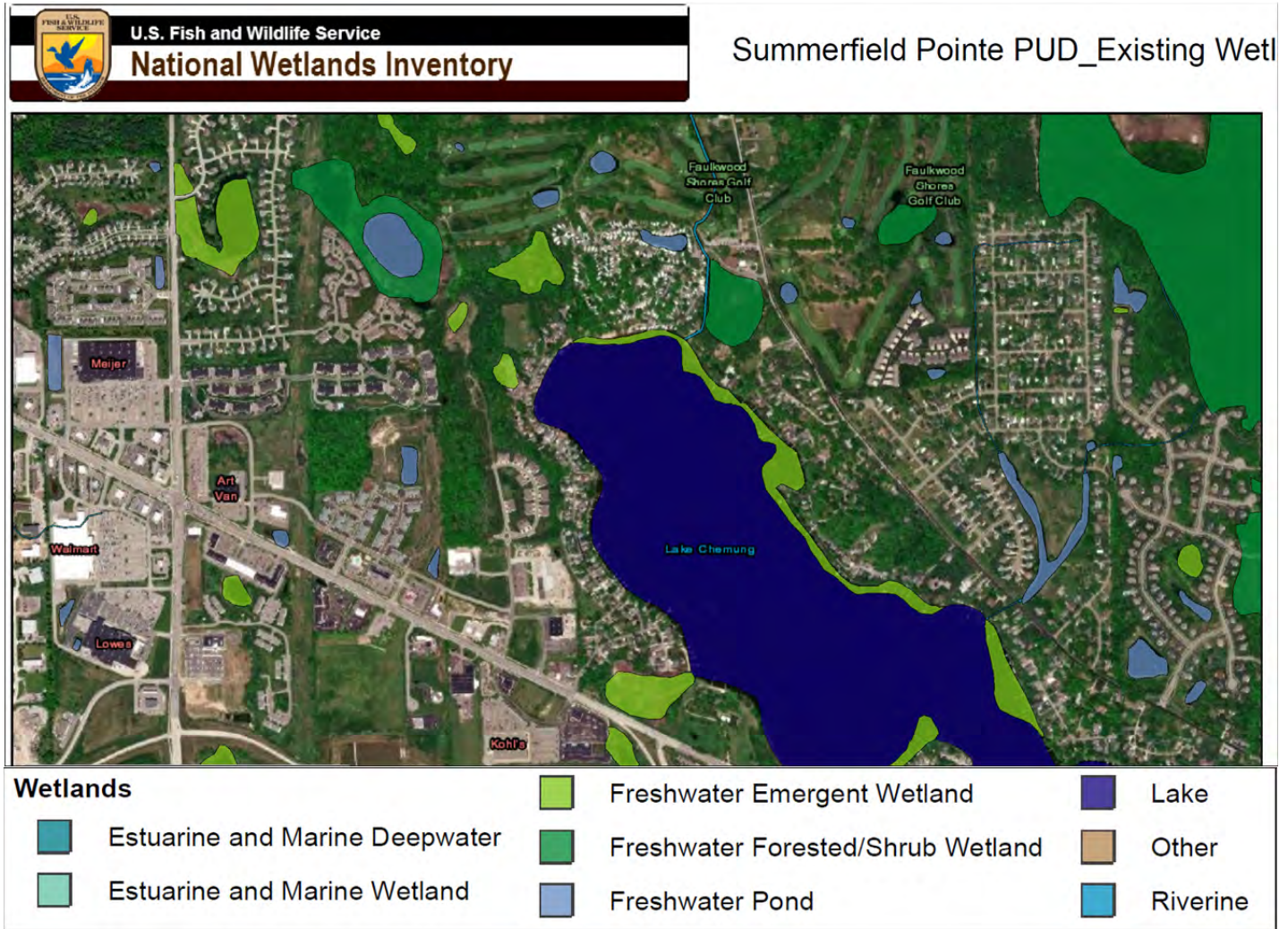


**FIGURE 5**

<b>Map Unit Symbol</b>	<b>Map Unit Name</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
Cc	Carlisle muck, 0 to 2 percent slopes	5.0	3.2%
CvraaB	Conover loam, 0 to 4 percent slopes	3.4	2.2%
Gd	Gilford sandy loam, 0 to 2 percent slopes, gravelly subsoil	11.5	7.3%
Ho	Houghton muck, 0 to 1 percent slopes	4.3	2.7%
MoB	Wawasee loam, 2 to 6 percent slopes	62.4	39.7%
MoC	Wawasee loam, 6 to 12 percent slopes	20.0	12.7%
MoD	Miami loam, 12 to 18 percent slopes	4.9	3.1%
MoE	Miami loam, 18 to 25 percent slopes	11.7	7.4%
MoF	Miami loam, 25 to 35 percent slopes	13.3	8.5%
SvB	Spinks-Oakville loamy sands, 0 to 6 percent slopes	6.4	4.0%
W	Water	14.4	9.1%
<b>Totals for Area of Interest</b>		<b>157.3</b>	<b>100.0%</b>

**SOILS MAP LEGEND**  
**(NOT TO SCALE)**

**FIGURE 6**



**WETLANDS INVENTORY MAP**  
**(NOT TO SCALE)**



**FIRST AMENDMENT TO AMENDED AND RESTATED SUMMERFIELD POINTE PLANNED  
UNIT DEVELOPMENT AGREEMENT**

THIS FIRST AMENDMENT TO SUMMERFIELD POINTE PLANNED UNIT DEVELOPMENT AGREEMENT (“Amendment”) is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2022 (“Effective Date”), by and between the CHARTER TOWNSHIP OF GENOA, a Michigan municipal corporation (“Township”), whose address is 2911 Dorr Road, Brighton, Michigan 48116 and HEALY HOMES AT SUMMERFIELD, LLC, a Michigan limited liability company (“Developer), whose address is 3696 Sleeth Road, Commerce Township, Michigan 48382.

**RECITALS**

A. The Township and Developer’s predecessor in interest, Adler Enterprises Company, L.L.C., entered into that certain Summerfield Pointe Planned Unit Development Agreement dated April 19, 2002, and recorded on September 25, 2002 in Liber 3533, Page 0900, Livingston County Records, as amended by that certain Amended and Restated Summerfield Pointed Planned Unit Development Agreement dated April 19, 2002 and recorded on February 24, 2003 in Liber 0772, Page 0940, Livingston County Records (as amended, the “**PUD Agreement**”), pertaining to the real property described in **Exhibit A** attached hereto and incorporated herein (the “**Property**”).

B. Developer desires to reconfigure the lay-out, configuration, number and type of condominium units, and changes to related specifications and set-back, to be developed under the PUD Agreement as further described and depicted on the amended PUD Site Plan attached as **Exhibit B** to this Agreement (“**Amended PUD Site Plan**”) as it relates to a portion of the Property further described on **Exhibit C** to this Amendment (the “**Future Phases**”).

C. To facilitate the development of the Future Phases, the Township and Developer desire to amend the PUD Agreement to incorporate the Amended PUD Plan.

D. All provisions and terms of the PUD Agreement not addressed by this Amendment shall remain in full force and effect.

**AMENDMENT**

The PUD Agreement is amended as follows:

1. **Amended PUD Site Plan.** The PUD Site Plan defined in the PUD Agreement, as it relates to the Future Phases, is hereby amended and replaced with the Amended PUD Site Plan. The remainder of the Property shall continue to be subject to the terms and conditions of the PUD Agreement.

2. **Land Use Authorization and Standards.** Article II of the PUD Agreement is hereby amended to add the following provisions as it relates to the Future Phases:

**“ARTICLE II. LAND USE AUTHORIZATION AND STANDARDS**

2.1 The Planned Unit Development as set forth on the PUD Plan reflects the change in the zoning for the Property from Rural Residential to medium density residential (MDR) consisting of the following use:

Not more than 108 single family units and 12 Buildings of 4 units a total of 48 attached units of which 44 have already been built. A total of 156 residential units.

2.2 The number of multi-family residential units permitted on the Property are a maximum of 48 attached condominium units for occupancy as single family residences. Also permitted on the property are 108 single family detached units.

2.3 **Setbacks for the attached condominium buildings are:**

<u>Perimeter Setback</u>	<u>Sidewalk Setback</u>	<u>Setback Between Building</u>	<u>Wetlands Setback</u>
North (rear) 50 ft West (side) Min 30 ft South (front) Min 34 ft East (side) 75 ft.	Min 20 ft from back of sidewalk to front of residential building improvements.  30 ft from back of curb.	Min 30 ft	Min 25 ft.

**Setbacks for Single Family detached units are:**

<u>Perimeter Setback</u>	<u>Front Setback</u>	<u>Rear Setback</u>	<u>Side Setback</u>
North(rear) 50 ft West (side) Min 30 ft South (front) Min 35 ft East (side) Min 75 ft	30 ft from back of curb  20 ft from back side of walk	Min 30 ft	5 ft Min  14 ft between houses”

**Proposed Dimensional Deviations from the MDR Zoning Requirements**

	<u>Unit Width</u>	<u>Unit Area</u>
<b>MDR Zoning Requirements</b>	75’	10,000 sq ft
<b>Deviations Proposed by Applicant</b>	55’	6,600 sq ft (5,934 sq ft for Unit #29)

2.4 Developer and the Developer’s successors in interest, including, but not limited to the association established to operate and manage the condominium, and the future owners of units shall preserve and protect the woodlands along the perimeter setback of the property on the east side and the PUD Plan shall identify the area within the east side perimeter setback as a permanent conservation area. The permanent conservation area shall be preserved and protected and maintained by association.”

3. Schedule of Construction. Developer shall install and construct improvements for the Future Phases in accordance with the phasing plan set forth PUD Site Plan and as further described below:



- a. **Phase I.** The Lawson Road and Grand River road improvements and installation as required by the PUD Agreement have been completed. Developer shall be entitled to start clearing, grading, construction and installation of utilities and roads for Phase I as identified on the PUD site plan, which includes (i) fourteen (14) site condominium units, and (ii) Building A of the attached condominium units, unit 1-4, inclusive as described on the Amended PUD Site Plan attached as Exhibit B. Developer shall be entitled to two (2) model units for both the site condominium portion and the attached condominium portion. Upon execution of this Amendment and making application for appropriate permits (including payment of related fees), and Developer complying with all agency regulations and approvals, the Township shall issue all necessary land use permits to Developer to commence clearing, grading, site work, installation and construction. The Developer shall be entitled to final certificates of occupancy for each structure it completes within Phase I, provided each structure otherwise complies with building code requirements. Developer shall have no obligation to complete any improvements in subsequent phases prior to receiving the certificates of occupancy for Phase I, unless such development is required by a different agency in relation to such agency's approval.
- b. **Phase II.** Prior to issuance of building permits for any units located in Phase II, Developer shall start construction of the portion of Lawson Drive which will serve as the connector road to Hampton Ridge. The portion of Lawson Drive which must be started by Developer is located along units 107-108, 50-62, 66-74 (the "Connector Road"). When the Connector Road is substantially complete meaning the base layer of asphalt is installed and the road may accommodate vehicle traffic, then the Township shall, and Developer shall be entitled to, issuance of any and all required land use permits for units 107-108, 50-62, or 66-74.
- c. **Phase III-IV.** Developer shall install the remainder of improvements as follows:
  - i. Developer shall install the utilities and roads to service units 75-106 and pay any required fees to agencies required to review and approve such utilities and roads. Upon completion of installation of such improvements, Developer shall be entitled to issuance of all land use permits for units 75-106.
  - ii. Developer shall install the utilities and roads to service units 15-49 and pay any required fees to agencies required to review and approve such utilities and roads. Upon completion of installation of such improvements, Developer shall be entitled to issuance of all land use permits for units 15-49.

4. **Drainage.** Developer has completed installation of all drainage systems required to be installed pursuant to the PUD Agreement, including all drainage facilities required for the Future Phase. Developer shall have no obligation to install further stormwater drainage facilities for the Future Phase, provided, however, that Developer will make any and all changes and install any additional improvements as required by the Livingston County Drain Commission or the Township pursuant to County and Township requirements for such system, to the extent the existing systems are not compliant/do not meet the requirements of each governmental agency.

5. **Utilities.** Article VIII of the PUD is amended to add the following at the following in relation to the Future Phase:

**FUTURE PHASE UTILITIES**

“8.1 Public sanitary sewer and public water are provided to the development by the Township and/or the responsibly governmental authority for the Future Phases.

8.2 Prior to the issuance of the final certificates of occupancy for each residential structure in a Phase, Developer shall provide and dedicate easements to the Township and/or the responsible governmental

authority to allow for ingress, egress maintenance, repair and improvements of the public sanitary and public water systems.

8.3 Developer shall construct and pay the cost of the infrastructure required by the Township and the Township's consulting engineers to connect the property to the public sanitary system and the public water system.

8.4 The Township has water supply capacity and sewage disposal capacity to provide public sanitary and public water to the Property. The cost of water supply and sewage disposal to be paid by Developer will be:

- a) Forty Four Thousand One Hundred Sixty and No/100 (\$44,160.00) Dollars due upon issuance of the grading permit. Developer has already paid for grading permit;
- b) Four Thousand and No/100 (\$4,000.00) Dollars for sewer payable upon land use permit for each single family home/unit.
- c) Three Thousand Two Hundred and No/100 (\$3,200.00) Dollars payable for each land use permit for water tap per single family home/unit.
- d) The Developer and the Township agree that the costs imposed upon the Developer by the Township represents the amount due to the Township for the acreage assessment at 38.48 acres of developable land (excluding the Nature Preserve), 150 front feet (the front footage assessment for sewer) and 160 condominium units.

8.5 Upon Completion of construction of the above infrastructure and the approval by the Township for each Phase, the Developer shall convey the infrastructure components (the sewer, water mains and their appurtenant components) to the Township and thereafter the Township shall be responsible for maintenance, repair and replacement of the same. The Developer and its successors and assigns shall be responsible for the maintenance and repair and replacement of:

- a) The water supply leads extending from the utility/right of way easement to the buildings;
- and;
- b) The sanitary sewer leads from the utility/right of way easement to the buildings.”

6. Conflict. In the event of a conflict between provisions of this Amendment and the provision of any ordinance or regulation of the Township, the provision of this Amendment shall prevail.

7. Entire Agreement. This Amendment constitutes the entire agreement between the parties with respect to the subject of this Amendment and may not be amended or its terms varied except in writing and executed by all parties.

8. Successors and Assigns. This Amendment shall run with the land and shall bind and inure to the benefit of their parties and their successors and assigns.

9. Recording. Following execution of the Amendment by the parties, this Amendment shall be recorded with the Livingston County Register of Deeds. Any amendment shall be recorded with the Livingston County Register of Deeds.

10. Counterparts. This Amendment may be executed by the parties in one or more counterparts, and, when all counterpart documents are executed, the counterparts shall constitute a single binding instrument.



11. Effect of Amendment. The PUD Agreement, as amended by this Amendment continues in full force and effect. The terms of this Amendment supersede any contrary provisions in the PUD Agreement. Undefined terms in this Amendment shall have the meaning set forth in the PUD Agreement unless the context otherwise requires. The Recitals are incorporated in this Amendment by reference.

IN WITNESS WHEREOF, the parties have caused this Amendment to be executed as of the day and year recited above.

*[signatures on the following pages]*

**DEVELOPER**

HEALY HOMES AT SUMMERFIELD, LLC, a Michigan limited liability company

By: \_\_\_\_\_  
Jack Healy  
Its: Managing Member

**ACKNOWLEDGEMENT**

STATE OF MICHIGAN            )  
  ) ss  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 2022, before me, a notary public in and for Shiawassee County personally appeared Jack Healy, the Managing Member of Healy Homes at Summerfield, LLC, a Michigan limited liability company, known to be the person described in and who executed this Amendment, and who acknowledged the same to be of his free act and deed.

\_\_\_\_\_  
\_\_\_\_\_, Notary Public  
\_\_\_\_\_ County, Michigan  
My Commission expires: \_\_\_\_\_  
Acting in \_\_\_\_\_ County

*[signatures continue on following page]*



TOWNSHIP

CHARTER TOWNSHIP OF GENOA, a Michigan municipal corporation

By: \_\_\_\_\_  
Supervisor

By: \_\_\_\_\_  
Clerk

**ACKNOWLEDGEMENT**

STATE OF MICHIGAN            )  
  ) ss  
COUNTY OF LIVINGSTON    )

On this \_\_\_\_\_ day of \_\_\_\_\_, 2022, before me, a notary public in and for Livingston County personally appeared \_\_\_\_\_ to me known to be the Supervisor and Clerk, of the Charter Township of Genoa, a Michigan municipal corporation, respectively, who were duly authorized by the Genoa Township Board to sign this Agreement on behalf of Genoa Township.

\_\_\_\_\_  
\_\_\_\_\_, Notary Public  
\_\_\_\_\_ County, Michigan  
My Commission expires: \_\_\_\_\_  
Acting in Livingston County

**PREPARED BY**

Alexandra E. Dieck  
Bodman PLC  
201 S. Division, Suite 400  
Ann Arbor, Michigan 48103

**WHEN RECORDED RETURN TO:**

Nancy Willson (32620-319)  
Bodman PLC  
201 W. Big Beaver Road, Suite 500  
Troy, Michigan 48084

**EXHIBIT A**

*Legal Description of the Property*



**EXHIBIT B**  
*(Amended PUD Site Plan)*

**EXHIBIT C**

*Legal Description of the Future Phase*



Rec'd 5/23/03

RECORDED

2003 FEB 24 12 48

LIVINGSTON COUNTY MI. 48843

BPA

**AMENDED AND RESTATED SUMMERFIELD POINTE  
PLANNED UNIT DEVELOPMENT AGREEMENT**

THE PLANNED UNIT DEVELOPMENT AGREEMENT for SUMMERFIELD POINTE dated April 19, 2002 between ADLER ENTERPRISES COMPANY, L.L.C., 719 E. Grand River, Brighton, Michigan 48116 and the TOWNSHIP OF GENOA, a Michigan General Law Township, 2911 Dorr Road, Brighton, Michigan 48116 ("TOWNSHIP") is amended this 21<sup>st</sup> day of February, 2003, as follows:

**RECITATIONS**

ADLER ENTERPRISES COMPANY, L.L.C. of 719 E. Grand River, Brighton, Michigan 48116 ("MDR OWNER") possess fee title to certain real property situated in the Township of Genoa, County of Livingston, State of Michigan, more particularly described on attached *Schedule "A"* (referred to as the "MDR PROPERTY").

That GARELD K. HEXIMER and JEANETTE K. HEXIMER, of 3576 Brophy, Howell, Michigan 48843 ("LIC OWNER") possess fee title to certain real property situated in the Township of Genoa, County of Livingston, State of Michigan more particularly described on attached *Schedule "B"* (referred to as the "LIC PROPERTY").

The MDR OWNER, LIC OWNER and the TOWNSHIP have agreed to enlarge and expand the SUMMERFIELD POINTE PLANNED UNIT DEVELOPMENT AGREEMENT to include the LIC PROPERTY pursuant to the conditions set forth below for the uses and future development of the LIC PROPERTY and the uses and future development of the TOWNSHIP's previous approval of the MDR PROPERTY, as set forth in the Planned Unit Development Agreement recorded at Liber 3533, Pages 0900 to 0906, Livingston County Records, and as depicted upon the site plan for the MDR PROPERTY attached as *Schedule "C"*.

The Township Planning Commission and Township Board, in strict compliance with the Township Zoning Ordinance and with Act 184 of the Public Acts of 1943, as amended, reclassified the Property as Residential Planned Unit Development District, finding that such reclassification properly achieved the purposes of Article 10 of the Genoa Township Zoning Ordinance, including the encouragement of innovation in land use, the preservation of open space, the promotion of efficient provision of public services and utilities, the reduction of adverse traffic impacts, and the provision of adequate housing and employment.

The TOWNSHIP has found and concluded that the uses and future development plans and conditions for the LIC PROPERTY as shown on the approved PUD Site Plan, as amended, are reasonable and promote the public health, safety and welfare of the TOWNSHIP and they are consistent with the plans and objectives of the TOWNSHIP and consistent with surrounding uses of land.

NOW, THEREFORE, MDR OWNER, LIC OWNER and the TOWNSHIP, in consideration of the mutual promises contained in this Agreement as amended and restated, agree as follows:

**ARTICLE I  
GENERAL TERMS OF AGREEMENT**

1.1 The TOWNSHIP and the MDR OWNER and LIC OWNER acknowledge and represent that the recitations set forth above are true, accurate and binding.



- 1.2 The TOWNSHIP acknowledges and represents that this Agreement may be relied upon for future land use and development of the MDR PROPERTY by MDR OWNER and LIC PROPERTY by the LIC OWNER and/or their respective assigns, successors in interest, or successors in title.
- 1.3 The PUD Plan, as amended, and attached as *Schedule "D"*, has been duly approved by the TOWNSHIP in accordance with all applicable TOWNSHIP ordinances. The land uses which will be permitted and which may be developed on the MDR PROPERTY are as set forth below. The permitted land uses which may be developed on the LIC PROPERTY are attached as *Schedule "E"*.
- 1.4 The PUD Plan, as amended, complies with the Township Zoning Ordinance requirements, except as specifically provided otherwise within this Agreement.
- 1.5 The PUD Plan, as amended, identifies the location and configuration of the authorized land uses that may be developed, or must remain undeveloped, on the MDR PROPERTY and LIC PROPERTY.
- 1.6 In those instances in which the MDR OWNER and/or the LIC OWNER desire to obtain a modification of the PUD Plan, as amended, the TOWNSHIP shall review the proposed change in accordance with the Township Zoning Ordinance in effect as of the date of this Agreement, for the purpose of determining whether the change would have a material adverse impact upon surrounding land uses, services, transportation systems and/or facilities, and if such adverse impact would result, the TOWNSHIP may deny or impose mitigating conditions upon the proposed modification.
- 1.7 This Agreement, including the uses approved on the PUD Plan, as amended, are for the benefit of the MDR PROPERTY and LIC PROPERTY and shall run with the land, and shall bind and inure to the benefit of the heirs, successors, assigns and/or transferees of the parties to this Agreement.

**ARTICLE II.**  
**LAND USE AUTHORIZATION AND STANDARDS**

**MDR PROPERTY**

- 2.1 The Planned Unit Development as set forth on the PUD Plan, as amended, reflects the change in the zoning for the MDR PROPERTY from Rural Residential to medium density residential (MDR) consisting of the following use:

Not more than 192 attached condominium units consisting of forty eight (48) four (4) unit buildings.

- 2.2 The number of residential units permitted on the Property are a maximum of 192 attached condominium units for occupancy as single family residences.
- 2.3 The approved setbacks for the condominium buildings are:

<u>Perimeter Setbacks</u>	<u>Sidewalk Setback</u>	<u>Setback Between Buildings</u>	<u>Wetlands Setback</u>
North (Rear) - Min. 50 ft.	Min. 20 ft. from back	Min. 30 ft.	Min. 25 ft.
West (Side) - Min. 30 ft.	of sidewalk to front of		
East (Side) - Min. 75 ft.	building		
South (Front) - Min. 35 ft			

- 2.4 The MDR OWNER and the MDR OWNER's successors in interest shall preserve and protect the woodlands along the perimeter setback of the property on the east side and the PUD Plan, as amended, shall identify the area within the east side perimeter setback as a permanent conservation area. This permanent conservation area shall be preserved, protected and maintained by the Association of Co-Owners.



LIC PROPERTY

- 2.5 The Planned Unit Development as set forth on the PUD Plan, as amended, is consistent with light industrial/commercial usage.
- 2.6 The total number of light industrial/commercial parcels available on the **LIC PROPERTY** shall be not more than four (4) parcels. The existing Media One tower shall continue as an easement consisting of 0.23 acres +/- . The **LIC OWNER** retains the right to continue to receive rents for the tower site upon the easement, however, if the easement is abandoned such that it is no longer used for a tower, the land area comprising the easement parcel shall be joined to enlarge the land area for Parcel 3.
- 2.7 The uses allowed on any one of the four (4) parcels within the **LIC PROPERTY**, excepting the easement portion of Parcel 3 for the tower, shall be enumerated on *Schedule "D"* attached and as depicted on the PUD Plan, as amended (*Schedule "C"* attached), subject to the following conditions for outdoor storage:
- a. The existing outdoor storage on **LIC PROPERTY** Parcel No. 1 shall be allowed to be maintained in its existing location and with no additional screening required;
  - b. All outdoor storage will be screened from adjoining residential property and from Lawson Drive by a masonry wall with a sufficient height to screen any and all materials being stored;
  - c. All outdoor storage must be set back a minimum of one hundred (100') feet from all residential property lines and/or Lawson Drive;
  - d. All outdoor storage areas shall be paved with asphalt or concrete;
  - e. All outdoor storage shall be limited to no more than twenty five (25%) percent of the parcel; and
  - f. All outdoor storage (including any modifications to the existing outdoor storage on Parcel No. 1) shall require prior special land use approval from the **TOWNSHIP**.
- 2.8 The approved set backs for the **LIC PROPERTY** are:
- a. All parking will be set back ten (10') feet from the front lot line of the parcel with landscaping as required and depicted on the PUD Plan, as amended;
  - b. Except for Parcel 1, a fifty (50') foot wide greenbelt will be provided by the **LIC OWNER** or his successor in title along the north and west sides of the **LIC PROPERTY** as depicted on the PUD Plan, as amended, containing not less than one (1) canopy tree, two (2) evergreen trees and four (4) shrubs for each twenty (20) linear feet of the greenbelt;
  - c. The greenbelt for Parcel 1 shall be not less than forty (40') feet in width and shall contain not less than one (1) canopy tree, two (2) evergreen trees and four (4) shrubs per each twenty (20) linear feet, as well as a portion of any detention pond(s), if required.
  - d. If the existing structure on Parcel 1 is destroyed, relocated or removed, a minimum fifty (50') foot setback from the Parcel 1 perimeter property lines must be provided.
  - e. Parcels 2, 3 and 4 shall have a minimum fifty (50') foot front setback.
  - f. The internal <sup>building</sup> setback for all parcels shall be a minimum of ten (10') feet with landscaping as required by the **TOWNSHIP**.
  - g. The front yard setback from Lawson Drive and the southern service road may be reduced to a minimum of twenty-five (25') feet, provided the parking for the improvements on the parcel will be in the rear or side yard areas and further requiring that the front façade of any building or structure will be primarily brick with architectural detailing.



- (i) A permitted reduction of the front yard setback to a minimum of twenty-five (25') feet along Lawson Drive or the southern service drive shall require the parcel owner to provide a twenty (20') foot wide landscape buffer which shall include a three (3') foot high berm with not less than plantings of one (1) canopy tree, one (1) evergreen tree and four (4) shrubs for each thirty (30') feet along the property line, rounded upward.

ARTICLE III.  
TRANSPORTATION IMPROVEMENTS

MDR PROPERTY

- 3.1 The **MDR OWNER** at its expense and subject to the approval from the Michigan Department of Transportation and the Livingston County Road Commission shall be required to improve the intersection of Lawson Drive and Grand River Avenue as follows: (i) Lawson Drive will be improved to accommodate three lanes of vehicular traffic which shall include one separate right turn lane and one separate left turn lane; (ii) The Grand River Avenue intersection with Lawson Drive shall include an acceleration lane for vehicles exiting Lawson Drive and a de-acceleration lane for vehicles entering Lawson Drive; (iii) at the north terminus of Lawson Drive a radial cul-de-sac will be constructed by **MDR OWNER** within the public right-of-way; and (iv) one-half of the cost of the purchase and initial installation of a traffic control device when approved by the Michigan Department of Transportation at the Lawson Drive and Grand River Avenue intersection.
- 3.2 The **MDR OWNER** and/or its successor in title will be required at a future date to grant a reciprocal easement, satisfactory to the Township Board, for a connection road between the Summerfield Pointe Planned Unit Development and the adjoining property located to the west, to allow ingress and egress from and to the Development from both Grand River Avenue and Latson Road.

LIC PROPERTY

- 3.3 The east-west service drive as depicted on the PUD Plan, as amended, shall be constructed in accordance with Livingston County Road Commission standards with a fifty (50') foot right-of-way and the service drive road width being thirty one (31') feet from back of curb to back of curb,
- 3.4 The construction cost for the east-west service drive shall be escrowed in advance with the **TOWNSHIP** in the amounts indicated and be shared by the percentage indicated, amongst the following parties, which have agreed to their proportionate responsibility by a separate written agreement with the **TOWNSHIP**:

	<u>CONTRIBUTOR</u>	<u>PERCENTAGE OF CONTRIBUTION</u>	<u>AMOUNT ESCROWED</u>
a.	<b>TOWNSHIP</b>	25%	\$31,000.00
b.	Singh Development Company	12.5%	\$15,500.00
c.	Corrigan Oil Company	31.25%	\$38,625.00
d.	<b>LIC OWNER</b>	31.25%	\$38,625.00
	Total	100%	\$123,750.00

- 3.5 All of the above parties have contributed and deposited the monetary amounts set forth as the Amount Escrowed with the **TOWNSHIP** to be held in escrow to pay and satisfy the construction costs of the service drive. In the event that the **TOWNSHIP** has funds remaining after the payment of all construction costs for the service drive, any remaining funds from the escrow account will be returned to the parties in such amounts as determined by the parties respective percentage of contribution.
- 3.6 The service drive will be dedicated by the **LIC OWNER** and any other required parties for acceptance as a public road by the Livingston County Road Commission. Upon acceptance of the service drive as a public road, all maintenance and



repairs to the service drive will thereafter be the responsibility of the Livingston County Road Commission the entire length of the southern service drive between Lawson Road and Latson Road shall have one (1) name to be approved by the TOWNSHIP and the Livingston County Road Commission.

- 3.7 The service drive shall be constructed, completed and dedicated by the LIC OWNER and any other required parties to the dedication not later than October 15, 2003.

ARTICLE IV.

INTERNAL ROAD NETWORK - MDR PROPERTY ONLY

- 4.1 The internal system of vehicular thoroughfares will be established throughout the development as shown on the PUD Plan, as amended.
- 4.2 The internal roads within the MDR PROPERTY are private roads and shall be maintained pursuant to the terms of the Master Deed and condominium documents which shall designate responsibility for maintenance, repair or replacement to the incorporated association of co-owners.
- 4.3 The internal roads within the MDR PROPERTY are 27 feet measured from back of curb to back of curb, excepting in the area provided with a landscaped boulevard in which the roadways on either side of the boulevard are 18 feet measured from back of curb to back of curb.

ARTICLE V.

DRAINAGE

MDR PROPERTY

- 5.1 The system of drainage on the MDR PROPERTY within the development, including drainage sedimentation and detention, as applicable, is coordinated throughout the development and has been approved by the TOWNSHIP and its engineering consultants.
- 5.2 The drainage system on the MDR PROPERTY within the development is private and shall be maintained pursuant to the terms of the Master Deed and condominium documents which shall designate responsibility for maintenance, repair or replacement to the incorporated association of co-owners.

LIC PROPERTY

- 5.3 The drainage system on the LIC PROPERTY shall be private and the responsibility of the LIC OWNER, and his successors in title with annual assessments for maintenance of the drainage system as set forth within a Private Storm Water Drainage Easement, to be recorded by the LIC OWNER contemporaneously with the recording of this PUD Agreement, as amended.

ARTICLE VI.

SITE IMPROVEMENTS

MDR PROPERTY

- 6.1 The site improvements upon the MDR PROPERTY have been created to accomplish the objective of providing accommodations for vehicular traffic, parking, and pedestrian traffic as depicted upon the PUD Plan, as amended.
- 6.2 All pedestrian walkways to be constructed within the MDR PROPERTY shall be five (5') feet wide and constructed of concrete.
- 6.3 The MDR PROPERTY is serviced with underground utilities, including electrical, natural gas, telephone, and cable television, providing utility services to all buildings within the improved portion of the MDR PROPERTY with easements reserved to the utility providers for repair, maintenance and improvements.



- 6.4 There will be no site lighting by the **MDR OWNER** within the common elements or limited common elements of the **MDR PROPERTY**, except ground lighting for the development signage. Decorative lighting shall be low wattage fixtures attached to each side of the garage door of every unit within the development. Maintenance of the decorative lighting shall be the responsibility of each unit co-owner.

LIC PROPERTY

- 6.5 Individual site plans shall be submitted by the owner/developer of each parcel to the **TOWNSHIP** for approval prior to any development, with the exception of Parcel 1. In the event that the existing building upon Parcel 1 is destroyed, relocated or removed, then in that event, a site plan shall be prepared and submitted by the owner/developer for approval by the **TOWNSHIP** prior to development.
- 6.6 As a condition for approval of site plans for the development of Parcels 2, 3 and 4, the **LIC OWNER** or his successors in title shall be responsible for the construction of a five (5') foot wide concrete sidewalk along the parcel frontages as depicted on the PUD Plan, as amended. Maintenance and repair of the sidewalk shall be the responsibility of the adjoining parcel owner having sidewalk frontage, with the owner of Parcel 2 being also responsible for the maintenance and repair of the sidewalk crossing the proposed forty (40') foot wide access easement.
- 6.7 All lighting for the **LIC PROPERTY** shall be as set forth on the PUD Plan, as amended with all maintenance costs to be the responsibility of the **LIC OWNER** or his successors in title.

ARTICLE VII.  
LANDSCAPING

MDR PROPERTY

- 7.1 The landscaping shall be planted as designated on the PUD Plan, as amended, and as required by the **TOWNSHIP**. Landscape maintenance and replacement shall be pursuant to the terms of the Master Deed and condominium documents which shall designate responsibility for maintenance, repair or replacement to the incorporated association of co-owners.

LIC PROPERTY

- 7.2 The landscaping shall be planted as required by the **TOWNSHIP**. Landscape maintenance and replacement shall be the responsibility of the **LIC OWNER** or his successors in title.

ARTICLE VIII.  
UTILITIES

MDR PROPERTY

- 8.1 Public sanitary sewer and public water are provided to the development by the **TOWNSHIP** and/or the responsible governmental authority.
- 8.2 **MDR OWNER** shall provide and dedicate easements to the **TOWNSHIP** and/or the responsible governmental authority to allow for ingress, egress maintenance, repair and improvements of the public sanitary and public water systems.
- 8.3 **MDR OWNER** shall construct and pay the cost of the infrastructure required by the **TOWNSHIP** and the **TOWNSHIP's** consulting engineers to connect the **MDR PROPERTY** to the public sanitary system and the public water system.
- 8.4 The **TOWNSHIP** has water supply capacity and sewage disposal capacity to provide public sanitary and public water to the **MDR PROPERTY**. The cost of water supply and sewage disposal to be paid by **MDR OWNER** will be:
- a. Forty Four Thousand One Hundred Sixty and No/100 (\$44,160.00) Dollars due upon issuance of the grading permit;



- b. Sixteen Thousand and No/100 (\$16,000.00) Dollars for sewer payable upon issuance of each land use permit for the construction of each building; and
- c. Twelve Thousand Eight Hundred and No/100 (\$12,800.00) Dollars for water payable upon issuance of each land use permit for the construction of each building.

The **MDR OWNER** and the **TOWNSHIP** agree that the costs imposed upon the **MDR OWNER** by the **TOWNSHIP** represents the amount due the **TOWNSHIP** for the acreage assessment at 38.48 acres of developable land (excluding the Nature Preserve), 150 front feet (the front footage assessment for sewer) and 192 attached condominium units.

- 8.5 Upon completion of construction of the above infrastructure and approval by the **TOWNSHIP**, the **MDR OWNER** shall convey the infrastructure components (the sewer, water mains and their appurtenant components) to the **TOWNSHIP** and thereafter the **TOWNSHIP** shall be responsible for maintenance, repair and replacement of the same. The **MDR OWNER** and its successors and assigns shall be responsible for the maintenance repair and replacement of:
  - a. The water supply leads extending from the curb stops to the buildings; and
  - b. The sanitary sewer leads from the main to the buildings.

#### LIC PROPERTY

- 8.6 Public sanitary sewer and public water are provided to the development by the **TOWNSHIP** and/or the responsible governmental authority.
- 8.7 **LIC OWNER** shall provide and dedicate easements to the **TOWNSHIP** and/or the responsible governmental authority to allow for ingress, egress maintenance, repair and improvements of the public sanitary and public water systems.
- 8.8 **LIC OWNER** shall construct and pay the cost of the infrastructure required by the **TOWNSHIP** and the **TOWNSHIP's** consulting engineers to connect the **LIC PROPERTY** to the public sanitary system and the public water system.
- 8.9 Upon completion of construction of the above infrastructure and approval by the **TOWNSHIP**, the **LIC OWNER** shall convey the infrastructure components (the sewer, water mains and their appurtenant components) to the **TOWNSHIP** and thereafter the **TOWNSHIP** shall be responsible for maintenance, repair and replacement of the same. The **LIC OWNER** and its successors and assigns shall be responsible for the maintenance repair and replacement of:
  - a. The water supply leads extending from the **LIC PROPERTY** line to the individual parcels; and
  - b. The sanitary sewer leads from the **LIC PROPERTY** line to the individual parcels.

#### ARTICLE IX. NATURE PRESERVE - MDR PROPERTY ONLY

- 9.1 The PUD Plan, as amended incorporates a Nature Preserve of open and undeveloped land which is legally described as follows:

Part of the Southeast ¼ of Section 4, T2N-R5E, Genoa **TOWNSHIP**, Livingston County, Michigan, more particularly described as follows: Commencing at the South ¼ corner of said Section 4; thence along the North-South ¼ line of said Section 4, N 01°50'51" E, 1936.02 feet to the Point of Beginning of the parcel to be described; thence continuing along said North-South ¼ line, N 01°50'51" E, 954.63 feet to the center of said Section 4; thence along said East-West ¼ line as previously surveyed and monumented S 87°40'06" E, 1300.46 feet; thence S 01°53'15" W, 482.55 feet (previously recorded as South 492.5 feet) to a found iron pipe; thence along a previously surveyed and monumented line, S 88°06'46" W, 683.63 feet (previously recorded as S 86° W, 686 feet); thence S 01°26'28" W, 400.04 feet to a found iron rod; thence S 01°17'41" W, 132.62 feet; thence N 88°42'19" W, 144.66 feet; thence N 50°36'28" W, 244.39 feet; thence S 85°31'06" W, 285.32 feet to the Point of Beginning, containing 21.95 acres, more or less.



- 9.2 The restrictions imposed by the **MDR OWNER** on the open space and Nature Preserve shall be set forth within the Covenants, Conditions and Restrictions recorded with the Livingston County Register of Deeds and shall provide the following restrictions on rights and usage (i) there are no riparian rights from the Nature Preserve (or from any other point within the development) to Lake Chemung; (ii) no motor vehicles, off-road vehicles, snowmobiles, mini bikes, motorcycles, all terrain vehicles, canoes, watercraft, or floatation devices are permitted access to any wetland area within the Nature Preserve; (iii) recreational use shall be semi-passive activities such as walking, bird watching, but no overnight camping shall be permitted; and (iv) any and all changes and/or improvements to the Nature Preserve shall require prior approval of the **TOWNSHIP**.
- 9.3 Notwithstanding the open space requirement and the restriction on development within the Nature Preserve, **MDR OWNER** shall construct in compliance with the requirements and regulations of the Livingston County Drain Commission, a storm water detention pond within the Nature Preserve as depicted upon the PUD Plan.
- 9.4 In the event that the **TOWNSHIP** accepts **MDR OWNER**'s conveyance of the Nature Preserve, such conveyance is conditioned upon the prior approval by the **TOWNSHIP** of the condition of the title to the Nature Preserve, the recorded use restrictions, preservation and maintenance requirements for the Nature Preserve, and a non-exclusive access easement granted by the **MDR OWNER** over, upon and across the most direct established internal road or roads within the development, by the most direct route from the southerly most boundary of the Property northerly to the Nature Preserve.
- 9.5 The **TOWNSHIP** and **MDR OWNER** agree that the **MDR OWNER** will escrow with Metropolitan Title Company, Howell, Michigan, a warranty deed conveying legal title to the Nature Preserve to the **TOWNSHIP** and the non-exclusive access easement to the Nature Preserve. The escrowed warranty deed and non-exclusive access easement shall be released to the **TOWNSHIP** upon the **TOWNSHIP**'s acceptance of the Nature Preserve conveyance, but in no event shall the release occur earlier than either: (i) the completion of the build out of the 192 condominium units by **MDR OWNER**; or (ii) sixty (60) months from the date of this Agreement.
- 9.6 In the event that the **TOWNSHIP** does not accept the conveyance from the **MDR OWNER** of the Nature Preserve, **MDR OWNER** reserves the right to convey the Nature Preserve in fee title or as a conservation easement to an established land conservancy which conservancy maintains as an organizational purpose the acquisition, maintenance and protection of nature sanctuaries, and/or preserves natural areas, and/or the preservation of Michigan flora and fauna.

**ARTICLE X.**  
**MISCELLANEOUS**

- 10.1 The **MDR OWNER**, the **LIC OWNER** and the **TOWNSHIP**, upon mutual agreement, shall be entitled to modify, replace or amend this Agreement without the consent of any other person or entity, regardless of whether such person or entity now or hereafter has any interest in any part of the **MDR PROPERTY** or **LIC PROPERTY**, including co-owners, tenants of co-owners, mortgagees, land conservancies, or others.
- 10.2 In the event of any direct conflict between the terms and provisions of this Agreement (including the attached PUD Plan, as amended) and the provisions of the Zoning Ordinance, or other township ordinances, rules or regulations, the provisions of this Agreement shall control.
- 10.3 The undersigned parties acknowledge that the conditions imposed are reasonable conditions necessary to ensure that public services and facilities affected by the land use or activity will be capable of accommodating increased service and facility loads caused by the land use or activity, to protect the natural environment and conserve natural resources and energy, to ensure compatibility with adjacent uses of land, and to promote the use of land in a socially and economically desirable manner.



APPROVED by MDR OWNER on this 17<sup>th</sup> day of January, 2003.

WITNESSES:

MDR OWNER:

ADLER ENTERPRISES COMPANY, L.L.C.

By: [Signature]  
Tom Adler, Member

[Signature]  
Kenneth E. Burchfield

[Signature]  
Lori Anne Stankiewicz

On this 17<sup>th</sup> day of January, 2003, before me, a notary public in and for Livingston County, personally appeared Adler Enterprises Company, L.L.C. by Tom Adler, Member, known to be the person(s) described in and who executed the Amended Summerfield Pointe Planned Unit Development Agreement, set forth above, and who acknowledged the same to be of his free act and deed.

[Signature]  
Kenneth E. Burchfield, Notary Public  
Livingston County, Michigan  
My Commission Expires: 01/10/06

APPROVED BY LIC OWNER on this 31<sup>st</sup> day of January, 2003

WITNESSES:

LIC OWNER:

By: [Signature]  
Gareld K. Heximer

By: [Signature]  
Jeanette K. Heximer

[Signature]  
Lori Anne Stankiewicz

[Signature]  
Kenneth E. Burchfield

On this 31<sup>st</sup> day of January, 2003, before me, a notary public in and for Livingston County, personally appeared GARELD K. HEXIMER and JEANETTE K. HEXIMER, known to be the persons described in and who executed the Amended Summerfield Pointe Planned Unit Development Agreement, set forth above, and who acknowledged the same to be of his free act and deed.

[Signature]  
Kenneth E. Burchfield, Notary Public  
Livingston County, Michigan  
My Commission Expires: 01/10/06

APPROVED BY THE TOWNSHIP BOARD FOR THE TOWNSHIP OF GENOA on the 21<sup>st</sup> day of February, 2003, at a meeting duly called and held.

WITNESSES:

TOWNSHIP OF GENOA:

By: [Signature]  
Gary McCririe, Supervisor

By: [Signature]  
Paulette A. Skolarus, Clerk

[Signature]  
Michael Archinal

[Signature]  
Lillian E. Tubbs

On this 21<sup>st</sup> day of February, 2003 before me, a notary public in and for Livingston County, personally appeared **GARY MCCRIRIE** and **PAULETTE A. SKOLARUS** to me known to be the Supervisor and Clerk, respectively, who were duly authorized by the Genoa Township Board to sign this Amended Summerfield Pointe Planned Unit Development Agreement on behalf of Genoa Township and who acknowledged the same to be their free act and deed.

  
\_\_\_\_\_  
Notary Public

Livingston County, Michigan  
My Commission Expires: 10-4-05

*Instrument Prepared and Drafted by:*  
*Kenneth E. Burchfield, Attorney at Law*  
*Burchfield, Park & Pollesch, P.C.*  
*225 E Grand River, Suite 203*  
*Brighton, MI 48116 (810) 227-3100*



SCHEDULE A

MDR PROPERTY

Part of the Southeast 1/4 of Section 4, T2N-R5E, Genoa Township, Livingston County, Michigan, more particularly described as follows: Beginning at the South 1/4 Corner of said Section 4; thence along the North-South 1/4 line of said Section 4, N 01°50'51"E, 2890.65 feet to the Center of said Section 4; thence along the East-West 1/4 line of said Section 4 as previously surveyed and monumented, S 87°40'06"E, 1162.17 feet; thence N 02°19'54"E, 16.05 feet; thence along an existing chain link fence line, S 84°42'06"E, 140.66 feet; thence continuing along an existing chain link fence line, S 13°29'03"W, 81.90 feet; thence S 19°08'24"E, 39.61 feet; thence S 01°53'15"W, 374.11 feet (previously recorded as South) to a found iron pipe; thence along a previously surveyed and monumented line, S 88°06'46"W, 683.63 feet (previously recorded as S 86°00'00"W 686 feet); thence S 01°26'28"W, 400.04 feet to a found iron rod; thence S 01°17'41"W, 510.39 feet to a found iron pipe; thence N 87°29'24"E, 79.92 feet (previously recorded as East 78.00 feet); thence along a line 10 feet west of and parallel to the West line of "SUNRISE PARK" a subdivision as recorded in Liber 2 of Plats on Page 23 of the Livingston County Records, S 02°21'39"W, 243.95 feet; thence S 01°45'17"W, 227.42 feet to a found iron rod; thence S 87°01'22"E, 186.47 feet (previously recorded as East 167.00 feet); thence along the West line of said "SUNRISE PARK" S 48°20'08"E, (previously recorded as S 51°35'00"E) 240.00 feet; thence continuing along said West line, S 37°37'38"E, 146.14 feet (previously recorded as S 37°34'00"E, 148.00 feet); thence continuing along said West line, S 01°42'54"W (previously recorded as South, 386.00 feet); thence N 88°17'06"W (previously recorded as West), 10.00 feet; thence along a line 10.00 west of and parallel to the West line of said "SUNRISE PARK", S 01°42'54"W (previously recorded as South), 241.14 feet; thence continuing along a line 10 west of and parallel to said "SUNRISE PARK" S 11°13'33"E, 48.86 feet; thence along the South line of said Section 4 as monumented, N 89°43'06"W, 473.99 feet; thence along the East line of Lawson Drive, N 02°12'21"W, 150.00 feet; thence along the North line of Lawson Drive, N 89°43'06"W, 150.00 feet; thence along the West line of Lawson Drive, S 02°12'21"E, 150.00 feet; thence along the South line of said Section 4, as monumented, N 89°43'06"W, 546.16 feet; to the Point of Beginning; containing 60.49 acres more or less and subject to the rights of the Public over Lawson Drive. Also subject to Sanitary Sewer Easements as recorded in Liber 1346, Page 644 of the Livingston County Records. Also subject to any other easements or restrictions of record.

Bearings were established from the Plat of "LAKEWOOD KNOLL No.2" as recorded in Liber 35 of Plats on Pages 20 and 21 of the Livingston County Records.

N 1/4 Cor. Sec. 4 T2N-R5E  
 Fd. Iron rod in monument box  
 SW 71.10' nail in N/S 10" Oak  
 SE 74.05' nail in N/S Twin 3" Ash  
 West 178.25' nail in S/S Power Pole  
 East 53.10' S 1/4 Cor. Sec. 33 T3N-R5E

S 1/4 Cor. Sec. 4, T2N-R5E  
 Fd. "T" iron.  
 N30E 4.36' Fd N/T N/S 40" Oak  
 South 28.22' Fd. N/T W/S 10" Hickory  
 North 88.14' Fd. N/T W/S 42" Oak  
 S45E 58.88' Corner of Building

SCHEDULE BLIC PROPERTY

Part of the Northeast 1/4 of Section 9, T2N-R5E, Genoa Township, Livingston County, Michigan, more particularly described as follows: Beginning at the North 1/4 Corner of said Section 9; thence along the North Line of said Section 4, S 89°43'06" E, 621.16 feet (previously described as S 89°06'45" E, 660.80 feet); thence along the centerline of Lawson Road (66 foot wide Right of Way), S 02°10'22" E (previously described as S 01°36' E), 506.63 feet; thence continuing along said centerline, southerly on an arc right, having a length of 178.58 feet, a radius of 1026.63 feet, a central angle of 09°58'00", and a long chord which bears S 02°48'38" W, 178.36 feet (previously described as S 03°23' W, 178.37 feet); thence N 89°55'37" W, 78.37 feet (previously described as N 89°06'45" W, 78.16 feet); thence N 68°02'22" W, 610.87 feet (previously described as N 67°30' E, 612.00 feet); thence along the North-South 1/4 Line of said Section 9, N 01°39'41" E (previously described as N 02°24' E), 459.11 feet, to the POINT OF BEGINNING, containing 8.62 acres, more or less, and subject to the rights of the public over the existing Lawson Road. Also subject to any other easements or restrictions of record.

Bearings were established from a previous survey by Boss Engineering as recorded in Liber 2747, Page 0238, Livingston County records.



SCHEDULE "E"

LIST OF USES - LIC PROPERTY

INDUSTRIAL - *Principal Uses Permitted*

- a. Contractors' offices and building with only indoor storage of equipment and machinery (as amended 4/15/95);
- b. Indoor commercial storage (including boat storage);
- c. Indoor mini-storage;
- d. Health clubs/fitness centers accessory to industrial use either within the same building or within one-quarter (1/4) mile of the industrial building;
- e. Manufacturing, fabricating, processing, packaging and/or assembling of products indoors from previously prepared materials, such as: bone, canvas, cellophane, cloth, cork, feathers, felt, fibre, fur glass, hair, horn, paper, plastics, rubber, precious or semiprecious metal or stones, sheet metal, shell, textiles, tobacco, wax, wire, wood (excluding saw and planing mills) and yarns, excluding leather and food processing, and producing no external smoke, airborne solids, odors, gases, vibrations and noise;
- f. Print shops and book publishing that produce no external smoke, airborne solids, odors, gases, vibrations and noise;
- g. Professional or corporate offices;
- h. Radio and television studios;
- i. Research and development facilities, testing laboratories that produce no external smoke, airborne solids, odors, gases, vibrations and noise;
- j. Warehousing establishments;
- k. Business services (mailing, copying, data processing, etc.);
- l. Essential public services, public service buildings (excluding public service storage yards);
- m. Vocational/technical training facilities;
- n. Accessory uses, buildings and structures customarily incidental to any of the above uses, as defined in Article 3, General Provisions, Sections 3.31-3.36, except commercial outdoor display, sales or storage and open air business activities shall require a Special Land Use Permit as listed in Article 12.

INDUSTRIAL - *Special Land Uses*

- a. Any permitted use involving wet processes or the use of water in processing;
- b. Any permitted use of 20,000 square feet of total floor area;
- c. Bottling and packaging except canning (as amended 4/15/95);
- d. Personal service, retail and restaurants within office or industrial building provided the combined floor area is a minimum twenty-five percent (25%) of the building's gross floor area and all pedestrian access is from inside the



- building, and any exterior sign shall have a maximum size of ten (10) square feet;
- e. Urgent care, medical centers/clinics;
  - f. Indoor commercial recreation (skating, bowling, arcades);
  - g. Brew pubs;
  - h. Freezer locker plants and cold storage;
  - i. Retail sales or goods assembled, manufactured, compounded, processed, packaged or treated from previously prepared materials, or repaired or stored, on the premises, provided the building floor area devoted to retail sales comprises no more than 25 percent of principal building floor area and the outdoor sales area comprises no more than 25 percent of the minimum required lot area;
  - j. Child care centers, preschool, commercial day care;
  - k. Similar uses of the same nature or class as those listed as either a Principal Use or Special Land Use in this district as determined by the Planning Commission based on the Standards of Section 3.05;
  - l. Accessory uses, buildings and structures customarily incidental to any of the above uses, as defined in Article 3, General Provisions, Sections 3.31-3.36 shall be permitted with the Special Land Use except accessory fuel storage use or storage of hazardous materials, commercial outdoor display, sales or storage and open air business activities shall require a separate Special Land Use Permit.

**NEIGHBORHOOD SERVICE** – *Permitted Uses*

- a. Retail establishments and shopping centers with up to 15,000 square feet gross floor area which provide goods such as: bakery goods, including bakery items produced on the premises; groceries; produce; meats; provided no slaughtering shall take place on the premises; auto parts; seafood; dairy products; appliances; furniture and home furnishings; apparel; art galleries; drugs; home improvement items; hardware and garden supplies; sporting goods; rental and sales of videos; recorded music, bookstores; computer and software sales; flower shops, greeting card shops, and similar establishments not specifically addressed elsewhere (as amended 4/15/95).
- b. Personal and business service establishments, which perform services on the premises, including: photographic studios drying cleaning drop-off stations (without on-site processing); fitness centers; copy centers; mailing centers; data processing centers; dressmakers and tailors; shoe repair shops; tanning salons; beauty parlors; barber shops; and similar establishments (as amended 4/15/95);
- c. Restaurants, delicatessen and similar establishments serving food or beverages, excluding restaurants which provide drive-up or drive-through service (as amended 4/15/95);
- d. Professional offices of doctors, dentists, optometrists, chiropractors, psychiatrists, psychologists and similar or allied professions; excluding clinics



- and urgent care centers; within buildings up to 15,000 square feet of gross floor area (as amended 4/15/95);
- e. Professional offices of lawyers, architects, engineers, insurance agents, real estate agents, financial consultants, accountants and similar or allied professions within buildings up to 15,000 square feet of gross floor area (as amended 4/15/95);
  - f. Churches, temples and similar places of worship and related facilities (as amended 4/15/95);
  - g. Child care centers, preschool and commercial day care provided that for each child cared for, there shall be provided and maintained a minimum of two hundred and fifty (250) square feet of indoor play area and one hundred and fifty (150) square feet of outdoor play area with a minimum play area of one thousand (1,000) square feet. The required play area shall be fenced and screened from any abutting residential district. The Planning Commission may reduce the required play area in consideration of the number of infants which care is devoted (as amended 4/15/95);
  - h. Bed and breakfast inns (as amended 4/15/95);
  - i. Hotels and motels with no more than 25 rooms not including accessory convention/meeting facilities or restaurants. These uses may include the residence for the owner/manager's family (as amended 4/15/95)
  - j. Public/government buildings.

**NEIGHBORHOOD SERVICE** - *Special Land Uses*

- a. Retail establishments and shopping centers as listed in Section 8.202 (a) with 15,001 - 30,000 square feet of gross floor area (as amended 4/15/95);
- b. Banks, savings and loan, credit unions and similar financial institutions with up to three (3) drive-through teller windows including any automated teller windows. All drive-through facilities shall be within the principal building or attached by a canopy;
- c. Convenience stores and beer/wine/liquor stores, provided there is no gasoline sales or automobile service (as amended 4/15/95);
- d. Laundromats (as amended 4/15/95);
- e. Restaurants and open front windows;
- f. Professional offices and medical offices with over 15,000 square feet of gross floor area (as amended 4/15/95);
- g. Restaurants, taverns and bars serving alcoholic beverages but without live entertainment or dancing (as amended 4/15/95);
- h. Studios of photographers and artists;
- i. Similar uses of the same nature or class as those listed as either a Principal Use or Special Land Use in this district as determined by the Planning Commission based on the Standards of Section 3.05;
- j. Accessory uses, buildings and structures customarily incidental to any of the above uses, as defined in Article 3, General Provisions, Sections 3.31-3.36,

except accessory uses listed in Article 12 as Special Land Uses require an additional Special Land Use Permit. Accessory uses requiring a Special Land Use Permit include fuel storage, use or storage of hazardous materials, commercial outdoor display or sales or storage and open air business activities.





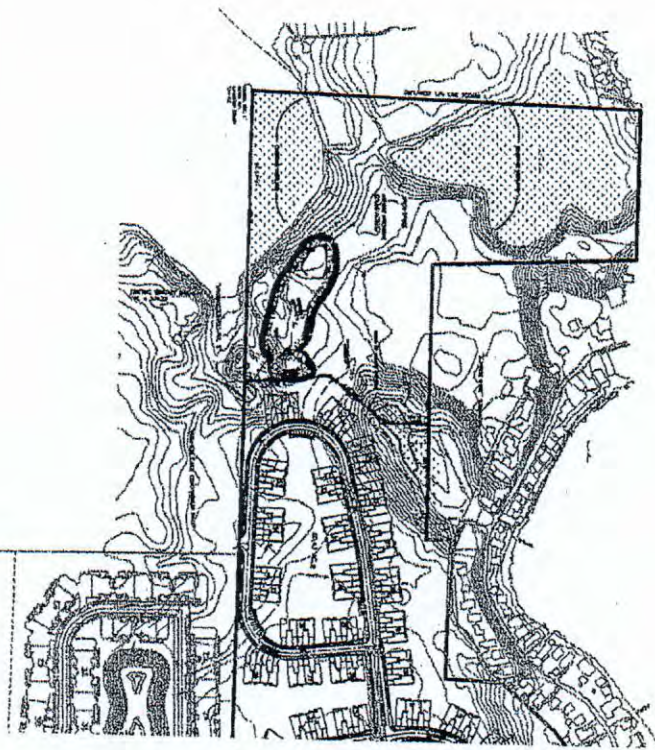
SCHEDULE "D"

OVERALL SITE PLAN

BENCHMARK: RAILROAD 39K6 AT EAST SIDE OF POWER POLE ELEVATION=98353 (U.S.C.S.)



LEGEND	
SYMBOL	DESCRIPTION
	CENTERLINE
	SPOT ELEVATION
	STORM SEWER LINE
	UTILITY POLE
	WATER SEWER
	WATER MAIN
	GAS MAIN
	ELECTRIC
	TELEPHONE
	EXISTING STREET
	STREET
	ASPHALT PAVEMENT
	CONCRETE PAVEMENT



THIS DRAWING IS FOR SITE PLAN APPROVAL ONLY NOT FOR CONSTRUCTION.

OVERALL SITE PLAN - ALL SHEETS - 06/05/2002 - 10:03:27 AM EDT





**MASTER DEED  
SUMMERFIELD POINTE ESTATES**

This Master Deed is made and executed on this \_\_\_ day of \_\_\_\_\_, 2022, by Healy Homes of Summerfield LLC, a Michigan Limited Liability Company (the “Developer”), whose address is 3696 Sleeth Road, Commerce Township, Michigan 48382, in pursuance of the provisions of the Michigan Condominium Act (being Act 59 of the Public Acts of 1978, as amended) (the “Act”).

WHEREAS, the Developer desires by recording this Master Deed, together with the Bylaws attached hereto as Exhibit A and together with the Condominium Subdivision Plan attached hereto as Exhibit B (both of which are incorporated by reference into and made a part of this Master Deed), to establish the real property described in Article II below, together with the improvements located and to be located thereon, and the appurtenances thereto as a residential Condominium Project under the provisions of the Act.

NOW, THEREFORE, the Developer does, upon the recording hereof, establish Summerfield Pointe Estates as a Condominium Project under the Act and does declare that Summerfield Pointe Estates (the “Condominium,” the “Project” or the “Condominium Project”) shall, after such establishment, be held, conveyed, hypothecated, encumbered, leased, rented, occupied, improved, or in any other manner utilized, subject to the provisions of the Act, and to the covenants, conditions, restrictions, uses, limitations and affirmative obligations set forth in this Master Deed and the attached Exhibits A and B, all of which shall be deemed to run with the land and shall be a burden and a benefit to the Developer, its successors and assigns, and any persons acquiring or owning an interest in the Condominium Premises, and its successors and assigns. In furtherance of the establishment of the Condominium Project, it is provided as follows:

**ARTICLE I  
TITLE AND NATURE**

The Condominium Project shall be known as Summerfield Pointe Estates, Livingston County Condominium Subdivision Plan No. \_\_\_\_\_. The Condominium Project is established in accordance with the Act. The Units contained in the Condominium, including the number, boundaries, dimensions and area of each, are set forth completely in the Condominium Subdivision Plan attached as Exhibit B. Each Unit is capable of individual utilization on account of having its own entrance from and exit to a Common Element of the Condominium Project. Each Co-owner in the Condominium Project shall have an exclusive right to his or her Unit and shall have undivided and inseparable rights to share with other Co-owners the General Common Elements of the Condominium Project.



**ARTICLE II  
LEGAL DESCRIPTION**

The land which is submitted to the Condominium Project established by this Master Deed is described as follows:

[INSERT LEGAL DESCRIPTION]

**ARTICLE III  
DEFINITIONS**

Certain terms are utilized not only in this Master Deed and the attached Exhibits A and B, but are or may be used in various other instruments such as, by way of example and not limitation, the Articles of Incorporation and rules and regulations of the Summerfield Pointe Estates Home Owners Association, a Michigan non-profit corporation, and deeds, mortgages, liens, land contracts, easements and other instruments affecting the establishment of, or transfer of, interests in Summerfield Pointe Estates as a condominium. Wherever used in such documents or any other pertinent instruments, the terms set forth below shall be defined as follows:

Section 1. Act. The “Act” means the Michigan Condominium Act, being Act 59 of the Public Acts of 1978, as amended.

Section 2. Association. “Association” means Summerfield Pointe Estates Home Owners Association, which is the non-profit corporation organized under Michigan law of which all Co-owners shall be members, which corporation shall administer, operate, manage and maintain the Condominium.

Section 3. Bylaws. “Bylaws” means the attached Exhibit A, being the Bylaws setting forth the substantive rights and obligations of the Co-owners and required by Section 3(8) of the Act to be recorded as part of the Master Deed. The Bylaws shall also constitute the corporate bylaws of the Association as provided for under the Michigan Nonprofit Corporation Act.

Section 4. Common Elements. “Common Elements,” where used without modification, means both the General and Limited Common Elements described in Article IV hereof.

Section 5. Condominium Documents. “Condominium Documents” means and includes this Master Deed and the attached Exhibits A and B, and the Articles of Incorporation, Bylaws and rules and regulations, if any, of the Association, as all of the same may be amended from time to time.

Section 6. Condominium Premises. “Condominium Premises” means and includes the land described in Article II above, all improvements and structures thereon, and all easements, rights and appurtenances belonging to Summerfield Pointe Estates as described above.

Section 7. Condominium Project, Condominium or Project. “Condominium Project,” “Condominium” or “Project” means Summerfield Pointe Estates, as a Condominium Project established in conformity with the Act.

Section 8. Condominium Subdivision Plan. “Condominium Subdivision Plan” means the attached Exhibit B.

Section 9. Consolidating Master Deed. “Consolidating Master Deed” means the final amended Master Deed which shall describe Summerfield Pointe Estates as a completed Condominium Project and shall reflect the entire land area in the Condominium Project resulting from parcels that may have been added to and/or withdrawn from the Condominium from time to time under Articles VI and VII of this Master Deed, and all Units and Common Elements therein, as constructed, and which shall express percentages of value pertinent to each Unit as finally readjusted. Such Consolidating Master Deed, if and when recorded in the office of the Livingston County Register of Deeds, shall supersede the previously recorded Master Deed for the Condominium and all amendments thereto.

Section 10. Co-owner or Owner. “Co-owner” means a person, firm, corporation, partnership, association, trust or other legal entity or any combination thereof who or which owns one or more Units in the Condominium Project. The term “Owner,” wherever used, shall be synonymous with the term “Co-owner.”

Section 11. Developer. “Developer” means Healy Homes of Summerfield, LLC, a Michigan Limited Liability Company, which has made and executed this Master Deed, and its successors and assigns including any successor developer(s) under section 135 of the Act. All successor developers under Section 135 of the Act shall always be deemed to be included within the term “Developer” whenever, however and wherever such terms are used in the Condominium Documents.

Section 12. Development and Sales Period. “Development and Sales Period,” for the purposes of the Condominium Documents and the rights reserved to the Developer thereunder, means the period commencing with the recording of the Master Deed until one (1) year after the Developer no longer owns a Unit in the Condominium Project. For the purposes of this Section, the term “Developer” shall also mean any successor developer(s) as defined in Section 135 of the Act.

Section 13. First Annual Meeting. “First Annual Meeting” means the initial meeting at which non-developer Co-owners are permitted to vote for the election of all Directors and upon all other matters which properly may be brought before the meeting. Such meeting is to be held (a) in the Developer’s sole discretion after 50% of the Units that may be created are sold, or (b) mandatorily within (i) 54 months from the date of the first Unit conveyance, or (ii) 120 days after 75% of the Units that may be created are sold, whichever first occurs.

Section 14. Transitional Control Date. “Transitional Control Date” means the date on which a Board of Directors of the Association takes office pursuant to an election in which the votes which may be cast by eligible Co-owners unaffiliated with the Developer exceed the votes which may be cast by the Developer.

Section 15. Unit or Condominium Unit. “Unit” or “Condominium Unit” each mean a single Unit in Summerfield Pointe Estates, as such space may be described in Article V, Section 1 of this Master Deed and on the attached Exhibit B, and shall have the same meaning as the term “Condominium Unit” as defined in the Act. All structures and improvements now or hereafter located within the boundaries of a Unit shall be owned in their entirety by the Co-owner of the Unit within which they are located and shall not, unless otherwise expressly provided in the Condominium Documents, constitute Common Elements. The Developer does not intend to and is not obligated to install any structures whatsoever within the Units or their appurtenant Limited Common Elements.

Section 16. Mailbox Fee. “Mailbox Fee” means the \_\_\_\_\_ dollar (\$ \_\_\_\_\_) mailbox installation fee paid by each initial purchaser of a Unit from Developer in Summerfield Pointe Estates at the closing of the purchase of the Unit. The Mailbox Fee is in addition to other fees and assessments to be paid to Developer at the closing of a Unit.



Section 17. PUD Agreement. “PUD Agreement” means that certain Summerfield Pointe Planned Unit Development Agreement by and between the Township and Developer’s Predecessor in interest, dated April 19, 2002, recorded in Liber 3533, Page 0900, Livingston County Records, as amended by that certain First Amendment to Summerfield Pointe Planned Unit Development Agreement, recorded, or to be recorded in the Livingston County Records, which sets forth requirements from the Township in relation to the zoning and development of the Project. All Co-Owner’s acknowledge and agree that the Condominium is subject to the terms and conditions of the

Section 18. Future Aster Boulevard Easement. “Future Aster Boulevard Easement” means that means the future easement and permission that Developer or the Association will grant to the neighboring property owner to the west of the Condominium to connect to the Roads in Summerfield Pointe via Aster Boulevard. Developer, and the Association, if after the Transitional Control Date, shall grant the Future Aster Boulevard Easement in accordance with the terms of the PUD Agreement as prescribed by the Township. In the event that the road connecting Summerfield Pointe Estates and the neighboring property via Aster Boulevard is installed, the Condominium, Association and Co-Owners shall have the right to utilize the future roads to be located on the neighboring property. Once construction of the Future Aster Boulevard Easement is complete, the portion of Aster Boulevard located wholly within the Project will be considered part of the Roads in the Condominium and will be maintained by the Association pursuant to this Master Deed. The location of the Future Aster Boulevard Easement is shown on the Condominium Subdivision Plan attached as Exhibit B hereto.

Whenever any reference herein is made to one gender, the same shall include a reference to any and all genders where the same would be appropriate; similarly, whenever a reference is made herein to the singular, a reference shall also be included to the plural where the same would be appropriate and vice versa.

#### **ARTICLE IV COMMON ELEMENTS**

The Common Elements of the Project and the respective responsibilities for maintenance, decoration, repair or replacement thereof, are as follows:

Section 1. General Common Elements. The General Common Elements are:

(a) Land. The land described in Article II above, including the roads located within the Condominium (only until dedicated to the public and if requested or required by the Charter Township of Genoa), and other common areas, if any, not identified as Limited Common Elements.

(b) Electrical. The electrical transmission lines and transformers throughout the Project, up to the point at which service leads leave the transformer to provide connections for service of Units and dwellings.

(c) Telephone. The telephone system throughout the Project up to the point of lateral connections for Unit service.

(d) Gas. The gas distribution system throughout the Project up to the point of lateral connections for Unit service.

(e) Telecommunications. The telecommunications system, if and when any may be installed, up to the point of lateral connections for Unit service.

(f) Storm Drainage System. The storm water drainage system including detention ponds and appurtenances throughout the Project.

(g) Entrance Areas. The entrance areas to the Condominium as shown as General Common Elements as the Condominium Subdivision Plan.

(h) Sanitary Sewer System. The sanitary sewer system throughout the Project up to the point of lateral connection for service to Units and dwellings.

(i) Water Service System. The water service system and water mains throughout the project up to the point of lateral connection for service to Units and dwellings.

(j) Sprinkler System. Any sprinkler system(s), if and when installed, by the Developer to serve general common lawn areas shall be General Common Elements to be maintained, repaired and replaced by the Association.

(k) Sidewalks. The sidewalks, walking paths and bike paths within the Condominium Project, contained within the road rights of way in the Project, a General Common Element. The sidewalks, if any, along any public road adjoining the Project on Nine Mile Road are also General Common Elements (but only to the extent that they are within the Project boundaries); however, the sidewalks, walking paths and bike paths may be dedicated to the public in the future by the Developer and in that event the sidewalks will no longer be Common Elements and will not be part of the Project. There is no absolute promise that dedication of the sidewalks will take place and this dedication may be made by the Developer without the consent of any Co-owner.

(l) Landscaping. All landscaping, if any, installed by the Developer on the Entrance Areas or on any other area constituting a General Common Element.

(m) Other. Such other elements of the Project not herein designated as General or Limited Common Elements which are not enclosed within the boundaries of a Unit, and which are intended for common use or are necessary to the existence, upkeep, appearance, utility or safety of the Project, including all open spaces and storm water detention facilities and appurtenances.

Section 2. Limited Common Elements. Limited Common Elements, if any, shall be subject to the exclusive use and enjoyment of the owner of the Unit to which the Limited Common Elements are appurtenant.

(a) Utility Service Leads. Any utility service leads which connect any utility lines of any sort located within the Common Elements of the Project to any dwelling shall be Limited Common Elements limited in use to the Unit(s) which they serve.

(b) Driveways and Walks. Driveways and walks are Limited Common Elements serving the Units as depicted on the Condominium Subdivision Plan are limited in use to the Units which they serve.

Section 3. Responsibilities. The respective responsibilities for the maintenance, decoration, repair and replacement of the Common Elements are as follows:

(a) Co-owner Responsibilities.



- (1) Units and Limited Common Elements. It is anticipated that separate residential dwellings will be constructed within the Units depicted on Exhibit B. Except as otherwise expressly provided with respect to exterior maintenance of dwellings, the responsibility for, and the costs of maintenance, decoration, repair and replacement of any dwelling and appurtenances to each dwelling as a Limited Common Element (such as driveways, walks, utility leads, decks, and air conditioner compressors and pads), shall be borne by the Co-owner of the Unit which is served by such Limited Common Elements; provided, however, that the exterior appearance of such dwelling, the Units and appurtenant Limited Common Elements, to the extent visible from any other dwelling, Unit or Common Element in the Project, shall be subject at all times to the approval of the Association and to reasonable aesthetic and maintenance standards prescribed by the Association in duly adopted rules and regulations.
- (2) Utility Services. All costs of electricity, water (including irrigation costs) and natural gas and any other utility services, except as otherwise specifically provided, shall be borne by the Co-owner of the Unit to which such services are furnished.
- (3) Landscaping. Each Co-owner shall be responsible for the initial installation of landscaping in his or her Unit and the yard area appurtenant to the Unit. Co-owners shall be responsible for and bear the costs of replacement of all landscaping installed in their respective Units and yard areas, including lawns. General Common Element landscaping installed by the Developer shall be maintained, repaired and replaced by the Association

(b) Association Responsibility for Units and Common Elements: Exterior Maintenance of Dwellings/Residence on Units.

- (i) The Association shall be responsible for routine maintenance and repair, but not replacement of the exteriors the residences built within the Units. The Developer, in the initial maintenance budget for the Association, shall be entitled to determine the nature and extent of such services and reasonable rules and regulations may be promulgated in connection therewith. As required under the Act, The Association is responsible for maintenance, repair and replacement of all General Common Elements.
- (ii) Notwithstanding any other provisions of the Condominium Documents to the contrary, the Association is responsible for the routine exterior maintenance of the dwellings or residences located on Units. The Association undertake exterior building maintenance, roof shingle repair and replacement (but not including underlayment sheets or other roof structural elements), exterior painting, caulking, siding maintenance, regular lawn cutting and edging and maintenance of lawns. However all windows, doors, and garage door, doors, decks (if any) and patios (if any) shall be maintained, repaired and replaced by the Co-Owners of the Unit, not the Association.
- (iii) The Association shall also be responsible for maintaining Common Element open space of the Condominium Project immediately adjacent to the single family

homes and lawn areas within Units. Plating beds, if any shall be installed and maintain by the Co-Owners of Units, not by the Associations.

- (iv) The Association shall undertake snow removal from walks and driveways.
- (v) The Co-owners of Units shall solely be responsible for all cost of irrigation and irrigation systems, including maintenance repair and replacement as their individual cost and expense.
- (vi) The Association shall not be responsible for maintenance, repair or replacement of and decks or patios or others landscaping hardscape on Units which are the responsibility of the Co-Owners of Units.
- (vii) The Association shall not be responsible for irrigation of lawns and landscaping on Units.
- (viii) The Association's maintenance responsibilities for Units do not include the cost of insurance which is the responsibility of the individual Co-Owners of Unit.
- (ix) Notwithstanding the Association's maintenance obligations in Section 3(c) the cost of replacement of any part of the dwelling or residence and the cost of replacement (rather mere maintenance) of the landscaping shall be borne by the Co-Owners of Units as their individual responsibility and expense.

(c) Maintenance Until Dedicated; Roads. The roads referred to in Article IV, Section 1(a) above will be maintained, replaced, repaired and resurfaced as necessary by the Association or the condominium association for the neighboring Summerfield Point unless and until dedicated and accepted by the Road Commission for Livingston County. It is the Association's responsibility to inspect and to perform preventative maintenance of the condominium roadways on a regular basis in order to maximize their useful life and to minimize repair and replacement costs until dedication occurs. The Association shall not be responsible for the maintenance, repair or replacement of the driveways which serve the Units. The costs of the foregoing maintenance, repair, replacement and resurfacing by the Association or the neighboring condominium association for Summerfield Point shall be assessed to the Co-Owners in Summerfield Pointe Estates on a pro-rata basis based on the number of Units in Summerfield Pointe Estates and Summerfield Pointe. Co-Owners acknowledge and agree that they will be subject to assessments relating to Article XIII and the cost sharing with the neighboring community and as required under the PUD Agreement.

(d) General Common Elements. The cost of maintenance, repair and replacement of all General Common Elements shall be borne by the Association, subject to any provision of the Condominium Documents expressly to the contrary.

(e) Sprinkling Systems for Entrance Ways. The Association shall be responsible for the repair, replacement and maintenance of any of the sprinkler systems within the entrance ways and the cul-de-sac islands including all electrical appliances such as (if installed) pumps, timers and controls which operate the system, if and when installed wherever they may be located.

Section 4. Utility Systems. Some or all of the utility lines, systems (including mains and service leads) and equipment, and the telecommunications described above may be owned by the local public authority or by the company that is providing the pertinent service. Accordingly, such utility lines,



systems and equipment, and the telecommunications, shall be General Common Elements only to the extent of the Co-owner's interest therein, if any, and Developer makes no warranty whatever with respect to the nature or extent of such interest, if any. The extent of the Developer's responsibility will be to see that water, sanitary, telephone, electric and natural gas mains are installed within reasonable proximity to, but not within, the Units. Each Co-owner will be entirely responsible for arranging for and paying all costs in connection with extension of such utilities by laterals from the mains to any structures and fixtures located within the Units.

Section 5. Use of Units and Common Elements. No Co-owner shall use his or her Unit or the Common Elements in any manner inconsistent with the purposes of the Project or in any manner which will interfere with or impair the rights of any other Co-owner in the use and enjoyment of his or her Unit or the Common Elements. No Limited Common Element may be modified or its use enlarged or diminished by the Association without the written consent of the Co-owner to whose Unit the same is appurtenant.

## **ARTICLE V UNIT DESCRIPTIONS, PERCENTAGES OF VALUE AND CO-OWNER RESPONSIBILITIES**

Section 1. Description of Units. Each Unit in the Condominium Project is described in this paragraph with reference to the Condominium Subdivision Plan of Summerfield Pointe Estates, as prepared by Desine, Inc. and attached to this Master Deed as Exhibit B. As of the date of this Master Deed, there are 14 Units in the Condominium. Each Unit shall consist of the space located within Unit boundaries as shown on the attached Exhibit B and delineated with heavy outlines together with all appurtenances thereto. The plans and specifications for the Project have been filed with the Charter Township of Genoa. All dwellings must be constructed within the Units as depicted on Exhibit B. The Units are numbered consecutively from 1 to 14.

Section 2. Percentage of Value. The percentage of value assigned to each Unit in Summerfield Pointe Estates shall be equal. The determination that percentages of value should be equal was made after reviewing the comparative characteristics of each Unit in the Project and concluding that there are no material differences among the Units insofar as the allocation of percentages of value is concerned. The percentage of value assigned to each Unit shall be determinative of each Co-owner's respective share of the Common Elements of the Condominium Project, the proportionate share of each respective Co-owner in the proceeds and the expenses of administration and the value of such Co-owner's vote at meetings of the Association. The total value of the Project is 100%.

## **ARTICLE VI EXPANSION OF CONDOMINIUM**

Section 1. Area of Future Development. The Condominium Project established pursuant to the initial Master Deed consisting of fourteen (14) Units is intended to be a multiphase expandable project which maybe be expanded to up to 108 Units total. The land on which additional Units maybe be created is described as:

**[INSERT LEGAL DESCRIPTION]**

(the "area of future development").

Additionally the Developer has reserved the right to withdraw land as provided under Article VII, below and as provided under the Act. Any such withdrawn land shall be deemed also to be an area of future development which may be re-incorporated in the Condominium Project. is an “area of future development”.

Section 2. Increase in Number of Units. Any other provisions of this Master Deed notwithstanding, the area(s) of future development maybe be incorporated in the Condominium Project, at the option of the Developer, from time to time, within a period ending no later than six years from the date of recording this Master Deed, by addition or re-incorporation into this Condominium of any portion of the area of future development and the development of residential Units thereon. The location, nature, appearance, design and structural components of all such additional Units as may be constructed thereon shall be determined by the Developer in its sole discretion subject only to approval by the Charter Township of Genoa. All such improvements shall be reasonably compatible with the existing development in the Project, as determined by the Developer in its sole discretion. No Unit shall be created within the area of future development that is not restricted exclusively to residential use.

Section 3. Expansion and Re-Expansion Not Mandatory. Nothing herein contained shall in any way obligate the Developer to expand or re-expand the Condominium Project and the Developer may, in its discretion, establish all or a portion of the area of future development as a rental development, a separate condominium project (or projects) or any other form of development. There are no restrictions on the election of the Developer to expand or re-expand the Project other than as explicitly set forth herein. There is no obligation on the part of the Develop add or re-incorporate any portion of the area of future development described in this Article VI, nor is there any obligation to add portions thereof in any particular order nor to construct particular improvements thereon in any specific locations.

Section 4. Charter Township of Genoa Approval Required. Any amendments under Articles VI through XI of this Master Deed are subject to the approval of the Charter Township of Genoa at its discretion. The rights set forth in Articles VI through X are incorporated in this Master Deed for the purpose of providing the Developer and the Charter Township of Genoa reasonable flexibility to amend the Project Documents should appropriate circumstances arise. .

Section 5. Expansion Under Section 36, Condominium Act. As provided under Section 36 of the Act, MCL 559.136, undivided interests in land may be added to the Condominium Project as common elements and with respect any such land added Co-owners may be tenants in common, joint tenants, or life tenants with other persons. A Condominium Unit shall not be situated on the lands. The Master Deed, or any amendment to Master Deed of the Condominium project shall include a legal description of the land added under this Section 6 and shall describe the nature of the Co-owners’ estate in it.

## **ARTICLE VII CONTRACTION OF CONDOMINIUM**

Section 1. Right to Contract. As of the date this Master Deed is recorded, the Developer intends to establish a Condominium Project consisting of fourteen (14) Units on the land described in Article II, all as shown on the Condominium Subdivision Plan. Developer reserves the right, however, to establish a Condominium Project consisting of fewer Units than described above and to withdraw from the Project all or some portion of the land described in Article II, except that in no event may the Project consist of fewer than two (2) Units, being Units 1 and 2 as they are depicted on Exhibit B attached hereto. Furthermore, any land re-incorporated added under Article VI above shall be deemed to be part of the contractible area under Article VII (the “contractible area”).



Therefore, any other provisions of this Master Deed to the contrary notwithstanding, the number of Units in this Condominium Project may, at the option of the Developer from time to time, within a period ending no later than six (6) years from the date of recording this Master Deed, be contracted to any number determined by the Developer in its sole judgment, but in no event shall the number of Units be less than two. There is no obligation on the part of the Developer to withdraw from the Condominium all or any portion of the contractible area described in this Article VII, nor is there any obligation to withdraw portions thereof in any particular order.

Section 2. Withdrawal of Land. In connection with such contraction, the Developer unconditionally reserves the right to withdraw from the Condominium Project such portion or portions of the land described in this Article VII as is not reasonably necessary to provide access to or otherwise serve the Units included in the Condominium Project as so contracted. Developer reserves the right to use the portion of the land so withdrawn to establish, in its sole discretion, a rental development, a separate condominium project (or projects) or any other form of development. Developer further reserves the right, subsequent to such withdrawal but prior to six (6) years from the date of recording this Master Deed, to expand the Project as so reduced to include all or any portion of the land so withdrawn.

Section 3. Reservation of Rights Under Section 67. The Developer further reserves all contraction rights provided under Section 67 of the Act, as amended by the Public Act 379 of 2000.

## **ARTICLE VIII CONVERTIBLE AREAS**

Section 1. Designation of Convertible Areas. All Units and Common Elements are hereby designated on the Condominium Subdivision Plan as Convertible Areas within which the Units and Common Elements may be modified or created.

Section 2. The Developer's Right to Modify Units and Common Elements. The Developer reserves the right, in its sole discretion, during a period ending no later than six (6) years from the date of recording this Master Deed, to modify the size, location, design or elevation of Units and/or General or Limited Common Elements appurtenant or geographically proximate to such Units within the Convertible Areas designated for such purpose on the Condominium Subdivision Plan, so long as such modifications do not unreasonably impair or diminish the appearance of the Project or the view, privacy or other significant attribute or amenity of any Unit which adjoins or is proximate to the modified Unit or Common Element, including the creation or elimination of Units or Common Elements.

Section 3. Compatibility of Improvements. All improvements constructed within the Convertible Areas described above shall be reasonably compatible with the structures on other portions of the Condominium Project. No improvements, other than as above indicated, may be created on the Convertible Areas.

## **ARTICLE IX OPERATIVE PROVISIONS**

Any expansion, contraction or conversion in the Project pursuant to Articles VI, VII or VIII above shall be governed by the provisions as set forth below.

Section 1. Amendment of Master Deed and Modification of Percentages of Value. Such expansion, contraction or conversion of this Condominium Project shall be given effect by appropriate amendments to this Master Deed in the manner provided by law, which amendments shall be prepared by and at the discretion of the Developer and in which the percentages of value set forth in Article V hereof

shall be proportionately readjusted when applicable in order to preserve a total value of 100% for the entire Project resulting from such amendments to this Master Deed. The precise determination of the readjustments in percentages of value shall be made within the sole judgment of the Developer. Such readjustments, however, shall reflect a continuing reasonable relationship among percentages of value based upon the original method of determining percentages of value for the Project.

Section 2. Redefinition of Common Elements. Such amendments to the Master Deed shall also contain such further definitions and redefinitions of General or Limited Common Elements as may be necessary to adequately describe, serve and provide access to the additional parcel or parcels being added to (or withdrawn from) the Project by such amendments. In connection with any such amendments, the Developer shall have the right to change the nature of any Common Element previously included in the Project for any purpose reasonably necessary to achieve the purposes of this Article, including, but not limited to, the connection of roadways and sidewalks in the Project to any roadways and sidewalks that may be located on, or planned for the area of future development or the contractible area, as the case may be, and to provide access to any Unit that is located on, or planned for the area of future development or the contractible area from the roadways and sidewalks located in the Project.

Section 3. Right to Modify Units; Plans. The Developer further reserves the right to amend and alter the Units described in the Condominium Subdivision Plan attached hereto as long as any Unit so altered has not been sold at the time the alteration is made. The nature and appearance of all such altered Units shall be determined by the Developer in its sole judgment; but, subject to approval of the Charter Township of Genoa. All improvements shall be reasonably compatible with the existing improvements in the Project, as determined by the Developer in its sole discretion. No Unit shall be created within the area of future development that is not restricted exclusively to residential use.

Section 4. Consolidating Master Deed. A Consolidating Master Deed shall be recorded pursuant to the Act when the Project is finally concluded as determined by the Developer in order to incorporate into one set of instruments all successive stages of development. The Consolidating Master Deed, when recorded, shall supersede the previously recorded Master Deed and all amendments thereto.

Section 5. Consent of Interested Persons. All of the Co-owners and mortgagees of Units and other persons interested or to become interested in the Project from time to time shall be deemed to have irrevocably and unanimously consented to such amendments to this Master Deed as may be proposed by the Developer to effectuate the purposes of Articles VI, VII and VIII above and to any proportionate reallocation of percentages of value of existing Units which the Developer may determine necessary in conjunction with such amendments. All such interested persons irrevocably appoint the Developer as agent and attorney for the purpose of execution of such amendments to the Master Deed and all other documents necessary to effectuate the foregoing. Such amendments may be effected without the necessity of re-recording the entire Master Deed or the Exhibits hereto and may incorporate by reference all or any pertinent portions of this Master Deed and the Exhibits hereto.

Section 6. Charter Township of Genoa Approval Required. Any amendments under Articles VI through IX of this Master Deed are subject to the approval of Charter Township of Genoa at its discretion. The rights set forth in Articles VI through IX are incorporated in this Master Deed for the sole purpose of providing the Developer and Charter Township of Genoa reasonable flexibility to amend the Project Documents should circumstances arise.

**ARTICLE X  
SUBDIVISION, CONSOLIDATION  
AND OTHER MODIFICATIONS OF UNITS**



Although it is recognized that at the time of the recording of this Master Deed, the size of the Units may make it impractical to subdivide, consolidate, or modify the boundaries of Units, notwithstanding any other provision of the Master Deed or the Bylaws, Units in the Condominium may be subdivided, consolidated, modified and the boundaries relocated, in accordance with Sections 48 and 49 of the Act, applicable zoning laws and regulations in effect in the Charter Township of Genoa at the time, and this Article and only with the approval of the Charter Township of Genoa and any required review process. Such changes in the affected Unit or Units shall be promptly reflected in a duly recorded amendment or amendments to this Master Deed.

Section 1. By Developer. Subject to the approval of Charter Township of Genoa, if required under local ordinances, Developer reserves the sole right during the Development and Sales Period and without the consent of any other Co-owner or any mortgagee of any Unit to take the following action:

(a) Subdivide Units. Subdivide or resubdivide any Units which it owns and in connection therewith to install utility conduits and connections and any other improvements reasonably necessary to effect the subdivision, any or all of which may be designated by the Developer as General or Limited Common Elements; such installation shall not disturb any utility connections serving Units other than temporarily. Such subdivision or resubdivision of Units shall be given effect by an appropriate amendment or amendments to this Master Deed in the manner provided by law, which amendment or amendments shall be prepared by and at the sole discretion of Developer, its successors or assigns.

(b) Consolidate Contiguous Units. Consolidate under single ownership two or more Units. Such consolidation of Units shall be given effect by an appropriate amendment or amendments to this Master Deed in the manner provided by Law, which amendment or amendments shall be prepared by and at the sole discretion of the Developer, its successors or assigns.

(c) Relocate Boundaries. Relocate any boundaries between adjoining Units, separated only by Unit perimeters or other Common Elements not necessary for the reasonable use of Units other than those subject to the relocation. The relocation of such boundaries shall be given effect by an appropriate amendment or amendments to this Master Deed in the manner provided by law, which amendment or amendments shall be prepared by and at the sole discretion of the Developer, its successors or assigns.

(d) Amend to Effectuate Modifications. In any amendment or amendments resulting from the exercise of the rights reserved to Developer above, each portion of the Unit or Units resulting from such subdivision, consolidation or relocation of boundaries shall be separately identified by number. Such amendment or amendments to the Master Deed shall also contain such further definitions of General or Limited Common Elements as may be necessary to adequately describe the Units in the Condominium Project as so modified. All of the Co-owners and mortgagees of Units and other persons interested or to become interested in the Project from time to time shall be deemed to have irrevocably and unanimously consented to such amendment or amendments of this Master Deed to effectuate the foregoing and to any proportionate reallocation of percentages of value of Units which Developer or its successors may determine necessary in conjunction with such amendment or amendments. All such interested persons irrevocably appoint Developer or its successors as agent and attorney for the purpose of execution of such amendment or amendments to the Master Deed and all other documents necessary to effectuate the foregoing. Such amendments may be effected without the necessity of re-recording an entire Master Deed or the Exhibits hereto.

Section 2. By Co-owners. Subject to the approval of the Charter Township of Genoa, if required under local ordinances, one or more Co-owners may undertake:

(a) Subdivision of Units. The Co-owner of a Unit may subdivide his Unit upon request to and approval by the Association and the Developer during the Development and Sales Period and further subject to the applicable zoning regulations then in effect in Charter Township of Genoa. Upon receipt of such request and submission of evidence that the Charter Township of Genoa has approved of the proposed division, the president of the Association shall present the matter to the Board of Directors for review and, if approved by the Board, cause to be prepared an amendment to the Master Deed, duly subdividing the Unit, separately identifying the resulting Units by number or other designation, designating only the Limited or General Common Elements in connection therewith, and reallocating the percentages of value (if necessary) in accordance with the Co-owner's request. The Co-owner requesting such subdivision shall bear all costs of such amendment. Such subdivision shall not become effective, however, until the amendment to the Master Deed, duly executed by the Association, has been recorded in the office of the Livingston County Register of Deeds.

(b) Consolidation of Units; Relocation of Boundaries. Co-owners of adjoining Units may relocate boundaries between their Units or eliminate boundaries between two or more Units upon written request to and approval by the Association. Upon receipt of such request and submission of evidence that the proposed consolidation of Units has been approved by the Charter Township of Genoa, the president of the Association shall present the matter to the Board of Directors for review and, if approved by the Board, cause to be prepared an amendment to the Master Deed duly relocating the boundaries, identifying the Units involved, reallocating percentages of value if necessary, and providing for conveyancing between or among the Co-owners involved in relocation of boundaries. The Co-owners requesting relocation of boundaries shall bear all costs of such amendment. Such relocation or elimination of boundaries shall not become effective, however, until the amendment to the Master Deed has been recorded in the office of the Livingston County Register of Deeds.

Section 3. Limited Common Elements. Limited Common Elements shall be subject to assignment and reassignment in accordance with Section 39 of the Act and in furtherance of the rights to subdivide, consolidate or relocate boundaries described in this Article X.

## **ARTICLE XI EASEMENTS**

Section 1. Easement for Maintenance of Encroachments and Utilities. In the event of any encroachments due to shifting, settling or moving of an improvement, or due to survey errors, or construction deviations, reciprocal easements shall exist for the maintenance of such encroachment for so long as such encroachment exists, and for maintenance thereof after rebuilding in the event of any destruction. There shall be easements to, through and over those portions of the land, structures, buildings and improvements for the continuing maintenance, repair, replacement, enlargement of or tapping into all utilities in the Condominium. The Developer and the Association also hereby reserve easements within General Common Elements for the purpose of construction and maintenance of entry markers or signs identifying the Condominium by name. The size, design and precise location of such markers or signs shall be at the sole discretion of the Developer and the Association shall be responsible for the maintenance, repair and replacement thereof.

Section 2. Easements and Right to Dedicate Retained by Developer.



(a) Roadway Easements. Developer reserves for the benefit of itself, its successors and assigns, and all future owners of the land described in Articles VI and VII or any portion or portions thereof, perpetual easements for the unrestricted use of all main service roads in the Condominium designated as such on the Condominium Subdivision Plan, as amended from time to time, for the purposes of further development and construction by it or its successors and assigns and also for purposes of access to any adjoining land which may now be owned by the Developer and to other residential projects within the area of future development by the owners and occupants thereof and their invitees, successors and assigns. In order to achieve the purposes of this Article, and of Articles VI and VII of this Master Deed, the Developer shall have the right to alter any General Common Element areas existing between any of said main service roads and any portion of said area of future development or any adjoining land which may be owned by Developer by installation of curb cuts, paving and roadway connections at such locations on and over said General Common Elements as the Developer may elect from time to time. In the event Developer disturbs any area of the Condominium Premises adjoining such curb cuts, paving or roadway connections in connection with the installation thereof, the Developer shall, at its expense, restore such disturbed areas to substantially their condition existing immediately prior to such disturbance. All expenses of maintenance, repair, replacement and resurfacing of any main service road shall be borne by all residential developments the means of access to a public road of which is over such road. The Co-owners in this Condominium shall be responsible from time to time for payment of a proportionate share of the above expenses with respect to each main service road which share shall be determined by multiplying such expenses times a fraction the numerator of which is the number of completed dwelling Units in this Condominium and the denominator of which is comprised of the number of such Units plus all other completed dwelling units in developments the means of access to a public road of which is over such main service road. Developer may, by a subsequent instrument, prepared and recorded in its discretion, without consent from any interested party, specifically define by legal description the easements of access reserved hereby, if Developer deems it necessary or desirable to do so. Notwithstanding the foregoing, Developer recognizes its responsibility to restore the main service road and install the top course of asphalt within three (3) months of the issuance of the first certificate of occupancy, weather permitting for the first residence but in all events no later than November 30, 2016.

(b) Dedication to the Public. The Developer reserves the right at any time during the Development and Sales Period to dedicate to the public a right-of-way of such width as may be required by the local public authority over any or all of the roadways in Summerfield Pointe Estates, shown as General Common Elements in the Condominium Subdivision Plan. Any such right-of-way dedication may be made by the Developer without the consent of any Co-owner, mortgagee or other person and shall be evidenced by an appropriate amendment to this Master Deed and to the Condominium Subdivision Plan hereto, recorded in the Livingston County Records. All of the Co-owners and mortgagees of Units and other persons interested or to become interested in the Project from time to time shall be deemed to have irrevocably and unanimously consented to such amendment or amendments of this Master Deed to effectuate the foregoing right-of-way dedication. While contemplated the decision to accept dedication is in the hands of the Road Commission of Livingston County and the Developer cannot guarantee acceptance by the Road Commission. Any such right-of-way dedication shall be evidenced by an appropriate amendment to the Master Deed and to the attached Exhibit B, recorded in Livingston County Register of Deeds. ALL CO-OWNERS SHOULD TAKE NOTE THAT NOTWITHSTANDING THE PROVISIONS STATED HERE ACCEPTANCE OF A DEDICATION IS A DECISION SOLELY WITHIN THE DISCRETION OF THE PUBLIC BODY WITH JURISDICTION OVER ROADS AND THE REQUIREMENTS OF THE LOCAL PUBLIC AUTHORITIES. It is very unlikely the roads will be accepted by Livingston County.

(c) Utility Easements. The Developer also hereby reserves for the benefit of itself, its successors and assigns, and all future owners of the land described in Articles VI and VII and any adjoining land thereof, perpetual easements to utilize, tap, tie into, extend and enlarge all utility mains located in the Condominium, including, but not limited to, water, gas, storm and sanitary sewer mains. In the event Developer, its successors or assigns, utilizes, taps, ties into, extends or enlarges any utilities located in the Condominium, it shall be obligated to pay all of the expenses reasonably necessary to restore the Condominium Premises to their state immediately prior to such utilization, tapping, tying-in, extension or enlargement. All expenses of maintenance repair and replacement of any utility mains referred to in this Section shall be shared by this Condominium and any developed portions of the land described in Articles VI and VII and any adjoining land which may be owned by the Developer which are served by such mains. The Co-owners of this Condominium shall be responsible from time to time for payment of a proportionate share of said expenses which share shall be determined by multiplying such expenses times a fraction, the numerator of which is the number of dwelling Units in this Condominium, and the denominator of which is comprised of the numerator plus all other dwelling Units in the land described in Articles VI and VII and any adjoining land which may be owned by Developer that are served by such mains.

(d) Granting of Utility Easements. The Developer reserves the right at any time during the Development and Sales Period to grant easements for utilities over, under and across the Condominium to appropriate governmental agencies or public utility companies and to transfer title of utilities to governmental agencies or to utility companies. Any such easement or transfer of title may be conveyed by the Developer without the consent of any Co-owner, mortgagee or other person and shall be evidenced by an appropriate amendment to this Master Deed and to the attached Exhibit B, recorded in the Livingston County Records. All of the Co-owners and mortgagees of Units and other persons interested or to become interested in the Project from time to time shall be deemed to have irrevocably and unanimously consented to such amendments to this Master Deed as may be required to effectuate the foregoing grant of easement or transfer of title.

Section 3. Grant of Easements by Association. The Association, acting through its lawfully constituted Board of Directors (including any Board of Directors acting prior to the Transitional Control Date) shall be empowered and obligated to grant such reasonable easements (including dedication of the sidewalks), licenses, rights-of-entry and rights-of-way over, under and across the Condominium Premises for utility purposes or other lawful purposes, as may be necessary for the benefit of the Condominium subject, however, to the approval of the Developer so long as the Development and Sales Period has not expired. No easements created under the Condominium Documents may be modified, nor may any of the obligations with respect thereto be varied, without the consent of each person benefited or burdened thereby. Developer, or the Association, if after the Transitional Control Date, shall have the right to grant the Future Aster Boulevard Easement. All Co-Owners acknowledge and agree that the Roads in Summerfield Pointe shall connect to the neighboring property and the neighboring property may utilize the Roads in Summerfield Pointe.

Section 4. Association Right to Dedicate Public Rights-of-Way; Make Other Dedications, and Act Upon Special Assessment Proceeding. The Association, upon expiration of the Development and Sales Period, acting through its lawfully constituted Board of Directors shall be empowered to dedicate to the public a right-of-way of such width as may be required by the local public authority over any or all of the roadways or sidewalks in Summerfield Pointe Estates, shown as General Common Elements in the Condominium Subdivision Plan provided that such dedication meets all of the requirements of the local public authority. Furthermore the Association has the right to make any and all other public dedications which are required by any local Unit of government having jurisdiction over the Condominium Project.



There is no promise that any such dedication will ever take place, notwithstanding the reservation of this right. Any such right-of-way dedication shall be evidenced by an appropriate amendment to the Master Deed and to the attached Exhibit B, recorded in Livingston County Register of Deeds. The Association shall further be empowered, at any time, to execute petitions for and to act on behalf of all Co-owners in any statutory proceedings regarding special assessment improvements of the roadways or drainage systems in the Condominium. Consistent with Section 131 of 1978 Public Act 59 as amended (MCL 559.231) the Association shall be vested with the power to sign petitions requesting establishment of a special assessment district pursuant to any provisions of applicable Michigan statutes for improvements of public roads within or adjacent to the condominium premises upon approval by and affirmative vote of not less fifty-one percent (51%) of the Co-owners of that own Units within the special assessment district. All of the Co-owners and mortgagees of Units and other persons interested or to become interested in the Project from time to time shall be deemed to have irrevocably and unanimously consented to such amendment or amendments of this Master Deed to effectuate the foregoing right-of-way dedication. ALL CO-OWNERS SHOULD TAKE NOTE THAT NOTWITHSTANDING THE PROVISIONS STATED HERE ACCEPTANCE OF ANY DEDICATION IS A DECISION SOLELY WITHIN THE DISCRETION OF THE PUBLIC BODY WITH JURISDICTION OVER ROADS.

Section 5. Association Easements for Maintenance, Repair and Replacement. The Developer, the Association and all public or private utilities shall have such easements over, under, across and through the Condominium Premises, including all Units and Common Elements, as may be necessary to fulfill any responsibilities of maintenance, repair, decoration, replacement or upkeep which they or any of them are required or permitted to perform under the Condominium Documents or by law or to respond to any emergency or common need of the Condominium including without limitation an easement over all Units for maintenance, repair and replacement of lawn sprinkling systems and related controls, clocks, meters and valves; provided, however, that the easements granted hereunder shall not entitle any person other than the Co-Owner thereof to gain entrance to the interior of any dwelling or garage located within a Unit. While it is intended that each Co-owner shall be solely responsible for the performance and costs of all maintenance, repair and replacement of and decoration of the residence and all other appurtenances and improvements constructed or otherwise located within his or her Unit unless otherwise provided herein, it is nevertheless a matter of concern that a Co-owner may fail to properly maintain the exterior of his or her Unit or any Limited Common Elements appurtenant thereto in a proper manner and in accordance with the standards set forth in this Master Deed, the Bylaws and any rules and regulations promulgated by the Association. Therefore, in the event a Co-owner fails, as required by this Master Deed, the Bylaws or any rules and regulations of the Association, to properly and adequately maintain, decorate, repair, replace or otherwise keep his or her Unit or any improvements or appurtenances located therein or any Limited Common Elements appurtenant thereto, the Association (and/or the Developer during the Development and Sale Period) shall have the right, and all necessary easements in furtherance thereof, (but not the obligation) to take whatever action or actions it deems desirable to so maintain, decorate, repair or replace the Unit (including the exteriors of any structures located therein), its appurtenances or any of its Limited Common Elements, all at the expense of the Co-owner of the Unit. Neither the Developer nor the Association shall be liable to the Owner of any Unit or any other person, in trespass or in any other form of action, for the exercise of rights pursuant to the provisions of this Section or any other provision of the Condominium Documents which grant such easements, rights of entry or other means of access. Failure of the Association (or the Developer) to take any such action shall not be deemed a waiver of the Association's (or the Developer's) right to take any such action at a future time. All costs incurred by the Association or the Developer in performing any responsibilities which are required, in the first instance to be borne by any Co-owner, shall be assessed against such Co-owner and shall be due and payable with his or her monthly assessment next falling due; further, the lien for non-payment shall attach as in all cases of regular assessments and such assessments may be enforced by the use of all means available to the Association under the Condominium Documents and by law for the

collection of regular assessments including, without limitation, legal action, foreclosure of the lien securing payment and imposition of fines.

Section 6. Telecommunications Agreements. The Association, acting through its duly constituted Board of Directors and subject to the Developer's approval during the Development and Sales Period, shall have the power to grant such easements, licenses and other rights-of-entry, use and access and to enter into any contract or agreement, including wiring agreements, right-of-way agreements, access agreements and multi-unit agreements and, to the extent allowed by law, contracts for sharing of any installation or periodic subscriber service fees as may be necessary, convenient or desirable to provide for telecommunications, videotext, broad band cable, satellite dish, earth antenna and similar services (collectively "Telecommunications") to the Project or any Unit within the Project. Notwithstanding the foregoing, in no event shall the Board of Directors enter into any contract or agreement or grant any easement, license or right of entry or do any other act or thing which will violate any provision of any federal, state or local law or ordinance. Any and all sums paid by any telecommunications or other company or entity in connection with such service, including fees, if any, for the privilege of installing same or sharing periodic subscriber service fees, shall be receipts affecting the administration of the Condominium Project within the meaning of the Act and shall be paid over to and shall be the property of the Association.

Section 7. Emergency Vehicle and Public Services Access Easement. There shall exist for the benefit of the Charter Township of Genoa, any emergency service agency and the United States Postal Service ("USPS"), an easement over all roads in the Condominium for use by Charter Township of Genoa service providers, USPS, garbage collection and/or emergency vehicles. Said easement shall be for purposes of ingress and egress to provide, without limitation, fire and police protection, ambulance and rescue services and other lawful governmental or private emergency services to the Condominium Project and Co-owners thereof. This grant of easement shall in no way be construed as a dedication of any streets, roads or driveways to the public.

Section 8. Maintenance and Repair of Storm Drainage System and Common Elements by Charter Township of Genoa in the Event of Default by the Association or the Developer. In the event that the Developer or Association shall at any time fail to maintain or repair the Storm Drainage System or Common Elements, the Charter Township of Genoa may serve written notice upon the Developer, its successors and assigns, setting forth the deficiencies in maintenance and/or repair. Notice shall also set forth a demand that the deficiencies be cured within a stated reasonable time period, and the date, time and place of the hearing before the Township, or such other body or official delegated by the Charter Township of Genoa for the purpose of allowing the Developer, its successors and assigns to be heard as to why the Charter Township of Genoa should not proceed with the maintenance and/or repair which has not been undertaken. At the hearing, the time for curing the deficiencies and the hearing itself may be extended and/or continued to a date certain. If, following the hearing, the Charter Township of Genoa, or other body or official designated to conduct the hearing, shall determine that maintenance and/or repair have not been undertaken within the time specified in the notice, the Charter Township of Genoa shall thereupon have the power and authority, but not the obligation, to enter upon the property, or cause its agents or contractors to enter upon the property and perform such maintenance and/or repair as reasonably found by the Charter Township of Genoa to be appropriate. The cost and expense of making and financing such maintenance and/or repair, including the cost of notices by the Charter Township of Genoa and reasonable legal fees incurred by the Charter Township of Genoa, plus an administrative fee in the amount of 25% of the total of all costs and expenses incurred, shall be paid by the Developer, its successors and assigns, and such amount shall constitute a lien on an equal pro rata basis as to all of the condominium units on the property. The Charter Township of Genoa may require the payment of such monies prior to the commencement of work. If such costs and expenses have not been paid within 30 days of a billing to the Developer, its successors and assigns or Association, all unpaid amounts may be



placed on the delinquent tax roll of the Charter Township of Genoa, pro rata, as to each condominium Unit, and shall accrue interest and penalties, and shall be collected as and deemed delinquent real property taxes, according to the laws made and provided for the collection of delinquent real property taxes. In the discretion of the Charter Township of Genoa, such costs and expenses may be collected by suit initiated against the Developer, its successors and assigns, and, in such event, the Developer, its successors and assigns, or Association shall pay all court costs and reasonable attorney fees incurred by the Charter Township of Genoa in connection with such suit. Developer's obligation under this Section 8 shall end after transfer and acceptance of the maintenance and repair obligations by the Summerfield Pointe Estates Condominium Association.

## **ARTICLE XII AMENDMENT**

This Master Deed and the Condominium Subdivision Plan may be amended with the consent of 66-2/3% of the Co-owners, except as hereinafter set forth:

Section 1. Modification of Units or Common Elements. No Unit dimension may be modified in any material way without the consent of the Co-owner of such Unit nor may the nature or extent of Limited Common Elements or the responsibility for maintenance, repair or replacement thereof be modified in any material way without the written consent of the Co-owner of any Unit to which the same are appurtenant.

Section 2. Mortgagee, Mortgage Insurer and Mortgage Guarantor Consent. Whenever a proposed amendment would materially alter or change the rights of mortgagees generally, mortgagee insurers or mortgage guarantors, then such amendments shall require the approval of 66-2/3% of all first mortgagees, insurers of the first mortgagee and guarantors of the first mortgages of record allocating only one vote for each mortgage held. No more than one vote may be cast per first mortgage, regardless of the number of mortgagees, insurers and guarantors having such an interest in the first mortgage.

Section 3. By Developer. Prior to one year after expiration of the Development and Sales Period, the Developer may, without the consent of any Co-owner or any other person, amend this Master Deed and the Condominium Subdivision Plan attached as Exhibit B in order to correct survey or other errors made in such documents and to make such other amendments to such instruments and to the Bylaws attached hereto as Exhibit A as do not materially affect any rights of any Co-owners or mortgagees in the Project.

Section 4. Change in Percentage of Value. The value of the vote of any Co-owner and the corresponding proportion of common expenses assessed against such Co-owner shall not be modified without the written consent of such Co-owner and his or her mortgagee, nor shall the percentage of value assigned to any Unit be modified without like consent; thus, any change in such matters shall require unanimity of action of all Co-owners.

Section 5. Termination, Vacation, Revocation or Abandonment. The Condominium Project may not be terminated, vacated, revoked or abandoned without the written consent of the Developer and 80% of non-Developer Co-owners and mortgagees, allocating one vote for each unit on which a mortgage is held.

Section 6. Developer Approval. During the Development and Sales Period, the Condominium Documents shall not be amended nor shall the provisions thereof be modified in any way without the written consent of the Developer.

Section 7. Amendment by Association Board of Directors. The right is further reserved to the Board Directors of the Association, after the Construction and Sales Period ends, to make amendments to the Master Deed and Bylaws without the consent of mortgagees or the Co-owners as long as the amendments do not materially change the rights of the Co-owners and subject only to the provisions of Section 90(1) of the Act. For the purpose of this Section 8 an amendment that does not materially change the rights of a co-owner or mortgagee includes, but is not limited, to modifications of Common Elements and appurtenant Limited Common Elements, provisions related to insurance, reconstruction, maintenance, repair and replacement, fines, fees, and changes or additions related to health, safety and welfare of the Co-owners and occupants, or the operation and administration of the Condominium Project generally, and by accepting title to a Unit a Co-owner agrees that all such amendments do not materially change a Co-owner's rights.

Section 8. Approvals by Municipality; Open Space and General Common Elements. No amendment may be made to the Master Deed which affects any approvals granted by the Charter Township of Genoa unless the proposed amendment has been approved in writing by the Charter Township of Genoa and the approval is indicated on the amendment as recorded. The open space areas and General Common Elements shall not be modified by the Charter Township of Genoa as set forth on the approved site plan without the prior written consent of the Charter Township of Genoa granted or withheld on its sole consent.

Section 9. Developer Responsibility. The Developer shall remain responsible for maintenance of General Common Elements until either responsibility is assumed by the Road Commission for Livingston County, as may be applicable, or until the Transitional Control Date.

Section 10. Open Space Preserved. General Common Element open spaces set forth on the Condominium Subdivision Plan and as approved by the Charter Township of Genoa shall remain as open spaces and may be developed only as provided in the approved site plan.

### **ARTICLE XIII ASSIGNMENT**

Any or all of the rights and powers granted or reserved to the Developer in the Condominium Documents or by law, including the power to approve or disapprove any act, use or proposed action or any other matter or thing, may be assigned, in whole or part, by it to any other entity or entities or to the Association. Any such assignment or transfer shall be made by appropriate instrument in writing duly recorded in the office of the Livingston County Register of Deeds.

### **ARTICLE XIII**

#### **ADJOINING SUMMERFIELD POINTE CONDOMINIUM**

Section 1. Easement Rights. The Condominium Project benefits from certain access and utility easement rights granted pursuant to the Article X, Section 2 of the Master Deed of Summerfield Pointe as recorded in Liber 4218, Page 874, Livingston County Records, Livingston County Condominium Subdivision Plan No. 295

Section 2. Joint Maintenance of Summer Ridge Drive and Lawton Road. The Condominium Project adjoins Summerfield Pointe and the two condominium projects jointly use certain roads such as Summer Ridge Drive East and the portion of Lawton Road which is not dedicated to the public. Summerfield Pointe Association, the administrator of Summerfield Pointe, is generally responsible for the maintenance, repair and replacement of those roads and Summerfield Pointe Estates Association shall



reimburse Summerfield Pointe Association for a proportionate share of the reasonable costs of maintenance, repair and replacement, such as snow removal, pavement repair and replacement, and maintenance of associated berms, open space and roundabout infrastructure (“Road Maintenance Costs”). However Summerfield Pointe Estates and Summerfield Point Estate Association shall not otherwise other share in the expenses of administration of Summerfield Pointe’s common elements or project administration and likewise Summerfield Pointe and Summerfield Point Association shall not share in the expenses associated with the common elements and administration of Summerfield Pointe Estates. Each condominium project will be otherwise responsible for maintenance of the common elements within their respective condominium projects.

Section 3. Expense Percentage. Summerfield Pointe Associations shall pay 27% of the Road Maintenance Costs as its proportionate share. The proportionate share of the Road Maintenance Costs shall be and expense of administration of the Condominium Project.

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[Signature on Following Page]

DEVELOPER:

HEALY HOMES AT SUMMERFIELD LLC,  
a Michigan limited liability company

By: \_\_\_\_\_

Jack Healy

Its: Manager and Member

STATE OF MICHIGAN        )  
  ) SS  
COUNTY OF OAKLAND     )

On this \_\_\_ day of \_\_\_\_\_, 2022 this Master Deed was acknowledged before me by Jack Healy, the Manager of Healy Homes of Summerfield LLC, on behalf of the Michigan limited liability company.

\_\_\_\_\_  
\_\_\_\_\_, Notary Public  
\_\_\_\_\_ County, Michigan

My Commission Expires: \_\_\_\_\_  
Acting in Livingston County

**DRAFT BY AND RETURN TO:**  
Gregory J. Gamalski, Esq.  
Bodman PLC  
201 West Big Beaver Road, Suite 500  
Troy, MI 48084



**EXHIBIT A**  
**SUMMERFIELD POINTE ESTATES**  
**BYLAWS**

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**ARTICLE I  
ASSOCIATION OF CO-OWNERS**

Summerfield Pointe, a residential Condominium Project located in the Charter Township of Genoa, Livingston County, Michigan, shall be administered by an Association of Co-Owners which shall be a non-profit corporation (the "Association"), organized under the applicable laws of the State of Michigan, and responsible for the management, maintenance, operation and administration of the Common Elements, easements and affairs of the Condominium Project in accordance with the Condominium Documents and the laws of the State of Michigan. These Bylaws shall constitute both the Bylaws referred to in the Master Deed and required by Section 3(8) of the Act and the Bylaws provided for under the Michigan Nonprofit Corporation Act. Each Co-Owner shall be entitled to membership and no other person or entity shall be entitled to membership. The share of a Co-Owner in the funds and assets of the Association cannot be assigned, pledged or transferred in any manner except as an appurtenance to his or her Unit. The Association shall keep current copies of the Master Deed, all amendments to the Master Deed, and other Condominium Documents for the Condominium Project available at reasonable hours to Co-Owners, prospective purchasers, mortgagees and prospective mortgagees of Units in the Condominium Project. All Co-Owners in the Condominium Project and all persons using or entering upon or acquiring any interest in any Unit therein or the Common Elements thereof shall be subject to the provisions and terms set forth in the Condominium Documents.

**ARTICLE II  
ASSESSMENTS**

All expenses arising from the management, administration and operation of the Association in pursuance of its authorizations and responsibilities as set forth in the Condominium Documents and the Act shall be levied by the Association against the Units and the Co-Owners thereof in accordance with the following provisions:

Section 1. Assessments for Common Elements. All costs incurred by the Association in satisfaction of any liability arising within, caused by, or connected with the Common Elements or the administration of the Condominium Project shall constitute expenditures affecting the administration of the Project, and all sums received as the proceeds of, or pursuant to, any policy of insurance securing the interest of the Co-Owners against liabilities or losses arising within, caused by, or connected with the Common Elements or the administration of the Condominium Project shall constitute receipts affecting the administration of the Condominium Project within the meaning of Section 54(4) of the Act. All Co-Owners acknowledge and agree that assessment shall include any charges related to the cost-sharing with the neighboring communities as further described in Article XIII of the Master Deed.

Section 2. Determination of Assessments. Assessments shall be determined in accordance with the following provisions:

(a) Budget; Regular Assessments. The Board of Directors of the Association shall establish an annual budget in advance for each fiscal year and such budget shall project all expenses for the forthcoming year which may be required for the proper operation, management and maintenance of the Condominium Project, including a reasonable allowance for contingencies and reserves. An adequate reserve fund for maintenance, repairs and replacement of those Common Elements that must be replaced on a periodic basis shall be established in the budget and must be funded by regular payments as set forth in Section 2(c) below rather than by special assessments. At a minimum, the reserve fund shall be equal to ten (10%) percent of the Association's current annual budget on a noncumulative basis. Since the minimum standard required by this subparagraph may prove to be inadequate for this particular Project, the Association of Co-Owners should carefully analyze the Condominium Project to determine if a

greater amount should be set aside or if additional reserve funds should be established for other purposes from time to time. Upon adoption of an annual budget by the Board of Directors, copies of the budget shall be delivered to each Co-Owner and the assessment for said year shall be established based upon said budget. The annual assessments as so determined and levied shall constitute a lien against all Units as of the first day of the fiscal year to which the assessments relate. Failure to deliver a copy of the budget to each Co-Owner shall not affect or in any way diminish such lien or the liability of any Co-Owner for any existing or future assessments. Should the Board of Directors at any time decide, in the sole discretion of the Board of Directors: (1) that the assessments levied are or may prove to be insufficient (a) to pay the costs of operation and management of the Condominium, (b) to provide replacements of existing Common Elements, (c) to provide additions to the Common Elements not exceeding three thousand (\$3000.00) dollars annually for the entire Condominium Project, or (2) that an emergency exists, the Board of Directors shall have the authority to increase the general assessment or to levy such additional assessment or assessments as it shall deem to be necessary. The Board of Directors also shall have the authority, without Co-Owner consent, to levy assessments pursuant to the provisions of Article V, Section 3 hereof. The discretionary authority of the Board of Directors to levy assessments pursuant to this subparagraph shall rest solely with the Board of Directors for the benefit of the Association and the members thereof, and shall not be enforceable by any creditors of the Association or of the members thereof.

(b) Special Assessments. Special assessments, in addition to those required in subsection (a) above, may be made by the Board of Directors from time to time and approved by the Co-Owners as hereinafter provided to meet other requirements of the Association, including, but not limited to: (1) assessments for additions to the Common Elements of a cost exceeding three thousand (\$3000.00) dollars for the entire Condominium Project per year, (2) assessments to purchase a Unit upon foreclosure of the lien for assessments described in Section 5 hereof, (3) assessments for any other appropriate purpose not elsewhere herein described. Special assessments referred to in this subsection (b) (but not including those assessments referred to in subsection 2(a) above, that shall be levied in the sole discretion of the Board of Directors) shall not be levied without the prior approval of more than sixty (60%) percent of all Co-Owners. The authority to levy assessments pursuant to this subsection is solely for the benefit of the Association and the members thereof and shall not be enforceable by any creditors of the Association or of the members thereof.

(c) Assessment as Security for Association Indebtedness. A special assessment approved above may be used by the Association as security for loan approved by the Board of Directors and 60% of all of the Co-Owners in number and in value and may be pledged to creditor for the purposes of securing such a loan. The creditor in that instance may enforce that assessment by collecting individually (not jointly and may exercise such rights as the Association may have to collect the assessment under this Section 2(c).

(d) Apportionment of Assessments. All assessments levied against the Co-Owners to cover expenses of administration shall be apportioned among and paid by the Co-Owners in accordance with each Co-Owner's proportionate share of the expenses of administration as provided in Article V, Section 2 of the Master Deed and without increase or decrease for the existence of any rights to the use of Limited Common Elements appurtenant to a Unit except as otherwise specifically provided in the Master Deed. Annual assessments as determined in accordance with Article II, Section 2(a) above shall be payable by Co-Owners in periodic installments, commencing with acceptance of a deed to or a land contract vendee's interest in a Unit, or with the acquisition of fee simple title to a Unit by any other means.

Section 3. Developer's Responsibility for Assessments. During the Development and Sales Period as defined in the Master Deed, the Developer of the Condominium, even though a member of the



Association, shall not be responsible for payment of the monthly Association assessment. The Developer, however, shall, during the Development and Sales Period, pay a proportionate share of the Association's current maintenance expenses, (limited to grass cutting and snow plowing only), including administration costs actually incurred from time to time based upon the ratio of Units owned by Developer at the time the expense is incurred to the total number of Units in the Condominium. In no event shall Developer be responsible for payment, during the Development and Sales Period, of any assessments for deferred maintenance, reserves for replacement, for capital improvements or other special assessments, except with respect to Occupied Units owned by it. Developer shall not be responsible at any time for payment of said monthly assessments or payment of any expenses whatsoever with respect to Units not completed, notwithstanding the fact that such Units not completed may have been included in the Master Deed. Further, the Developer shall in no event be liable for any assessment levied in whole or in part to purchase any Unit from the Developer, to finance any litigation or other claims against the Developer, any cost of investigating and preparing such litigation or claim, or any similar or related costs, or other claims against the Developer, its directors, officers, agents, principals, assigns, affiliates and/or the first Board of Directors of the Association or any directors of the Association appointed by the Developer, or any cost of investigating and preparing such litigation or claim, or any similar or related costs. "Occupied Unit" shall mean a Unit with a structure used as a residence on it. A model home is not to be considered as an "Occupied Unit." "Completed Unit" shall mean a Unit with a dwelling constructed upon it that has been issued a final certificate of occupancy by the Charter Township of Genoa.

Section 4. Penalties for Default. The payment of an assessment shall be in default if any installment thereof is not paid to the Association in full on or before the due date for such installment. A late charge not to exceed fifty (\$50.00) dollars per installment may be assessed automatically by the Association upon each installment in default for ten (10) or more days until paid in full. The Association may, pursuant to Article XIX, Section 4 and Article XX of these Bylaws, levy fines for late payment of assessments in addition to such late charge. Each Co-Owner (whether one (1) or more persons) shall be and remain personally liable for the payment of all assessments (including interest, late charges and fines for late payment and costs of collection and enforcement of payment) pertinent to his or her Unit that may be levied while such Co-Owner is the owner thereof, except a land contract purchaser from any Co-Owner, including Developer, shall be so personally liable and such land contract seller shall not be personally liable for all such assessments levied up to, and including, the date upon which such land contract seller actually takes possession of the Unit following extinguishment of all rights of the land contract purchaser in the Unit. Each installment in default for ten (10) or more days may bear interest from the initial due date thereof at the rate of seven (7%) percent per annum until each installment is paid in full. Payments on account of installments of assessments in default shall be applied as follows: first, to costs of collection and enforcement of payment, including reasonable attorney fees; second, to any interest, late charges and fines for late payment on such installments; and third, to installments in default in order of their due dates. A Co-Owner in default of his or her monetary obligations to the Association shall not be eligible to run for the Board of Directors or to be appointed as an officer. Any officers or Directors in default of a payment obligation to the Association may be removed from their office, failure to pay dues being deemed just cause for removal.

Section 5. Liens for Unpaid Assessments. Sums assessed to the Association that remain unpaid, including, but not limited to, regular assessments, special assessments, interest, fines and late charges, shall constitute a lien upon the Unit or Units in the Project owned by the Co-Owner at the time of the assessment(s) and upon the proceeds of sale thereof. Any such unpaid sum(s) shall constitute a lien against the Unit as of the first day of the fiscal year to which the assessment, interest, fine or late charge relates and shall be a lien prior to all claims except real property taxes and first mortgages of record. All charges that the Association may levy against any Co-Owner shall be deemed to be assessments for purposes of this Section and Section 108 of the Act.

Section 6. Waiver of Use or Abandonment of Unit. No Co-Owner may exempt himself or herself from liability for his or her contribution toward the expenses of administration by waiver of the use or enjoyment of any of the Common Elements or by the abandonment of his or her Unit.

Section 7. Enforcement.

(a) Remedies. In addition to any other remedies available to the Association, the Association may enforce collection of delinquent assessments by a suit at law for a money judgment or by foreclosure of the statutory lien that secures payment of assessments. In the event of default by any Co-Owner in the payment of any installment of the annual assessment levied against his or her Unit, the Association shall have the right to declare all unpaid installments of the annual assessment for the pertinent fiscal year immediately due and payable. The Association may also discontinue the furnishing of any utilities or other services to a Co-Owner in default upon seven (7) days' written notice to such Co-Owner of its intention to do so. A Co-Owner in default shall not be entitled to utilize any of the General Common Elements of the Project and shall not be entitled to vote at any meeting of the Association so long as such default continues; provided, however, this provision shall not operate to deprive any Co-Owner of ingress or egress to and from his or her Unit. In a judicial foreclosure action, a receiver may be appointed to collect a reasonable rental for the Unit from the Co-Owner or any persons claiming under the Co-Owner. The Association may also assess fines for late payment or non-payment of assessments in accordance with the provisions of Article XIX, Section 4 and Article XX of these Bylaws. All of these remedies shall be cumulative and not alternative.

(b) Foreclosure Proceedings. Each Co-Owner, and every other person who from time to time has any interest in the Project, shall be deemed to have granted to the Association the unqualified right to elect to foreclose the lien securing payment of assessments either by judicial action or by advertisement. The provisions of Michigan law pertaining to foreclosure of mortgages by judicial action and by advertisement, as the same may be amended from time to time, are incorporated in these Bylaws by reference for the purposes of establishing the alternative procedures to be followed in lien foreclosure actions and the rights and obligations of the parties to such actions. Further, each Co-Owner and every other person who from time to time has any interest in the Project, shall be deemed to have authorized and empowered the Association to sell or to cause to be sold the Unit with respect to which the assessment(s) is or are delinquent and to receive, hold and distribute the proceeds of such sale in accordance with the priorities established by applicable law. Each Co-Owner of a Unit in the Project acknowledges that at the time of acquiring title to such Unit, he or she was notified of the provisions of this subsection and that he or she voluntarily, intelligently and knowingly waived notice of any proceedings brought by the Association to foreclose by advertisement the lien for non-payment of assessments and a hearing on the same prior to the sale of the subject Unit.

(c) Notice of Action. Notwithstanding the foregoing, neither a judicial foreclosure action nor a suit at law for a money judgment shall be commenced, nor shall any notice of foreclosure by advertisement be published, until the expiration of ten (10) days after mailing, by first class mail, postage prepaid, addressed to the delinquent Co-Owner(s) at the last known address of Co-Owner(s), a written notice that one (1) or more installments of the annual assessment levied against the pertinent Unit is or are delinquent and that the Association may invoke any of its remedies hereunder if the default is not cured within ten (10) days after the date of mailing. Such written notice shall be accompanied by a written affidavit of an authorized representative of the Association that sets forth (i) the affiant's capacity to make the affidavit, (ii) the statutory and other authority for the lien, (iii) the amount outstanding (exclusive of interest, late charges, fines, costs, attorney's fees and future assessments), (iv) the legal description of the subject Unit(s), and (v) the name(s) of the Co-Owner(s) of record. Such affidavit shall be recorded in the office of the Livingston County Register of Deeds prior to commencement of any foreclosure proceeding, but it need not have been recorded as of the date of mailing. If the delinquency is not cured within the



ten-day period, the Association may take such remedial action as may be available to it hereunder or under Michigan law. In the event the Association elects to foreclose the lien by advertisement, the Association shall so notify the delinquent Co-Owner and shall inform him or her that he or she may request a judicial hearing by bringing suit against the Association.

(d) Expenses of Collection. The expenses incurred in collecting unpaid assessments, including interest, late charges, fines, costs, actual attorney's fees (not limited to statutory fees) and advances for taxes or other liens paid by the Association to protect its lien, shall be chargeable to the Co-Owner in default and shall be secured by the lien on his or her Unit.

Section 8. Statement as to Unpaid Assessments. The purchaser of any Unit may request a statement of the Association as to the amount of any unpaid Association assessments thereon, whether regular or special. Upon written request to the Association, accompanied by a copy of the executed purchase agreement pursuant to which the purchaser holds the right to acquire a Unit, the Association shall provide a written statement of such unpaid assessments as may exist or a statement that none exist, which statement shall be binding upon the Association for the period stated therein. Upon the payment of that sum within the period stated, the Association's lien for assessments as to such Unit shall be deemed satisfied; provided, however, that the failure of a purchaser to request such statement at least five (5) days prior to the closing of the purchase of such Unit shall render any unpaid assessments and the lien securing the same fully enforceable against such purchaser and the Unit itself to the extent provided by the Act. The Association may charge a reasonable fee for providing the statement, not to exceed \$100.00, plus any fee charged by the management agent.

Section 9. Liability of Mortgagee. Notwithstanding any other provisions of the Condominium Documents, the holder of any first mortgage covering any Unit in the Project that comes into possession of the Unit pursuant to the remedies provided in the mortgage or by deed (or assignment) in lieu of foreclosure, or any purchaser at a foreclosure sale, shall take the property free of any claims for unpaid assessments or charges against the mortgaged Unit that accrue prior to the time such holder receives a Sheriff's Deed. Such mortgagee or the purchaser of the Unit at the foreclosure sale shall be obligated for assessments as of the date of the Sheriff's Deed or deed in lieu of foreclosure. However parties foreclosing, (or taking deeds in lieu of foreclosure) of second or other junior mortgages DO NOT take title or possession free of any unpaid assessments or charges and the holder of second and other junior mortgages are responsible for all Associations assessments if they foreclose or take deed in lieu of foreclosure. The Association may, in its discretion, notify any mortgagee of a Co-Owner's default under the Condominium Documents.

Section 10. Property Taxes and Special Assessments. All property taxes and special assessments levied by any public taxing authority shall be assessed in accordance with Section 131 of the Act.

Section 11. Personal Property Tax Assessment of Association Property. The Association shall be assessed as the person or entity in possession of any tangible personal property of the Condominium owned or possessed in common by the Co-Owners, and personal property taxes based thereon shall be treated as expenses of administration.

Section 12. Construction Lien. A construction lien otherwise arising under Act No. 497 of the Michigan Public Acts of 1980, as amended, shall be subject to Section 132 of the Act.

**ARTICLE III  
ALTERNATIVE DISPUTE RESOLUTION; CIVIL ACTIONS**

In the event of a dispute between the Association and a Co-Owner other than the Developer, or a dispute or any claims or grievance between the Co-Owners related to the application or enforcement of any Condominium Documents, any party to the dispute may demand the dispute be resolved arbitration as provided under Section 54(8) of the Act (“Alternative Dispute Resolution” or “ADR”).

Section 1.     Demand and Election.

(a)     Section 54(8) of the Act provides in part:

“The Bylaws shall contain a provision providing that arbitration if disputes, claims and grievances arising out of or relating to the interpretation of the application of the condominium document or arising out of disputes among or between Co-Owners shall be submitted to arbitration and that parties to the dispute claim or grievance shall accept the arbitrator decision as final and binding...”

(b)     If the demand for Alternative Dispute Resolution is made, no lawsuit may be commenced in any court.

Section 2.     Rules. The commercial arbitration rules of the American Arbitration Association (or any recognized successor or equivalent of the American Arbitration Association should it no longer exist) shall govern arbitration proceedings if arbitration is elected. The rules of a qualified mediation service shall govern mediation proceedings, including mediation conducted by a mediator not affiliated with such a service.

Section 3.     Attorney Fees and Costs. Unless the mediation or arbitration rules specifically provide to the contrary, the prevailing party, as determined by the mediator or arbitrator, shall be reimbursed for its actual costs and attorney fees as part of any award.

Section 4.     Enforcement. The decision made in any Alternative Dispute Resolution forum shall be enforceable in circuit court (or district court if a monetary award is below the circuit court jurisdictional amount).

Section 5.     Lien Claims Not Subject to ADR Election; Not Applicable to Developer. Disputes related to assessments and liens for assessments may not be subjected to the provisions of this Article, including contests of the lien or any subsequent foreclosure proceedings, except with the consent of the Association, which may be withheld in the Association’s absolute and sole discretion. The consent of the Association in that circumstance must be in writing. The provisions of Sections 1 through 4 above shall not apply to disputes between the Association and the Developer or between a Co-Owner and the Developer unless the Developer has consented to be subject to these provisions in writing.

Section 6.     Co-Owner Approval for Civil Actions Against Developer; Election of Remedies.

(a)     Any civil action proposed by the Board of Directors on behalf of the Association to be initiated against the Developer, its agents or assigns, and/or the First Board of Directors of the Association or other Developer-appointed directors, for any reason, shall be subject to approval by a vote of sixty-six and two-thirds (66 2/3%) percent of all Co-Owners and notice of such proposed action must be given in writing to all Co-Owners in accordance with Section 8 through 19 below. Such vote may only be taken at a meeting of the Co-Owners and no proxies or absentee ballots shall be permitted to be used, notwithstanding the provisions of Article VIII, Section 5.



(b) Election by the parties to any such disputes, claims or grievances to submit such disputes, claims or grievances to arbitration shall preclude such parties from litigating such disputes, claims or grievances in the Court.

Section 7. Not Applicable to Title Claims. Questions involving or affecting the claim of title of any person to any fee or life estate in real estate are not subject to this Article.

Section 8. Actions on Behalf of or Against Co-Owners. Actions on behalf of and against Co-Owners shall be brought in the name of the Association. Subject to the express limitations on actions in these Bylaws and in the Association's Articles of Incorporation, the Association may assert, defend or settle claims on behalf of all Co-Owners in connection with the Common Elements of the Condominium.

Section 9. Commencement of Civil Actions. Other than lawsuits against the Developer covered by Article II, Section 6 above requiring consent of 66 2/3% of the Co-Owners, as provided in the Articles of Incorporation of the Association, the commencement of any civil action (other than one to enforce these Bylaws or collect delinquent assessments) shall require the approval of a 60% in number and in value of the Co-Owners, and shall be governed by the requirements of this Article. The requirements of this Article are intended to ensure that the Co-Owners are fully informed regarding the prospects and likely costs of any civil action the Association proposes to engage in, as well as the ongoing status of any civil actions the Association proposes to engage in, as well as the ongoing status of any civil actions actually filed by the Association. These requirements are imposed in order to reduce both the cost of litigation and the risk of improvident litigation, and in order to avoid the waste of the Association's assets in litigation where reasonable and prudent alternatives to the litigation exist. Each Co-Owner shall have standing to sue to enforce the requirements of this Article. The following procedures and requirements apply to the Association's commencement of any civil action other than an action to enforce these Bylaws or to collect delinquent assessments.

Section 10. Board of Directors' Recommendation to Co-Owners. The Association's Board of Directors shall be responsible in the first instance for recommending to the Co-Owners that a civil action be filed and supervising and directing any civil actions that are filed.

Section 11. Litigation Evaluation Meeting. Before an attorney is engaged for purposes of filing a civil action on behalf of the Association, the Board of Directors shall call a special meeting of the Co-Owners ("litigation evaluation meeting") for the express purpose of evaluating the merits of the proposed civil action. The written notice to the Co-Owners of the date, time and place of the litigation evaluation meeting shall be sent to all Co-Owners not less than twenty (20) days before the date of the meeting and shall include the following information copied onto 8 1/2" x 11" paper:

(a) A certified resolution of the Board setting forth in detail the concerns of the Board giving rise to the need to file a civil action and further certifying that:

- (1) it is in the best interest of the corporation to file a lawsuit;
- (2) that at least one (1) Board member has personally made a good faith effort to negotiate a settlement with the putative defendant(s) on behalf of the corporation, without success;
- (3) litigation is the only prudent, feasible and reasonable alternative; and
- (4) the Board's proposed attorney for the civil action is of the written opinion that litigation is the corporation's most reasonable and prudent alternative.

(b) A written summary of the relevant experience of the attorney (“litigation attorney”) the Board recommends be retained to represent the corporation in the proposed civil action, including the following information:

(1) the number of years the litigation attorney has practiced law; and

(2) the name and address of every condominium and homeowner association for which the attorney has filed a civil action in any court, together with the case number, county and court in which each civil action was filed.

(c) The litigation attorney’s written estimate of the amount of the corporation’s likely recovery in the proposed lawsuit, net of legal fees, court costs, expert witness fees and all other expenses expected to be incurred in the civil action.

(d) The litigation attorney’s written estimate of the cost of the civil action through a trial on the merits of the case (“total estimated cost”). The total estimated cost of the civil action shall include the litigation attorney’s expected fees, court costs, expert witness fees and all other expenses expected to be incurred in the civil action.

(e) The litigation attorney’s proposed written fee agreement.

(f) The amount to be specifically assessed against each Unit in the Condominium to fund the estimated cost of the civil action in both total and on a monthly per Unit basis, as required by this subsection.

Section 12. Independent Expert Opinion. If the lawsuit relates to the condition of any of the Common Elements of the Condominium, the Board of Directors shall obtain a written independent expert opinion as to reasonable and practical alternative approaches to repairing the problems with the Common Elements which shall set forth the estimated costs and expected viability of each alternative. In obtaining the independent expert opinion required by the preceding sentence, the Board shall conduct its own investigation as to the qualifications of any expert and shall not retain any expert recommended by the litigation attorney or any other attorney with whom the Board consults. The purpose of the independent expert opinion is to avoid any potential confusion regarding the condition of the Common Elements that might be created by a report prepared as an instrument of advocacy for use in a civil action. The independent expert opinion will ensure that the Co-Owners have a realistic appraisal of the condition of the Common Elements, the likely cost of repairs to or replacement of the same, and the reasonable and prudent repair and replacement alternatives. The independent expert opinion shall be sent to the Co-Owners with the written notice of the litigation evaluation meeting.

Section 13. Fee Agreement with Litigation Attorney. The corporation shall have a written fee agreement with the litigation attorney and any other attorney retained to handle the proposed civil action. The corporation shall not enter into any fee agreement that is a combination of the retained attorney’s hourly rate and a contingent fee arrangement unless the existence of the agreement is disclosed to the Co-Owners in the text of the corporation’s written notice to the members of the litigation evaluation meeting.

Section 14. Co-Owner Vote Required. At the litigation evaluation meeting, the Co-Owners shall vote on whether to authorize the Board of Directors to proceed with the proposed civil action and whether the matter should be handled by the proposed litigation attorney. Furthermore, the commencement of any civil action by the corporation (other than a suit to enforce the Condominium Bylaws or collect delinquent assessments) shall require the approval of 66 2/3% in value of members of

the corporation. Any proxies to be voted at the litigation evaluation meeting must be signed at least seven (7) days prior to the litigation evaluation meeting.

Section 15. Litigation Special Assessment. All legal fees incurred in pursuit of any civil action that is subject to Section 8 through 18 of this Article shall be paid by special assessment of the Co-Owners (“litigation special assessment”). The litigation special assessment shall be approved at the litigation evaluation meeting (or at any subsequent duly called and noticed meeting) by a majority in number and in value of all Co-Owners in the amount of the estimated total cost of the civil action. If the litigation attorney proposed by the Board of Directors is not retained, the litigation special assessment shall be in an amount equal to the retained attorney’s estimated total cost of the civil action. The litigation special assessment shall be apportioned to the Co-Owners in accordance with their respective percentage of value interests in the Condominium and shall be collected from the Co-Owners on a monthly basis. The total amount of the litigation special assessment shall be collected monthly over a period not to exceed twenty-four (24) months.

Section 16. Attorney’s Written Report. During the course of any civil action authorized by the Co-Owners pursuant to this Article, the retained attorney shall submit a written report (“attorney’s written report”) to the Board of Directors every thirty (30) days setting forth:

(a) The attorney’s fees, the fees of any experts retained by the attorney, and all other costs of litigation during the 30-day period immediately preceding the date of the attorney’s written report (“reporting period”);

(b) All actions taken in the civil action during the reporting period, together with copies of all pleadings, court papers and correspondence filed with the court or sent to opposing counsel during the reporting period;

(c) A detailed description of all discussions with opposing counsel during the reporting period, written and oral, including, but not limited to, settlement discussions;

(d) The costs incurred in the civil action through the date of the written report, as compared to the attorney’s estimated total cost of the civil action;

(e) Whether the originally estimated total cost of the civil action remains accurate.

Section 17. Board Meetings. The Board shall meet monthly during the course of any civil action to discuss and review:

(a) the status of the litigation;

(b) the status of settlement efforts, if any; and

(c) the attorney’s written report.

Section 18. Changes in the Litigation Special Assessment. If at any time during the course of a civil action the Board of Directors determines that the originally estimated total cost of the civil action or any revision thereof is inaccurate, the Board of Directors shall immediately prepare a revised estimate of the total cost of the civil action. If the revised estimate exceeds the litigation special assessment previously approved by the Co-Owners, the Board shall call a special meeting of the Co-Owners to review the status of the litigation and to allow the Co-Owners to vote on whether or not to continue the



civil action and increase the litigation special assessment. The meeting shall have the same quorum and voting requirements as a litigation evaluation meeting.

Section 19. Disclosure of Litigation Expenses. The attorneys' fees, court costs, expert witness fees and all other expenses of any civil action filed by the Association ("litigation expenses") shall be fully disclosed to the Co-Owners in the Association's annual budget. The litigation expenses for each civil action filed by the Association shall be listed as a separate line item captioned "litigation expenses" in the Association's annual budget.

#### **ARTICLE IV INSURANCE**

Section 1. Extent of Coverage. The Association shall, to the extent appropriate in light of the nature of the General Common Elements of the Project, carry fire insurance, extended coverage, vandalism and malicious mischief endorsements, liability insurance (in a minimum amount to be determined by the Developer or the Association in its discretion, but in no event less than \$1,000,000 per occurrence) and including the Charter Township of Genoa endorsed as an additional named insured, officers' and directors' liability insurance, and workers' compensation insurance, if applicable, and any other insurance the Association may deem applicable, desirable or necessary pertinent to the ownership, use and maintenance of the Common Elements of the Condominium, Fidelity Bond coverage for the members of the Board and any management agent who has access to and authority over any monies received by or payable to the Association, Directors and Officers Liability coverage, and such other insurance as the Board of Directors deems advisable, and all General Common Elements, and such insurance shall be carried and administered in accordance with the following provisions:

(a) Responsibilities of Association. All such insurance shall be purchased by the Association for the benefit of the Association, the Developer and the Co-Owners and their mortgages as their interests may appear, and provision shall be made for the issuance of certificates of mortgagee endorsements to the mortgages of Co-Owners.

(b) Insurance of Common Elements. All General Common Elements of the Condominium Project shall be insured against fire (if appropriate) and other perils covered by a standard extended coverage endorsement, if applicable and appropriate, in an amount equal to the current insurable replacement value, excluding foundation and excavation costs, as determined annually by the Board of Directors of the Association. The Association shall not be responsible, in any way, for maintaining insurance with respect to Limited Common Elements.

(c) Premium Expenses. All premiums on insurance purchased by the Association pursuant to these Bylaws shall be expenses of administration.

(d) Proceeds of Insurance Policies. Proceeds of all insurance policies owned by the Association shall be received by the Association, held in a separate account and distributed to the Association and the Co-Owners and their mortgagees as their interests may appear; provided, however, whenever repair or reconstruction of the Condominium shall be required as provided in Article V of these Bylaws, the proceeds of any insurance received by the Association as a result of any loss requiring repair or reconstruction shall be applied to such repair or reconstruction, and in no event shall hazard insurance proceeds be used for any purpose other than for repair, replacement or reconstruction of the Project unless all of the institutional holders of first mortgages on Units in the Project have given their prior written approval.

Section 2. Authority of Association to Settle Insurance Claims. Each Co-Owner, by ownership of a Unit in the Condominium Project, shall be deemed to appoint the Association as his or her true and lawful attorney-in-fact to act in connection with all matters concerning the maintenance of fire insurance, extended coverage, vandalism and malicious mischief endorsements, liability insurance and workers' compensation insurance, if applicable, pertinent to the Condominium Project and the General Common Elements appurtenant thereto, with such insurer as may, from time to time, provide such insurance for the Condominium Project. Without limitation on the generality of the foregoing, the Association as said attorney shall have full power and authority to purchase and maintain such insurance, to collect and remit the insurance premiums, to collect proceeds and to distribute them to the Association, the Co-Owners and their respective mortgagees, as their interests may appear (subject always to the Condominium Documents), to execute releases of liability and to execute all documents and to do all things on behalf of the Co-Owners and the Condominium as shall be necessary or convenient to the accomplishment of the foregoing.

Section 3. Responsibilities of Co-Owners. Each Co-Owner shall be obligated and responsible for obtaining fire insurance, extended coverage, and vandalism and malicious mischief endorsements with respect to the building and all other improvements constructed or to be constructed within the perimeter of his or her Condominium Unit and its appurtenant Limited Common Elements and for his or her personal property located therein or thereon or elsewhere in the Condominium Project. There is no responsibility on the part of the Association to insure any of such improvements whatsoever. All such insurance shall be carried by each Co-Owner in an amount equal to the maximum insurable replacement value, excluding foundation and excavation costs. Each Co-Owner shall deliver certificates of insurance to the Association not less than annually to evidence the continued existence of all insurance required to be maintained by the Co-Owner hereunder. In the event of the failure of a Co-Owner to obtain such insurance or to provide evidence thereof to the Association, the Association may obtain such insurance (but is under no obligation whatsoever to do so) on behalf of such Co-Owner and the premiums therefor shall constitute a lien against the Co-Owner's Unit which may be collected from the Co-Owner in the same manner that Association assessments may be collected in accordance with Article II hereof. Each Co-Owner also shall be obligated to obtain insurance coverage for his or her personal liability for occurrences within the perimeter of his or her Unit and affecting appurtenant Limited Common Elements or the improvements located thereon (naming the Association and the Developer as insureds), and also for any other personal insurance coverage that the Co-Owner wishes to carry. Such insurance shall be carried in such minimum amounts as may be specified by the Association (and as specified by the Developer during the Development and Sales Period) and each Co-Owner shall furnish evidence of such coverage to the Association or the Developer annually.

The Association shall, under no circumstances, have any obligation to obtain any of the insurance coverage described in this Section 3 or any liability to any person for failure to do so. The Association may elect, however, through its Board of Directors, to undertake the responsibility for obtaining the insurance described in this Section 3, or any portion thereof, exclusive of insurance covering the contents located within a Co-Owner's residence, and the cost of the insurance shall be included as an expense item in the Association budget. All Co-Owners shall be notified of the Board's election to obtain the insurance at least sixty (60) days prior to its effective date, which notification shall include a description of the coverage and the name and address of the insurer. Each Co-Owner shall also be provided a certificate of insurance as soon as it is available from the insurer. Co-Owners may obtain supplementary insurance, but in no event shall any such insurance coverage undertaken by a Co-Owner permit a Co-Owner to withhold payment of the share of the Association assessment that relates to the equivalent insurance carried by the Association. The Association also shall not reimburse Co-Owners for the cost of premiums resulting from the early cancellation of an insurance policy. To the extent a Co-Owner does or permits anything to be done or kept on his or her Unit that will increase the rate of insurance each Co-Owner shall pay to the Association, the increased cost of insurance premiums resulting

from any such activity or the maintenance of any such condition shall be charged to the Co-Owner responsible for such activity or condition.

Section 4. Waiver of Right of Subrogation. The Association and all Co-Owners shall use their best efforts to cause all property and liability insurance carried by the Association or any Co-Owner to contain appropriate provisions whereby the insurer waives its right of subrogation as to any claims against any Co-Owner or the Association.

Section 5. Indemnification. Each individual Co-Owner shall indemnify and hold harmless every other Co-Owner, the Developer and the Association for all damages and costs, including attorneys' fees, which such other Co-Owners, the Developer or the Association may suffer as a result of defending any claim arising out of an occurrence on or within such individual Co-Owner's Unit and shall carry insurance to secure this indemnity if so required by the Association (or the Developer during the Development and Sales Period). This Section 5 shall not be construed to give any insurer any subrogation right or other right or claim against any individual Co-Owner, however.

## **ARTICLE V RECONSTRUCTION OR REPAIR**

Section 1. Responsibility for Reconstruction or Repair. If any part of the Condominium Premises shall be damaged, the determination of whether or not it shall be reconstructed or repaired, and the responsibility therefor, shall be as follows:

(a) General Common Elements. If the damaged property is a General Common Element the damaged property shall be rebuilt or repaired subject to the requirements of the Charter Township of Genoa.

(b) Unit or Improvements on the Unit. If the damaged property is within a Unit, is a Limited Common Element or any improvements thereon, the Co-Owner of such Unit alone shall determine whether to rebuild or repair the damaged property, subject to the rights of any mortgagee or other person or entity having an interest in such property, and such Co-Owner shall be responsible for any reconstruction or repair that he or she elects to make. The Co-Owner shall in any event remove all debris and restore his or her Unit and the improvements thereon to a clean and slightly condition satisfactory to the Association and in accordance with the provisions of Article VI hereof as soon as reasonably possible following the occurrence of the damage. In the event that a Co-Owner has failed to repair, restore, demolish or remove the improvements on the Co-Owner's Unit under this Section, the Association shall have the right (but not the obligation) to undertake reasonable repair, restoration, demolition or removal and shall have the right to place a lien on the Unit for the amounts expended by the Association for that purpose which may be foreclosed as provided for in these Bylaws.

Section 2. Repair in Accordance with Master Deed, Etc. Any such reconstruction or repair shall be substantially in accordance with the Master Deed and the original plans and specifications for any damaged improvements located within the Unit unless the Co-Owners shall unanimously decide otherwise.

Section 3. Association Responsibility for Repair. Immediately after the occurrence of a casualty causing damage to property for which the Association has the responsibility of maintenance, repair and reconstruction, the Association shall obtain reliable and detailed estimates of the cost to place the damaged property in a condition as good as that existing before the damage. If the proceeds of insurance are not sufficient to defray the estimated cost of reconstruction or repair required to be performed by the Association, or if at any time during such reconstruction or repair, or upon completion



of such reconstruction or repair, the funds for the payment of the cost thereof are insufficient, assessment shall be made against all Co-Owners for the cost of reconstruction or repair of the damaged property in sufficient amounts to provide funds to pay the estimated or actual cost of repair. This provision shall not be construed to require replacement of mature trees and vegetation with equivalent trees or vegetation.

Section 4. Timely Reconstruction and Repair. If damage to the General Common Elements adversely affects the appearance of the Project, the Association shall proceed with replacement of the damaged property without delay.

Section 5. Eminent Domain. The following provisions shall control upon any taking by eminent domain:

(a) Taking of Unit or Improvements Thereon. In the event of any taking of all or any portion of a Unit or any improvements thereon by eminent domain, the award for such taking shall be paid to the Co-Owner of such Unit and the mortgagee thereof as their interests may appear, notwithstanding any provision of the Act to the contrary. If a Co-Owner's entire Unit is taken by eminent domain, such Co-Owner and his or her mortgagee shall, after acceptance of the condemnation award therefore, be divested of all interest in the Condominium Project.

(b) Taking of General Common Elements. If there is any taking of any portion of the General Common Elements, the condemnation proceeds relative to such taking shall be paid to the Co-Owners and their mortgagees in proportion to their respective interests in the Common Elements and the affirmative vote of more than fifty (50%) percent of the Co-Owners shall determine whether to rebuild, repair or replace the portion so taken or to take such other action as they deem appropriate.

(c) Continuation of Condominium After Taking. In the event the Condominium Project continues after taking by eminent domain, then the remaining portion of the Condominium Project shall be resurveyed and the Master Deed amended accordingly, and, if any Unit shall have been taken, then Article V of the Master Deed shall also be amended to reflect such taking and to proportionately readjust the percentages of value of the remaining Co-Owners based upon the continuing value of the Condominium of one hundred (100%) percent. Such amendment may be effected by an officer of the Association duly authorized by the Board of Directors without the necessity of execution or specific approval thereof by any Co-Owner.

(d) Notification of Mortgagees. In the event any Unit in the Condominium, or any portion thereof, or the Common Elements or any portion thereof, is made the subject matter of any condemnation or eminent domain proceeding or is otherwise sought to be acquired by a condemning authority, the Association promptly shall so notify each institutional holder of a first mortgage lien on any of the Units in the Condominium.

(e) Applicability of the Act. To the extent not inconsistent with the foregoing provisions, Section 133 of the Act shall control upon any taking by eminent domain.

Section 6. Priority of Mortgagee Interests. Nothing contained in the Condominium Documents shall be construed to give a Co-Owner or any other party priority over any rights of first mortgagees of Condominium Units pursuant to their mortgages in the case of a distribution to Co-Owners of insurance proceeds or condemnation awards for losses to or a taking of Condominium Units and/or Common Elements.

Section 7. Notification of FHLMC, FNMA, Etc. In the event any mortgage in the Condominium is held by the Federal Home Loan Mortgage Corporation ("FHLMC"), Federal National

Mortgage Association ("FNMA"), Government National Mortgage Association ("GNMA"), the Michigan State Housing Development Authority ("MSHDA"), or insured by the Veterans Administration ("VA"), Department of Housing and Urban Development ("HUD"), Federal Housing Association ("FHA") or any private or public mortgage insurance program, then the Association shall give the aforementioned parties written notice, at such address as they may from time to time direct, of any loss to or taking of the Common Elements of the Condominium if the loss or taking exceeds Ten Thousand (\$10,000.00) Dollars in amount or damage to a Condominium Unit or dwelling covered by a mortgage purchased, held or insured by them exceeds One Thousand (\$1,000.00) Dollars. Furthermore, the Association may, but is not obliged to, inform any such lender of such damages or condemnation actions.

Section 8. Co-Owner Maintenance of Unit and Limited Common Elements. Each Co-Owner shall maintain his Unit and any Limited Common Elements appurtenant thereto for which he has maintenance responsibility in a safe, clean and sanitary condition. Each Co-Owner shall also use due care to avoid damaging any of the Common Elements, including, but not limited to, the telephone, water, gas, plumbing, electrical, cable TV or other utility conduits and systems and any other Common Elements in any Unit which are appurtenant to or which may affect any other Unit. Each Co-Owner shall be responsible for damages or costs to the Association resulting from damage to or misuse of any of the Common Elements by him, or his family, guests, agents or invitees, or by casualties and occurrences, whether or not resulting from Co-Owner negligence, involving items or common elements which are the responsibility of the Co-Owner to maintain, repair and replace, unless such damages or costs are covered by insurance carried by the Association, in which case there shall be no such responsibility (unless reimbursement to the Association is excluded by virtue of a deductible provision, in which case the responsible Co-Owner shall bear the expense to the extent of the deductible amount.) Any costs or damages to the Association may be assessed to and collected from the responsible Co-Owner in the manner provided in Article II hereof. Each individual Co-Owner shall indemnify the Association and all other Co-Owners against such damages and costs, including attorneys' fees, and all such costs or damages to the Association may be assessed to and collected from the responsible Co-Owner in the manner provided in Article II hereof. The Co-Owners shall have the responsibility to report to the Association any Common Element which has been damaged or which is otherwise in need of maintenance, repair or replacement.

## **ARTICLE VI ARCHITECTURAL, BUILDING SPECIFICATIONS AND USE RESTRICTIONS**

All of the Units in the Condominium shall be held, used and enjoyed subject to the following limitations and restrictions and Charter Township of Genoa ordinances. The Condominium Project is an expandable project which may contain if fully expanded up to 108 Units. References to Units numbered 15-108 are to Units which maybe be added in the future.

Section 1. Residential Use. Condominium Units shall be used exclusively for residential occupancy, and no Unit or appurtenant Common Element shall be used for any purpose other than that of a single family residence or purposes incidental to residential use. Home occupations conducted entirely within the residence and participated in solely by members of the immediate family residing in the residence that do not generate unreasonable traffic by members of the general public and do not change the residential character of the Unit or neighborhood, are permitted as incidental to primary residential use. No building intended for other uses, and no apartment house, rooming house, day care facility, foster care residence, or other commercial and/or multiple-family dwelling of any kind shall be erected, placed, or permitted on or within any Unit.

Section 2. Leasing and Rental.

(a) Right to Lease. A Co-Owner may lease his or her Unit for the same purposes set forth in Section 1 of this Article VI; provided that written disclosure of such lease transaction is submitted to the Board of Directors of the Association in the manner specified in subsection (b) below. With the exception of a lender in possession of a Unit following a default of a first mortgage, foreclosure or deed or other arrangement in lieu of foreclosure, no Co-Owner shall lease less than an entire Unit in the Condominium and no tenant shall be permitted to occupy said Unit except under a lease, the initial term of which is at least one (1) year (however, this one-(1) year restriction on the length of the lease shall only apply after the Development and Sales Period has ended), unless specifically approved in writing by the Association. The terms of all leases, occupancy agreements and occupancy arrangements shall incorporate, or be deemed to incorporate, all of the provisions of the Condominium Documents. The Developer may lease any number of Units in the Condominium in its discretion.

(b) Leasing Procedures. The leasing of Units in the Project shall conform to the following provisions:

(1) A Co-Owner desiring to rent or lease a Unit shall supply the Association with a copy of the exact lease form for its review for its compliance with the Condominium Documents. If the Developer desires to rent Units before the Transitional Control Date, it shall notify either the Advisory Committee or each Co-Owner in writing.

(2) Tenants and non-owner occupants shall comply with all of the conditions of the Condominium Documents and all leases and rental agreements shall so state.

(3) If the Association determines that the tenant or non-owner occupant has failed to comply with the conditions of the Condominium Documents, the Association shall take the following action:

(i) The Association shall notify the Co-Owner by certified mail of the alleged violation by the tenant.

(ii) The Co-Owner shall have fifteen (15) days after receipt of such notice to investigate and correct the alleged breach by the tenant or advise the Association that a violation has not occurred.

(iii) If, after fifteen (15) days, the Association believes that the alleged breach is not cured or may be repeated, it may institute on its behalf, or derivatively by the Co-Owners on behalf of the Association if it is under the control of the Developer, an action for eviction against the tenant or non-owner occupant and simultaneously for money damages in the same action against the Co-Owner and tenant or non-owner occupant for breach of the conditions of the Condominium Documents. The relief provided for in this subparagraph may be by summary proceeding. The Association may hold both the tenant or non-owner occupant and the Co-Owner liable for any damages to the Common Elements caused by the Co-Owner or tenant or non-owner occupant in connection with the Unit or Condominium Project.

(4) When a Co-Owner is in arrears to the Association for assessments, the Association may give written notice of the arrearage to a tenant or non-owner occupant occupying a Co-Owner's Unit under a lease or rental agreement and the tenant or non-owner occupant, after receiving the notice, shall deduct from rental payments due the Co-



Owner the arrearage and future assessments as they fall due and pay them to the Association. The deductions shall not constitute a breach of the rental agreement or lease by the tenant or non-owner occupant.

Section 3. Drainage. The grade of any Unit in the Condominium may not be changed from the Grading Plan prepared by the Developer and approved by the Charter Township of Genoa. The Grading Plan may be subsequently amended from time to time as conditions require and subsequently approved by the Charter Township of Genoa. It shall be the responsibility of each Co-Owner to maintain the surface drainage grades of his or her Unit as established by the Developer. Each Co-Owner covenants that he or she will not change the surface grade of his or her Unit in a manner that will materially increase or decrease the storm water flowing onto or off of his or her Unit and will not block, pond or obstruct surface water. The Board of Directors of the Association shall enforce this covenant and shall charge the costs of the correction to the Co-Owner and such costs shall be a lien upon the Unit.

Section 4. Alterations and Modifications. No Co-Owner shall make any alterations in the exterior appearance of his or her dwelling or make changes in any of the Common Elements, limited or general, without the express written approval of the Association (and the Developer during the Development and Sales Period). No Co-Owner shall in any way restrict access to or tamper with any pump, plumbing, waterline, waterline valves, water meter, sprinkler system valves or any other element that must be accessible to service other Units, the Common Elements or which affects an Association responsibility in any way. Should access to any facilities of any sort be required, the Association may remove any coverings or attachment of any nature that restricts such access and it will have no responsibility for repairing, replacing or reinstalling any materials that are damaged in the course of gaining such access.

Section 5. Activities. No immoral, improper, unlawful or offensive activity shall be carried on in any Unit or upon the Common Elements, nor shall anything be done that may be or become an annoyance or a nuisance to the Co-Owners of the Condominium. No unreasonably noisy activity shall occur in or on the Common Elements or in any Unit at any time, and disputes among Co-Owners arising as a result of this provision that cannot be amicably resolved shall be arbitrated by the Association. No Co-Owner shall do or permit anything to be done or keep or permit to be kept in his or her dwelling, on his or her Unit or on the Common Elements anything that will increase the rate of insurance on the Condominium without the written approval of the Association, and each Co-Owner shall pay to the Association the increased cost of insurance premiums resulting from any such activity or the maintenance of any such condition even if approved. Activities that are deemed offensive and are expressly prohibited include, but are not limited to, the following: any activity involving the use of firearms, air rifles, pellet guns, B-B guns, bows and arrows, or other similar dangerous weapons, projectiles or devices.

Section 6. Architectural Control. All residences in the Summerfield Pointe Estates Condominium shall conform to the Architectural and General Site Design Guidelines and no construction may take place prior to obtaining required permits and approvals from the Charter Township of Genoa. Further, the Developer shall establish an Architectural Control Committee to review any plans and specifications, and to make recommendations regarding the proposed construction. Following the conclusion of the Development and Sales Period, the members of the Architectural Control Committee shall be appointed by the Board of Directors of the Association. No residence, building, structure or other improvement, including but not limited to decks and patios, shall be constructed within a Condominium Unit or elsewhere within the Condominium Project, nor shall any exterior modification be made to any existing residences, buildings, structure or improvement, unless plans and specifications therefore, containing such detail as the Developer and the Architectural Control Committee may reasonably request, have been first approved in writing by the Developer during the Development and Sales Period, and by

the Architectural Control Committee thereafter. The Developer, or Association, as applicable, shall have the right to refuse to approve any such plans or specifications, color and/or material specifications, grading or landscaping plans, or building location plans which are not suitable or desirable in its opinion for aesthetic or other reasons, and in passing upon such plans and specifications it shall have the right to take into consideration the suitability of the proposed structure, improvement or modification, the site upon which it is proposed to be constructed, the proposed location within the Unit and the location of structures within adjoining Units and the degree of harmony thereof with the Condominium as a whole.

Section 2. No liability. In no event shall either the Developer or the Association have any liability whatsoever to anyone for their approval or disapproval of plans, drawings, specifications, elevations of the dwellings, fences, walls, or other structures subject thereto, whether such alleged liability is based on negligence, tort, express or implied contract, fiduciary duty or otherwise. By way of example but not limitation, there shall be no liability to the Developer or the Association for approval of plans, drawings, specifications, elevations or the residences, fences, walls, or other structures which are not in conformity with the provisions of the Condominium Documents, or for disapproving plans, drawings, specifications, elevations or the residences, fences, walls, or other structures which are arguably in conformity with the provisions hereof.

Section 3. Architectural and General Site Design Guidelines. The following Architectural and General Site Design Guidelines:

(a) Minimum Dwelling Unit Size. The minimum size of dwellings shall be as follows:

(1) Units 1-6, inclusive, shall be 1200 square feet for a ranch and 1500 square feet for a 2-story or 1.5-story bungalow;

(2) Units 7-14 shall be 1200 square feet for a ranch and 1500 square feet for a 2-story or 1.5-story bungalow

(3) Units 15-108, inclusive, shall be 1200 square feet for a ranch and 1500 square feet for a 2-story or 1.5-story bungalow.

(b) Setbacks. Setbacks for residences on Units are as follows:

(1) The following setbacks are applicable for Units 1-6, inclusive, and 15-108, inclusive:

(i) Front yard: 30 feet from back of curb;

(ii) Side yard: minimum 9 feet one side and 5 feet on other side

(iii) Minimum 14 feet between residences.

(iv) Rear yard setback of 30 feet.

(2) The following setbacks are applicable for Units 7-14, inclusive:

(i) Front yard \_\_\_\_\_ feet from back of curb.

- (ii) Side yard a minimum of \_\_\_\_\_ one side and \_\_\_\_\_ the other side.
- (iii) Not less than 14 feet between residences.
- (iv) Rear yard setback of 30 feet.

(c) Height. Building height will not exceed 35 feet, measured as specified in the Zoning Ordinance (the vertical distance measured from the established grade to the average height between the eaves and ridge for a gable roof).

(d) Exterior Materials. The materials used on exterior walls of all residences shall be a combination of brick, stone, wood, vinyl siding. Aluminum gutters, downspouts and flashing shall be permitted as well as copper roofing materials on bays. Texture T 1-11 and aluminum siding are prohibited. Window and house trim shall be wood, vinyl clad wood, aluminum clad or vinyl. Exposed foundations are allowed.

(e) Driveways and Sidewalks. Driveways shall be constructed of asphalt, brick pavers or concrete. Sidewalks shall be constructed of brick pavers or concrete.

(f) Exterior Colors; Unit 1-6 Elevations Harmony With Adjoining Summerfield Pointe Attached Condominium; Generally Applicable Architectural Requirements for Units 1-14.

(1) Exterior colors must be natural and subdued. Proposed stain colors shall be submitted to the Developer for approval prior to application.

(2) Units 1-6 exterior color. The exterior colors of Units 1-6 are to match existing attached condominiums in Summerfield Pointe as close as possible subject to availability of materials: (1) Brick Kingsmill Cadillac Queens; (2) shingle Weatherwood by Landmark; (3) trim Navajo White; (4) vinyl siding Sunset Tan by Hamilton; and (5) windows: beige.

(3) Units 1-6 Elevations. The front elevations of Units 1-6 shall be generally harmonious and architecturally reasonably compatible with the existing attached housing units located in the adjoining Summerfield Pointe Condominium, subject to current code requirements, Genoa Township ordinance and availability of materials. And exact match is not required.

(4) Garage lights Unit 1-14. Units 1-14 must have lights on front of garage to act as street lights and be on photo sensor maintained by homeowner.

(g) Units 1-6 and Adjoining Condominium Requirements. The following requirements relate to Units 1-6 only and are imposed to create an maintain a generally harmonious appearance between residences on Units 1-6 and the units in the existing adjoining attached condominium project called Summerfield Pointe.

(1) As provide for in Article IV, Section of the Master Deed for Summerfield Pointe Estates, the Summerfield Pointe Estates Association will be responsible for be for outside maintenance, repair and replacement of each



dwelling constructed on the including exterior painting, roofs, caulking, siding, grass, shrubs and sidewalks of those Units (only).

(2) Units 1-6 shall comply with the adjoining Summerfield Pointe Condominium Guidelines Matrix which generally allow the following, however Co-owners are solely responsible for inquiring about Guidelines currently in effect and the following list is not exhaustive and may change:

(i) Allowed items with approval:

- a) Portable basketball backboard
- b) Awnings
- c) Bird bath feeders in rear yard
- d) Decks or patios
- e) Invisible fence
- f) Flags
- g) Grills
- h) Holiday decorations
- i) Landscaping can be changed
- j) Satellite dish
- k) Storm doors

- l) Window treatments or wreaths
- m) Flowers hanging baskets or on patios, porches or decks

(ii) Items not allowed.

- a) Basketball backboards attached to house or driveway
- b) Any storage building
- c) No swimming pools
- d) Fences
- e) Gazebo
- f) Fire pits detached from house
- g) Play structures
- h) Sheds, shutters, statues

(h) Guidelines for Units 15 through 108.

(1) Items allowed with approval

- i. Play structures
- ii. Swimming pools
- iii. Fire pits
- iv. Satellite dishes.
- v. Holiday decorations,
- vi. Decks and Patios.
- vii. Flags.
- viii. Portable basketball backboard.
- ix. Awnings.

- x. Flowers in hanging baskets (off deck).
- xi. Landscaping can be changed with approval.
- xii. Bird feeder in rear yard.
- xiii. Storm doors.

(2) Items not allowed.

- i. Fences
- ii. Out buildings and sheds.

(i) Fences. No fences or walls shall be permitted, including without limitation privacy, outside screening, chain link and perimeter fences along property boundaries, except for fences enclosing in-ground swimming pools and required by applicable law, are allowed. Fencing of wrought iron type or similar may be allowed for pools. Notwithstanding anything herein to the contrary, all fences shall be subject to (i) Township approval and (ii) Developer approval, so long as the Developer owns any unit during the Development and Sales Period and thereafter the Association.

(j) Garages. All garages shall be attached to the dwelling. All garages shall be two, three or four car garages. In relation to Units 1-6, inclusive, and 15-108, inclusive, all garages shall be front entrance garages. Garage doors shall be either panelized steel, panelized aluminum or wood. Garage doors may face the road. Owners are responsible for maintenance and painting of garage doors, entrance doors, and windows.

(k) Roof Material and Pitch. Roof material shall be at least 25-year three- tab architectural/dimensional asphalt shingles. No single-level flat roofs shall be permitted on the main body of any dwelling or other structure, except that flat roofs may be installed for Florida rooms, porches or patios if they are architecturally compatible with the rest of the dwelling unit. The roof pitch shall have a minimum pitch of 6 on 12 or steeper. No roofing materials may be installed without the prior written approval of the Developer and the Architectural Control Committee during the Development and Sales Period, and of the Association thereafter.

(l) Air Conditioners. No window or wall-mounted air conditioners are permitted. All exterior air conditioner equipment shall be located so as to minimize noise to adjacent homes and shall be screened by landscaping or other material if approved by the Developer and must also comply with Township ordinance requirements.

Section 9. Use and Occupancy Restrictions. In addition to the general requirements of Article VI, Sections 1 through 8, the use of the Project and its Common Elements by any Co-Owner shall be subject to the following specific restrictions:

(m) Common Areas. The Common Elements shall be used only by the Co- owners of Units in the Condominium Project and by their agents, tenants, family members, invitees, and licensees for access, ingress to, and egress from the respective Units, and for other purposes incidental to use of the Units; provided, that any parking areas, storage facilities, or other Common Elements designed for a specific purpose shall be used only for those purposes or other uses approved by the Board. The use, maintenance, and operation of the Common Elements shall not be obstructed, damaged, or unreasonably interfered with by any Co-Owner, and shall be subject to any lease or easement presently in existence or entered into by the Board at some future date that affects all or any part of the Common Elements.

(n) Basketball Hoops / Backboards. Basketball hoops and backboards may **NOT** be attached to the home or garage. Ground mounted posts must be located at least twenty (20) feet from the curb of the road adjacent to the Unit and at least one (1) foot from the side lot line of the Unit. Ground mounted posts shall be painted black and the backboard of the basketball hoop shall be transparent. Portable and/or removable hoops must be kept well maintained and enclosed in the garage when not in use.

(o) Birdbaths and Birdfeeders. Birdbaths and birdfeeders shall only be permitted in the landscaped areas of the rear yard of the Unit.

(p) Bug Lights / Zappers. No attachment, appliance or other item may be installed which is designed to kill or repel insects or other animals by light or electrical current, or which emits a humanly audible sound.

(q) Exterior Changes. No Co-Owner shall make any additions, alterations, or modifications to any of the Common Elements, nor make any changes to the exterior appearance or structural elements of the Unit without the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter. Alterations or structural modifications that would jeopardize or impair the soundness, safety, or appearance of the Project shall be prohibited. Any Co-Owner may not make alterations, additions or improvements within the Co-Owner's Unit without such prior approval, but the Co-Owner shall be responsible for any damage to other Units, the Common Elements, or the property resulting from such alterations, additions, or improvements. Any re-painting or re-staining of the Unit or any part thereof (including doors, shutters and trim) shall require such prior approval, unless it reasonably conforms to the original colors.

(r) Exterior Lighting. Other than exterior light fixtures required by the Condominium Documents, exterior lighting shall be permitted only with the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter, subject to the limitations in this paragraph. The color of any lighting, lamps or illumination shall be typical material colors or, if not, specifically approved in writing by the Developer or after the end of the Development and Sales Periods ends, the Association thereafter. Any approved lighting shall be compatible with the intensity and style of existing lighting throughout the Condominium Premises. Horizontal distribution lights such as wall packs and floodlights are not permitted. Lighting shall be focused downward, except as follows: low-voltage lighting may be permitted to upwardly illuminate the front facade of homes and landscaping provided that any element being up-lighted shall be focused and controlled to minimize spill light. Lights aimed at architectural structures shall be shielded and baffled so that the majority of the light will fall on the architectural surface. Landscape up-lights shall be focused so that the majority of the light shall fall on the trunk, structure or canopy of the trees. The majority of light shall be defined as 75% of the center beam candle power falling upon the surface. Notwithstanding anything herein to the contrary, the foregoing provision shall not be construed to prohibit lighting at the project entranceway, which shall be permitted in conformance with all applicable ordinances and subject to prior Township approval. Each house shall have one light on front of house or front of garage with photo cell or timer to be on from dusk to dawn.

(s) Firearms and Weapons. No Co-Owner shall use, or permit the use by any occupant, agent, tenant, invitee, guest, or member of the Co-Owner's family of any firearms, air rifles, pellet guns, B-B guns, bows and arrows, illegal fireworks or other dangerous weapons, Projectiles, or devices anywhere on or about the property.



(t) Flagpoles and Flags. Flagpoles shall be permitted with the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter. Approved flagpoles must remain within the Unit or Limited Common Elements of the applicable Unit or mounted on the garage door jamb trim, and shall not exceed 72" in length or 3/4" in diameter. Flag pole holders so-mounted shall be cast brass. Flags shall not exceed 3' by 5' in size, and shall be maintained in good repair by the Co-Owner. Subject to the foregoing restrictions regarding the installation of flagpoles and the size of approved flags, each Co-Owner shall otherwise have the right to display a single United States flag anywhere on the exterior of the Co-Owner's Unit pursuant to MCL 559.156a.

(u) Holiday Decorations. Co-Owners may not place holiday decorations on the Common Elements. Holiday decorations may be installed within two (2) weeks before a holiday and must be removed within two (2) weeks after the holiday. Christmas and Hanukkah decorations may be installed at any time on or after Thanksgiving and must be removed within two (2) weeks after New Year's Day. Holiday lawn decorations are discouraged, may be subject to future rules and regulations and are one the less subject to approval by the Developer during the Development and Sales Period and the Association thereafter.

(v) Garage / Yard Sales. No garage sales or yard sales shall be permitted, except any community sale to be organized by the Association.

(w) Grills. Propane, natural gas or electric grills shall be allowed on the rear deck or patio. Such grills may also be used in the driveway appurtenant to a Unit, provided that the grills must be stored in the garage when not in use, subject to all applicable ordinances.

(x) Lawn Equipment. Lawn mowers, weed whackers and other gas or electric-powered lawn equipment may only be operated between the hours of 7 a.m. to dusk. Snow blowers may be operated in accordance with the Township Ordinance.

(y) Mailboxes. Each Unit shall have the same mailbox determined by the Developer and Association. No Co-Owner shall alter or modify in any way the mailbox appurtenant to their Unit without the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter. Co-Owner shall pay for the Mailbox Fee at Closing.

(z) Nuisances. No nuisances shall be permitted on the property nor shall any use or practice be permitted that is a source of annoyance to, or that interferes with the peaceful possession or proper use of the Project by the Co-Owners. No Unit shall be used in whole or in part for the storage of rubbish or trash, nor for the storage of any property or thing that may cause the Unit to appear in an unclean or untidy condition. No substance or material shall be kept on a Unit that will emit foul or obnoxious odors, or that will cause excessive noise that will or might disturb the peace, quiet, comfort, or serenity of the occupants of surrounding Units. No rubbish, trash, leaves, grass clippings or other landscaping materials may be burned outside of a Unit.

(aa) Outdoor Hot Tubs / Spas. Outdoor hot tubs/ spas shall be permitted, subject to the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter. All such pools must be located in the rear yard of the Unit. All pool areas shall be visually screened with landscaping and all mechanical equipment shall be concealed from view and must comply with Township ordinances.

(bb) Outdoor Playsets. For Units 1-6, outdoor playsets are prohibited. For all other Units, Outdoor playsets shall be permitted with the prior written approval of the Developer during

the Development and Sales Period, and of the Association thereafter. Only one swing set or other play structure shall be permitted in any rear yard. No swing sets or playground equipment shall be placed in front or side yards. Play sets are also subject to any applicable Township ordinances.

(cc) Personal Property. No Co-Owner shall display, hang, or store any clothing, sheets, blankets, laundry, or other articles of personal property outside a residence. This restriction shall not be construed to prohibit a Co-Owner from placing and maintaining outdoor furniture and accoutrements and decorative foliage of a customary nature and appearance on a patio, deck, or balcony appurtenant to a Unit; provided, that no such furniture or other personal property shall be stored from November 1 through March 30, inclusive, on any open patio, deck, or balcony that is visible from another Unit or from the Common Elements of the Project, unless such furniture or other personal property is covered with appropriate and traditional furniture covers. The use of couches, car seats or other non-traditional outdoor furniture shall be prohibited.

(dd) Pets and Animals. No animals of any kind may be kept or maintained in any Unit, except for two common domestic pets (such as cats and dogs), without the prior written consent of the Association, which consent, if given, may be revoked at any time by the Association. The Association shall have the right to require all pets to be registered with the Association. No exotic, savage, or dangerous animal shall be kept on the property, and no animal may be kept or bred for commercial purposes. Dangerous, aggressive or oversized dogs such as, but not limited to Rottweilers, Great Danes, German Shepherds, and pit bulls as determined by the Developer and the Association, are prohibited from being kept on the property. No chickens, other fowl or livestock shall be allowed. Common household pets permitted under the provisions of this subsection shall be kept only in compliance with the rules and regulations promulgated by the Board of Directors from time to time, and must at all times be kept under care and restraint so as not to be obnoxious on account of noise, odor, or unsanitary conditions. No animal shall be permitted to run loose upon the Common Elements, and must remain leashed and attended by a responsible person. The owner of each pet shall be responsible for the collection and disposition of all fecal matter deposited by any pet maintained by such Co-Owner. Dog kennels and dog runs are prohibited. Invisible electronic fences shall be allowed with the prior consent of the Association. Small non dangerous, non-barking dogs may run inside an area enclosed by an invisible fence.

Dogs must be maintained indoors if they are a nuisance or dangerous to other people such as barking or aggressive behavior. The Association may charge a Co-Owner maintaining animals a reasonable supplemental assessment if the Association determines that such an assessment is necessary to defray additional maintenance costs to the Association of accommodating animals within the Condominium. The Association may also promulgate rules and regulations providing for the imposition of reasonable fines against offending Co-Owners, and/or, without liability to the owner of the pet, remove or cause any animal to be removed from the condominium that it determines to be in violation of the restrictions imposed by this Section. Any Co-Owner or other person who causes or permits any animal to be brought to or kept on the condominium property shall indemnify and hold the Association harmless from any loss, damage, or liability that the Association may sustain as a result of the presence of such animal on the condominium property.

(ee) Temporary parking located at neighboring Summerfield Pointe is for the use by Co-Owners of Units in Summerfield Pointe, exclusively. Co-Owners of Units in Summerfield Pointe Estates and their guests and visitors are prohibited from using the temporary parking located on Summerfield Pointe. Co-Owners of Units in Summerfield Pointe Estates, or their

guests and invitees who park in the parking area located in Summerfield Pointe shall be subject to towing and car removal by the Summerfield Pointe Condominium Association.

(ff) Prohibited Uses. No immoral, improper, offensive, or unlawful use shall be conducted on the property, and nothing shall be done or kept in any Unit or on the Common Elements that will increase the rate of insurance for the Project without the prior written consent of the Association. No Co-Owner shall permit anything to be done or kept in the Co-Owner's Unit or elsewhere on the Common Elements that will result in the cancellation of insurance on any Unit or any part of the Common Elements, or that will be in violation of any law.

(gg) Rubbish Removal. If the Association, has a mandatory rubbish removal and waste recycling program, each Co-Owner shall participate in such program and shall be billed separately by the Association for such services. If the Association does not have a mandatory rubbish removal and recycling program, each Co-Owner, at the Co-Owner's sole expense, shall contract for rubbish removal and/or waste recycling.

(hh) Rubbish Receptacles. Trash, garbage or other waste shall be kept only in closed, sanitary containers and shall be promptly disposed of so that it will not be objectionable to neighboring Co-Owners. Co-Owners shall provide their own trash receptacles, which must be rigid, with a lid. The burning or incineration of rubbish, trash, leaves, construction materials or other waste within the Condominium is strictly prohibited. No outside storage for refuse or garbage is allowed. Containers shall be maintained in the garage at all times and shall not be permitted to remain elsewhere on the Common Elements except for such short periods of time as may be reasonably necessary to permit periodic collection of trash.

(ii) Satellite Dishes, Antennae and Aerials. A Co-Owner may install a satellite dish, antennae or aerial on the roof of said Co-Owner's Unit, subject to the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter, as to size, location, color, and screening. Notwithstanding anything herein to the contrary, no such satellite dish, antennae or aerial shall be permitted that penetrates the roof of the applicable Unit. To the extent required by applicable federal law, the Association's regulations shall not unreasonably impair a Co-Owner's installation, maintenance, or use of the satellite dish. Dishes are not to be seen from the road.

(jj) Signs. One "for sale" sign, not exceeding six (6) square feet in area advertising a Unit for sale, may be displayed so long as it conforms to the rules and regulations of the Association with regard to size, shape, color, placement and such other criteria as the Association may deem appropriate. Signs, including, but not limited to, "for rent" and "garage sale" type of signs are not allowed. "Open House" signs, not exceeding six (6) square feet in area, may be displayed on the day and during the times that the home is being held open. One "political" or "election" type of sign, not exceeding six (6) square feet in area, may be displayed on or in the front yard of each Unit during election periods and then only consistent with Township codes and ordinances. Developer may have as many signs and size of sign as it wants as long as the ordinances of Genoa Township are maintained during the sales and construction period. Developer may permit each residential builder in Summerfield Pointe Estates to maintain signage as approved in advance by Developer during the construction and sales period and subject to Township Ordinance.

(kk) Signs - Off Site. Open House signs are permitted during actual time house is open. This does not pertain to the Developer during the Development and Sales Period



(ll) Statues and Lawn Ornaments. Statues and other lawn ornaments shall only be permitted with the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter.

(mm) Storm Doors. Storm doors may be installed with the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter. Approved doors must be full lite, without ornamentation and must match the color of the frame. Co-Owners may not install on either the interior or the exterior of the storm door, any bars or other similar visible security protection devices.

(nn) Swimming Pools; Pool Fences. For Units 1-6, inclusive, pools are prohibited. For all other Units, only in-ground, aesthetically pleasing pools are permitted, subject to the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter. All such pools must be located in the rear yard of the Unit. All pool areas shall be visually screened with landscaping and all mechanical equipment shall be concealed from view. Fencing is allowed around pool areas (only). Pool area fences may not be chain link fences and must be of wrought iron or other similar decorative style and material. Pool fencing is limited to the pool area; entire yards may not be fenced. All pool fences must be approved by the Association during the Development and Sales Period and the Board of Directors thereafter.

(oo) Temporary Structures. No trailer, mobile home, motor home, van, tent, garage or structure of a temporary character shall be used at any time as a temporary or permanent residence, nor shall any basement be used for such purposes; provided, however, that the foregoing restriction shall not apply to any activities by Developer or any builder, developer or real estate company during the Development and Sales Period.

(pp) Unit Rental. No portion of a Unit may be rented, and no transient tenants may be accommodated in any building; provided, that this restriction shall not prevent the rental or sublease of an entire Unit together with its appurtenant Limited Common Elements for residential purposes in the manner permitted by these Bylaws.

(qq) Vehicles. No vehicles, boats, trailers, mobile homes, buses, boat trailer, air craft, motor homes, motorcycle, recreational vehicles, commercial or inoperative vehicle and no commercial vehicle with commercial advertising signage or logos or graphics (including so-called "body wrap" vinyl graphics, etc.) shall be parked or stored anywhere on the property, except within a closed garage, without the written approval of the Developer during the Development and Sales Period and thereafter the Association. No snowmobile, all-terrain vehicle, or other motorized recreational vehicle shall be operated on the property. No maintenance or repair shall be performed on any boat or vehicle except within a garage or residence where totally isolated from public view. This does not apply to Developer/Builder. No commercial vehicle lawfully upon any Unit shall remain on such Unit except in the ordinary course of business and in conformity with all applicable laws and/or ordinances. A motor home or camping vehicle may be parked temporarily in the Co-Owner's driveway for a period up to four (4) days for the purpose of loading and unloading prior to and following its use. A non-operational vehicle (including expired license plates and flat tires) shall not be parked or stored within the Condominium except within a garage or residence where totally isolated from public view. The Association may cause vehicles parked in violation to be removed. The cost of removal shall be collected from the Co-Owner of the Unit responsible for the presence of the vehicle without liability to the Association. Each Co-Owner shall, if the Association requires, register all vehicles with the Association. The Association may make reasonable rules and regulations in implementation of this Section. Pick-up trucks without company information and without ladder racks or other equipment or storage

racks are permitted; otherwise such vehicles must be parked inside garages. The purpose of this Section is to accommodate reasonable Co-Owner parking but to avoid unsightly conditions which may detract from the appearance of the Condominium as a whole.

(rr) Window Treatments. All window treatments must be harmonious to the residence and neighborhood. Co-Owners may not install, on either the interior or the exterior of the windows, any bars or other similar visible security protection devices.

Section 7. Application of Restrictions. Unless there is an election to arbitrate pursuant to these Bylaws, a dispute or question as to whether a violation of any specific regulation or restriction contained in this Section has occurred shall be submitted to the Board, which shall conduct a hearing and render a decision in writing; the decision shall be binding upon all Co- owners and other parties having an interest in the Project.

Section 8. Landscaping.

(a) Conformance with the Approved Landscape Plan. The Developer will install landscaping in accordance with the Landscape Plan approved by the Township of Genoa. To ensure consistency with the approved Landscape Plan, modifications of types and specific locations of plantings shall require the approval of the Township Planner. Modifications and additional details may be required by the Township at the time of site plan to adapt the landscaping to the site plan or condominium plan approved by the Township.

(b) Installation by Co-Owners. Except for landscaping installed by Developer which is hereby specifically approved, no Co-Owner shall perform any landscaping or plant any trees, shrubs or flowers or place any ornamental materials upon the Common Elements, Limited or General, without the prior written approval of the Association and, during the Development and Sales Period, the Developer as applicable. For Units 1-6, inclusive, installation of gardens is prohibited. In addition and subject to the foregoing approval(s), at minimum each Co-Owner shall be responsible for the installation and expense of the following:

(c) Planting Material Sizes. Planting materials are to be of a high quality and substantial size to provide a degree of maturity to the appearance of the landscaping immediately upon installation. Evergreen trees shall be nursery-grown and a minimum of five (5') feet in height, and canopy trees should have a minimum caliper of two (2') feet.

(d) Lawn Areas. All areas of a Unit (i.e., front, side and rear yards) not landscaped with plant materials or hard surfaces or kept as natural wooded areas shall be established as lawn areas by sodding. Preservation of wooded rear yard areas in their natural condition is strongly encouraged. No structures, except as provided in Section 21(b) are permitted in the rear yards of Units 1-6, inclusive.

(e) Edging and Mulching Materials. The use of natural cut sod edging to define planting beds is strongly encouraged. Edging materials made of steel, aluminum or plastic may be used to define planting beds.

(f) Boulders. The creation of landscaped berms, boulder outcroppings, raised beds and other creative landscape design is strongly encouraged.

(g) Irrigation. Underground sprinkler systems must be installed in the front, side and rear yards of each Unit. If a unit is adjacent to open space, the sprinkler system must address and service the open space also.

(h) Maintenance. Each Co-Owner shall maintain the lawn and landscaping on its unit. Developer shall cut the grass on its unit once per month during sales and construction period. The Home Owner Association may maintain the lawn and landscaping and snow removal.

(i) Other. Any and all other landscaping required by the Developer and/or Residential Builder of the respective Unit as a condition of sale. Each Co-Owner acknowledges and agrees that such requirements may vary or be more restrictive from those described in this Article VI. In such event, the requirements of the Developer and/or Residential Builder shall supersede these requirements and govern the Co-Owner's responsibilities.

(j) Completion of Landscaping. Installation of landscaping prior to occupancy is strongly encouraged. The cost of landscaping can usually be included in the mortgage of the home. Landscape installation shall be completed, meaning finish-graded and suitably planted, within six (6) months after the exterior of the residence has been substantially completed, weather permitting, including the area tying between the sidewalk and the road, except such portion thereof as is used for driveways and walks.

(k) Approval. Each Co-Owner acknowledges and agrees that the Developer or Residential Builder as applicable, reserves the right to determine, in its sole discretion, whether the Co-Owner's landscaping complies with these requirements or any requirements imposed by the Developer or Residential Builder as a condition of sale.

The following are minimal landscape planting required for each unit.

- (1) Street trees are required as a landscape approved by Genoa Township for Summerfield Pointe Estates.
- (2) An approved mix of perennial bushes and shrubs.
- (3) Sod and sprinklers.

(l) Security Deposit. In order to insure the compliance of all contractors, subcontractors and laborers with these Bylaws, and as a security deposit against damage to the Property, before commencing any site work or construction on any Unit, the Association may require a security deposit in the amount of \$5,000.00. Upon completion of construction of approved improvements on the Unit in accordance with the approved site plan for the Unit, completion of the landscaping on the Unit in accordance with the approved landscape plan, and restoration and repair of all Common Elements damaged or disturbed by construction activity on the Unit, the security deposit will be returned, less amounts necessary to reimburse the Association or Developer for expenses incurred by them in repairing or restoring any portions of the Common Elements or any Unit damaged or disturbed by that construction activity. All interest, if any, earned by the Association on the security deposit shall belong to the Association.

(m) Limitations. Notwithstanding anything herein to the contrary, the terms and provisions of this Article VI shall not apply to the Developer, nor to any Residential Builder who acquires the right to develop the entire Project or the entire balance of the Project, and may



be selectively waived by the Developer or such Residential Builder in its sole and absolute discretion without the necessity of obtaining the prior written consent from the Association or any Co-Owner, mortgagee or other private person or entity, subject only to approval of the local public authority and to the express limitations contained in any applicable Condominium Documents. Developer shall be allowed to store construction material, supplies, ports johns, and trailers on vacant lots.

Section 9. Reserved Rights of Developer. The purpose of this Section is to assure the continued maintenance of the Property and the Project as a beautiful and harmonious residential development and shall be binding upon the Association and upon all Co-Owners. The Developer may construct any improvements upon the Property that it may, in its sole discretion, elect to make, without the necessity of obtaining the prior written consent from the Association or any Co-Owner, mortgagee or other private person or entity, subject only to approval of the local public authority and to the express limitations contained in any applicable Condominium Documents.

Section 10. Potable Water and Public Health Requirements. The provisions hereinafter set forth have been required by the Michigan Department of Public Health and the Livingston County Health Division. Subject to availability, the project shall connect to the Township's public water service. Such system for distribution of potable water shall be constructed to serve all users on the Property, and connection shall require payment of all applicable fees, charges and assessments.

Section 11. Non-Disturbance of Wetland Areas. The wetlands must be preserved pursuant to the requirements of any applicable MDEQ permit governing the Condominium Project. No mowing, cutting, construction, filling, applications of chemicals, or dredging allowed in the designated wetlands areas and all requirements of the MDEQ permit must be observed by Co-Owner.

The Michigan Department of Environmental Quality and the Township must approve any modification, interference, or improvements to the wetland areas in writing.

Section 12. Open Spaces, Recreation Facilities and Paths. Common open spaces and paths shall be provided as proposed on the plans.

Section 13. Rules of Conduct. Additional rules and regulations ("rules and regulations") consistent with the Act, the Master Deed, and these Bylaws concerning the use of Units and Common Elements may be promulgated and amended by the Board. Copies of such rules and regulations must be furnished by the Board to each Co-Owner at least 10 days prior to their effective date, and may be revoked at any time by the affirmative vote of 60 percent or more of all Co-Owners.

Section 14. Enforcement by Developer. The Project shall at all times be maintained in a manner consistent with the highest standards of a private residential community, used and occupied for the benefit of the Co-Owners and all other persons interested in the condominium. If at any time the Association fails or refuses to carry out its obligations to maintain, repair, replace, and landscape in a manner consistent with the maintenance of such standards, the Developer, or any person to whom it may assign this right may, at its option, elect to maintain, repair, and/or replace any Common Elements or to do any landscaping required by these Bylaws and to charge the cost to the Association as an expense of administration. The Developer shall have the right to enforce these Bylaws throughout the development and sales period, which right of enforcement shall include (without limitation) an action to restrain the Association or any Co-Owner from any prohibited activity.

Section 15. Co-Owner Enforcement. An aggrieved Co-Owner will also be entitled to compel enforcement of the Condominium Documents by action for injunctive relief and/or damages against the Association, its officers, or another Co-Owner in the Project.

Section 16. Remedies on Breach. In addition to the remedies granted by these Bylaws for the collection of assessments, the Association shall have the right, in the event of a violation of the restrictions on use and occupancy imposed by this Section, to enter the Unit and to remove or correct the cause of the violation. Such entry will not constitute a trespass, and the Co-Owner of the Unit will reimburse the Association for all costs of the removal or correction. Failure to enforce any of the restrictions contained in this Section will not constitute a waiver of the right of the Association to enforce restrictions in the future.

Section 17. Reserved Rights of Developer. The restrictions contained in this Article shall not apply to the commercial activities of the Developer, nor to any Residential Builder who acquires the right to develop the entire Project or the entire balance of the Project, during the Development and Sales Period. The Developer shall also have the right to maintain a sales office, advertising display signs, storage areas, and reasonable parking areas and spaces incident to its sales efforts and such access to, from, and over the property as may be reasonable to enable development and sale of the entire Project or any other Project owned by the Developer or an affiliate.

Section 18. Accessory Buildings and Structures.

(a) Accessory buildings such as sheds, barns, storage buildings, kennels, dog runs and outbuildings are prohibited on Units 1-6, inclusive. Such structures shall be permitted for all other Units, subject to the prior written approval by the Developer in its sole discretion during the Development and Sales Period and by the Board of Directors thereafter.

(b) Decorative or entertainment structures or hardscape such as, but not limited to, gazebos, fire pits, swimming pool cabanas, patios and decks are subject to prior written approval by the Developer in its sole discretion during the Development and Sales Period and by the Board of Directors thereafter.

Section 19. Rules and Regulations. Reasonable rules and regulations consistent with the Act, the Master Deed and these Bylaws, concerning the operation and the use of the Common Elements may be made and amended from time to time by any Board of Directors of the Association, including the First Board of Directors (or its successors elected by the Developer) prior to the First Annual Meeting of the entire Association held as provided in these Bylaws. Copies of all such rules and regulations, and amendments thereto, shall be furnished to all Co-Owners and shall become effective thirty (30) days after mailing or delivery of such rules and regulations, and amendments thereto, to the designated voting representative of each Co-Owner. Any such rule, regulation or amendment may be revoked at any time by the affirmative vote of more than fifty (50%) percent of all Co-Owners, except that the Co-Owners may not revoke any rule, regulation or amendment prior to said First Annual Meeting of the entire Association.

Section 20. Right of Access of Association. The Association, or its duly authorized agents, shall have access to each Unit (but not any dwelling) and any Common Elements appurtenant thereto from time to time, during reasonable working hours, upon notice to the Co-Owner thereof, as may be necessary for the maintenance, repair or replacement of any of the Common Elements. The Association, or its agents, shall also have access to each Unit and any Common Elements appurtenant thereto at all times without notice as may be necessary to make emergency repairs to prevent damage to the Common Elements or to another Unit or dwelling. It shall be the responsibility of each Co-Owner to

provide the Association means of access to his or her Unit and any Common Elements appurtenant thereto during all periods of absence, and in the event of the failure of such Co-Owner to provide means of access, the Association may gain access in such manner as may be reasonable under the circumstances and shall not be liable to such Co-Owner for any necessary damage to his or her Unit and/or any Common Elements appurtenant thereto. The Association shall also have a right of access to any Unit for the purpose of assuring compliance with the Condominium Documents. This provision shall not, however, entitle the Association to access a dwelling built upon a Unit, except with reasonable notice to the Unit Owner.

Section 21. Landscaping.

(a) No Co-Owner shall perform any landscaping or plant any trees, shrubs or flowers, or place any ornamental materials upon the General Common Elements without the prior written approval of the Association. Any landscaping installed by the Co-Owner pursuant to this Section shall be maintained by the Co-Owner and the Association shall have no responsibility for its maintenance.

(b) Lawns shall be installed by the Co-Owner within six (6) months after completion of construction or later, depending on weather.

(c) Foundation plantings shall be installed by the Co-Owner within six (6) months after completion of construction or later, depending on weather.

Section 22. Reserved Rights of Developer.

(a) Developer's Rights in Furtherance of Development and Sales. Subject to the requirements and restrictions set forth in the Charter Township of Genoa ordinances, Developer, and its successors and/or assigns, shall have the right to maintain a sales office, a business office, construction offices, model units, storage areas and reasonable parking incident to the foregoing and such access to, from and over the Project as may be reasonable to enable development and sale of the entire Project by Developer and/or its successors and/or assigns; and may continue to do so during the entire Development and Sales Period. Developer shall restore the areas so utilized to habitable status upon termination of use.

(b) Enforcement of Bylaws. The Condominium Project shall at all times be maintained in a manner consistent with the highest standards of a beautiful, serene, private, residential community for the benefit of the Co-Owners and all persons interested, or to become interested from time to time in the Condominium. If at any time the Association fails or refuses to carry out its obligation to maintain, repair, replace and/or landscape in a manner consistent with the maintenance of such high standards, then Developer, or any entity to which it may assign this right, at its option, may elect to maintain, repair and/or replace any Common Elements and/or to do any landscaping required by these Bylaws and to charge the cost thereof to the Association as an expense of administration. The Developer shall have the right to enforce these Bylaws throughout the Development and Sales Period, notwithstanding that it may no longer own a Unit in the Condominium, which right of enforcement shall include (without limitation) an action to restrain the Association or any Co-Owner from any activity prohibited by these Bylaws. Additionally, the Charter Township of Genoa shall have the right to enforce the Bylaws and Condominium Documents as set forth in the Condominium Documents

Section 23. NO WARRANTY ON EXISTING TREES AND VEGETATION. THE DEVELOPER MAKES NO WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO ANY



NATIVE TREES OR VEGETATION WITHIN THE CONDOMINIUM PROJECT. ALSO, VEGETATION AND TREES NATIVE TO THE SITE ARE BEING DELIVERED TO THE CO-OWNERS IN AN "AS IS" AND "WHERE AS" CONDITION. THE DEVELOPER SHALL USE BEST REASONABLE EFFORTS TO PRESERVE AND PREVENT DAMAGE TO THE EXISTING TOPOGRAPHY, NATURE, VEGETATION AND TREES IN THE CONDOMINIUM PROJECT. DEVELOPER SHALL ENSURE THAT ALL LANDSCAPING WILL BE COMPLETED IN A HEALTHY CONDITION AS REQUIRED BY THE CHARTER TOWNSHIP OF GENOA AND AS INDICATED ON THE SITE PLAN APPROVAL BY THE CHARTER TOWNSHIP OF GENOA.

Section 24. Tree Removal; Woodlands Preservation. No trees shall be removed, except for diseased or dead trees and trees needing to be removed to promote the growth of other trees or for safety reasons, unless approved by the Association. No such removal shall occur within a woodlands area which is regulated by the Charter Township of Genoa or other public agency without obtaining the proper permit from the Charter Township of Genoa or other public agency with jurisdiction over such matters prior to removal.

Section 25. Disposition of Interest in Unit by Sale or Lease.

(a) Notice to Association: Co-Owner to Provide Condominium Documents to Purchaser or Tenant. A Co-Owner intending to make a sale or lease of a Unit in the Condominium, or any interest therein, shall give written notice of such intention delivered to the Association at its registered office and shall furnish the name and address of the intended purchaser or lessee and such other information as the Association may reasonably require. Prior to the sale or lease of a Unit, the selling or leasing Co-Owner shall provide a copy of the Condominium Master Deed (including Exhibits "A" and "B" thereto) and any amendments to the Master Deed, the Articles of Incorporation and any amendment there, and the rules and regulations, as amended, if any, to the proposed purchaser or lessee. In the event a Co-Owner shall fail to notify the Association of the proposed sale or lease or in the event a Co-Owner shall fail to provide the prospective purchaser or lessee with a copy of the Master Deed and other documents referred to above, such Co-Owner shall be liable for all costs and expenses, including attorney fees, that may be incurred by the Association as a result thereof or by reason of any noncompliance of such purchaser or lessee with the terms, provisions and restrictions set forth in the Master Deed; provided, however, that this provision shall not be construed so as to relieve the purchaser or lessee of his obligations to comply with the provisions of the Condominium Documents.

(b) Developer and Mortgagees not Subject to Section. The Developer shall not be subject to this Section as to the sale or, except to the extent provided in Article VI, Section 2(b), the lease of any Unit in the Condominium which it owns, nor shall the holder of any mortgage which comes into possession of a Unit pursuant to the remedies provided in the mortgage, or foreclosure of the mortgage, or deed in lieu of foreclosure, be subject to the provisions of this Section 16.

Section 26. Foreclosed Units; Title, Fee Procedures.

(a) Ownership Commences Upon Date of Sheriff's Deed. For the purposes of defining when a grantee becomes a Co-Owner or Owner of a Unit in the Condominium, a winning bidder at a foreclosure sale shall be deemed to have become a Co-Owner, with all rights, privilege and obligations of a Co-Owner or Owner, on the date of the sheriff's deed and have all obligations, rights and duties as any other Co-Owner as of that date, even though the grantee under the sheriff's deed may not be entitled to actual possession and notwithstanding the

expiration (or not) of any redemption rights held by the mortgagee. The grantee, under the Sheriff's Deed, may include any Association assessments paid by the grantee in any amount due from the mortgagee in order to redeem.

(b) Transfer Fees When Title Acquired by Sheriff's Deed. The Association incurs added costs, legal fees, insurance costs and expenses dealing with title transfers of Units after foreclosures and those expenses do not directly benefit the other Co-Owners or mortgagees whose mortgages are in good standing. Furthermore, the Association cannot reasonably budget for those expenses. Those added costs and expenses should not be subsidized by Co-Owners of Units whose mortgages are not in default and those costs adversely affect Co-Owners who are otherwise current on their dues. The Board of Directors, as fiduciaries, has a duty to assure Co-Owners who are not otherwise in default of obligations to the Association are not unduly burdened by expenses which occur due to mortgagees' foreclosures. It is in the best interest of the Association and its members that a reasonable fee for title transfer by mortgagees who become Co-Owners after foreclosure is \$2,500.00 per transfer to defray those costs, expenses and risks and Association shall charge a transfer fee of \$2,500.00 on any Unit which is resold by the foreclosing mortgagee and for which the prior mortgage was in default for less than six months. If the Board reasonably determines that the mortgage was in default for more than six months, the transfer fee will be increased by an amount equal to monthly Association dues for each month beyond the six months that the mortgage which was foreclosed was in default. This charge is also immediately a lien on the Unit as of the date of the sheriff's deed. This charge will be deemed to only have accrued after the date of the sheriff's deed and not before.

(c) Insurance Service Fee Accruing After Foreclosure; Vacant Unit Fee; Unit Marketing Fee; Other Fees. Because of the added administrative costs and risks associated with absentee institutional ownership, insurance fees and burdens imposed by the Association in dealing with such owners when Units are foreclosed and because of the blight and loss of value which vacant Units bring to the Condominium Project, the following surcharges are to be levied on any Units where the Co-Owner took title by foreclosure and commencing with the date of the sheriff's deed. These charges only apply to the grantee under a sheriff's deed and do not apply to a mortgagee in its capacity as a secured party. These charges are not intended to impair mortgagee rights and these charges cannot accrue before the sheriff's sale occurs. The fees are:

(1) An Insurance Administration and Vacant Unit Risk Surcharge of \$100.00 per Unit, per month.

(2) An Association Vacant or Sheriff's Deed Unit Administration Fee equal to the then current monthly Association fee per month for the added costs the Association incurs in dealing with vacant foreclosed Units.

(3) A marketing fee of \$25.00 per month for the privilege of advertising a Unit for sale and posting a sign on the premises offering the Unit for sale, whether or not a sign is placed.

(4) A mortgage advertisement posting fee of \$200.00 for the privilege of posting a foreclosure notice or judicial sale notice in the Project.

(5) A Legal Services Fee of \$250.00 per Unit when the Unit is ultimately sold by the grantee under the Sheriff's Deed.

(6) A Dues Statement Fee of \$200.00 shall be charged to the grantee under the Sheriff's Deed for a dues statement letter along with any charges for Association dues liens to be released.

(7) Some or all of the fees in the preceding subsection, may be waived in the discretion of the Board of Directors if the mortgagee who became grantee under the Sheriff's Deed included the Association dues in the redemption amount and has remitted those dues to the Association.

Section 27. Potential Future Special Assessment for Road Improvements; Dedication Rights. At some time subsequent to the initial development, it may become necessary to pave or improve some or all of the roads within or adjacent to the Condominium Project premises. The improvement may be financed, in whole or part, by the creation of a special assessment district or districts which may include the Condominium Project. The acceptance of a conveyance or execution of a land contract by a Co-Owner or purchaser of a condominium Unit shall constitute the agreement by such Co-Owner or purchaser, his or her heirs, executors, administrators or assigns, that the Board of Directors of the Association shall be vested with the full power and authority to obligate all Co-Owners to participate in a special assessment district, sign petitions requesting such special assessment, and consider and otherwise act on all special assessment issues on behalf of the Association and all Co-Owners; provided prior to signature by the Association on a petition for improvements of such roads, the desirability of said improvements shall be approved by an affirmative vote of not less than fifty-one percent (51%) of the Co-Owners that own Units within the special assessment district. No consent of mortgagees shall be required for approval of such road improvement. There is no promise that any road dedications will ever take place, notwithstanding the reservation of this right, however at some time subsequent to the initial development it may become necessary. All Co-Owners should take note that notwithstanding the provisions stated here acceptance of a dedication is a decision solely within the discretion of the public body with jurisdiction over roads and is unlikely to occur because of the physical characteristics of the project and the requirements of the local public authorities and while dedication is expected to occur final acceptance is within the discretion of the Livingston County Road Commission.

Section 28. Foreclosed Units; Title, Fee Procedures. Ownership Commences Upon Date of Sheriff's Deed. For the purposes of defining when a grantee becomes a Co-Owner or Owner of a Unit in the Condominium, a winning bidder at a foreclosure sale shall be deemed to have become a Co-Owner, with all rights, privilege and obligations of a Co-Owner or Owner, on the date of the Sheriff's Deed and have all obligations, rights and duties as any other Co-Owner as of that date, even though the grantee under the Sheriff's Deed may not be entitled to actual possession and notwithstanding the expiration (or not) of any redemption rights held by the mortgagee. The grantee, under the Sheriff's Deed, may include any Association assessments paid by the grantee in any amount due from the mortgagee in order to redeem.

Section 29. Drainage Discharge. ALL WATER SOFTENERS MUST BE INSTALLED SO THAT BACK FLOW VALVES OR OTHER MECHANISMS PREVENT BACKWASH AND DO NOT ALLOW SOFTENER BACKWASH TO ENTER THE SANITARY SEWER SYSTEMS. SO THAT THE TOWNSHIP CAN MAINTAIN PERMITTED DISCHARGE LIMITS IN THE WASTEWATER TREATMENT PLANT, THE USE OF SODIUM CHLORIDE IN WATER SOFTENERS IS PROHIBITED. POTASSIUM CHLORIDE OR OTHER WATER TREATMENTS AS ALLOWED BY THE TOWNSHIP BUILDING OFFICIAL ARE PERMITTED. WATER SOFTENERS DISCHARGE INTO THE PUBLIC SANITARY SEWER SYSTEM IS PROHIBITED. THESE PROHIBITIONS AND REQUIREMENTS ARE ALSO ENFORCEABLE BY PUBLIC AGENCIES HAVING JURISDICTION OF SUCH DISCHARGES AND SANITARY SEWER SYSTEMS.



## **ARTICLE VII MORTGAGES**

Section 1. Notice to Association. Any Co-Owner who mortgages his or her Unit shall notify the Association of the name and address of the mortgagee, and the Association shall maintain such information in a book entitled "Mortgagees of Units." The Association may, at the written request of a mortgagee of any such Unit, report any unpaid assessments due from the Co-Owner of such Unit. The Association shall give to the holder of any first mortgage covering any Unit in the Project written notification of any default in the performance of the obligations of the Co-Owner of such Unit that is not cured within 60 days. The Association may charge a reasonable fee to the mortgagee for that service not to exceed \$150.00 per notice which shall be due upon mailing and which if not shall absolve the Association from the obligation to provide and further such notices. Failure of a Co-Owner to notify the Association of the existence of a mortgage absolves the Association from any notice responsibilities to a mortgagee unless the mortgage has otherwise requested to be provided such notice by so stating in writing to the Association. Second and other junior mortgagees are not entitled to any notice from the Association unless they have both made written request of the Associations to receive notices and paid an annual junior mortgage notice fee of 100.00 for each mortgage held. Owner of such Unit that is not cured within sixty (60) days.

Section 2. Insurance. The Association shall notify each mortgagee appearing in said book of the name of each company insuring the Condominium against fire, perils covered by extended coverage and vandalism and malicious mischief, and the amounts of such coverage.

Section 3. Notification of Meetings. Upon request submitted to the Association, any institutional holder of a first mortgage lien on any Unit in the Condominium shall be entitled to receive written notification of every meeting of the members of the Association a Section 4. Waiver of Notice of Amendment. By taking a mortgage on a Unit all mortgagees agree that the waiver notice of any nonmaterial amendment to the Condominium Documents as materiality is defined under Section 90 and 90(a) of the Act.

Section 4. Mortgage Consent; Notice. If a mortgagee consent is required for any amendment or other action or if a mortgagee is required to receive notice of a matter related to the Condominium Project, Association or Condominium Documents: (a) notice to a mortgagee shall be deemed effective if sent to the address set forth in the mortgage (or any recorded assignment of mortgage; (b) mortgagees will be deemed to have consented to any actions if they fail to affirmatively object in writing. By accepting a grant of mortgage on a Unit in the Condominium Project all mortgagees are deemed to have agreed to this provision and all other provisions of the Act and expressly waive any provisions of the Act to the contrary including but not limited to provisions related to mortgagee rights under Section 90 and Section 90(a), MCL 559.190 and MCL 559.190(a) and to designate a representative to attend such meeting.

## **ARTICLE VIII VOTING**

Section 1. Vote. Except as limited in these Bylaws, each Co-Owner shall be entitled to one (1) vote for each Condominium Unit owned.

Section 2. Eligibility to Vote. No Co-Owner, other than the Developer, shall be entitled to vote at any meeting of the Association until he or she has presented evidence of ownership of a Unit in the Condominium Project to the Association. Except as provided in Article XI, Section 2 of these Bylaws, no Co-Owner, other than the Developer, shall be entitled to vote prior to the date of the First

Annual Meeting of members held in accordance with Section 2 of Article IX hereof. The vote of each Co-Owner may be cast only by the individual representative designated by such Co-Owner in the notice required in Section 3 below, or by a proxy given by such individual representative. The Developer shall be the only person entitled to vote at a meeting of the Association until the First Annual Meeting of members and shall be entitled to vote during such period notwithstanding the fact that the Developer may own no Units in the Project at some time or from time to time during such period. At and after the First Annual Meeting the Developer shall be entitled to one (1) vote for each Unit which it owns and for which it is paying Association maintenance expenses. If, however, the Developer elects to designate a director (or directors) pursuant to its rights under Article XI, Section 2(c)(i) or (ii) hereof, it shall not then be entitled to also vote for the non-developer directors.

Section 3. Designation of Voting Representative. Each Co-Owner shall file a written notice with the Association designating the individual representative who shall vote at meetings of the Association and receive all notices and other communications from the Association on behalf of such Co-Owner. Such notice shall state the name and address of the individual representative designated, the number or numbers of the Condominium Unit or Units owned by the Co-Owner, and the name and address of each person, firm, corporation, partnership, association, trust or other entity who is the Co-Owner. Such notice shall be signed and dated by the Co-Owner. The individual representative designated may be changed by the Co-Owner at any time by filing a new notice in the manner herein provided.

Section 4. Quorum. The presence in person or by proxy of thirty-five (35%) percent of the Co-Owners qualified to vote shall constitute a quorum for holding a meeting of the members of the Association, except for voting on questions specifically required by the Condominium Documents to require a greater quorum. The written vote of any person furnished at or prior to any duly called meeting, at which meeting said person is not otherwise present in person or by proxy, shall be counted in determining the presence of a quorum with respect to the question upon which the vote is cast.

Section 5. Voting. Votes may be cast only in person or by a writing duly signed by the designated voting representative not present at a given meeting in person or by proxy. Proxies and any written votes must be filed with the Secretary of the Association at or before the appointed time of each meeting of the members of the Association. Cumulative voting shall not be permitted.

Section 6. Majority. A majority, except where otherwise provided herein, shall consist of more than fifty (50%) percent of those qualified to vote and present in person or by proxy (or written vote, if applicable) at a given meeting of the members of the Association. Whenever provided specifically herein, a majority may be required to exceed the simple majority hereinabove set forth of designated voting representatives present in person or by proxy, or by written vote, if applicable, at a given meeting of the members of the Association.

## **ARTICLE IX MEETINGS**

Section 1. Place of Meeting. Meetings of the Association shall be held at the principal office of the Association or at such other suitable place convenient to the Co-Owners as may be designated by the Board of Directors. Meetings of the Association shall be conducted in accordance with Sturgis' Code of Parliamentary Procedure, Roberts Rules of Order or some other generally recognized manual of parliamentary procedure when not otherwise in conflict with the Condominium Documents (as defined in the Master Deed) or the laws of the State of Michigan. Electronic participation shall not be allowed generally (such as by email, telephone, "Face-Time", Skype, etc.) unless the Board of Directors establishes rules and regulations for that purpose.

Section 2. First Annual Meeting. The First Annual Meeting of members of the Association may be convened only by Developer and may be called at any time after more than fifty (50%) percent of the Units that may be created in Summerfield Pointe Estates have been conveyed and the purchasers thereof qualified as members of the Association. In no event, however, shall such meeting be called later than 120 days after the conveyance of legal or equitable title to non-developer Co-Owners of seventy-five (75%) percent of all Units that may be created, or 54 months after the first conveyance of legal or equitable title to a non-developer Co-Owner of a Unit in the Project, whichever first occurs. Developer may call meetings of members for informative or other appropriate purposes prior to the First Annual Meeting of members, and no such meeting shall be construed as the First Annual Meeting of members. The date, time and place of such meeting shall be set by the Board of Directors, and at least ten (10) days' written notice thereof shall be given to each Co-Owner. The phrase "Units that may be created" as used in this Section and elsewhere in the Condominium Documents refers to the maximum number of Units which the Developer is permitted under the Condominium Documents to include in the Condominium.

Section 3. Annual Meetings. Annual meetings of members of the Association shall be held on any business day during the second or third week of April each succeeding year after the year in which the First Annual Meeting is held, at such time and place as shall be determined by the Board of Directors; provided, however, that the second annual meeting shall not be held sooner than eight (8) months after the date of the First Annual Meeting. At such meetings there shall be elected by ballot of the Co-Owners a Board of Directors in accordance with the requirements of Article XI of these Bylaws. The Co-Owners may also transact at annual meetings such other business of the Association as may properly come before them. The decision(s) of the Co-owners at an annual meeting shall rule over the Board of Directors for the next year. Co-owners may bring issues to be voted on at annual meeting.

Section 4. Special Meetings. It shall be the duty of the President to call a special meeting of the Co-Owners as directed by resolution of the Board of Directors or upon a petition signed by one-third (1/3) of the Co-Owners presented to the Secretary of the Association. Notice of any special meeting shall state the time and place of such meeting and the purposes thereof. No business shall be transacted at a special meeting except as stated in the notice.

Section 5. Notice of Meetings. It shall be the duty of the Secretary (or other Association officer in the Secretary's absence) to serve a notice of each annual or special meeting, stating the purpose thereof as well as the date, time and place where it is to be held, upon each Co-Owner of record, at least ten (10) days but not more than sixty (60) days prior to such meeting. The mailing, postage prepaid, of a notice to the representative of each Co-Owner at the address shown in the notice required to be filed with the Association by Article VIII, Section 3 of these Bylaws shall be deemed notice served. Any member may, by written waiver of a notice signed by such member, waive such notice, and such waiver, when filed in the records of the Association, shall be deemed due notice.

Section 6. Adjournment. If any meeting of Co-Owners cannot be held because a quorum is not in attendance, the Co-Owners who are present may adjourn the meeting to a time not less than forty-eight (48) hours from the time the original meeting was called.

Section 7. Order of Business. The order of business at all meetings of the members shall be as follows: (a) roll call to determine the voting power represented at the meeting; (b) proof of notice of meeting or waiver of notice; (c) reading of minutes of preceding meeting; (d) reports of officers; (e) reports of committees; (f) appointment of inspectors of election (at annual meetings or special meetings held for the purpose of electing directors or officers); (g) election of directors (at annual meeting or special meetings held for such purpose); (h) unfinished business; and (i) new business. Meetings of members shall be chaired by the most senior officer of the Association present at such meeting. For



purposes of this Section, the order of seniority of officers shall be President, Vice President, Secretary and Treasurer.

Section 8. Action Without Meeting. Any action that may be taken at a meeting of the members (except for the election or removal of directors) may be taken without a meeting by written ballot of the members. Ballots shall be solicited in the same manner as provided in Section 5 above for the giving of notices of meetings of members. Such solicitations shall specify (a) the number of responses needed to meet the quorum requirements; (b) the percentage of approvals necessary to approve the action; and (c) the time by which ballots must be received in order to be counted. The form of written ballot shall afford an opportunity to specify a choice between approval and disapproval of each matter and shall provide that, where the member specifies a choice, the vote shall be cast in accordance therewith. Approval by written ballot shall be constituted by receipt, within the time period specified in the solicitation, of (i) a number of ballots which equals or exceeds the quorum that would be required if the action were taken at a meeting; and (ii) a number of approvals which equals or exceeds the number of votes that would be required for approval if the action were taken at a meeting at which the total number of votes cast was the same as the total number of ballots cast.

Section 9. Consent of Absentees. The transactions at any meeting of members, either annual or special, however called and noticed, shall be as valid as though made at a meeting duly held after regular call and notice, if a quorum is present either in person or by proxy; and if, either before or after the meeting, each of the members not present in person or by proxy, signs a written waiver of notice, or a consent to the holding of such meeting, or an approval of the minutes thereof. All such waivers, consents or approvals shall be filed with the corporate records or made a part of the minutes of the meeting.

Section 10. Minutes; Presumption of Notice. Minutes or a similar record of the proceedings of meetings of members, when signed by the President or Secretary, shall be presumed truthfully to evidence the matters set forth therein. A recitation in the minutes of any such meeting that notice of the meeting was properly given shall be prima facie evidence that such notice was given.

## **ARTICLE X ADVISORY COMMITTEE**

Within one (1) year after conveyance of legal or equitable title to the first Unit in the Condominium to a purchaser, or within one hundred twenty (120) days after conveyance to purchasers of one-third (1/3) of the total number of Units that may be created, whichever first occurs, the Developer shall cause to be established an Advisory Committee consisting of at least three (3) non-developer Co-Owners. The Committee shall be established and perpetuated in any manner the Developer deems advisable, except that if more than fifty (50%) percent of the non-developer Co-Owners petition the Board of Directors for an election to elect the Advisory Committee, then an election for such purpose shall be held. The purpose of the Advisory Committee shall be to facilitate communications between the temporary Board of Directors and the other Co-Owners and to aid in the transition of control of the Association from the Developer to purchaser Co-Owners. The Advisory Committee shall cease to exist automatically when the non-developer Co-Owners have the voting strength to elect a majority of the Board of Directors of the Association. The Developer may remove and replace at its discretion at any time any member of the Advisory Committee who has not been elected thereto by the Co-Owners.

**ARTICLE XI**  
**BOARD OF DIRECTORS**

Section 1.       Number and Qualification of Directors. The Board of Directors shall initially be comprised of five (5) members and shall continue to be so comprised until enlarged to five members in accordance with the provisions of Section 2 hereof. Thereafter, the affairs of the Association shall be governed by a Board of five Directors, all of whom must be members of the Association or officers, partners, trustees, employees or agents of members of the Association, except for the first Board of Directors. Directors shall serve without compensation.

Section 2.       Election of Directors.

(a)               First Board of Directors. The first Board of Directors, or its successors as selected by the Developer, shall manage the affairs of the Association until the appointment of the first non-developer Co-Owners to the Board. Immediately prior to the appointment of the first non-developer Co-Owners to the Board, the Board shall be increased in size from three persons to five persons. Thereafter, elections for non-developer Co-Owner directors shall be held as provided in subsections (b) and (c) below.

(b)               Appointment of Non-developer Co-Owners to Board Prior to First Annual Meeting. Not later than one hundred twenty (120) days after conveyance of legal or equitable title to non-developer Co-Owners of twenty-five (25%) percent of the Units that may be created, one (1) of the five (5) directors shall be selected by non-developer Co-Owners. Not later than one hundred twenty (120) days after conveyance of legal or equitable title to non-developer Co-Owners of fifty (50%) percent of the Units that may be created, two (2) of the three (3) directors shall be elected by non-developer Co-Owners. When the required percentage of conveyances have been reached, the Developer shall notify the non-developer Co-Owners and convene a meeting so that the Co-Owners can elect the required director or directors, as the case may be. Upon certification by the Co-Owners to the Developer of the director or directors so elected, the Developer shall then immediately appoint such director or directors to the Board to serve until the First Annual Meeting of members unless he or she is removed pursuant to Section 7 of this Article or he or she resigns or becomes incapacitated.

(c)               Election of Directors at and After First Annual Meeting.

(1)               Not later than one hundred twenty (120) days after conveyance of legal or equitable title to non-developer Co-Owners of seventy-five (75%) percent of the Units that may be created, and before conveyance of ninety (90%) percent of such Units, the non-developer Co-Owners shall elect all directors on the Board, except that the Developer shall have the right to designate at least one (1) director as long as the Units that remain to be created and conveyed equal at least ten (10%) percent of all Units that may be created in the Project. Whenever the seventy-five (75%) percent conveyance level is achieved, a meeting of Co-Owners shall be promptly convened to effectuate this provision, even if the First Annual Meeting has already occurred.

(2)               Regardless of the percentage of Units which have been conveyed, upon the expiration of fifty-four (54) months after the first conveyance of legal or equitable title to a non-developer Co-Owner of a Unit in the Project, the non-developer Co-Owners have the right to elect a number of members of the Board of Directors equal to the percentage of Units they own, and the Developer has the right to elect a number of members of the Board of Directors equal to the percentage of Units that are owned by the Developer and for which maintenance expenses are payable by the Developer. This election may increase, but shall not reduce, the minimum election and designation rights otherwise established in subsection (i) below.

(3) If the calculation of the percentage of members of the Board of Directors that the non-developer Co-Owners have the right to elect under subsections (b) and (c)(1), or if the product of the number of members of the Board of Directors multiplied by the percentage of Units held by the non-developer Co-Owners under subsection (c)(2) results in a right of non-developer Co-Owners to elect a fractional number of members of the Board of Directors, then a fractional election right of 0.5 or greater shall be rounded up to the nearest whole number, which number shall be the number of members of the Board of Directors that the non-developer Co-Owners have the right to elect. After application of this formula, the Developer shall have the right to elect the remaining members of the Board of Directors. Application of this subsection shall not eliminate the right of the Developer to designate one (1) director as provided in subsection (c)(1) above.

(4) At the First Annual Meeting, three (3) directors shall be elected for a term of two (2) years and two (2) directors shall be elected for a term of one (1) year. At such meeting all nominees shall stand for election as one slate and the three (3) persons receiving the highest number of votes shall be elected for a term of two (2) years and the two (2) persons receiving the next highest number of votes shall be elected for a term of one (1) year. At each annual meeting held thereafter, either two (2) or three (3) directors shall be elected depending upon the number of directors whose terms expire. After the First Annual Meeting, the term of office (except for two (2) of the directors elected at the First Annual Meeting) of each director shall be two (2) years. The directors shall hold office until their successors have been elected and hold their first meeting.

(5) Once the Co-Owners have acquired the right hereunder to elect a majority of the Board of Directors, annual meetings of Co-Owners to elect directors and conduct other business shall be held in accordance with the provisions of Article IX, Section 3 hereof.

Section 3. Powers and Duties. The Board of Directors shall have the powers and duties necessary for the administration of the affairs of the Association and may do all acts and things as are not prohibited by the Condominium Documents or required thereby to be exercised and done by the Co-Owners.

Section 4. Other Duties. In addition to the foregoing duties imposed by these Bylaws, or any further duties which may be imposed by resolution of the members of the Association, the Board of Directors shall be responsible specifically for the following:

(a) To manage and administer the affairs of and to maintain the Condominium Project and the Common Elements thereof.

(b) To levy and collect assessments from the members of the Association and to use the proceeds thereof for the purposes of the Association.

(c) To carry insurance and collect and allocate the proceeds thereof.

(d) To rebuild improvements after casualty.

(e) To contract for and employ persons, firms, corporations or other agents to assist in the management, operation, maintenance and administration of the Condominium Project.

(f) To acquire, maintain and improve; and to buy, operate, manage, sell, convey, assign, mortgage or lease any real or personal property (including any Unit in the Condominium, easements, rights-of-way and licenses) on behalf of the Association in furtherance of any of the purposes of the Association.



(g) To borrow money and issue evidences of indebtedness in furtherance of any or all of the purposes of the Association, and to secure the same by mortgage, pledge, or other lien on property owned by the Association; provided, however, that any such action shall also be approved by affirmative vote of seventy-five (75%) percent of all of the members of the Association.

(h) To make rules and regulations in accordance with Article VI, Section 9 of these Bylaws.

(i) To establish such committees as it deems necessary, convenient or desirable and to appoint persons thereto for the purpose of implementing the administration of the Condominium and to delegate to such committees any functions or responsibilities that are not by law or the Condominium Documents required to be performed by the Board of Directors.

(j) To enforce the provisions of the Condominium Documents.

Section 5. Management Agent. The Board of Directors may employ for the Association a professional management agent (which may include the Developer or any person or entity related thereto) at reasonable compensation established by the Board to perform such duties and services as the Board shall authorize, including, but not limited to, the duties listed in Sections 3 and 4 of this Article, and the Board may delegate to such management agent any other duties or powers that are not by law or by the Condominium Documents required to be performed by or have the approval of the Board of Directors or the members of the Association. In no event shall the Board be authorized to enter into any contract with a professional management agent, or any other contract providing for services by the Developer, sponsor or builder, in which the maximum term is greater than three (3) years or which is not terminable by the Association upon ninety (90) days' written notice thereof to the other party, and no such contract shall violate the provisions of Section 55 of the Act. **THE DEVELOPER HAS THE RIGHT TO DISAPPROVE ANY DECISION BY THE BOARD OF DIRECTORS TO SELF-MANAGE THE PROJECT WITHOUT THE BENEFIT OF A PROFESSIONAL MANAGEMENT SERVICE. THE DISAPPROVAL RIGHT SHALL END WHEN THE DEVELOPMENT AND SALES PERIOD EXPIRES.**

Section 6. Vacancies. Vacancies in the Board of Directors that occur after the Transitional Control Date, caused by any reason other than the removal of a director by a vote of the members of the Association, shall be filled by vote of the majority of the remaining directors, even though they may constitute less than a quorum, except that the Developer shall be solely entitled to fill the vacancy of any director whom it is permitted in the first instance to designate. Each person so elected shall be a director until a successor is elected at the next annual meeting of the members of the Association. Vacancies among non-developer Co-Owner elected directors that occur prior to the Transitional Control Date may be filled only through election by non-developer Co-Owners and shall be filled in the manner specified in Section 2(b) of this Article.

Section 7. Removal. At any regular or special meeting of the Association duly called with due notice of the removal action proposed to be taken, any one (1) or more of the directors may be removed with or without cause by the affirmative vote of more than fifty (50%) percent of all of the Co-Owners and a successor may then and there be elected to fill any vacancy thus created. The quorum requirement for the purpose of filling such vacancy shall be the normal thirty-five (35%) percent requirement set forth in Article VIII, Section 4. Any director whose removal has been proposed by the Co-Owners shall be given an opportunity to be heard at the meeting. The Developer may remove and replace any or all of the directors selected by it at any time or from time to time in its sole discretion. Likewise, any director selected by the non-developer Co-Owners to serve before the First Annual

Meeting may be removed before the First Annual Meeting in the same manner set forth in this section for removal of directors generally.

Section 8. First Meeting. The first meeting of a newly elected Board of Directors shall be held within ten (10) days of election at such place as shall be fixed by the directors at the meeting at which such directors were elected, and no notice shall be necessary to the newly elected directors in order to legally constitute such meeting, providing a majority of the whole Board shall be present.

Section 9. Regular Meetings. Regular meetings of the Board of Directors may be held at such times and places as shall be determined from time to time by a majority of the directors, but at least two (2) such meetings shall be held during each fiscal year. Notice of regular meetings of the Board of Directors shall be given to each director personally, by mail, telephone or telegraph, at least ten (10) days prior to the date named for such meeting.

Section 10. Special Meetings. Special meetings of the Board of Directors may be called by the President on three (3) days' notice to each director given personally, by mail, telephone or telegraph, which notice shall state the time, place and purpose of the meeting. Special meetings of the Board of Directors shall be called by the President or Secretary in like manner and on like notice on the written request of two (2) directors.

Section 11. Waiver of Notice. Before or at any meeting of the Board of Directors, any director may, in writing, waive notice of such meeting and such waiver shall be deemed equivalent to the giving of such notice. Attendance by a director at any meetings of the Board shall be deemed a waiver of notice by him or her of the time and place thereof. If all the directors are present at any meeting of the Board, no notice shall be required and any business may be transacted at such meeting.

Section 12. Quorum. At all meetings of the Board of Directors, a majority of the directors shall constitute a quorum for the transaction of business, and the acts of the majority of the directors present at a meeting at which a quorum is present shall be the acts of the Board of Directors. If, at any meeting of the Board of Directors, there be less than a quorum present, the majority of those present may adjourn the meeting to a subsequent time upon twenty-four (24) hours' prior written notice delivered to all directors not present. At any such adjourned meeting, any business that might have been transacted at the meeting as originally called may be transacted without further notice. The joinder of a director in the action of a meeting by signing and concurring in the minutes thereof, shall constitute the presence of such director for purposes of determining a quorum.

Section 13. First Board of Directors. The actions of the first Board of Directors of the Association, or any successors thereto selected or elected before the Transitional Control Date, shall be binding upon the Association so long as such actions are within the scope of the powers and duties that may be exercised generally by the Board of Directors as provided in the Condominium Documents.

Section 14. Fidelity Bonds. The Board of Directors shall require that all officers and employees of the Association handling or responsible for Association funds shall furnish adequate fidelity bonds. The premiums on such bonds shall be expenses of administration.

Section 15. Electronic, Digital and Telephonic Participation. The Board may conduct its meetings by telephonic or other electronic or digital means of communication. Board votes may also be conducted by digital, electronic, or telephone communications.

## ARTICLE XII OFFICERS

Section 1. Officers. The principal officers of the Association shall be a President, who shall be a member of the Board of Directors, a Vice President, a Secretary and a Treasurer. The directors may appoint an Assistant Treasurer, an Assistant Secretary, and such other officers as in their judgment may be necessary. Any two (2) offices except that of President and Vice President may be held by one (1) person.

(a) President. The President shall be the chief executive officer of the Association. He or she shall preside at all meetings of the Association and of the Board of Directors. He or she shall have all of the general powers and duties which are usually vested in the office of the President of an association, including, but not limited to, the power to appoint committees from among the members of the Association from time to time as he or she may, in his or her discretion, deem appropriate to assist in the conduct of the affairs of the Association.

(b) Vice President. The Vice President shall take the place of the President and perform his or her duties whenever the President shall be absent or unable to act. If neither the President nor the Vice President is able to act, the Board of Directors shall appoint some other member of the Board to so do on an interim basis. The Vice President shall also perform such other duties as shall from time to time be imposed upon him or her by the Board of Directors.

(c) Secretary. The Secretary shall keep the minutes of all meetings of the Board of Directors and the minutes of all meetings of the members of the Association; he or she shall have charge of the corporate seal, if any, and of such books and papers as the Board of Directors may direct; and he or she shall, in general, perform all duties incident to the office of the Secretary.

(d) Treasurer. The Treasurer shall have responsibility for the Association's funds and securities and shall be responsible for keeping full and accurate accounts of all receipts and disbursements in books belonging to the Association. He or she shall be responsible for the deposit of all monies and other valuable effects in the name and to the credit of the Association, and in such depositories as may, from time to time, be designated by the Board of Directors.

Section 2. Election. The officers of the Association shall be elected annually by the Board of Directors at the organizational meeting of each new Board and shall hold office at the pleasure of the Board.

Section 3. Removal. Upon affirmative vote of a majority of the members of the Board of Directors, any officer may be removed either with or without cause, and his or her successor elected at any regular meeting of the Board of Directors, or at any special meeting of the Board called for such purpose. No such removal action may be taken, however, unless the matter shall have been included in the notice of such meeting. The officer who is proposed to be removed shall be given an opportunity to be heard at the meeting.

Section 4. Duties. The officers shall have such other duties, powers and responsibilities as shall, from time to time, be authorized by the Board of Directors.



**ARTICLE XIII  
SEAL**

The Association may (but need not) have a seal. If the Board determines that the Association shall have a seal, then it shall have inscribed thereon the name of the Association, the words "corporate seal" and "Michigan."

**ARTICLE XIV  
FINANCE AND RECORDS**

Section 1. Records. The Association shall keep detailed books of account showing all expenditures and receipts of administration, and which shall specify the maintenance and repair expenses of the Common Elements and any other expenses incurred by or on behalf of the Association and the Co-Owners. Such accounts and all other Association records shall be open for inspection by the Co-Owners and their mortgagees during reasonable working hours. The Association shall prepare and distribute to each Co-Owner at least once a year a financial statement, the contents of which shall be defined by the Association. The books of account shall be audited at least annually by qualified independent auditors; provided, however, that such auditors need not be certified public accountants, nor does such audit need to be a certified audit. Any institutional holder of a first mortgage lien on any Unit in the Condominium shall be entitled to receive a copy of such annual audited financial statement within ninety (90) days following the end of the Association's fiscal year upon request therefor. The costs of any such audit and any accounting expenses shall be expenses of administration.

Section 2. Fiscal Year. The fiscal year of the Association shall be an annual period commencing on such date as may be initially determined by the directors. The commencement date of the fiscal year shall be subject to change by the directors for accounting reasons or other good cause.

Section 3. Bank. Funds of the Association shall be initially deposited in such bank or savings association as may be designated by the directors and shall be withdrawn only upon the check or order of such officers, employees or agents as are designated by resolution of the Board of Directors from time to time. The funds may be invested from time to time in accounts or deposit certificates of such bank or savings association as are insured by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation and may also be invested in interest-bearing obligations of the United States Government.

Section 4. Co-Owner Access to Books and Records; Procedures. Each Co-Owner has the right to review the books and records of the Association. The following procedures are to be followed regarding such requests.

(a) In order to review the books and records, including a request for balance sheet, statement of income and statement of sources and uses of funds (if actually prepared), the requesting Co-Owner must submit a request in writing to the Board of Directors, in care of the management agent (or if there is not management agent to the Secretary of the Association).

(1) The request must state which books and/or records the Co-Owner seeks to review.

(2) The request must state whether the Co-Owner will require copies of the records that are requested.

(3) The request must have the name, address and telephone number of the requesting party.

(b) Upon receipt of the request from a Co-Owner to review the records, the management agent (or Secretary of the Association if there is no management agent) will advise the Board of Directors of the Association of the request. The management agent (or Secretary if there is no management agent) will then inform the Co-Owner of a convenient time, place and date where the requested records may be reviewed. The Co-Owner shall be advised of the time, place and date within five (5) business working days of the receipt of the Co-Owners' initial request. The Co-Owner shall be advised at that time of the following:

(1) The Co-Owner will be responsible for payment of the actual costs of all reproductions or copies of the requested documents. The Co-Owner shall be informed of the per-page copying cost before copies are made.

(2) The Co-Owner shall be responsible for payment for time spent by management agent personnel at the rate set by the management contract or otherwise reasonably established by the Developer or Association, Developer office personnel, and/or Association employees, in applicable.

(c) Each Co-Owner may make only one (1) such request per calendar quarter. (d) No right of inspection exists if the Board of Directors determines in its reasonable discretion that allowing the inspection would impair the privacy or free association rights of members or the lawful purpose of the Association.

(d) These procedures shall also apply to requests for copies of books and records made by mortgagees of Units.

**ARTICLE XV  
INDEMNIFICATION OF OFFICERS AND DIRECTORS;  
OFFICERS' AND DIRECTORS' INSURANCE**

Section 1. Indemnification of Officers and Directors. No volunteer director or officer, as that term is defined in Act 162, Public Acts of 1982, as amended ("Act"), shall be personally liable to the Association or its members for monetary damages for breach of fiduciary duty as a director or officer, provided that the foregoing shall not eliminate the liability of a director or officer for any of the following: (i) breach of the director's or officer's duty of loyalty to the Association or its members; (ii) acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law; (iii) a violation of Section 551(1) of the Act; (iv) a transaction from which the director or officer derived an improper personal benefit; or (v) an act or omission that is grossly negligent. If the act hereafter is amended to authorize the further elimination or limitation of the liability of directors or officers, then the liability of a director or officer of the Association, in addition to the limitation on personal liability contained herein, shall be limited to the fullest extent permitted by the amended Act. No amendment or repeal of this Article XV shall apply to or have any effect on the liability of any director or officer of the Association for or with respect to any acts or omissions of such director or officer occurring prior to such amendment or repeal.

As provided under MCL 450.2209, and 1996 Public Act 397, the Association will assume liability for all acts or omissions of a volunteer director, volunteer officer or other volunteer which occurred after the date of the filing of the Articles of Incorporation of the Association if all of the following conditions are met: (i) the volunteer was acting or reasonably believed he or she was acting

within the scope of his or her authority; (ii) the volunteer was acting in good faith, (iii) the volunteer's conduct did not amount to gross negligence or willful and wanton misconduct; (iv) the volunteer's conduct was not an intentional tort; and (v) the volunteer's conduct was not a tort arising out of the ownership, maintenance or use of a motor vehicle for which tort liability may be imposed as provided in Section 3135 of the Insurance Code of 1956, 1956 Public Act 218, being MCL 500.3135.

Every director and officer of the Association (including the first Board of Directors and any other directors and/or officers of the Association appointed by the Developer) shall be indemnified by the Association against all expenses and liabilities, including actual and reasonable attorney fees and amounts paid in settlement, incurred by or imposed upon him or her in connection with any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative, or investigative, and whether formal or informal, including actions by or in the right of the Association, to which he or she may be a party or in which he or she may become involved by reason of his or her being or having been a director or officer of the Association, whether or not he or she is a director or officer at the time such expenses are incurred, except as otherwise prohibited by law; provided, that in the event of any claim for reimbursement or indemnification hereunder based upon a settlement by the director or officer seeking such reimbursement or indemnification, the indemnification herein shall apply only if the Association (with the director seeking reimbursement abstaining) approves such settlement and reimbursement as being in the best interest of the Association. The foregoing right of indemnification shall be in addition to and not exclusive of all other rights to which such director or officer may be entitled. At least ten (10) days prior to payment of any indemnification that it has approved, the Association shall notify all Co-Owners thereof.

Section 2. Directors' and Officers' Insurance. The Association shall/may provide liability insurance for every director and every officer of the Association for the same purposes provided above in Section 1 and in such amounts as may reasonably insure against potential liability arising out of the performance of their respective duties. With the prior written consent of the Association, a director or an officer of the Association may waive any liability insurance for such director's or officer's personal benefit, or other applicable statutory indemnification. No director or officer shall collect for the same expense or liability under Section 1 above and under this Section 2; however, to the extent that the liability insurance provided herein to a director or officer was not waived by such director or officer and is inadequate to pay any expenses or liabilities otherwise properly indemnifiable under the terms hereof, a director or officer shall be reimbursed or indemnified only for such excess amounts under Section 1 hereof or other applicable statutory indemnification.

## ARTICLE XVI AMENDMENTS

Section 1. Proposal. Amendments to these Bylaws may be proposed by the Board of Directors of the Association acting upon the vote of the majority of the directors or may be proposed by one-third (1/3) or more of the Co-Owners by instrument in writing signed by them.

Section 2. Meeting. Upon any such amendment being proposed, a meeting for consideration of the same shall be duly called in accordance with the provisions of these Bylaws.

Section 3. Voting. These Bylaws may be amended by the Co-Owners at any regular annual meeting or a special meeting called for such purpose by an affirmative vote of not less than sixty-six and two-thirds (66 2/3%) percent of all Co-Owners. As long as Developer owns at least one unit. Developer must approve any amendment also. No consent of mortgagees shall be required to amend these Bylaws unless such amendment would materially alter or change the rights of such



mortgagees, in which event the approval of sixty-seven (67%) percent of the mortgagees shall be required, with each mortgagee to have one (1) vote for each first mortgage held.

Section 4. By Developer. Prior to the end of the Development and Sales Period, these Bylaws may be amended by the Developer without approval from any other person so long as any such amendment does not materially alter or change the right of a Co-Owner or mortgagee, or affect any approval of the municipality.

Section 5. When Effective. Any amendment to these Bylaws shall become effective upon recording of such amendment in the office of the Livingston County Register of Deeds.

Section 6. Binding. A copy of each amendment to these Bylaws shall be furnished to every member of the Association after adoption; provided, however, that any amendment to these Bylaws that is adopted in accordance with this Article shall be binding upon all persons who have an interest in the Project, irrespective of whether such persons actually receive a copy of the amendment.

Section 7. Amendments; Township Approval. Amendments to these Bylaws are subject to the prior review and approval of the Charter Township of Genoa as required under the Master Deed Article VIII, Section 8.

## **ARTICLE XVII COMPLIANCE**

The Association and all present or future Co-Owners, tenants, future tenants, or any other persons acquiring an interest in or using the Project in any manner are subject to and shall comply with the Act, as amended, and the mere acquisition, occupancy or rental of any Unit or an interest therein or the utilization of or entry upon the Condominium Premises shall signify that the Condominium Documents are accepted and ratified. In the event the Condominium Documents conflict with the provisions of the Act, the Act shall govern.

## **ARTICLE XVIII DEFINITIONS**

All terms used herein shall have the same meaning as set forth in the Master Deed to which these Bylaws are attached as an Exhibit or as set forth in the Act.

## **ARTICLE XIX REMEDIES FOR DEFAULT**

Any default by a Co-Owner shall entitle the Association or another Co-Owner or Co-Owners to the following relief:

Section 1. Legal Action. Failure to comply with any of the terms or provisions of the Condominium Documents shall be grounds for relief, which may include, without intending to limit the same, an action to recover sums due for damages, injunctive relief, foreclosure of a lien (if default in payment of assessment(s)) or any combination thereof, and such relief may be sought by the Association or, if appropriate, by an aggrieved Co-Owner or Co-Owners.

Section 2. Recovery of Costs. In any proceeding arising because of an alleged default by any Co-Owner, the Association, if successful, shall be entitled to recover the costs of the proceeding and

such reasonable attorney fees (not limited to statutory fees) as may be determined by the court, but in no event shall any Co-Owner be entitled to recover such attorney fees.

Section 3. Removal and Abatement. The violation of any of the provisions of the Condominium Documents shall also give the Association or its duly authorized agents, the right, in addition to the rights set forth above, to enter upon the Common Elements or onto any Unit, where reasonably necessary, and summarily remove and abate, at the expense of the Co-Owner in violation, any structure, thing or condition existing or maintained contrary to the provisions of the Condominium Documents. The Association shall have no liability to any Co-Owner arising out of the exercise of its removal and abatement power authorized herein.

Section 4. Assessment of Fines. The violation of any of the provisions of the Condominium Documents by any Co-Owner shall be grounds for assessment by the Association, acting through its duly constituted Board of Directors, of monetary fines for such violations in accordance with Article XX of these Bylaws. No fine may be assessed unless rules and regulations establishing such fine have first been duly adopted by the Board of Directors of the Association and notice thereof given to all Co-Owners in the same manner as prescribed in Article IX, Section 5 of these Bylaws.

Section 5. Non-waiver of Right. The failure of the Association or of any Co-Owner to enforce any right, provision, covenant or condition that may be granted by the Condominium Documents shall not constitute a waiver of the right of the Association or of any such Co-Owner to enforce such right, provision, covenant or condition in the future.

Section 6. Cumulative Rights, Remedies and Privileges. All rights, remedies and privileges granted to the Association or any Co-Owner or Co-Owners pursuant to any terms, provisions, covenants or conditions of the aforesaid Condominium Documents shall be deemed to be cumulative and the exercise of any one (1) or more shall not be deemed to constitute an election of remedies, nor shall it preclude the party thus exercising the same from exercising such other and additional rights, remedies or privileges as may be available to such party at law or in equity.

Section 7. Enforcement of Provisions of Condominium Documents. A Co-Owner may maintain an action against the Association and its officers and directors to compel such persons to enforce the terms and provisions of the Condominium Documents. A Co-Owner may maintain an action against any other Co-Owner for injunctive relief or for damages or any combination thereof for non-compliance with the terms and provisions of the Condominium Documents or the Act.

## **ARTICLE XX ASSESSMENT OF FINES**

Section 1. General. The violation by any Co-Owner, occupant or guest of any of the provisions of the Condominium Documents, including any duly adopted rules and regulations, shall be grounds for assessment by the Association, acting through its duly constituted Board of Directors, of monetary fines against the involved Co-Owner. Such Co-Owner shall be deemed responsible for such violations whether they occur as a result of his or her personal actions or the actions of his or her family, guests, tenants or any other person admitted through such Co-Owner to the Condominium Premises.

Section 2. Procedures. Upon any such violation being alleged by the Board of Directors, the following procedures will be followed:

(a) Notice. Notice of the violation, including the Condominium Document provision violated, together with a description of the factual nature of the alleged offense set forth with such

reasonable specificity as will place the Co-Owner on notice as to the violation, shall be sent by first class mail, postage prepaid, or personally delivered to the representative of said Co-Owner at the address as shown in the notice required to be filed with the Association pursuant to Article VIII, Section 3 of these Bylaws.

(b) Opportunity to Defend. The offending Co-Owner shall have an opportunity to appear before the Board of Directors and offer evidence in defense of the alleged violation. The appearance before the Board of Directors shall be at its next scheduled meeting, but in no event shall the Co-Owner be required to appear less than ten (10) days from the date of the notice.

(c) Default. Failure to respond to the notice of violation constitutes a default.

(d) Hearing and Decision. Upon appearance by the Co-Owner before the Board of Directors and presentation of evidence of defense, or, in the event of the Co-Owner's default, the Board shall, by majority vote of a quorum of the Board, decide whether a violation has occurred. The Board's decision is final.

Section 3. Amounts. Upon violation of any of the provisions of the Condominium Documents, and after default of the offending Co-Owner or upon the decision of the Board as recited above, the following fines shall be levied:

(a) First Violation. No fine shall be levied.

(b) Second Violation. Fifty (\$50.00) Dollar fine.

(c) Third Violation. One Hundred (\$100.00) Dollar fine.

(d) Fourth Violation and Subsequent Violations. One Hundred Fifty (\$150.00) Dollar fine.

Section 4. Collection. The fines levied pursuant to Section 3 above shall be assessed against the Co-Owner and shall be due and payable together with the regular Condominium assessment on the first of the next following month. Failure to pay the fine will subject the Co-Owner to all liabilities set forth in the Condominium Documents, including, without limitation, those described in Article II and Article XIX of these Bylaws.

Section 5. Rights Under Condominium Act As to Tenants; Land Contract Vendees. Any violations of the Condominium Documents by tenants or land contract vendees, including the Rules and Regulations, shall entitle the Association acting through its Board of Directors to evict any tenant, occupant or land contract vendee under summary proceedings statutes. By taking occupancy or possession of a Unit all land contract vendees, tenants and occupants are deemed to have presumptively agreed to this right of the Association, even if they have not been provide actual notice of this right by the landlord or vendor of a Unit.

## **ARTICLE XXI RIGHTS RESERVED TO DEVELOPER**

Any or all of the rights and powers granted or reserved to the Developer in the Condominium Documents or by law, including the right and power to approve or disapprove any act, use, or proposed action or any other matter or thing, may be assigned by it to any other entity or to the Association. Any such assignment or transfer shall be made by appropriate instrument in writing in which the assignee or



transferee shall join for the purpose of evidencing its acceptance of such powers and rights, and such assignee or transferee shall thereupon have the same rights and powers as herein given and reserved to the Developer. Any rights and powers reserved or granted to the Developer, or its successors and/or assigns, shall terminate, if not sooner assigned to the Association, at the conclusion of the Development and Sales Period as defined in Article III of the Master Deed. The immediately preceding sentence dealing with the termination of certain rights and powers granted or reserved to the Developer is intended to apply, insofar as the Developer is concerned, only to the Developer's rights to approve and control the administration of the Condominium and shall not, under any circumstances, be construed to apply to or cause the termination of any real property rights granted or reserved to the Developer, or its successors and/or assigns, in the Master Deed or elsewhere (including, but not limited to, access easements, utility easements and all other easements created and reserved in such documents that shall not be terminable in any manner hereunder and that shall be governed only in accordance with the terms of their creation or reservation and not hereby).

## **ARTICLE XXII SEVERABILITY/CONSTRUCTION**

Section 1. Severability. In the event that any of the terms, provisions or covenants of these Bylaws or the Condominium Documents are held to be partially or wholly invalid or unenforceable for any reason whatsoever, such holding shall not affect, alter, modify or impair in any manner whatsoever any of the other terms, provisions or covenants of such documents or the remaining portions of any terms, provisions or covenants held to be partially invalid or unenforceable.

Section 2. Rules of Construction.

(a) In the event of a conflict between the Act, the Master Deed, the Articles of Incorporation, Bylaws and Rules and Regulations, the Act shall control.

(b) In the event of a conflict between the Articles of Incorporation, the Master Deed, the Bylaws, or Rules and Regulations, the Articles of Incorporation shall control.

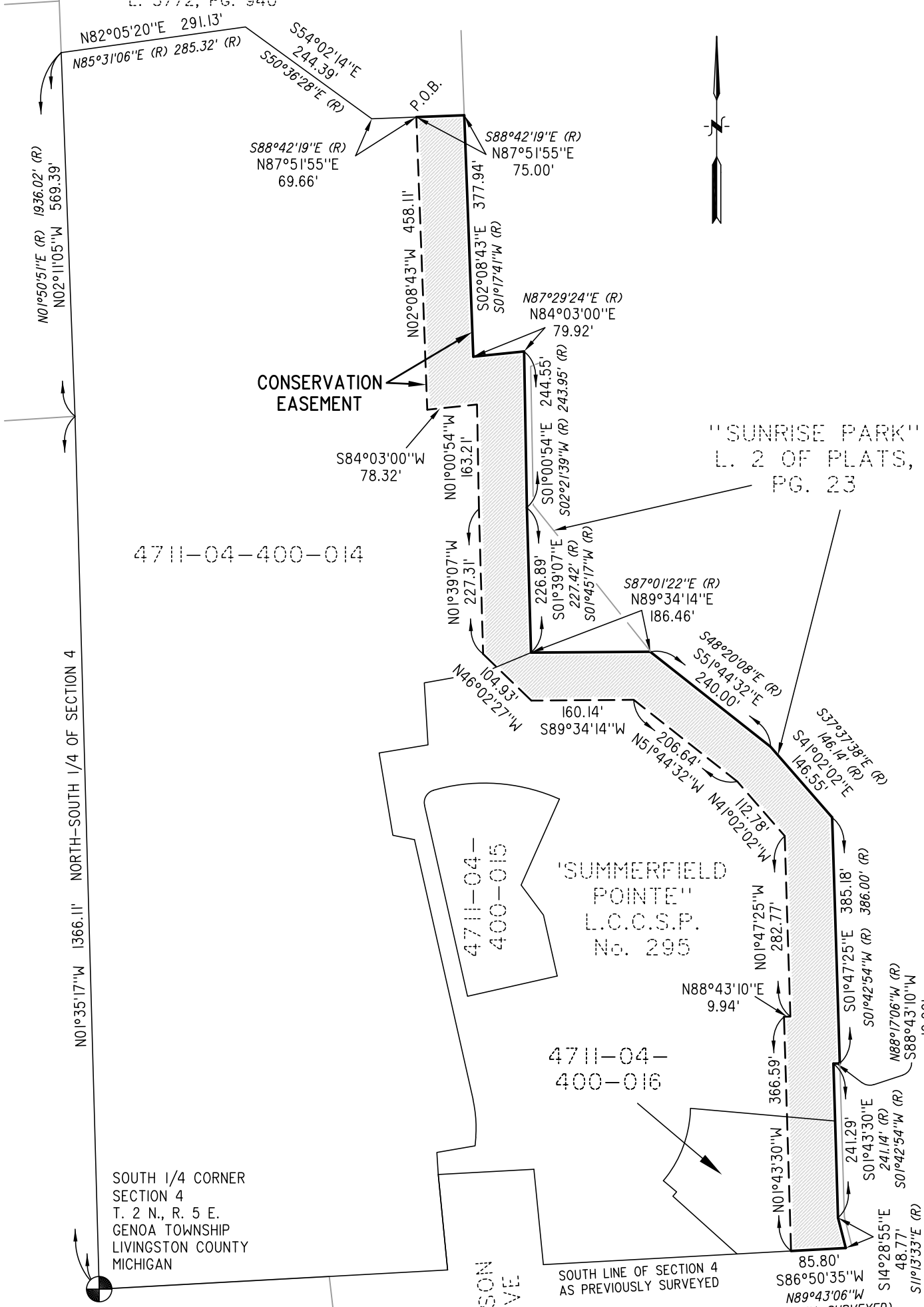
(c) In the event of a conflict between the Master Deed, the Bylaws or Rules and Regulations, the Master Deed shall control.

(d) In the event of a conflict between the Bylaws and the Rules and Regulations, the Bylaws shall control.

4711-04-400-013

NATURE PRESERVE  
L. 3772, PG. 940

# EXHIBIT "\_\_\_" DEPICTION OF EASEMENT AREA



CIVIL ENGINEERS  
LAND SURVEYORS



PH (810) 227-9533  
 FAX (810) 227-9460  
 EMAIL: [desine@desineinc.com](mailto:desine@desineinc.com)  
 2183 PLESS DRIVE  
 BRIGHTON, MICHIGAN 48114

SCALE 1" = 100"

PREPARED FOR

### SUMMERFIELD POINTE ESTATES

SECTION 4, TOWN 2 NORTH, RANGE 5 EAST  
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

JOB No. 1-10-04-214159

DATE 03/25/22

DWG No. 214159-CONS

DRAWN LMC

CHECKED TRP

**EXHIBIT " \_ "**  
**LEGAL DESCRIPTION OF EASEMENT AREA**

**CONSERVATION EASEMENT**

*(Part of Parcels No. 4711-04-400-014, 4711-04-400-016 and "Summerfield Pointe" Replat #2, being a part of the Northeast 1/4 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, according to the Master Deed thereof, as recorded in Liber 4218, Page 874, Livingston County Records, as amended in Replat No. 1 as recorded in Document No. 2008R-028520 and \*Replat No. 2 as recorded in Document No. 2014R-006883, Livingston County Records, and designated as Livingston County Condominium Subdivision Plan No. 295, and as described in Act 59 of the Public Acts of 1978, as amended.)*

Part of the East 1/2 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; described as:

Commencing at the South 1/4 Corner of said Section 4;

thence along the North-South 1/4 line of Section 4 to following two courses:

- 1) N01°35'17"W 1366.11 feet and
- 2) N02°11'05"W 569.39 feet (recorded as N01°50'51"E 1936.02 feet);

thence along the South line of a Nature Preserve as recorded in Liber 3772, Page 940, Livingston County Records, the following four courses:

- 1) N82°05'20"E 291.13 feet (recorded as N85°31'06"E 285.32 feet),
- 2) S54°02'14"E (recorded as S50°36'28"E) 244.39 feet,
- 3) N87°51'55"E (recorded as S88°42'19"E) 69.66 feet to the **PLACE OF BEGINNING** and
- 4) continuing N87°51'55"E 75.00;

thence S02°08'43"E (recorded as S01°17'41"W) 377.94 feet;

thence N84°03'00"E (recorded as N87°29'24"E) 79.92 feet;

thence along a line 10.00 feet West of and parallel to the Westerly line of "Sunrise Park", a subdivision recorded in Liber 2 of Plats, Page 23, Livingston County Records, S01°00'54"E 244.55 feet (recorded as S02°21'39"W 243.95 feet);

thence S01°39'07"E 226.89 feet (recorded as S01°45'17"W 227.42 feet);

thence N89°34'14"E (recorded as S87°01'22"E) 186.46 feet;

thence along the West line of said "Sunrise Park" the following three courses

- 1) S51°44'32"E (recorded as S48°20'08"E) 240.00 feet,
- 2) S41°02'02"E 146.55 feet (recorded as S37°37'38"E 146.14 feet) and
- 3) S01°47'25"E 385.18 feet (recorded as S01°42'54"W 386.00 feet);

thence S88°43'10"W 10.00 feet (recorded as N88°17'06"W feet);

thence along a line 10 feet West of and parallel to the West line of said "Sunrise Park" the following two courses:

- 1) S01°43'30"E 241.29 feet (recorded as S1°42'54"W 241.14 feet) and
- 2) S14°28'55"E 48.77 feet (recorded as S11°13'33"E 48.86 feet);

thence along the South line of said Section 4, as previously surveyed, S86°50'35"W (recorded as N89°43'06"W) 85.80 feet;

thence N01°43'30"W 366.59 feet;

thence N88°43'10"E 9.94 feet;

thence N01°47'25"W 282.77 feet;

thence N41°02'02"W 112.78 feet;

thence N51°44'32"W 206.64 feet;

thence S89°34'14"W 160.14 feet;

thence N46°02'27"W 104.93 feet;

thence N01°39'07"W 227.31 feet;

thence N01°00'54"W 163.21 feet;

thence S84°03'00"W 78.32 feet;

thence N02°08'43"W 458.11 feet to the Place of Beginning.

Containing 3.73 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.

CIVIL ENGINEERS  
LAND SURVEYORS



PH (810) 227-9533  
FAX (810) 227-9460  
EMAIL: [desine@desineinc.com](mailto:desine@desineinc.com)  
2183 PLESS DRIVE  
BRIGHTON, MICHIGAN 48114

PREPARED FOR

**SUMMERFIELD POINTE ESTATES**

SECTION 4, TOWN 2 NORTH, RANGE 5 EAST  
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

JOB No. 1-10-04-214159

DATE 03/25/22

DWG No. 214159-CONS

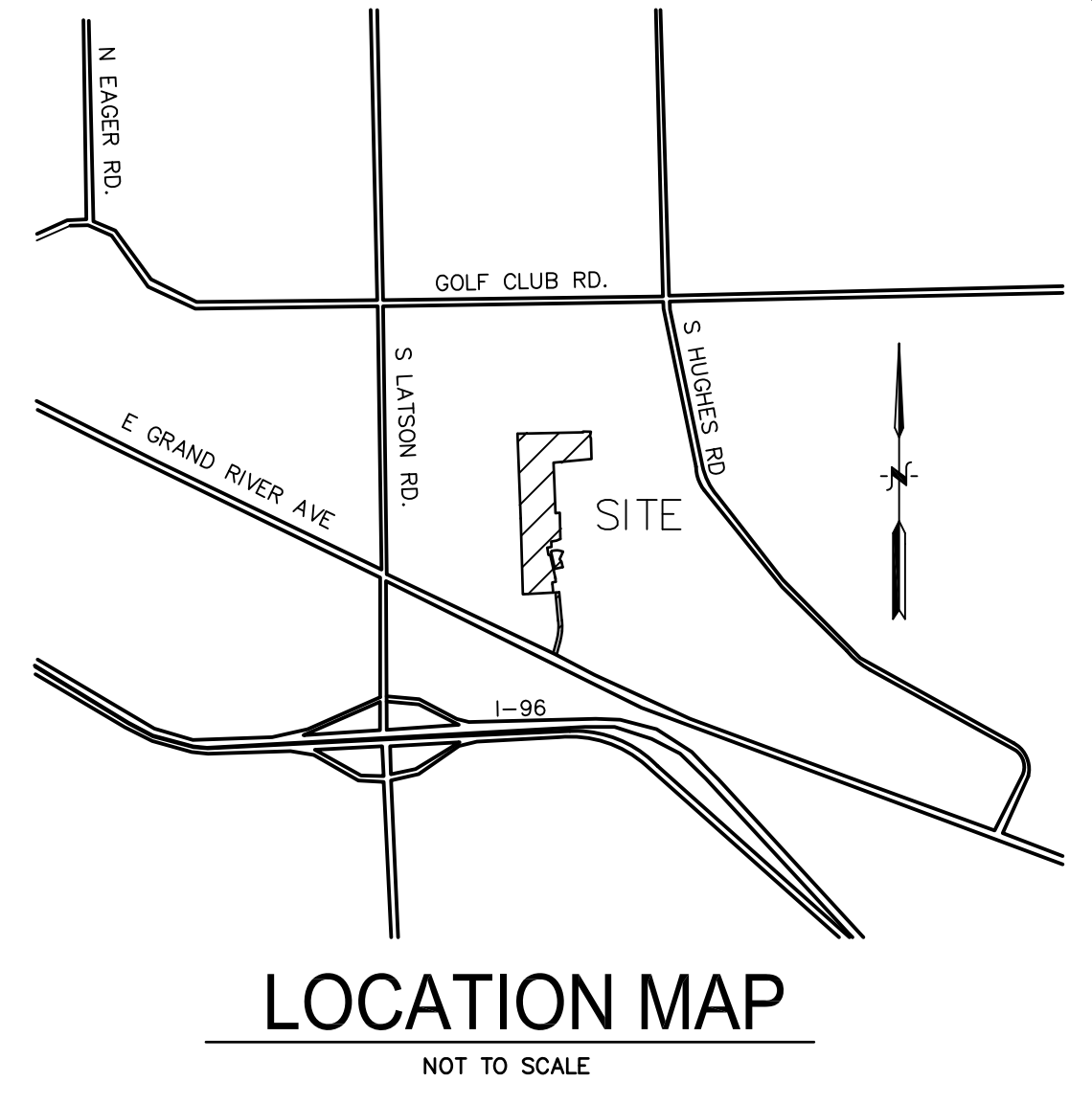
DRAWN LMC

CHECKED TRP



# AMENDED P.U.D. PLAN FOR SUMMERFIELD POINTE ESTATES

A PART OF THE SOUTHEAST 1/4 OF SECTION 4  
T2N, R5E, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN



**LEGAL DESCRIPTIONS SUBSEQUENT TO SURVEY**

Reference: "Summerfield Pointe", a part of the Southeast 1/4 and part of the Northeast 1/4 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, according to the Master Deed thereof, as recorded in Liber 4218, Page 874, Livingston County Records, as amended in Replat No. 1 as recorded in Document No. 2008R-028520 and "Replat No. 2 as recorded in Document No. 2014R-006883, Livingston County Records, and designated as Livingston County Condominium Subdivision Plan No. 295, and as described in Act 59 of the Public Acts of 1978, as amended.

**OVERALL PARCEL 60.732 Acres**

(Parcels 4711-04-400-013, 014, 015, 016 and "Summerfield Pointe" Replat #2 Combined)  
Part of the East 1/2 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; described as:  
**BEGINNING** at the South 1/4 Corner of said Section 4;  
thence along the North-South 1/4 line of Section 4 to following two courses:  
1) N01°35'17"W 1366.11 feet and  
2) N02°11'05"W 1525.13 feet  
thence along the East-West 1/4 line of Section 4, N88°53'35"E 1177.52 feet (recorded as S87°40'06"E 1162.17 feet);  
thence N01°06'25"W (recorded as N02°19'54"E) 16.05 feet; thence S88°08'25"E (recorded as S84°42'06"E) 140.66 feet;  
thence S10°02'44"W (recorded as S13°29'03"W) 81.90 feet; thence S22°34'43"E 40.64 feet (recorded as S19°02'24"E 38.81 feet);  
thence S01°33'04"E 373.67 feet (recorded as S01°53'15"W 374.11 feet); thence S84°41'09"W (recorded as S88°06'46"W) 683.63 feet;  
thence S01°59'18"E (recorded as S01°26'28"W) 400.04 feet; thence S02°08'43"E 510.56 feet (recorded as S01°17'41"W 510.59 feet);  
thence N84°03'00"E (recorded as N87°29'24"E) 79.92 feet; thence along a line 10.00 feet West of and parallel to the Westerly line of "Sunrise Park", a subdivision recorded in Liber 2 of Plats, Page 23, Livingston County Records, S01°00'54"E 244.55 feet (recorded as S02°21'39"W 243.95 feet); thence S01°39'07"E 226.89 feet (recorded as S01°42'17"W 227.42 feet); thence N85°34'16"E (recorded as S87°01'22"E) 188.47 feet; thence along the West line of said "Sunrise Park" the following three courses:  
1) S51°44'32"E (recorded as S48°20'08"E) 240.00 feet;  
2) S41°00'22"E 146.55 feet (recorded as S37°37'39"E 146.14 feet) and  
3) S01°47'25"E 385.18 feet (recorded as S01°42'54"W 386.00 feet);  
thence S88°43'10"W 10.00 feet (recorded as N88°17'06"W 10.00 feet); thence along a line 10 feet West of and parallel to the West line of said "Sunrise Park" the following two courses:  
1) S01°43'30"E 241.52 feet (recorded as S11°25'24"W 241.14 feet) and  
2) S14°28'55"E 48.77 feet (recorded as S11°13'33"E 48.86 feet);  
thence along the South line of said Section 4, as previously surveyed, S88°50'35"W (recorded as N89°43'06"W) 473.99 feet; thence along a line coincident with Lawson Drive the following three courses:  
1) N82°38'45"W (recorded as N02°12'21"W) 150.00 feet;  
2) S86°50'35"W (recorded as N89°43'06"W) 150.00 feet and  
3) S02°08'43"E (recorded as S02°12'21"E) 150.00 feet;  
thence along the South line of said Section 4, as previously surveyed, S88°50'35"W 546.06 feet (recorded as N89°43'06"W 546.16 feet) to the Point of Beginning. Containing 60.73 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.

**PARCEL 4711-04-400-013 22.22z Acres**

(Nature Preserve as recorded in Liber 3772, Page 940, Livingston County Records)  
Part of the East 1/2 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; described as:  
Commencing at the South 1/4 Corner of said Section 4; thence along the North-South 1/4 line of Section 4 to following two courses:  
1) N01°35'17"W (recorded as N01°50'51"E) 1366.11 feet and  
2) N02°11'05"W (recorded as N01°50'51"E) 955.74 feet to the center of Section 4;  
thence along the East-West 1/4 line of Section 4, N88°53'35"E 1177.52 feet (recorded as S87°40'06"E 1162.17 feet); thence N01°06'25"W (recorded as N02°19'54"E) 16.05 feet; thence S88°08'25"E (recorded as S84°42'06"E) 140.66 feet; thence S10°02'44"W (recorded as S13°29'03"W) 81.90 feet; thence S22°34'43"E 40.64 feet (recorded as S19°02'24"E 38.81 feet); thence S01°33'04"E 373.67 feet (recorded as S01°53'15"W 374.11 feet); thence S84°41'09"W (recorded as S88°06'46"W) 683.63 feet; thence S01°59'18"E (recorded as S1°26'28"W) 400.04 feet; thence S02°08'43"E (recorded as S01°17'41"W) 132.62 feet; thence along the East line of a Nature Preserve as recorded in Liber 3772, Page 940, Livingston County Records, the following three courses:  
1) N82°38'45"W (recorded as N02°12'21"W) 150.00 feet;  
2) N54°02'14"W (recorded as N50°36'28"W) 244.39 feet and  
3) S82°05'20"W 291.13 feet (recorded as S85°31'06"W 285.32 feet) to the Place of Beginning.  
Containing 22.22 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.

**PARCEL 4711-04-400-014 26.25z Acres**

(\*Part of Possible Expansion/Future Development Area "A")  
Part of the East 1/2 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; described as:  
**BEGINNING** at the South 1/4 Corner of said Section 4;  
thence along the North-South 1/4 line of Section 4 to following two courses:  
1) N01°35'17"W 1366.11 feet and  
2) N02°11'05"W 569.39 feet (recorded as N01°50'51"E 1936.02 feet);  
thence along the East line of a Nature Preserve as recorded in Liber 3772, Page 940, Livingston County Records, the following three courses:  
1) N82°09'20"E 291.13 feet (recorded as N85°31'06"E 285.32 feet);  
2) S54°02'14"E (recorded as S50°36'28"E) 244.39 feet and  
3) N87°51'55"E (recorded as S88°42'19"E) 144.66 feet;  
thence S02°08'43"E (recorded as S01°17'41"W) 377.94 feet;  
thence N84°03'00"E (recorded as N87°29'24"E) 79.92 feet;  
thence along a line 10.00 feet West of and parallel to the Westerly line of "Sunrise Park", a subdivision recorded in Liber 2 of Plats, Page 23, Livingston County Records, S01°00'54"E 244.55 feet (recorded as S02°21'39"W 243.95 feet); thence S01°39'07"E 226.89 feet (recorded as S01°45'17"W 227.42 feet); thence S67°21'52"W 79.51 feet (recorded as S70°51'31"W 80.28 feet); thence S79°56'57"W (recorded as S82°20'15"W) 95.00 feet; thence S02°24'18"E (recorded as S02°00'00"W) 97.26 feet; thence S86°50'35"W (recorded as S84°01'44"W) 77.58 feet; thence S02°28'23"E (recorded as S06°04'05"E) 130.52 feet; thence S78°24'48"E 34.85 feet (recorded as S75°00'30"E 34.93 feet); thence S12°42'28"E 416.34 feet (recorded as S09°16'02"E 416.23 feet); thence Southeastly 59.62 feet along the arc of a 200.00 foot radius curve to the right, through a central angle of 17°04'52" and having a chord bearing S04°10'00"E (recorded as N00°43'36"E) 59.40 feet; thence N04°22'28"W (recorded as S07°48'50"W) 13.56 feet; thence S80°11'15"W (recorded as S83°37'39"W) 60.77 feet; thence S03°26'24"E (recorded as S00°00'00"W) 34.61 feet; thence along the West line of Lawson Drive, S05°38'45"E (recorded as S02°12'21"E) 150.00 feet; thence along the South line of Section 4, as previously surveyed, S88°50'35"W 546.06 feet (recorded as N89°43'06"W 546.16 feet) to the Point of Beginning.  
Containing 26.25 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.

**PARCEL No. 4711-04-400-015 1.12z Acres**

(\*Possible Expansion/Future Development Area "B")  
Part of the Southeast 1/4 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; described as:  
Commencing at the South 1/4 Corner of said Section 4; thence along the South line of Section 4, as previously surveyed, N88°50'35"E 546.06 feet (recorded as S89°43'06"E 546.16 feet); thence along the West line of Lawson Drive, N05°38'45"W (recorded as N02°12'21"W) 150.00 feet; thence N03°26'24"W (recorded as N00°00'00"E) 34.61 feet; thence N80°11'15"E (recorded as N83°37'39"E) 60.77 feet;  
thence N04°22'28"E (recorded as N07°48'50"E) 13.56 feet; thence Northwesterly 59.62 feet along the arc of a 200.00 foot radius curve to the left, through a central angle of 17°04'52" and having a chord which bears N04°10'00"W (recorded as N00°43'36"E) 59.40 feet; thence N12°42'28"W (recorded as N09°16'02"W) 159.13 feet; thence N77°18'10"E (recorded as N80°43'58"E) 27.00 feet to the **POINT OF BEGINNING**; thence N12°42'28"W (recorded as N09°16'02"W) 306.30 feet; thence Northwesterly 30.26 feet along the arc of a 200.00 foot radius curve to the right, through a central angle of 86°41'26" (recorded as 86°41'33") and having a chord bearing N30°27'50"E (recorded as N34°04'42"E) 21.46 feet; thence Southeastly 201.82 feet along the arc of a 289.00 foot radius curve to the right, through a central angle of 40°00'52" (recorded as 40°00'44") and having a chord bearing S86°00'33"E (recorded as S82°34'07"E) 197.75 feet; thence S23°59'50"W (recorded as S27°58'14"W) 147.43 feet; thence S38°36'45"E (recorded as S33°10'21"E) 58.47 feet; thence S12°42'28"E (recorded as 09°16'02"E) 97.80 feet; thence S77°17'34"W (recorded as S80°43'58"W) 143.83 feet to the Point of Beginning.  
Containing 1.13 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.

**PARCEL No. 4711-04-400-016 1.14z Acres**

(\*Possible Expansion/Future Development Area "C")  
Part of the Southeast 1/4 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; described as:  
Commencing at the South 1/4 Corner of said Section 4; thence along the South line of Section 4, N88°50'35"E (recorded as S89°43'06"E) 999.68 feet to the **POINT OF BEGINNING**;  
thence N88°50'35"W (recorded as N44°37'04"E) 135.18 feet; thence N41°19'45"E (recorded as N44°37'04"E) 9.00 feet; thence N50°03'17"W (recorded as N46°36'58"W) 27.00 feet; thence Northwesterly 123.38 feet along the arc of a 182.00 foot radius curve to the left, through a central angle of 38°50'33" (recorded as 38°50'33") and having a chord bearing N20°31'27"E (recorded as N23°07'46"E) 121.03 feet;  
thence S84°58'38"E 227.08 feet (recorded as S81°32'11"E 227.01 feet); thence along a line 10.00 feet West of and parallel to the Westerly line of said "Sunrise Park" the following two courses:  
1) S01°43'30"E 151.43 feet (recorded as S01°42'54"W 151.38 feet) and  
2) S14°28'55"E 48.77 feet (recorded as S11°13'33"E 48.86 feet);  
thence along the South line of Section 4, S88°50'35"W 170.37 feet (recorded as N89°43'06"W 170.47 feet) to the Point of Beginning.  
Containing 1.14 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.



AERIAL PHOTOGRAPH  
SCALE: 1in. = 300ft.

AERIAL PHOTOGRAPHY BY:



Aerial photographic underlay is an unrectified image and is oriented to the engineering line work within reasonable accuracy and precision, and may not accurately depict current site conditions.

**PLAN DISTRIBUTION LIST**

DATE OF APPLICATION	CONST. SET DATE	AGENCY	CONTACT NAME	DESCRIPTION	STATUS
March 02, 2022	Feb. 23, 2022	Genoa Twp.	Kelly VanMarter	PUD / Site Plan Review	Pending
March 24, 2022	March 23, 2022	Genoa Twp.	Kelly VanMarter	PUD / Site Plan Review	Pending

**PERMITTING AGENCY LIST**

AGENCY	PERMIT
Genoa Township	P.U.D. Amendment, Site Plan, Land Use, Construction
M.H.O.G.	Water & Sanitary Sewer
Livingston County Drain Commission	Drain & Soil Erosion
Livingston County Building Department	Building
Livingston County Road Commission	Roads

**SHEET INDEX**

- EX EXISTING CONDITIONS & DEMOLITION PLAN
- SD SITE DEVELOPMENT PLAN
- SP1 DIMENSIONAL SITE PLAN (SOUTH)
- SP2 DIMENSIONAL SITE PLAN (NORTH)
- UT1 UTILITY PLAN (SOUTH)
- UT2 UTILITY PLAN (NORTH)
- UT3 UTILITY EASEMENT PLAN (SOUTH)
- UT4 UTILITY EASEMENT PLAN (NORTH)
- UT5 DETENTION BASIN "A" CALCULATION, NOTES & DETAILS
- UT6 SANITARY SEWER & STORM SEWER CALCULATIONS
- UT7 EXISTING & PROPOSED UTILITY STRUCTURE INVENTORY
- GR1 GRADING PLAN (SOUTH)
- GR2 GRADING PLAN (NORTH)
- WS1 WATERSHED PLAN
- WS2 EXISTING SOILS MAP
- L-1 LANDSCAPE PLAN
- L-2 LANDSCAPE PLAN
- L-3 LANDSCAPE DETAILS
- DT1 SUMMERFIELD IMPROVEMENTS, PAVEMENT NOTES & DETAILS
- DT2 SOIL STABILIZATION, SIGNAGE & STORM SEWER NOTES & DETAILS

**SUMMERFIELD POINTE P.U.D. UTILITIES QUANTITY**

Water Main		
8" CL54 D.I. Watermain	3,331	LF.
6" CL54 D.I. Watermain	80	LF.
8" Gate Valve in Well (5' Dia.)	5	Each
Hydrant + Valve Assembly	8	Each
8"x8"x8" Tee	2	Each
8"x8"x6" Tee	8	Each
8" Tapping Sleeve & Valve in Well	1	Each
8" Valve In Well	4	Each
8"-11.25" Bend	16	Each
8"-22.25" Bend	7	Each
8"-45" Bend	2	Each
6" 90° Bend	6	Each
2" Copper Water Lead	4,943	LF.
Water Shutoff	108	Each
Sanitary Sewer		
8" SDR 26 PVC Sanitary Sewer Main	3,987	LF.
6" SDR 26 PVC Sanitary Sewer Lead	3,300	LF.
Sanitary Cleanouts	108	Each
4" Dia. Concrete Manhole w/solid Manhole Cover	22	Each

**ENGINEER/SURVEYOR**  
DESINE INC.  
2183 PLESS DRIVE  
BRIGHTON, MICHIGAN 48114  
PHONE: (810) 227-9533

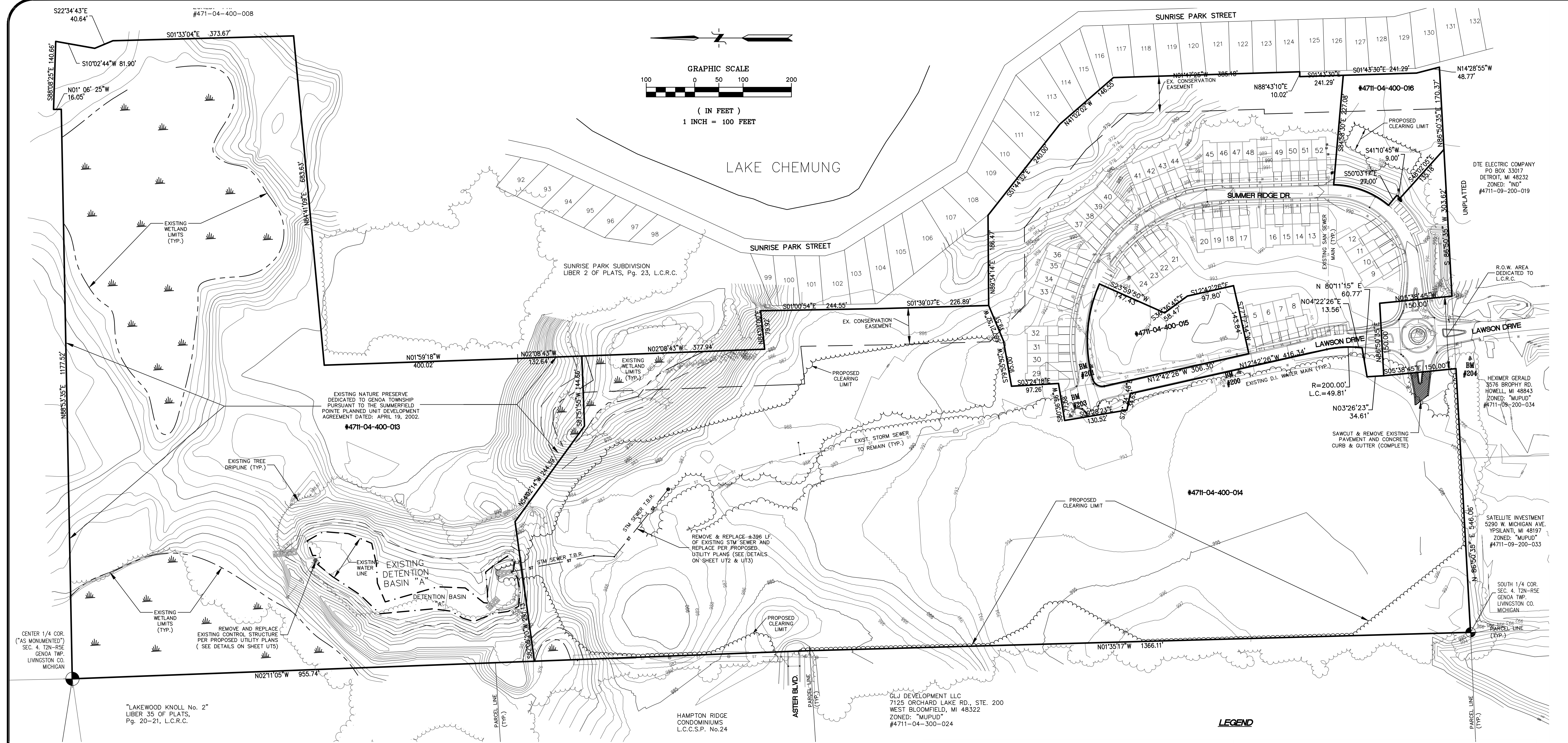
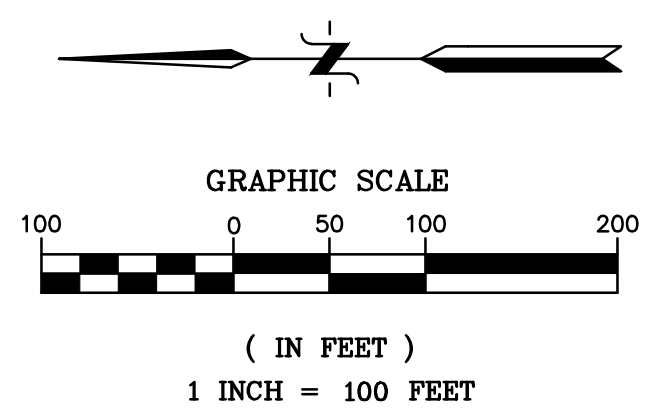
**OWNER / DEVELOPER**  
HEALY HOMES AT SUMMERFIELD LLC  
3696 SLEETH ROAD  
COMMERCE TWO, MICHIGAN 48382

**LANDSCAPE ARCHITECT**  
ALLEN DESIGN  
557 CARPENTER  
NORTHVILLE, MI 48167  
PHONE: (248) 467-4668



REVISED	SCALE: 1"=300'
03/23/22	PROJECT No.: 214159
	DWG NAME: 4159-COV
	PRINT: MARCH 23, 2022





**DEMOLITION NOTES:**

- The demolition specifications of the Local Municipality are a part of this work. Refer to the General Notes on the project plans for additional requirements.
- Contractor shall contact the 811 Underground Public Utility Locating System or other appropriate local underground utility locating Agency, a minimum of three (3) working days prior to performing demolition work. Existing utility information on the project plans may be from information disclosed to this firm by the Utility Companies, Local, County or State Agencies, and/or various other sources. No guarantee is given as to the completeness or accuracy thereof. Prior to construction, locations and depths of all existing utilities (in possible conflict with the proposed improvements) shall be verified in the field.
- Contractor shall contact the appropriate Agencies to coordinate disconnect of the electric, gas, phone, cable and other public utilities as necessary prior to performing demolition work.
- Contractor shall contact the appropriate Agencies to coordinate removal and/or relocation of any underground and/or overhead public utility lines as necessary prior to performing demolition work.
- Contractor shall recycle and/or dispose of all demolition debris in accordance with the appropriate Local, County, State and Federal regulations.
- All bituminous and concrete pavement to be removed shall be saw cut at the limits of removal to provide for a clean straight edge for future abutment.
- All existing irrigation lines to be removed shall be terminated at the limits of demolition or as necessary to allow for construction of the proposed site improvements. Ends of pipe shall be capped and the location marked for future connection.
- All existing water main and sanitary sewer to be removed shall be terminated at the limits of demolition or as indicated on the project plans. Temporary plugs shall be installed in the ends of pipe in accordance with the appropriate Agency and the locations of marked for future connection. Permanent plugs shall be installed in the ends of pipe in accordance with the appropriate Agency. The Contractor shall record the location of all permanent plugs and provide the location information to the appropriate Agency.
- All existing storm sewer to be removed shall be terminated at the limits of demolition or as indicated on the project plans. Temporary plugs shall be installed in the ends of pipe in accordance with the appropriate Agency and the locations of marked for future connection. Permanent bulkheads shall be installed in the ends of pipe and/or openings in terminating structures in accordance with the appropriate Agency. The Contractor shall record the location of all permanent bulkheads and provide the location information to the appropriate Agency.
- All existing light sources to be removed shall have their power cables removed up to the power source or properly terminated for future connection at the limits of demolition or as necessary to allow for construction of the proposed site improvements. Removal and termination of power cables shall be performed in accordance with local electric codes.
- All existing utility meters to be removed shall be properly removed to allow for reuse. Any existing utility meters that are not to be reused as a part of this project shall be returned to the appropriate Agency.
- All trenches and/or excavations resulting from the demolition of underground utilities, building foundations, etc., that are located within the 1 on 1 influence zone of proposed structures, paved areas and/or other areas subject to vehicular traffic shall be backfilled with MDOT Class III granular material (or better) to the proposed subgrade elevation. Backfill shall be placed using the controlled density method (12" maximum lifts, compacted to 95% maximum unit weight, modified proctor).

**BENCHMARKS**

- DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPEAT No. 2 OF "SUMMERFIELD POINTE," LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "U.S.G.S." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.
- BENCHMARK #201 (PRIMARY) SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE, AND THE ENTRANCE TO "SUMMERFIELD POINTE." ELEVATION = 993.43 (NAVD 88) REF: FIELD BOOK 1483, PG. 34 POINT #201
  - BENCHMARK #203 (PRIMARY) ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 377.8 FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 995.39 (NAVD 88) REF: FIELD BOOK 1483, PG. 34 POINT #203
  - BENCHMARK #204 (PRIMARY) SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE, AND THE ENTRANCE TO "SUMMERFIELD POINTE." ELEVATION = 993.43 (NAVD 88) REF: FIELD BOOK 1483, PG. 34 POINT #204
  - BENCHMARK #205 (PRIMARY) ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 377.8 FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 995.39 (NAVD 88) REF: FIELD BOOK 1483, PG. 34 POINT #205

- LEGEND**
- = MISC. STRUCTURE (AS LABELED)
  - = MONITOR WELL
  - (with dot) = BOLLARD
  - (with cross) = SIGN
  - (with triangle) = LIGHT BASE
  - (with cross) = UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX)
  - = UTILITY POLE W/GUY WIRE
  - (with lines) = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
  - (with lines) = U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTIC/CABLE TV/MISC UTILITIES)
  - (with lines) = EDGE OF WOODS / TREE DRIP LINE
  - (with cross) = DECIDUOUS TREE W/IDENTIFIER
  - (with dot) = CONIFEROUS TREE W/IDENTIFIER
  - (with lines) = FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
  - (with lines) = EDGE OF GRAVEL
  - (with lines) = CONCRETE CURB (UNLESS OTHERWISE STATED)
  - (with cross) = SANITARY SEWER MANHOLE W/IDENTIFIER
  - (with lines) = SANITARY SEWER PIPE
  - (with cross) = STORM WATER MANHOLE W/IDENTIFIER
  - (with lines) = FLARED END SECTION
  - (with lines) = STORM WATER DRAINAGE PIPE
  - (with cross) = HYDRANT
  - (with dot) = WATER VALVE
  - (with cross) = WATER VALVE BOX
  - (with cross) = GAS/GASOLINE COVER
  - (with cross) = GAS SHUT OFF
  - (with lines) = U/G GAS
  - (with cross) = 1' CONTOUR
  - (with cross) = 5' CONTOUR
  - (with lines) = TRN. EX. WATER
  - (with lines) = APPROX. WETLANDS LINE

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DESIGN: FAF	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: WMP						

**SUMMERFIELD  
POINTE ESTATES**

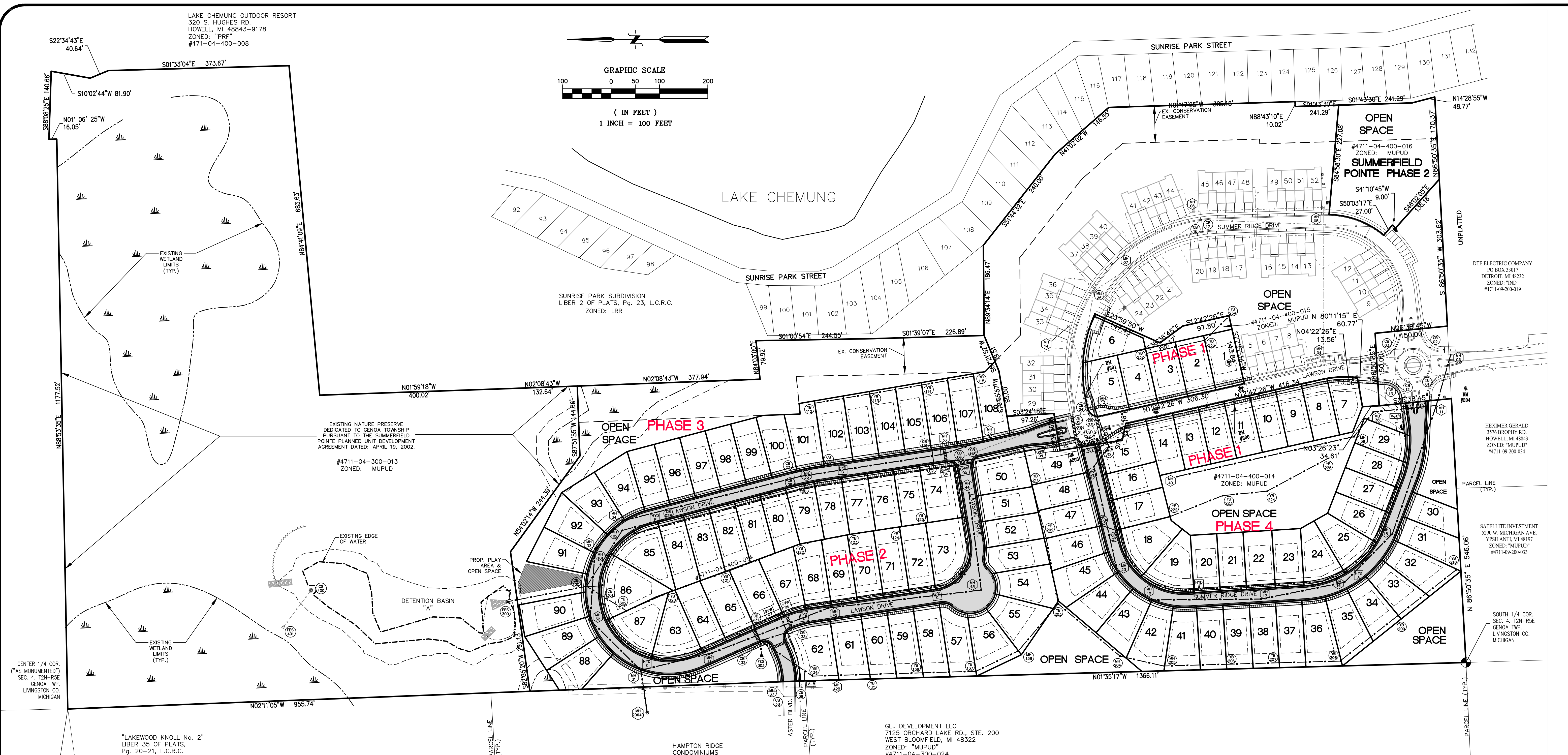
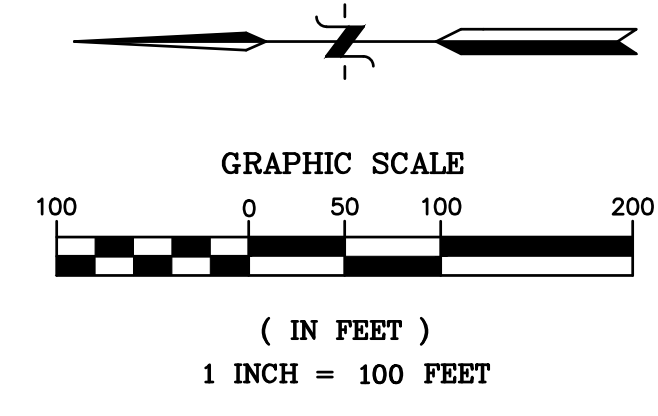
**EXISTING CONDITIONS  
&  
DEMOLITION PLAN**

CLIENT: HEALY HOMES AT SUMMERFIELD LLC 3696 SLEETH RD, COMMERCE TOWNSHIP, MICHIGAN 48382 248-684-1699	SCALE: 1in. = 100ft. PROJECT No.: 214159 DWG NAME: 4159 EX ISSUED: MARCH 23, 2022
---	--

**EX**



LAKE CHEMUNG OUTDOOR RESORT  
320 S. HUGHES RD.  
HOWELL, MI 48843-9178  
ZONED: "PRF"  
#471-04-400-008



**SITE DATA & ZONING DEVIATION TABLE**

Project / Owner: Summerfield Pointe PUD / Healy Homes of Summerfield Tax ID Number(s): #4711-04-400-014, 015 & 016  
Location: Genoa Township, Michigan Zoning: MUPUD-Mixed Use Planned Unit Development (Art.10)  
Address: Summerfield Pointe Residential Development

FEATURE	MU-PUD	MDR DISTRICT	COMMENTS
<b>OVERALL SITE DATA</b>			
Front Building Setback =	30 ft	25 ft	See Plan Sheets SP1, SP2, UT3 & UT4 for Details
Side Building Setback =	5 ft Min. / 14 ft Max.	5 ft Min. / 20 ft. Total	
Rear Building Setback =	30 ft	30 ft	
Road Right of Way =	30 ft. Min.	20 ft.	
<b>Lots &amp; Buildings</b>			
Max. Building Height =	2 Story	2 Story	Proposed Single Family Homes (x108) Proposed Attached Condominiums (x4) Proposed Unit #29
Max. Building Height =	35 ft	35 ft	
Units with Basement =	Yes	N/A	
Min. Building Footprint =	1,400 sf	900 sf	
Min. Lot Area =	6,606 sf	10,000 sf	Proposed Unit #29
Min. Lot Width =	55 ft	75 ft	
<b>Site Area &amp; Coverage:</b>			
Gross Site Area =	26.25 Ac.		#4711-04-400-014
	1.13 Ac.		#4711-04-400-015
	1.14 Ac.		#4711-04-400-016
	<b>28.52 Ac.</b>		<b>Combined Site Area</b>
Nature Preserve Area =	22.21 Ac.		#4711-04-400-013 Dedicated to Genoa Twp.
Open Space Area =	7.30 Ac.		
% Open Space Area =	25.6%		25% Min.
% Overall Site Lot Coverage =	12.6%		
% Max. Unit Lot Coverage =	23.6%	35%	Proposed Unit #29
Bituminous Pavement Area =	2.0 Ac.		Private
Concrete Sidewalk Area =	0.97 Ac.		Private
% Impervious Surface =	10.4%	50%	50% Max.

t: Proposed Site will be serviced by public Water & Sanitary Sewer service.

**NOTES:**

- See sheets SP1 & SP2 for Overall Site layout
- See sheets UT2 & UT3 for site setbacks
- The following permits are required for these proposed site improvements:
  - Genoa Twp. (PUD Amendment, Site Plan, Land Use & Construction)
  - MHO (Sanitary & Watermain)
  - LCRC (Roads)
  - LCDC (Drainage & Soil Erosion)
  - Liv. County (Building Permits)
- Overall Utility Providers:
  - Consumers Energy (Natural Gas)
  - DTE (Electric)
  - AT&T (Telephone)
  - Comcast (Fiber Optic)
  - MHO (Water & Sewer)

**BENCHMARKS**

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPLAN No. 2 OF "SUMMERFIELD POINTE," LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "U.S.G.S." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.

BENCHMARK #204 (PRIMARY)  
SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE." ELEVATION = 993.43 (NAVD 88)  
ELEVATION = 993.93 (PLATTED)  
REF: FIELD BOOK 1483, PG. 34

BENCHMARK #203  
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 334 FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 993.88 (NAVD 88)  
ELEVATION = 994.38 (PLATTED)  
REF: POINT #203

BENCHMARK #200  
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 377 1/2 FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 995.39 (NAVD 88)  
ELEVATION = 995.89 (PLATTED)  
REF: FIELD BOOK 1483, PG. 34  
POINT #200

BENCHMARK #201  
CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 484 FEET EAST OF LAWSON DRIVE. ELEVATION = 991.29 (NAVD 88)  
ELEVATION = 992.14 (PLATTED)  
REF: FIELD BOOK 148, PG. 34  
POINT #201

**PHASE SCHEDULE**

PHASE 1: UNIT 1 - UNIT 14  
PHASE 2: UNIT 50 - UNIT 87  
PHASE 3: UNIT 88 - UNIT 108  
PHASE 4: UNIT 15 - UNIT 49

**LEGEND**

- = EXISTING TREE DRIP LINE
- = EDGE OF GRAVEL
- = CONCRETE CURB (UNLESS OTHERWISE STATED)
- = SANITARY SEWER MANHOLE W/IDENTIFIER
- = SANITARY SEWER PIPE
- = CLEAN OUT
- = STORM WATER MANHOLE W/IDENTIFIER
- = CATCH BASIN W/IDENTIFIER
- = FLARED END SECTION
- = STORM WATER DRAINAGE PIPE
- = HYDRANT
- = WATER SHUT OFF
- = WATER VALVE
- = WATER VALVE BOX
- = WATER MAIN
- = PROP. DRAINAGE AREA
- = PROPOSED SANITARY SEWER
- = PROPOSED WATER MAIN
- = PROPOSED STORM SEWER
- = PROPOSED STREET STRUCTURES
- = PROPOSED CURB AND GUTTER
- = PROPOSED CONCRETE WALK
- = PROPOSED STANDARD DUTY BITUMINOUS PAVEMENT
- = PROPERTY LINE
- = EX. EDGE OF PAVEMENT
- = EX. EASEMENT LINE
- = APPROX. WETLAND LINE
- = PROP. EDGE OF PAVEMENT

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REVISION #	DATE	REVISION-DESCRIPTION
1	03/23/22	REVISED PER TWP. REVIEW COMMENTS DATED 03/16/22 & 03/18/22

REVISION #	DATE	REVISION-DESCRIPTION

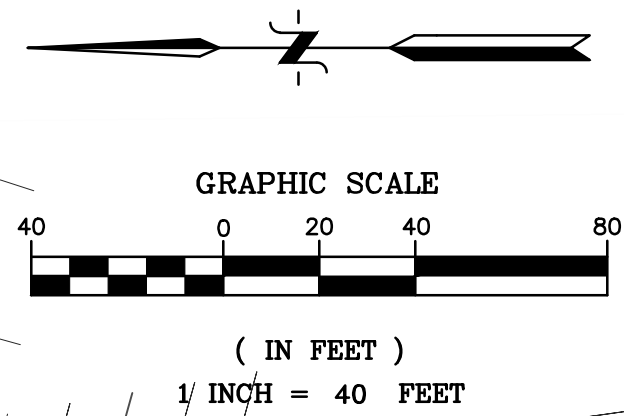
# SUMMERFIELD POINTE ESTATES PUD

## SITE DEVELOPMENT PLAN

CLIENT:	HEALY HOMES AT SUMMERFIELD LLC 3696 SLEETH RD, COMMERCE TOWNSHIP, MICHIGAN 48382 248-684-1699
SCALE:	1in. = 100ft.
PROJECT No.:	214159
DWG NAME:	4159 SD
ISSUED:	MARCH 23, 2022

**SD**





**LEGEND**

- = MISC. STRUCTURE (AS LABELED)
- = CONCRETE CURB (UNLESS OTHERWISE STATED)
- = SANITARY SEWER MANHOLE W/IDENTIFIER
- = SANITARY SEWER PIPE
- = CLEAN OUT
- = STORM WATER MANHOLE W/IDENTIFIER
- = CATCH BASIN W/IDENTIFIER
- = FLARED END SECTION
- = STORM WATER DRAINAGE PIPE
- = HYDRANT
- = WATER SHUT OFF
- = WATER VALVE
- = WATER VALVE BOX
- = WATER MAIN
- = GAS SHUT OFF
- = U/G GAS
- = SPOT ELEVATION
- = 1' CONTOUR
- = 5' CONTOUR
- = PROPERTY LINE
- = EX. EDGE OF PAVEMENT
- = EX. SANITARY SEWER
- = EX. STORM SEWER
- = EX. WATERMAIN
- = EX. EASEMENT LINE
- = APPROX. WETLAND LINE
- = PROP. EDGE OF PAVEMENT
- = PROP. CENTERLINE OF ROAD
- = PROPOSED SANITARY SEWER
- = PROPOSED WATER MAIN
- = PROPOSED STORM SEWER
- = PROPOSED STORM STRUCTURES
- = PROPOSED CURB AND GUTTER
- = PROPOSED CONCRETE WALK
- = PROPOSED STANDARD DUTY BITUMINOUS PAVEMENT
- = PROPOSED HEAVY DUTY BITUMINOUS PAVEMENT

**BENCHMARKS**

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPEAT NO. 2 OF "SUMMERFIELD POINTE," LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN NO. 295. DATUM REFERS TO "N.A.S.S." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.

**BENCHMARK #204 (PRIMARY)**  
SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE," ELEVATION = 993.43 (NAVD 88)  
ELEVATION = 993.93 (PLATTED)  
REF: FIELD BOOK 14B3, PG. 34  
POINT #204

**BENCHMARK #200**  
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 377.8 FEET NORTH OF SILVER LEAF DRIVE.  
ELEVATION = 995.39 (NAVD 88)  
ELEVATION = 995.89 (PLATTED)  
REF: FIELD BOOK 14B3, PG. 34  
POINT #200

**BENCHMARK #201**  
CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 488 FEET EAST OF LAWSON DRIVE.  
ELEVATION = 991.29 (NAVD 88)  
ELEVATION = 992.14 (PLATTED)  
REF: FIELD BOOK 14B, PG. 34  
POINT #201

**BENCHMARK #203**  
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 338 FEET NORTH OF SILVER LEAF DRIVE.  
ELEVATION = 993.88 (NAVD 88)  
ELEVATION = 994.38 (PLATTED)  
REF: POINT #203

**CURVE TABLE**

CURVE	RADIUS	LENGTH	CHORD	BEARING
1	250.00'	112.30'	111.36'	S81°43'34"E
2	200.00'	228.02'	215.87'	S36°11'47"E
3	153.00'	211.80'	195.29'	S36°07'26"W

**NOTES:**

- See sheet SD for site data & zoning table
- See sheets UT2 & UT3 for utility easements
- The address shall be a minimum of 4" high letters of contrasting colors and be clearly visible from the street, the location and size shall be verified prior to installation".

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DESIGN/FAF	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	03/23/22	REVISED PER TWP. REVIEW COMMENTS DATED 03/16/22 & 03/18/22
CHECK: JMB			

REVISION #	DATE	REVISION-DESCRIPTION

**SUMMERFIELD  
POINTE ESTATES PUD**

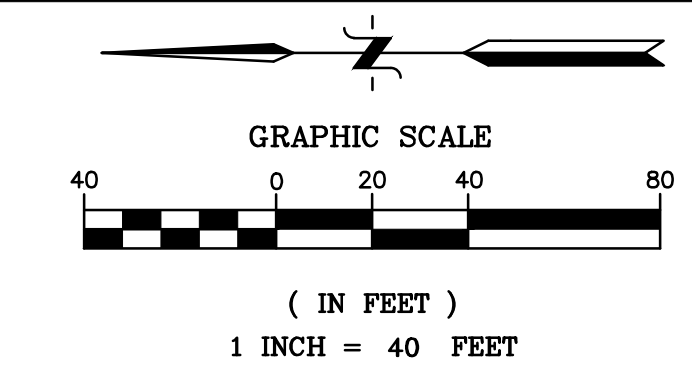
**DIMENSIONAL  
SITE PLAN (SOUTH)**

CLIENT:  
HEALY HOMES AT SUMMERFIELD LLC  
3696 SLEETH RD,  
COMMERCE TOWNSHIP, MICHIGAN 48382  
248-684-1699

SCALE: 1in. = 40ft.  
PROJECT No.: 214159  
DWG NAME: 4159 SP2-3  
ISSUED: MARCH 23, 2022

**SP1**





**LEGEND**

- MISC. STRUCTURE (AS LABELED)
- CONCRETE CURB (UNLESS OTHERWISE STATED)
- SANITARY SEWER MANHOLE W/IDENTIFIER
- SANITARY SEWER PIPE
- CLEAN OUT
- STORM WATER MANHOLE W/IDENTIFIER
- STORM WATER DRAINAGE PIPE
- HYDRANT
- WATER SHUT OFF
- WATER VALVE
- WATER VALVE BOX
- WATER MAIN
- GAS SHUT OFF
- U/G GAS
- SPOT ELEVATION
- 1' CONTOUR
- 5' CONTOUR
- PROPERTY LINE
- EX. EDGE OF PAVEMENT
- EX. SANITARY SEWER
- EX. STORM SEWER
- EX. WATERMAIN
- EX. EASEMENT LINE
- APPROX. WETLAND LINE
- PROP. EDGE OF PAVEMENT
- PROP. CENTERLINE OF ROAD
- PROPOSED SANITARY SEWER
- PROPOSED WATER MAIN
- PROPOSED STORM SEWER
- PROPOSED STORM STRUCTURES
- PROPOSED CURB AND GUTTER
- PROPOSED CONCRETE WALK
- PROPOSED STANDARD DUTY BITUMINOUS PAVEMENT
- PROPOSED HEAVY DUTY BITUMINOUS PAVEMENT

**BENCHMARKS**

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON RE-PLAT No. 2 OF "SUMMERFIELD POINTE," LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "NAD 83" NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.

BENCHMARK #204 (PRIMARY)  
SPRUE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE," ELEVATION = 993.43 (NAVD 88)  
ELEVATION = 993.93 (PLATTED)  
REF: FIELD BOOK 1483, PG. 34  
POINT #204

BENCHMARK #200  
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 377A FEET NORTH OF SILVER LEAF DRIVE.  
ELEVATION = 995.39 (NAVD 88)  
ELEVATION = 995.89 (PLATTED)  
REF: FIELD BOOK 1483, PG. 34  
POINT #200

BENCHMARK #201  
CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 48A FEET EAST OF LAWSON DRIVE.  
ELEVATION = 991.29 (NAVD 88)  
ELEVATION = 992.14 (PLATTED)  
REF: FIELD BOOK 148, PG. 34  
POINT #201

BENCHMARK #203  
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 33A FEET NORTH OF SILVER LEAF DRIVE.  
ELEVATION = 993.88 (NAVD 88)  
ELEVATION = 994.38 (PLATTED)  
REF: POINT #203

**CURVE TABLE**

CURVE	RADIUS	LENGTH	CHORD	BEARING
4	750.00'	56.19'	56.18'	S10°40'25"E
5	660.00'	72.73'	72.69'	N11°41'03"W
6	158.00'	521.46'	315.00'	S70°36'34"W
7	230.00'	61.91'	61.72'	N16°13'44"W
8	100.00'	158.88'	142.67'	S54°01'37"E
9	150.00'	60.30'	59.90'	N77°34'37"E

**NOTES:**

1. See sheet SD for site data & zoning table
2. See sheets UT2 & UT3 for utility easements
3. The address shall be a minimum of 4" high letters of contrasting colors and be clearly visible from the street, the location and size shall be verified prior to installation.

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DESIGN/FAF	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	03/23/22	REVISED PER TWP. REVIEW COMMENTS DATED 03/16/22 & 03/18/22			
CHECK: JMB						

**SUMMERFIELD POINTE ESTATES PUD**

**DIMENSIONAL SITE PLAN (NORTH)**

CLIENT: HEALY HOMES AT SUMMERFIELD LLC  
3696 SLEETH RD., COMMERCE TOWNSHIP, MICHIGAN 48382  
248-684-1699

SCALE: 1in. = 40ft.  
PROJECT No.: 214159  
DWG NAME: 4159 SP2-3  
ISSUED: MARCH 23, 2022

SP2

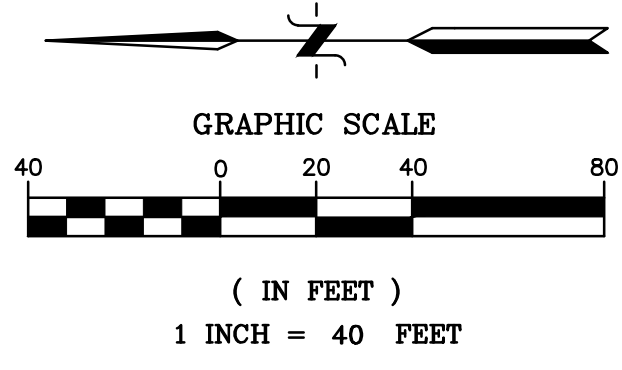


**STRUCTURE INVENTORY**

- SAN SEWER MH-03  
RM 991.83  
INVERTS  
N 8" PVC 981.48  
W 8" PVC 981.48  
S 8" PVC 981.43
- SAN SEWER MH-04  
RM 992.58  
INVERTS  
N 8" PVC 982.58  
E 8" PVC 982.68  
S 8" PVC 982.48
- SAN SEWER MH-13  
RM 992.07  
INVERTS  
NE 8" PVC 984.72  
SE 8" PVC 984.69  
S 8" PVC 984.72
- SAN SEWER MH-12  
RM 993.95  
INVERTS  
N 8" PVC 984.15  
S 8" PVC 984.05
- SAN SEWER MH-14  
RM 993.67  
INVERTS  
SE 8" PVC 985.42
- STORM CATCH BASIN CB-01  
RM 990.86  
INVERTS  
E 12" RCP 984.96
- STORM MANHOLE MH-01A  
RM 993.04  
INVERTS  
S 18" RCP 983.41  
N 21" RCP 981.74
- STORM MANHOLE MH-02B  
RM 987.40  
INVERTS  
SE 36" RCP 972.50  
NW 36" RCP 970.35
- STORM CATCH BASIN CB-03  
RM 990.88  
INVERTS  
W 15" RCP 984.28  
S 15" RCP 984.28  
N 18" RCP 984.08
- STORM MANHOLE #03A  
RM 982.50  
INVERTS  
SE 21" RCP 979.05  
NW 24" RCP 979.00
- STORM CATCH BASIN CB-04  
RM 990.92  
INVERTS  
SW 12" RCP 982.62  
S 21" RCP 981.12  
NW 21" RCP 981.02
- STORM CATCH BASIN CB-05  
RM 990.97  
INVERTS  
W 18" RCP 981.27  
S 21" RCP 980.87  
SE 24" RCP 978.37  
NW 27" RCP 977.07
- STORM CATCH BASIN CB-12  
RM 991.08  
INVERTS  
W 12" RCP 985.88
- STORM CATCH BASIN CB-13  
RM 991.07  
INVERTS  
SW 12" RCP 985.07  
W 12" RCP 984.52  
E 15" RCP 984.47
- STORM CATCH BASIN CB-21  
RM 991.04  
INVERTS  
W 18" RCP 981.61  
E 18" RCP 981.50
- STORM CATCH BASIN CB-22  
RM 991.07  
INVERTS  
SE 12" RCP 985.27
- STORM CATCH BASIN CB-23  
RM 991.12  
INVERTS  
NW 12" RCP 984.92  
E 12" RCP 984.80

- NOTES:**
1. See sheets UT3 & UT4 for proposed utility casement plan.
  2. See sheets UT5 & UT6 for control structure, detention basin, storm sewer, & sanitary sewer calculations.
  3. A permit from MHO is required for sanitary & water main connections.

Structure	Diameter (ft.)	Casting Type
<b>Storm Sewer structures:</b>		
Manholes	4'	EJIW 1040, Type "A" Solid Cover
Curb Catch Basin	2', 4' & 6'	EJIW 7065-T1-M1 (Flat Grate & Roll Back)
Yard Basin	2' & 4'	EJIW 1020, Type-01 (Beehive Grate)
Roof Drain	---	EJIW 15782-A
<b>Sanitary Sewer structures:</b>		
Manholes	4'	EJIW 1040 (Sanitary Watertight)
Cleanout	---	EJIW 1574 A



**LEGEND**

- = MISC. STRUCTURE (AS LABELED)
- = MONITOR WELL
- = BOLLARD
- ⊕ = SIGN
- ⊙ = LIGHT BASE
- ⊛ = UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX)
- ⊞ = UTILITY POLE W/GUY WIRE
- = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
- = EDGE OF WOODS / TREE DRIP LINE
- ⊙ = DEODIOUS TREE W/IDENTIFIER
- ⊙ = CONIFEROUS TREE W/IDENTIFIER
- ⊙ = FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
- = EDGE OF GRAVEL
- = CONCRETE CURB (UNLESS OTHERWISE STATED)
- ⊙ = SANITARY SEWER MANHOLE W/IDENTIFIER
- = SANITARY SEWER PIPE
- ⊙ = STORM WATER MANHOLE W/IDENTIFIER
- ⊙ = CATCH BASIN W/IDENTIFIER
- ⊙ = FLARED END SECTION
- = STORM WATER DRAINAGE PIPE
- ⊙ = HYDRANT
- ⊙ = WATER VALVE
- ⊙ = WATER VALVE BOX
- = WATER MAIN
- ⊙ = GAS/GASOLINE COVER
- ⊙ = GAS SHUT OFF
- = U/G GAS
- ⊙ = 1' CONTOUR
- ⊙ = 5' CONTOUR
- = PROP. CURB
- = PROP. EDGE OF PAVEMENT
- = PROP. EDGE OF SEWER
- = PROP. WATER MAIN

**BENCHMARKS**

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPEAT NO. 2 OF "SUMMERFIELD POINTE" LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN NO. 295. DATUM REFERS TO "U.S.C.S." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.

BENCHMARK #201 (PRIMARY)  
SPRINKLE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE." ELEVATION = 993.43 (PLATTED) REF: FIELD BOOK 14B3, PG. 34 POINT #204

BENCHMARK #202  
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 377A FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 995.39 (NAVD 88) REF: FIELD BOOK 14B3, PG. 34 POINT #200

BENCHMARK #203  
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 33A FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 993.88 (NAVD 88) REF: FIELD BOOK 14B3, PG. 34 POINT #203

**SUMMERFIELD POINTE P.U.D. UTILITIES QUANTITY**

Water Main	
8" CL54 D.I. Watermain	3,331 LF.
6" CL54 D.I. Watermain	80 LF.
8" Gate Valve in Well (5" Dia.)	5 Each
Hydrant + Valve Assembly	8 Each
8"x8"x8" Tee	2 Each
8"x8"x6" Tee	8 Each
8" Tapping Sleeve & Valve in Well	1 Each
8" Valve in Well	4 Each
8"-11.25" Bend	16 Each
8"-22.25" Bend	7 Each
8"-45" Bend	2 Each
8" 90° Bend	6 Each
2" Copper Water Lead	4,943 LF.
Water Shutoff	108 Each

Sanitary Sewer	
8" SDR 26 PVC Sanitary Sewer Main	3,987 LF.
6" SDR 26 PVC Sanitary Sewer Lead	3,300 LF.
Sanitary Cleanouts	108 Each
4" Dia. Concrete Manhole w/solid Manhole Cover	22 Each

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DESIGN/FAV	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	03/23/22	REVISED PER TWP. REVIEW COMMENTS DATED 03/16/22 & 03/18/22
CHECK: WMP			

REVISION #	DATE	REVISION-DESCRIPTION

**SUMMERFIELD  
POINTE ESTATES PUD**

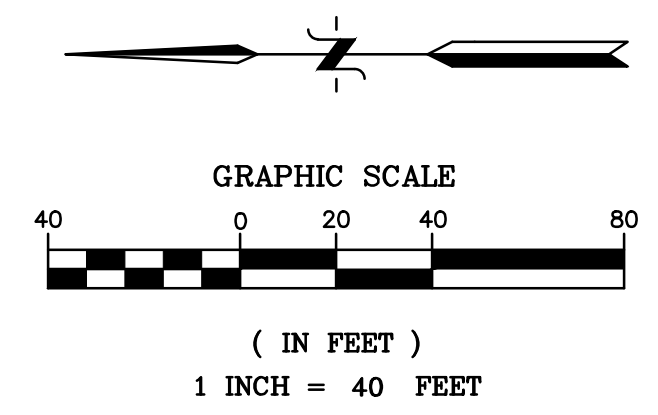
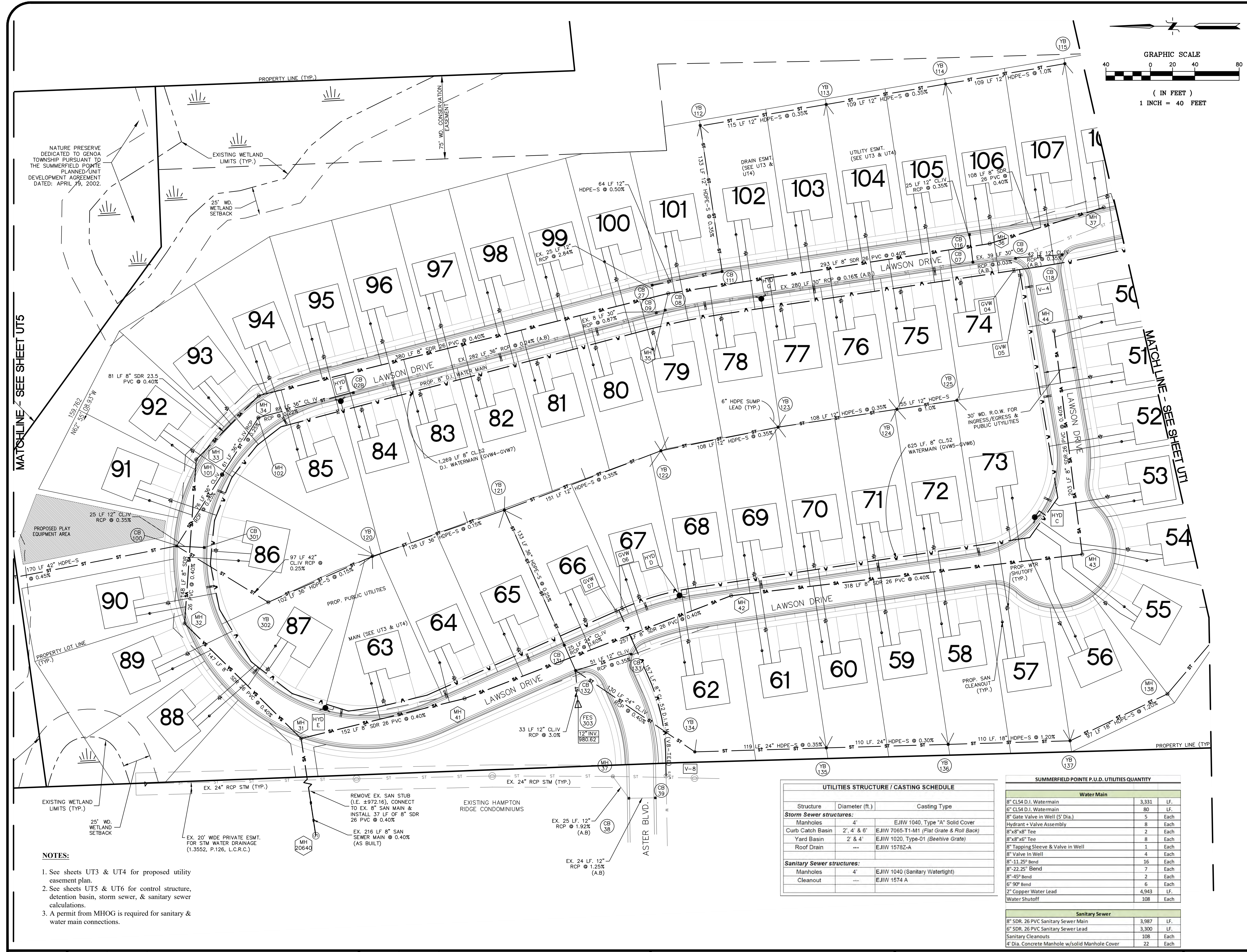
**UTILITY PLAN  
SOUTH**

CLIENT: HEALY HOMES AT SUMMERFIELD LLC  
3696 SLEETH RD., COMMERCE TOWNSHIP, MICHIGAN 48382  
248-684-1699

SCALE: 1in. = 40ft.  
PROJECT No.: 214159  
DWG NAME: 4159\_UT  
ISSUED: MARCH 23, 2022

**UT1**





**LEGEND**

- MISC. STRUCTURE (AS LABELED)
- MONITOR WELL
- BOLLARD
- SIGN
- LIGHT BASE
- UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX)
- UTILITY POLE W/GUY WIRE
- OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
- EDGE OF WOODS / TREE DRIP LINE
- DECIDUOUS TREE W/IDENTIFIER
- CONIFEROUS TREE W/IDENTIFIER
- FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
- EDGE OF GRAVEL
- CONCRETE CURB (UNLESS OTHERWISE STATED)
- SANITARY SEWER MANHOLE W/IDENTIFIER
- SANITARY SEWER PIPE
- STORM WATER MANHOLE W/IDENTIFIER
- CATCH BASIN W/IDENTIFIER
- FLARED END SECTION
- STORM WATER DRAINAGE PIPE
- HYDRANT
- WATER VALVE
- WATER VALVE BOX
- WATER MAIN
- GAS/GASOLINE COVER
- GAS SHUT OFF
- U/G GAS
- 1' CONTOUR
- 5' CONTOUR
- PROP. CURB
- PROP. EDGE OF PAVEMENT
- PROP. STORM SEWER
- PROP. WATER MAIN
- AS BUILT

**BENCHMARKS**

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPEAT No. 2 OF "SUMMERFIELD POINTE," LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "U.S.C.S." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.

BENCHMARK #201  
CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 48± FEET EAST OF LAWSON DRIVE.  
ELEVATION = 991.29 (NAVD 88)  
ELEVATION = 992.14 (PLATTED)  
REF: FIELD BOOK 1483, PG. 34  
POINT #201

BENCHMARK #204 (PRIMARY)  
SPRINK IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE, AND THE ENTRANCE TO "SUMMERFIELD POINTE." ELEVATION = 993.43 (NAVD 88)  
ELEVATION = 993.93 (PLATTED)  
REF: FIELD BOOK 1483, PG. 34  
POINT #204

BENCHMARK #203  
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 33± FEET NORTH OF SILVER LEAF DRIVE.  
ELEVATION = 993.88 (NAVD 88)  
ELEVATION = 994.38 (PLATTED)  
REF: POINT #203

BENCHMARK #200  
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 377± FEET NORTH OF SILVER LEAF DRIVE.  
ELEVATION = 995.39 (NAVD 88)  
ELEVATION = 995.89 (PLATTED)  
REF: FIELD BOOK 1483, PG. 34  
POINT #200

**STRUCTURE INVENTORY**

SAN SEWER MH #20640 (OFFSITE)  
RM = 989.00  
INVERTS  
W 8" PVC 971.30  
STORM CATCH BASIN CB-02 (REPLACE CASTI)  
RM = 990.81  
INVERTS  
W 12" RCP 984.61  
N 15" RCP 984.56  
STORM CATCH BASIN CB-06  
RM = 989.39  
INVERTS  
SE 27" RCP 976.81  
N 30" RCP 976.64  
STORM CATCH BASIN CB-07  
RM = 989.53  
INVERTS  
S 30" RCP 976.63  
N 30" RCP 973.72  
STORM CATCH BASIN CB-08  
RM = 986.78  
INVERTS  
S 30" RCP 973.26  
N 30" RCP 973.26  
STORM CATCH BASIN CB-09  
RM = 986.97  
INVERTS  
E 12" RCP 978.19  
S 30" RCP 973.19  
N 36" RCP 973.19  
STORM CATCH BASIN CB-27  
RM = 986.36  
INVERTS  
W 12" RCP 978.90  
STORM MANHOLE MH-37  
RM = 984.31  
INVERTS  
N 24" RCP 979.36  
SW 12" RCP 980.56  
STORM CATCH BASIN CB-38  
RM = 985.74  
INVERTS  
NE 12" RCP 981.14  
S 12" RCP 981.04  
STORM CATCH BASIN CB-39  
RM = 985.74  
INVERTS  
N 12" RCP 981.44

**UTILITIES STRUCTURE / CASTING SCHEDULE**

Structure	Diameter (ft.)	Casting Type
Storm Sewer structures:		
Manholes	4'	EJIW 1040, Type "A" Solid Cover
Curb Catch Basin	2', 4' & 6'	EJIW 7065-T1-M1 (Flat Grate & Roll Back)
Yard Basin	2' & 4'	EJIW 1020, Type-01 (Beehive Grate)
Roof Drain	---	EJIW 1578Z-A
Sanitary Sewer structures:		
Manholes	4'	EJIW 1040 (Sanitary Watertight)
Cleanout	---	EJIW 1574 A

**SUMMERFIELD POINTE P.U.D. UTILITIES QUANTITY**

Water Main	
8" CL54 D.I. Watermain	3,331 LF.
6" CL54 D.I. Watermain	80 LF.
8" Gate Valve in Well (5" Dia.)	5 Each
Hydrant + Valve Assembly	8 Each
8"x8"x8" Tee	2 Each
8"x8"x6" Tee	8 Each
8" Tapping Sleeve & Valve in Well	1 Each
8" Valve in Well	4 Each
8"-11.25" Bend	16 Each
8"-22.25" Bend	7 Each
8"-45" Bend	2 Each
6" 90° Bend	6 Each
2" Copper Water Lead	4,943 LF.
Water Shutoff	108 Each
Sanitary Sewer	
8" SDR, 26 PVC Sanitary Sewer Main	3,987 LF.
6" SDR, 26 PVC Sanitary Sewer Lead	3,300 LF.
Sanitary Cleanouts	108 Each
4" Dia. Concrete Manhole w/solid Manhole Cover	22 Each

- NOTES:**
- See sheets UT3 & UT4 for proposed utility easement plan.
  - See sheets UT5 & UT6 for control structure, detention basin, storm sewer, & sanitary sewer calculations.
  - A permit from MHOOG is required for sanitary & water main connections.

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BRIGHTON, MICHIGAN 48114

DESIGN/FAF	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	03/23/22	REVISED PER TMP. REVIEW COMMENTS DATED 03/16/22 & 03/18/22			
CHECK: WMP						

**SUMMERFIELD POINTE ESTATES PUD**

**UTILITY PLAN NORTH**

CLIENT: HEALY HOMES AT SUMMERFIELD LLC  
3696 SLEETH RD., COMMERCE TOWNSHIP, MICHIGAN 48382  
248-684-1699

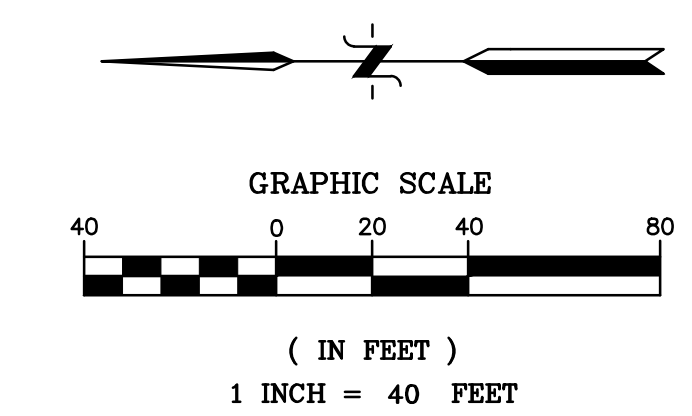
SCALE: 1in. = 40ft.  
PROJECT No.: 214159  
DWG NAME: 4159\_UT  
ISSUED: MARCH 23, 2022

**UT2**









LEGEND

- = MISC. STRUCTURE (AS LABELED)
- = MONITOR WELL
- = BOLLARD
- = SIGN
- ☆ = LIGHT BASE
- □ □ □ = UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX)
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- EL = U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
- CTV = U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
- UT = U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
- = EDGE OF WOODS / TREE DRIP LINE
- = DECIDUOUS TREE W/IDENTIFIER
- = CONIFEROUS TREE W/IDENTIFIER
- = FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
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- = WATER VALVE BOX
- = WATER MAIN
- = GAS/GASOLINE COVER
- = GAS SHUT OFF
- = U/G GAS
- = 1' CONTOUR
- = 5' CONTOUR
- = PROP. CURB
- = PROP. EDGE OF PAVEMENT
- = PROP. STORM SEWER
- = PROP. WATER MAIN
- = PROPOSED UTILITY EASEMENT
- = PROPOSED PROPERTY SETBACK

BENCHMARKS

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPEAT No. 2 OF "SUMMERFIELD POINTE," LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "U.S.G.S." NO DATUM SPECIFIED. ELEVATION = 991.29 (NAVD 88) REF: FIELD BOOK 148, PG. 34 POINT #201

BENCHMARK #201 CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 48+ FEET EAST OF LAWSON DRIVE. ELEVATION = 992.14 (NAVD 88) REF: FIELD BOOK 148, PG. 34 POINT #201

BENCHMARK #204 (PRIMARY) SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE." ELEVATION = 993.43 (NAVD 88) REF: FIELD BOOK 148, PG. 34 POINT #204

BENCHMARK #203 ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 33+ FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 993.88 (NAVD 88) REF: FIELD BOOK 148, PG. 34 POINT #203

BENCHMARK #200 ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 37+ FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 995.39 (NAVD 88) REF: FIELD BOOK 148, PG. 34 POINT #200

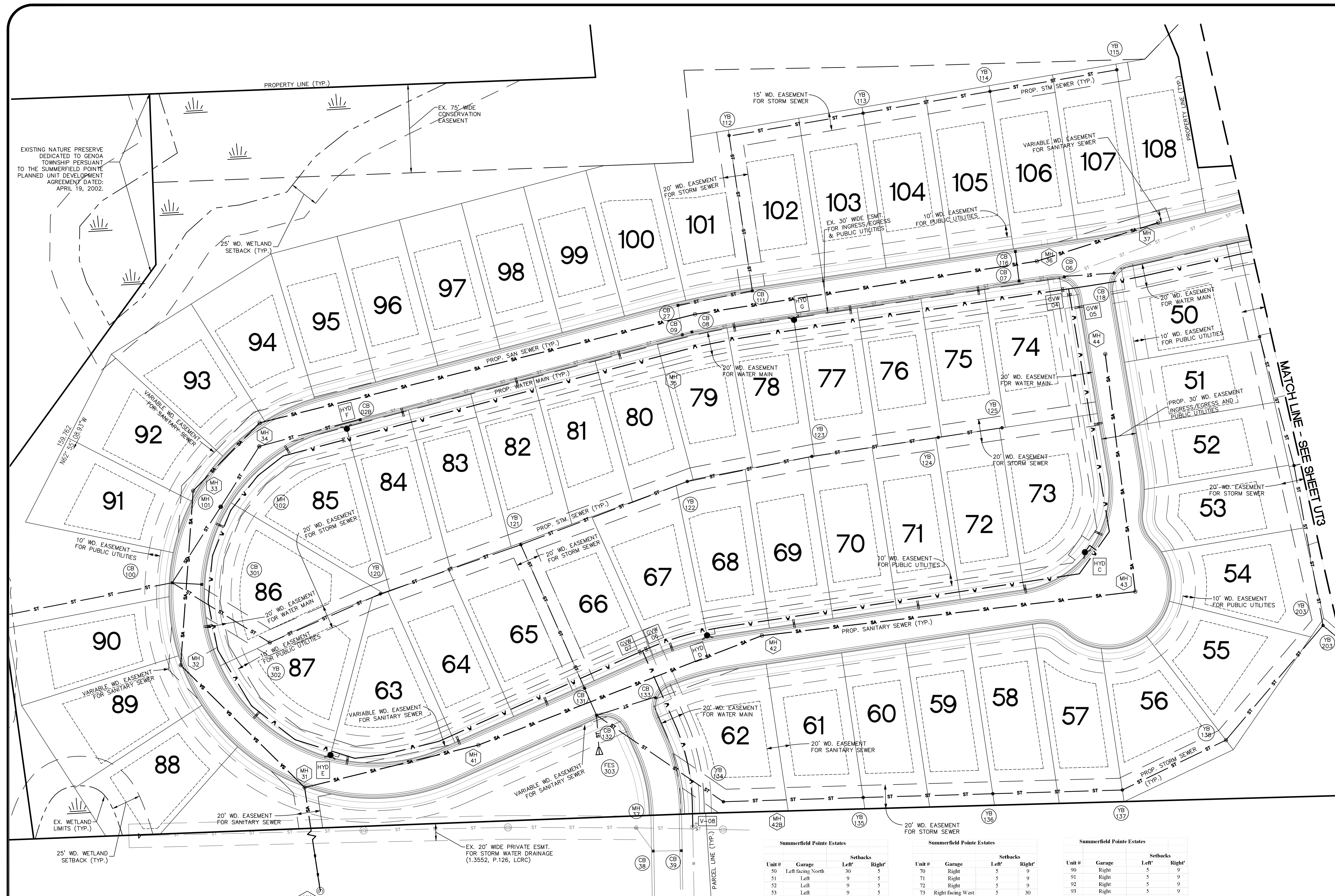
NOTES:

1. See sheets UT5 & UT6 for control structure, detention basin, storm sewer, & sanitary sewer calculations.
2. A permit from MHO is required for sanitary & water main connections.

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Summerfield Pointe Estates				Summerfield Pointe Estates				Summerfield Pointe Estates			
Unit #	Garage	Left	Right	Unit #	Garage	Left	Right	Unit #	Garage	Left	Right
50	Left facing North	30	5	70	Right	5	9	90	Right	5	9
51	Left	9	5	71	Right	5	9	91	Right	5	9
52	Left	9	5	72	Right	5	9	92	Right	5	9
53	Left	9	5	73	Right facing West	5	30	93	Right	5	9
54	Left	9	5	74	Left facing East	30	5	94	Right	5	9
55	Left	9	5	75	Left	9	5	95	Right	5	9
56	Left	9	5	76	Left	9	5	96	Right	5	9
57	Left	9	5	77	Left	9	5	97	Right	5	9
58	Left	9	5	78	Left	9	5	98	Right	5	9
59	Left	9	5	79	Left	9	5	99	Right	5	9
60	Left	9	5	80	Left	9	5	100	Right	5	9
61	Left	9	5	81	Left	9	5	101	Right	5	10
62	Right facing East	5	30	82	Left	9	5	102	Right	10	9
63	Right	5	9	83	Left	9	5	103	Right	5	9
64	Right	5	9	84	Left	9	5	104	Right	5	9
65	Right	5	10	85	Left	9	10	105	Right	5	9
66	Right	10	9	86	Left	10	9	106	Right	5	9
67	Right	5	9	87	Right	5	9	107	Right	5	9
68	Right	5	9	88	Right	5	9	108	Right	5	9
69	Right	5	9	89	Right	5	9				

DESIGN/FAF	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	03/23/22	REVISED PER TWP. REVIEW COMMENTS DATED 03/16/22 & 03/18/22			
CHECK: JMB						

SUMMERFIELD POINTE ESTATES PUD  
UTILITY EASEMENT PLAN NORTH

CLIENT: HEALY HOMES AT SUMMERFIELD LLC  
3696 SLEETH RD., COMMERCE TOWNSHIP, MICHIGAN 48382  
248-684-1699

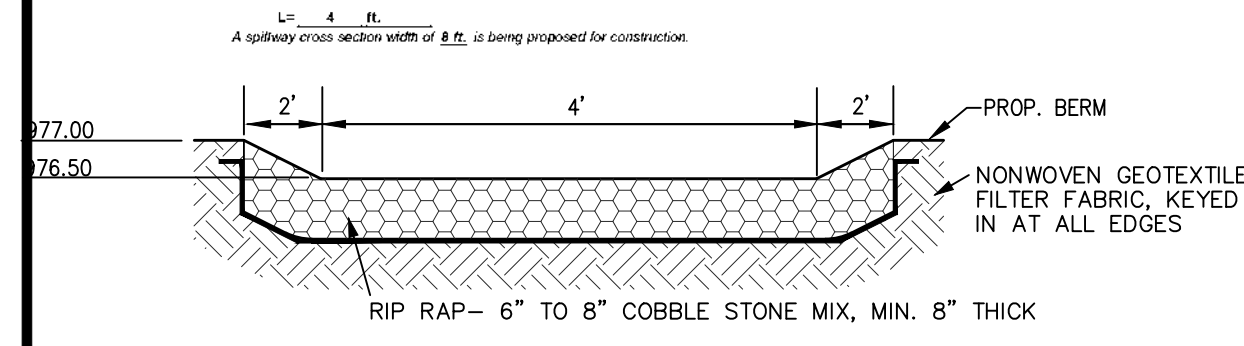
SCALE: 1in. = 40ft.  
PROJECT No.: 214159  
DWG NAME: 4159\_UT  
ISSUED: MARCH 23, 2022

UT4



**Detention "A" Emergency Spillway Calculation**

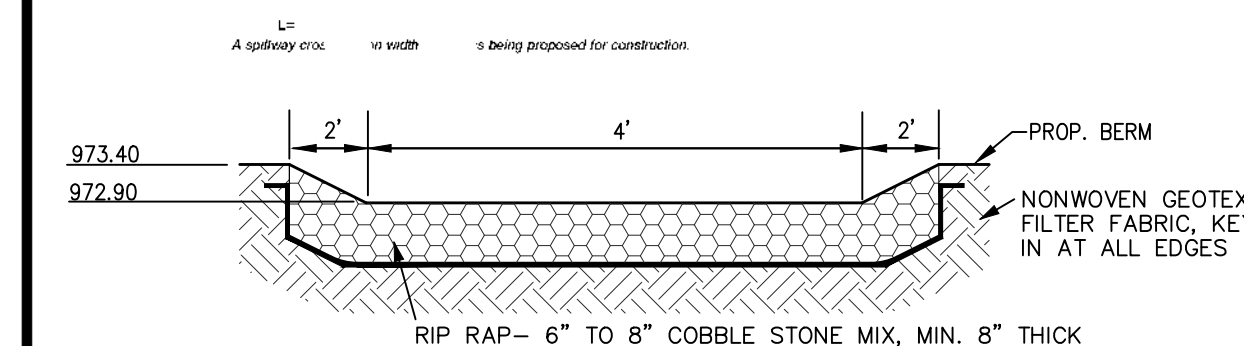
Project: Summerfield Pointe Estates  
 Date: 11/15/2021  
 Dimensions for the proposed Spillway have been calculated using the following equation:  
 $Q = C \cdot A \cdot H^{1.49}$   
 Where:  
 C = 0.36  
 A = 2.57 Ac.  
 H = 0.50 ft.  
 L = 11.40 ft.  
 A spillway cross section with 6" to 8" rip-rap is being prepared for construction.



**EMERGENCY SPILLWAY ELEVATION**  
NOT TO SCALE

**Forebay Spillway Calculation**

Project: Summerfield Pointe Estates  
 Date: 11/15/2021  
 Dimensions for the proposed Spillway have been calculated using the following equation:  
 $Q = C \cdot A \cdot H^{1.49}$   
 Where:  
 C = 0.31  
 A = 0.99 Ac.  
 H = 0.50 ft.  
 L = 14.20 ft.  
 A spillway cross section with 6" to 8" rip-rap is being prepared for construction.



**FOREBAY SPILLWAY ELEVATION**  
NOT TO SCALE

EXISTING DETENTION BASIN "A" 100 YEAR STORM VOLUME						
Duration (Minutes)	Duration (Seconds)	Intensity (100-yr Storm) (in/hr)	Col. 2 * Col. 3 (inches)	Inflow Volume = Col. 4 * K1 (Cubic Feet)	Outflow Volume = Col. 2 * Qo (Cubic Feet)	Storage Volume = Col. 5 - Col. 6 (Cubic Feet)
5	300	0.71	2760	42,347	40,335	2,012
10	600	7.86	4714	72,595	4,025	68,570
15	900	6.88	6188	95,281	6,037	89,244
20	1,200	6.11	7333	112,926	8,050	104,876
30	1,800	5.00	6000	138,591	12,074	126,517
60	3,600	3.24	11647	179,353	24,149	155,204
90	5,400	2.39	12913	198,848	36,223	162,625
120	7,200	1.90	13655	210,276	48,298	161,978
180	10,800	1.34	14488	223,069	72,448	150,621
240	14,400	1.04	14943	230,113	96,595	133,518

\* Allowable outflow rate Qo is computed by one of the following cases:  
 Case 1: Qo = Approved Discharge  
 Case 2: Qo = q \* A where q = Permissible discharge rate per acre of tributary area = 0.20 cfs / Acre  
 Note: Figures in Columns (3) and (4) are computed by the formula  $q = 275 / (t + 25)$  (i.e. 100-yr Curve).  
**Bankfull Volume:** (5.180)(A)(C) = 79,611 cf  
**First Flush Volume:** (1.815)(A)(C) = 28,003 cf  
**Forebay Volume (5% of 100 Year Volume):** = 8,131 cf

**NOTES:**

- See sheets UT3 & UT4 for proposed utility easement plan.
- See sheets UT6 for storm sewer, & sanitary sewer calculations.
- A permit from MHOG is required for sanitary & water main connections.

DETENTION BASIN "A" VOLUME CALCULATIONS				
POND DEPTH (FT)	ELEV.	CONTOUR AREA (SF)	INCREMENTAL VOLUME (CF)	TOTAL VOLUME (CF)
BOTTOM	971.00	11,751	0	0
1	972.00	18,927	15,197	15,197
2	973.00	32,624	23,467	40,664
3	974.00	46,082	39,160	79,824
4	975.00	58,441	50,689	130,513
5	976.00	69,381	60,326	190,841
FREEBORD	977.00	74,437	69,845	260,686

**Detention Storage Elevation Calculation:**

ELEV.	VOLUME	VOLUME REQ.	ELEVATION	
LOWER	976.00	130,513	162,625	975.53
HIGHER	976.00	190,841		

**Bankfull Storage Elevation Calculation:**

ELEV.	VOLUME	VOLUME REQ.	ELEVATION	
LOWER	973.00	49,664	79,611	973.99
HIGHER	974.00	79,824		

**First Flush Storage Elevation Calculation:**

ELEV.	VOLUME	VOLUME REQ.	ELEVATION	
LOWER	972.00	15,197	28,003	972.59
HIGHER	973.00	40,664		

**Forebay Storage Calculation:**

POND DEPTH (FT)	ELEV.	CONTOUR AREA (SF)	INCREMENTAL VOLUME (CF)	TOTAL VOLUME (CF)
BOTTOM	970.00	565	0	0
1	971.00	2,133	1,842	1,842
2	972.00	2,769	2,440	4,281
3	973.00	4,499	3,584	7,865
SPILLWAY	973.40	5,478	1,992	9,858

LOWER 973.00 7,876 8.131 973.05  
 HIGHER 973.40 9,858

Existing Forebay Spillway Elevation = 973.40

PROPOSED CS-301 CALCULATIONS				
Tributary Area:	A = 33.54 Acres			
Compound Runoff Coefficient:	C = 0.46			
Orifice Flow Coefficient:	Cd = 0.6			
Allowable Outflow Rate:	Qa = 8.71 CFS			
100 Year Flood Volume:	V100 = 162,625 CF			
Bankfull Flood Volume = 5180 x A x C	Vbf = 79,611 CF			
First Flush Volume = 1815 x A x C	Vff = 28,003 CF			

Low Water Level: LWL = 970.80 (CS #301 Outlet I.E.)  
 First Flush Elevation: Xff = 973.50  
 Bankfull Flood Elevation: Xbf = 973.99  
 Using Proposed 100 Yr. Flood Elevation: X100 = 975.53

**FIRST FLUSH:**  
 Qff =  $Vff * (1 / 24 \text{ hrs}) * (1 / 3600 \text{ sec}) = 0.3241 \text{ CFS}$   
 Hff =  $Xff - LWL = 1.70 \text{ FT}$   
 Aff =  $Qff / (c * \text{SQRT}(2 * 32.2 * Hff)) = 0.0516 \text{ SF}$   
 Nff =  $Aff / 0.00852 = 6.05 \text{ (1-1/4" Holes)}$

Use Nff = 6 1-1/4" Holes at CL Elevation = 970.85  
 Approx. First Flush Detention Duration = 24.21 hours

**BANKFULL FLOOD:**  
 H =  $Xbf - LWL = 3.19 \text{ FT}$   
 Qbf =  $c * Nbf * 0.00852 * \text{SQRT}(2 * 32.2 * H) = 0.4399 \text{ CFS}$   
 Vprovided =  $Qbf * 24 \text{ hrs} * (3600 \text{ sec} / 1 \text{ hr}) = 38,011 \text{ CF}$   
 Vneeded =  $Vbf - Vprovided = 41,600 \text{ CF}$

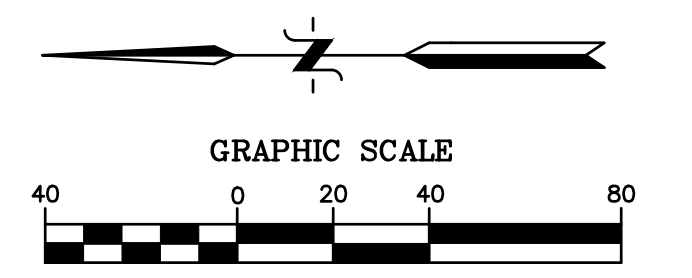
Qbf =  $Vneeded * (1 / 24 \text{ hrs}) * (1 / 3600 \text{ sec}) = 0.48 \text{ CFS}$   
 Hbf =  $Xbf - Xff = 1.49 \text{ FT}$   
 Abf =  $Qbf / (c * \text{SQRT}(2 * 32.2 * Hbf)) = 0.0819 \text{ SF}$   
 Nbf =  $Abf / 0.0123 = 6.66 \text{ (1-1/2" Holes)}$

Use Nbf = 6 1-1/2" Holes at CL Elevation = 972.57  
 Approx. Bankfull Detention Duration = 50.90 hours

**100 YEAR FLOOD:**  
 Q100 =  $Qbf * (c * Nbf * 0.00852 * \text{SQRT}(2 * 32.2 * (X100 - LWL))) / (c * Nbf * 0.0123 * \text{SQRT}(2 * 32.2 * (X100 - Xff))) = 1.15 \text{ CFS}$   
 H100 =  $X100 - LWL = 5.55 \text{ FT}$   
 A100needed =  $Q100needed / (c * \text{SQRT}(2 * 32.2 * H100)) = 0.9302 \text{ SF}$   
 N100needed =  $A100needed / 0.0412 = 22.58 \text{ (2-3/4" Holes)}$

Use N100 = 22 2-3/4" Holes at CL Elevation = 974.11  
 A100 =  $(2.75/24) * (2 * 3.14159) * 0.0412 \text{ SF}$   
 A100total =  $N100 * A100 = 0.9074 \text{ SF}$   
 Qtotal =  $Qbf * Qbf / (0.6 * A100total * \text{SQRT}(2 * 32.2 * Htotal)) = 6.57 \text{ CFS} < 6.71 \text{ CFS (Qa)}$

KEY	
A	CONTROL STRUCTURE DESIGNATION CS-400
B	MATERIAL TYPE, SEE NOTE 2 CMP
C	STRUCTURE INSIDE DIAMETER 5'
D	RIM ELEVATION WITHOUT GRATE 975.53
E	INVERT ELEVATION OUTLET PIPE 970.80
F	TOP OF STONE ELEVATION 975.13
G	OUTLET PIPE DIAMETER 15"
H	OUTLET PIPE MATERIAL RCP
I	STRUCTURE HEIGHT WITHOUT GRATE 6.73'
J	SUMP HEIGHT 2'
K	ORIFICE PIPE DIA. N/A
L	FIRST ROW OF HOLES CENTERLINE ELEVATION HOLE DIAMETER NUMBER OF HOLES IN ROW 970.85 1-1/4" 6
M	SECOND ROW OF HOLES CENTERLINE ELEVATION HOLE DIAMETER NUMBER OF HOLES IN ROW 972.57 1-1/2" 6
N	THIRD ROW OF HOLES CENTERLINE ELEVATION HOLE DIAMETER NUMBER OF HOLES IN ROW 974.11 2-3/4" 22



**LEGEND**

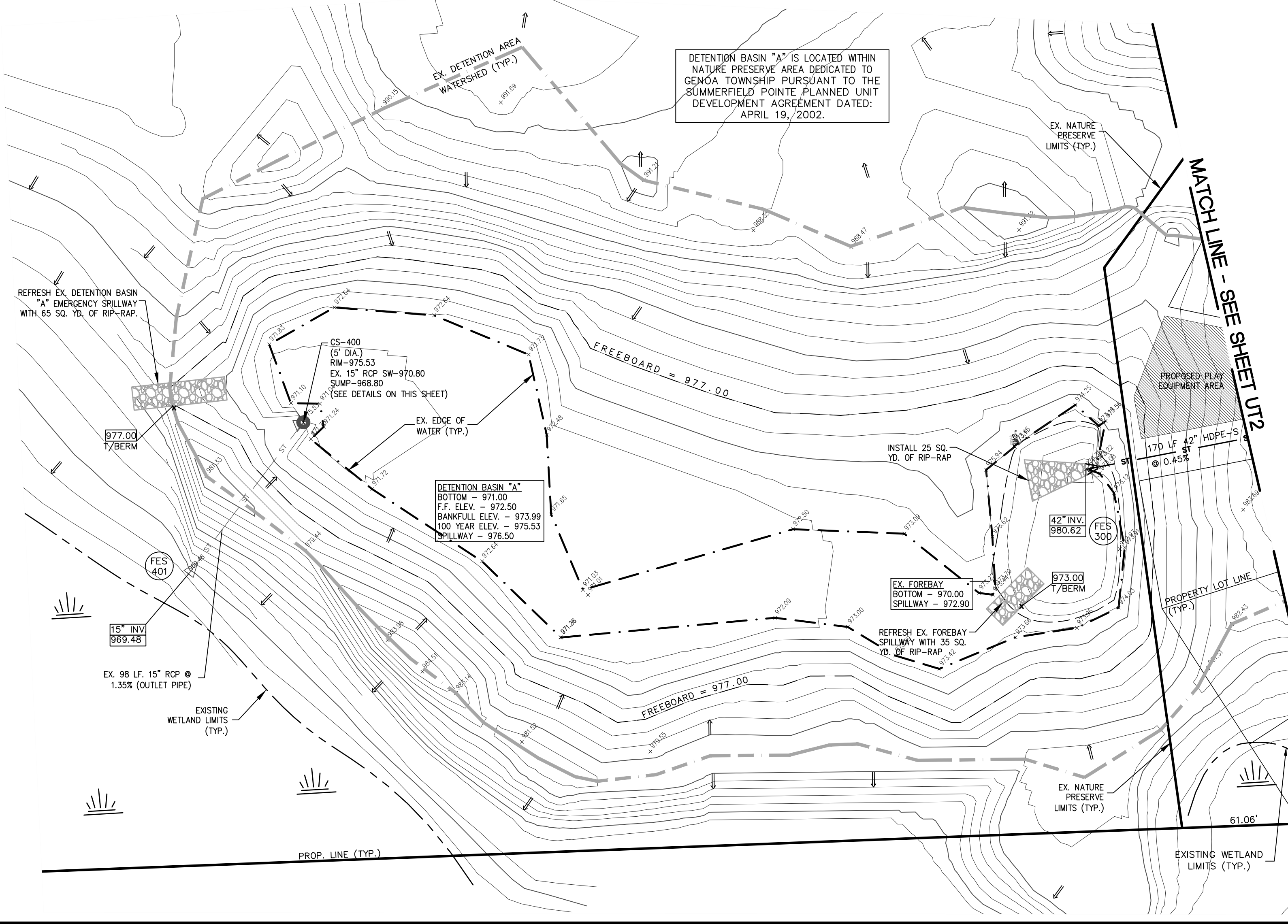
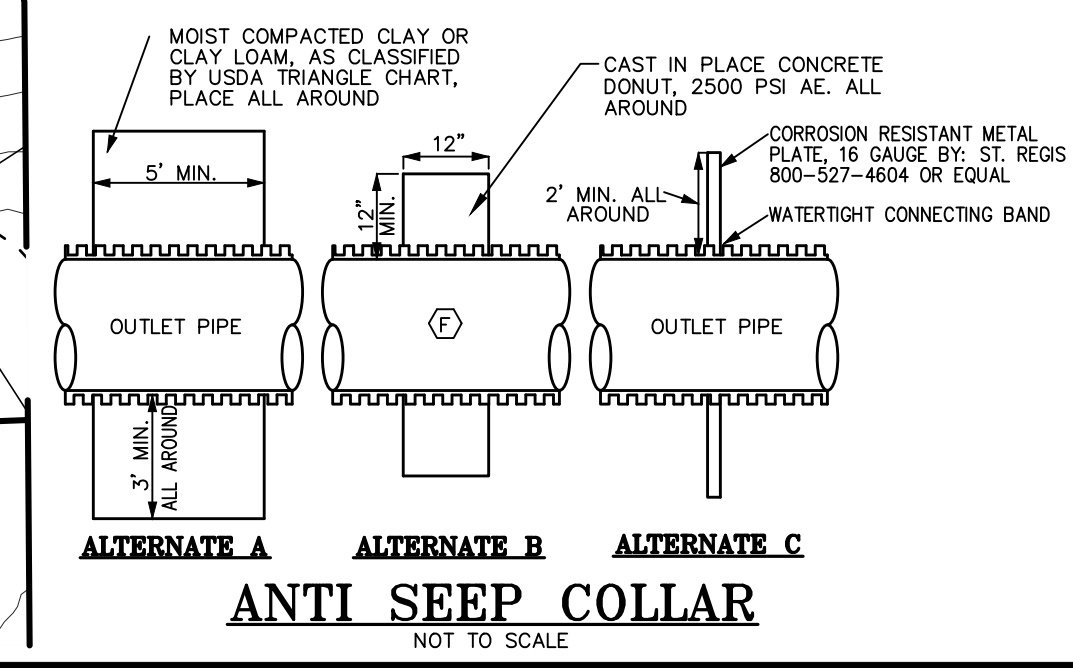
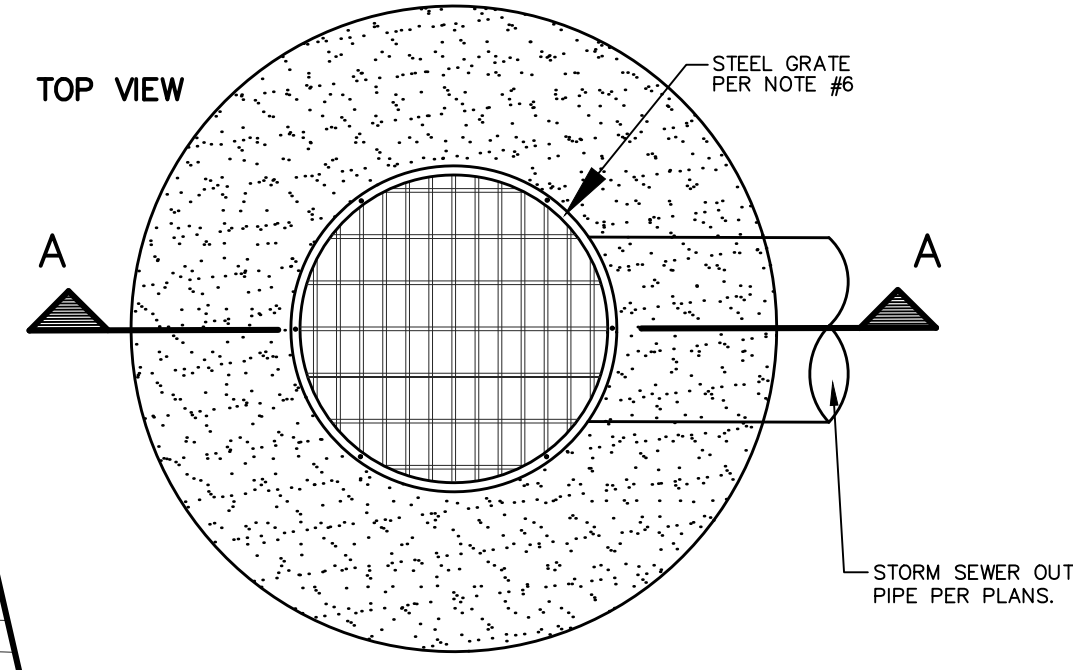
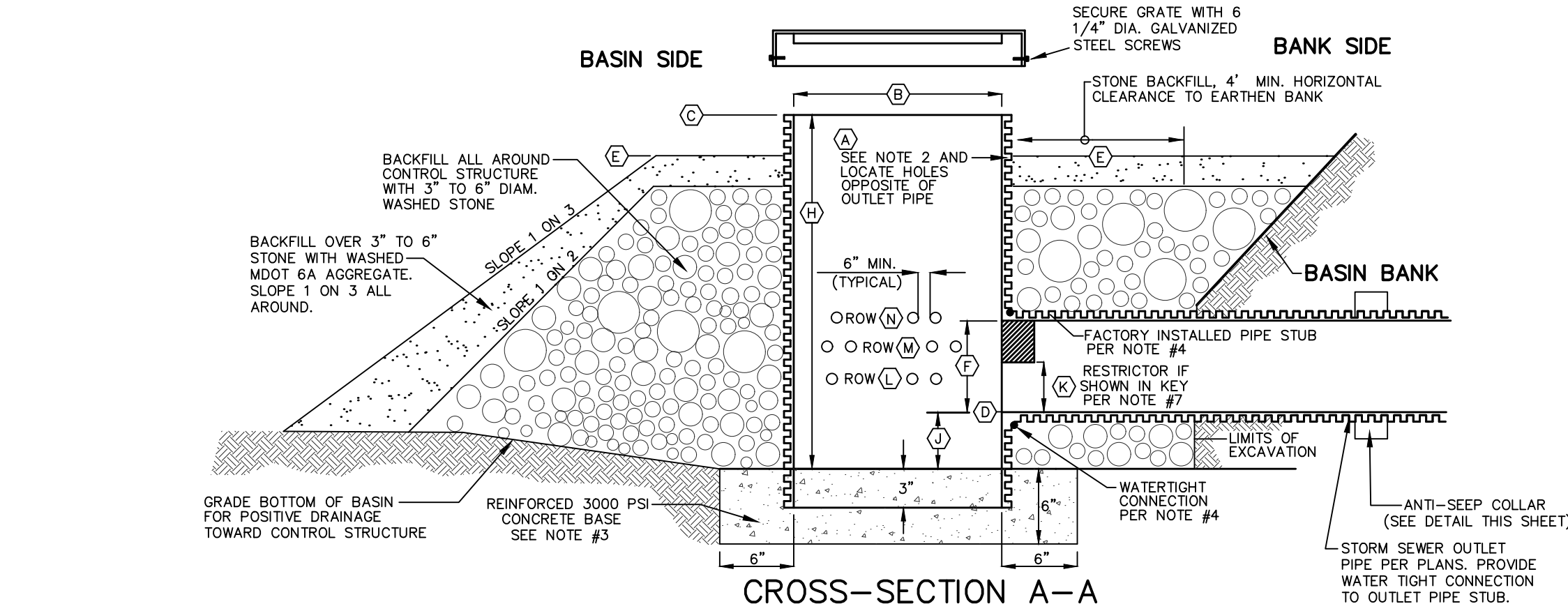
- MISC. STRUCTURE (AS LABELED)
- MONITOR WELL
- BOLLARD
- SIGN
- LIGHT BASE
- UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX)
- UTILITY POLE W/GUY WIRE
- OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
- EDGE OF WOODS / TREE DRIP LINE
- DECIDUOUS TREE W/IDENTIFIER
- CONIFEROUS TREE W/IDENTIFIER
- FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
- EDGE OF GRAVEL
- CONCRETE CURB (UNLESS OTHERWISE STATED)
- SANITARY SEWER MANHOLE W/IDENTIFIER
- SANITARY SEWER PIPE
- STORM WATER MANHOLE W/IDENTIFIER
- CATCH BASIN W/IDENTIFIER
- FLARED END SECTION
- STORM WATER DRAINAGE PIPE
- HYDRANT
- WATER VALVE
- WATER VALVE BOX
- WATER MAIN
- GAS/CASOLINE COVER
- GAS SHUT OFF
- U/G GAS
- 1' CONTOUR
- 5' CONTOUR
- PROP. CURB
- PROP. EDGE OF PAVEMENT
- PROP. STORM SEWER
- PROP. WATER MAIN
- PROP. DETENTION BASIN FREEBOARD
- TRN. EX. WATER
- PROPOSED WATERSHED BREAKLINE

**BENCHMARKS**

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REFLAT NO. 2 OF SUMMERFIELD POINTE LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN NO. 295. DATUM REFERS TO "U.S.C.S." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.  
 BENCHMARK #201: CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 484 FEET EAST OF LAWSON DRIVE. ELEVATION = 991.29 (NAVD 88) FROM ELEVATION = 992.14 (PLATTED) REF: FIELD BOOK 148, PG. 34 POINT #201  
 BENCHMARK #204 (PRIMARY): SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO SUMMERFIELD POINTE. ELEVATION = 993.83 (NAVD 88) FROM ELEVATION = 993.93 (PLATTED) REF: FIELD BOOK 148, PG. 34 POINT #204  
 BENCHMARK #203: ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 334 FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 993.88 (NAVD 88) FROM ELEVATION = 993.98 (PLATTED) REF: FIELD BOOK 148, PG. 34 POINT #203  
 BENCHMARK #200: ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 3774 FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 995.39 (NAVD 88) FROM ELEVATION = 995.89 (PLATTED) REF: FIELD BOOK 148, PG. 34 POINT #200

**CONTROL STRUCTURE NOTES:**

- Control Structure and Grate shall be factory built. Contractor shall provide Engineer with Shop Drawings for Control Structure and Grate. Contractor shall obtain Engineer's Approval of Shop Drawings prior to Control Structure installation.
- Control Structure shall be constructed of material noted in Item A of KEY. CMP shall be corrugated metal pipe with corrosion resistant coating and shall conform to the specifications for corrugated metal pipe per AASHTO Designation M36.
- Control Structure Base shall be a reinforced 3000 PSI air entrained concrete base. Control Structure shall be embedded into the concrete base providing a full strength water tight connection as illustrated in the Basin Control Structure Detail.
- Provide a watertight connection between the Control Structure and Outlet Pipe.
- Construct berm over Outlet Pipe as necessary to provide 12" minimum cover.
- Grate shall be built to fit over the outside edge of the Control Structure and to be secured to the Control Structure with six (6) 1/4" minimum diameter removable galvanized screws. All joints shall be welded full strength per current AWS code. Grate shall be factory coated with bitumastic or corrosion resistant paint. Grate shall be constructed of 1/2" minimum diameter round or square steel bar creating a square grid pattern with a maximum 3"x3" opening size. Outside of Grate shall be wrapped with a 1/4" minimum x 3" minimum flat stock steel.



DESIGN:FAF	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: WMP						

**SUMMERFIELD POINTE ESTATES PUD**

**DETENTION BASIN "A" CALCULATIONS, NOTES & DETAILS**

CLIENT: HEALY HOMES AT SUMMERFIELD LLC  
 3696 SLEETH RD.  
 COMMERCE TOWNSHIP, MICHIGAN 48382  
 248-684-1699

SCALE: 1in. = 40ft.  
 PROJECT No.: 214159  
 DWG NAME: 4159\_UT  
 ISSUED: FEB. 23, 2022

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 CIVIL ENGINEERS  
 LAND SURVEYORS  
 2183 PLESS DRIVE  
 BRIGHTON, MICHIGAN 48114



From MH#	To MH#	Pipe Material	Area Acres	Eqv. Area 1 CA	Total Area 1 CA	T Time Min.	I Inch Per Hour	Q (CIA) c.f.s.	Dia. of pipe inch	Slope %	Slope H.G. %	Length of line ft.	Vel. Flow full ft./sec.	Time of flow min.	Cap of pipe c.f.s.	H.G. Elev. upper end	Ground Elev. Upper end	Ground Elev. Lower end	Invert Elev. Upper end	Invert Elev. Lower end	
Project: Summerfield Estates PUD Location: Genoa Township, Livingston County, MI. Design Criteria: 10 year event (I = 175i + 25)																					
RCP n= 0.013 HDPE n= 0.011 SLCPP n= 0.010 CMP n= 0.022																					
EXISTING & PROPOSED SUMMERFIELD POINT STORM SEWER SYSTEM :																					
1	2	RCP	0.78	0.62	0.49	0.49	15.0	4.38	2.12	12	0.49	0.35	72	3.16	0.4	2.48	988.77	990.88	990.81	984.96	984.61
2	3	RCP	0.05	0.62	0.03	0.52	15.4	4.33	2.24	15	0.38	0.12	73	3.28	0.4	4.00	986.51	990.61	990.88	984.56	984.28
12	13	RCP	0.65	0.63	0.41	0.41	15.0	4.38	1.79	12	13.50	0.25	6	16.68	0.0	13.09	988.61	991.08	991.07	985.88	985.07
13	3	RCP	0.43	0.70	0.30	0.71	15.1	4.36	3.11	15	0.26	0.23	72	2.70	0.4	3.32	986.59	991.07	990.88	984.47	984.28
3	01A	RCP	0.59	0.67	0.40	1.63	15.8	4.29	6.99	18	0.20	0.44	342	3.95	1.4	4.65	986.42	990.88	993.04	984.08	983.41
01A	231	RCP	0.00	0.00	0.00	1.63	17.2	4.15	6.75	21	0.20	0.18	159	2.95	0.9	7.11	983.53	993.04	993.10	981.74	981.42
234	233	HDPE-S	0.13	0.34	0.04	0.04	15.0	4.38	0.19	12	0.35	0.00	64	3.17	0.3	2.49	984.01	993.50	992.50	983.23	983.01
233	232	HDPE-S	0.25	0.34	0.09	0.13	15.3	4.34	0.56	12	0.35	0.02	123	3.17	0.6	2.49	983.50	992.50	992.50	982.91	982.49
232	231	RCP	0.43	0.37	0.16	0.29	16.0	4.27	1.23	12	0.35	0.12	102	2.68	0.6	2.11	983.36	992.50	993.10	982.38	982.02
231	4	RCP	0.00	0.00	0.00	1.92	16.6	4.21	8.05	21	0.21	0.26	144	3.35	0.7	7.23	983.24	992.50	990.92	981.42	981.12
22	23	RCP	0.22	0.66	0.14	0.14	17.3	4.13	0.59	12	5.00	0.03	7	10.14	0.0	7.96	985.92	991.07	991.12	985.27	984.92
23	4	RCP	0.38	0.51	0.20	0.34	17.3	4.13	1.39	12	5.32	0.15	41	10.46	0.1	8.21	983.68	991.12	990.92	984.80	982.62
4	5	RCP	0.60	0.60	0.36	2.61	17.4	4.13	10.77	21	0.43	0.46	35	4.48	0.1	10.37	982.78	990.92	990.97	981.02	980.87
14	15	RCP	1.58	0.52	0.81	0.81	15.0	4.38	3.54	12	0.52	0.99	23	4.51	0.1	2.57	983.90	988.58	988.52	982.79	982.67
15	17	RCP	0.88	0.70	0.62	1.43	15.1	4.37	6.23	21	0.12	0.15	349	2.59	2.2	5.56	983.21	988.52	988.64	980.02	979.59
16	17	RCP	1.22	0.46	0.55	0.55	15.0	4.38	2.42	12	1.43	0.46	23	5.43	0.1	4.27	982.85	988.92	988.64	982.07	981.74
17	3A	RCP	0.79	0.70	0.55	2.53	17.3	4.13	10.45	21	0.18	0.44	267	4.35	1.0	6.79	982.67	988.64	992.50	979.54	979.05
3A	4	RCP	0.42	0.80	0.34	2.66	18.4	4.04	11.56	24	0.24	0.26	262	3.68	1.2	11.09	981.51	992.50	990.50	979.00	978.37
21	5	RCP	0.32	0.57	0.18	0.18	15.0	4.38	0.80	18	0.47	0.01	49	4.07	0.2	7.19	982.77	991.04	990.97	981.50	981.27
5	6	RCP	0.52	0.74	0.38	6.04	19.5	3.93	23.73	27	0.10	0.59	264	5.97	0.7	9.72	980.83	990.97	990.89	977.07	976.81
118	6	RCP	0.55	0.57	0.31	0.31	15.0	4.38	1.37	12	0.35	0.15	42	2.68	0.3	2.11	979.34	991.30	990.89	977.99	977.84
6	7	RCP	0.16	0.77	0.12	6.48	20.3	3.86	25.03	30	0.03	0.37	39	5.10	0.1	6.57	979.28	990.89	990.55	976.64	976.63
118	7	RCP	0.28	0.58	0.16	0.16	15.0	4.38	0.70	12	0.35	0.04	25	2.68	0.2	2.11	977.40	990.55	990.55	975.01	974.92
7	8	RCP	0.04	0.73	0.03	6.67	20.4	3.85	25.89	30	0.16	0.39	280	5.23	0.9	16.62	977.39	990.55	987.89	973.72	973.26
8	9	RCP	0.32	0.57	0.18	6.85	21.3	3.78	25.89	30	0.87	0.40	8	7.81	0.0	38.35	976.30	987.89	987.89	973.26	973.19
115	114	HDPE-S	0.25	0.34	0.09	0.09	15.0	4.38	0.38	12	1.00	0.01	109	5.36	0.3	4.21	985.58	990.80	989.50	985.66	984.57
114	113	HDPE-S	0.30	0.32	0.10	0.16	15.3	4.34	0.79	12	0.35	0.04	109	3.17	0.6	2.49	985.13	990.80	989.50	984.47	984.09
113	112	HDPE-S	0.28	0.33	0.09	0.27	15.9	4.28	1.17	12	0.35	0.08	115	3.17	0.6	2.49	983.77	988.50	988.50	983.09	982.69
112	111	RCP	0.33	0.31	0.10	0.38	16.5	4.22	1.58	12	0.35	0.20	133	2.68	0.8	2.11	982.48	988.50	988.50	981.69	981.22
111	27	RCP	0.24	0.61	0.15	0.52	17.3	4.13	2.16	12	0.50	0.37	64	3.21	0.3	2.52	981.13	988.50	987.89	980.22	979.80
27	9	RCP	0.53	0.67	0.36	0.68	17.7	4.10	3.62	12	2.84	1.02	25	7.84	0.1	6.00	979.45	987.89	987.89	978.90	978.19
9	28	RCP	0.26	0.58	0.15	7.88	21.3	3.78	29.77	36	0.24	0.20	282	4.67	1.0	32.98	976.26	987.89	989.25	973.19	972.50
28	102	RCP	0.08	0.55	0.04	7.92	22.3	3.70	29.30	36	0.22	0.19	88	4.42	0.3	31.27	975.70	988.25	988.52	972.40	972.21
102	101	RCP	0.00	0.00	0.00	7.92	22.7	3.67	29.10	36	0.25	0.19	81	4.72	0.2	33.34	975.53	988.25	988.00	972.11	971.96
101	100	RCP	0.00	0.00	0.00	7.92	22.9	3.66	28.96	36	0.25	0.19	76	4.72	0.3	33.34	975.42	988.00	987.39	971.86	971.67
210	209	HDPE-S	0.45	0.32	0.14	0.14	15.0	4.38	0.63	12	1.00	0.02	153	5.36	0.5	4.21	990.65	994.50	995.00	991.15	989.62
209	208	HDPE-S	0.66	0.26	0.17	0.31	15.5	4.32	1.35	12	0.35	0.10	152	3.17	0.8	2.49	990.14	995.00	995.00	988.52	988.99
208	207	HDPE-S	0.35	0.30	0.11	0.42	16.3	4.24	1.77	12	0.35	0.18	126	3.17	0.7	2.49	989.67	995.00	995.00	988.89	988.45
207	206	HDPE-S	0.26	0.34	0.09	0.51	16.9	4.17	2.11	12	0.35	0.25	109	3.17	0.6	2.49	989.24	995.00	995.00	988.35	987.96
206	205	HDPE-S	0.24	0.35	0.08	0.59	17.5	4.12	2.43	12	0.35	0.33	128	3.17	0.7	2.49	988.84	995.00	997.20	987.88	987.42
205	204	HDPE-S	0.00	0.00	0.00	0.59	18.2	4.05	2.39	12	0.35	0.32	92	3.17	0.5	2.49	988.29	997.20	995.80	987.32	986.99
204	203	HDPE-S	0.00	0.00	0.00	0.59	18.7	4.01	2.36	12	0.35	0.32	168	3.17	0.9	2.49	986.84	996.80	992.50	985.99	985.41
211	202	HDPE-S	0.44	0.36	0.16	0.16	15.0	4.38	0.70	12	1.00	0.03	113	5.36	0.4	4.21	986.30	992.20	992.20	986.36	985.23
225	224	HDPE-S	1.20	0.32	0.38	0.38	15.0	4.38	1.68	12	0.35	0.16	143	3.17	0.8	2.49	988.64	992.20	992.20	987.91	987.41
224	223	HDPE-S	0.60	0.29	0.17	0.56	15.8	4.29	2.40	12	0.35	0.32	93	3.17	0.5	2.49	988.28	992.20	992.20	987.31	986.98
223	222	HDPE-S	0.82	0.29	0.24	0.79	16.2	4.24	3.37	18	0.25	0.07	117	3.51	0.6	6.20	987.88	992.20	992.50	986.58	986.29
222	221	RCP	1.07	0.33	0.36	1.15	16.8	4.19	4.82	18	0.25	0.21	115	2.97	0.6	6.25	987.65	992.20	993.77	986.19	985.98
221	201	RCP	0.49	0.59	0.29	1.44	17.4	4.12	5.93	18	0.40	0.32	30	3.76	0.1	6.64	987.28	993.77	993.57	985.80	985.68
201	202	RCP	0.58	0.59	0.33	1.77	17.6	4.11	7.27	18	0.55	0.48	118	4.41	0.4	7.79	987.00	993.57	992.20	985.58	984.93
202	203	HDPE-S	0.56	0.36	0.20	2.13	15.4	4.34	9.24	18	0.60	0.55	138	5.44	0.4	9.61	986.27	992.20	992.50	984.83	984.01
203	138	HDPE-S	1.33	0.28	0.37	3.09	19.5	3.93	12.15	18	1.20	0.96	127	7.69	0.3	13.59	990.50	993.80	994.50	983.91	982.38
138	137	HDPE-S	0.00	0.00	0.00	3.09	19.8	3.90	12.08	18	1.20	0.95	97	7.69	0.2	13.59	983.54	994.50	991.80	982.28	981.12
137	136	HDPE-S	0.35	0.30	0.11	3.20	20.0	3.89	12.43	18	1.20	1.00	110								



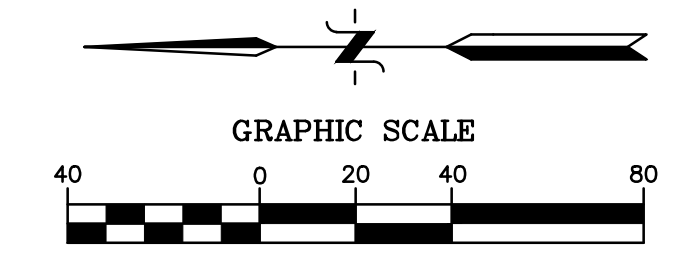
**EXISTING UTILITY STRUCTURE INVENTORY**

SAN SEWER MH-03 RIM 991.83 INVERTS N 8" PVC 981.48 W 8" PVC 981.48 S 8" PVC 981.43	STORM MANHOLE #03A RIM 992.50 INVERTS SE 21" RCP 979.05 NW 24" RCP 979.00	STORM CATCH BASIN CB-17 RIM 988.64 INVERTS W 12" RCP 981.74 S 21" RCP 979.59 NW 21" RCP 979.54
SAN SEWER MH-04 RIM 992.58 INVERTS N 8" PVC 982.58 E 8" PVC 982.68 S 8" PVC 982.48	STORM CATCH BASIN CB-04 RIM 990.92 INVERTS SW 12" RCP 982.62 S 21" RCP 981.12 NW 21" RCP 981.02	STORM CATCH BASIN CB-21 RIM 991.04 INVERTS W 18" RCP 981.61 E 18" RCP 981.50
SAN SEWER MH-05 RIM 990.79 INVERTS N 8" PVC 983.90 W 8" PVC 983.94	STORM CATCH BASIN CB-05 RIM 990.97 INVERTS W 18" RCP 981.27 S 21" RCP 980.87 SE 24" RCP 978.37 NW 27" RCP 977.07	STORM CATCH BASIN CB-22 RIM 991.07 INVERTS SE 12" RCP 985.27
SAN SEWER MH-06 RIM 990.92 INVERTS NE 8" PVC 985.12 S 8" PVC 985.12	STORM CATCH BASIN CB-06 RIM 989.39 INVERTS SE 27" RCP 976.81 N 30" RCP 976.64	STORM CATCH BASIN CB-23 RIM 991.12 INVERTS NW 12" RCP 984.92 E 12" RCP 984.80
SAN SEWER MH-07 RIM 991.89 INVERTS SE 8" PVC 986.09	STORM CATCH BASIN CB-07 RIM 989.53 INVERTS S 30" RCP 976.63 N 30" RCP 973.72	STORM CATCH BASIN CB-27 RIM 988.00 INVERTS W 12" RCP 978.90
SAN SEWER MH-13 RIM 992.07 INVERTS NE 8" PVC 984.72 SE 8" PVC 984.69 S 8" PVC 984.72	STORM CATCH BASIN CB-08 RIM 986.78 INVERTS S 30" RCP 973.26 N 30" RCP 973.26	STORM MANHOLE MH-37 RIM 984.31 INVERTS N 24" RCP 979.36 SW 12" RCP 980.56
SAN SEWER MH-12 RIM 993.95 INVERTS N 8" PVC 984.15 S 8" PVC 984.05	STORM CATCH BASIN CB-09 RIM 986.97 INVERTS E 12" RCP 978.19 S 30" RCP 973.19 N 36" RCP 973.19	STORM CATCH BASIN CB-38 RIM 985.74 INVERTS NE 12" RCP 981.14 S 12" RCP 981.04
SAN SEWER MH-14 RIM 993.67 INVERTS SE 8" PVC 985.42	STORM CATCH BASIN CB-10 (T.B.R.) RIM 985.12 INVERTS SE 36" RCP 970.69 N 36" RCP 970.59	STORM CATCH BASIN CB-39 RIM 985.74 INVERTS N 12" RCP 981.44
SAN SEWER MH #20640 (OFFSITE) RIM 989.00 INVERTS W 8" PVC 971.30	STORM CATCH BASIN CB-11 (T.B.R.) RIM 985.33 INVERTS S 36" RCP 970.63 NW 36" RCP 970.53	YARD BASIN YB-120 (4' DIA) (8641.06, 3147.88) RIM 984.50 INVERTS NW 36" HDPE-S 972.76 SE 36" HDPE-S 974.66
STORM CATCH BASIN CB-01 RIM 990.86 INVERTS E 12" RCP 984.96	STORM CATCH BASIN CB-12 RIM 991.08 INVERTS W 12" RCP 985.88	YARD BASIN YB-121 (4' DIA) (8522.03, 3189.54) RIM 984.50 INVERTS NW 36" HDPE-S 974.85 SW 36" HDPE-S 976.45 SE 12" HDPE-S 976.45
STORM MANHOLE MH-01A RIM 993.04 INVERTS S 18" RCP 983.41 N 21" RCP 981.74	STORM CATCH BASIN CB-13 RIM 991.07 INVERTS SW 12" RCP 985.07 W 12" RCP 984.52 E 15" RCP 984.47	YARD BASIN YB-122 (4' DIA) (8381.08, 3243.05) RIM 986.00 INVERTS NW 12" HDPE-S 976.98 SE 12" HDPE-S 978.48
FLARED END SECTION FES-100B INVERTS S 36" RCP 970.35	STORM CATCH BASIN CB-14 RIM 988.59 INVERTS SE 12" RCP 982.79	YARD BASIN YB-123 (4' DIA) (8275.56, 3264.28) RIM 987.00 INVERTS NW 12" HDPE-S 978.86 SE 12" HDPE-S 980.36
STORM CATCH BASIN CB-02 (REPLACE CASTING)  RIM 990.81 INVERTS W 12" RCP 984.61 N 15" RCP 984.56	STORM CATCH BASIN CB-15 RIM 988.62 INVERTS NW 12" RCP 982.67 N 21" RCP 980.02	YARD BASIN YB-124 (4' DIA) (8168.55, 3280.41) RIM 986.50 INVERTS NW 12" HDPE-S 980.73 SE 12" HDPE-S 980.83
STORM MANHOLE MH-02B RIM 987.40 INVERTS SE 36" RCP 972.50 NW 36" RCP 970.35	STORM CATCH BASIN CB-16 RIM 988.92 INVERTS E 12" RCP 982.07	YARD BASIN YB-125 (2' DIA) (8114.51, 3288.52) RIM 987.50 INVERTS NW 12" HDPE-S 981.38
STORM CATCH BASIN CB-03 RIM 990.88 INVERTS W 15" RCP 984.28 S 15" RCP 984.28 N 18" RCP 984.08		FLARED END SECTION FES-300 (8984.07, 3124.97) INVERTS SE 42" HDPE-S 970.50

**PROPOSED UTILITY STRUCTURE INVENTORY**

STORM MANHOLE MH-231 (4' DIA) (7638.39, 3542.97) RIM 993.10 INVERTS SE 21" RCP 981.42 NW 21" RCP 981.42 NE 12" RCP 982.02	STORM CATCH BASIN CB-131 (4' DIA) (8468.07, 3067.99) RIM 986.39 INVERTS NE 36" HDPE-S 976.78 SW 24" RCP 977.58 SUMP - 974.78	YARD BASIN YB-113 (4' DIA) (8232.22, 3554.93) RIM 988.50 INVERTS NW 12" HDPE-S 983.09 SE 12" HDPE-S 984.09
STORM CATCH BASIN CB-27 (4' DIA) (8388.97, 3392.16) RIM 987.89 INVERTS SE 12" RCP 979.90 SW 12" RCP 978.90 SUMP - 976.90	STORM CATCH BASIN CB-132 (4' DIA) (8457.90, 3045.10) RIM 986.39 INVERTS NE 24" RCP 977.73 SW 24" RCP 977.83 SE 12" RCP 978.53 W 12" RCP 979.63 SUMP - 975.73	YARD BASIN YB-114 (4' DIA) (8124.76, 3573.34) RIM 989.50 INVERTS NW 12" HDPE-S 984.47 SE 12" HDPE-S 984.57
STORM MANHOLE MH-102 (4' DIA) (8743.34, 3272.81) RIM 988.82 INVERTS SE 36" RCP 972.21 NW 36" RCP 972.11	STORM CATCH BASIN CB-133 (4' DIA) (8407.86, 3059.92) RIM 986.69 INVERTS NW 12" RCP 978.71 SUMP - 976.71	YARD BASIN YB-115 (2' DIA) (8017.28, 3591.62) RIM 990.80 INVERTS NW 12" HDPE-S 985.66
STORM MANHOLE MH-101 (4' DIA) (8776.20, 3221.61) RIM 988.00 INVERTS SE 36" RCP 971.96 NW 36" RCP 971.86	YARD BASIN YB-134 (4' DIA) (8350.55, 2971.88) RIM 984.50 INVERTS NE 24" RCP 978.35 S 24" HDPE-S 978.45	STORM MANHOLE MH-204 (4' DIA) (7714.71, 3013.04) RIM 996.80 INVERTS SW 12" HDPE-S 986.99 NE 12" HDPE-S 985.99
STORM CATCH BASIN CB-100 (6' DIA) (8817.21, 3157.32) RIM 987.39 INVERTS SE 36" RCP 971.67 S 12" RCP 973.27 SW 42" RCP 971.37 NW 42" HDPE-S 971.27 SUMP - 969.27	STORM CATCH BASIN CB-116 (2' DIA) (8103.18, 3437.85) RIM 990.55 INVERTS SW 12" RCP 975.01 SUMP - 973.01	STORM MANHOLE MH-205 (4' DIA) (7623.23, 2992.81) RIM 997.20 INVERTS S 12" HDPE-S 987.42 NE 12" HDPE-S 987.32
YARD BASIN YB-120 (4' DIA) (8641.06, 3147.88) RIM 984.50 INVERTS NW 36" HDPE-S 972.76 SE 36" HDPE-S 974.66	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	STORM MANHOLE MH-206 (4' DIA) (7494.78, 2996.38) RIM 995.80 INVERTS N 12" HDPE-S 987.86 S 12" HDPE-S 987.96
YARD BASIN YB-121 (4' DIA) (8522.03, 3189.54) RIM 984.50 INVERTS NW 36" HDPE-S 974.85 SW 36" HDPE-S 976.45 SE 12" HDPE-S 976.45	STORM CATCH BASIN CB-111 (4' DIA) (8325.94, 3404.45) RIM 988.50 INVERTS NE 12" RCP 981.22 NW 12" RCP 980.22 SUMP - 978.22	YARD BASIN YB-206 (4' DIA) (7385.76, 2999.38) RIM 995.00 INVERTS N 12" HDPE-S 988.35 S 12" HDPE-S 988.45
YARD BASIN YB-122 (4' DIA) (8381.08, 3243.05) RIM 986.00 INVERTS NW 12" HDPE-S 976.98 SE 12" HDPE-S 978.48	STORM CATCH BASIN CB-02B (4' DIA) (8658.03, 3295.34) RIM 989.25 INVERTS NW 36" RCP 972.40 SE 36" RCP 972.50 SUMP - 970.40	YARD BASIN YB-207 (4' DIA) (7385.76, 2999.38) RIM 995.00 INVERTS N 12" HDPE-S 988.35 S 12" HDPE-S 988.45
YARD BASIN YB-123 (4' DIA) (8275.56, 3264.28) RIM 987.00 INVERTS NW 12" HDPE-S 978.86 SE 12" HDPE-S 980.36	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-208 (4' DIA) (7259.10, 3002.94) RIM 995.00 INVERTS N 12" HDPE-S 988.89 SE 12" HDPE-S 988.99
YARD BASIN YB-124 (4' DIA) (8168.55, 3280.41) RIM 986.50 INVERTS NW 12" HDPE-S 980.73 SE 12" HDPE-S 980.83	STORM CATCH BASIN CB-111 (4' DIA) (8325.94, 3404.45) RIM 988.50 INVERTS NE 12" RCP 981.22 NW 12" RCP 980.22 SUMP - 978.22	YARD BASIN YB-209 (4' DIA) (7141.00, 3096.56) RIM 995.00 INVERTS NW 12" HDPE-S 989.52 SE 12" HDPE-S 989.62
YARD BASIN YB-125 (2' DIA) (8114.51, 3288.52) RIM 987.50 INVERTS NW 12" HDPE-S 981.38	STORM CATCH BASIN CB-111 (4' DIA) (8325.94, 3404.45) RIM 988.50 INVERTS NE 12" RCP 981.22 NW 12" RCP 980.22 SUMP - 978.22	YARD BASIN YB-210 (2' DIA) (7020.36, 3191.23) RIM 994.50 INVERTS NW 12" HDPE-S 991.15
FLARED END SECTION FES-300 (8984.07, 3124.97) INVERTS SE 42" HDPE-S 970.50	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-211 (2' DIA) (7020.36, 3191.23) RIM 994.50 INVERTS NW 12" HDPE-S 991.15
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-212 (4' DIA) (7611.81, 3301.33) RIM 992.50 INVERTS NW 18" RCP 986.19 SE 18" HDPE-S 986.29
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-222 (4' DIA) (7503.01, 3344.68) RIM 992.20 INVERTS NW 18" HDPE-S 986.58 SE 12" HDPE-S 986.98
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-223 (4' DIA) (7503.01, 3344.68) RIM 992.20 INVERTS NW 18" HDPE-S 986.58 SE 12" HDPE-S 986.98
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-224 (4' DIA) (7410.92, 3353.97) RIM 992.20 INVERTS NW 12" HDPE-S 987.31 SE 12" HDPE-S 987.41
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-225 (4' DIA) (7284.97, 3421.70) RIM 992.20 INVERTS NW 12" HDPE-S 987.91
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	STORM MANHOLE MH-204 (4' DIA) (7714.71, 3013.04) RIM 996.80 INVERTS SW 12" HDPE-S 986.99 NE 12" HDPE-S 985.99
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	STORM MANHOLE MH-205 (4' DIA) (7623.23, 2992.81) RIM 997.20 INVERTS S 12" HDPE-S 987.42 NE 12" HDPE-S 987.32
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-206 (4' DIA) (7385.76, 2999.38) RIM 995.80 INVERTS N 12" HDPE-S 987.86 S 12" HDPE-S 987.96
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-207 (4' DIA) (7385.76, 2999.38) RIM 995.00 INVERTS N 12" HDPE-S 988.35 S 12" HDPE-S 988.45
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-208 (4' DIA) (7259.10, 3002.94) RIM 995.00 INVERTS N 12" HDPE-S 988.89 SE 12" HDPE-S 988.99
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-209 (4' DIA) (7141.00, 3096.56) RIM 995.00 INVERTS NW 12" HDPE-S 989.52 SE 12" HDPE-S 989.62
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-210 (2' DIA) (7020.36, 3191.23) RIM 994.50 INVERTS NW 12" HDPE-S 991.15
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-211 (2' DIA) (7020.36, 3191.23) RIM 994.50 INVERTS NW 12" HDPE-S 991.15
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-212 (4' DIA) (7611.81, 3301.33) RIM 992.50 INVERTS NW 18" RCP 986.19 SE 18" HDPE-S 986.29
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-222 (4' DIA) (7503.01, 3344.68) RIM 992.20 INVERTS NW 18" HDPE-S 986.58 SE 12" HDPE-S 986.98
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-223 (4' DIA) (7503.01, 3344.68) RIM 992.20 INVERTS NW 18" HDPE-S 986.58 SE 12" HDPE-S 986.98
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-224 (4' DIA) (7410.92, 3353.97) RIM 992.20 INVERTS NW 12" HDPE-S 987.31 SE 12" HDPE-S 987.41
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-225 (4' DIA) (7284.97, 3421.70) RIM 992.20 INVERTS NW 12" HDPE-S 987.91
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	STORM MANHOLE MH-204 (4' DIA) (7714.71, 3013.04) RIM 996.80 INVERTS SW 12" HDPE-S 986.99 NE 12" HDPE-S 985.99
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	STORM MANHOLE MH-205 (4' DIA) (7623.23, 2992.81) RIM 997.20 INVERTS S 12" HDPE-S 987.42 NE 12" HDPE-S 987.32
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-206 (4' DIA) (7385.76, 2999.38) RIM 995.80 INVERTS N 12" HDPE-S 987.86 S 12" HDPE-S 987.96
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-207 (4' DIA) (7385.76, 2999.38) RIM 995.00 INVERTS N 12" HDPE-S 988.35 S 12" HDPE-S 988.45
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-208 (4' DIA) (7259.10, 3002.94) RIM 995.00 INVERTS N 12" HDPE-S 988.89 SE 12" HDPE-S 988.99
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-209 (4' DIA) (7141.00, 3096.56) RIM 995.00 INVERTS NW 12" HDPE-S 989.52 SE 12" HDPE-S 989.62
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-210 (2' DIA) (7020.36, 3191.23) RIM 994.50 INVERTS NW 12" HDPE-S 991.15
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-211 (2' DIA) (7020.36, 3191.23) RIM 994.50 INVERTS NW 12" HDPE-S 991.15
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	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-222 (4' DIA) (7503.01, 3344.68) RIM 992.20 INVERTS NW 18" HDPE-S 986.58 SE 12" HDPE-S 986.98
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-223 (4' DIA) (7503.01, 3344.68) RIM 992.20 INVERTS NW 18" HDPE-S 986.58 SE 12" HDPE-S 986.98
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-224 (4' DIA) (7410.92, 3353.97) RIM 992.20 INVERTS NW 12" HDPE-S 987.31 SE 12" HDPE-S 987.41
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68, 3419.52) RIM 991.30 INVERTS N 12" RCP 977.99 SUMP - 975.99	YARD BASIN YB-225 (4' DIA) (7284.97, 3421.70) RIM 992.20 INVERTS NW 12" HDPE-S 987.91
	STORM CATCH BASIN CB-118 (2' DIA) (8019.68,	





**LEGEND**

- = MISC. STRUCTURE (AS LABELED)
- = BOLLARD
- = SIGN
- = LIGHT BASE
- = STREET LIGHT
- = OVERHEAD TRAFFIC SIGNAL
- = UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX)
- = AIR CONDITIONER UNIT
- = UTILITY MANHOLE (AS LABELED)
- = UTILITY POLE W/GUY WIRE
- = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = U/G UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = DECIDUOUS TREE W/IDENTIFIER
- = CONIFEROUS TREE W/IDENTIFIER
- = DECIDUOUS SHRUB
- = EXISTING TREE DRIP LINE
- = FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
- = GUARD RAIL
- = EDGE OF GRAVEL
- = CONCRETE CURB (UNLESS OTHERWISE STATED)
- = SANITARY SEWER MANHOLE W/IDENTIFIER
- = SANITARY SEWER PIPE
- = CLEAN OUT
- = STORM WATER MANHOLE W/IDENTIFIER
- = STORM WATER DRAINAGE PIPE
- = HYDRANT
- = WATER SHUT OFF
- = WATER VALVE
- = WATER VALVE BOX
- = WATER MAIN
- = GAS SHUT OFF
- = U/G GAS
- = SPOT ELEVATION
- = 1' CONTOUR
- = 5' CONTOUR
- = EXISTING LIGHT POLE
- = PROPOSED LIGHT POLE
- = PROPOSED SANITARY SEWER
- = PROPOSED WATER MAIN
- = PROPOSED STORM SEWER
- = PROPOSED STORM STRUCTURES
- = PROPOSED CURB AND GUTTER
- = PROPOSED CONCRETE WALK
- = PROPOSED STANDARD DUTY BITUMINOUS PAVEMENT

**BENCHMARKS**

DATUM BASED ON PREVIOUS BENCHMARK AS IDENTIFIED ON REPEAT NO. 2 OF "SUMMERFIELD POINTE", LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "U.S.C.S." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.

BENCHMARK #201  
CENTRUM OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 484 FEET EAST OF LAWSON DRIVE.  
ELEVATION = 991.29 (NAVD 88)  
REF: FIELD BOOK 1483, PG. 34  
POINT #201

BENCHMARK #204 (PRIMARY)  
SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE".  
ELEVATION = 993.43 (NAVD 88)  
ELEVATION = 993.93 (PLATTED)  
REF: FIELD BOOK 1483, PG. 34  
POINT #204

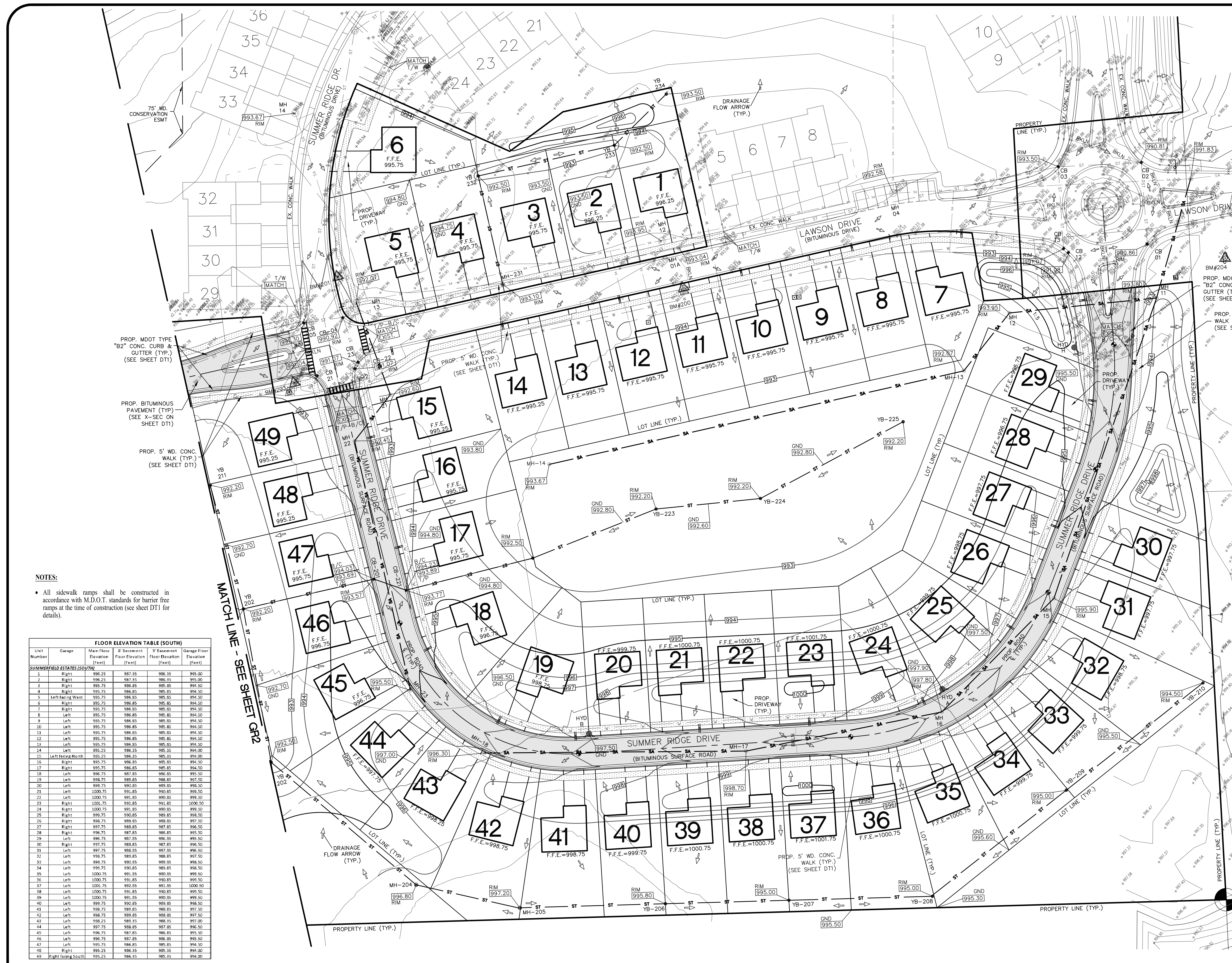
BENCHMARK #203  
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 335 FEET NORTH OF SILVER LEAF DRIVE.  
ELEVATION = 993.88 (NAVD 88)  
ELEVATION = 994.38 (PLATTED)  
REF: POINT #203

BENCHMARK #200  
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 377.5 FEET NORTH OF SILVER LEAF DRIVE.  
ELEVATION = 995.39 (NAVD 88)  
ELEVATION = 995.89 (PLATTED)  
REF: FIELD BOOK 1483, PG. 34  
POINT #200

**NOTES:**

- All sidewalk ramps shall be constructed in accordance with M.D.O.T. standards for barrier free ramps at the time of construction (see sheet DT1 for details).

FLOOR ELEVATION TABLE (SOUTH)					
Unit Number	Garage	Main Floor Elevation (feet)	1st Basement Floor Elevation (feet)	2nd Basement Floor Elevation (feet)	Garage Floor Elevation (feet)
<b>SUMMERFIELD ESTATES (SOUTH)</b>					
1	Right	996.25	987.35	986.35	993.00
2	Right	998.25	987.35	986.35	995.00
3	Right	995.75	986.85	985.85	994.50
4	Right	995.75	986.85	985.85	994.50
5	Left facing West	995.75	986.85	985.85	994.50
6	Right	995.75	986.85	985.85	994.50
7	Right	995.75	986.85	985.85	994.50
8	Left	995.75	986.85	985.85	994.50
9	Left	995.75	986.85	985.85	994.50
10	Left	995.75	986.85	985.85	994.50
11	Left	995.75	986.85	985.85	994.50
12	Left	995.75	986.85	985.85	994.50
13	Left	995.75	986.85	985.85	994.50
14	Left	995.75	986.85	985.85	994.50
15	Left facing North	995.75	986.85	985.85	994.50
16	Right	995.75	986.85	985.85	994.50
17	Right	995.75	986.85	985.85	994.50
18	Left	995.75	986.85	985.85	994.50
19	Left	996.25	987.35	986.35	995.00
20	Left	999.75	990.85	989.85	996.50
21	Left	1000.75	991.85	990.85	999.50
22	Right	1000.75	992.85	991.85	1000.50
23	Right	1000.75	992.85	991.85	998.50
24	Right	995.75	990.85	989.85	998.50
25	Right	995.75	990.85	989.85	998.50
26	Right	998.75	989.85	988.85	997.50
27	Right	997.75	988.85	987.85	996.50
28	Right	998.75	988.85	987.85	996.50
29	Left	996.75	987.85	986.85	995.50
30	Right	997.75	988.85	987.85	996.50
31	Left	997.75	988.85	987.85	996.50
32	Left	998.75	989.85	988.85	997.50
33	Left	999.75	990.85	989.85	998.50
34	Left	999.75	990.85	989.85	998.50
35	Left	1000.75	991.85	990.85	999.50
36	Left	1000.75	991.85	990.85	999.50
37	Left	1001.75	992.85	991.85	1000.50
38	Left	1000.75	991.85	990.85	999.50
39	Left	998.75	989.85	988.85	997.50
40	Left	998.75	989.85	988.85	997.50
41	Left	998.75	989.85	988.85	997.50
42	Left	997.75	988.85	987.85	996.50
43	Left	997.75	988.85	987.85	996.50
44	Left	998.75	989.85	988.85	997.50
45	Left	998.75	989.85	988.85	997.50
46	Left	998.75	989.85	988.85	997.50
47	Left	997.75	988.85	987.85	996.50
48	Right	995.25	986.35	985.35	992.00
49	Right facing South	995.25	986.35	985.35	992.00



DESIGN/FAF	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: OM	1	03/23/22	REVISED PER TWP. REVIEW COMMENTS DATED 03/16/22 & 03/18/22
CHECK: FAF			

REVISION #	DATE	REVISION-DESCRIPTION

**SUMMERFIELD  
POINTE ESTATES PUD**

**GRADING PLAN (SOUTH)**

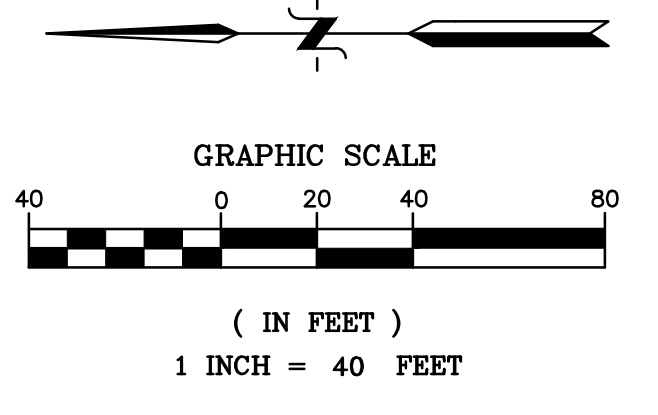
CLIENT: HEALY HOMES AT SUMMERFIELD LLC  
3696 SLEETH RD.,  
COMMERCE TOWNSHIP, MICHIGAN 48382  
248-684-1699

SCALE: 1in. = 40ft.  
PROJECT No.: 214159  
DWG NAME: 4159 GR  
ISSUED: MARCH 23, 2022

**GR1**

**DESIGN INC.**  
(810) 227-9533  
CIVIL ENGINEERS  
LAND SURVEYORS  
2183 PLESS DRIVE  
BRIGHTON, MICHIGAN 48114





### LEGEND

- = MISC. STRUCTURE (AS LABELED)
- = BOLLARD
- = SIGN
- = LIGHT BASE
- = STREET LIGHT
- = OVERHEAD TRAFFIC SIGNAL
- = UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX)
- = AIR CONDITIONER UNIT
- = UTILITY MANHOLE (AS LABELED)
- = UTILITY POLE W/GUY WIRE
- = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = U/G UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = DECIDUOUS TREE W/IDENTIFIER
- = CONIFEROUS TREE W/IDENTIFIER
- = DECIDUOUS SHRUB
- = EXISTING TREE DRIP LINE
- = GUARD RAIL
- = EDGE OF GRAVEL
- = CONCRETE CURB (UNLESS OTHERWISE STATED)
- = SANITARY SEWER MANHOLE W/IDENTIFIER
- = SANITARY SEWER PIPE
- = CLEAN OUT
- = STORM WATER MANHOLE W/IDENTIFIER
- = CATCH BASIN W/IDENTIFIER
- = FLARED END SECTION
- = STORM WATER DRAINAGE PIPE
- = HYDRANT
- = WATER SHUT OFF
- = WATER VALVE
- = WATER VALVE BOX
- = WATER MAIN
- = GAS SHUT OFF
- = U/G GAS
- = SPOT ELEVATION
- = 1' CONTOUR
- = 5' CONTOUR
- = EXISTING LIGHT POLE
- = PROPOSED LIGHT POLE
- = PROPOSED SANITARY SEWER
- = PROPOSED WATER MAIN
- = PROPOSED STORM SEWER
- = PROPOSED STORM STRUCTURES
- = PROPOSED CURB AND GUTTER
- = PROPOSED CONCRETE WALK
- = PROPOSED STANDARD DUTY BITUMINOUS PAVEMENT

B/C= BACK OF CURB  
 E/M= EDGE OF METAL  
 T/P= TOP OF PAVEMENT  
 T/C= TOP OF CONCRETE  
 T/W= TOP OF WALK  
 GND= GROUND

= PROP. DRAINAGE FLOW ARROW

### BENCHMARKS

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON RE-PLAN NO. 2 OF "SUMMERFIELD POINTE" LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN NO. 295. DATUM REFERS TO "U.S.C.S." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.

BENCHMARK #201  
 CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 486 FEET EAST OF LAWSON DRIVE.  
 ELEVATION = 991.29 (NAVD 88)  
 REF: FIELD BOOK 148, PG. 34  
 POINT #201

BENCHMARK #204 (PRIMARY)  
 SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE, AND THE ENTRANCE TO "SUMMERFIELD POINTE".  
 ELEVATION = 993.43 (NAVD 88)  
 ELEVATION = 993.93 (PLATTED)  
 REF: FIELD BOOK 148, PG. 34  
 POINT #204

BENCHMARK #203  
 ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 336 FEET NORTH OF SILVER LEAF DRIVE.  
 ELEVATION = 993.98 (NAVD 88)  
 ELEVATION = 994.38 (PLATTED)  
 REF: POINT #203

BENCHMARK #200  
 ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 373 FEET NORTH OF SILVER LEAF DRIVE.  
 ELEVATION = 995.39 (NAVD 88)  
 ELEVATION = 995.89 (PLATTED)  
 REF: FIELD BOOK 148, PG. 34  
 POINT #200

### NOTES:

- All sidewalk ramps shall be constructed in accordance with M.D.O.T. standards for barrier free ramps at the time of construction.
- See sheet UT6 of plans for proposed Floor Elevation Table

FLOOR ELEVATION TABLE (NORTH)					FLOOR ELEVATION TABLE (NORTH)					FLOOR ELEVATION TABLE (NORTH)							
Unit Number	Garage	Main Floor	1st Basement	2nd Basement	Unit Number	Garage	Main Floor	1st Basement	2nd Basement	Unit Number	Garage	Main Floor	1st Basement	2nd Basement			
50		994.75	985.85	984.85	991.50	50		994.75	985.85	984.85	991.50	50		994.75	985.85	984.85	991.50
51		994.75	985.85	984.85	991.50	51		994.75	985.85	984.85	991.50	51		994.75	985.85	984.85	991.50
52		994.75	985.85	984.85	991.50	52		994.75	985.85	984.85	991.50	52		994.75	985.85	984.85	991.50
53		994.75	985.85	984.85	991.50	53		994.75	985.85	984.85	991.50	53		994.75	985.85	984.85	991.50
54		994.75	985.85	984.85	991.50	54		994.75	985.85	984.85	991.50	54		994.75	985.85	984.85	991.50
55		994.75	985.85	984.85	991.50	55		994.75	985.85	984.85	991.50	55		994.75	985.85	984.85	991.50
56		994.75	985.85	984.85	991.50	56		994.75	985.85	984.85	991.50	56		994.75	985.85	984.85	991.50
57		994.75	985.85	984.85	991.50	57		994.75	985.85	984.85	991.50	57		994.75	985.85	984.85	991.50
58		994.75	985.85	984.85	991.50	58		994.75	985.85	984.85	991.50	58		994.75	985.85	984.85	991.50
59		994.75	985.85	984.85	991.50	59		994.75	985.85	984.85	991.50	59		994.75	985.85	984.85	991.50
60		994.75	985.85	984.85	991.50	60		994.75	985.85	984.85	991.50	60		994.75	985.85	984.85	991.50
61		994.75	985.85	984.85	991.50	61		994.75	985.85	984.85	991.50	61		994.75	985.85	984.85	991.50
62		994.75	985.85	984.85	991.50	62		994.75	985.85	984.85	991.50	62		994.75	985.85	984.85	991.50
63		994.75	985.85	984.85	991.50	63		994.75	985.85	984.85	991.50	63		994.75	985.85	984.85	991.50
64		994.75	985.85	984.85	991.50	64		994.75	985.85	984.85	991.50	64		994.75	985.85	984.85	991.50
65		994.75	985.85	984.85	991.50	65		994.75	985.85	984.85	991.50	65		994.75	985.85	984.85	991.50
66		994.75	985.85	984.85	991.50	66		994.75	985.85	984.85	991.50	66		994.75	985.85	984.85	991.50
67		994.75	985.85	984.85	991.50	67		994.75	985.85	984.85	991.50	67		994.75	985.85	984.85	991.50
68		994.75	985.85	984.85	991.50	68		994.75	985.85	984.85	991.50	68		994.75	985.85	984.85	991.50
69		994.75	985.85	984.85	991.50	69		994.75	985.85	984.85	991.50	69		994.75	985.85	984.85	991.50
70		994.75	985.85	984.85	991.50	70		994.75	985.85	984.85	991.50	70		994.75	985.85	984.85	991.50
71		994.75	985.85	984.85	991.50	71		994.75	985.85	984.85	991.50	71		994.75	985.85	984.85	991.50
72		994.75	985.85	984.85	991.50	72		994.75	985.85	984.85	991.50	72		994.75	985.85	984.85	991.50
73		994.75	985.85	984.85	991.50	73		994.75	985.85	984.85	991.50	73		994.75	985.85	984.85	991.50
74		994.75	985.85	984.85	991.50	74		994.75	985.85	984.85	991.50	74		994.75	985.85	984.85	991.50
75		994.75	985.85	984.85	991.50	75		994.75	985.85	984.85	991.50	75		994.75	985.85	984.85	991.50
76		994.75	985.85	984.85	991.50	76		994.75	985.85	984.85	991.50	76		994.75	985.85	984.85	991.50
77		994.75	985.85	984.85	991.50	77		994.75	985.85	984.85	991.50	77		994.75	985.85	984.85	991.50
78		994.75	985.85	984.85	991.50	78		994.75	985.85	984.85	991.50	78		994.75	985.85	984.85	991.50
79		994.75	985.85	984.85	991.50	79		994.75	985.85	984.85	991.50	79		994.75	985.85	984.85	991.50
80		994.75	985.85	984.85	991.50	80		994.75	985.85	984.85	991.50	80		994.75	985.85	984.85	991.50
81		994.75	985.85	984.85	991.50	81		994.75	985.85	984.85	991.50	81		994.75	985.85	984.85	991.50
82		994.75	985.85	984.85	991.50	82		994.75	985.85	984.85	991.50	82		994.75	985.85	984.85	991.50
83		994.75	985.85	984.85	991.50	83		994.75	985.85	984.85	991.50	83		994.75	985.85	984.85	991.50
84		994.75	985.85	984.85	991.50	84		994.75	985.85	984.85	991.50	84		994.75	985.85	984.85	991.50
85		994.75	985.85	984.85	991.50	85		994.75	985.85	984.85	991.50	85		994.75	985.85	984.85	991.50
86		994.75	985.85	984.85	991.50	86		994.75	985.85	984.85	991.50	86		994.75	985.85	984.85	991.50
87		994.75	985.85	984.85	991.50	87		994.75	985.85	984.85	991.50	87		994.75	985.85	984.85	991.50
88		994.75	985.85	984.85	991.50	88		994.75	985.85	984.85	991.50	88		994.75	985.85	984.85	991.50
89		994.75	985.85	984.85	991.50	89		994.75	985.85	984.85	991.50	89		994.75	985.85	984.85	991.50
90		994.75	985.85	984.85	991.50	90		994.75	985.85	984.85	991.50	90		994.75	985.85	984.85	991.50
91		994.75	985.85	984.85	991.50	91		994.75	985.85	984.85	991.50	91		994.75	985.85	984.85	991.50
92		994.75	985.85	984.85	991.50	92		994.75	985.85	984.85	991.50	92		994.75	985.85	984.85	991.50
93		994.75	985.85	984.85	991.50	93		994.75	985.85	984.85	991.50	93		994.75	985.85	984.85	991.50
94		994.75	985.85	984.85	991.50	94		994.75	985.85	984.85	991.50	94		994.75	985.85	984.85	991.50
95		994.75	985.85	984.85	991.50	95		994.75	985.85	984.85	991.50	95		994.75	985.85	984.85	991.50
96		994.75	985.85	984.85	991.50	96		994.75	985.85	984.85	991.50	96		994.75	985.85	984.85	991.50
97		994.75	985.85	984.85	991.50	97		994.75	985.85	984.85	991.50	97		994.75	985.85	984.85	991.50
98		994.75	985.85	984.85	991.50	98		994.75	985.85	984.85	991.50	98		994.75	985.85	984.85	991.50
99		994.75	985.85	984.85	991.50	99		994.75	985.85	984.85	991.50	99		994.75	985.85	984.85	991.50
100		994.75	985.85	984.85	991.50	100		994.75	985.85	984.85	991.50	100		994.75	985.85	984.85	991.50
101		994.75	985.85	984.85	991.50	101		994.75	985.85	984.85	991.50	101		994.75	985.85	984.85	991.50
102		994.75	985.85	984.85	991.50	102		994.75	985.85	984.85	991.50	102		994.75	985.85	984.85	991.50
103		994.75	985.85	984.85	991.50	103		994.75	985.85	984.85	991.50	103		994.75	985.85	984.85	991.50
104		994.75	985.85	984.85	991.50	104		994.75	985.85	984.85	991.50	104		994.75	985.85	984.85	991.50
105		994.75	985.85	984.85	991.50	105		994.75	985.85	984.85	991.50	105		994.75	985.85	984.85	991.50
106		994.75	985.85	984.85	991.50	106		994.75	985.85	984.85	991.50	106		994.75	985.85	984.85	991.50
107		994.75	985.85	984.85	991.50	107		994.75	985.85	984.85	991.50	107		994.75	985.85	984.85	991.50
108		994.75	985.85	984.85	991.50	108		994.75	985.85	984.85	991.50	108		994.75	985.85	984.85	991.50



SUMMERFIELD POINTE ESTATES P.U.D.

Project: Summerfield Pointe PUD  
 Location: Genoa Township, Livingston County, MI  
 Date: 11/15/2021

PROPOSED STORM WATER RUN-OFF CALCULATIONS							
"Area"	0.90	0.80	0.70	0.60	0.50	1.00	(ACRES)
Pavement	Gravel	Building	Lawn	Water	Area	"C" Factor	
CB-01	0.47	0.00	0.00	0.31	0.00	0.78	0.82
CB-02	0.03	0.00	0.00	0.02	0.00	0.05	0.52
CB-02B	0.04	0.00	0.00	0.04	0.00	0.08	0.55
CB-03	0.34	0.00	0.07	0.18	0.00	0.59	0.67
MH-03A	0.00	0.00	0.42	0.00	0.00	0.42	0.80
CB-04	0.24	0.00	0.00	0.26	0.00	0.60	0.80
CB-05	0.28	0.00	0.14	0.10	0.00	0.52	0.74
CB-06	0.13	0.00	0.00	0.03	0.00	0.16	0.77
CB-07	0.03	0.00	0.00	0.01	0.00	0.04	0.73
CB-08	0.17	0.00	0.00	0.15	0.00	0.32	0.57
CB-09	0.14	0.00	0.00	0.12	0.00	0.26	0.58
CB-12	0.40	0.00	0.00	0.25	0.00	0.65	0.63
CB-13	0.31	0.00	0.00	0.12	0.00	0.43	0.70
CB-14	0.41	0.00	0.35	0.80	0.00	1.56	0.52
CB-15	0.39	0.00	0.28	0.21	0.00	0.88	0.70
CB-16	0.32	0.00	0.14	0.78	0.00	1.22	0.45
CB-17	0.32	0.00	0.28	0.19	0.00	0.79	0.70
CB-21	0.17	0.00	0.00	0.15	0.00	0.32	0.57
CB-22	0.14	0.00	0.00	0.08	0.00	0.22	0.65
CB-23	0.17	0.00	0.00	0.21	0.00	0.38	0.51
CB-27	0.23	0.00	0.15	0.15	0.00	0.53	0.67
CB-100	0.21	0.00	0.09	0.07	0.00	0.37	0.74
CB-101	0.14	0.00	0.15	0.09	0.00	0.38	0.69
CB-111	0.14	0.00	0.00	0.19	0.00	0.24	0.61
YB-112	0.00	0.00	0.06	0.27	0.00	0.33	0.31
YB-113	0.00	0.00	0.06	0.22	0.00	0.28	0.33
YB-114	0.00	0.00	0.06	0.24	0.00	0.30	0.32
YB-115	0.00	0.00	0.06	0.19	0.00	0.25	0.34
CB-116	0.15	0.00	0.00	0.13	0.00	0.28	0.58
CB-118	0.29	0.00	0.00	0.26	0.00	0.55	0.57
YB-120	0.00	0.00	0.18	0.83	0.00	0.81	0.33
YB-121	0.00	0.00	0.15	0.62	0.00	0.77	0.32
YB-122	0.00	0.00	0.06	0.40	0.00	0.46	0.28
YB-123	0.00	0.00	0.06	0.28	0.00	0.34	0.31
YB-124	0.00	0.00	0.12	0.34	0.00	0.46	0.36
YB-125	0.00	0.00	0.06	0.21	0.00	0.27	0.33
CB-131	0.40	0.00	0.00	0.03	0.00	0.17	0.78
FES-303	0.01	0.00	0.00	0.22	0.00	0.23	0.23
CB-133	0.35	0.00	0.21	0.00	0.00	0.56	0.64
YB-134	0.00	0.00	0.03	0.14	0.00	0.17	0.31
YB-135	0.00	0.00	0.06	0.20	0.00	0.26	0.34
YB-136	0.00	0.00	0.06	0.24	0.00	0.30	0.32
YB-137	0.00	0.00	0.06	0.29	0.00	0.35	0.30
CB-301	0.27	0.00	0.00	0.15	0.00	0.42	0.65
CB-201	0.31	0.00	0.00	0.25	0.00	0.56	0.59
YB-202	0.00	0.00	0.15	0.41	0.00	0.56	0.36
YB-203	0.00	0.00	0.18	1.15	0.00	1.33	0.28
YB-205	0.00	0.00	0.06	0.18	0.00	0.24	0.35
YB-207	0.00	0.00	0.06	0.20	0.00	0.26	0.34
YB-208	0.00	0.00	0.06	0.29	0.00	0.35	0.30
YB-209	0.00	0.00	0.06	0.60	0.00	0.66	0.25
YB-210	0.00	0.00	0.09	0.36	0.00	0.45	0.32
YB-211	0.00	0.00	0.12	0.32	0.00	0.44	0.36
CB-221	0.27	0.00	0.00	0.22	0.00	0.49	0.59
YB-222	0.00	0.00	0.24	0.83	0.00	1.07	0.33
YB-223	0.00	0.00	0.12	0.70	0.00	0.82	0.29
YB-224	0.00	0.00	0.09	0.51	0.00	0.60	0.29
YB-225	0.00	0.00	0.24	0.96	0.00	1.20	0.32
YB-232	0.00	0.00	0.12	0.31	0.00	0.43	0.37
YB-233	0.00	0.00	0.06	0.19	0.00	0.25	0.34
YB-234	0.00	0.00	0.03	0.10	0.00	0.13	0.34
FOKESWAY	0.00	0.00	0.00	0.85	0.14	0.99	0.31
BASIN	0.00	0.00	0.00	2.04	0.53	2.57	0.36

TOTAL AREA = 33.54  
 RUN-OFF COEFFICIENT = 0.46

EXISTING NATURE PRESERVE  
 DEDICATED TO GENOA TOWNSHIP  
 PURSUANT TO THE SUMMERFIELD  
 POINTE PLANNED UNIT  
 DEVELOPMENT  
 AGREEMENT DATED:  
 APRIL 19, 2002.

LEGEND

- = PROPERTY LINE
- - - = EX. EDGE OF PAVEMENT
- - - = EX. SANITARY SEWER
- - - = EX. STORM SEWER
- - - = EX. WATERMAIN
- - - = EX. EASEMENT LINE
- - - = APPROX. WETLAND LINE
- - - = PROP. EDGE OF PAVEMENT
- - - = PROP. CENTERLINE OF ROAD
- - - = PROP. DRAINAGE AREA
- - - = PROP. LIMITS OF DISTURBANCE

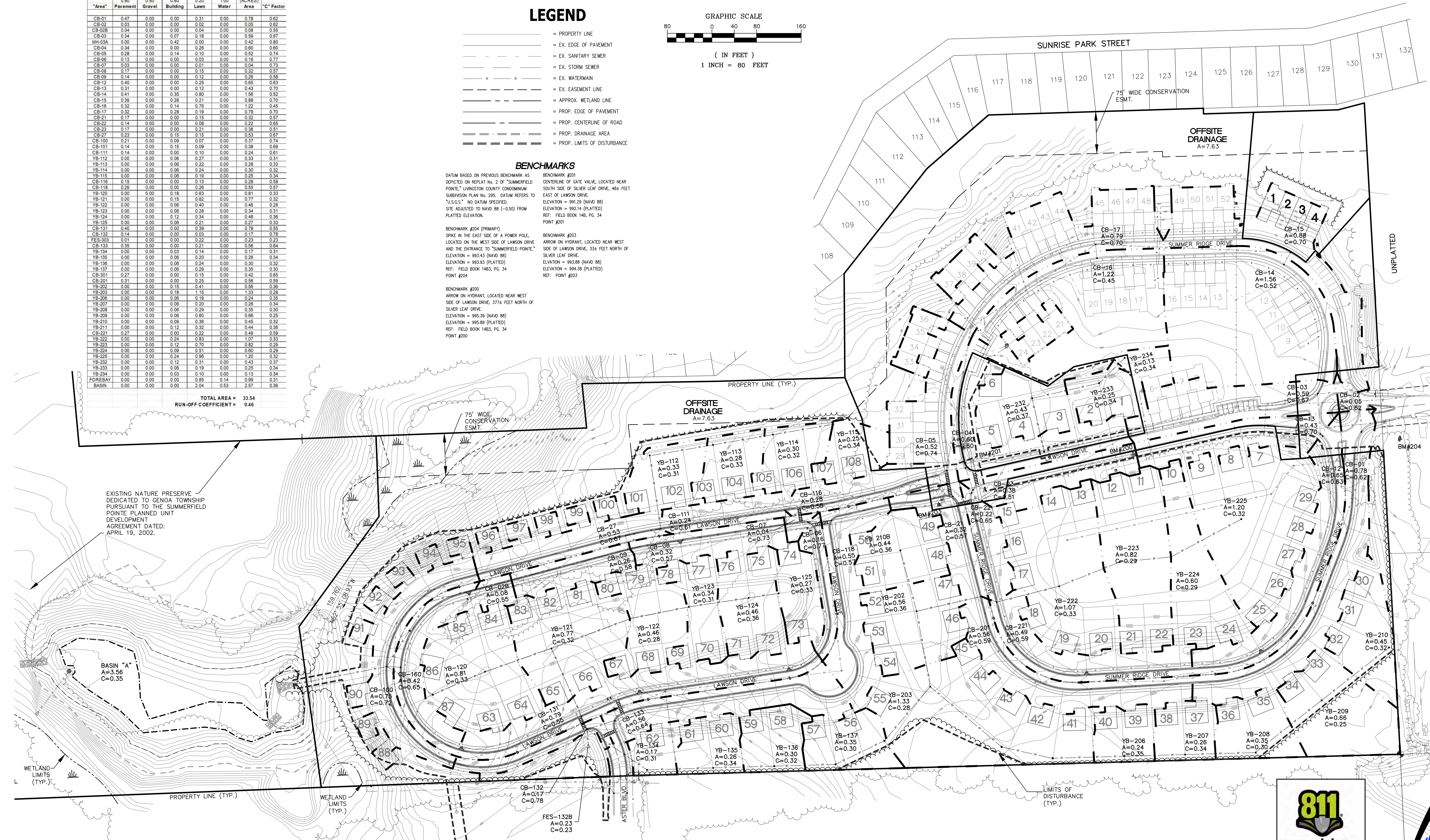
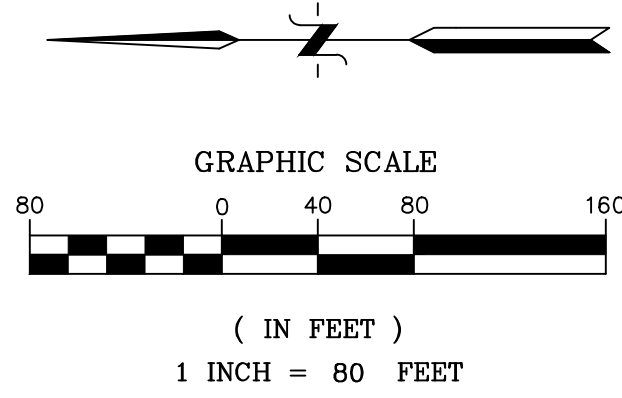
BENCHMARKS

DATUM BASED ON PREVIOUS BENCHMARK AS  
 DEPICTED ON REPEAT No. 2 OF "SUMMERFIELD  
 POINTE," LIVINGSTON COUNTY CONDORMIUM  
 SUBDIVISION PLAN No. 295. DATUM REFERS TO  
 "U.S.G.S." NO DATUM SPECIFIED.  
 SITE ADJUSTED TO NAVD 88 (-0.50) FROM  
 PLATTED ELEVATION.

BENCHMARK #201  
 CENTERLINE OF GATE VALVE, LOCATED NEAR  
 SOUTH SIDE OF SILVER LEAF DRIVE, 488 FEET  
 EAST OF LAWSON DRIVE.  
 ELEVATION = 991.29 (NAVD 88)  
 ELEVATION = 992.14 (PLATTED)  
 REF: FIELD BOOK 14B, PG. 34  
 POINT #201

BENCHMARK #204 (PRIMARY)  
 SPIKE IN THE EAST SIDE OF A POWER POLE,  
 LOCATED ON THE WEST SIDE OF LAWSON DRIVE  
 AND THE ENTRANCE TO "SUMMERFIELD POINTE."  
 SILVER LEAF DRIVE.  
 ELEVATION = 993.53 (PLATTED)  
 ELEVATION = 993.58 (NAVD 88)  
 ELEVATION = 994.38 (PLATTED)  
 REF: FIELD BOOK 14B3, PG. 34  
 POINT #204

BENCHMARK #200  
 ARROW ON HYDRANT, LOCATED NEAR WEST  
 SIDE OF LAWSON DRIVE, 3774 FEET NORTH OF  
 SILVER LEAF DRIVE.  
 ELEVATION = 995.39 (NAVD 88)  
 ELEVATION = 995.89 (PLATTED)  
 REF: FIELD BOOK 14B3, PG. 34  
 POINT #200



TOTAL AREA OF DISTURBANCE = 23.0 AC.

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 (TOLL FREE)  
 OR VISIT CALL811.COM

**DESIGN INC.**  
 (810) 227-9533  
 CIVIL ENGINEERS  
 LAND SURVEYORS  
 2183 PLESS DRIVE  
 BRIGHTON, MICHIGAN 48114

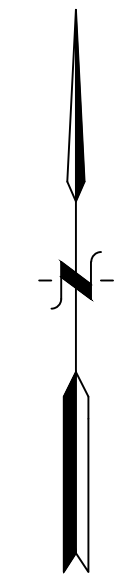
DESIGN: FAF	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION	<p>SUMMERFIELD                  POINTE ESTATES PUD</p> <p>WATERSHED PLAN</p>	CLIENT:	SCALE: 1in. = 80ft.
DRAFT: OM								HEALY HOMES AT SUMMERFIELD LLC 3696 SLEETH RD, COMMERCE TOWNSHIP, MICHIGAN 48382 248-684-1699	PROJECT No.: 214159 DWG NAME: 4159_WS
CHECK: WMP								ISSUED: FEB. 23, 2022	

**WS1**



**MAP LEGEND**

- Area of Interest (AOI)
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points
- Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features
- Water Features**
- Streams and Canals
- Transportation**
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads
- Background**
- Aerial Photography



NATURE PRESERVE AREA  
#4711-04-300-013

AREA "A"  
#4711-04-400-014

EXISTING SUMMERFIELD  
POINTE CONDOMINIUM AREA

AREA "B"  
#4711-04-400-015

AREA "C"  
#4711-04-400-016

**Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Cc	Carlisle muck, 0 to 2 percent slopes	6.1	3.5%
CvraaB	Conover loam, 0 to 4 percent slopes	3.4	2.0%
Gd	Gilford sandy loam, 0 to 2 percent slopes, gravelly subsoil	11.2	6.6%
Ho	Houghton muck, 0 to 1 percent slopes	4.5	2.7%
MoB	Wawasee loam, 2 to 6 percent slopes	70.9	41.5%
MoC	Wawasee loam, 6 to 12 percent slopes	23.6	13.8%
MoD	Miami loam, 12 to 18 percent slopes	5.8	3.4%
MoE	Miami loam, 18 to 25 percent slopes	11.9	7.0%
MoF	Miami loam, 25 to 35 percent slopes	13.1	7.6%
SvB	Spinks-Oakville loamy sands, 0 to 6 percent slopes	6.7	3.9%
W	Water	13.7	8.0%
<b>Totals for Area of Interest</b>		<b>171.0</b>	<b>100.0%</b>

**EXISTING SOILS MAP**  
NOT TO SCALE

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BRIGHTON, MICHIGAN 48114

DESIGN: FAF	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: OM						
CHECK: WMP						

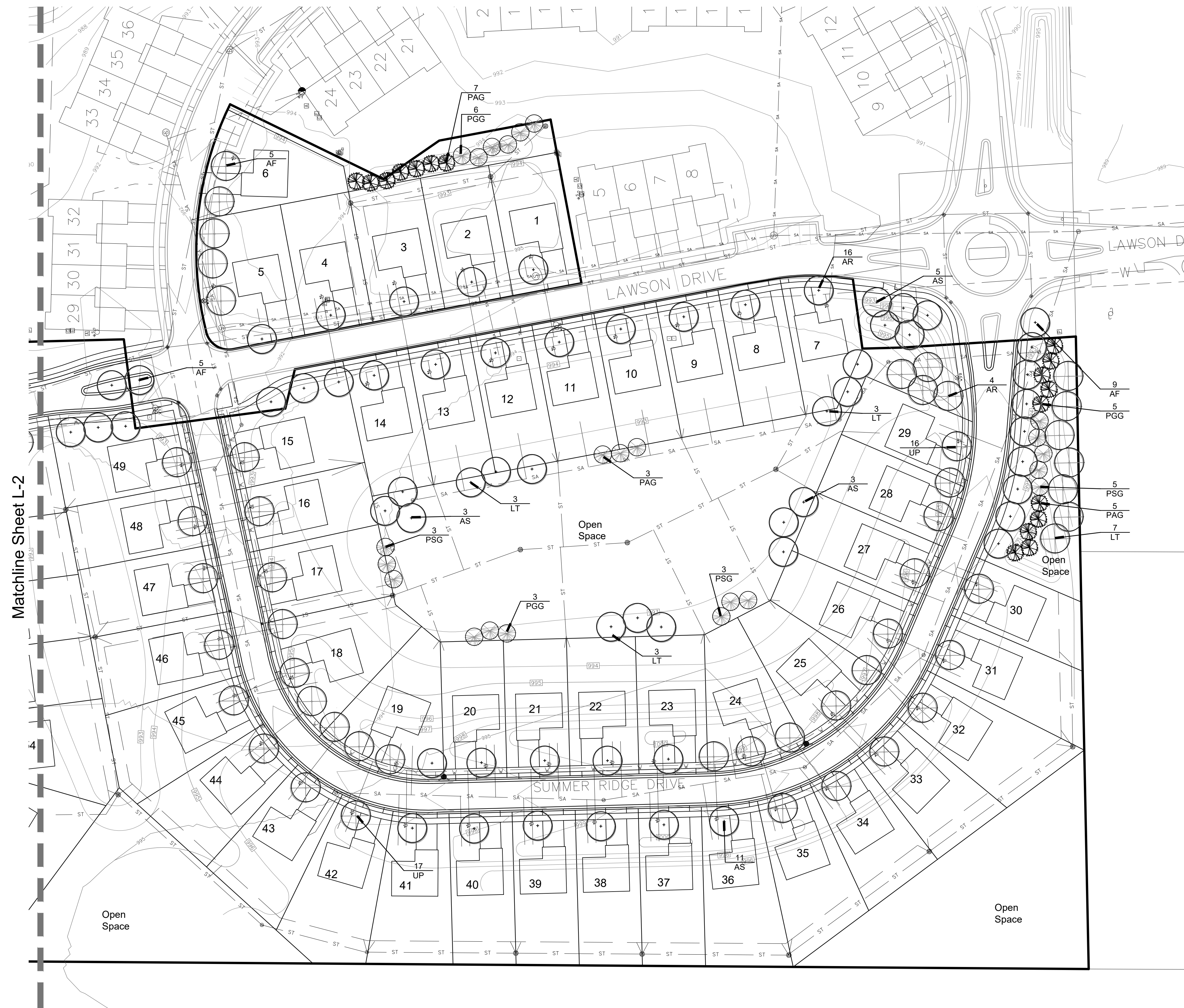
**SUMMERFIELD  
POINTE ESTATES PUD**

**EXISTING  
SOILS MAP**

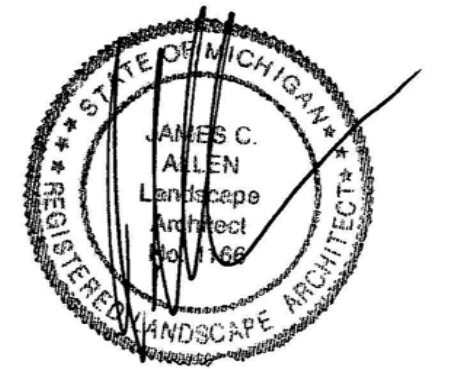
CLIENT:	SCALE: NOT TO SCALE
HEALY HOMES AT SUMMERFIELD LLC 3696 SLEETH RD, COMMERCE TOWNSHIP, MICHIGAN 48382 248-684-1699	PROJECT No.: 214159 DWG NAME: 4159_WS2 ISSUED: FEB. 23, 2022

**WS2**





Seal: \_\_\_\_\_



Title: \_\_\_\_\_  
**Landscape Plan**

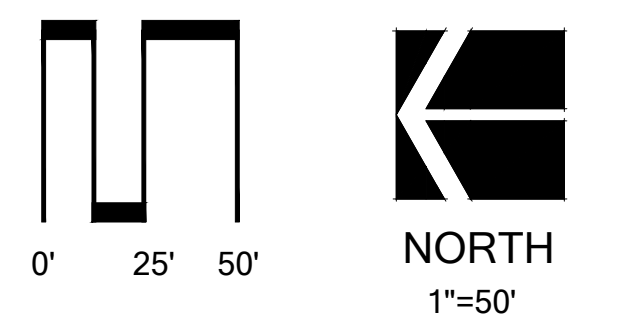
Project: \_\_\_\_\_  
**Summerfield Point Estates**  
 Genoa Township, Michigan

Prepared for: \_\_\_\_\_  
 Healy Homes, LLC  
 3696 Sleeth Road  
 Commerce Township, Michigan 48382

Revision:	Issued:
Review	October 25, 2021
Revised	November 4, 2021
Revised	March 24, 2022

Job Number: \_\_\_\_\_  
 21-068

Drawn By: \_\_\_\_\_ Checked By: \_\_\_\_\_  
 jca jca



**Landscape Summary**

Street Trees  
 Lots Shown 108 Lots  
 Street Trees Required 216 Trees (108 x 8)  
 Street Trees Provided 216 Trees

**Plant List - This Sheet**

sym.	qty.	botanical name	common name	caliper	spacing	root	height
<b>Street Trees</b>							
AF	20	Acer x. freemanii 'Autumn Blaze'	Autumn Blaze Maple	2.5"	as shown	B&B	
AR	20	Acer rubrum 'October Glory'	October Glory Red Maple	2.5"	as shown	B&B	
AS	19	Acer saccharum 'Green Mountain'	Green Mountain Sugar Maple	2.5"	as shown	B&B	
LT	19	Liriodendron tulipifera	Tulip Tree	2.5"	as shown	B&B	
UP	33	Ulmus 'Pioneer'	Pioneer Elm	2.5"	as shown	B&B	
111		Trees Provided					
<b>General Plantings</b>							
PAG	15	Picea abies	Norway Spruce		as shown	B&B	6'
PGG	14	Picea glauca var. densata	Black Hills Spruce		as shown	B&B	6'
PSG	11	Pinus strobus	White Pine		as shown	B&B	6'

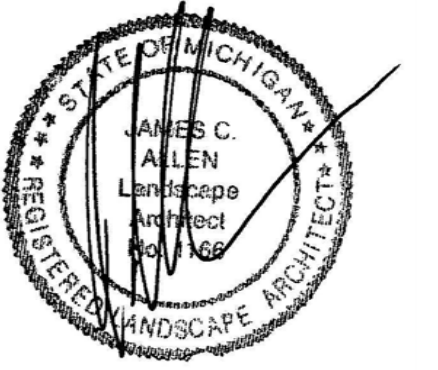


Sheet No. \_\_\_\_\_

**L-1**



Seal: \_\_\_\_\_



Title: \_\_\_\_\_  
**Landscape Plan**

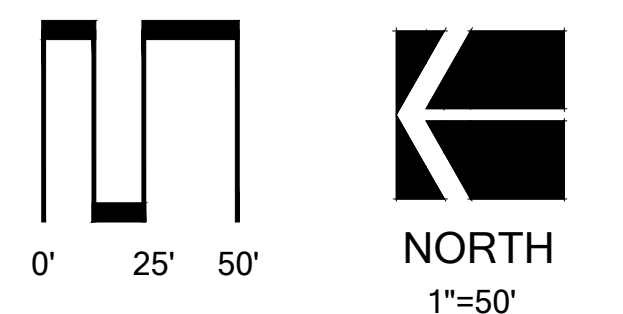
Project: \_\_\_\_\_  
**Summerfield Point Estates**  
 Genoa Township, Michigan

Prepared for: \_\_\_\_\_  
 Healy Homes, LLC  
 3696 Sleeth Road  
 Commerce Township, Michigan 48382

Revision: \_\_\_\_\_ Issued: \_\_\_\_\_  
 Revised October 25, 2021  
 Revised November 4, 2021  
 Revised March 24, 2022

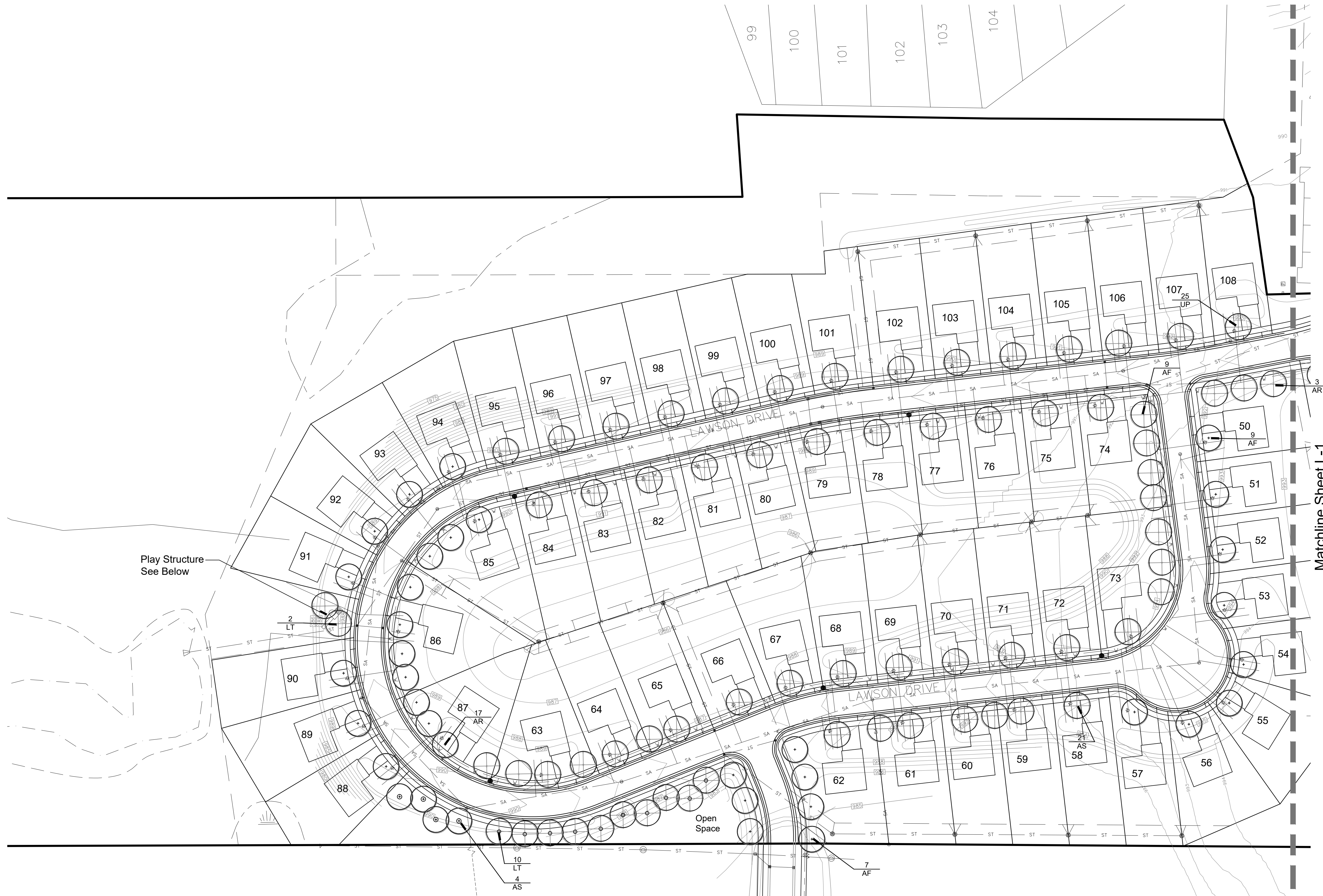
Job Number: \_\_\_\_\_  
 21-068

Drawn By: \_\_\_\_\_ Checked By: \_\_\_\_\_  
 jca jca



Sheet No. \_\_\_\_\_

**L-2**



Play Structure  
 See Below

Open Space

Matchline Sheet L-1

**Plant List - This Sheet**

sym.	qty.	botanical name	common name	caliper	spacing	root	height
<b>Street Trees</b>							
AF	23	Acer x. 'freemanii' 'Autumn Blaze'	Autumn Blaze Maple	2.5"	as shown	B&B	
AR	20	Acer rubrum 'October Glory'	October Glory Red Maple	2.5"	as shown	B&B	
AS	25	Acer saccharum 'Green Mountain'	Green Mountain Sugar Maple	2.5"	as shown	B&B	
LT	12	Liriodendron tulipifera	Tulip Tree	2.5"	as shown	B&B	
UP	25	Ulmus 'Pioneer'	Pioneer Elm	2.5"	as shown	B&B	
105		Trees Provided					

**Play Structure**



Port Liberty Play Structure  
 by Playgroundequipment.com



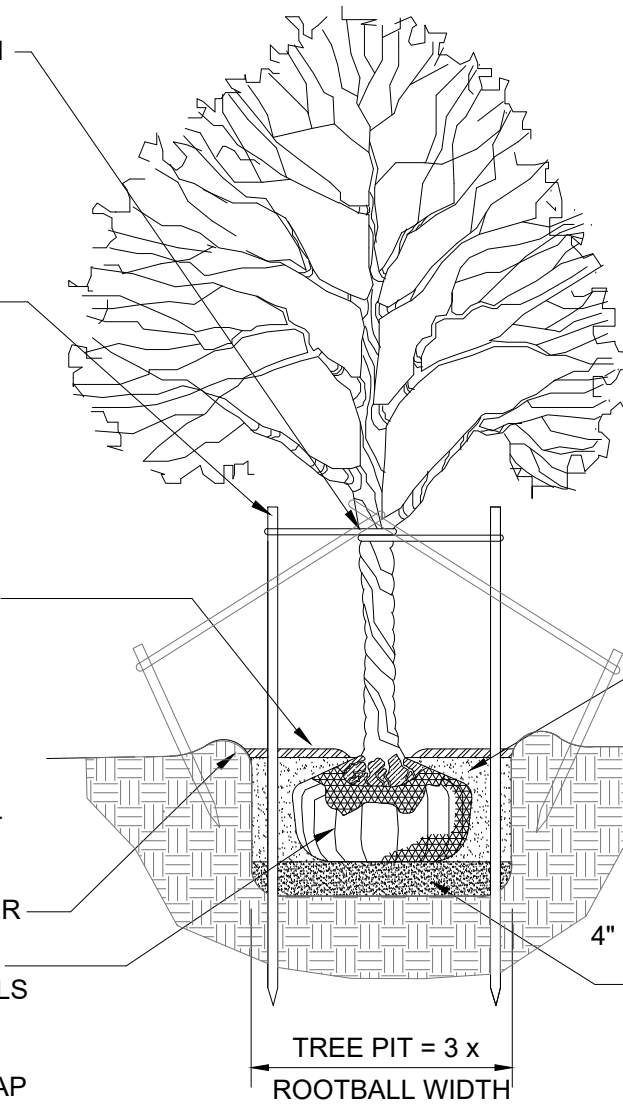
NOTE:  
GUY DECIDUOUS TREES ABOVE  
3" CAL. STAKE DECIDUOUS  
TREES BELOW 3" CAL.

STAKE TREES AT FIRST BRANCH  
USING 2"-3" WIDE BELT-LIKE  
NYLON OR PLASTIC STRAPS.  
ALLOW FOR SOME MINIMAL  
FLEXING OF THE TREE.  
REMOVE AFTER ONE YEAR.

2" X 2" HARDWOOD STAKES,  
MIN. 36" ABOVE GROUND FOR  
UPRIGHT, 18" IF ANGLED. DRIVE  
STAKES A MIN. 18" INTO  
UNDISTURBED GROUND  
OUTSIDE ROOTBALL. REMOVE  
AFTER ONE YEAR.

MULCH 4" DEPTH WITH  
SHREDDED HARDWOOD BARK,  
NATURAL IN COLOR. LEAVE 3"  
CIRCLE OF BARE SOIL AT BASE  
OF TREE TRUNK. PULL ANY  
ROOT BALL DIRT EXTENDING  
ABOVE THE ROOT FLARE AWAY  
FROM THE TRUNK SO THE ROOT  
FLARE IS EXPOSED TO AIR.

MOUND EARTH TO FORM SAUCER  
REMOVE ALL  
NON-BIODEGRADABLE MATERIALS  
COMPLETELY FROM THE  
ROOTBALL. CUT DOWN WIRE  
BASKET AND FOLD DOWN BURLAP  
FROM TOP 1/2 OF THE ROOTBALL.



NOTE:  
TREE SHALL BEAR SAME  
RELATION TO FINISH GRADE AS  
IT BORE ORIGINALLY OR  
SLIGHTLY HIGHER THAN FINISH  
GRADE UP TO 6" ABOVE GRADE,  
IF DIRECTED BY LANDSCAPE  
ARCHITECT FOR HEAVY CLAY  
SOIL AREAS.

DO NOT PRUNE TERMINAL  
LEADER. PRUNE ONLY DEAD OR  
BROKEN BRANCHES.

REMOVE ALL TAGS, STRING,  
PLASTICS AND OTHER  
MATERIALS THAT ARE  
UNSIGHTLY OR COULD CAUSE  
GIRDLING.

PLANTING MIXTURE:  
AMEND SOILS PER  
SITE CONDITIONS  
AND REQUIREMENTS  
OF THE PLANT  
MATERIAL.

SCARIFY SUBGRADE  
AND PLANTING PIT  
SIDES. RECOMPACT  
BASE OF TO 4"  
DEPTH.

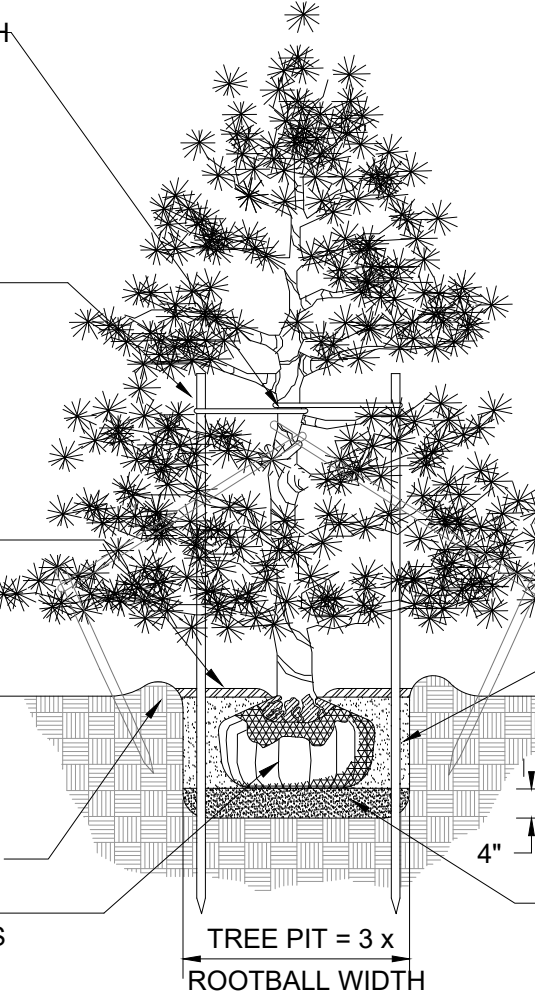
NOTE:  
GUY EVERGREEN TREES ABOVE  
12' HEIGHT. STAKE EVERGREEN  
TREE BELOW 12' HEIGHT.

STAKE TREES AT FIRST BRANCH  
USING 2"-3" WIDE BELT-LIKE  
NYLON OR PLASTIC STRAPS.  
ALLOW FOR SOME MINIMAL  
FLEXING OF THE TREE.  
REMOVE AFTER ONE YEAR.

2" X 2" HARDWOOD STAKES,  
MIN. 36" ABOVE GROUND FOR  
UPRIGHT, 18" IF ANGLED. DRIVE  
STAKES A MIN. 18" INTO  
UNDISTURBED GROUND  
OUTSIDE ROOTBALL. REMOVE  
AFTER ONE YEAR.

MULCH 4" DEPTH WITH  
SHREDDED HARDWOOD BARK,  
NATURAL IN COLOR. LEAVE 3"  
CIRCLE OF BARE SOIL AT BASE  
OF TREE TRUNK. PULL ANY  
ROOT BALL DIRT EXTENDING  
ABOVE THE ROOT FLARE AWAY  
FROM THE TRUNK SO THE ROOT  
FLARE IS EXPOSED TO AIR.

MOUND EARTH TO FORM SAUCER  
REMOVE ALL  
NON-BIODEGRADABLE MATERIALS  
COMPLETELY FROM THE  
ROOTBALL. CUT DOWN WIRE  
BASKET AND FOLD DOWN BURLAP  
FROM TOP 1/2 OF THE ROOTBALL.



NOTE:  
TREE SHALL BEAR SAME  
RELATION TO FINISH GRADE AS  
IT BORE ORIGINALLY OR  
SLIGHTLY HIGHER THAN FINISH  
GRADE UP TO 6" ABOVE GRADE,  
IF DIRECTED BY LANDSCAPE  
ARCHITECT FOR HEAVY CLAY  
SOIL AREAS.

DO NOT PRUNE TERMINAL  
LEADER. PRUNE ONLY DEAD OR  
BROKEN BRANCHES.

REMOVE ALL TAGS, STRING,  
PLASTICS AND OTHER  
MATERIALS THAT ARE  
UNSIGHTLY OR COULD CAUSE  
GIRDLING.

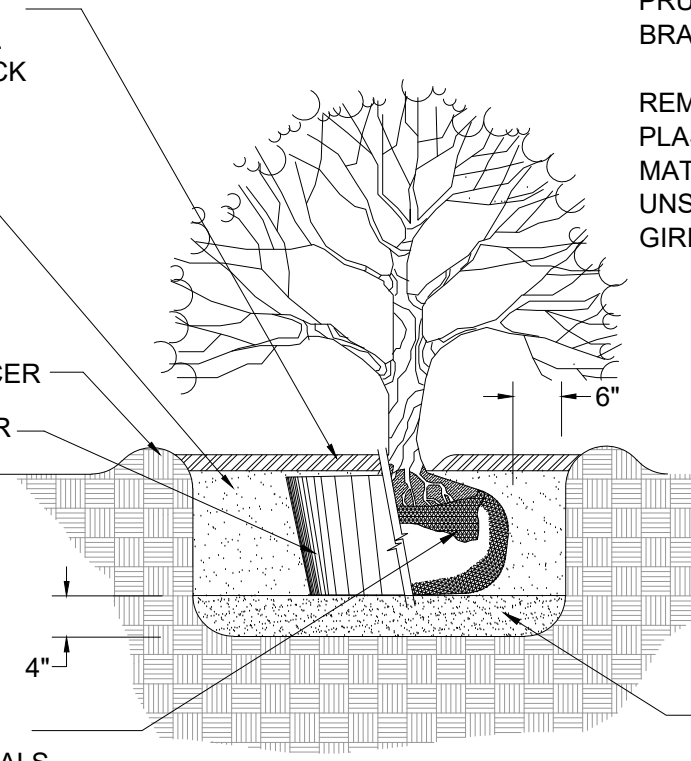
PLANTING MIXTURE:  
AMEND SOILS PER  
SITE CONDITIONS  
AND REQUIREMENTS  
OF THE PLANT  
MATERIAL.

SCARIFY SUBGRADE  
AND PLANTING PIT  
SIDES. RECOMPACT  
BASE OF TO 4"  
DEPTH.

NOTE:  
TREE SHALL BEAR SAME  
RELATION TO FINISH GRADE AS  
IT BORE ORIGINALLY OR  
SLIGHTLY HIGHER THAN FINISH  
GRADE UP TO 4" ABOVE GRADE,  
IF DIRECTED BY LANDSCAPE  
ARCHITECT FOR HEAVY CLAY  
SOIL AREAS.

MULCH 3" DEPTH WITH  
SHREDDED HARDWOOD BARK,  
NATURAL IN COLOR. PULL BACK  
3" FROM TRUNK.

REMOVE ALL  
NON-BIODEGRADABLE MATERIALS  
COMPLETELY FROM THE  
ROOTBALL. FOLD DOWN BURLAP  
FROM TOP 1/2 OF THE ROOTBALL.



PRUNE ONLY DEAD OR BROKEN  
BRANCHES.

REMOVE ALL TAGS, STRING,  
PLASTICS AND OTHER  
MATERIALS THAT ARE  
UNSIGHTLY OR COULD CAUSE  
GIRDLING.

SCARIFY SUBGRADE  
AND PLANTING PIT  
SIDES. RECOMPACT  
BASE OF TO 4"  
DEPTH.

## DECIDUOUS TREE PLANTING DETAIL

Not to scale

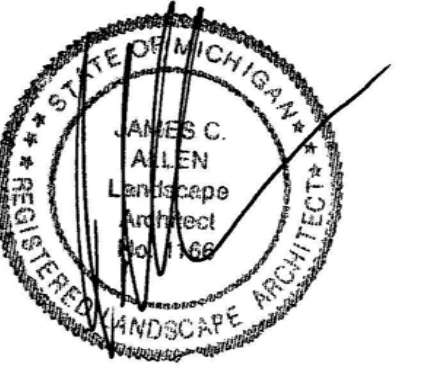
## EVERGREEN TREE PLANTING DETAIL

Not to scale

## SHRUB PLANTING DETAIL

NOT TO SCALE

Seal:



Title:

Landscape Details

Project:

Summerfield Point Estates  
Genoa Township, Michigan

Prepared for:

Healy Homes, LLC  
3696 Sleeth Road  
Commerce Township, Michigan 48382

Revision:

Review  
Revised  
Revised

Issued:

October 25, 2021  
November 4, 2021  
March 24, 2022

Job Number:

21-068

Drawn By:

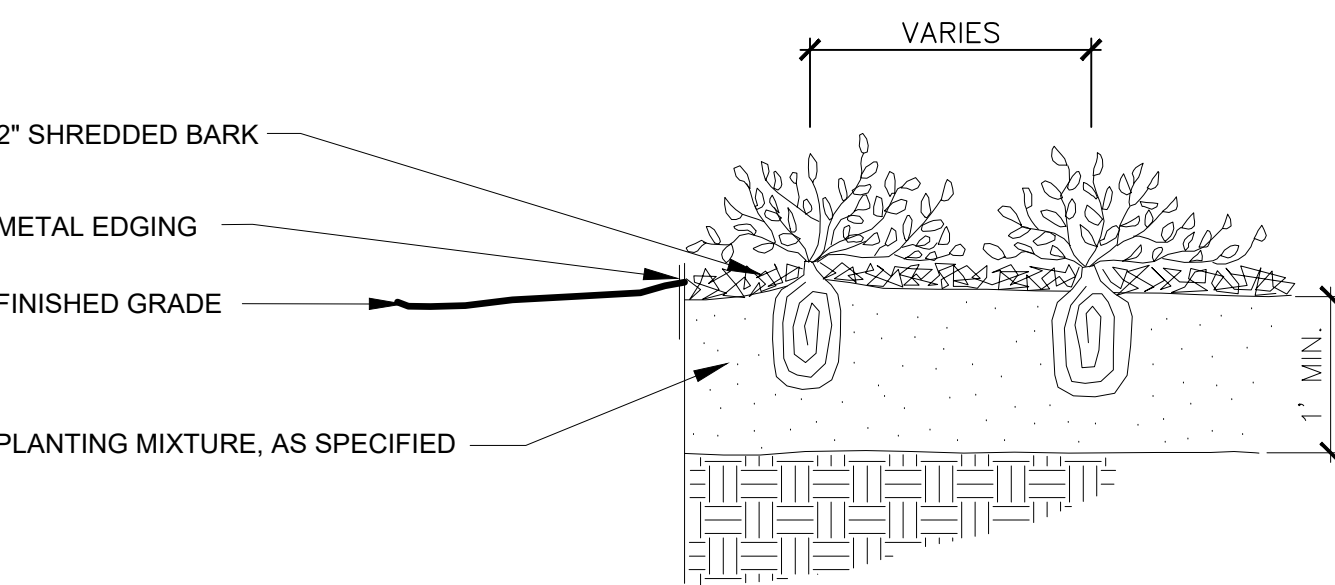
jca

Checked By:

jca

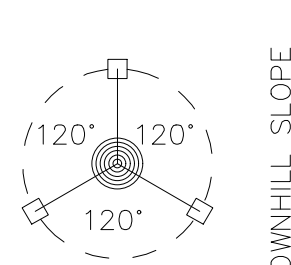
Sheet No.

L-3



## PERENNIAL PLANTING DETAIL

Not to scale

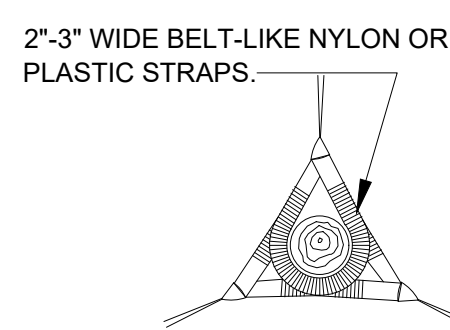


DOWNHILL SLOPE  
OR  
PREVAILING WIND

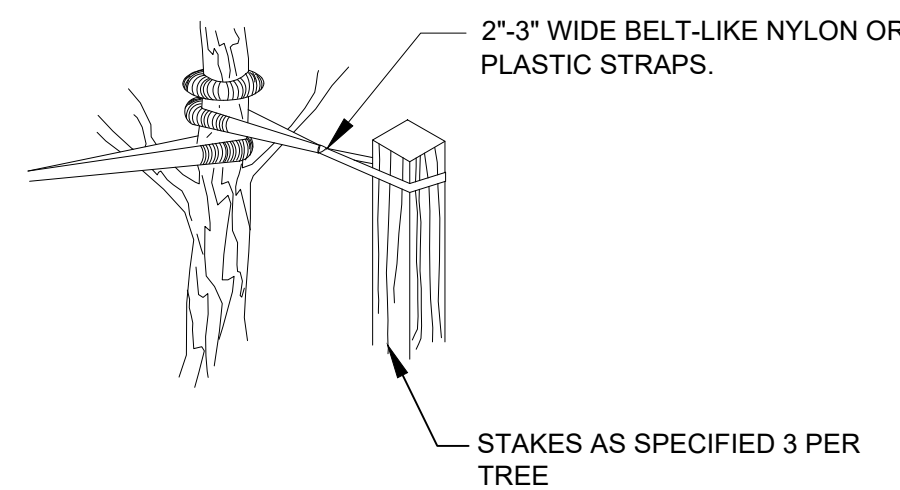
NOTE:  
ORIENT STAKING/GUYING TO PREVAILING  
WINDS, EXCEPT ON SLOPES GREATER  
THAN 3:1 ORIENT TO SLOPE.

USE SAME STAKING/GUYING  
ORIENTATION FOR ALL PLANTS WITHIN  
EACH GROUPING OR AREA

STAKING/GUYING LOCATION



2"-3" WIDE BELT-LIKE NYLON OR  
PLASTIC STRAPS.



2"-3" WIDE BELT-LIKE NYLON OR  
PLASTIC STRAPS.

STAKES AS SPECIFIED 3 PER  
TREE

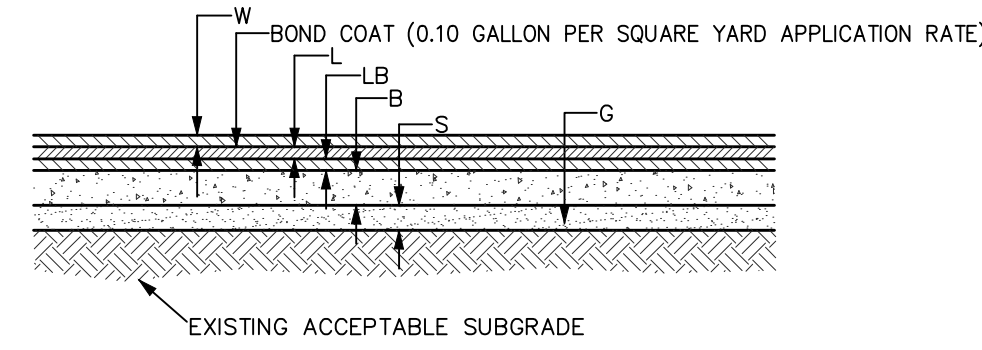
GUYING DETAIL

STAKING DETAIL

## TREE STAKING DETAIL

Not to scale



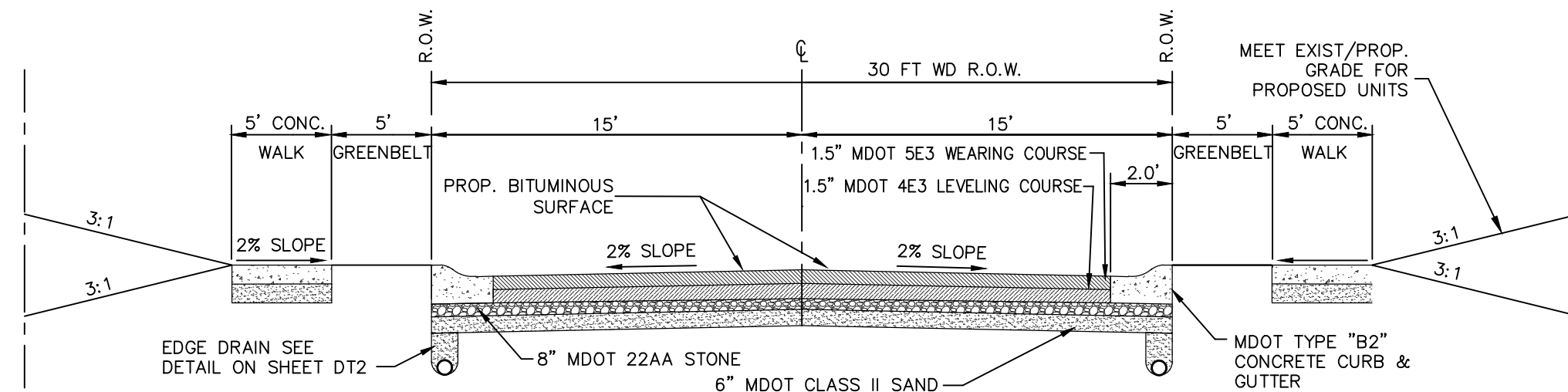


**LAWSON ROAD BITUMINOUS PAVEMENT CROSS SECTION**  
NOT TO SCALE

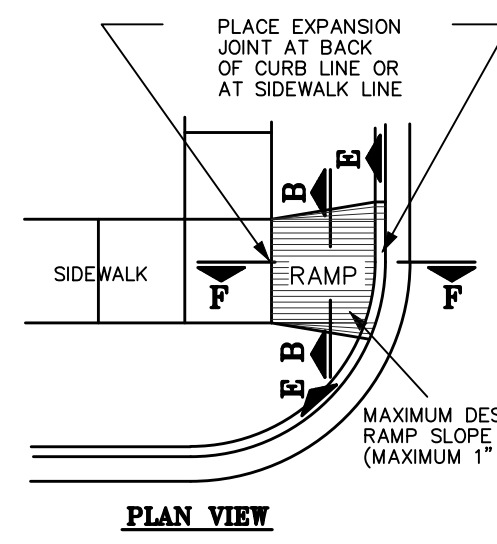
KEY	DESCRIPTION	MATERIAL SPECIFICATION	MINIMUM COMPACTED THICKNESS
W	WEARING COURSE	MDOT 5E3	1.5"
L	LEVELING COURSE	MDOT 4E3	1.5"
LB	LEVELING BASE COURSE	MDOT 3E3	N/A
B	AGGREGATE BASE	MDOT 22AA	8"
S	GRANULAR SUBBASE	MDOT CLASS II	6"
G	GEOGRID	N/A	N/A

**PAVEMENT NOTES:**

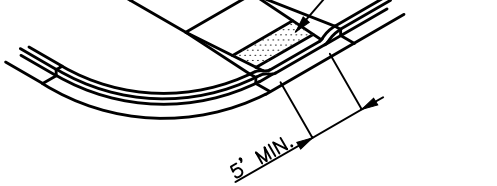
1. ABOVE CROSS SECTION APPLICABLE TO PROPOSED PRIVATE PAVEMENT WITHIN PROPOSED LAWSON DR. RIGHT OF WAY.
2. THE RECOMMENDED PG BINDER FOR THIS REGION IS PG 64-28 BASED ON MDOTS HMA SELECTION GUIDELINES.
3. UNSUITABLE SOILS SUCH AS MUCK, PEAT, MARL, TOPSOIL, SILT OR OTHER UNSTABLE MATERIALS SHALL BE UNDERCUT AND REPLACED WITH COMPACTED SAND SUBBASE.
4. AREAS OF FILL SHALL BE CONSTRUCTED TO GRADE USING 6" THICK LIFTS OF COMPACTED SAND SUBBASE.



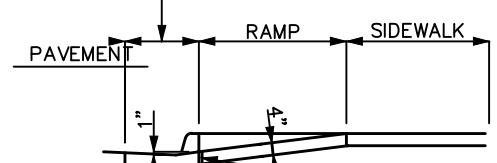
**TYPICAL CROSS SECTION FOR LAWSON DRIVE & SUMMER RIDGE DRIVE PRIVATE ROADS**  
NOT TO SCALE



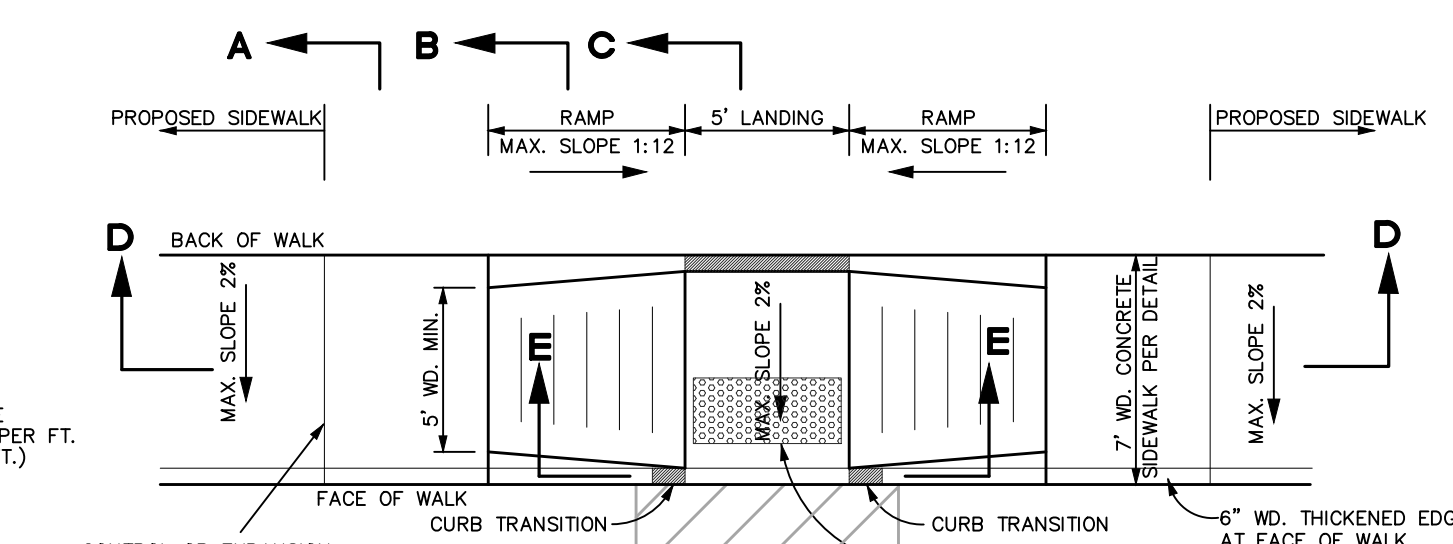
**PLAN VIEW**



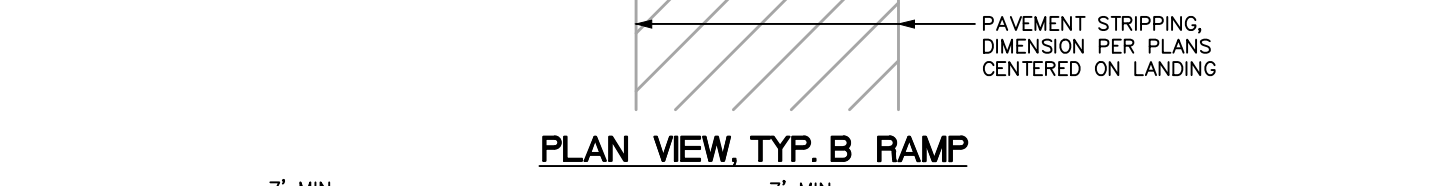
**PLAN VIEW, TYP. A RAMP**



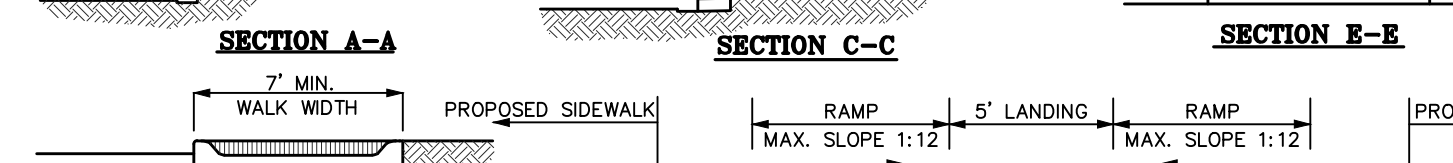
**SECTION F-F**



**PLAN VIEW, TYP. B RAMP**



**SECTION A-A**



**SECTION B-B**

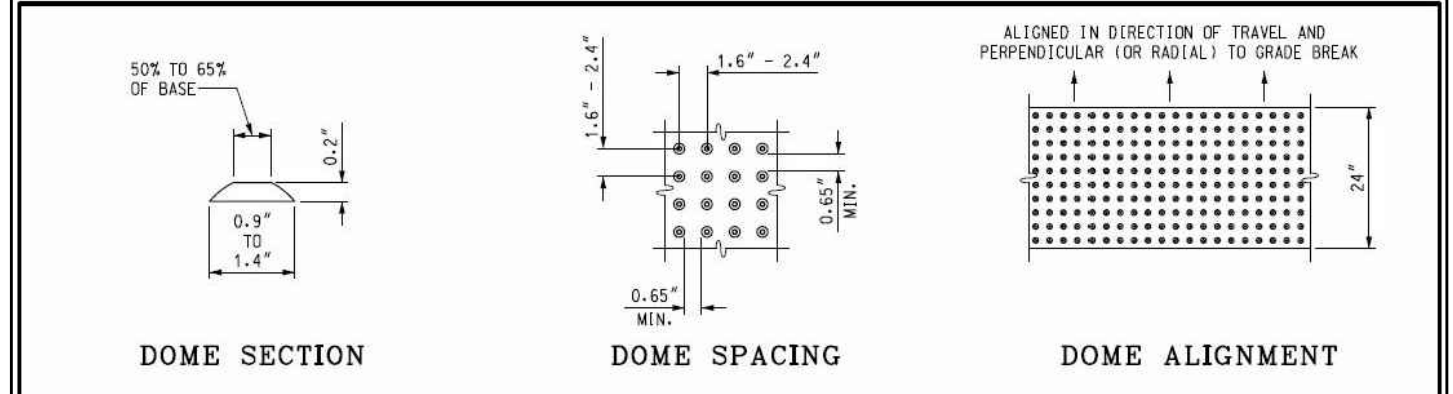


**SECTION C-C**



**SECTION D-D**

**BARRIER FREE RAMP DETAILS**  
NOT TO SCALE



**DETECTABLE WARNING DETAILS**

**NOTES:**

DETAILS SPECIFIED ON THIS PLAN APPLY TO ALL CONSTRUCTION, RECONSTRUCTION, OR ALTERATION OF STREETS, CURBS, OR SIDEWALKS IN THE PUBLIC RIGHT OF WAY.

SIDEWALK RAMP RAMP ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

RAMP RAMP SHALL BE PROVIDED AT ALL CORNERS OF AN INTERSECTION WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. RAMP RAMP SHALL ALSO BE PROVIDED AT MARKED AND/OR SIGNALIZED MID-BLOCK CROSSINGS.

SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COARSE BROOMING, TRANSVERSE TO THE RUNNING SLOPE.

SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

CARE SHALL BE TAKEN TO ASSURE A UNIFORM GRADE ON THE RAMP, WHERE CONDITIONS PERMIT, IT IS DESIRABLE THAT THE SLOPE OF THE RAMP BE IN ONLY ONE DIRECTION, PARALLEL TO THE DIRECTION OF TRAVEL.

RAMP WIDTH SHALL BE INCREASED, IF NECESSARY, TO ACCOMMODATE SIDEWALK SNOW REMOVAL EQUIPMENT NORMALLY USED BY THE MUNICIPALITY.

WHEN 5' MINIMUM WIDTHS ARE NOT PRACTICABLE, RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 4' AND LANDINGS TO NOT LESS THAN 4' x 4'.

CURB RAMP WITH A RUNNING SLOPE 5% DO NOT REQUIRE A TOP LANDING, HOWEVER, ANY CONTINUOUS SIDEWALK OR PEDESTRIAN ROUTE CROSSING THROUGH OR INTERSECTING THE CURB RAMP MUST INDEPENDENTLY MAINTAIN A CROSS SLOPE NOT GREATER THAN 2% PERPENDICULAR TO ITS OWN DIRECTION(S) OF TRAVEL.

DETECTABLE WARNING SURFACE COVERAGE IS 24" MINIMUM IN THE DIRECTION OF RAMP/PATH TRAVEL AND THE FULL WIDTH OF THE RAMP/PATH OPENING EXCLUDING CURBED OR FLARED CURB TRANSITION AREAS. A BORDER OFFSET NOT GREATER THAN 1/2" MEASURED ALONG THE SIDES OF THE DETECTABLE WARNING IS ALLOWABLE FOR RADIAL CURB THE OFFSET IS MEASURED FROM THE ENDS OF THE RADII.

FOR NEW ROADWAY CONSTRUCTION, THE RAMP CROSS SLOPE MAY NOT EXCEED 2.0%. FOR ALTERATIONS TO EXISTING ROADWAYS, THE CROSS SLOPE MAY BE TRANSLATED TO MEET AN EXISTING ROADWAY GRADE. THE CROSS SLOPE TRANSITION SHALL BE APPLIED UNIFORMLY OVER THE FULL LENGTH OF THE RAMP.

THE MAXIMUM RUNNING SLOPE OF 8.3% IS RELATIVE TO A FLAT (0%) REFERENCE. HOWEVER, IT SHALL NOT REQUIRE ANY RAMP OR SERIES OF RAMP TO EXCEED 15 FEET IN LENGTH NOT INCLUDING LANDINGS OR TRANSITIONS.

DRAINAGE STRUCTURES SHOULD NOT BE PLACED IN LINE WITH RAMP. THE LOCATION OF THE RAMP SHOULD TAKE PRECEDENCE OVER THE LOCATION OF THE DRAINAGE STRUCTURE. WHERE EXISTING DRAINAGE STRUCTURES ARE LOCATED IN THE RAMP/PATH OF TRAVEL, USE A MANUFACTURER'S ADA COMPLIANT GRATE. OPENINGS SHALL NOT BE GREATER THAN 1/2". ELONGATED OPENINGS SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.

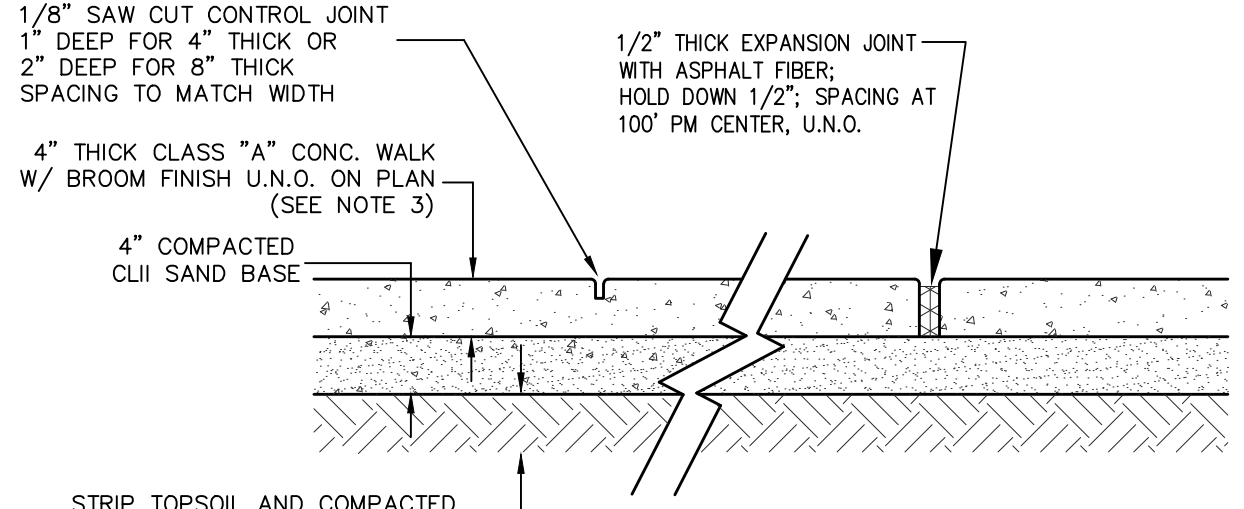
THE TOP OF THE JOINT FILLER FOR ALL RAMP TYPES SHALL BE FLUSH WITH THE ADJACENT CONCRETE.

CROSSWALK AND STOP LINE MARKINGS, IF USED, SHALL BE SO LOCATED AS TO STOP TRAFFIC SHORT OF RAMP CROSSINGS. SPECIFIC DETAILS FOR MARKING APPLICATIONS ARE GIVEN IN THE "MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

FLARED SIDES WITH A SLOPE OF 10% MAXIMUM, MEASURED ALONG THE RADII OF THE CURB LINE, SHALL BE PROVIDED WHERE AN UNOBSTRUCTED CIRCULATION PATH LATERALLY CROSSES THE SIDEWALK RAMP. FLARED SIDES ARE NOT REQUIRED WHERE THE RAMP IS BORDERED BY LANDSCAPING, IMPAVED SURFACE OR PERMANENT FENCE OBJECTS, WHERE THEY ARE NOT REQUIRED, FLARED SIDES CAN BE CONSIDERED IN ORDER TO AVOID SHARP CURB RADIUS AT RAMP OPENINGS.

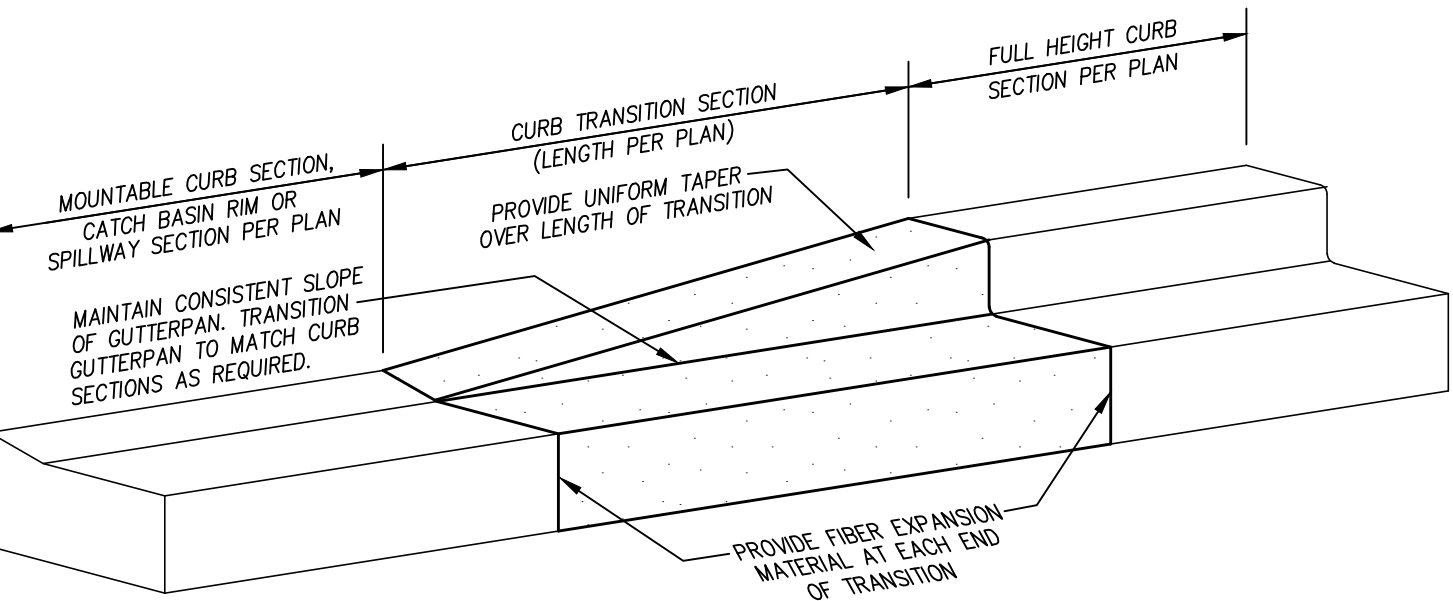
DETECTABLE WARNING PLATES MUST BE INSTALLED USING FABRICATED OR FIELD CUT UNITS CAST AND/OR ANCHORED IN THE PAVEMENT TO RESIST SHIFTING OR HEAVING.

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR  
**SIDEWALK RAMP AND  
DETECTABLE WARNING DETAILS**  
12-11-2017  
R-28-J  
SHEET 1 OF 1



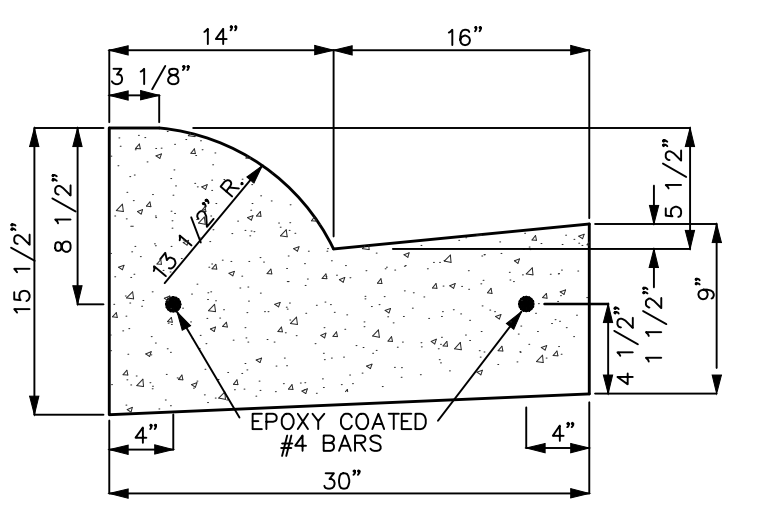
**SIDEWALK CROSS SECTION**  
NOT TO SCALE

- NOTES:**
1. SEE PLAN FOR WIDTH OF SIDEWALK.
  2. PROVIDE CONCRETE TYPE PER LOCAL CODE. (3500 PSI AIR ENTRAINMENT)
  3. 6" THICK CLASS "A" CONC. SHALL BE PROVIDED AT ALL DRIVEWAY ACCESS CROSSINGS.



**CURB TRANSITION DETAIL**  
NOT TO SCALE

- NOTES:**
1. CURB TRANSITIONS SHALL BE SMOOTH. PROVIDE SPECIAL FORMING AND LABOR IF NEEDED. CURB TRANSITIONS ARE INCIDENTAL TO CURB WORK.
  2. CONTRACTOR SHALL ADJUST THE ELEVATION OF THE TOP OF CURB AS NEEDED TO MAINTAIN THE GUTTER LINE AT A CONSTANT SLOPE BETWEEN THE DIFFERENT CURB CROSS SECTIONS.
  3. WHEN PRESENT, THE CURB TRANSITION MAY BEGIN AT A CATCH BASIN OR PAVED SPILLWAY SECTION.



**MDOT TYPE B2 CURB**  
NOT TO SCALE

**CONCRETE CURB NOTES:**

1. Refer to the project plans for the proposed locations of the specific curb types.
2. The construction specifications of the appropriate Local Municipality are a part of this work. Refer to the Private Road Construction Notes and/or Driveway and Parking Lot Construction Notes and the General Notes on the project plans for additional requirements.
3. Concrete material shall meet or exceed the specification requirements of the appropriate Local Municipality. Unless specified otherwise by the Local Municipality, concrete material shall be air-entrained and shall have a minimum 28-day class design strength of 3500 psi. Contractor shall submit concrete mix design and aggregate mechanical analysis report to the Local Municipality and Engineer for review and approval prior to use.
4. Install transverse contraction control joints in accordance with the Local Municipality requirements. If not specified by the Local Municipality, then install transverse contraction control joints in curb with 1" minimum depth at 10' on center. Tool joints in fresh concrete or saw cut within 8 hours.
5. Install transverse expansion control joints in accordance with the Local Municipality requirements. If not specified by the Local Municipality, then install transverse expansion control joints in curb as follows: 300' maximum on center, at spring points of intersecting streets and within 10' on each side of catch basins. Transverse expansion control joints shall be 1" thick asphalt fiber joint filler matching entire curb cross section.
6. Provide 0.5" asphalt fiber control joint between back of curb and all other concrete structures, such as concrete sidewalks and concrete driveways.
7. Curb Contractor shall provide final adjustment of catch basin castings in curb line. Castings shall be tucked pointed to structure water tight with concrete or mortar inside and outside of casting.
8. Install curb cuts for all existing and proposed sidewalks and pedestrian ramps in accordance with the American Disabilities Act and the Barrier Free Design requirements of the appropriate Local, County and/or State Agency. Install curb cuts for all existing and proposed vehicular ramps and drives as noted on the project plans.

**GENERAL NOTES:**

1. Contractor shall perform the work in accordance with the requirements of the appropriate Local, County and State Agencies and all other Government and Regulatory Agencies with jurisdiction over the project. Contractor shall notify the appropriate Agencies in advance of each stage of work in accordance with each Agency's requirements.

2. Contractor shall comply with all permit, insurance, licensing and inspection requirements associated with the work. Prior to construction, Contractor and Owner/Developer shall determine who is responsible for obtaining each required permit. Contractor shall verify that the each required permit has been obtained prior to commencement of the stage of work associated with the required permit(s).

3. Contractor shall furnish liability insurance and property damage insurance to save harmless the Owner, Developer, Architect, Engineer, Surveyor and Government Agencies for any accident occurring during the construction period. Refer to the appropriate Local, County and State Agencies for additional requirements. Copies of insurance certifications shall be made available to the Owner/Developer.

4. Contractor shall conduct and perform work in a safe and competent manner. Contractor shall perform all necessary measures to provide for traffic and pedestrian safety from the start of work and through substantial completion. Contractor shall determine procedures and provide safety equipment such as traffic controls, warning devices, temporary pavement markings and signs as needed. Contractor shall comply with the safety standards of the State Department of Labor, the occupational health standards of the State Department of Health and safety regulations of the appropriate Local, County, State and Federal Agencies. Refer to the safety specifications of the appropriate Regulatory Agencies. The Contractor shall designate a qualified employee with complete job site authority over the work and safety precautions; said designated employee shall be on site at all times during the work.

5. Contractor shall coordinate scheduling of all work in the proper sequence, including work by Subcontractors. Additional costs due to improper planning by Contractor or work done out of sequence as determined by standard acceptable construction practices, shall be Contractor's responsibility.

6. Contractor shall contact the MISS DIG locating system, or other appropriate local underground utility locating Agency, a minimum of three (3) working days prior to construction. Existing utility information on the project plans may be from information disclosed to this firm by the Utility Companies, Local, County or State Agencies, and/or various other sources. No guarantee is given as to the completeness or accuracy thereof. Prior to construction, locations and depths of all existing utilities (in possible conflict with the proposed improvements) shall be verified in the field.

7. Contractor shall coordinate scheduling a Pre-Construction Meeting with Engineer prior to commencement of work.

8. The Local Municipality, County and/or State in which the project is located may require an Engineer's Certification of construction of the proposed site improvements. Contractor shall verify the certification requirements with Engineer prior to commencement of work. Contractor shall coordinate construction staking, testing, documentation submittal and observation with the appropriate Agency, Surveyor and/or Engineer as required for Engineer's Certification and Government Agency Acceptance. All materials used and work done shall meet or exceed the requirements of certification and acceptance, the contract documents and the material specifications noted on the project plans. Any materials used or work done that does not meet said requirements, contract documents and/or specifications shall be replaced and/or redone at Contractor's expense. The Owner/Developer may wait for test results, certifications and/or Agency reviews prior to accepting work.

9. Engineer may provide subsurface soil evaluation results, if available, to Contractor upon request. Subsurface soil evaluation results, soils maps and/or any other documentation does NOT guarantee existing soil conditions or that sufficient, acceptable on-site granular material is available for use as structural fill, pipe bedding, pipe backfill, road subbase or use as any other granular material specified on the project plans. On-site granular material that meets or exceeds the material specifications noted on the project plans may be used as structural fill, pipe bedding, pipe backfill and/or road subbase material. On-site granular material shall be stockpiled and tested as acceptable to the appropriate Agency and/or Engineer prior to use.

10. During the performance of their work, Contractor shall be solely responsible for determining soil conditions and appropriate construction methods based on the actual field conditions. Contractor shall furnish, install and maintain sheeting, shoring, bracing and/or other tools and equipment and/or construction techniques as needed for the safety and protection of the workers, pedestrians and vehicular traffic and for protection of adjacent structures and site improvements.

11. Contractor shall install temporary and permanent soil erosion and sedimentation control devices at the appropriate stages of construction in accordance with the appropriate regulatory Agencies. Refer to Soil Erosion and Sedimentation Control Plans and Notes on the project plans.

12. Structural fill shall be placed as specified on the project plans and within the 1 on 1 influence zone of all structures, paved areas and other areas subject to vehicular traffic. Structural fill shall be placed using the controlled density method (12" maximum lifts, compacted to 95% maximum unit weight, modified proctor). Fill material shall meet or exceed the specifications noted on the project plans or as directed by Engineer when not specified on the project plans.

13. All existing monuments, property corners, ground control and benchmarks shall be protected and preserved; and if disturbed by Contractor, shall be restored at Contractor's expense. Contractor shall notify Surveyor of any conflicts between existing monuments, property corners, ground control and/or benchmarks and the proposed site improvements.

14. Contractor shall notify Owner/Developer and Engineer immediately upon encountering any field conditions, which are inconsistent with the project plans and/or specifications.

15. When noted on the project plans for demolition and/or removal, Contractor shall remove existing structures, building and debris and recycle and/or dispose of in accordance with Local, County, State and Federal regulations.

16. Contractor shall remove excess construction materials and debris from site and perform restoration in accordance with the project plans and specifications. Disposing of excess materials and debris shall be performed in accordance with Local, County, State and Federal regulations.

17. Construction access to the site shall be located as acceptable to the Owner/Developer and to the appropriate Local, County and/or State Agency with jurisdiction over the road(s) providing access to the site. Construction access shall be maintained and cleaned in accordance with the appropriate Local, County and/or State Agencies and as directed by Owner/Developer and/or Engineer.

18. Contractor shall take necessary precautions to protect all site improvements from heavy equipment and construction procedures. Damage resulting from Contractor actions shall be repaired at Contractor's expense.

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BRIGHTON, MICHIGAN 48114

DESIGN:FAF	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: OM	1	3-23-22	REVISED PER TWP. REVIEW COMMENTS DATED 03/16/22 & 03/18/22
CHECK: WMP			

REVISION #	DATE	REVISION-DESCRIPTION

**SUMMERFIELD POINTE  
ESTATES PUD**

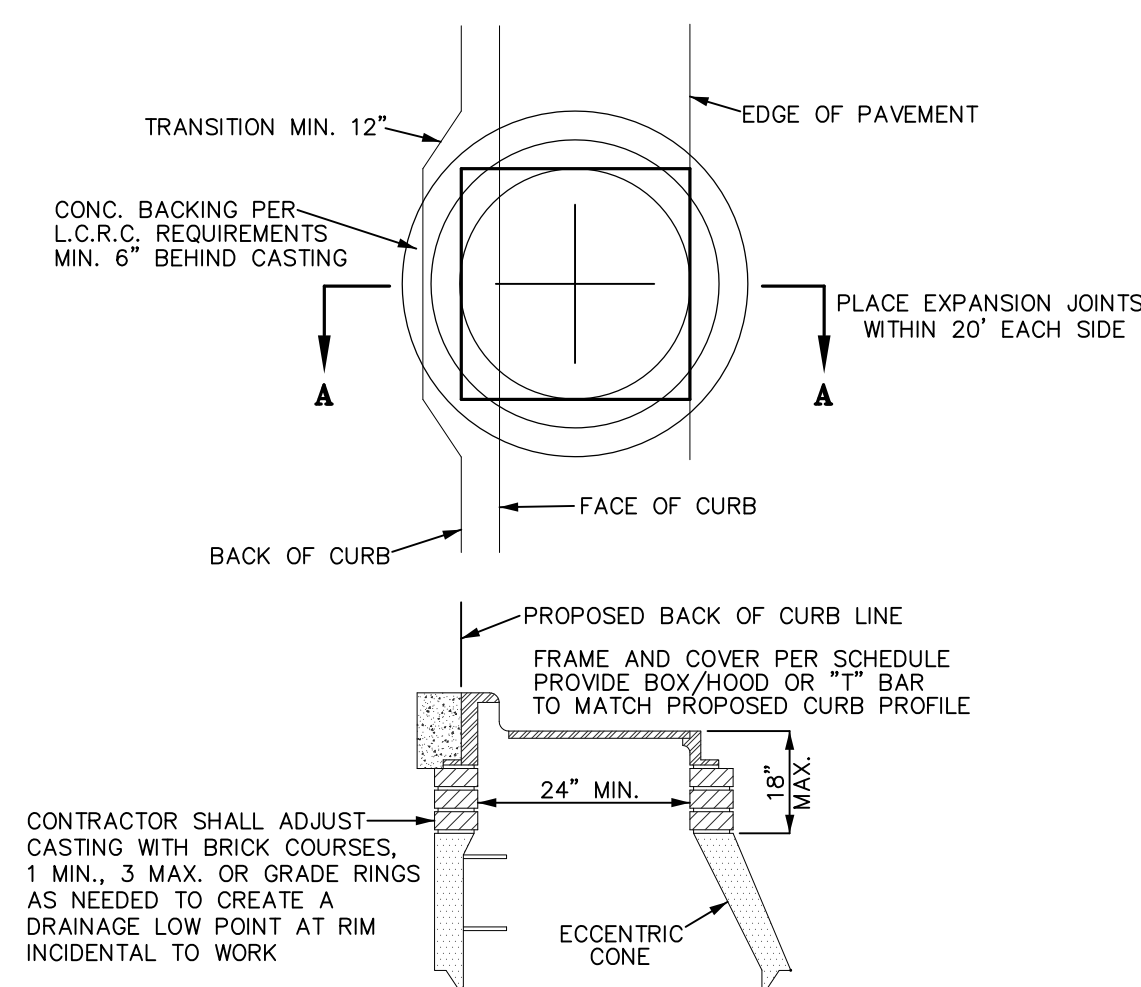
**SUMMERFIELD IMPROVEMENTS  
PAVEMENT NOTES & DETAILS**

CLIENT: HEALY HOMES AT SUMMERFIELD LLC  
3696 SLEETH RD.  
COMMERCE TOWNSHIP, MI 48382  
(248) 684-1699

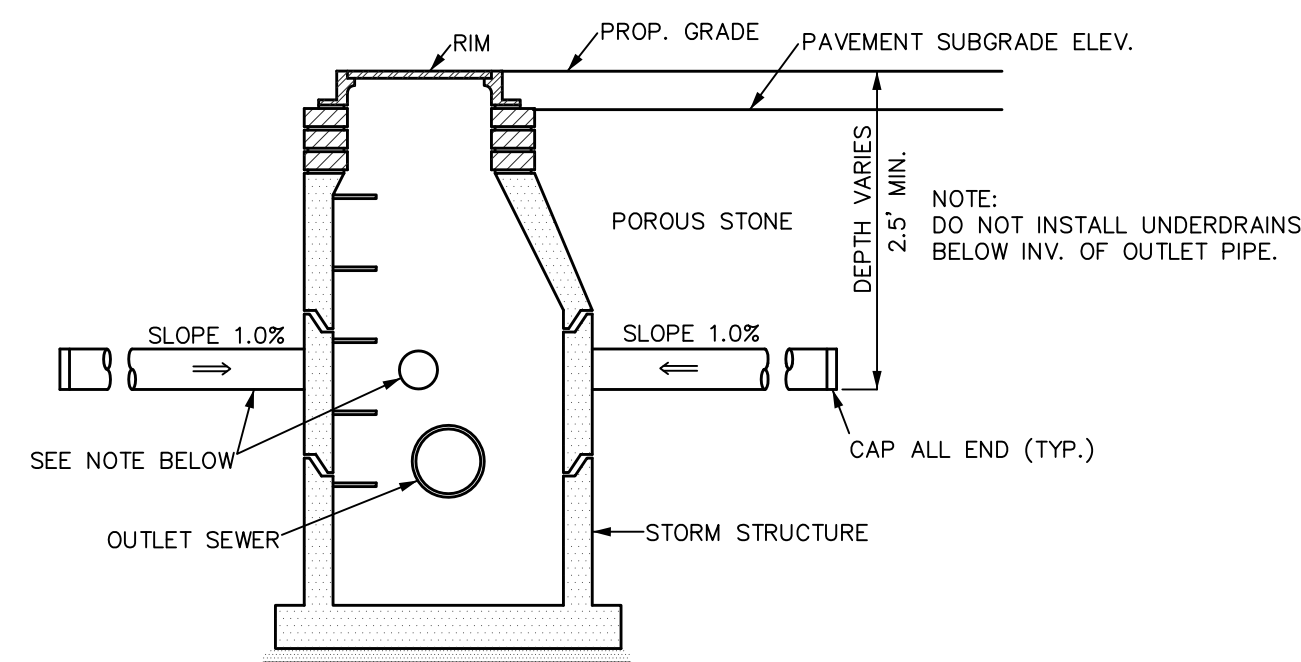
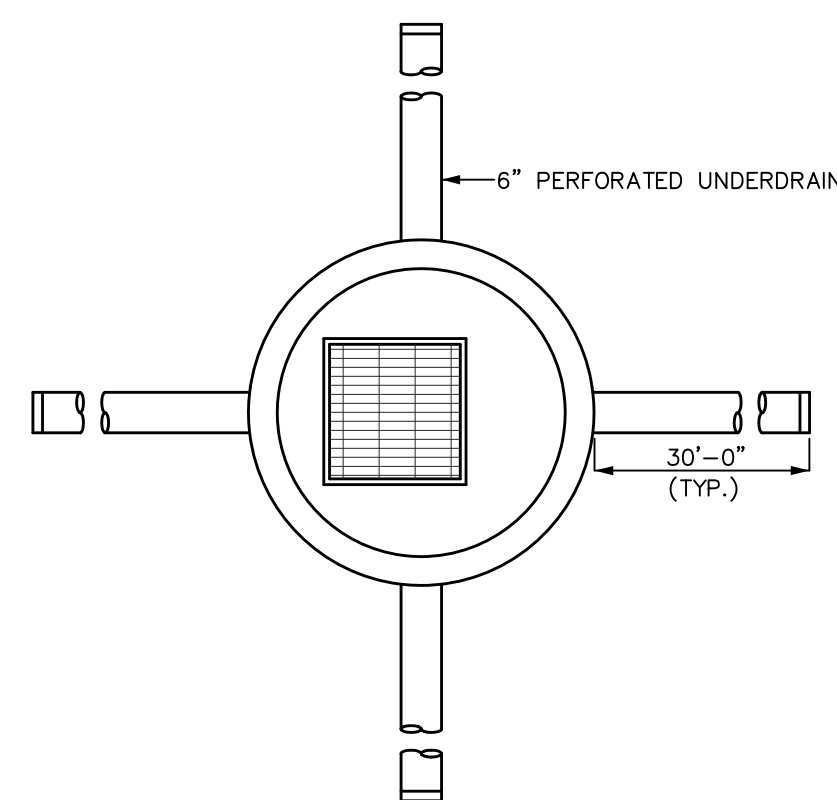
SCALE: AS NOTED  
PROJECT No.: 214159  
DWG NAME: 4159 DT  
ISSUED: MARCH 23, 2022

**DT1**





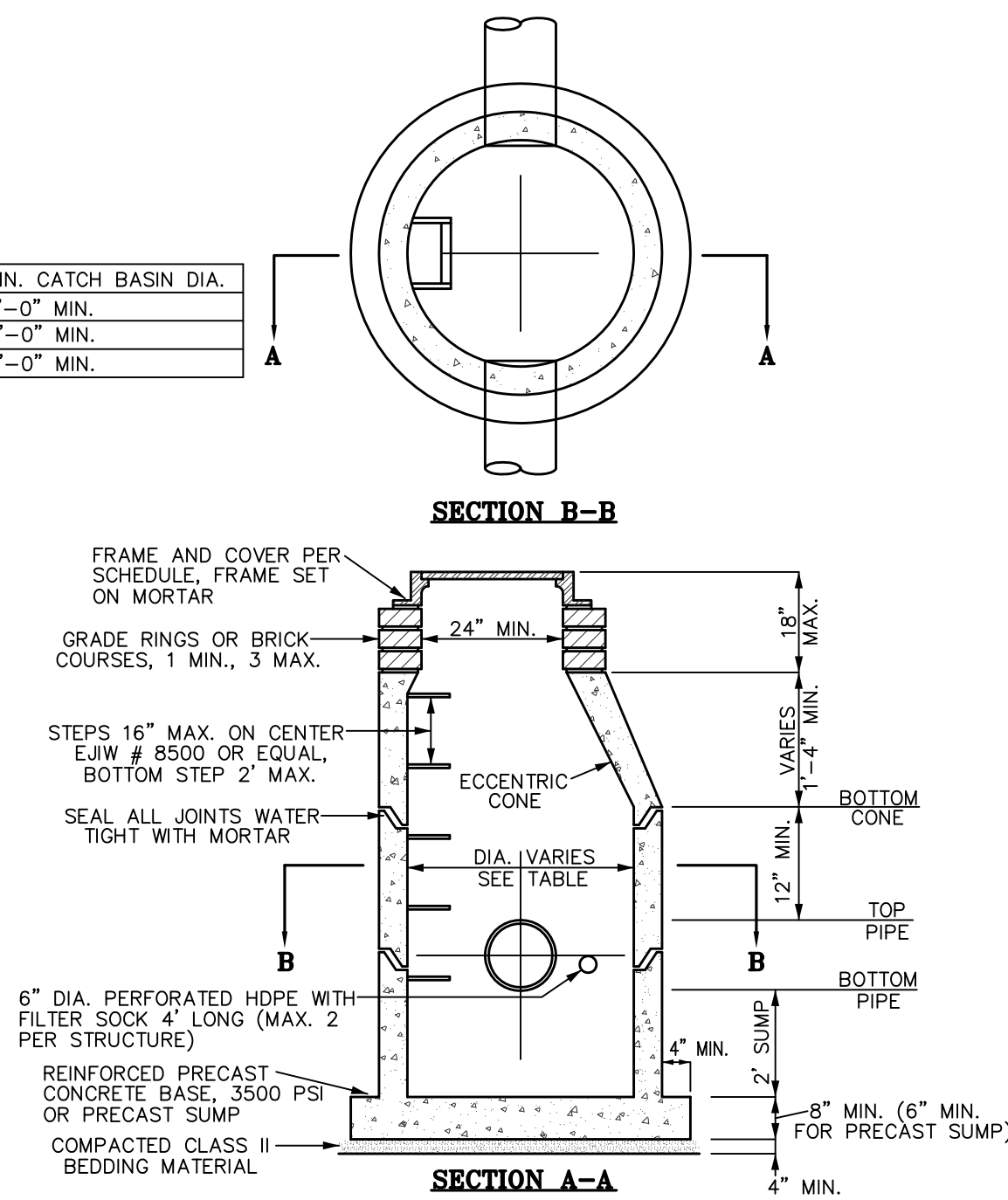
**CURB LINE CASTING DETAIL**  
NOT TO SCALE



**UNDER DRAIN CONNECTION DETAIL**  
NOT TO SCALE

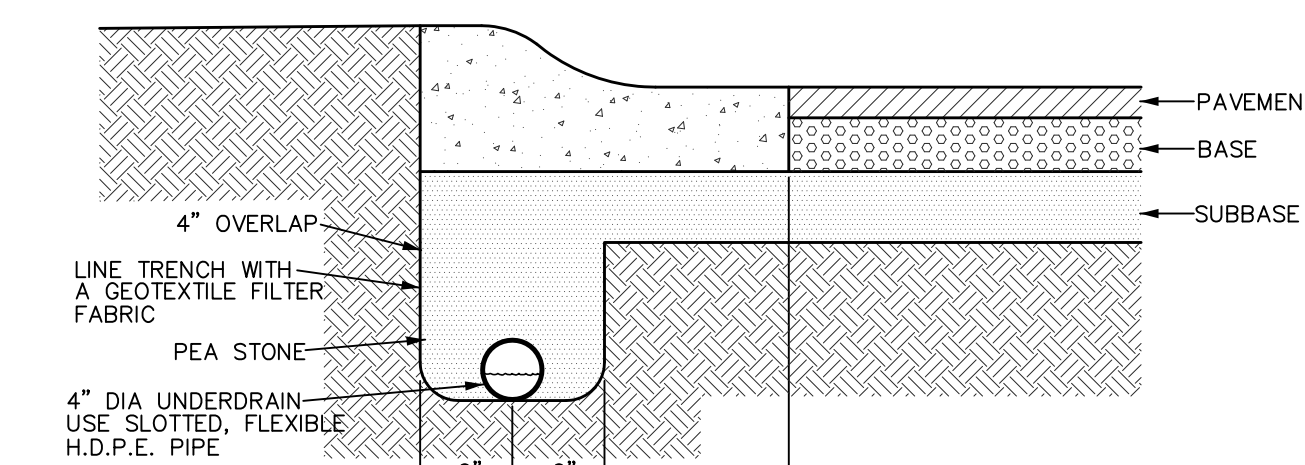
**UNDERDRAIN NOTES:**  
FINGER DRAIN TO BE 6" DIA. PERFORATED PLASTIC PIPE LAID AT 1.0% SLOPE WITH UPSTREAM ENDS PLUGGED. POROUS STONE (PEA STONE) SHALL EXTEND FROM 4" BELOW UNDERDRAIN TO THE UNDERSIDE OF PAVEMENT SUBGRADE FOR THE LENGTH OF THE UNDERDRAIN. PROTECT ALL FROM HEAVY TRAFFIC AFTER INSTALLATION.

PIPE SIZE	MIN. CATCH BASIN DIA.
12"-24"	4'-0" MIN.
24"-36"	5'-0" MIN.
42"-48"	6'-0" MIN.



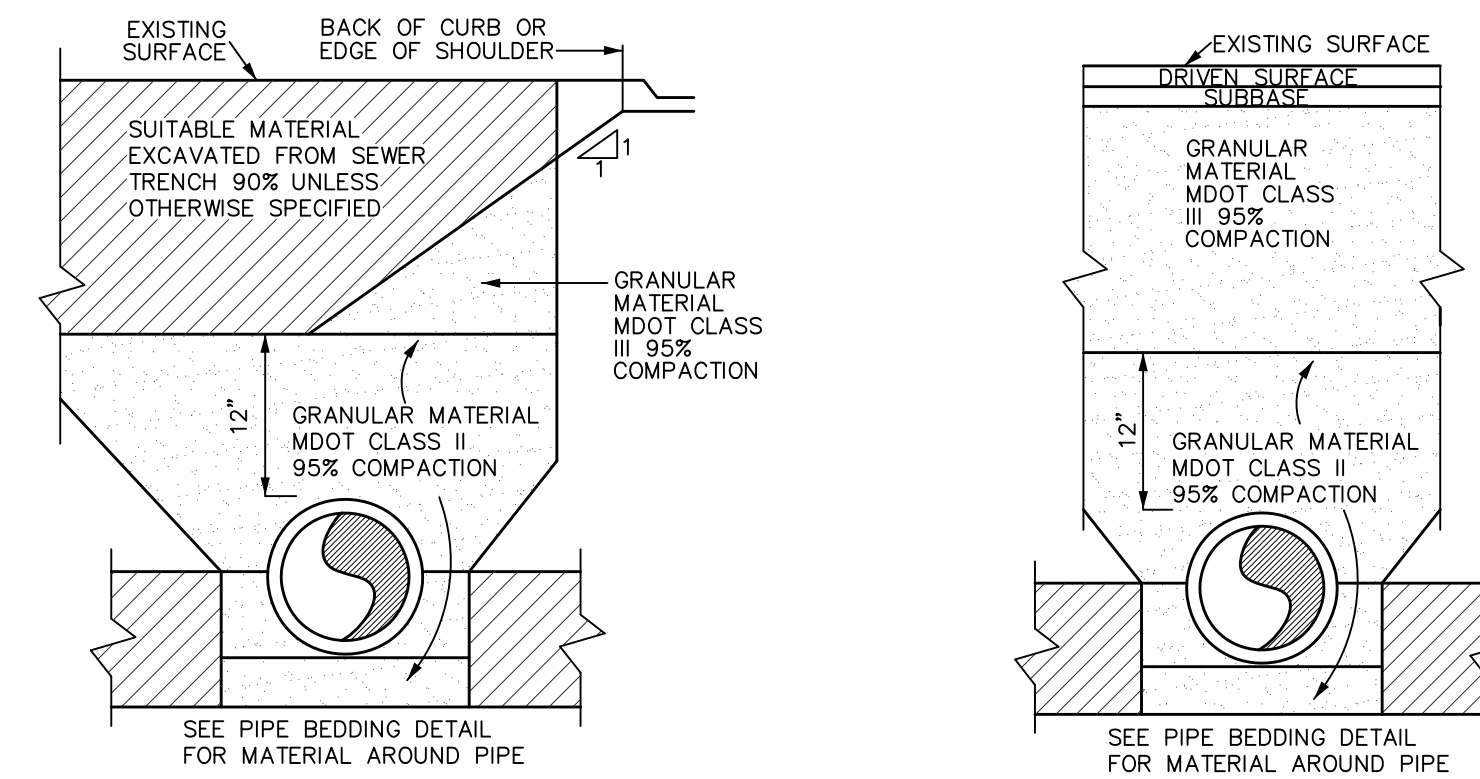
**CATCH BASIN**  
NOT TO SCALE

- NOTES:**
- FURNISH LARGER STRUCTURE DIAMETER AS NEEDED TO MAINTAIN 6" MIN. CLEAR BETWEEN PIPE OPENINGS.
  - FURNISH LOW PROFILE STRUCTURE ONLY WHEN NECESSARY TO MAINTAIN PROPER CLEARANCE ABOVE PIPES.



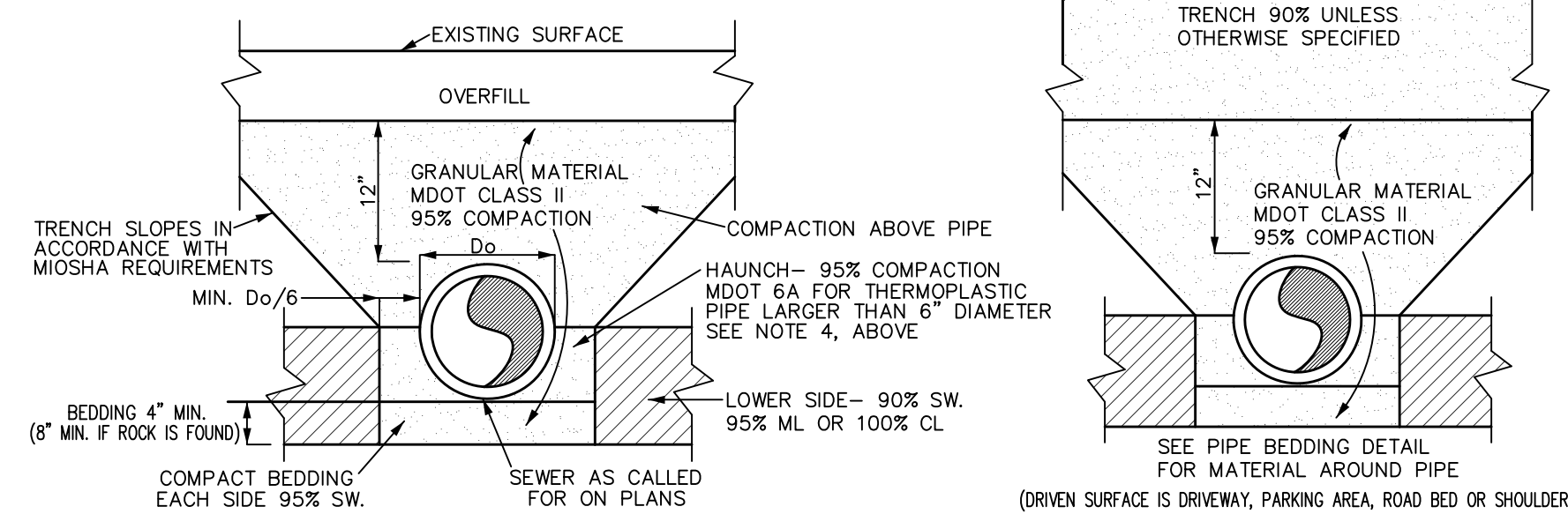
**UNDERDRAIN DETAIL**  
NOT TO SCALE

**NOTE:**  
CONNECT DOWN STREAM PIPE END TO CATCH BASIN, AND PLUG UP STREAM PIPE END WITH PLASTIC CAP.



**TRENCH A - PIPE UNDER OR WITHIN INFLUENCE OF DRIVEN SURFACE**  
NOT TO SCALE

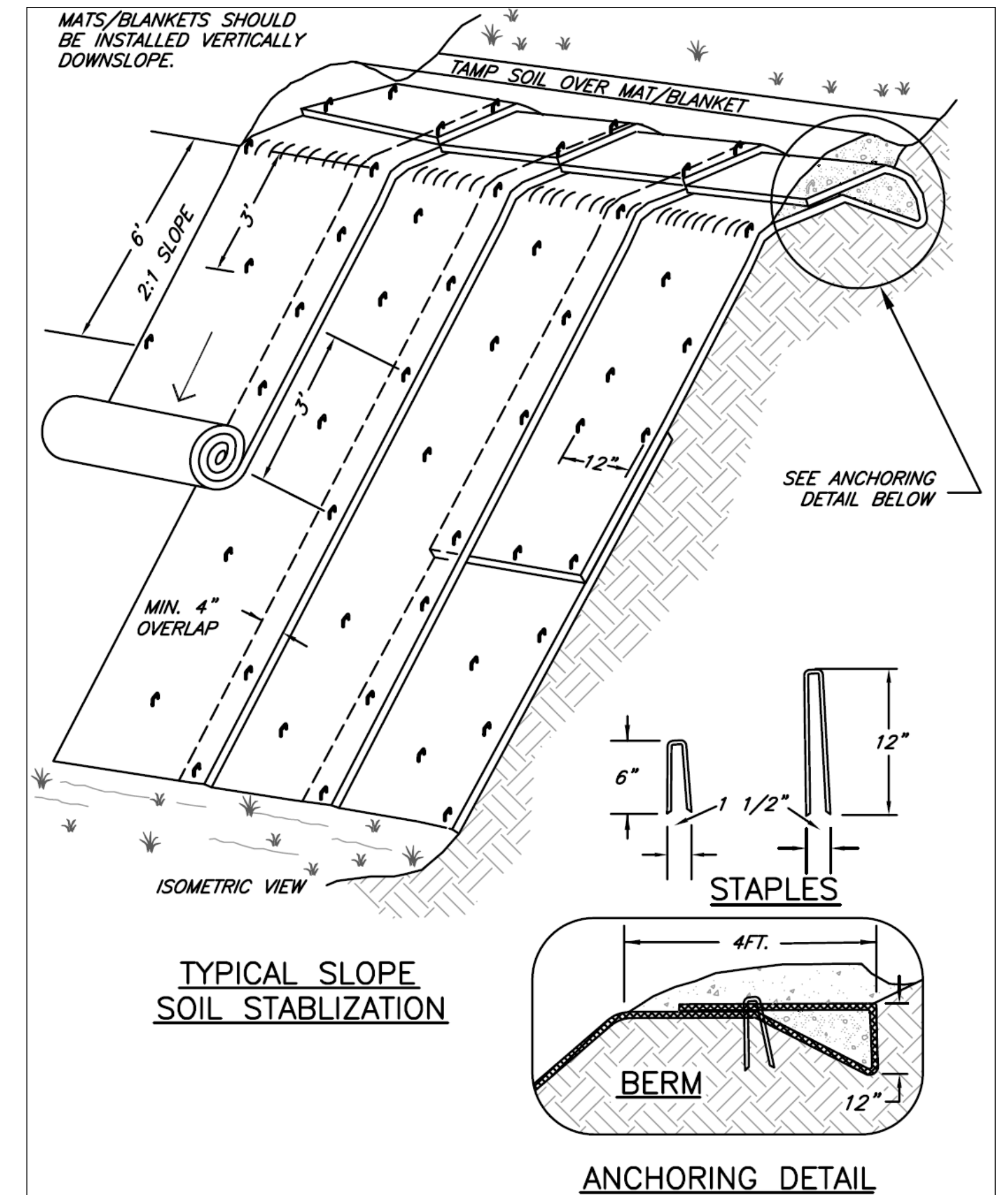
- NOTES:**
- COMPACTION PRESENTED AS STANDARD PROCTOR VALUES.
  - SOIL TYPES AASHTO DESIG.  
GRAVEL SANDY (SW) A1, A3  
SANDY SILTY (ML) A2, A4  
SILTY CLAY (CL) A5, A6, A7
  - SOIL IN HAUNCH AND LOWER SIDE ZONES OUTSIDE OF  $D_o/6$  FROM SPRING LINE SHALL BE COMPACTED TO AT LEAST THE SAME COMPACTION AS THE SOIL IN THE OVERFILL ZONE.
  - MATERIALS AROUND THERMO. PLASTIC PIPE WITH DIAMETER 6 INCHES SHALL PASS 0.5 INCH SIEVE. MATERIALS AROUND OTHER PIPES SHALL PASS 1.5 INCH SIEVE.



**PIPE BEDDING DETAIL**  
NOT TO SCALE

**TRENCH B - PIPE NOT UNDER DRIVEN SURFACES**  
NOT TO SCALE

**TRENCH DETAILS**  
NOT TO SCALE

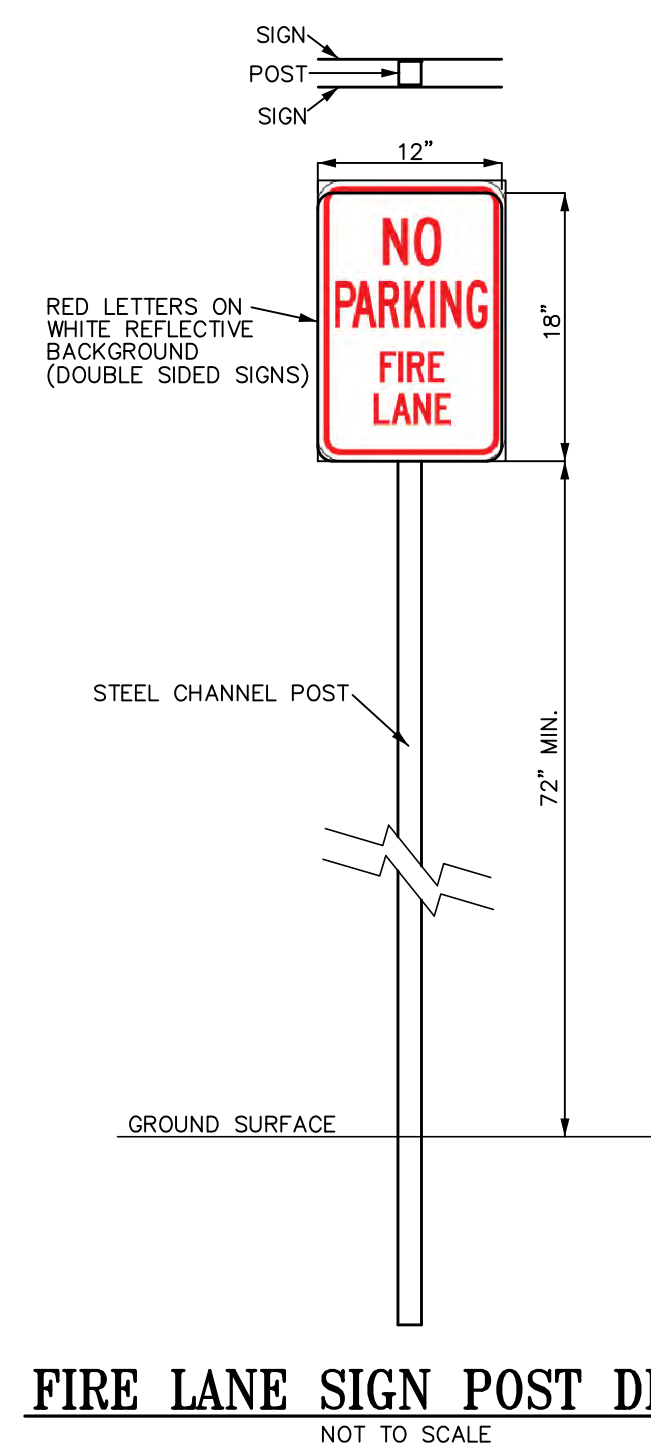


**TYPICAL SLOPE SOIL STABILIZATION**

**ANCHORING DETAIL**

**SOIL STABILIZATION NOTES:**

- SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS & GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
- APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
- LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
- SOIL STABILIZATION BLANKETS SHALL BE USED FOR SLOPES EXCEEDING 1 ON 4. SEE SHEET GR2 OF PLANS FOR PROPOSED LOCATIONS.



**FIRE LANE SIGN POST DETAIL**  
NOT TO SCALE

**SIGN SCHEDULE**

SIGN	KEY	SIZE (W x H)	TYPE OR MOUNT	MOUNTING HEIGHT	QUANTITY
	FIRE LANE	12' x 18'	POST MOUNTED	6'-0"	38

- ADDITIONAL FIRE LANE SIGNAGE MAY BE REQUIRED BY THE LOCAL FIRE DEPARTMENT AUTHORITY.
- SEE SHEETS SP1 AND SP2 OF PLANS FOR FIRE LANE SIGN LOCATIONS.

DESIGN: FAF	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: MO	1	3-23-22	REVISED PER TWP. REVIEW COMMENTS DATED 03/16/22 & 03/18/22			
CHECK: WMP						

SUMMERFIELD POINTE  
ESTATES PUD

SOIL STABILIZATION, SIGNAGE  
AND STORM SEWER  
NOTES & DETAILS

CLIENT: HEALY HOMES AT SUMMERFIELD LLC 3696 SLEETH RD. COMMERCE TOWNSHIP, MI 48382 (248) 684-1699	SCALE: AS NOTED PROJECT No.: 214159 DWG NAME: 4159 DT ISSUED: MARCH 23, 2022
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**DT2**







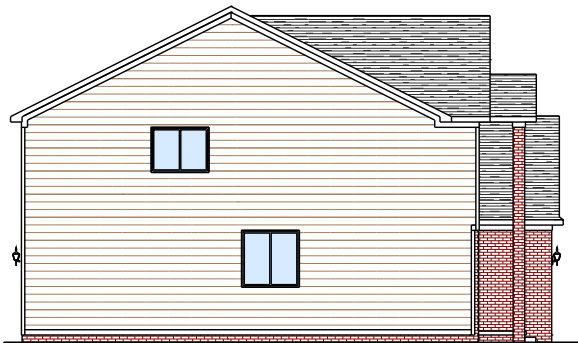
# ASBURY HILL ESTATES

## *The Asbury*

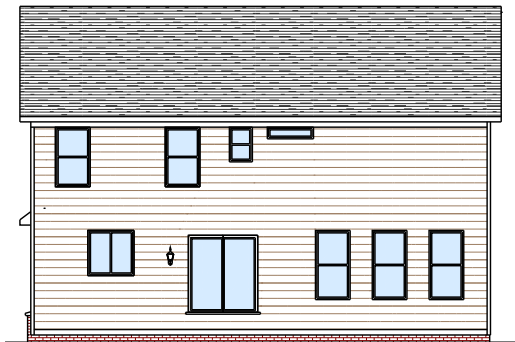
2676 SQ. FT. (96 SQ. FT. OPTIONAL BONUS ROOM)  
(120 SQ. FT. OPTIONAL SUNROOM)



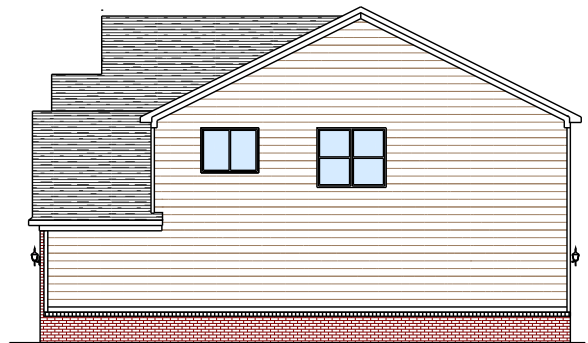
ELEVATION - D



LEFT ELEVATION



REAR ELEVATION



RIGHT ELEVATION

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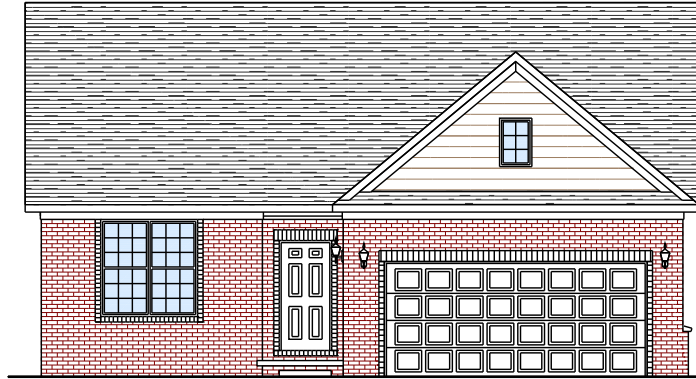




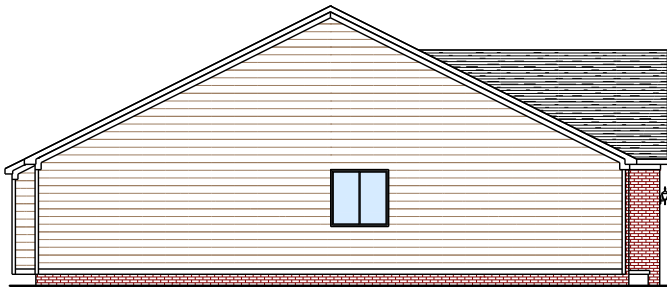
# ASBURY HILL ESTATES

## *The Cherrywood*

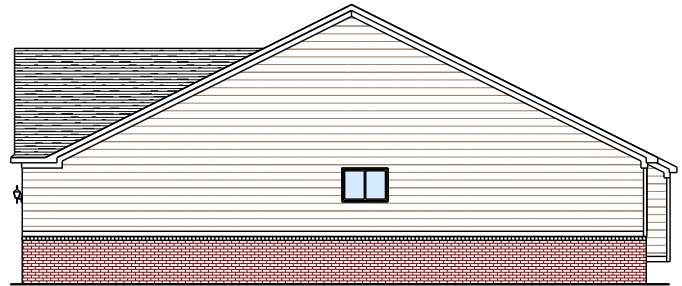
1605 SQ. FT. (120 SQ. FT. SUNROOM)



ELEVATION - A



LEFT ELEVATION



RIGHT ELEVATION



REAR ELEVATION

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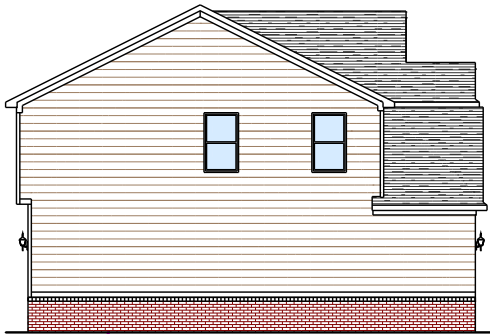
# ASBURY HILL ESTATES

## *The Hudson*

2240 SQ. FT. (80 SQ. FT. OPTIONAL BONUS ROOM)  
(120 SQ. FT. OPTIONAL SUNROOM)



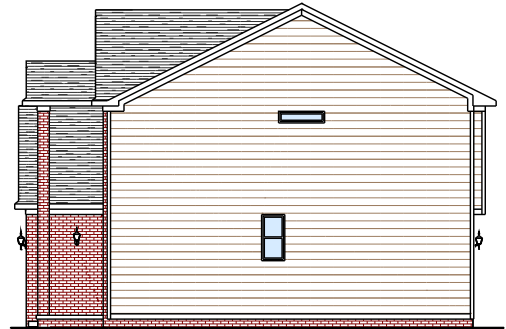
ELEVATION - D



LEFT ELEVATION



REAR ELEVATION



RIGHT ELEVATION

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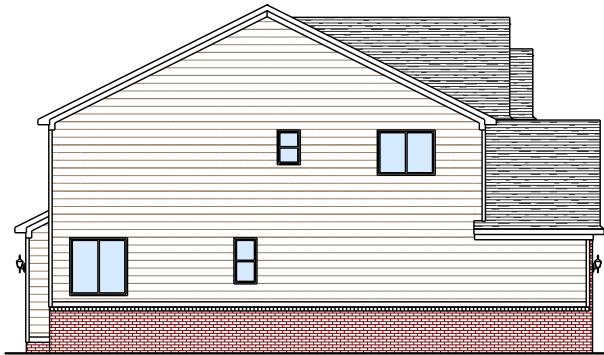
# ASBURY HILL ESTATES

## *The Kent Lake*

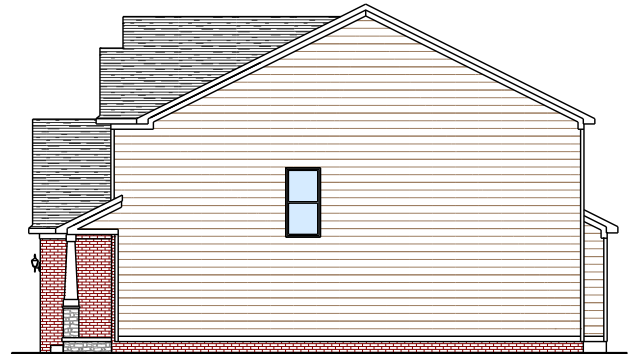
2805 SQ. FT. (65 SQ. FT. OPTIONAL BONUS ROOM)



ELEVATION - B2



LEFT ELEVATION



RIGHT ELEVATION



REAR ELEVATION

Sales Office (248) 773-7572  
Sales Direct (248) 770-2488  
[www.healyhomes.com](http://www.healyhomes.com)



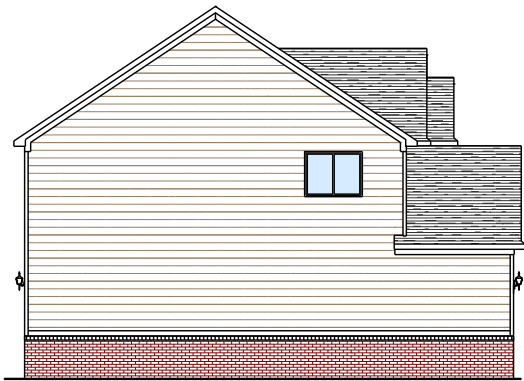
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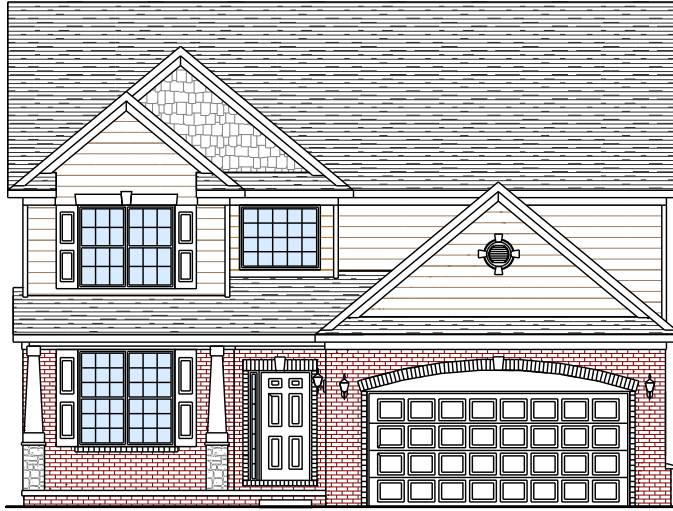
# ASBURY HILL ESTATES

## *The Newport*

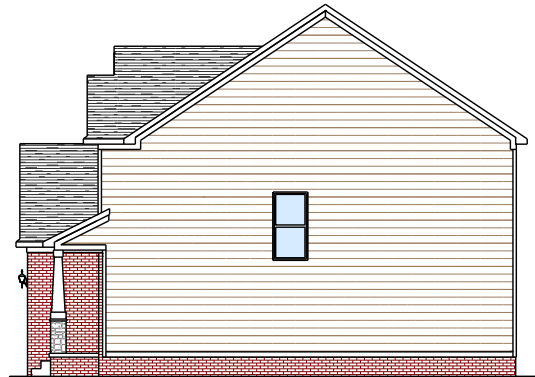
2400 SQ. FT. (92 SQ. FT. OPTIONAL BONUS ROOM)  
(120 SQ. FT. OPTIONAL SUNROOM)



LEFT ELEVATION



ELEVATION - B



RIGHT ELEVATION



REAR ELEVATION

Sales Office (248) 773-7572  
Sales Direct (248) 770-2488  
[www.healyhomes.com](http://www.healyhomes.com)



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**GENOA CHARTER TOWNSHIP**  
**Application for Site Plan Review**

**TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:**

APPLICANT NAME & ADDRESS: Elevate Property Partners, LLC  
*If applicant is not the owner, a letter of Authorization from Property Owner is needed.*

OWNER'S NAME & ADDRESS: Singh IV Limited Partnership

SITE ADDRESS: 1025 Westbury Blvd., Howell, MI 48843 PARCEL #(s): 11-04-300-024

APPLICANT PHONE: (248)939-7564 OWNER PHONE: (248)865-1600

OWNER EMAIL: avi@singhmail.com

LOCATION AND BRIEF DESCRIPTION OF SITE: This project is the second phase of a 2 phase apartment development. The property is on the Northeast side of Grand River Ave. east of Latson Road.

BRIEF STATEMENT OF PROPOSED USE: Westbury Phase 2 is a Multi-Family Project.

THE FOLLOWING BUILDINGS ARE PROPOSED: Westbury Phase 2 will consist of 136 Apartment Unit in 17 buildings.

**I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.**

BY: J. Robert Langan, Elevate Property Partners, LLC

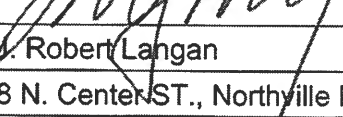
ADDRESS: 128 N. Center St., Northville MI 48167

**Contact Information** - Review Letters and Correspondence shall be forwarded to the following:

1.) J. Robert Langan (Bob) of Elevate Property Partners, LLC at blangan@bagleylangan.com  
Name Business Affiliation E-mail Address

**FEE EXCEEDANCE AGREEMENT**

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE:  DATE: 1-17-22  
PRINT NAME: J. Robert Langan PHONE: 248-939-7564  
ADDRESS: 128 N. Center ST., Northville MI 48167



April 7, 2022

Planning Commission  
 Genoa Township  
 2911 Dorr Road  
 Brighton, Michigan 48116

<b>Attention:</b>	Kelly Van Marter, AICP Planning Director and Assistant Township Manager
<b>Subject:</b>	Westbury Phase 2 – Site Plan Review #2
<b>Location:</b>	1025 Westbury Boulevard – north side of Grand River Avenue, east of Latson Road
<b>Zoning:</b>	MUPUD Mixed Use Planned Unit Development

Dear Commissioners:

At the Township’s request, we have reviewed the revised final PUD site plan submittal for Phase 2 of the Westbury multiple-family development (plans dated 3/23/22).

**A. Summary**

1. We request the applicant explain how Phase 1 amenities apply to Phase 2 units.
2. Building materials and colors are subject to review and approval by the Planning Commission.
3. The applicant should be prepared to present building material and color samples (and/or a color rendering) to the Commission as part of its review.
4. Per Section 14.02.06, the applicant must provide evidence in support of the amount of parking proposed.
5. If exterior site lighting is proposed, a detailed lighting plan must be provided.
6. The applicant must address any comments provided by the Township Engineer and/or Brighton Area Fire Authority.

**B. Proposal/Process**

The applicant proposes Phase 2 of the Westbury development. The project includes 136 multi-family units spread across 17 buildings.

Procedurally, the Planning Commission is to review the final PUD site plan and Environmental Impact Assessment, and put forth a recommendation on each to the Township Board.

**C. Site Plan Review**

1. **Consistency with PUD.** Multiple-family residential is a permitted use in the PUD. Phase 2 originally called for 137 units, while the proposal entails 136 units.

Phase 1 of the development includes a clubhouse and open space areas. We request the applicant explain to the Commission how Phase 1 amenities apply to the Phase 2 residential units.

2. **Dimensional Requirements.** The site plan depicts compliant setbacks (both internal and from exterior property lines) and building spacing.
3. **Buildings.** The proposal incorporates 3 different building types (identified as 100, 200, and 300). Each building type includes a mix of brick and horizontal siding, similar to the existing Phase 1 buildings.



*Aerial view of site and surroundings (looking east)*

Building materials and colors are subject to review and approval by the Planning Commission. The applicant should be prepared to present building material and color samples (and/or a color rendering) to the Commission as part of its review.

- 4. Pedestrian Circulation.** The site plan includes 5-foot wide sidewalks along both roadways, and around each building with access to entrances.
- 5. Vehicular Circulation.** Vehicular access is provided via extension of Arundell Drive and Westbury Boulevard. As a result, the project will complete a loop through and around the entire development.

The revised plan includes 28-foot road widths, which is sufficient for two-way travel and meets the requirements of the Brighton Area Fire Authority.

Any additional comments provided by the Township Engineer and/or the Brighton Area Fire Authority must be addressed.

- 6. Parking.** Section 14.04 requires 272 spaces for the proposed development. The calculations included on Sheet 3 note 252 garage spaces, 252 apron spaces and 13 off-street spaces (517 total).

The 200 and 300 type buildings include attached 2-car garages for each unit, while the 100 buildings include 50% 2-car and 50% 1-car attached garages.

The total amount of parking provided represents 190% of the minimum requirement (approximately 3.8 spaces per unit).

Per Section 14.02.06, the applicant must provide evidence in support of the amount of parking proposed, as it exceeds the maximum allowance (120% of the minimum requirement).

- 7. Landscaping.** The Ordinance requires 2 street trees per unit, resulting in a total requirement of 272 trees. The revised landscape plan includes a total of 272 trees (207 deciduous and 65 evergreen).

The majority of the deciduous trees are along the street, while the evergreen trees are primarily used as a buffer along the northerly property line.

- 8. Exterior Lighting.** The revised site plan includes a note stating that “site lighting fixtures, where required, will match the fixtures provided in Phase 1.”



If such fixtures are ultimately proposed, a detailed lighting plan (including fixture specifications) must be provided for review/approval.

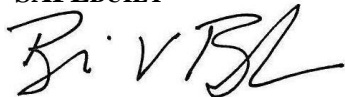
**9. Waste Receptacle/Enclosure.** The revised site plan includes a note stating that “individual trash pick-up will be provided.”

**10. Impact Assessment.** In summary, the Assessment notes that the proposed project is not expected to have an adverse impact upon natural features, stormwater, surrounding land, public services/utilities, or traffic and pedestrians.

The revised submittal includes a trip generation analysis. In summary, the analysis states that “no additional traffic mitigation measures are recommended to accommodate the projected traffic volumes generated by Phase 2.”

Should you have any questions concerning this matter, please do not hesitate to contact our office.

Respectfully,  
**SAFEBUILT**



Brian V. Borden, AICP  
Michigan Planning Manager



April 7, 2022

Ms. Kelly Van Marter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

**Re: Westbury Phase II  
Site Plan Review No. 2**

Dear Ms. Van Marter:

Tetra Tech conducted a second review of the proposed Westbury Phase II site plan submitted on March 23, 2022. The plans were prepared by Seiber Keast Lehner, Inc. on behalf of Elevate Property Partner, LLC. The development includes 16.35 acres located on the north side of the existing Westbury Development on White Horse Lane. The Petitioner is proposing 17 additional buildings as part of the second phase of the development. The proposed buildings include apartment buildings with a total of 136 individual units. We offer the following comments:

#### **GENERAL**

1. Parking dimensions should be added to typical parking details on ND3.
2. Approval should be obtained by the Brighton Area Fire Authority prior to site plan approval.
3. The petitioner has submitted water main and sanitary sewer plans to MHOG Sewer and Water Authority for review and received comments. After final site plan approval, the Petitioner will need to re-submit final construction plans to MHOG for re-review and approval.
4. The proposed site plan is being reviewed by the Livingston County Drain Commissioner. Approval from the Drain Commissioner should be provided to the Township prior to approval.

#### **PRIVATE ROAD**

1. The petitioner is proposing to extend the two existing private roads of Arundell Avenue and Westbury Boulevard. After site plan approval, the petitioner must submit private road construction plans for review.
2. The proposed road cross section shown on the plan notes a 50-foot-wide road ROW. The Township's Engineering Design Standards require that local roads have a minimum road ROW of 66 feet. The 50-foot-wide road ROW matches the previously approved road ROW in Westbury Phase I.
3. As requested, the site plan has been revised to show the existing asphalt paving on Arundel Avenue as being replaced. The note says that the existing asphalt will be replaced after construction of Westbury Phase II. Due to the poor existing condition of Arundel Avenue, the Planning Commission may wish to require that the Petitioner complete the base of the proposed asphalt prior to construction, then apply the top course when doing final paving of the Westbury Phase II, as construction will only further degrade the current condition of the road.



**Ms. Kelly Van Marter**  
**Re: Westbury Phase II**  
**Site Plan Review No. 2**  
**April 7, 2022**  
**Page 2**

We recommend the petitioner address the above comments prior to final site plan approval.

Sincerely,



Gary J. Markstrom, P.E.  
Vice President



Shelby Byrne  
Project Engineer



# BRIGHTON AREA FIRE AUTHORITY

615 W. Grand River Ave.  
Brighton, MI 48116  
o: 810-229-6640 f: 810-229-1619

April 6, 2022

Kelly VanMarter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

RE: Westbury Phase II PUD Amendment  
Genoa Twp., MI

Dear Kelly:

The Brighton Area Fire Authority has reviewed the above-mentioned site plan. The plans were received for review on March 30, 2022, and the drawings are dated January 17, 2022 with revisions dated March 23, 2022. The project is the proposed second phase of multi-family development. of seventeen (17) new structures and 136-Units. The plan review is based on the requirements of the International Fire Code (IFC) 2021 edition. All previous comments have been addressed.

1. Provide no parking fire lane signage every 50-feet along on the hydranted side of the access roads.
2. It is recommended that the sprinkler riser rooms be provided with separate addresses from the building units.

Additional comments will be given during the building plan review process (specific to the building plans and occupancy). The applicant is reminded that the fire authority must review the fire protection systems submittals (sprinkler & alarm) prior to permit issuance by the Building Department and that the authority will also review the building plans for life safety requirements in conjunction with the Building Department. If you have any questions about the comments on this plan review please contact me at 810-229-6640.

Cordially,

A handwritten signature in black ink, appearing to read "R. Boisvert".

Rick Boisvert, FM,CFPS  
Fire Marshal



**WESTBURY PHASE 2**  
**IMPACT ASSESSMENT**

Prepared for:  
**Elevate Property Partners, LLC**  
**126 N. Center Street**  
**Northville, Michigan 48167**  
**248-939-7564**

Prepared by:  
**Seiber Keast Lehner, Inc.**  
**39205 Country Club Drive**  
**Farmington Hills, Michigan 48331**  
**248-308-3331**  
**Job No. 21-030**

**January 17, 2022**

## WESTBURY PHASE 2 IMPACT ASSESSMENT

This Impact Assessment is being provided to address any changes to the Impact Assessment submitted to Genoa Township on February 8, 2002 for both Westbury Phase 1 and 2. That February 2002 Impact Assessment is attached. Any changes to that assessment or any information specifically related to the Westbury Phase 2 are noted below.

- a. **Name(s) and address(es) of person(s) responsible for preparation** of the **updated** impact assessment and a brief statement of their qualifications.

**Prepared By:**

*Seiber Keast Lehner, Inc.  
Engineering and Surveying  
39205 Country Club Drive  
Suite C-8  
Farmington Hills, Michigan 48331*

*Office Phone: 248-308-3331*

*Seiber Keast Lehner, Inc. is a full-service Engineering and Surveying company with 2 offices located in southeast Michigan. The company includes 6 Registered Engineers, 2 Registered Land Surveyors, 7 Project Managers/Designers, 3 CAD Operators, 3 Field Technicians and several support staff. The company was formed through a merger of Seiber Keast Engineering, LLC and Lehner & Associates and includes more than 35 years of experience.*

- b. **Map(s) and written description/analysis of the project site** including all existing structures, manmade facilities, and natural features. The analysis shall also include information for areas within 10 feet of the property. An aerial photograph or drawing may be used to delineate these areas.

*This is the second phase of an apartment project that began in 2002. The first phase buildings have been completed. Also, the phase 2 mass grading, stormwater detention basin and much of the storm sewers were completed during the phase 1 construction activities. The phase 1 buildings, as well as commercial buildings with frontage on Grand River Ave., are located to the south of this project. To the north of the site is Hampton Ridge Phase 2, to the east is vacant property and to the west is a utility corridor.*

- c. **Impact on natural features:** A written description of the environmental characteristics of the site prior to development and following development, i.e., topography, soils, wildlife, woodlands, mature trees (eight-inch caliper or greater), wetlands, drainage, lakes, streams, creeks or ponds. Documentation by a qualified wetland specialist shall be required wherever the Township determines that there is a potential regulated wetland. Reduced copies of the Existing Conditions Map(s) or aerial photographs may accompany written material.

*Except for the information provided in Item b. above the statements made in the February 2002 Impact Assessment about drainage and soils remains the same.*

- d. **Impact on stormwater management:** Description of measures to control soil erosion and sedimentation during grading and construction operations and until a permanent ground cover is established. Recommendations for such measures may be obtained from the Livingston County Drain Commission at (517) 546-0040.

*Refer to the attached February 2002 Impact Assessment. Also, see Item g. below for Stormwater Management Comments.*



- e. **Impact on surrounding land used:** Description of the types of proposed uses and other man-made facilities, including any project phasing, and an indication of how the proposed use conforms or conflicts with existing and potential development patterns. A description shall be provided of any increases of light, noise or air pollution which could negatively impact adjacent properties.

*Westbury Phase 1 consisting of 128 unit was built in 2002. This applicant is requesting approval of the second phase (136 units) to complete the 264-unit apartment complex.*

*The applicant will submit to Genoa Township, Livingston County and the State of Michigan for all required permits including sanitary sewer, water main, soil erosion control and stormwater management.*

*Refer to the attached February 2002 Impact Assessment.*

- f. **Impact on public facilities and services:** Describe the number of expected residents, employees, visitors, or patrons, and the anticipated impact on public schools, police protection and fire protection. Letters from the appropriate agencies may be provided, as appropriate.

*Based on the Southeast Michigan Council of Governments (SEMCOG) Livingston County Community Profile and the 2020 census the average population per household is 2.59. For Westbury Phase 2 this would result in a population increase of 352 people (136 units x 2.59 people/unit).*

- g. **Impact on public utilities:** Describe the method to be used to service the development with water and sanitary sewer facilities, the method to be used to control drainage on the site and from the site, including runoff control during periods of construction. For sites serviced with sanitary sewer, calculations for pre- and post-development flows shall be provided in comparison with sewer line capacity. Expected sewage rates shall be provided in equivalents to a single-family home. Where septic systems are proposed, documentation or permits from the Livingston County Health Department shall be provided.

**Water Mains:** *The water mains in Westbury Phase 2 shall be 8-inch diameter and connected to the existing 8-inch water mains in Phase 1 at 2 locations. A third connection shall be provided by tapping the existing 8-inch water main in Hampton Ridge Phase 2. The water main basis of design is Provided on sheet 4 of the Site Plan.*

**Sanitary Sewer:** *The sanitary sewer in Westbury Phase 2 shall be 8-inch diameter and connected to the existing 8-inch sanitary sewer in Phase 1 at 2 locations. All sewers service shall be provided to each building by gravity. No force mains are proposed. The sanitary sewer service basis of design is provided on sheet 4 of the Site Plan.*

**Stormwater Management:** *The stormwater management will be provided by using the 2 existing detention basins constructed as part of the phase 1 development. The basins have been redesigned because of recent changes in the Livingston County stormwater management requirements. We have been in contact with the Drain Office and received a Draft Copy of the new design standards. The design will be subject to review and approval by the Township and County. The storm water detention calculations are provided on sheet 16 of the Site Plan.*

- h. **Storage and handling of any hazardous materials:** A description of any hazardous substances expected to be used, stored or disposed of on the site. The information shall describe the type of materials, location within the site and method of containment. Documentation of compliance with federal and state requirements, and a Pollution Incident Prevention Plan (PIPP) shall be submitted, as appropriate.

*The project is residential therefore, no hazardous materials will be used or disposed of on the site.*

- i. **Impact on Traffic and Pedestrians:** A description of the traffic volumes to be generated based on national reference documents, such as the most recent edition of the *Institute of Transportation Engineers Trip Generation Manual*, other published studies or actual counts of similar uses in Michigan. A detailed traffic impact study shall be submitted for any site over ten (10) acres in size which would be expected to generate 100 directional vehicle trips (i.e. 100 inbound or 100 outbound trips) during the peak hour of traffic of the generator or on the adjacent streets. The contents of the detailed study shall include:

*Traffic impact information is provided in the attached February 2002 Impact Assessment.*

- j. **Special Provisions:** General description of any deed restrictions, protective covenants, master deed or association bylaws.

*Refer to the attached February 2002 Impact Assessment.*

- k. **A list of all sources shall be provided.**

*See the attached February 2002 Impact Assessment.*

*Livingston County Draft Copy of the Procedures and Design Criteria for Stormwater Management Systems*

*SEMCOG Livingston County Community Profile and 2020 Census*

*Previous Final Site Plan for Westbury Phase 1 and 2 Prepared by Boss Engineering with a latest revision date of November 20, 2003.*



**GENOA TOWNSHIP**

**FEB 08 2002**

**RECEIVED**

**IMPACT ASSESSMENT  
FOR  
"WESTBURY"  
PART OF LORENZEN PUD  
GENOA TOWNSHIP, LIVINGSTON COUNTY  
MICHIGAN**

Prepared for:

**SINGH DEVELOPMENT COMPANY  
7125 ORCHARD LAKE ROAD  
SUITE 200  
WESTBLOOMFIELD, Michigan 48334  
(248) 865-1600**

Prepared by:

**BOSS ENGINEERING COMPANY  
7125 ORCHARD LAKE ROAD  
SUITE 108  
WESTBLOOMFIELD, MI 48334  
(248) 626-2677**

Revised - February 7, 2002

February 27, 2001

**2-00038EIA**

## INTRODUCTION

The purpose of this Impact Assessment (IA) report is to show the effect that this proposed development have on various factors in the general vicinity of the project. The format used for presentation of this report conforms to the *Submittal Requirements For Impact Assessment/Impact Statement* guidelines in accordance with Section 13.05 of the published Zoning Ordinance for Genoa Township, Livingston County, Michigan.

## DISCUSSION ITEMS

### **A. Name(s) and address(es) of person(s) responsible for preparation of the impact assessment and a brief statement of their qualifications.**

Prepared By :  
BOSS ENGINEERING COMPANY  
3121 E. Grand River  
Howell, MI 48843  
(517) 546-4836

Prepared For :  
SINGH DEVELOPMENT COMPANY  
7125 Orchard Lake Road  
Suite 200  
West Bloomfield, MI 48322  
(248) 865-1600

### **B. Description of the site, including existing structures, man made facilities, and natural features, all-inclusive to within 10' of the property boundary.**

The site is located on the Grand River Avenue, just west of Latson Road, in section 4 & 9, T2N-R5E, Genoa Township, Livingston County, Michigan. The site location is presented on an USGS quad in Figure 1, Attachment A. The parcel contains an approximate area of 46.66 acres and is currently vacant. The northern half of the site drains in a northeasterly direction. The southern half of the site drains towards an existing detention basin on the southeast corner of the site. The average slope within the property is approximately 2%. The parcel is part of the approved Lorentzen P.U.D. and carries an underlying light industrial zoning classification. Singh Development Company is requesting that the underlying zoning be changed from LI to Medium Density Residential (MDR). Overall PUD plan and detailed site plan has been prepared as part of the site plan submittal.

The existing utilities abutting the site include water main and sanitary along Grand River Avenue on the southeast side of the site.

Adjacent properties include: To the east a vacant parcel, to the southeast corner an existing restaurant, to the southwest corner a proposed First National bank site, to the west Detroit Edison/Consumer Power corridor, to the north a proposed Hampton Ridge development.

### **C. Impact on natural features: A written description of the environmental characteristics of the site prior to development, i.e., topography, soils, vegetative cover, drainage, streams, creeks or ponds.**

As described in earlier section, drainage pattern of the property is divided into two areas. Northern half drains towards northeast and southern half drains towards existing detention basin in southeast corner.

A review of the U.S.D.A. Soil Conservation Service Soil Survey of Livingston County, Michigan, Sheet 26, indicates that the on-site soils consists of the following six soil types.



1. MIAMI LOAM (MoB), Miami Loams are typically well-drained soils found on nearly level to very steep till plains and moraines. Permeability is more moderate, and the available water capacity and fertility are high. MoB soil slopes vary from 2-6%. The surface runoff is slow for MoB soil, and the soil erosion hazard is slight.
2. MIAMI LOAM (MoC), These soils are similar to MoB except, soil slopes vary from 6 to 12%. The surface runoff is medium and soil erosion hazard is moderate.
3. BRONSON LOAMY SAND (BWA), The Bronston series consist of nearly level, moderately well drained soils on valley trains and outwash plains with slope 0 to 2%. Permeability is moderately rapid and surface runoff is slow.
4. CONOVER LOAM (CvA), This soil is on till plains and basin like depressions in the hilly moraines. Soil slope vary from 0 to 2%. The surface runoff is slow and permeability is moderately slow.
5. HILLSDALE SANDY LOAM(HID), This soil exist along natural drainage ways on till plains and in small areas on moraines. Surface runoff is rapid and permeability is moderate.
6. SPINKS-OAKVILLE LOAMY SANDS (SvB), The Spinks series consist of well drained, nearly level to very steep soil on till plains, outwash plains, and moraines. Slope varies from 0 to 6%. In these soils surface runoff is slow, permeability is moderately rapid with slight erosion hazard.

The soils map for the site area is presented in Figure 2.

Vegetation at the site consists mainly of fallow farmland except at the northwest corner of the site. Northwest corner is wooded with variety of trees and shrubs. Along the north and east property line there are some trees and shrubs, which act as a natural vegetative buffer.

**D. Impact on storm water management: description of soil erosion control measures during construction.**

Surface runoff during periods of construction will be controlled by proper methods set forth by the Livingston County Drain Commissioner, including silt fence, pea stone filters, and seed and mulch.

At the time of construction, there may be some temporary dust, noise, vibration and smoke, but these conditions will be of relatively short duration and shall be controlled by complying appropriate procedures to minimize the effects, such as watering if necessary for dust control.

**E. Impact on surrounding land use: Description of proposed usage and other man made facilities; how it conforms to existing and potential development patterns. Effects of added lighting, noise or air pollution which could negatively impact adjacent properties.**

The applicant is proposing to construct a 264 unit apartment complex with clubhouse and community amenities including a swimming pool and tennis court. Under the existing Lorentzen P.U.D. agreement, the following types of usage could be developed

1. Business park
2. Research and development center
3. Light industrial Park

The applicant is requesting to amend the P.U.D. agreement and change underlying zoning to accommodate the proposed development. It is our belief that the proposed project contains significantly more open space than the above uses and will also result in less impact in such areas as noise, artificial light and truck traffic.

This development is proposed to contain residential apartment buildings, circulation drives, streets, and parking lots. The expected impact from the development will be minimized because of the following:

1. Significant features on the site will be disturbed only as necessary to construct the site improvement. Two detention basins will be located on the site. The basin in the northeast corner

is designed to accommodate northwestern 2/3rd of the site, approximately 38.21 acres. The outlet discharge of 0.2 cfs will be discharged into the natural watercourse/wetlands on the north side of the site.

2. There is an existing detention basin on southeast corner of the site. Currently this basin is designed to handle runoff from existing restaurant site and natural drainage from the project site. The outlet from this basin is designed to release storm water at a rate of 2.13 cfs (2.56-0.43 cfs for the Bank site) per McNamee, Porter & Seeley's letter dated June 18, 1998 (included in Appendix C). This basin will be expanded to accommodate/detained added surface runoff from the proposed development. Keeping the outlet discharge the same. The outlet pipe discharges into the M.D.O.T. storm drainage system along Grand River Avenue.
3. The layout was prepared taking into account the natural features of the site so as to preserve the existing lay of the land. The wooded area to the northwest and along property boundary of the site will be preserved as a natural landscape buffer. In addition, the site will be landscaped in accordance with Genoa Township Standards and to provide an aesthetically pleasing site.
4. Soil erosion control measures such as silt fence, straw bale filters, and pea stone filters at the catch basins will be utilized during construction to control siltation and sedimentation from entering the wooded areas.
5. Grand River Avenue is a major service road in this area and presently experiences a large volume of traffic along with the associated noise level. It is unlikely that this development will significantly change that. Since the site is located along a primary commuting route, it is anticipated that most of the traffic generated will account for a very small percentage of the traffic already traveling in the area.

**F. Impact on public facilities and services: Description of number of residents, employees, patrons, and impact on general services, i.e., schools, police, fire.**

Based on the SEMCOG 2020 Regional Development Forecast, Summary Report, dated December 1995, average household size in the region continues to drop and in 1990 it was 2.66 per household. Therefore with the total planned density of 264 apartment units, the projected population for this site will be 702 people.

Impact from this residential development will be on the local school system. Using the school system's potential population of 0.5 students per family unit, this project may result in a school population of 132 students. In an effort to aid the Howell school system in future planning, plans of this development will be submitted for their use.

**G. Impact on public utilities: Description of public utilities serving the project, i.e., water, sanitary sewer, and storm drainage system. Expected flows projected in residential units.**

Total projected sanitary sewage flow from the site will be 264 residential equivalent units (R.E.U.s) in addition to flows created from a clubhouse facility. The property is located within the community water district and the Genoa/Oceola sewer district. Under the executed P.U.D. agreement for the Lorenzten P.U.D. each residential parcel/user must connect to the community water system if such system is available at the time of development. Such connection shall require payment of all proportionate and applicable fees, charges, and assessments.

As described above two detention basins will be designed to collect storm water runoff from the site. Storm water will be released at an agricultural runoff rate to the appropriate natural/designed storm water systems.

All other utilities, including gas, electric, and telephone are also available adjacent to or near the site.



**H. Storage or handling of any hazardous materials: Description of any hazardous materials used, stored, or disposed of on-site.**

Since the proposed development is residential, there will be no hazardous materials used or disposed of on this site.

**I. Impact on traffic and pedestrians: Description of traffic volumes to be generated and their effect on the area.**

Consideration was given to the amount of traffic generated from the Lorentzen P.U.D. development and the impact it would have on the existing public road network. Since that time, there have been significant improvements to Grand River Avenue and additional improvements are currently being planned. Not only is M.D.O.T. planning additional improvement, both roadway and signalization improvements are being proposed.

Using the Institute of Transportation Engineers publication, TRIP GENERATION MANUAL, 5<sup>th</sup> edition, traffic flow information was generated for the proposed site. A comparison of traffic volume between existing and proposed underlying new zoning is presented in Appendix A. This study shows that the traffic volume generated from proposed development (264 units) will be less than other usage of the site per current zoning.

**J. Special provisions: Deed restrictions, protective covenants, etc.**

A Planned Unit Development Agreement for the Lorentzen P.U.D. dated April 12, 1996, was entered into between the property owner, Birgit Lorentzen and the Genoa Township Board. The applicant would like to amend this P.U.D. agreement with underlying zoning changes as requested.

**K. Description of all sources:**

Genoa Township's *Submittal Requirements For Impact Assessment/Impact Statement*

Genoa Township Zoning Ordinances

Soil Survey of Livingston County, Michigan, U.S.D.A. Soil Conservation Service

National Wetland Inventory Plan, United States Department of the Interior, Fish and Wildlife Service

Brooks Williamson and Associates, Inc. letter dated December 6, 1991 detailing results of wetland inspection

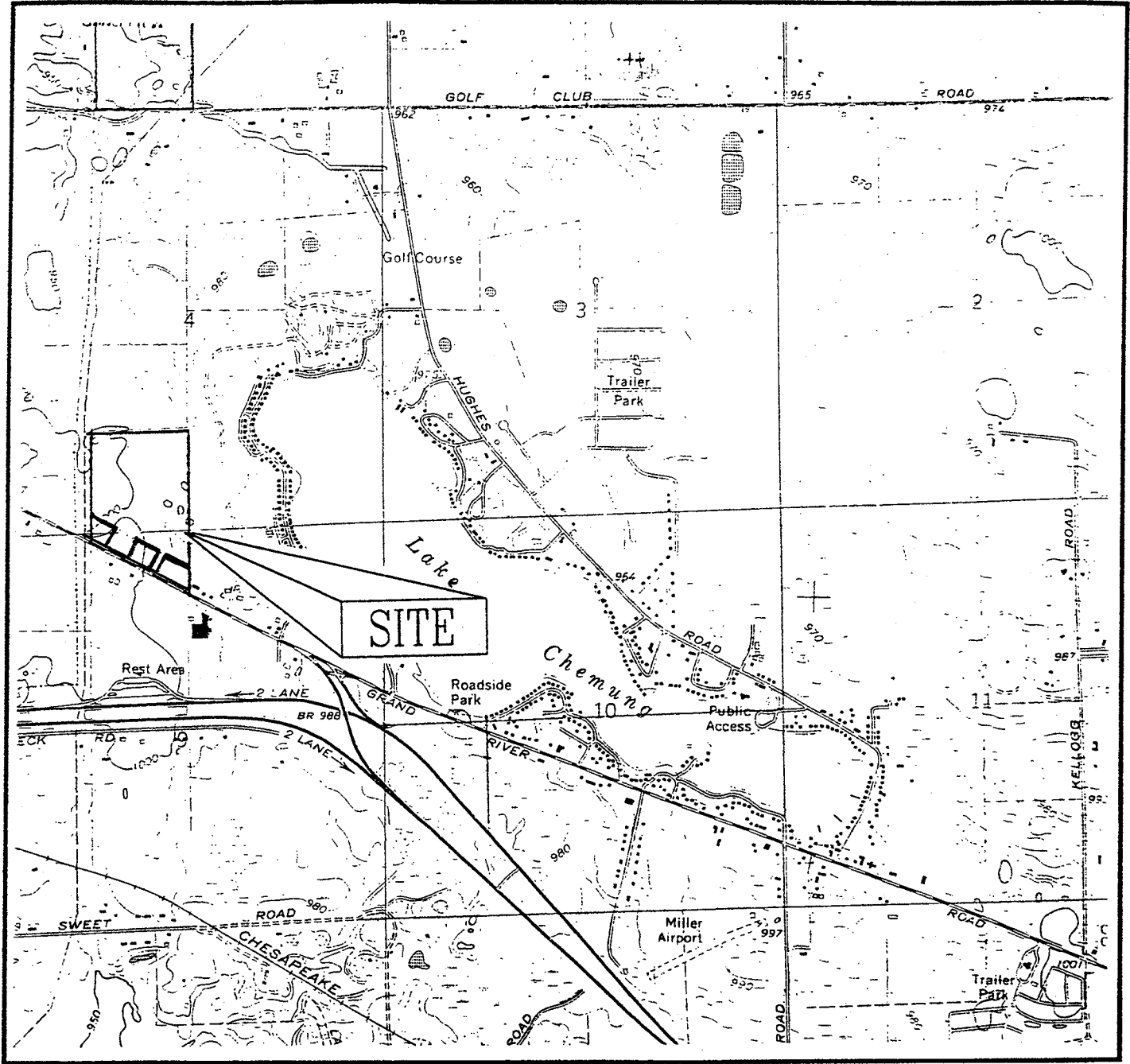
Trip Generation manual, 5<sup>th</sup> edition, Institute of Transportation Engineers

A Planned Unit Development Agreement for the Lorentzen P.U.D. dated April 12, 1996 (Appendix B)

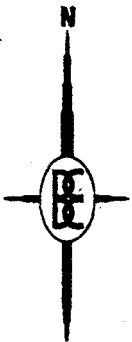
2020 Regional Development Forecast, Summary Report, dated December 1995, SEMCOG

**L. previously submitted environmental assessments**

None

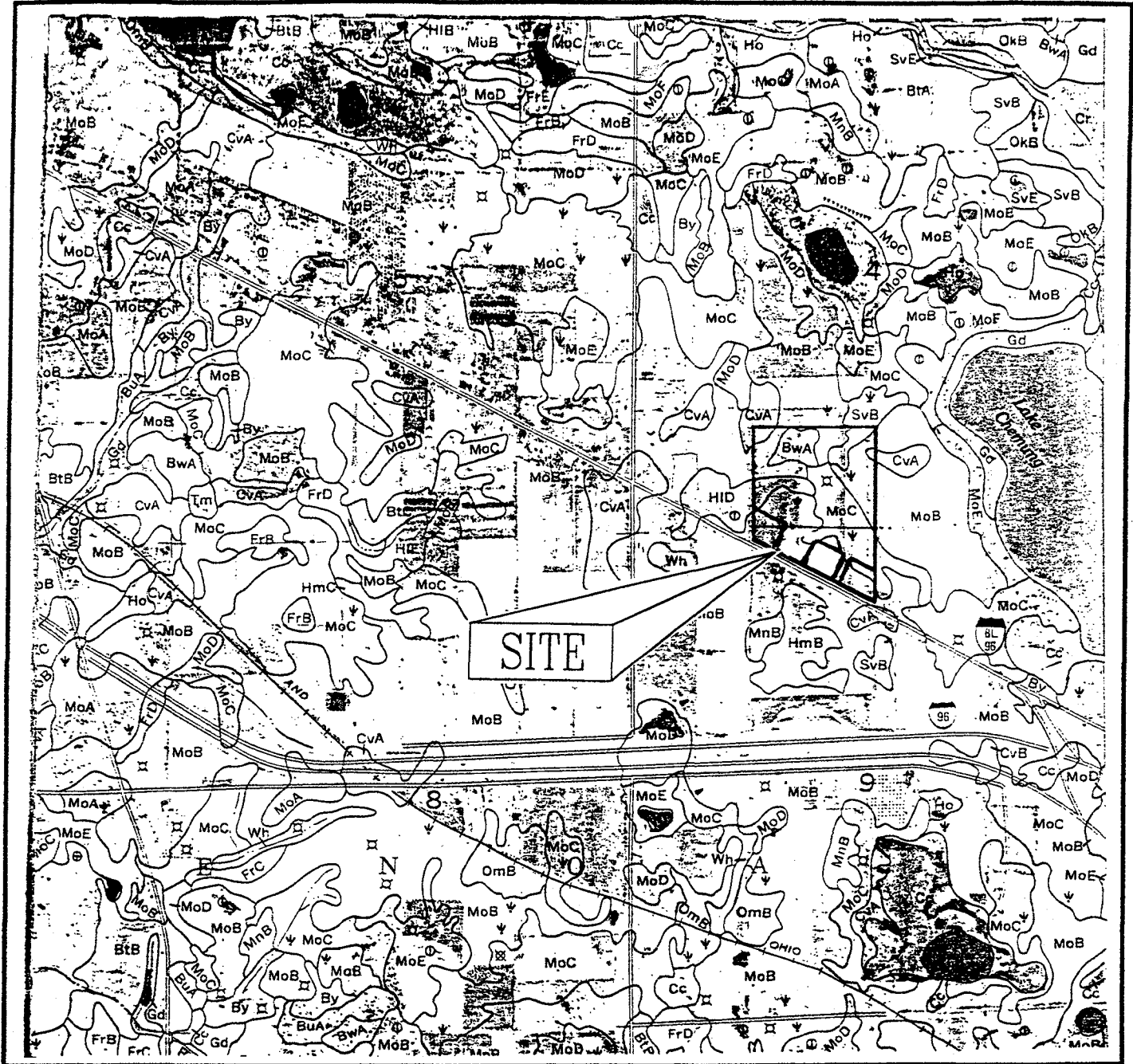


SOURCE : USGS QUADRANGLE MAP, BRIGHTON, MICHIGAN  
 SCALE : 1" = 2000'



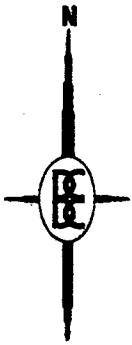
1	DESIGNED BY:	CLIENT	<b>BOSS ENGINEERING</b> ENGINEERS • SURVEYORS • PLANNERS LANDSCAPE ARCHITECTS	
	DRAWN BY: JB	SINGH DEVELOPMENT COMPANY		
	SCALE: 1"=2000'	PROJECT		WESTBURY
	JOB NO. 2-00038	TITLE		TOPOGRAPHY OF SITE AND VICINITY MAP
SHEET NO.	DATE: 11/28/00	HOWELL OFFICE: 3121 E. GRAND RIVER AVE., HOWELL, MI 48843 (517)546-4836 FAX (517)548-1670 (800)246-6735 E-MAIL: bosseng@smi.net		
		WEST BLOOMFIELD OFFICE: 7125 ORCHARD LAKE RD., SUITE 108 WEST BLOOMFIELD, MI 48322 (248)626-BOSS FAX (248)626-9480		





SITE

SOURCE : SOIL SURVEY OF LIVINGSTON COUNTY, MICHIGAN  
BY USDA SOIL CONSERVATION SERVICE

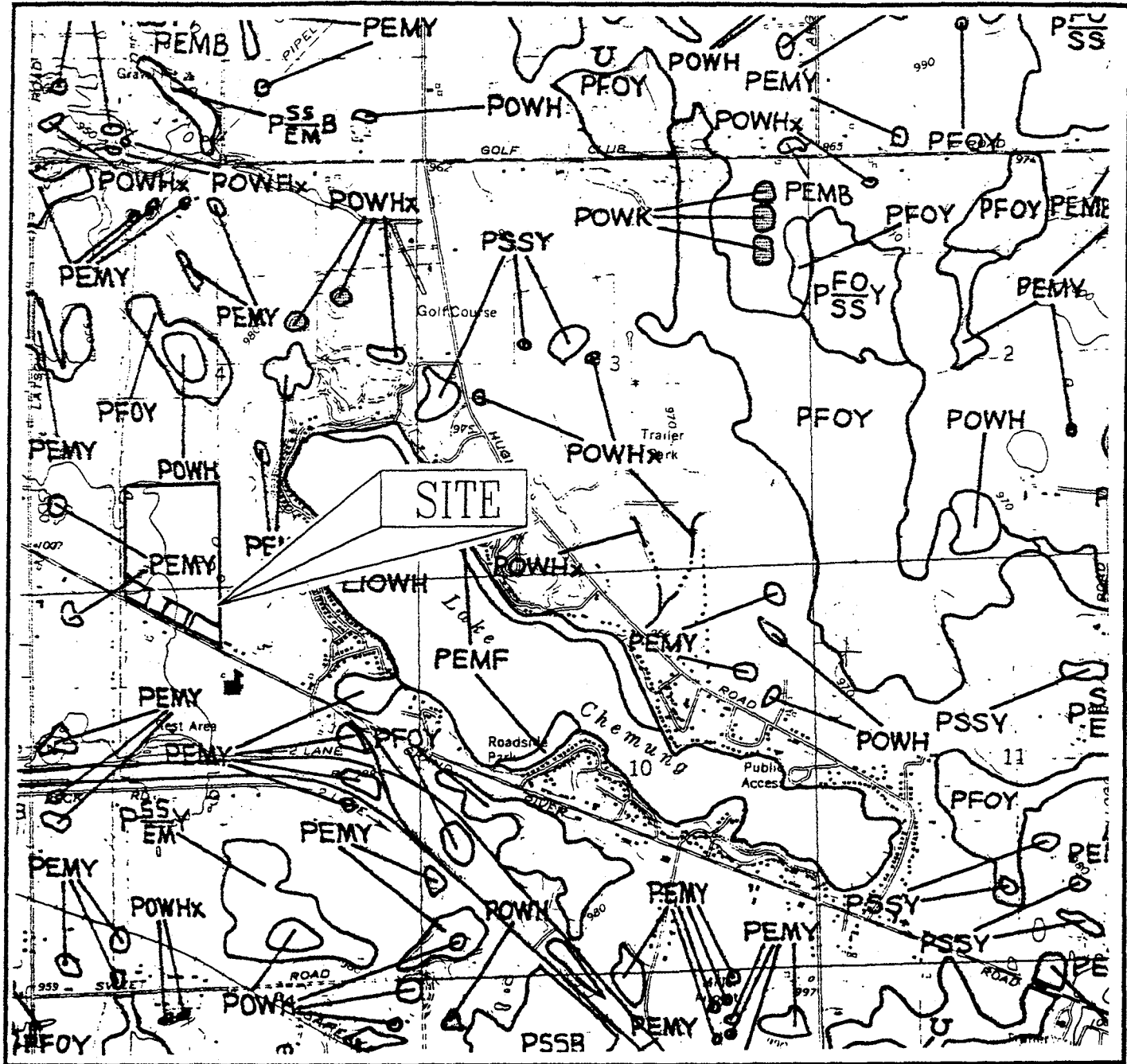


2	DESIGNED BY:	CLIENT
	DRAWN BY: JB	SINGH DEVELOPMENT COMPANY
	SCALE:	PROJECT
	JOB NO. 2-00038	WESTBURY
SHEET NO.	DATE: 11/28/00	TITLE
		SOIL SURVEY MAP

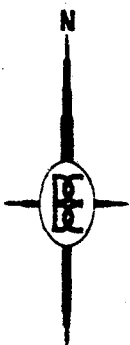
**BOSS ENGINEERING**  
ENGINEERS • SURVEYORS • PLANNERS  
LANDSCAPE ARCHITECTS

HOWELL OFFICE:  
3121 E. GRAND RIVER AVE. HOWELL, MI 48843  
(517)546-4836 FAX (517)548-1670 (800)246-6735  
E-MAIL: bosseng@smi.net

WEST BLOOMFIELD OFFICE:  
7125 ORCHARD LAKE RD. SUITE 108  
WEST BLOOMFIELD, MI 48322  
(248)626-BOSS FAX (248)626-9486



SOURCE : NATIONAL WETLAND INVENTORY MAP  
 U.S. DEPARTMENT OF THE INTERIOR  
 USGS QUADRANGLE MAP, BRIGHTON, MICHIGAN



3	DESIGNED BY:	CLIENT
	DRAWN BY: JB	SINGH DEVELOPMENT COMPANY
	SCALE: 1"=2000'	PROJECT
	JOB NO. 2-00038	WESTBURY
SHEET NO.	DATE: 11/28/00	TITLE
		WETLAND INVENTORY MAP

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 LANDSCAPE ARCHITECTS

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 3121 E. GRAND RIVER AVE. HOWELL, MI 48843  
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 E-MAIL: bosseng@bmi.net

WEST BLOOMFIELD OFFICE:  
 7125 ORCHARD LAKE RD. SUITE 108  
 WEST BLOOMFIELD, MI 48322  
 (248)626-8085 FAX (248)626-9480



**Lorentzen PUD Trip Generation Comparison  
43 +/- Acre Light Industrial Parcel**

**Existing Zoning**

Business Park (Land Use Code # 770)

Weekday Trips = 43 Ac x 159.75 = 6869 Vehicles

A.M. Peak = 43 Ac x 20.14 = 866 Vehicles

P.M. Peak = 43 Ac x 17.96 = 772 Vehicles

Research and Development Center (Land Use Code # 760)

Weekday Trips = 43 Ac x 79.6 = 3422 Vehicles

A.M. Peak = 43 Ac x 16.8 = 722 Vehicles

P.M. Peak = 43 Ac x 15.4 = 662 Vehicles

Industrial Park (Land Use Code # 130)

Weekday Trips = 43 Ac x 62.9 = 2705 Vehicles

A.M. Peak = 43 Ac x 8.29 = 356 Vehicles

P.M. Peak = 43 Ac x 8.67 = 372 Vehicles

**Proposed Zoning**

Single Family Development (Land Use Code # 210)

Weekday Trips = 189 Units x 9.55 = 1805 Vehicles

A.M. Peak = 189 Units x .76 = 144 Vehicles

P.M. Peak = 189 Units x 1.02 = 193 Vehicles

Apartment Development (Land Use Code # 221)

Weekday Trips = 264 Units x 6.59 = 1740 Vehicles

A.M. Peak = 264 Units x .51 = 135 Vehicles

P.M. Peak = 264 Units x .62 = 164 Vehicles

## Definitions

Business Park - Business parks consist of a group of flex-type or incubator one or two story buildings served by a common roadway system. The tenant space is flexible to house a variety of uses; the rear side of the building is usually served by a garage door. The average mix is 20 to 30% office/commercial, and 70 to 80% industrial/warehousing.

Research and Development Center- Research and development centers are facilities or groups of facilities devoted nearly exclusively to research and development activities. They may also contain offices and light fabrication areas.

Industrial Park- Industrial parks are areas containing a number of industrial or related facilities. They are characterized by a mix of manufacturing, service, and warehouse facilities with a wide variation in the proportion of each type of use from one location to another



FINAL

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015173 MAY-96

STATE OF MICHIGAN  
COUNTY OF LIVINGSTON  
TOWNSHIP OF GENOA

MARCE HAVILLAND  
REGISTERED CLERK  
LIVINGSTON COUNTY, MI  
AREA 1

MAY 9 3 53 PM '96

RECORDED

PLANNED UNIT DEVELOPMENT AGREEMENT

THIS PLANNED UNIT DEVELOPMENT AGREEMENT is made and entered into on this 17<sup>th</sup> day of April, 1996, by BIRGIT LORENTZEN, 388 Au Sable Place, Ann Arbor, Michigan 48104 (referred to as "Owner"), and the TOWNSHIP OF GENOA, a Michigan municipal corporation, 2980 Dorr Road, Brighton, Michigan 48116 (referred to as "Township").

R E C I T A T I O N S:

The Owner possesses fee title to certain real property situated in the Township of Genoa, County of Livingston, State of Michigan, more particularly described on attached Schedule A (referred to as the "Property"), some of which Property is currently under binding agreement of sale. At the closings on such agreements of sale, purchasers will acknowledge that their respective portions of the Property shall be bound by this Agreement.

The Owner does not have a site specific development plan for the Property. However, in view of the size and strategic location of the Property, Township desires the establishment of a general land use plan setting forth authorized land uses, and Owner likewise desires to establish a plan setting forth the manner in which Owner's transferees are entitled to develop the Property at such time in the future as they are ready to proceed with development.

The Owner has submitted a proposal for a general land use plan for the future development of the Property. Township has reviewed and revised such plan, requiring, among other things, reduced intensity of land uses, reduced residential use density and fewer access points along Grand River Avenue and Latson Road.

The Township Planning Commission and Township Board, in strict compliance with the Township Zoning Ordinance and with Act 184 of the Public Acts of 1943, as amended, reclassified the Property as Mixed Use Planned Unit Development District, finding that such classification properly achieved the purposes of Article 10 of the Genoa Township Zoning Ordinance, including the encouragement of innovation in land use, the preservation of open space in areas adjacent to Latson Road in order to achieve compatibility with adjacent land uses, the promotion of efficient provision of public services and utilities, the reduction of adverse traffic impacts, and the provision of adequate housing and employment.

RETURN TO: ✓ GENOA TOWNSHIP 2980 DORR ROAD BRIGHTON, MICH. 48116

MOHL, SECRETARY, WARDLE, NYCH, CLARK AND HAMPTON

The Township has found and concluded that the uses and future development plans and conditions shown on the approved PUD Concept Plan, attached as Schedule B ("PUD Plan"), are reasonable and promote the public health, safety and welfare of the Township, and that they are consistent with the plans and objectives of the Township and consistent with surrounding uses of land.

NOW, THEREFORE, OWNER AND TOWNSHIP, in consideration of the mutual promises contained in this Agreement, HEREBY AGREE AS FOLLOWS:

ARTICLE I. GENERAL TERMS OF AGREEMENT

1.1 The Township and the Owner acknowledge and represent that the recitations set forth above are true, accurate and binding.

1.2 The Township acknowledges and represents that this Agreement may be relied upon for future land use and development of the Property by Owner's heirs, assigns and transferees.

1.3 The PUD Plan, attached as Schedule B, has been duly approved by Township in accordance with all applicable Township ordinances, and depicts the land uses which will be permitted and which may be developed on the Property. All formal actions necessary or expedient to carry out this Agreement shall be taken by the parties without undue delay.

1.4 Except as specifically provided for in this Agreement, final site plans will comply with applicable Zoning Ordinance requirements. However, at the time of review of respective site plans for the development of various portions of the Property, deviations from ordinance regulations may be agreed upon by the Township and the ultimate developers of the Property.

1.5 The PUD Plan identifies the location and configuration of the authorized land uses that may be developed on the Property.

A. All uses authorized in the respective zoning classifications of the Genoa Township Zoning Ordinance on the date of this Agreement are authorized, provided, however, that east of Latson Road, between Latson Road and the Detroit Edison/Consumer's Power Corridor, in the areas which are designated GC\*, the uses specified on attached Schedule C are authorized.

B. The Owner shall be permitted without further approval of Township to adjust the size or shape of the various parcels provided the adjustment does not alter the land use.



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designation for any area of the Property or increase the intensity and/or density of use, provided, all development shall be subject to Final PUD Site Plan and land division approval. In addition:

1. The Owner shall not be entitled to make a modification which substantially increases the impact upon adjoining properties or facilities without the approval of Township.

2. The size, shape, entrance location and open space/buffer with respect to the 25.5 acre GC - Retail parcel shall not be modified without the approval of Township.

3. The Owner shall not be entitled to make other substantial changes without the approval of Township.

C. The sizes of the various parcels within the land use designations shall be subject to modification under the applicable regulations of the Zoning Ordinance and state law.

D. In those instances in which the Owner desires to obtain a modification of the PUD Plan, Township shall review the proposed change for the purpose of determining whether the change would have a material adverse impact upon surrounding land uses, services, transportation systems and/or facilities, and if such adverse impact would result, the Township may deny or impose mitigating conditions upon the proposed modification.

1.6 This Agreement, including the uses approved on the PUD Plan, are for the benefit of the Property, and shall run with the Property, and shall bind and inure to the benefit of the heirs, successors, assigns and transferees of the parties to this Agreement.

#### ARTICLE II. LAND USE AUTHORIZATION

2.1 The Planned Unit Development shall include a land use authorization for the following uses, as set forth on the PUD Zoning Plan:

GC	General Commercial
NSD	Neighborhood Service District
OSD	Office Service District
HDR	High Density Residential
IND	Light Industrial
MDR	Medium Density Residential

2.2 The Property is intended to be developed in stages or phases. More detailed planning for the development of the Property shall be undertaken on a parcel-by-parcel basis, subject to the intent and obligation to coordinate development of the Property as a whole, as specified hereinafter. The Owner, as dictated by the Owner's transferees, shall determine the timing and order of development. At the time the Owner, and the Owner's assigns and transferees, are prepared to develop each portion or phase of the Property, a plan prepared in the form required by applicable ordinance and law, including impact assessments required by the Township, and consistent with this Agreement, shall be submitted for review and approval. The Township shall review each of such plans within a reasonable time. Site plan and other review requirements shall not be subject to any subsequent enactments or amendments of the Zoning Ordinance which are inconsistent with this Agreement unless the concept plan as set forth herein is materially altered at the request of the Owner or her successors and assigns.

2.3 The number of residential units to be permitted on the residential component of the Property shall be as specified on the PUD Plan. Single family subdivision and site condominium lots, with detached housing, shall be a minimum of 18,000 square feet in area. The number of residential units shown on the PUD Plan may be reduced if required due to wetland considerations.

2.4 The Industrial use authorization shown on Schedule B shall include all permitted uses in the industrial district, however, the only special land uses which shall be permitted are for urgent care and day care uses.

2.5 If a use authorized under the Genoa Township Zoning Ordinance as a special land use is proposed on the PROPERTY, SUCH USE MUST BE APPLIED FOR AND AUTHORIZED AS PROVIDED IN THE ZONING ORDINANCE.

ARTICLE III. CURB CUTS AND OFF-SITE TRANSPORTATION IMPROVEMENTS

3.1 The establishment of curb cuts and driveways to public thoroughfares from the PUD property shall be limited and restricted for the purpose of reducing the number of turning movements to and from the property. Therefore, the number and general location of entrances to the site from adjacent public thoroughfares shall be fixed in the manner specified on the PUD Plan.

3.2 Off-site Improvements in Public Right of Way.

It has been determined that certain off-site improvements to the adjoining state highway, Grand River Avenue and Latson Road, would be desirable at such time as more



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intense development occurs on the Property, as specified in the following subparagraphs. Identification of the entity undertaking the surveying, engineering and construction with regard to Grand River Avenue improvements shall be determined by MDOT in the future based upon the MDOT access permit process. Identification of the entity undertaking the surveying, engineering and construction with regard to Latson Road improvements shall be determined by the Livingston County Road Commission, or MDOT, in the future. Owner's transferees shall participate financially in the improvements outlined herein, however, the extent of such financial participation shall take into consideration applicable law, and, such participation shall not be required if and to the extent the Michigan Department of Transportation and/or the Livingston County Road Commission has scheduled such improvements using other funding.

A. Grand River west of Latson: A center turn lane shall be constructed along Grand River Avenue to complete a continuous center turn lane from the western end of the Property to the Latson Road intersection approach. It is contemplated that such improvements, including traffic signal(s), will be constructed at such time in the future as more than fifty percent of the Grand River frontage on the Property, west of Latson Road, is developed or seeking development approval, or upon the development of the larger GC-Retail area, whichever occurs first in time.

B. Grand River Avenue east of Latson: A center turn lane must be constructed according to the plans and specifications, including length, established by the Michigan Department of Transportation. It is contemplated that such improvements would be undertaken at such time as: (1) the users on the Grand River frontage on the Property, east of Latson Road, would be reasonably anticipated to generate at least fifty peak hour left turns from Grand River into such portion of the Property; or (2) 50% of the acreage or frontage on the Property east of Latson Road is approved for development and is reasonably anticipated to begin generating traffic; whichever occurs first in time.

C. Latson Road, adjacent to non-residential: Turning lanes, mutually agreeable right-of-way and other improvements, as may be required by the Livingston County Road Commission, are to be constructed.

D. Latson Road, adjacent to residential: A turning lane for any access point from Latson Road is to be constructed prior to the occupancy of the twentieth unit to be served primarily by that access point, or as required by the Livingston County Road Commission. Passing lanes shall be constructed when a sufficient number of units are developed to warrant the requirement of a passing lane based upon Livingston County Road Commission standards.

LIBR 2038 NCE0044

ARTICLE IV. INTERNAL ROAD NETWORK

4.1 An internal system of vehicular thoroughfares shall be planned and established throughout the PUD as approval of the development on respective portions or phases of the Property takes place. Internal roads shall be designed to permit vehicular access between and among users of the Property, as ultimately developed, with the view and intent of minimizing the number of traffic movements onto adjoining public roads. The precise location and design of the overall system of thoroughfares shall be reviewed and authorized as each site plan for a portion of the overall PUD is proposed for development. Such review shall be based upon the objective of establishing a workable plan for the entire property, taking into consideration the uncertainty of the future development of the remainder of the undeveloped property.

4.2 In residential areas:

A. The Owner's transferees shall have the right to determine whether roads shall be public or private, provided applicable ordinances are met. If private roads are constructed, a private road maintenance agreement, subject to approval by the Township, providing for ongoing maintenance shall be adopted.

B. In the interest of efficient circulation and adequate access for emergency vehicles, the Township may as part of site plan approval, require street connections with land to the west or north of the residential component of the PUD on the Property, provided all rights relating to private streets shall be respected and observed. Owner's transferees shall construct such streets as reasonably required by the Township and/or the Board of Road Commissioners of Livingston County.

4.3 Permission for shared access east of Latson Road.

It is anticipated that Owner's transferees shall ultimately develop a vehicular traffic lane or road providing access to Latson Road at the northern end of the property on the east side of Latson Road. Immediately north of Owner's Property, the Township has approved a planned unit development which includes a multiple family residential component not yet constructed. Owner shall authorize the developer of the multiple family project to have common use of the traffic lane or road on the north end of Owner's Property following construction of the traffic lane or road so as to allow access from the multiple family residential component to Latson Road, provided that Owner and the developer of the multiple family property reach a mutually satisfactory agreement with respect to the use, location of connection, construction and maintenance of the traffic lane or road providing access to Latson Road, and providing to Owner and Owner's transferees a release with respect to liability in connection with the design



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and use thereof. The Owner and Owner's transferees shall not unreasonably negotiate relative to this right of access.

4.4 The developer of the Retail portion of the Property shall construct a service drive or traffic lane to the west Property line and provide a shared access easement for the connection to the adjacent property on which there are currently Kroger's and Walmart shopping facilities. This service drive shall be designed at a grade to allow eventual connection, however, the developer of such Retail area shall not be required to complete any service drive construction or provide any easement off of the Property.

4.5 If the then owner of the eastern portion of the Property and the developer of the land to the immediate east of the Property reach a mutually satisfactory agreement with respect to such things as construction, use, maintenance and liability, a service drive or traffic lane intersecting the east boundary of the Property, in the location determined in the discretion of the Owner (as dictated by Owner's transferees), shall be constructed to provide a vehicular connection between the properties. The Owner shall not be required to undertake construction or provide an easement off of the Property.

#### ARTICLE V. DRAINAGE

5.1 The system of drainage on the Property, including drainage retention and detention, as applicable, shall be designed so as to be coordinated throughout the PUD and shall be subject to Township review and approval.

5.2 It is acknowledged by the Township that there is a cross-easement with the property to the west (which includes the Walmart store) for storm drainage purposes.

#### ARTICLE VI. SITE IMPROVEMENTS

6.1 There shall be a coordination of site improvements within the overall Property, with the objective of creating site improvements that are integrated and mutually supportive among the respective portions or phases of the development, including the utilities, landscaping and lighting.

6.2 The bermed buffer area adjacent to Latson Road on the GC-Retail parcel shall be landscaped as shown on attached Schedule D.

6.3 The PUD Plan shows a Connection to Existing Parking on the west of the site in the area of the existing Wendy's and Kroger uses on adjoining property. Such connection is intended to make available a connection for vehicles and pedestrians. Owner shall not be required to acquire an easement or make improvements in any area not on the Property.

LDG 2038 M&E 0046

6.4 A pedestrian network shall be constructed as each phase of development on the Property is constructed, with the intent of connecting all pedestrian components of the Planned Unit Development on the Property, and connecting pedestrian walkways at the property line.

6.5 Unless the Township reasonably determines that it is not physically or economically feasible, development shall be undertaken with underground electrical service to the buildings on the Property.

#### ARTICLE VII. DESIGN OF BUILDINGS AND SIGNS

7.1 The architecture, building materials, colors and shapes of all non-residential buildings shall be in substantial conformity with the guidelines set forth in the Grand River Avenue Corridor Plan, as adopted, and as it may be reasonably amended. It is the intention of the parties to promote and encourage a development that incorporates varying building lines, natural earth tone construction materials and other elements contemplated to upgrade the appearance of the development overall in the interest of making it aesthetically pleasing. Flat front roof facades shall be discouraged. Large walls shall include varying building lines, setbacks, color accents, windows or other elements to upgrade appearance. Each site plan will include a narrative or illustration(s) that demonstrate the design will be consistent with, or complement, architecture of the other sites.

7.2 Signage: Free standing signs within the PUD shall be ground mounted (monument) signs. No pole signs shall be permitted. All free standing signs shall have a base constructed of materials that coordinate and are not inconsistent with the building, and other signs within the PUD. With regard to the area referenced on Schedule B as GC-Retail, there shall be not more than one free standing sign along Grand River Avenue and not more than one free standing sign along Latson Road advertising the uses on such property. The two signs for the GC-Retail area (one per frontage) shall be no taller than 15 feet and no larger than 72 square feet in area. All other lots within the PUD shall be limited to monument signs no taller than 6 feet and no larger than 60 square feet in area. All wall signs shall have channel lettering (not panels). All free standing lighted signs shall be internally lit. Wall and other signs shall be permitted as authorized in the zoning ordinance.

7.3 Landscaping and site lighting: The landscaping within the PUD shall demonstrate consistency in terms of design and materials. Generally, site lighting shall be a uniform type and color.



ARTICLE VIII. UTILITIES

8.1 All of the Property is located within the community water district area but is not included in the water special assessment district. Each commercial and residential parcel/uses must connect to the community water system if such system is available at the time of development. Such connection shall require payment of all proportionate and applicable fees, charges and assessments.

A. On the approximately 65 acres east of Latson Road designated for Industrial and NSD on Schedule B, connection to the public water system shall be made if a water main has been extended to and is available at the site, or, if a land area greater than 15 acres in size is proposed for development, connection shall be made to the system, provided that all off-site easements necessary for extension of the main have been provided by the Township.

B. On the balance of the property, connection to the municipal water system shall be made at the time of construction of buildings.

8.2 All of the commercial, industrial and residential buildings constructed on the Property shall, as developed, be connected to and served by public sanitary sewer. The Township represents that there has been reserved for owner adequate municipal wastewater treatment capacity to service the reasonable development of the Property, and the adequacy of wastewater treatment capacity shall not limit the type of use or density of the reasonable development of the Property.

8.3 Fees, charges and costs for utilities shall be as set forth on attached Schedule E, which may be amended on a district-wide basis from time-to-time.

ARTICLE IX. MISCELLANEOUS

9.1 This Agreement may not be modified, replaced, amended or terminated without the prior written consent of the parties to this Agreement. The Owner and the Township shall be entitled to modify, replace or amend this Agreement without the consent of any other person or entity, regardless of whether such person or entity now or hereafter has any interest in any part of the Property, including subsequent purchasers, or their tenants, mortgagees, or others.

9.2 While Owner possesses legal title to the Property, Owner does not intend to develop it. Rather, Owner intends to sell the Property in various parcels to others to develop. Accordingly, reference in this Agreement to activities by the Owner in relation to development is intended to mean Owner's transferees and assigns unless context dictates to the contrary.

9.3 In the event of any direct conflict between the terms and provisions of this Agreement (including the attached PUD Plan) and the provisions of the Zoning Ordinance, or other Township ordinances, rules or regulations, the provisions of this Agreement shall control.

9.4 In the event a portion of the Property is submitted for site plan approval, and such approval is denied, the party submitting such site plan shall be entitled to appeal such decision to the Zoning Board of Appeals as provided by law, and all parties shall agree to proceed expeditiously to final resolution.

9.5 The undersigned parties acknowledge that the conditions imposed upon the development of the property are reasonable conditions necessary to ensure that public services and facilities affected by the proposed land use or activity will be capable of accommodating increased service and facility loads caused by the land use or activity, to protect the natural environment and conserve natural resources and energy, to ensure compatibility with adjacent uses of land, and to promote the use of land in a socially and economically desirable manner. Further, it is acknowledged that the conditions meet all of the requirements of MSA 5.2963(15d)(2)(a)(b) and (c).

9.6 Until the Property is fully developed, each site plan applicant shall be responsible following Township approval of the respective site plan, plat and/or site condominium presented to the Township, to superimpose the approved plan of development upon the overall PUD plan to clearly illustrate the final development plan for each portion of the Property.

APPROVED by Owner on this 12<sup>th</sup> day of April, 1996.

WITNESSES:

OWNER:

*[Signature]*  
TERRY SMITH

*[Signature]*  
BIRGIT LORENTZEN

*[Signature]*  
Terry K. Compian

On this 12<sup>th</sup> day of April, 1996, before me, a notary public in and for Livingston County, personally appeared BIRGIT LORENTZEN to me known to be the person described in and who executed the Planned Unit Development Agreement, set forth above, and who acknowledged the same to be her free act and deed.

*[Signature]*  
Notary Public  
JOANNE B. HANTON  
Notary Public, Oakland County, MI  
My Commission Expires June 21, 1997





APPROVED BY THE TOWNSHIP BOARD FOR THE TOWNSHIP OF GENOA on the 18 day of March, 1996, at a meeting duly called and held.

WITNESSES:

TOWNSHIP OF GENOA:

Mary Krenicki  
Mary Krenicki

BY: Robert E. Murray  
Robert E. Murray

Mary Krenicki  
Mary Krenicki

BY: Paulette A. Skolarus  
Paulette A. Skolarus

On this 2 day of May, 1996, before me, a notary public in and for Livingston County, personally appeared Robert E. Murray and Paulette A. Skolarus to me known to be the Supervisor and Clerk, respectively, who were duly authorized by the Genoa Township Board to sign this Agreement on behalf of Genoa Township and who acknowledged the same to be their free act and deed.

Ann Spiroff  
Notary Public & alibi witness

Ann Spiroff  
Livingston Co.  
signed 9/6/99

5114/JATWORK3

Drafted by:  
Gerald L. Fisher  
30903 Northwestern Hwy.  
PO Box 3040  
Farmington Hills MI 48333-3040





EXHIBIT A

102038 11E0051

**BOSS ENGINEERING**  
ENGINEERS & SURVEYORS

LORENTZEN PROPERTY WEST OF LATSON ROAD:

Part of the Southeast 1/4 of Section 5, T2N-R5E, Genoa Township, Livingston County, Michigan, more particularly described as follows: Commencing at the Southeast Corner of Section 5; thence along the East line of Section 5 and being the centerline of Latson Road (66 foot wide Right of Way), N 02°11'26" E, 854.58 feet, to the POINT OF BEGINNING of the Parcel to be described; thence N 60°51'00" W, 287.02 feet; thence S 02°11'26" W, 306.09 feet; thence along the centerline of Grand River Avenue (100 foot wide right of Way), N 60°51'00" W, 950.60 feet; thence along the easterly property line, of a parcel as recorded in Livingston County Records, at Liber 1800 of Deeds, pages 81-83, N 02°11'32" E, 420.61 feet; thence N 89°59'52" W, 181.99 feet; thence along the North-South 1/8 line, of Section 5, N 02°12'56" E, 1101.46 feet; thence along the East-West 1/4 line of Section 5, N 88°41'15" W, 1284.64 feet; thence along the North-South 1/4 line of Section 5, N 02°08'46" E, 1325.47 feet; thence S 89°09'44" E, 1286.03 feet; thence S 88°44'51" E, 1284.51 feet; thence along the centerline of Latson Road and the East line of Section 5, S 02°11'26" W, 1337.49 feet to the East 1/4 Corner of said Section; thence continuing along the centerline of Latson Road and the East line of Section 5, S 02°11'26" W, 1789.80 feet, to the POINT OF BEGINNING; Containing 127.22 acres, more or less, and subject to the rights of the public over the existing GRAND RIVER AVENUE & LATSON ROAD. Also subject to any other easements or restrictions of record.

File No. 94192d10

Boss Engineering Company • 3121 East Grand River • Howell, Michigan 48843  
Phone (517) 546-4836 • Brighton (313) 229-4773 • Fax (517) 548-1670

2038-NE0052

Exhibit A

LORENTZEN PROPERTY EAST OF LATSON ROAD

Sheet 2 of 7

CERTIFICATE OF SURVEY

Part of the South 1/4 of the Southwest 1/4 of Section 4, T2N-R5E, Genoa Township, Livingston County, Michigan, described as follows: Beginning at the intersection of centerlines of Grand River Ave. and Latson Road and on the West line of Section 4, N02°11'26"E 548.49 feet from the Southwest corner of said Section 4; running thence N02°11'26"E 773.70 feet along the centerline of Latson Road and the Section line; thence N89°47'23"E 1095.65 feet; thence S02°01'03"W 1340.43 feet; thence N89°15'06"W 74.26 feet along the Section line; thence N60°42'38"W 584.16 feet along the centerline of Grand River Ave. (a 100 ft. wide R.O.W.); thence N60°51'00"W 565.97 feet along the centerline of Grand River Ave. (a 100 ft. wide R.O.W.) to the point of beginning. Containing 27.061 acres more or less, subject to highway easements and easements of record.

Part of the South 1/4 of the Southwest 1/4 of Section 4 and that part of the East 1/4 of the Northwest 1/4 of Section 9 lying Northerly of the centerline of Grand River Ave., all in T2N-R5E, Genoa Township, Livingston County, Michigan, described as follows: Beginning at the South 1/4 corner of said Section 4; running thence S01°39'41"W 864.72 feet along the North-South 1/4 line; thence N60°42'38"W 1483.05 feet along the centerline of Grand River Ave. (a 100 ft. wide R.O.W.); thence N01°39'09"E 156.04 feet along the West line of said East 1/4 of the Northwest 1/4 of Section 9; thence N02°01'03"E 1344.03 feet along the West line of the Southeast 1/4 of the Southwest 1/4 of Section 4; thence N89°47'23"E 1310.81 feet along the North line of the Southeast 1/4 of the Southwest 1/4 of Section 4; thence S01°50'59"W 1365.88 feet along the North-South 1/4 line of said Section 4 to the point of beginning. Containing 56.201 acres more or less, subject to highway easements and easements of record.

West 1/4 corner Sec. 4, T2N-R5E, Set PK spike on straight line between SW cor. and NW cor. of Sec. 4 at a record distance, N2°11'26"E 2644.33 feet from the SW cor, Sec. 4. No witness points available.

Ctr. Sec. 4, T2N-R5E, Computed intersection of 1/4 lines

Southwest corner Sec. 4, T2N-R5E, Fd. PK spike  
 N05°E-48.58'-I. Pipe  
 West-21.85'-ctr. 12" Oak  
 S20°E-41.85'-ctr. 12" oak  
 N54°W-27.60'-ctr. 11" Oak  
 S55°W-31.68'-ctr. 8" Hick

South 1/4 corner Sec. 4, T2N-R5E  
 Fd. "t" iron  
 East-4.7'-ctr. 48" oak  
 East-59.4'-ctr. 15" hick  
 North-88.3'-ctr. 36" Oak  
 S2W-28.2'-ctr. 5" hick  
 S30E-59.0'-NW cor. Pole Barn

Ctr. Sec. 9, T2N-R5E  
 Fd. Roat Spike  
 N10°E-27.18'-ctr. 30" Oak  
 S45°W-37.64'-ctr. 18" hick

I HEREBY CERTIFY THAT I HAVE SURVEYED AND MAPPED THE LAND ABOVE SHOWN AND/OR DESCRIBED AND THAT THE SURVEY COMPLES WITH THE REQUIREMENTS OF PUBLIC ACT NUMBER 132 - 1970

CHARLES E. GARLOCK  
 R.S. NO. 14762



2038-700053

SCHEDULE B

(PUD Concept Plan)

On Record at the Offices

of

Genoa Township  
2980 Dorr Road  
Brighton, MI 48116

2011-2012

102038-100054

SCHEDULE "C"

LIST OF PERMITTED USES EAST OF LATSON ROAD  
Between Latson & Power Lines

Child Care Center/Preschool  
Churches, Places of Worship  
Bed and Breakfast Inns  
Banks, S & L, Credit Unions  
Business Services  
Commercial Schools and Studios  
Dry Cleaners/Laundry  
Funeral Homes/Mortuary  
Hospitals  
Medical Offices  
Medical Centers/Urgent  
Personal Service Establishments  
Personal Service/Retail  
Photographic/Art Studios  
Professional and Corporate Offices  
Vocational/Technical Training Facilities  
Health Clubs, Gyms, Fitness Centers  
Bakeries  
Banquet Halls  
Food Establishment  
Restaurant or Deli, Sit Down, no Drive Thru  
Taverns and Bars Without Dancing  
Taverns and Bars With Dancing

JOHN, BETHELY, WARDLE, LYNCH, CLARK AND HAMPTON



ME2038 ME0055

Video Rental

Convenience Stores without gas

Lodging: Bed and Breakfast

Lodging: Hotel, Motel

Retail Indoor Business

Lawn and Garden Centers

Print Shops and Publishing

Research and Testing Laboratories and Facilities

ONE SERVICE CENTER, WASH. STATE CLERK (100) (1)

MI2038 MR0056

SCHEDULE D

(Landscape Plan)

On Record at the Offices  
of

Genoa Township  
2980 Dorr Road  
Brighton, MI 48116

COPIES ARCHIVED AT THE OFFICE OF THE CLERK OF THE BOARD OF SUPERVISORS



2038 NE0057

"SCHEDULE E"

LORENTZEN PUD AGREEMENT

GENOA/OCEOLA PHASE I  
SEWER ASSESSMENT FORMULA

<u>UNDEVELOPED</u>			<u>SEWER FEE</u>		
<u>FRONT FOOTAGE</u>	<u>ACRE</u>	<u>R.E.U.</u>	<u>FRONT FOOTAGE</u>	<u>ACRE</u>	<u>R.E.U.</u>
\$36.00	\$3,200	\$3,100	0	0	\$3,100

GENOA/OCEOLA PH I WATER  
WATER ASSESSMENT FORMULA

<u>UNDEVELOPED</u>	<u>R.E.U.</u>
\$1,300 PER ACRE	1.2 R.E.U.'s PER ACRE AT \$3,000.

When property develops, if the use exceeds the R.E.U per acre formula, an additional \$3,000. per R.E.U. will be charged.

AUG-18-98 09:56 AM BOB MURRAY

810 227 5060



812 East Grand River  
Brighton, MI 48116  
Telephone: (313) 220-2172  
Fax: (313) 220-0084

**McNAMEE, PORTER & SEELYE, INC.**

Ann Arbor • Brighton • Detroit • Escanaba • Grand Rapids • Lansing

June 18, 1998

RECEIVED

JUN 19 1998

Mr. Michael Archinal, Manager  
Genoa Township  
2980 Dorr Road  
Brighton, MI 48116

Ans'd \_\_\_\_\_

Re: Lorentzen PUD  
Drainage to Grand River

Dear Mr. Archinal:

As discussed, we have received a request from the developer's engineer for the above referenced property to determine the amount of flow the proposed storm sewer along Grand River was designed to accept. This property was allocated approximately 13 acres of drainage area based on existing contours during the design for the Grand River Avenue widening, which equates to an outlet rate of 2.56 cfs. It appears the petitioner is proposing to direct approximately 28 acres east of the utility corridor to the Grand River Avenue through a community detention basin. The basin would need to be sized to detain the flow to 0.9 cfs per acre to meet the design criteria. Since Grand River Avenue is a state road, approval from MDOT will be required for any discharge into the right of way.

We trust this meets your needs at this time. If you have any questions or comments, please call us.

Sincerely,

*Jeffrey J. Brown*  
Jeffrey J. Brown, P.E.

jms

Copy Robert Murray  
Jeanette Patterson, Boss Engineering  
Brenda O'Brien, MDOT

k:\unps\letters\storm.doc



# MEMO

VIA EMAIL [blangan@bagleylangan.com](mailto:blangan@bagleylangan.com)

**To:** Mr. Bob Langan  
Elevate Property Partners, LLC

**From:** Julie M. Kroll, PE, PTOE  
Fleis & VandenBrink

**Date:** March 22, 2022

**Re:** Westbury Phase 2  
Genoa Township, Livingston County, Michigan  
Trip Generation Analysis

## INTRODUCTION

This memorandum presents the results of the Trip Generation Analysis for the proposed Westbury Phase 2 multi-family development located in Genoa Township, Livingston County, Michigan. The proposed site plan includes Phase 2 of the existing Westbury Apartments development. The project site is located adjacent to the north side of Grand River Ave. approximately ½ mile east of Latson Road. as shown in **Figure 1**.

**Figure 1: Site Location Map**



27725 Stansbury Boulevard, Suite 195  
Farmington Hills, MI 48334

P: 248.536.0080

F: 248.536.0079

321  
[www.fveng.com](http://www.fveng.com)

The purpose of this study is to provide a comparison of the trip generation associated with current PUD zoning and the trip generation for the existing Phase 1 and proposed Phase 2 development plans to determine if the site plan is consistent with the traffic study prepared for the approved PUD.

As part of the PUD zoning for this site a Traffic Impact Assessment was prepared, which included the evaluation of 189 single family homes and 264 multi-family homes on this site. Westbury Phase 1 was constructed and includes 128 multi-family residential units. The proposed Westbury Phase 2 site plan includes the development of 136 multi-family residential units.

The analysis included herein is based upon Fleis & VandenBrink's (F&V) knowledge of the study area, understanding of the development program, accepted traffic engineering practice, and methodologies published by the Institute of Transportation Engineers (ITE).

### SITE TRIP GENERATION ANALYSIS

The number of weekday, daily, AM and PM peak hour vehicle trips that would be generated by the Westbury Development Phase 1 (existing) and Phase 2 (proposed) were forecast based on data published by ITE in the *Trip Generation Manual, 11<sup>th</sup> Edition*. The trip generation data for the approved PUD are summarized from the traffic study performed for the PUD zoning approval. The results of the analysis are summarized in **Table 1**.

**Table 1: Trip Generation Summary**

Land Use	ITE Code	Size	Unit	Weekday Average Daily Traffic (vpd)	AM Peak Hour (vph)			PM Peak Hour (vph)			
					In	Out	Total	In	Out	Total	
Current PUD (Traffic Study 2001)	Single-Family Detached	210	189	DU	1,805	37	107	144	122	71	193
	Multi-Family Housing	221	264	DU	1,740	31	104	135	100	64	164
Total			453	DU	3,545	68	211	279	222	135	357
Phase 1 (Existing)	Multi-Family Housing (Low-Rise)	220	128	DU	857	12	39	51	41	24	65
Phase 2 (Proposed)	Multi-Family Housing (Low-Rise)	220	136	DU	911	13	41	54	43	26	69
Total			264	DU	1,768	25	80	105	84	50	134
Difference			-189	DU	-1,777	-43	-131	-174	-138	-85	-223

### CONCLUSIONS

- The trips generated by the addition of Westbury Phase 2 are *less* than the overall PUD zoning trip generation for this site. No additional traffic mitigation measures are recommended to accommodate the projected traffic volumes generated by Phase 2.

Any questions related to this memorandum, study, analyses, and results should be addressed to Fleis & VandenBrink.



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Michigan.

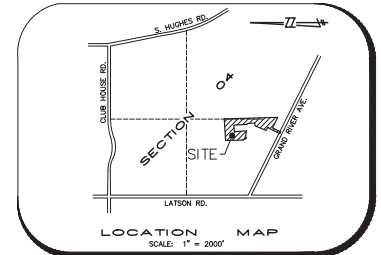
**Attached:** Site Plan  
 Westbury Traffic Study 2001, Trip Generation Excerpt



# ENGINEERING CONSTRUCTION PLANS WESTBURY PHASE 2

SECTION 4, TOWN 2N, RANGE 5E GENOA TOWNSHIP,  
LIVINGSTON COUNTY, MICHIGAN

PREPARED FOR:  
**ELEVATE PROPERTY PARTNER, LLC**  
128 N CENTER ST., NORTHVILLE,  
MICHIGAN 48167



## LEGAL DESCRIPTION

PHASE II PARCEL AS SURVEYED

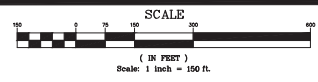
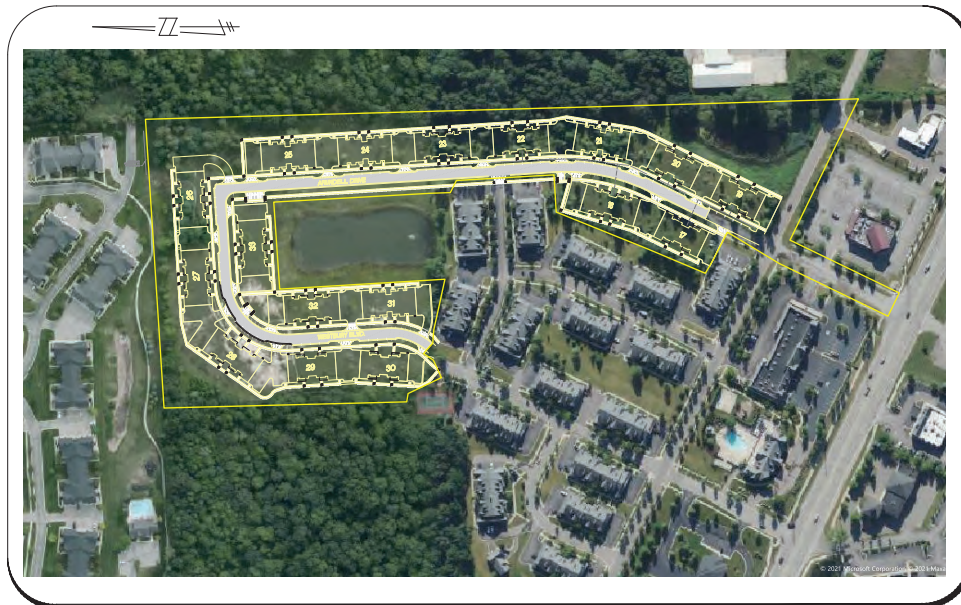
PART OF THE SOUTHWEST 1/4 OF SECTION 4 AND PART FORTHE NORTHWEST 1/4 OF SECTION 9, T20N R5E GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTH 1/4 CORNER OF SAID SECTION 9, ALSO BEING THE SOUTH 1/4 CORNER OF SAID SECTION 4; THENCE, ALONG THE NORTH-SOUTH QUARTER LINE OF SAID SECTION 9, S01°46'48"E FOR A DISTANCE OF 457.82 FEET TO THE SOUTH ROW OF WHITE HORSE LANE; THENCE, ALONG SAID SOUTH ROW LINE N64°57'56"W FOR A DISTANCE OF 401.50 FEET TO THE EAST ROW LINE OF ARUNDELL DRIVE;

THENCE, ALONG SAID EAST ROW LINE OF ARUNDELL DRIVE S26°17'50"W FOR A DISTANCE OF 310.35 FEET TO A POINT ON THE NORTHERLY ROW OF GRAND RIVER AVE. THENCE, ALONG SAID NORTHERLY ROW OF GRAND RIVER AVE. N64°18'31"W FOR A DISTANCE OF 60.00 FEET TO A POINT ON THE WESTERLY ROW OF ARUNDELL DRIVE. THENCE, ALONG SAID WESTERLY ROW OF ARUNDELL DRIVE N20°49'23"E FOR A DISTANCE OF 511.12 FEET TO A POINT ON THE SOUTHERLY LINE OF WHITE HORSE DRIVE. THENCE, THE FOLLOWING EIGHTEEN CALLS ALONG THE BOUNDARY OF PHASE I OF WESTBURY (WESTBURY APARTMENTS): THENCE, N311°24'47"E FOR A DISTANCE OF 153.65 FEET TO A POINT; THENCE, N62°56'36"W FOR A DISTANCE OF 81.10 FEET TO A POINT; THENCE, N09°29'41"W FOR A DISTANCE OF 38.18 FEET TO A POINT; THENCE, S22°21'51"E FOR A DISTANCE OF 156.87 FEET TO A POINT; THENCE, N01°57'24"E FOR A DISTANCE OF 255.26 FEET TO A POINT; THENCE, N86°32'02"E FOR A DISTANCE OF 95.34 FEET TO A POINT; THENCE, N03°17'14"W FOR A DISTANCE OF 202.22 FEET TO A POINT; THENCE, N03°16'41"W FOR A DISTANCE OF 229.67 FEET TO A POINT; THENCE, N03°14'48"W FOR A DISTANCE OF 34.62 FEET TO A POINT; THENCE, N04°04'37"W FOR A DISTANCE OF 52.16 FEET TO A POINT; THENCE, N03°47'09"W FOR A DISTANCE OF 399.95 FEET TO A POINT; THENCE, S80°07'36"W FOR A DISTANCE OF 223.17 FEET TO A POINT; THENCE, S03°25'16"E FOR A DISTANCE OF 423.20 FEET TO A POINT; THENCE, N77°39'12"W FOR A DISTANCE OF 132.29 FEET TO A POINT; THENCE, N80°07'23"W FOR A DISTANCE OF 34.49 FEET TO A POINT; THENCE, N82°52'59"W FOR A DISTANCE OF 52.58 FEET TO A POINT; THENCE, S33°46'12"W FOR A DISTANCE OF 30.30 FEET TO A POINT; THENCE, S65°47'25"W FOR A DISTANCE OF 48.11 FEET TO A POINT; THENCE, N25°43'30"W FOR A DISTANCE OF 94.52 FEET TO A POINT; THENCE, N80°52'07"W FOR A DISTANCE OF 21.51 FEET TO THE EAST LINE OF THE PARK AREA OF WESTBURY. THENCE, ALONG SAID EAST LINE N00°01'11"W FOR A DISTANCE OF 620.78 FEET TO THE SOUTH LINE OF HAMPTON RIDGE PHASE II. THENCE, ALONG SAID SOUTH LINE N80°15'15"E A DISTANCE OF 709.85 FEET TO THE WEST LINE OF PROPOSED SUMMERBELD POINT AND THE NORTH SOUTH 1/4 LINE AS PREVIOUSLY SURVEYED AND MONUMENTED BY BOSS ENGINEERING. THENCE, ALONG SAID NORTH-SOUTH 1/4 LINE S01°30'53"E FOR A DISTANCE OF 17365.87 FEET TO THE POINT OF BEGINNING CONTAINING 11472 ACRES MORE OR LESS AND SUBJECT TO THE RIGHTS TO THE PUBLIC OVER THE EXISTING GRAND RIVER AVENUE (100 FEET WIDE). ALSO, SUBJECT TO AND INCLUDING THE USE OF EASEMENT 1 AS RECORDED IN LIBER 2986 PG 0184-0205, EASEMENT A AND THE WHITE HORSE DRIVE EASEMENT AS RECORDED IN LIBER 3623 PG 0768-0778. ALSO, SUBJECT TO ANY EASEMENTS, RIGHT-OF-WAY AND RESTRICTIONS OF RECORD.

## NOTES

1. NOTIFY THE GENOA TOWNSHIP A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. ALL CONSTRUCTION MUST CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS ADOPTED BY GENOA TOWNSHIP. STANDARD DETAIL SHEETS ARE ATTACHED.
3. CALL 811 ONE-CALL UTILITY LOCATING A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
4. ALL SOIL EROSION AND SILTATION MUST BE CONTROLLED AND CONTAINED ON-SITE. THE OWNER SHALL SECURE A PERMIT FROM THE LIVINGSTON COUNTY DRAIN COMMISSION PRIOR TO ANY EARTH DISRUPTION.
5. ALL EXCAVATION, INCLUDING ALL UTILITIES AND LEADS, UNDER OR WITHIN 1' ON 1' INFLUENCE OF ANY PAVEMENT, EXISTING OR PROPOSED, OR OTHER SAND BACKFILL IS CALLED FOR ON THE PLAN, SHALL BE BACKFILLED AND COMPACTED WITH GRANULAR MATERIAL (SAND) MDOT CLASS II TO 95 PERCENT MAXIMUM UNIT DENSITY (ALL OTHERS 90 PERCENT).
6. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES AND FACILITIES. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT THE PROPOSED UTILITY CROSSINGS PRIOR TO THE START OF UNDERGROUND CONSTRUCTION. ANY CONFLICTS WITH UTILITIES SHALL BE IMMEDIATELY REPORTED TO THE PROJECT ENGINEER.
7. WHERE TWO UTILITIES CROSS, INCLUDING SANITARY SEWER LEADS, PROVIDE POROUS GRADE "B" BACKFILL MATERIAL COMPACTED TO THE UNDERSIDE OF THE HIGHER UTILITY OR AS SPECIFIED ON THE DETAIL SHEET.
8. DUST CONTROL SHALL BE MAINTAINED AT ALL TIMES.
9. ANY MUD TRACKED ONTO THE EXISTING STREETS SHALL BE REMOVED DAILY.
10. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS, INVERTS AND GRADES PRIOR TO THE START OF ANY WORK.
11. AS-BUILTS SHALL BE PROVIDED IN ACCORDANCE WITH THE GENOA TOWNSHIP AND LIVINGSTON COUNTY STANDARDS.



## SHEET INDEX

1. COVER SHEET
  2. EXISTING CONDITIONS
  3. SITE PLAN
  4. COMPOSITE UTILITY PLAN
  5. GRADING AND S.E.S.C. PLAN
  6. GRADING AND S.E.S.C. PLAN
  7. GRADING AND S.E.S.C. PLAN
  8. SANITARY & WATERMAIN PLAN & PROFILE
  9. SANITARY & WATERMAIN PLAN & PROFILE
  10. SANITARY & WATERMAIN PLAN & PROFILE
  11. STORM SEWER PLAN & PROFILE
  12. STORM SEWER PLAN & PROFILE
  13. STORM SEWER PLAN & PROFILE
  14. DRAINAGE DISTRIBUTION PLAN
  15. OVERALL TRIBUTARY AREA PLAN
  16. DETENTION BASIN 2 PLAN
  - ND1. NOTES AND DETAILS
  - ND2. NOTES AND DETAILS
- DETAILS
- MHOG WATER AND SANITARY STANDARD DETAILS
  - LIVINGSTON COUNTY SOIL EROSION AND SEDIMENT CONTROL DETAIL

## BENCHMARKS

BM#1 - TOP ARROW ON HYDRANT LOCATED ON SW SIDE OF WHITE HORSE LANE AND ARUNDELL DR. ELEVATION: 977.22 NAVD88

BM#3 - BENCHMARK ON LIGHT POLE BASE LOCATED ON NE SIDE OF STONEHENGE WAY AND WESTBURY BLVD. ELEVATION: 934.15 NAVD88

## SEIBER KEAST LEHNER, INC.



ENGINEERING | SURVEYING  
39205 COUNTRY CLUB DR. SUITE C-8  
FARMINGTON HILLS, MICHIGAN 48331  
PHONE: 248.308.3331

LANDSCAPE PLANS PREPARED BY:  
ALLEN DESIGN, LLC  
LANDSCAPE ARCHITECTURE  
557 CARPENTER, NORTHVILLE,  
MICHIGAN 48167  
PHONE: 248.467.4668

ARCHITECTURAL PLANS PREPARED BY:  
ALEXANDER V. BOGAERTS & ASSOC.  
2445 FRANKLIN ROAD,  
BLOOMFIELD HILLS, MICHIGAN  
48302  
PHONE: 248.334.5000

TOPOGRAPHIC & BOUNDARY SURVEY  
PROVIDED BY THE OWNER:

REVISIONS			ENGINEER'S SEAL
NO.	ITEM	DATE	

DATE: 1-17-22 DESIGNED BY: J.A. JOB NUMBER: 21-030  
CHECKED BY: B.E. DRAWING FILE: 21-030C-002

**GENOA TOWNSHIP**

**FEB 08 2002**

**RECEIVED**

**IMPACT ASSESSMENT  
FOR  
"WESTBURY"  
PART OF LORENZEN PUD  
GENOA TOWNSHIP, LIVINGSTON COUNTY  
MICHIGAN**

Prepared for:

**SINGH DEVELOPMENT COMPANY  
7125 ORCHARD LAKE ROAD  
SUITE 200  
WESTBLOOMFIELD, Michigan 48334  
(248) 865-1600**

Prepared by:

**BOSS ENGINEERING COMPANY  
7125 ORCHARD LAKE ROAD  
SUITE 108  
WESTBLOOMFIELD, MI 48334  
(248) 626-2677**

Revised - February 7, 2002

February 27, 2001

**2-00038EIA**



**Lorentzen PUD Trip Generation Comparison  
43 +/- Acre Light Industrial Parcel**

**Existing Zoning**

Business Park (Land Use Code # 770)

Weekday Trips = 43 Ac x 159.75 = 6869 Vehicles

A.M. Peak = 43 Ac x 20.14 = 866 Vehicles

P.M. Peak = 43 Ac x 17.96 = 772 Vehicles

Research and Development Center (Land Use Code # 760)

Weekday Trips = 43 Ac x 79.6 = 3422 Vehicles

A.M. Peak = 43 Ac x 16.8 = 722 Vehicles

P.M. Peak = 43 Ac x 15.4 = 662 Vehicles

Industrial Park (Land Use Code # 130)

Weekday Trips = 43 Ac x 62.9 = 2705 Vehicles

A.M. Peak = 43 Ac x 8.29 = 356 Vehicles

P.M. Peak = 43 Ac x 8.67 = 372 Vehicles

**Proposed Zoning**

Single Family Development (Land Use Code # 210)

Weekday Trips = 189 Units x 9.55 = 1805 Vehicles

A.M. Peak = 189 Units x .76 = 144 Vehicles

P.M. Peak = 189 Units x 1.02 = 193 Vehicles

Apartment Development (Land Use Code # 221)

Weekday Trips = 264 Units x 6.59 = 1740 Vehicles

A.M. Peak = 264 Units x .51 = 135 Vehicles

P.M. Peak = 264 Units x .62 = 164 Vehicles



# ENGINEERING CONSTRUCTION PLANS WESTBURY PHASE 2

SECTION 4, TOWN 2N, RANGE 5E GENOA TOWNSHIP,  
LIVINGSTON COUNTY, MICHIGAN

PREPARED FOR:  
**ELEVATE PROPERTY PARTNER, LLC**  
128 N CENTER ST., NORTHVILLE,  
MICHIGAN 48167

Utility plan and profile sheets numbered 8-13 and detail sheets ND1-3 were removed from the packet to reduce the file size. Please contact Kelly VanMarter at [kelly@genoa.org](mailto:kelly@genoa.org) to get a copy.

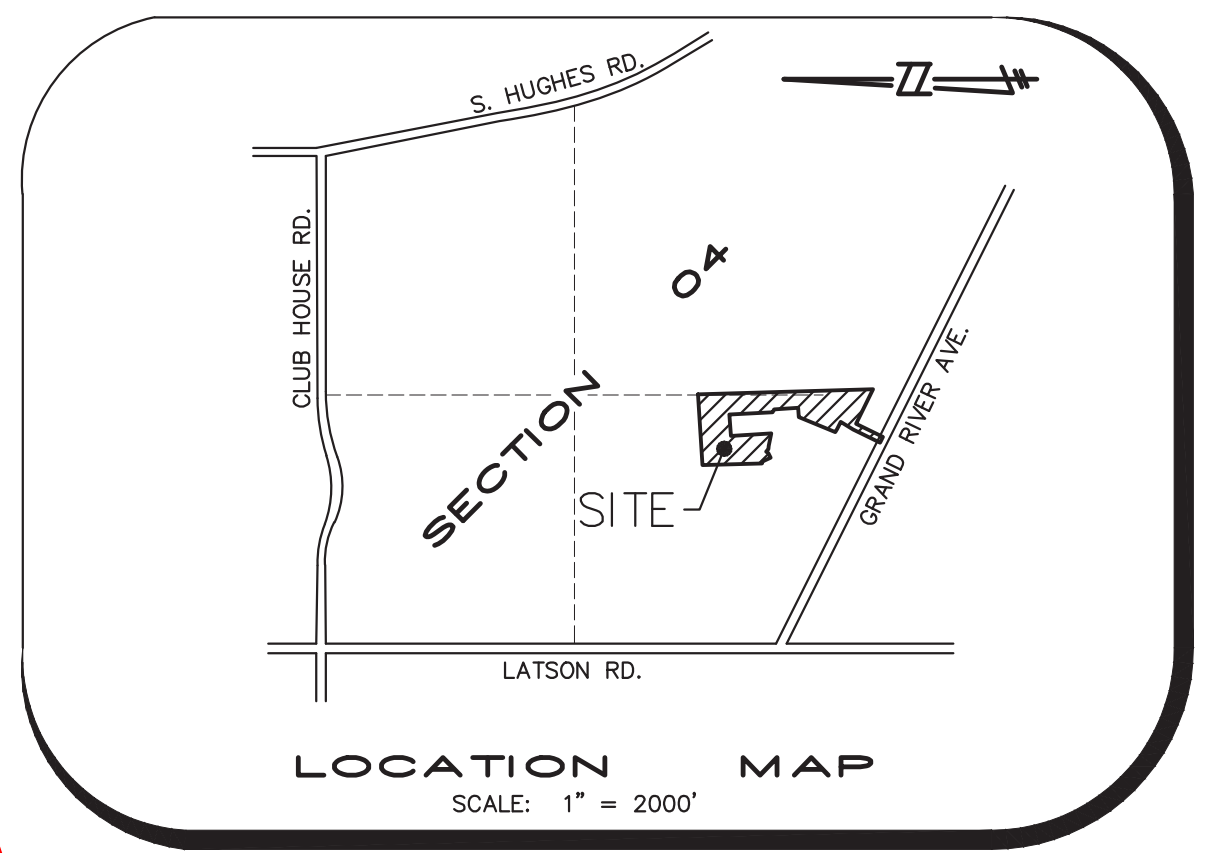
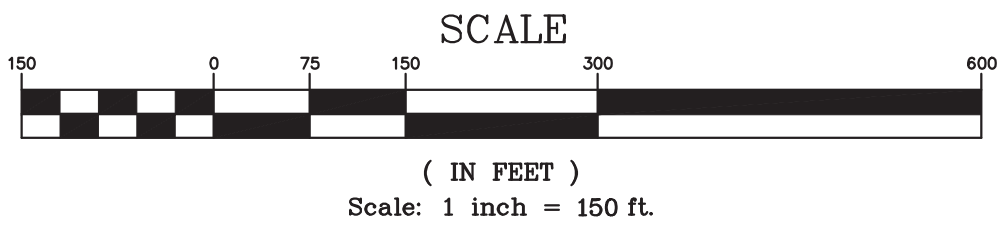
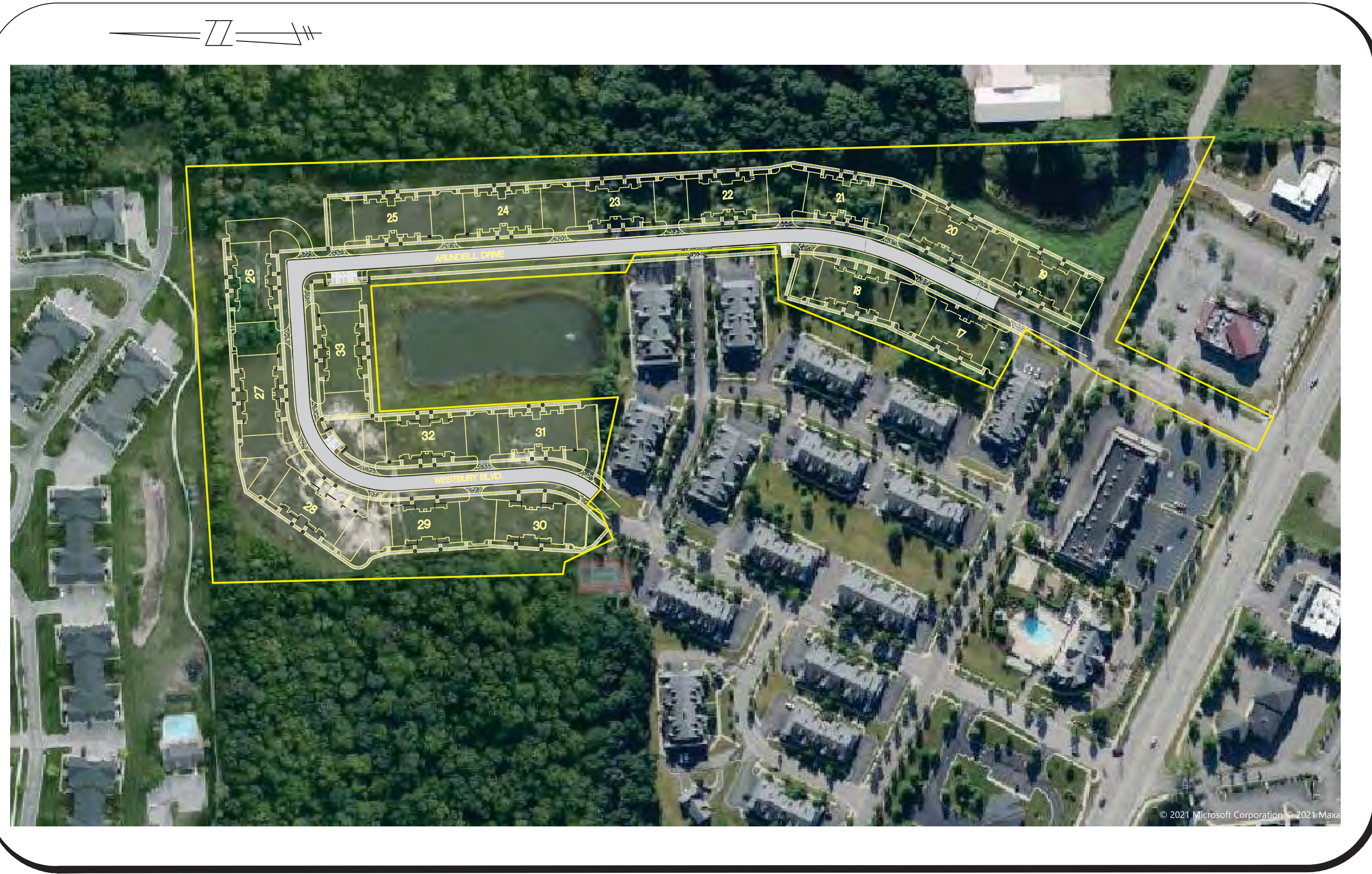
## LEGAL DESCRIPTION

PHASE II PARCEL AS SURVEYED

PART OF THE SOUTHWEST 1/4 OF SECTION 4 AND PART OF THE NORTHWEST 1/4 OF SECTION 9, TOWN 2N, RANGE 5E, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:  
BEGINNING AT THE NORTH 1/4 CORNER OF SAID SECTION 9, ALSO BEING THE SOUTH 1/4 CORNER OF SAID SECTION 4; THENCE, ALONG THE NORTH-SOUTH QUARTER LINE OF SAID SECTION 9, S01°46'49"E FOR A DISTANCE OF 457.82 FEET TO THE SOUTH ROW OF WHITE HORSE LANE; THENCE, ALONG SAID SOUTH ROW LINE N64°07'56"W FOR A DISTANCE OF 401.50 FEET TO THE EAST ROW LINE OF ARUNDELL DRIVE;  
THENCE, ALONG SAID EAST ROW LINE OF ARUNDELL DRIVE S25°47'50"W FOR A DISTANCE OF 310.35 FEET TO A POINT ON THE NORTHERLY ROW OF GRAND RIVER AVE. THENCE, ALONG SAID NORTHERLY ROW OF GRAND RIVER AVE. N64°09'31"W FOR A DISTANCE OF 66.00 FEET TO A POINT ON THE WESTERLY ROW OF ARUNDELL DRIVE; THENCE, ALONG SAID WESTERLY ROW OF ARUNDELL, N25°49'23"E FOR A DISTANCE OF 310.12 FEET TO A POINT ON THE SOUTHERLY LINE OF WHITE HORSE DRIVE. THENCE THE FOLLOWING EIGHTEEN CALLS ALONG THE BOUNDARY OF PHASE I OF WESTBURY (WESTBURY APARTMENTS); THENCE, N31°13'48"E FOR A DISTANCE OF 153.62 FEET TO A POINT; THENCE, N62°38'36"W FOR A DISTANCE OF 81.10 FEET TO A POINT; THENCE, N59°29'41"W FOR A DISTANCE OF 38.18 FEET TO A POINT; THENCE, N22°51'39"E FOR A DISTANCE OF 156.67 FEET TO A POINT; THENCE, N21°57'24"E FOR A DISTANCE OF 255.26 FEET TO A POINT; THENCE, N86°32'02"E FOR A DISTANCE OF 95.34 FEET TO A POINT; THENCE, N03°19'14"W FOR A DISTANCE OF 20.22 FEET TO A POINT; THENCE, N03°15'41"W FOR A DISTANCE OF 229.67 FEET TO A POINT; THENCE, N63°31'48"W FOR A DISTANCE OF 34.62 FEET TO A POINT; THENCE, N01°54'53"W FOR A DISTANCE OF 52.16 FEET TO A POINT; THENCE, N03°14'09"W FOR A DISTANCE OF 399.95 FEET TO A POINT; THENCE, S86°07'36"W FOR A DISTANCE OF 223.17 FEET TO A POINT; THENCE, S03°25'16"E FOR A DISTANCE OF 423.20 FEET TO A POINT; THENCE, N73°39'12"W FOR A DISTANCE OF 132.29 FEET TO A POINT; THENCE, N85°07'23"W FOR A DISTANCE OF 34.49 FEET TO A POINT; THENCE, N48°25'29"W FOR A DISTANCE OF 35.28 FEET TO A POINT; THENCE, S33°48'12"W FOR A DISTANCE OF 30.30 FEET TO A POINT; THENCE, S65°14'25"W FOR A DISTANCE OF 49.11 FEET TO A POINT; THENCE, N25°34'39"W FOR A DISTANCE OF 94.52 FEET TO A POINT; THENCE, N80°52'07"W FOR A DISTANCE OF 21.51 FEET TO THE EAST LINE OF THE PARK AREA OF WESTBURY; THENCE, ALONG SAID EAST LINE N01°26'11"W FOR A DISTANCE OF 620.78 FEET TO THE SOUTH LINE OF HAMPTON RIDGE PHASE II; THENCE, ALONG SAID SOUTH LINE N86°19'33"E A DISTANCE OF 739.65 FEET TO THE WEST LINE OF PROPOSED SUMMERFIELD POINT AND THE NORTH-SOUTH 1/4 LINE AS PREVIOUSLY SURVEYED AND MONUMENTED BY BOSS ENGINEERING; THENCE, ALONG SAID NORTH-SOUTH 1/4 LINE S01°35'53"E FOR A DISTANCE OF 1365.87 FEET TO THE POINT OF BEGINNING; CONTAINING 17.472 ACRES MORE OR LESS AND SUBJECT TO THE RIGHTS OF THE PUBLIC OVER THE EXISTING GRAND RIVER AVENUE (100 FEET WIDE). ALSO, SUBJECT TO AND INCLUDING THE USE OF EASEMENT B AS RECORDED IN LIBER 2560 PG 0194-0205, EASEMENT A AND THE WHITE HORSE DRIVE EASEMENT AS RECORDED IN LIBER 3623 PG 0768-0778. ALSO, SUBJECT TO ANY EASEMENTS, RIGHT-OF-WAY AND RESTRICTIONS OF RECORD.

## NOTES

1. NOTIFY THE GENOA TOWNSHIP A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. ALL CONSTRUCTION MUST CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS ADOPTED BY GENOA TOWNSHIP. STANDARD DETAIL SHEETS ARE ATTACHED.
3. CALL 811 ONE-CALL UTILITY LOCATING A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
4. ALL SOIL EROSION AND SILTATION MUST BE CONTROLLED AND CONTAINED ON-SITE. THE OWNER SHALL SECURE A PERMIT FROM THE LIVINGSTON COUNTY DRAIN COMMISSION PRIOR TO ANY EARTH DISRUPTION.
5. ALL EXCAVATION, INCLUDING ALL UTILITIES AND LEADS, UNDER OR WITHIN 1 ON 1 INFLUENCE OF ANY PAVEMENT, EXISTING OR PROPOSED, OR WHERE SAND BACKFILL IS CALLED FOR ON THE PLAN, SHALL BE BACKFILLED AND COMPACTED WITH GRANULAR MATERIAL (SAND) MDT CLASS II TO 95 PERCENT MAXIMUM UNIT DENSITY (ALL OTHERS 90 PERCENT).
6. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES AND FACILITIES. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT THE PROPOSED UTILITY CROSSINGS PRIOR TO THE START OF UNDERGROUND CONSTRUCTION. ANY CONFLICTS WITH UTILITIES SHALL BE IMMEDIATELY REPORTED TO THE PROJECT ENGINEER.
7. WHERE TWO UTILITIES CROSS, INCLUDING SANITARY SEWER LEADS, PROVIDE POROUS GRADE "B" BACKFILL MATERIAL COMPACTED TO THE UNDERSIDE OF THE HIGHER UTILITY OR AS SPECIFIED ON THE DETAIL SHEET.
8. DUST CONTROL SHALL BE MAINTAINED AT ALL TIMES.
9. ANY MUD TRACKED ONTO THE EXISTING STREETS SHALL BE REMOVED DAILY.
10. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS, INVERTS AND GRADES PRIOR TO THE START OF ANY WORK.
11. AS-BUILTS SHALL BE PROVIDED IN ACCORDANCE WITH THE GENOA TOWNSHIP AND LIVINGSTON COUNTY STANDARDS.



## SHEET INDEX

1. COVER SHEET
2. EXISTING CONDITIONS
3. SITE PLAN
4. COMPOSITE UTILITY PLAN
5. GRADING AND S.E.S.C. PLAN
6. GRADING AND S.E.S.C. PLAN
7. GRADING AND S.E.S.C. PLAN
8. SANITARY & WATERMAIN PLAN & PROFILE
9. SANITARY & WATERMAIN PLAN & PROFILE
10. SANITARY & WATERMAIN PLAN & PROFILE
11. STORM SEWER PLAN & PROFILE
12. STORM SEWER PLAN & PROFILE
13. STORM SEWER PLAN & PROFILE
14. DRAINAGE DISTRIBUTION PLAN
15. OVERALL TRIBUTARY AREA PLAN
16. DETENTION BASIN 2 PLAN
- ND1. NOTES AND DETAILS
- ND2. NOTES AND DETAILS
- ND3. NOTES AND DETAILS

- DETAILS**
- MHOG WATER AND SANITARY STANDARD DETAILS
  - LIVINGSTON COUNTY STORM SEWER DETAILS
  - LIVINGSTON COUNTY SOIL EROSION AND SEDIMENT CONTROL DETAIL

## BENCHMARKS

BM#1 -TOP ARROW ON HYDRANT  
LOCATED ON SW SIDE OF WHITE HORSE  
LANE AND ARUNDELL DR.  
ELEVATION 997.22 NAVD88

BM#3 -BENCHMARK ON LIGHT POLE BASE  
LOCATED ON NE SIDE OF STONEHENGE  
WAY AND WESTBURY BLVD. ELEVATION  
994.18 NAVD88

**SEIBER KEAST LEHNER, INC.**  
ENGINEERING | SURVEYING  
39205 COUNTRY CLUB DR. • SUITE C-8  
FARMINGTON HILLS, MICHIGAN • 48331  
PHONE: 248.308.3331

LANDSCAPE PLANS PREPARED BY:  
**ALLEN DESIGN, LLC**  
LANDSCAPE ARCHITECTURE  
557 CARPENTER, NORTHVILLE,  
MICHIGAN 48167  
PHONE: 248.467.4668

ARCHITECTURAL PLANS PREPARED BY:  
**ALEXANDER V. BOGAERTS & ASSOC.**  
2445 FRANKLIN ROAD,  
BLOOMFIELD HILLS, MICHIGAN  
48302  
PHONE: 248.334.5000

TOPOGRAPHIC & BOUNDARY SURVEY  
PROVIDED BY THE OWNER:

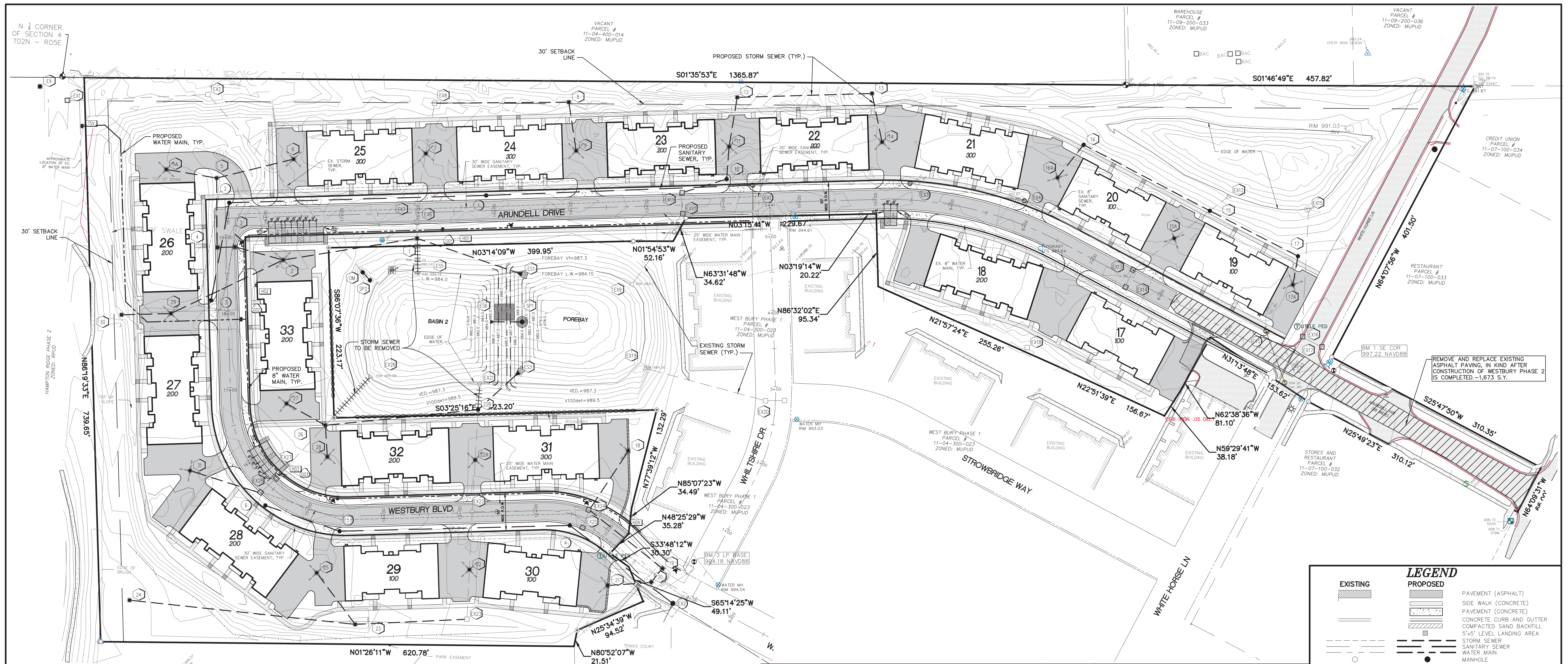
REVISIONS		ENGINEER'S SEAL	
NO.	ITEM	DATE	
1.	REVISED PER TOWNSHIP	03-23-2022	
DATE: 1-17-22		DESIGNED BY: A.A.	JOB NUMBER: 21-030
		CHECKED BY: B.B.	DRAWING FILE: 21-030CV.dwg











UNIT MATRIX													
BUILDING TYPE	UNIT TYPE	BUILDING NUMBER	UNIT DESCRIPTION	UNIT AREA (S.F.)	GARAGE SIZE (CARS)	TOTAL AREA PER UNIT TYPE (S.F.)	NUMBER OF BUILDINGS	UNITS PER BUILDING	NO. OF UNIT TYPES	TOTAL NUMBER OF UNITS	GARAGE AREA (S.F.)	TOTAL GARAGE AREA	GRAND TOTAL AREA (UNIT+GARAGE)
									1 BED	2 BED	3 BED		
100 PHASE II	101	17, 19, 20, 29, 31	1BR, 1 BTH RANCH LOWER	963	1	19,260	5	4	20			20	296
	102		3 BR, 2 BTH RANCH UPPER	1258	2	25,160		4		20		20	440
200 PHASE II	201	18, 22, 23, 26, 27, 28, 32, 33	2 BR, 2 BTH RANCH LOWER	1242	2	39,744	8	4		32		32	415
	202		2 BR, 2 BTH RANCH UPPER	1323	2	42,336		4		32		32	293
300 PHASE II	301	25, 30	3 BR, 2 BTH RANCH LOWER	1412	2	22,592	4	4		16		16	373
	302	21, 24	3 BR, 2 BTH RANCH UPPER	1393	2	22,288		4		16		16	388
SUBTOTAL						171,380	17		20	44	52	134	49,552
GRAND TOTAL									15%	41%	38%	100%	220,932

(UNIT MATRIX PROVIDED BY ALEXANDER V. BOGARTS & ASSOCIATES)

**WESTBURY PHASE 2 PARKING REQUIREMENTS**

**Parking Spaces Required**  
2 parking spaces per dwelling unit  
136 Units x 2 = 272  
**Total Required 272**

**Parking Spaces Provided**  
Garage Parking = 252  
Apron Parking = 252  
Off-Street Parking = 13  
**Total Provided 517**

**Accessible Parking Spaces**  
**Total Parking Spaces (Excluding Garages) =**  
Off-Street Parking = 13 spaces  
Garage Approach Parking = 252  
**TOTAL 265**

**Accessible Spaces**  
Per 2010 ADA (208.2.3 Residential Facilities)  
**Total Required (Minimum 2% of the total) 6**

**Total Provided**  
Standard Accessible Spaces 6  
Van Accessible Spaces 1/7

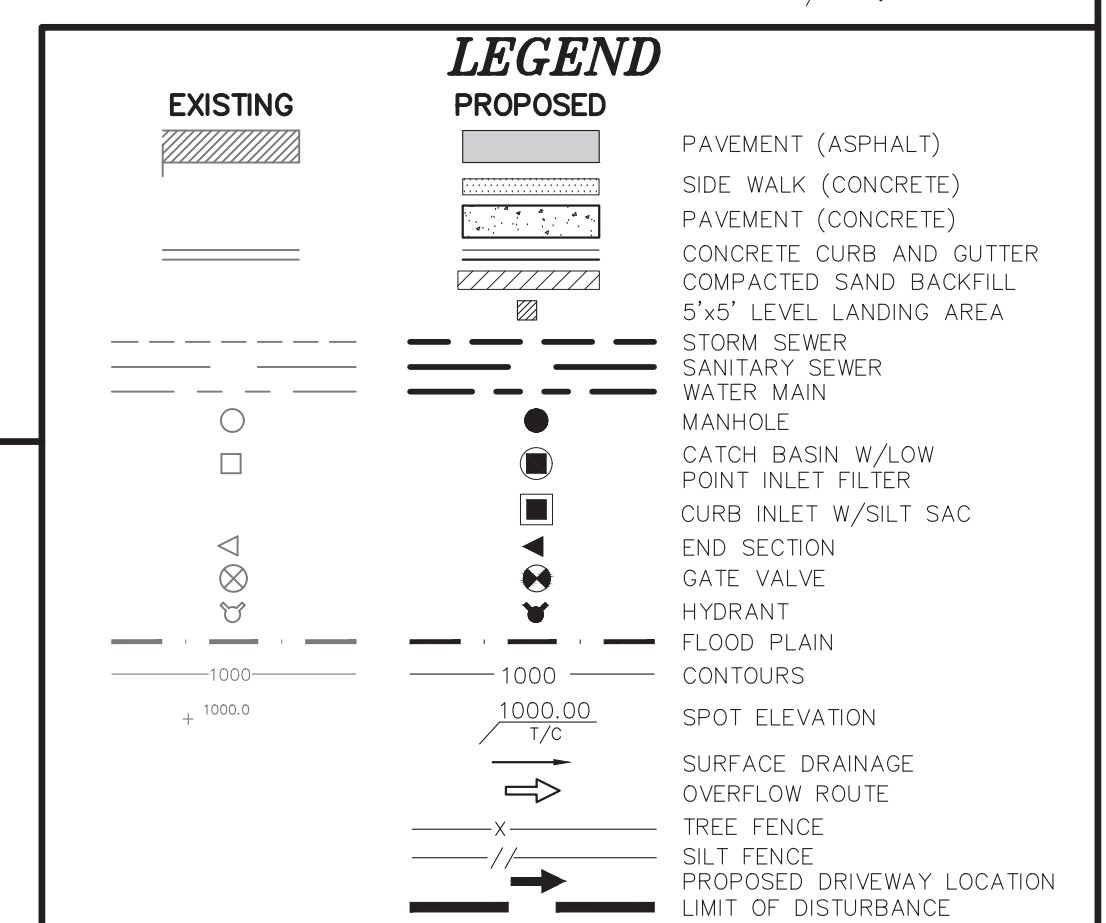
**WESTBURY PHASE 2 NOTES**

- U.S. DEPT. OF AGRICULTURE SOIL CONSERVATION SERVICE SOILS INFORMATION IS SHOWN ON SHEET 2
- SETBACKS
 

REQUIRED	PROPOSED
A. 35 FT. (MIN.) FRONT SETBACK	35 FT.
B. 15 FT. (MIN.) SIDE SETBACK	15 FT.
C. 30 FT. (MIN.) REAR SETBACK	30 FT.
D. FRONT YARD INTERNAL SETBACK 20 FT. (MIN.)	20 FT.
E. REAR YARD INTERNAL SETBACK 30 FT. (MIN.)	30 FT.
F. BUILDING SPACING 30 FT. (MIN.)	30 FT.
- SANITARY SEWER SHALL BE PROVIDED BY CONNECTING TO THE WESTBURY PHASE 1 SANITARY SEWERS.
- WATER SUPPLY SHALL BE PROVIDED BY CONNECTING TO THE WESTBURY PHASE 1 AND HAMPTON RIDGE WATER MAINS.
- BOTH ONSITE DETENTION BASINS ARE EXISTING.
- PROPOSED ELECTRICAL SUPPLY, GAS SUPPLY, CABLE SERVICE AND TELEPHONE SERVICE SHALL BE INSTALLED UNDERGROUND.
- INDIVIDUAL TRASH PICK-UP WILL BE PROVIDED.
- ALL ROADS ARE PRIVATE WITH CONCRETE CURBS.
- WESTBURY PHASE 1 INCLUDED THE CLUBHOUSE AND 16 BUILDINGS (128 UNITS). PHASE 2 CONSISTS OF 17 BUILDINGS (136 UNITS).
- SITE LIGHTING FIXTURES, WHERE REQUIRED, WILL MATCH THE FIXTURES PROVIDED IN PHASE 1.

**FIRE DEPARTMENT NOTES**

- NO STREET PARKING WILL BE ALLOWED ON THE HYDRANT SIDE OF THE STREET. "NO PARKING - FIRE LANE" SIGNS SHALL BE POSTED PER THE FIRE MARSHAL'S REQUIREMENTS.
- ALL PHASE 2 BUILDINGS SHALL BE SPRINKLED.
- HYDRANT LOCATIONS SHALL BE REVIEWED AND APPROVED BY THE FIRE MARSHAL



**WESTBURY PHASE 2 SECTION 4, TOWN 2 NORTH, RANGE 5 EAST GENOA TWP., LIVINGSTON COUNTY, MICHIGAN**

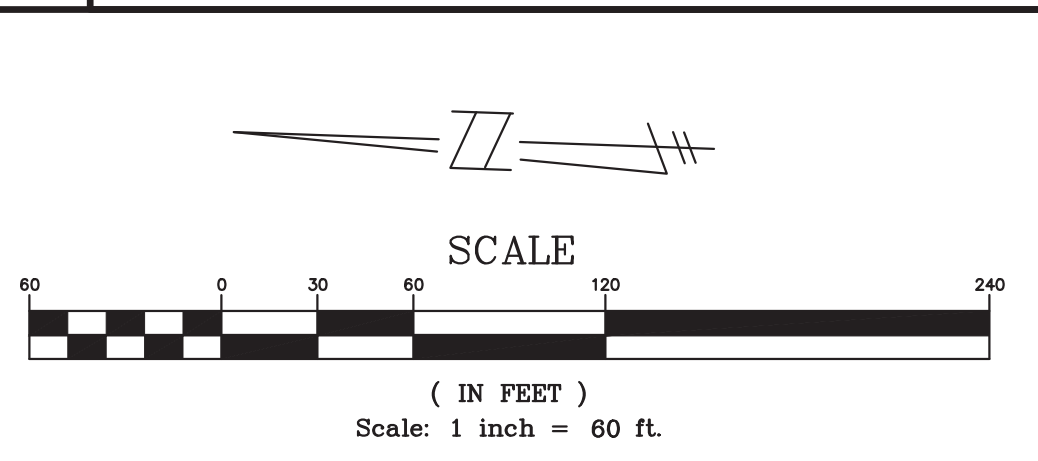
REVISIONS		UTILITY WARNING	
NO.	ITEM	DATE	DESCRIPTION
1.	REVISED PER TOWNSHIP	03-23-2022	UNDERGROUND UTILITY LOCATIONS AS SHOWN ON THE PLAN, WERE OBTAINED FROM UTILITY OWNER AND NOT FIELD LOCATED.

DATE: 1-17-22 DESIGNED BY: A.A. CHECKED BY: B.E. JOB NUMBER: 21-030 DRAWING FILE: 21-030SP.dwg

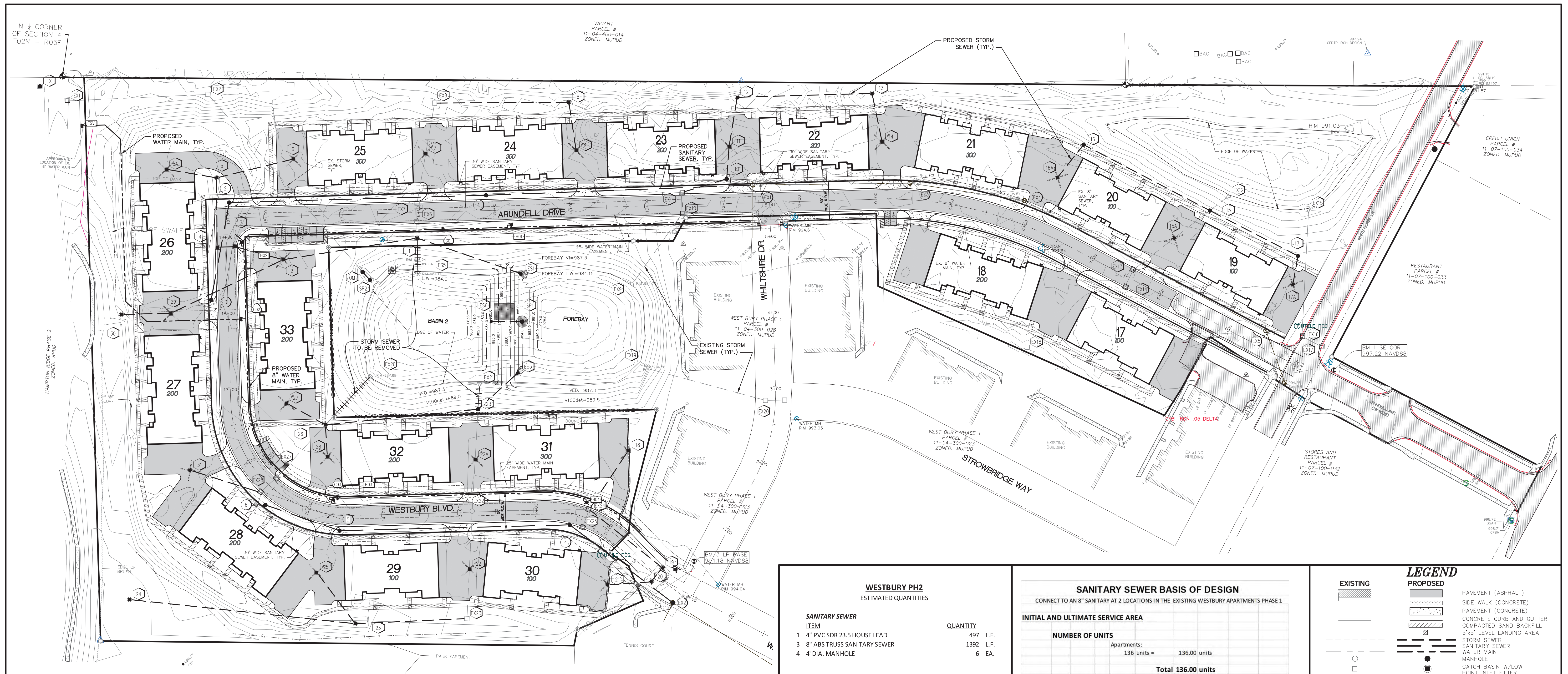
**SITE PLAN**

**SEIBER KEAST LEHNER INC.**  
ENGINEERING | SURVEYING  
39205 COUNTRY CLUB DR., SUITE C-8  
FARMINGTON HILLS, MICHIGAN 48331  
PHONE: 248.308.3331

**SHEET 3**



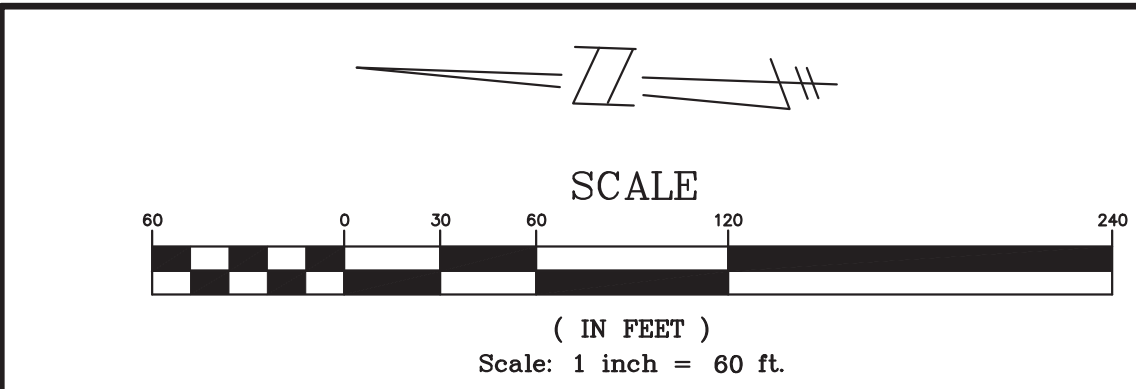




**BENCHMARKS**

BM#1 - TOP ARROW ON HYDRANT LOCATED ON SW SIDE OF WHITE HORSE LANE AND ARUNDELL DR. ELEVATION 997.22 NAVD88

BM#3 - BENCHMARK ON LIGHT POLE BASE LOCATED ON NE SIDE OF STONEHEDGE WAY AND WESTBURY BLVD. ELEVATION 994.18 NAVD88



**WESTBURY PH2 ESTIMATED QUANTITIES**

SANITARY SEWER ITEM	QUANTITY
1 4" PVC SDR 23.5 HOUSE LEAD	497 L.F.
3 8" ABS TRUSS SANITARY SEWER	1392 L.F.
4 4' DIA. MANHOLE	6 EA.

WATER MAIN ITEM	QUANTITY
1 8" WATER MAIN D.I. CL 54	1,989 L.F.
2 HYDRANT, VALVE & BOX	4 EA.
3 8"x12" TAPPING SLEEVE, VALVE & WELL	1 EA.
4 8" GATE, VALVE & WELL	3 EA.
5 4" D.I. WATER SERVICE LEAD	979 L.F.

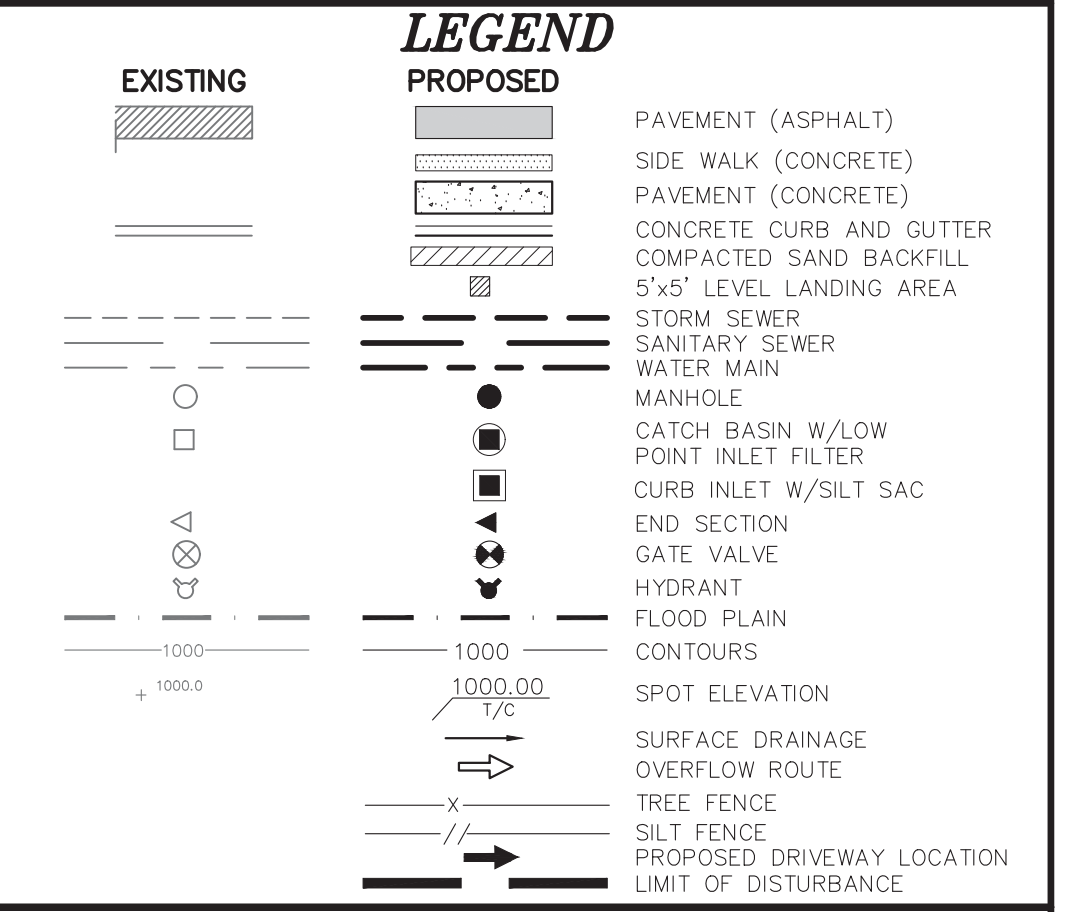
  

STORM SEWER ITEM	QUANTITY
1 4" PVC SCH. 40	L.F.
2 12" C-76 CL. 4	2414 L.F.
3 18" C-76 CL. 4	644 L.F.
4 21" C-76 CL. 4	189 L.F.
5 27" C-76 CL. 4	73 L.F.
6 2' DIA. INLET	12 EA.
7 4' DIA. CATCH BASIN	21 EA.
8 4' DIA. MANHOLE	3 EA.
9 MECHANICAL SEDIMENT REMOVAL STRUCTURE	1 EA.
10 36" CMP STANDPIPE (PIPE/STONE)	2 EA.
11 12" CONC. END SECTION	1 EA.
12 18" CONC. END SECTION	1 EA.
13 21" CONC. END SECTION	1 EA.
14 27" CONC. END SECTION	1 EA.

**SANITARY SEWER BASIS OF DESIGN**  
CONNECT TO AN 8" SANITARY AT 2 LOCATIONS IN THE EXISTING WESTBURY APARTMENTS PHASE 1

**INITIAL AND ULTIMATE SERVICE AREA**

NUMBER OF UNITS	POPULATION	AVERAGE FLOW	PEAK FACTOR	PEAK FLOW
Apartment: 136 units = 136.00 units	= 2.6 people/unit x 136.00 units = 353.60 people	= 353.60 people x 100 gal/cap/day = 35,360 gal/day = 0.055 cfs	= (18+SQRT(P/1000))/(4+SQRT(P/1000)) = 4.05 (28,400 > Pop > 500)	= PEAK FACTOR X AVERAGE FLOW = 0.219 cfs



**WESTBURY PHASE 2**  
**SECTION 4, TOWN 2 NORTH, RANGE 5 EAST**  
**GENOA TWP., LIVINGSTON COUNTY, MICHIGAN**

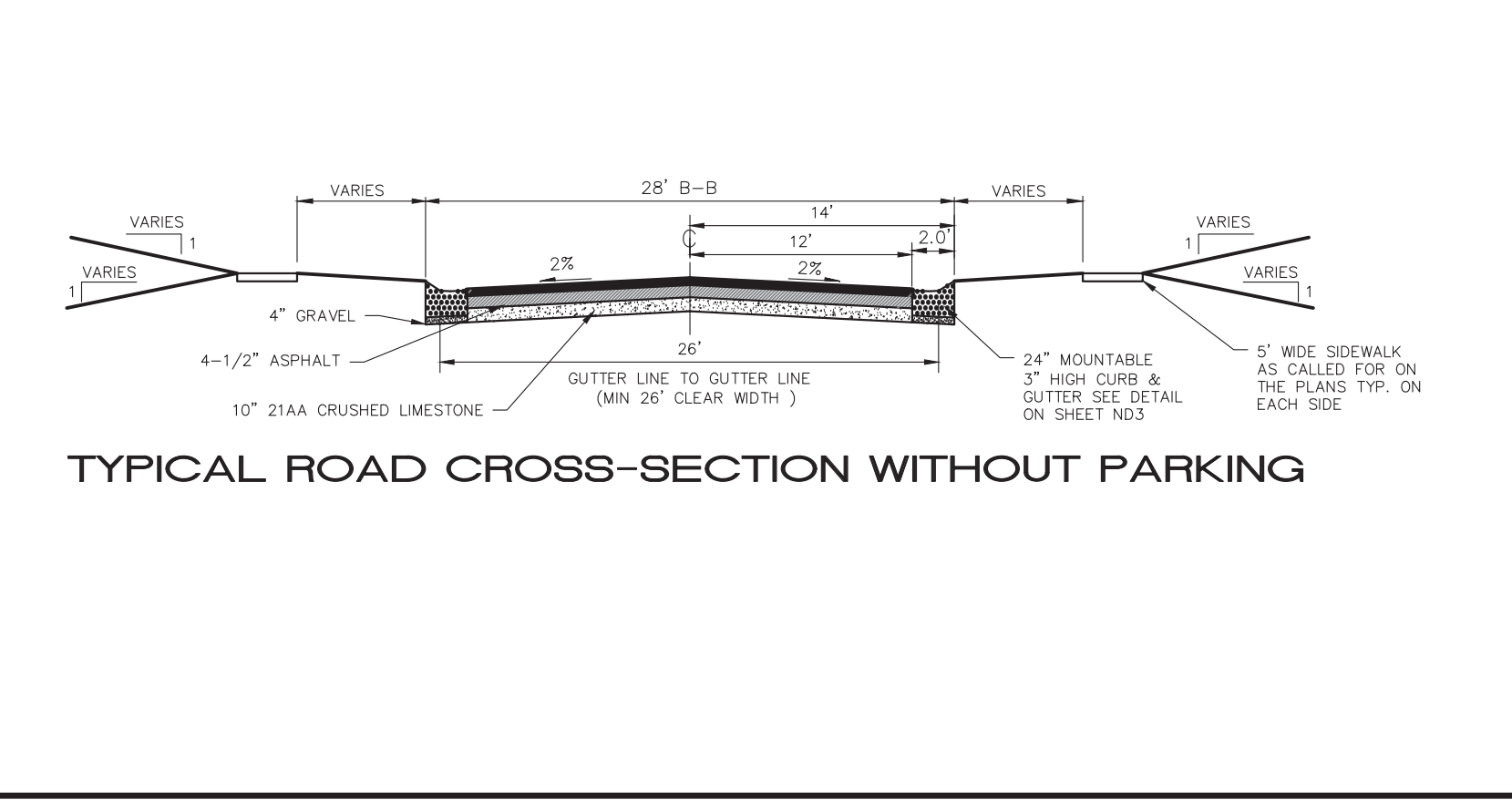
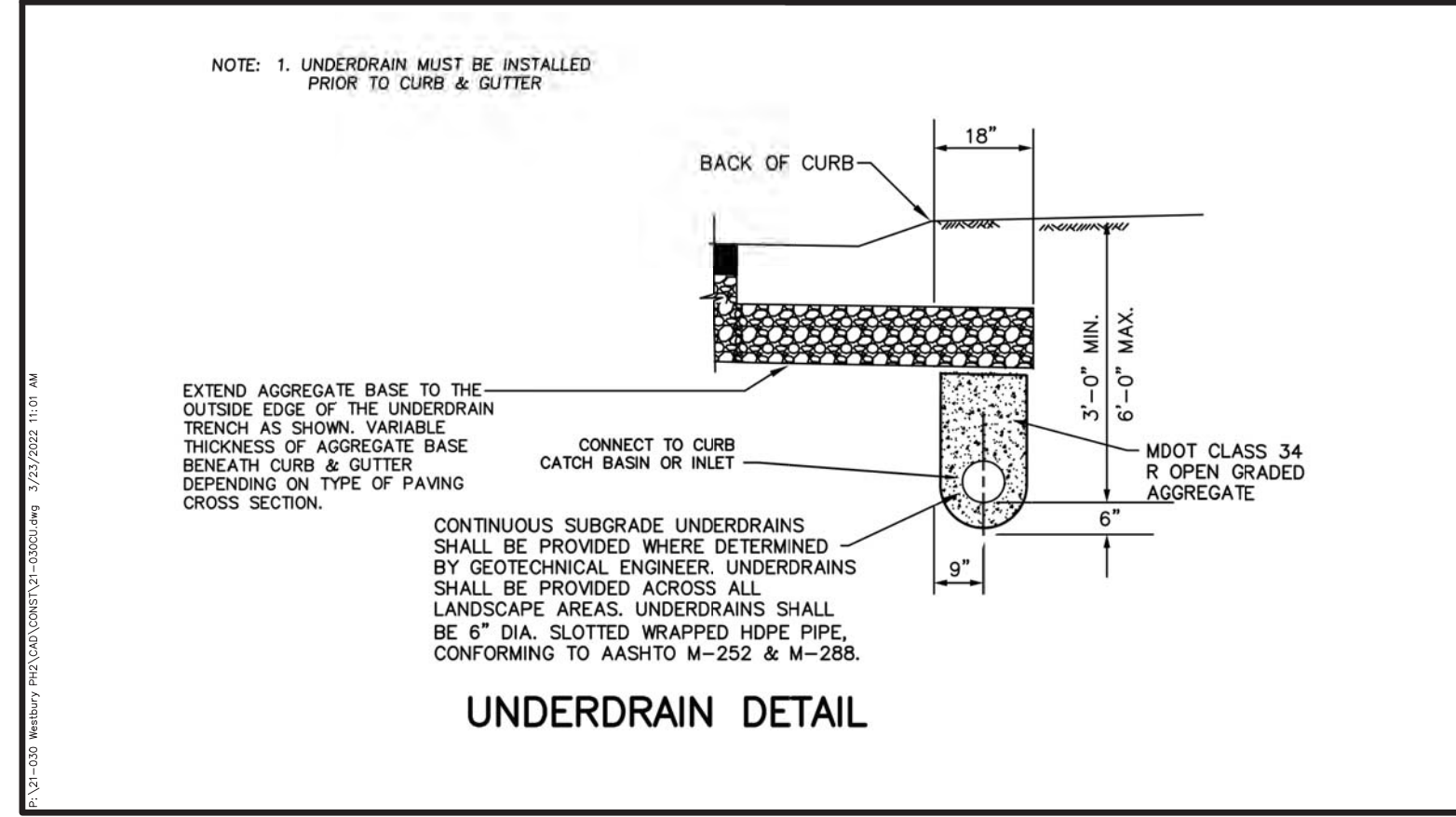
NO.	REVISIONS	DATE	UTILITY WARNING
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DATE: 1-17-22 DESIGNED BY: A.A. JOB NUMBER: 21-030  
CHECKED BY: B.E. DRAWING FILE: 21-030CU.dwg

**COMPOSITE UTILITY PLAN**

**SEIBER KEAST LEHNER INC.**  
ENGINEERING | SURVEYING  
39205 COUNTRY CLUB DR. SUITE C-8  
FARMINGTON HILLS, MICHIGAN 48331  
PHONE: 248.308.3331

**SHEET 4**



**PAVING ITEM**

ITEM	QUANTITY
1 ON-SITE ASPHALT PAVEMENT (4.5" ON 10")	16,634 S.Y.
2 CONC. CURB & GUTTER	5,422 L.F.
3 5' WIDE CONCRETE SIDEWALK (4" THICK)	5,334 S.Y.
4 CONCRETE DRIVE APPROACH (6" THICK)	878 S.Y.

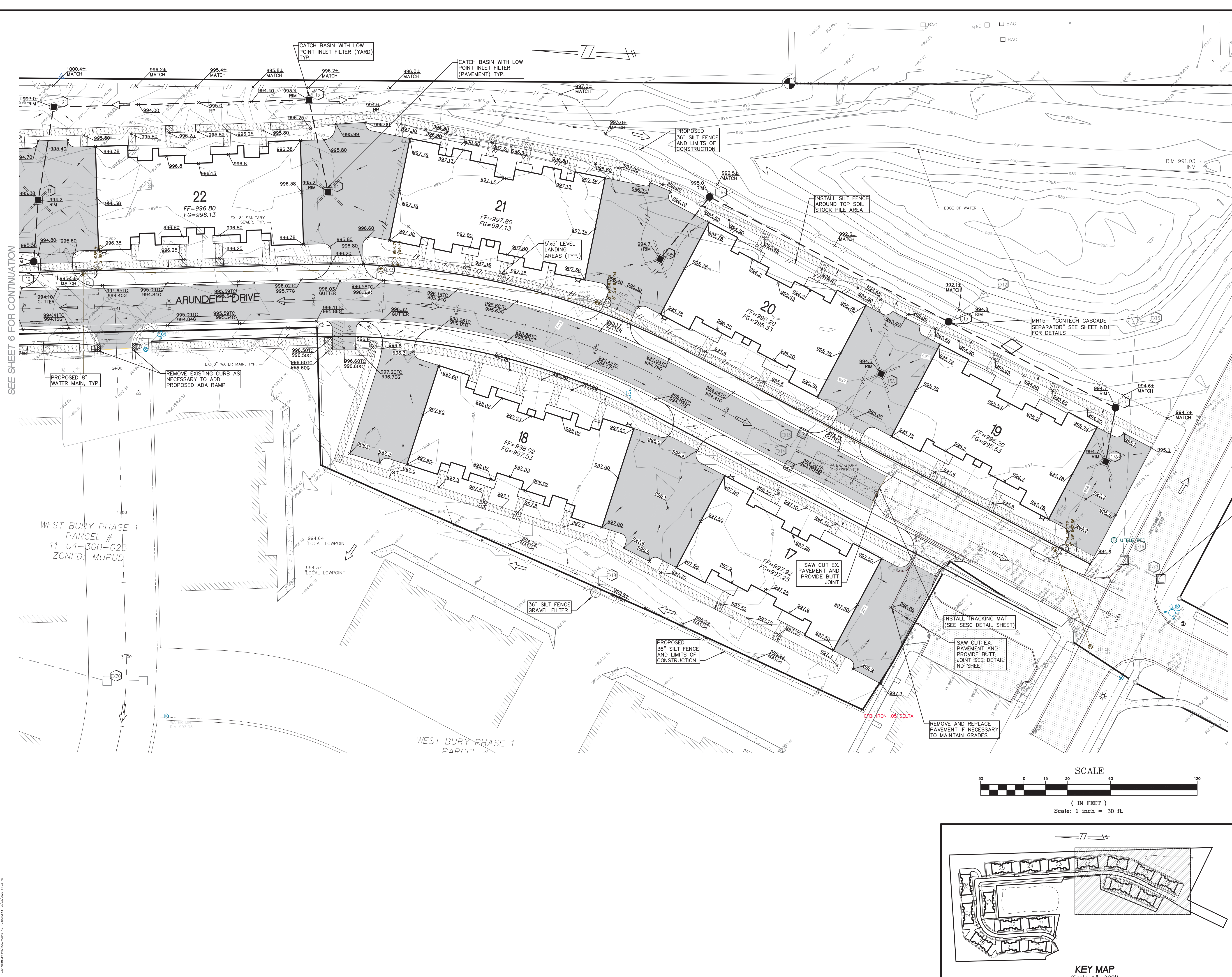
ESTIMATED QUANTITIES ARE FOR REFERENCE ONLY. CONTRACTOR SHALL DETERMINE THE QUANTITIES OF WORK REQUIRED TO COMPLETE THE PROJECT.

**WESTBURY PHASE 2**  
**Water Basis of Design**

**INITIAL AND ULTIMATE SERVICE AREA**

NUMBER OF UNITS	POPULATION	AVERAGE FLOW	PEAK FACTOR	PEAK FLOW
Apartment: 136 units = 136 units	= 2.7 people/unit x 136 units = 367.2 people	= 367.2 people x 100 gal/cap/day = 36,720.0 gal/day = 0.056814 cfs	= (18+SQRT(P/1000))/(4+SQRT(P/1000)) = 4.039533	= PEAK FACTOR X AVERAGE FLOW = 0.229503 cfs



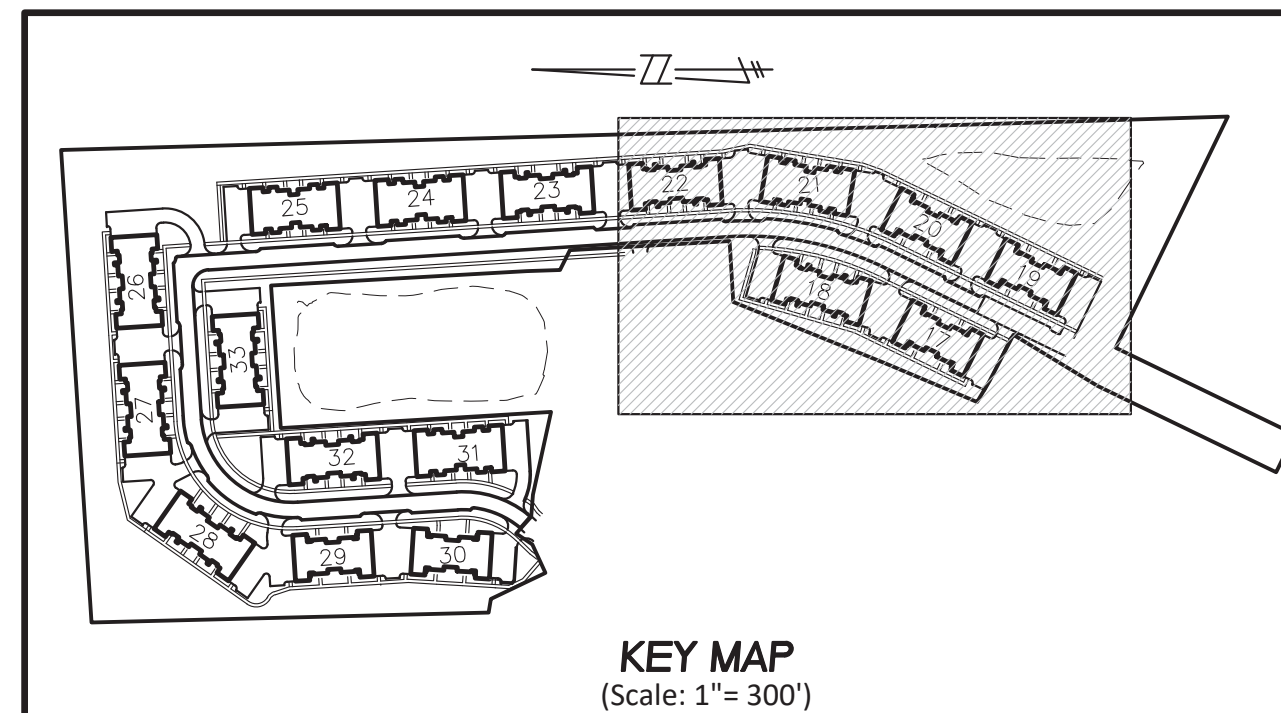
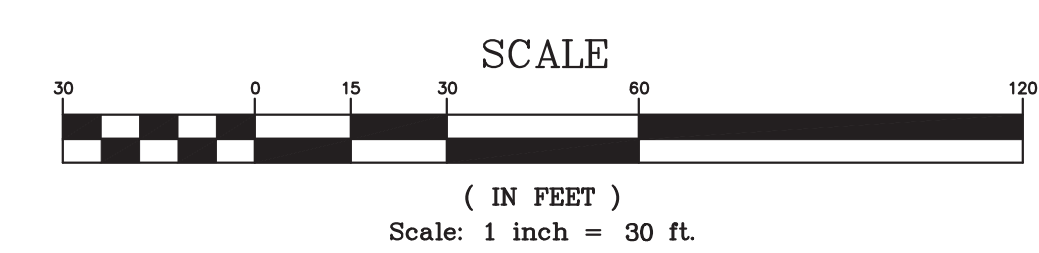


SEE SHEET 6 FOR CONTINUATION

WEST BURY PHASE 1  
PARCEL #  
11-04-300-023  
ZONED: MUPUD

WEST BURY PHASE 1  
PARCEL #

LEGEND	
	EXISTING PAVEMENT (ASPHALT)
	PROPOSED PAVEMENT (ASPHALT)
	EXISTING SIDE WALK (CONCRETE)
	PROPOSED SIDE WALK (CONCRETE)
	EXISTING CONCRETE CURB AND GUTTER
	PROPOSED CONCRETE CURB AND GUTTER
	COMPACTED SAND BACKFILL
	5'x5' LEVEL LANDING AREA
	STORM SEWER
	SANITARY SEWER
	WATER MAIN
	MANHOLE
	CATCH BASIN W/LOW POINT INLET FILTER
	CURB INLET W/SILT SAC
	END SECTION
	GATE VALVE
	HYDRANT
	FLOOD PLAIN
	CONTOURS
	SPOT ELEVATION
	SURFACE DRAINAGE
	OVERFLOW ROUTE
	TREE
	SILT FENCE
	PROPOSED DRIVEWAY LOCATION
	LIMIT OF DISTURBANCE



**WESTBURY PHASE 2**  
**SECTION 4, TOWN 2 NORTH, RANGE 5 EAST**  
**GENOA TWP., LIVINGSTON COUNTY, MICHIGAN**

REVISIONS		UTILITY WARNING
NO.	ITEM	DATE
1.	REVISED PER TOWNSHIP	03-23-2022

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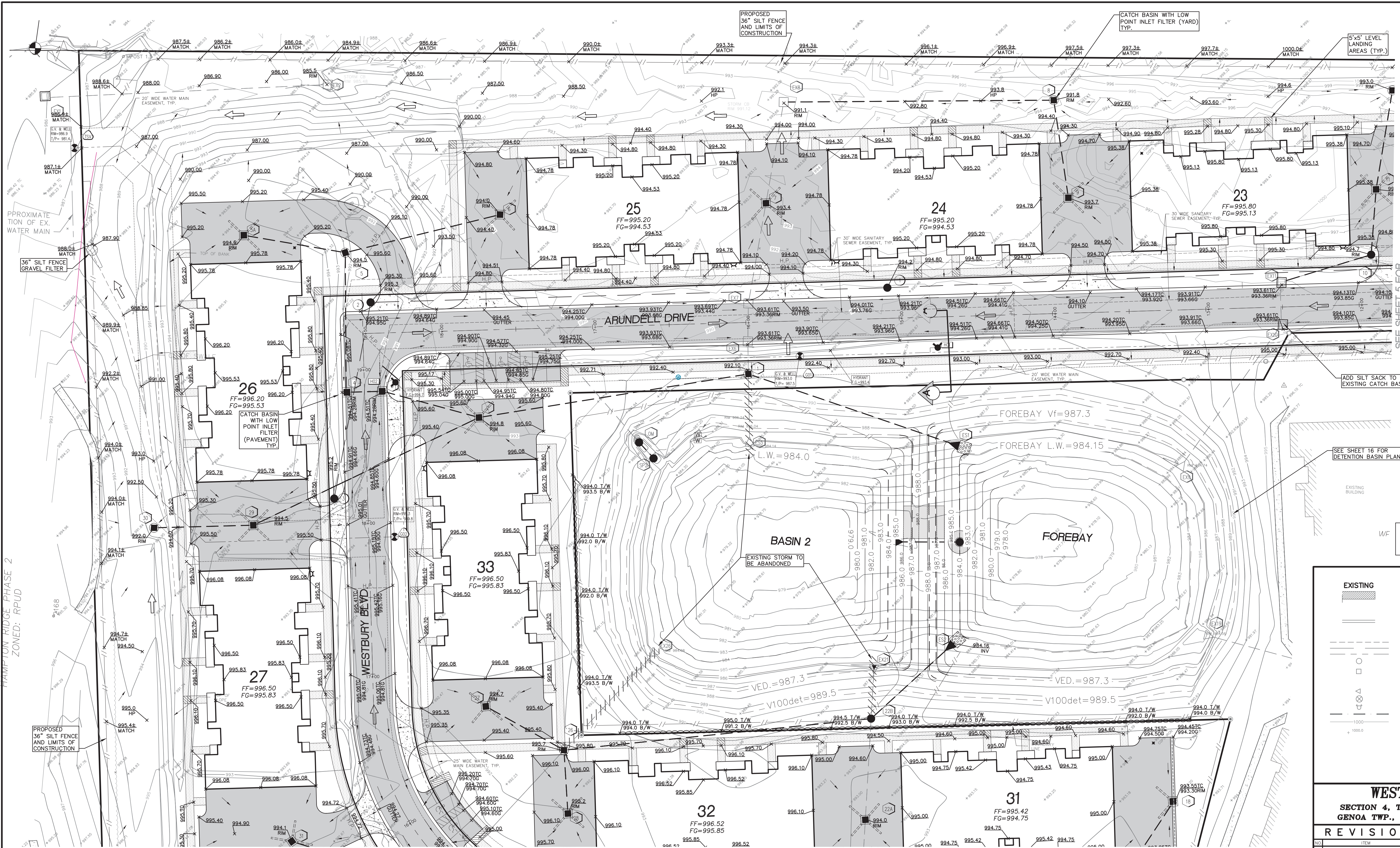
DATE: 1-17-22 DESIGNED BY: A.A. JOB NUMBER: 21-030  
CHECKED BY: B.E. DRAWING FILE: 21-030GR.dwg

**GRADING AND S.E.S.C. PLAN**

**SEIBER KEAST LEHNER INC.**  
ENGINEERING | SURVEYING  
39205 COUNTRY CLUB DR., SUITE C-8  
FARMINGTON HILLS, MICHIGAN 48331  
PHONE: 248.308.3331

**SHEET 5**





SEE SHEET 5 FOR CONTINUATION

ADD SILT SACK TO EXISTING CATCH BASINS, TYP.

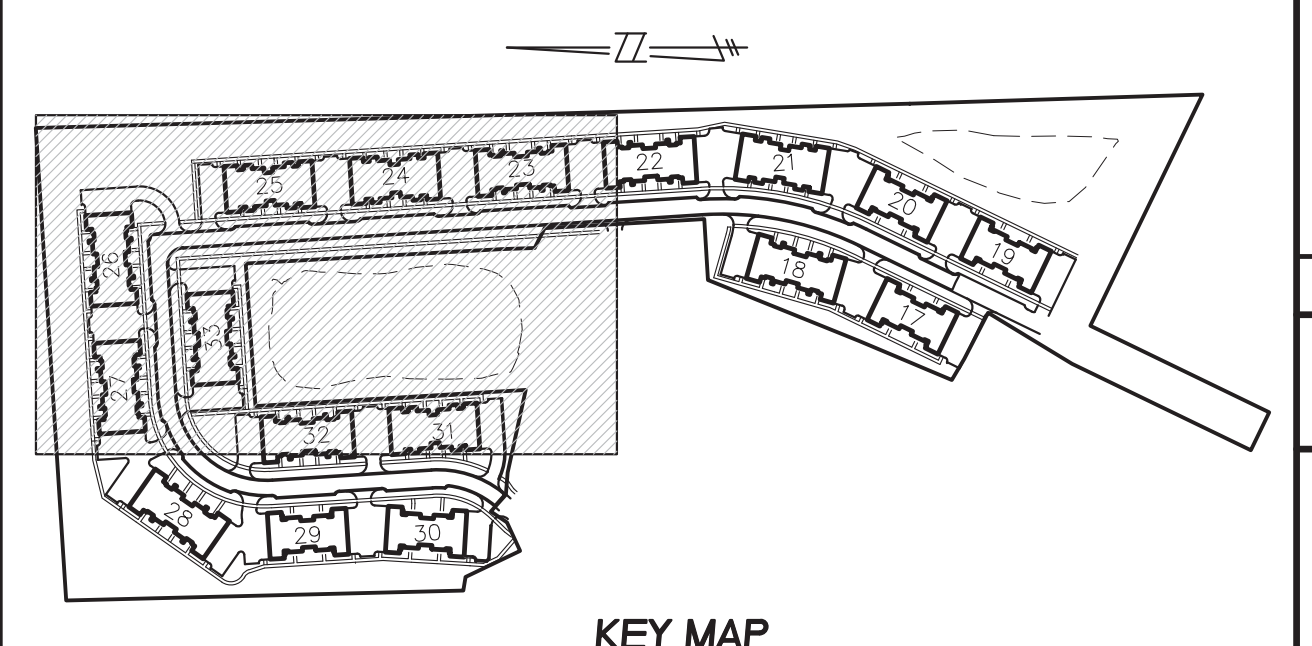
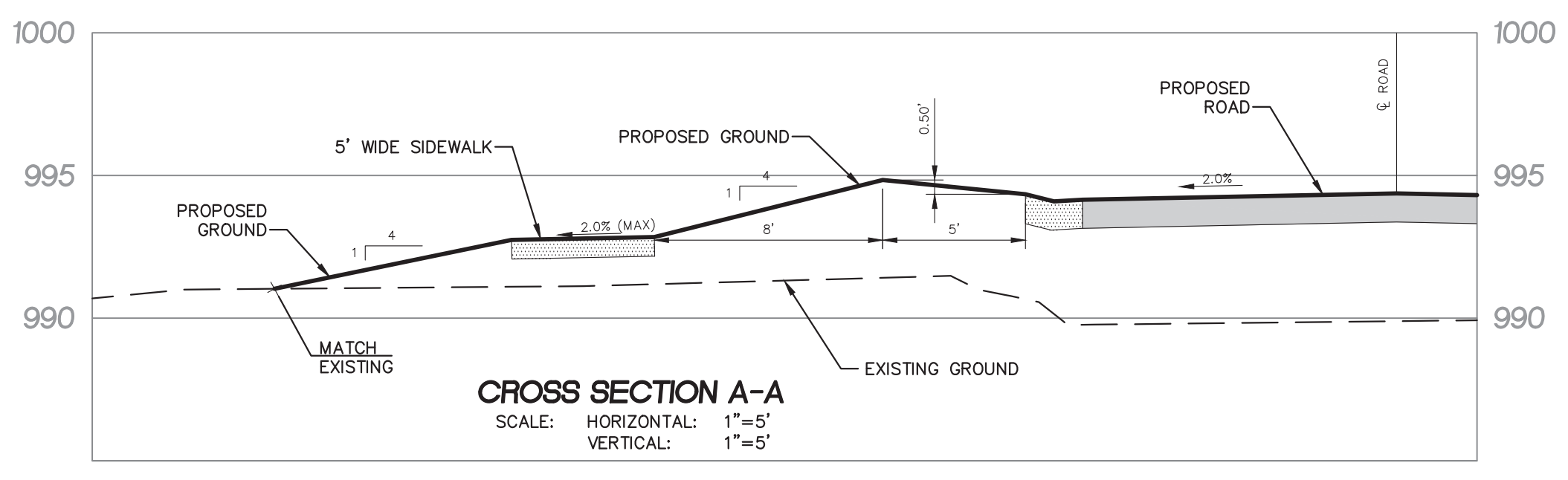
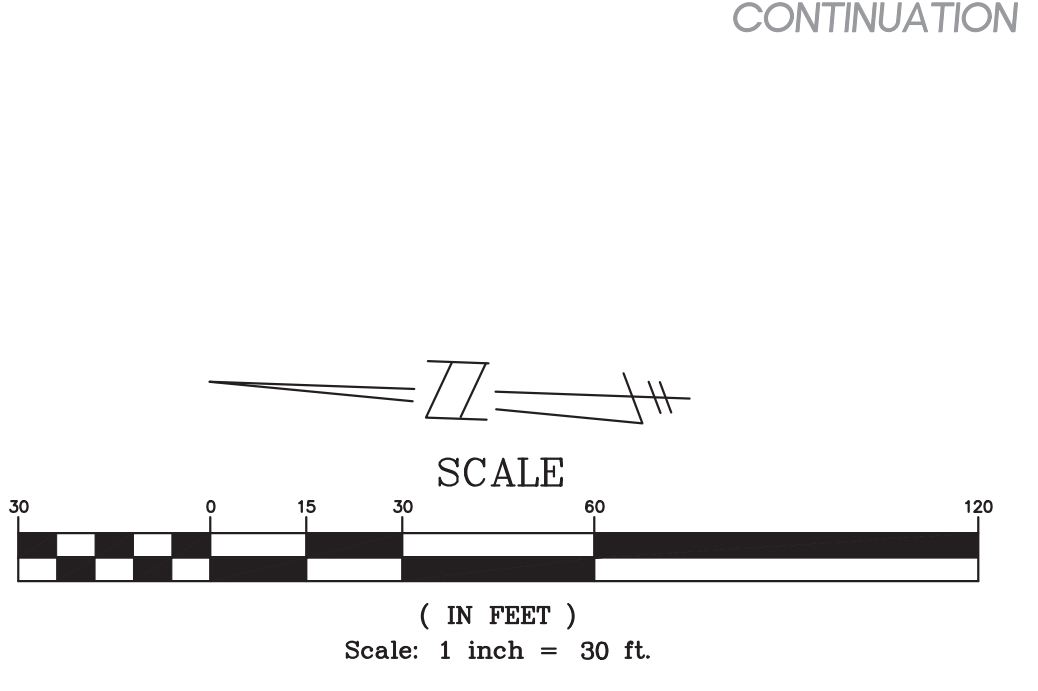
SEE SHEET 16 FOR DETENTION BASIN PLAN

- SEE SHEET ND1 FOR SESC NOTES
- SEE LIVINGSTON COUNTY SESC DETAIL SHEET

**LEGEND**

	<b>EXISTING</b>		<b>PROPOSED</b>	PAVEMENT (ASPHALT)
				SIDE WALK (CONCRETE)
				CONCRETE CURB AND GUTTER
				COMPACTED SAND BACKFILL
				5' X 5' LEVEL LANDING AREA
				STORM SEWER
				SANITARY SEWER
				WATER MAIN
				MANHOLE
				CATCH BASIN W/LOW POINT INLET FILTER
				CURB INLET W/SILT SACK
				END SECTION
				GATE VALVE
				HYDRANT
				FLOOD PLAIN
				CONTOURS
				SPOT ELEVATION
				SURFACE DRAINAGE
				OVERFLOW ROUTE
				TREE FENCE
				SILT FENCE
				PROPOSED DRIVEWAY LOCATION
				LIMIT OF DISTURBANCE

SEE SHEET 7 FOR CONTINUATION



**WESTBURY PHASE 2**  
SECTION 4, TOWN 2 NORTH, RANGE 5 EAST  
GENOA TWP., LIVINGSTON COUNTY, MICHIGAN

REVISIONS		UTILITY WARNING	
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DATE: 1-17-22 DESIGNED BY: A.A. CHECKED BY: B.F. JOB NUMBER: 21-030 DRAWING FILE: 21-030GR.dwg

**811** Know what's below. Call before you dig.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF AND/OR RELOCATION OF ALL UTILITIES THAT MAY INTERFERE WITH CONSTRUCTION.

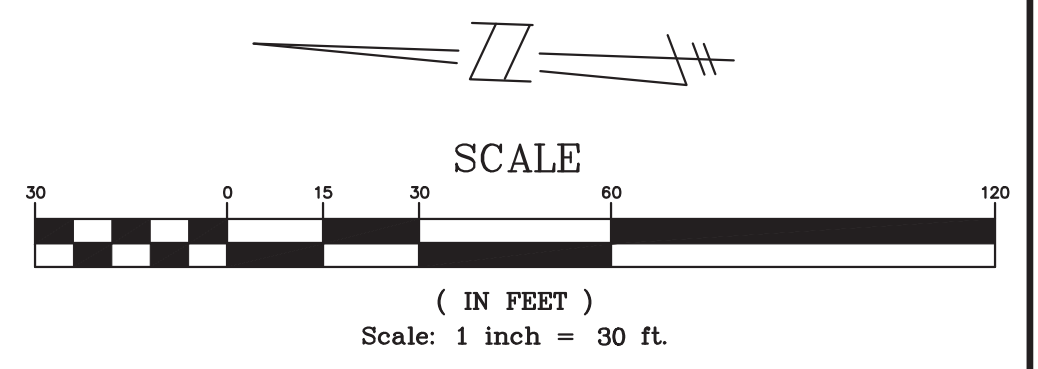
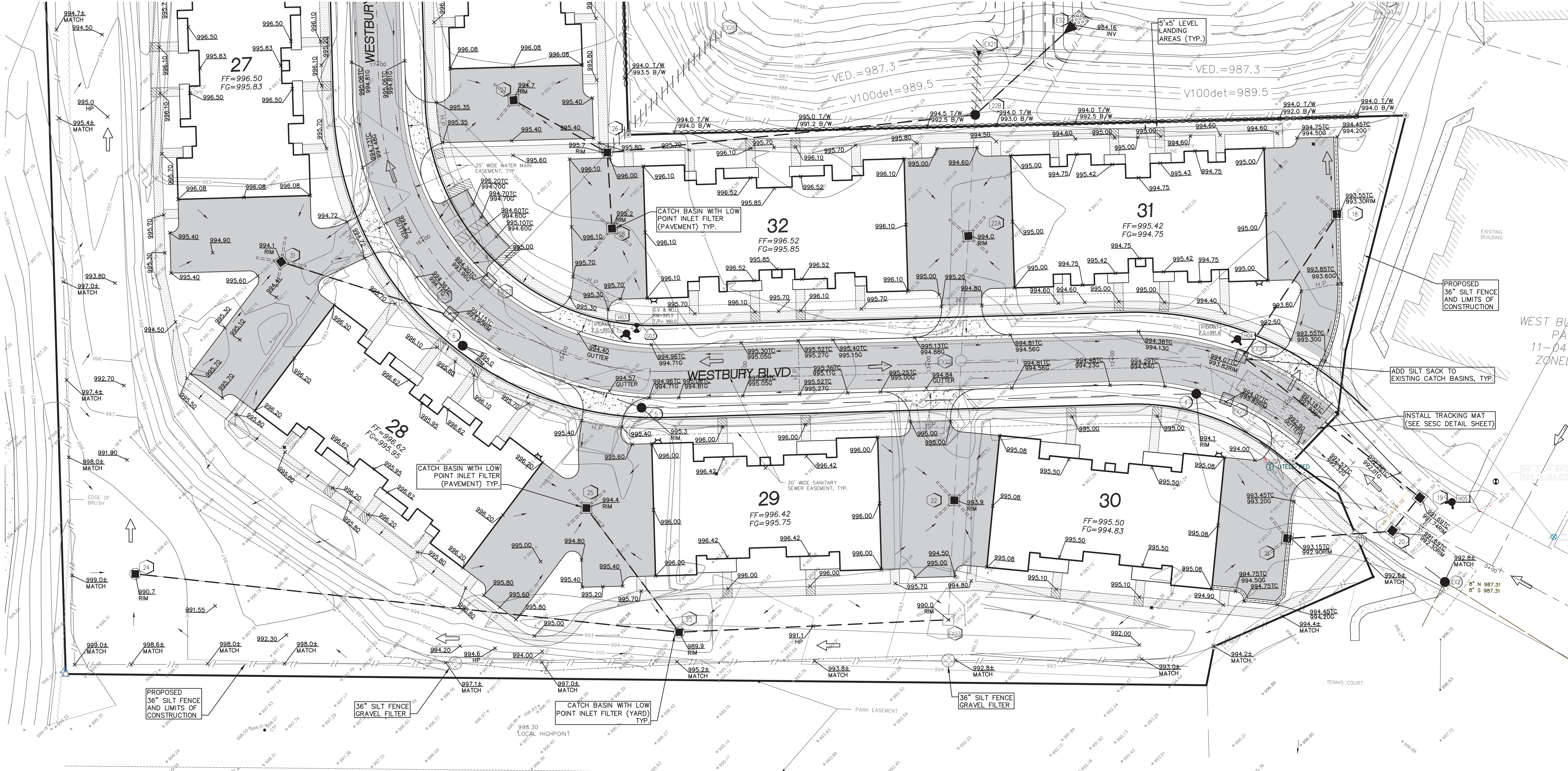
**GRADING AND S.E.S.C. PLAN**

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ENGINEERING | SURVEYING  
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FARMINGTON HILLS, MICHIGAN 48331  
PHONE: 248.308.3331

**SHEET 6**



SEE SHEET 6 FOR  
CONTINUATION



LEGEND	
	EXISTING PAVEMENT (ASPHALT)
	PROPOSED PAVEMENT (ASPHALT)
	EXISTING SIDE WALK (CONCRETE)
	PROPOSED SIDE WALK (CONCRETE)
	EXISTING CURB AND GUTTER (CONCRETE)
	PROPOSED CURB AND GUTTER (CONCRETE)
	EXISTING 5'x5' LEVEL LANDING AREA (COMPACTED SAND BACKFILL)
	PROPOSED 5'x5' LEVEL LANDING AREA (COMPACTED SAND BACKFILL)
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
	EXISTING SANITARY SEWER
	PROPOSED SANITARY SEWER
	EXISTING WATER MAIN
	PROPOSED WATER MAIN
	EXISTING MANHOLE
	PROPOSED MANHOLE
	EXISTING CATCH BASIN W/LOW POINT INLET FILTER
	PROPOSED CATCH BASIN W/LOW POINT INLET FILTER
	EXISTING CURB INLET W/SILT SAC
	PROPOSED CURB INLET W/SILT SAC
	EXISTING END SECTION
	PROPOSED END SECTION
	EXISTING GATE VALVE
	PROPOSED GATE VALVE
	EXISTING HYDRANT
	PROPOSED HYDRANT
	EXISTING FLOOD PLAIN
	PROPOSED FLOOD PLAIN
	EXISTING CONTOURS
	PROPOSED CONTOURS
	EXISTING SPOT ELEVATION
	PROPOSED SPOT ELEVATION
	EXISTING SURFACE DRAINAGE
	PROPOSED SURFACE DRAINAGE
	EXISTING OVERFLOW ROUTE
	PROPOSED OVERFLOW ROUTE
	EXISTING TREE
	PROPOSED TREE
	EXISTING SILT FENCE
	PROPOSED SILT FENCE
	EXISTING PROPOSED DRIVEWAY LOCATION
	PROPOSED PROPOSED DRIVEWAY LOCATION
	EXISTING LIMIT OF DISTURBANCE
	PROPOSED LIMIT OF DISTURBANCE

**WESTBURY PHASE 2**  
**SECTION 4, TOWN 2 NORTH, RANGE 5 EAST**  
**GENOA TWP., LIVINGSTON COUNTY, MICHIGAN**

REVISIONS		UTILITY WARNING
NO.	ITEM	DATE
1.	REVISED PER TOWNSHIP	03-23-2022
		UNDERGROUND UTILITY LOCATIONS AS SHOWN ON THE PLAN, WERE OBTAINED FROM UTILITY OWNER AND NOT FIELD LOCATED.

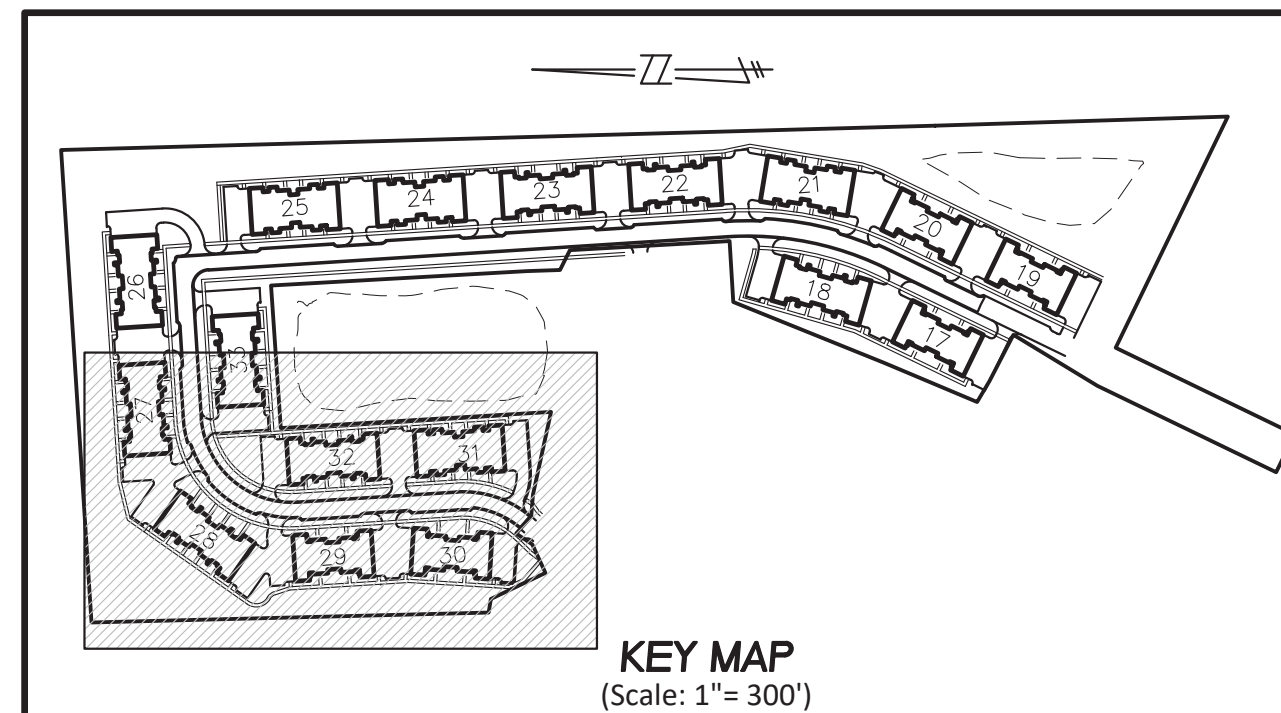


DATE: 1-17-22 DESIGNED BY: A.A. JOB NUMBER: 21-030  
CHECKED BY: B.E. DRAWING FILE: 21-030GR.dwg

**GRADING AND S.E.S.C. PLAN**

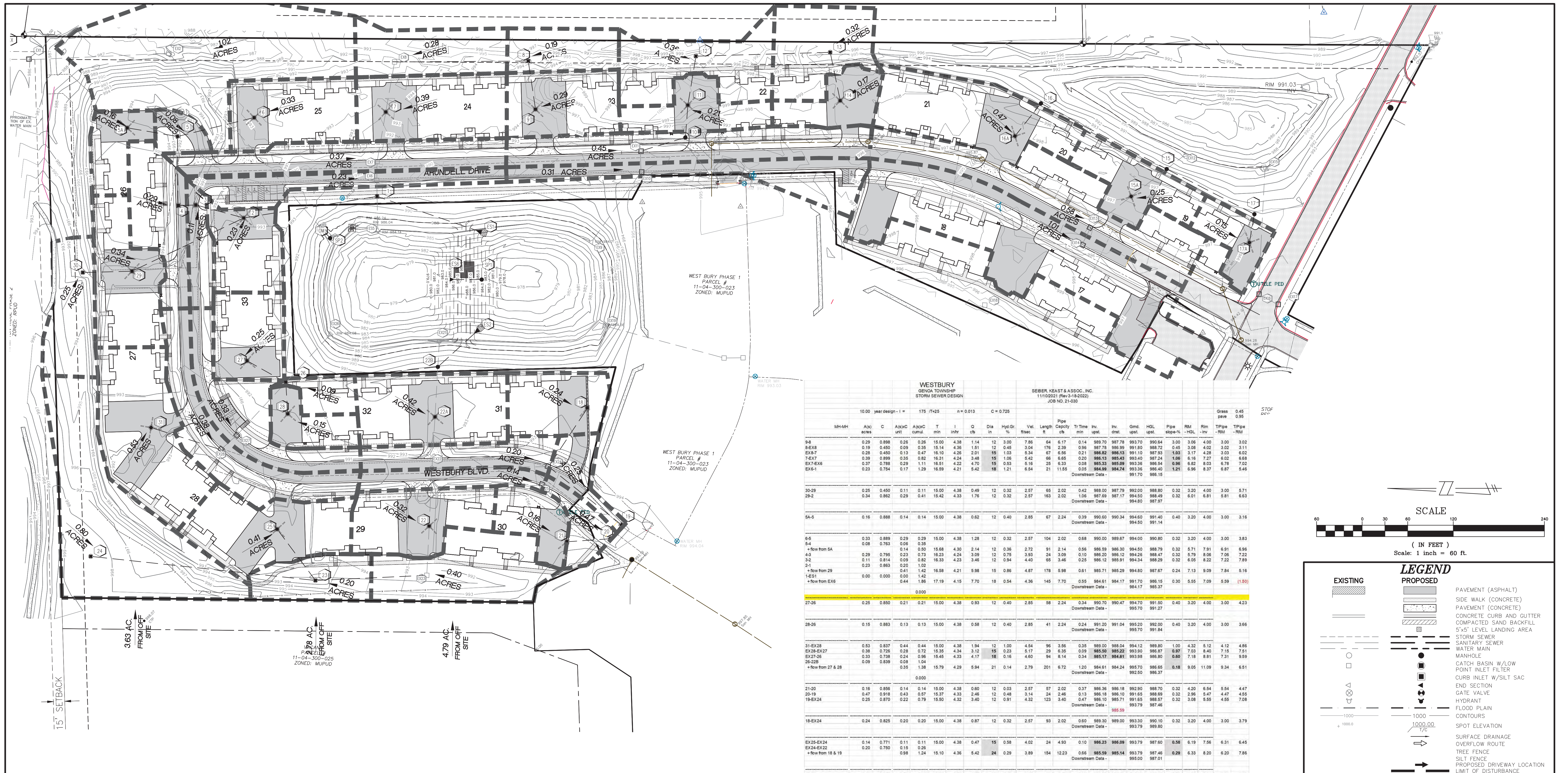
**SKL SEIBER KEAST LEHNER INC.**  
ENGINEERING | SURVEYING  
39205 COUNTRY CLUB DR., SUITE C-8  
FARMINGTON HILLS, MICHIGAN 48331  
PHONE: 248.308.3331

SHEET  
**7**



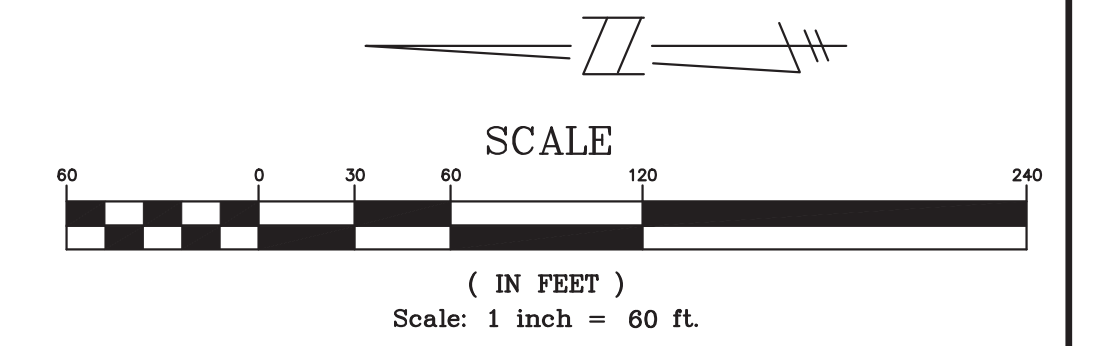
2022-03-23 10:00 AM





WESTBURY GENOA TOWNSHIP  
STORM WATER DESIGN  
SEIBER, KEAST & ASSOC. INC.  
11100221 (Rev. 11-2022)  
JOB NO. 21-030

Station	Area (A)	C	A <sup>2</sup> /C	A <sup>2</sup> /C <sup>2</sup>	A <sup>2</sup> /C <sup>3</sup>	T	I	Q	Dis	Hyd Gr	Vel	Length	Pipe Capacity	Tr Time	Inv. Upst.	Inv. Dnat.	Gnd. HG	Pipe slope	Rim - HG	Rim - RM	Rim - RM	Grass	pave
MH-MH	acres		unit	unit	unit	min	in/hr	cs	in	%	ft/sec	ft	cs	min	ft.	ft.	ft.	%	ft.	ft.	ft.	0.45	0.95
94	0.29	0.898	0.26	0.26	15.00	4.38	1.14	12	3.00	7.86	64	6.17	0.14	989.70	989.70	990.64	3.00	3.06	4.00	3.00	3.02		
94-EX8	0.19	0.450	0.09	0.35	15.14	4.36	1.51	12	0.45	3.04	176	3.38	0.96	987.72	987.72	990.64	3.00	3.08	4.00	3.02	3.11		
EX8-7	0.28	0.450	0.13	0.47	16.10	4.26	2.01	15	1.03	5.34	67	6.66	0.21	986.82	986.82	991.10	3.03	3.17	4.28	3.03	6.02		
7EX7	0.39	0.899	0.35	0.82	16.31	4.24	3.48	15	1.06	5.42	86	6.65	0.20	988.13	988.13	993.40	3.06	3.16	7.27	6.02	6.68		
EX7EX6	0.37	0.788	0.29	1.11	16.81	4.22	4.70	15	0.53	6.16	25	6.33	0.09	985.93	985.99	993.36	3.06	3.16	6.82	6.03	7.02		
EX6-1	0.23	0.754	0.17	1.29	16.59	4.21	5.42	18	1.21	6.84	21	11.55	0.05	984.99	984.74	993.36	3.06	3.16	6.82	6.03	7.02		



**LEGEND**

	<b>EXISTING</b>		PAVEMENT (ASPHALT)
	SIDE WALK (CONCRETE)		PAVEMENT (CONCRETE)
	CONCRETE CURB AND GUTTER		COMPACTED SAND BACKFILL
	5'x5' LEVEL LANDING AREA		STORM SEWER
	SANITARY SEWER		WATER MAIN
	MANHOLE		CATCH BASIN w/LOW POINT INLET FILTER
	CURB INLET w/SILT SAC		END SECTION
	GATE VALVE		HYDRANT
	FLOOD PLAIN		CONTOURS
	SPOT ELEVATION		SURFACE DRAINAGE
	OVERFLOW ROUTE		TREE FENCE
	SILT FENCE		PROPOSED DRIVEWAY LOCATION
	LIMIT OF DISTURBANCE		

**WESTBURY PHASE 2**  
**SECTION 4, TOWN 2 NORTH, RANGE 5 EAST**  
**GENOA TWP., LIVINGSTON COUNTY, MICHIGAN**

REVISIONS			UTILITY WARNING
NO.	ITEM	DATE	
1.	REVISED PER TOWNSHIP	03-23-2022	UNDERGROUND UTILITY LOCATIONS AS SHOWN ON THE PLAN, WERE OBTAINED FROM UTILITY OWNER AND NOT FIELD LOCATED.

**811 Know what's below. Call before you dig.**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF AND/OR RELOCATION OF ALL UTILITIES THAT MAY INTERFERE WITH CONSTRUCTION.

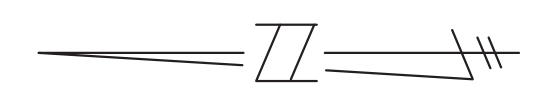
DATE: 1-17-22 DESIGNED BY: A.A. JOY JOB NUMBER: 21-030  
 CHECKED BY: B.R. CHECKED BY: B.R. DRAWING FILE: 21-030DD.dwg

**DRAINAGE DISTRIBUTION PLAN**

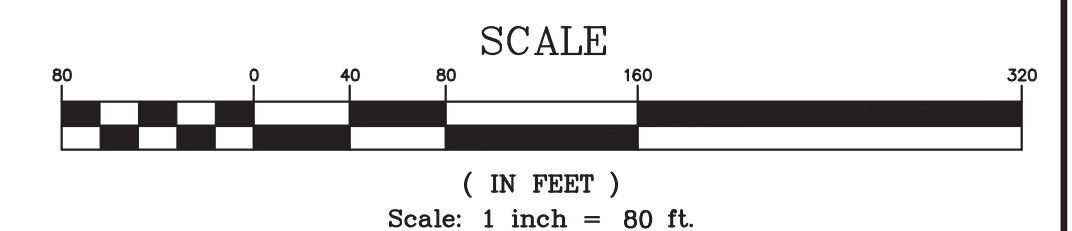
	<b>SEIBER KEAST LEHNER INC.</b>		SHEET <b>14</b>
	ENGINEERING   SURVEYING 39205 COUNTRY CLUB DR. SUITE C-8 FARMINGTON HILLS, MICHIGAN 48331 PHONE: 248.308.3331		

PROJECT: Westbury Phase 2, Section 4, Town 2 North, Range 5 East, Genoa Twp., Livingston County, Michigan. DATE: 01/17/22





NOTE:  
EXISTING DETENTION BASIN TRIBUTARY AREA AND IMPERVIOUS AREAS REMAIN AS ORIGINALLY DESIGNED. REFER TO SHEET 14 FOR PROPOSED TRIBUTARY AREAS.



LEGEND	
	EXISTING
	PAVEMENT (ASPHALT)
	SIDE WALK (CONCRETE)
	PAVEMENT (CONCRETE)
	CONCRETE CURB AND GUTTER
	COMPACTED SAND BACKFILL
	5'x5' LEVEL LANDING AREA
	STORM SEWER
	SANITARY SEWER
	WATER MAIN
	MANHOLE
	CATCH BASIN W/LOW POINT INLET FILTER
	CURB INLET W/SILT SAC
	END SECTION
	GATE VALVE
	HYDRANT
	FLOOD PLAIN
	CONTOURS
	SPOT ELEVATION
	1000.00 T/C
	SURFACE DRAINAGE
	OVERFLOW ROUTE
	TREE FENCE
	SILT FENCE
	PROPOSED DRIVEWAY LOCATION
	LIMIT OF DISTURBANCE

**WESTBURY PHASE 2**  
SECTION 4, TOWN 2 NORTH, RANGE 5 EAST  
GENOA TWP., LIVINGSTON COUNTY, MICHIGAN

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CHECKED BY: B.E. DRAWING FILE: 21-030DD.dwg

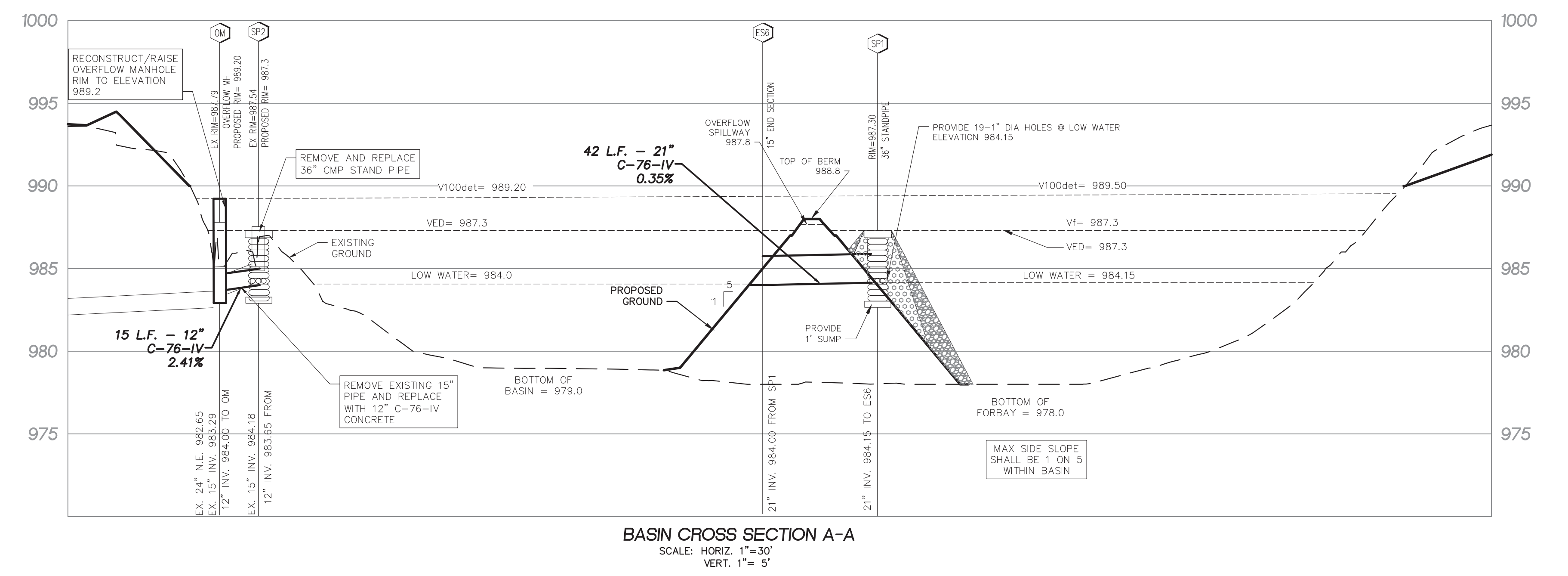
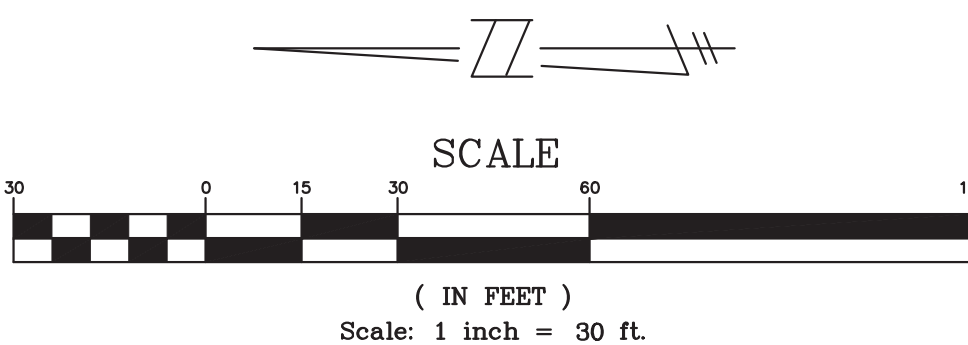
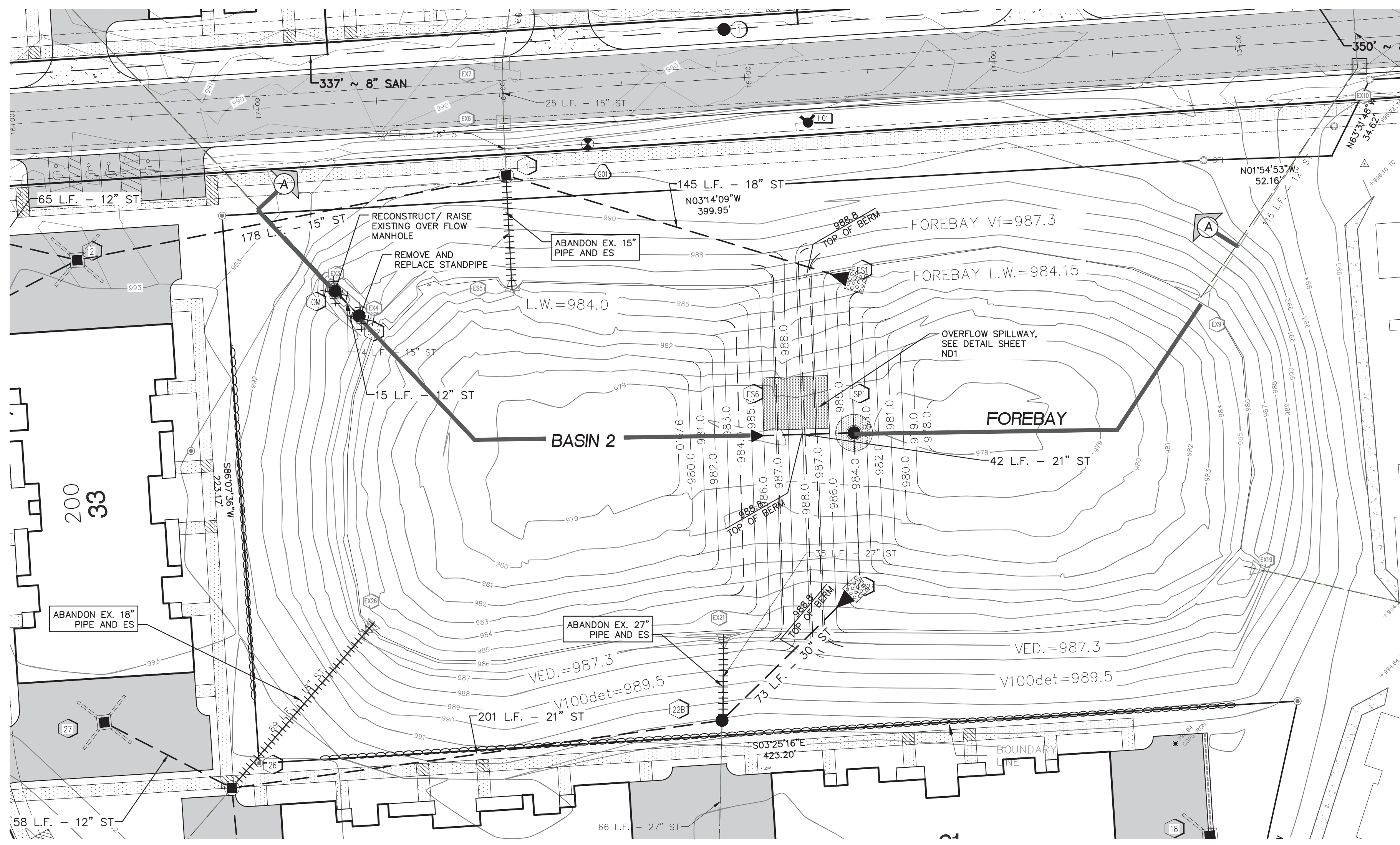
**OVERALL TRIBUTARY AREA PLAN**

**SEIBER KEAST LEHNER INC.**  
ENGINEERING | SURVEYING  
39205 COUNTRY CLUB DR., SUITE C-8  
FARMINGTON HILLS, MICHIGAN 48331  
PHONE: 248.308.3331

**SHEET 15**

611 BYRON ROAD, NO. 12  
HOWELL, MICHIGAN 48843-1041





BASIN CROSS SECTION A-A  
SCALE: HORIZ. 1"=30'  
VERT. 1"= 5'

**Calculate Detention Volume Provided**

Elev	AREA(sf)	Volume (sf)	Accum. (C.F.)
984.15	30607		
985.00	21102	21976	21976
986.00	24651	22877	44853
987.00	28100	26376	71228
987.40	29530	11526	82754
<b>TOTAL FOREBAY ALONE</b>			<b>82754</b>

**Detention Basin + Forebay**

Elev	AREA(sf)	Volume (sf)	Accum. (C.F.)
984.00	36853		
985.00	42394	39624	39624
986.00	49028	45711	85335
987.00	55980	52504	137839
987.40	58040	22804	160642 V <sub>ED</sub>
987.80	61120	23832	184474
987.81	62360	617	185092
988.00	63799	11985	197077
989.20	70201	80400	277477 V <sub>100det</sub>
<b>TOTAL BASIN + FOREBAY</b>			<b>277,477 C.F.</b>

**Westbury Phase 2 Detention Basin 2**

STORM WATER DETENTION DESIGN CALCULATIONS USING THE REVISED LIVINGSTON COUNTY DRAIN COMMISSIONERS STORMWATER STANDARDS

**"C" Factor Calculations**

TOTAL AREA TRIBUTARY TO STORM SEWERS	=	49.05	Ac	0.90	16.70
PAVEMENTS, BUILDING AREA & SIDEWALKS	=	16.03	Ac	0.60	16.70
LAWN AREAS	=	12.20	Ac	0.30	6.60
WOODLAND AREA	=	10.78	Ac	0.40	4.31
LOW WATER	=	1.34	Ac	1.00	1.34
<b>TOTAL AREA</b>		<b>49.05</b>	<b>Ac</b>		<b>79.30</b>

Cavg = A \* C / TOTAL ACRES = **0.630**

**Design Calculations**

Required Water Quality Volume  
 $V_{wq} = 1/12(4320)(C)(A)$   
 $V_{wq} = 36,301 \times 0.530 \times 49.05 = 91,907 \text{ C.F.}$

Required Channel Protection Volume  
 $V_{cp} = 1.3/12(4320)(C)(A)$   
 $V_{cp} = 47,819 \times 0.530 \times 49.05 = 105,250 \text{ C.F.}$

Required Forebay Volume  
 $V_{fb} = V_{wq}$   
 $V_{fb} = 90,962 \text{ C.F.}$

Required Extended Detention Volume  
 $V_{ed} = 1.9/12(4320)(C)(A)$   
 $V_{ed} = 62,997 \times 0.530 \times 49.05 = 153,807 \text{ C.F.}$

Extended Detention Discharge Rate  
 $Q_{ed} = V_{ed} / (48 \text{ min}) / (60 \text{ min/hr})$   
 $Q_{ed} = 153,807 / 2,880 = 53.4 \text{ cfs}$

100-Year Storm Inlet Rate  
 $Q_{100} = (CIA)(30.2033 \times 100^{0.7754}) / (T_c + 0.1747)^{0.7754}$   
 $Q_{100} = 0.530 \times 49.05 \times 1.83 \times 10^2 / 14.08026 = 131,952 \text{ cfs}$

100-Year Allowable Outlet Rate  
 $Q_{out} = 0.2 \text{ cfs/AC} \times 42.05 \text{ AC}$   
 $Q_{out} = 8.41 \text{ cfs}$

**Forebay Outlets and Spillway**

Detention Basin 2 Forebay Outlet  
 Forebay Outlet Size shall be the same as the Extended Detention Outlet Size

Use **18** 1" Dia. Holes at Elevation 984.15

Forebay Outlet Pipe Sizing for the 15-Year Storm  
 Office Outlet Formula  
 $Q = 62 \times \text{AREA} \times \text{SQRT}(64.4 \times H)$   
 $H = 3.250$  (from center of assumed 12" outlet pipe to H.W.)  
 $Q = 20.145 \text{ cfs}$   
 $\text{Area} = 2.240 \text{ sq ft}$   
 $\text{Diameter} = 20.252 \text{ inches}$

Use **21** 1/2" Dia. Holes at Elevation 984.15

Forebay Overflow Spillway Sizing  
 $Q = C \times L \times H^{1.5}$   
 $C = 3.25$   
 $L = 10 \text{ ft}$   
 $H = 1 \text{ ft}$   
 $Q_{100} = 33.3 \text{ cfs}$

Use **10** foot wide overflow spillway.

**DETENTION BASIN 2 OUTLET SIZING**

**Detention Basin Outlets**

Extended Detention Volume Release Rate Outlet Sizing at Detention Basin 2 Outlet

$Q_{ed} \text{ Rate} = 0.890 \text{ cfs}$   
 $h = 987.3 - 984.0 = 3.400 \text{ ft}$   
 Number of 1" dewatering holes required  
 $N_{hd} = V_{ed} / (4800)(h)^{1.5} = 18.85$

Use **19** 1" Dia. Holes at Elevation 984.0

Outlet Sizing for the 100-Year Storm  
 Office Outlet Formula  
 $Q = 62 \times \text{AREA} \times \text{SQRT}(64.4 \times H)$   
 $H = 4.575$  (from center of assumed 12" outlet pipe to H.W.)  
 $\text{Area} = 0.790 \text{ sq ft}$   
 $\text{Diameter} = 12.037 \text{ inches}$

Use **12** Inch Diameter Outlet Pipe at Elevation 984.0

**DETERMINE SIZE OF DETENTION BASIN OVERFLOW STRUCTURE**

Size of Overflow MH = **4** ft  
 % of MH that can be used as a Weir = **50** %  
 Calculated Length of Weir = **L = 6.28** ft  
 Average Tributary to Overflow (on + off site) = **42.05** Ac  
 Composite Runoff Coefficient = **0.530**

Longest Time of Flow to Basin = **17.92** min  
 Sum of All Flow into Basin = **28.96** cfs

Volume of Basin (Det Calcs) = **262084** ft<sup>3</sup>  
 Storage Elevation = **989.20** ft  
 Freeboard Elevation = **990.20** ft  
 Time to Fill Basin =  $V_{det} / \text{Flow into Basin} = 150.63$  min  
 10 Year Storm  $I = 175(T+25)$   
 $Q_{exp} = C \times I^A = 0.90 \text{ in/hr}$   
 $Q_{weir} = 3.33(L)^{1.5} = 20.14 \text{ cfs}$

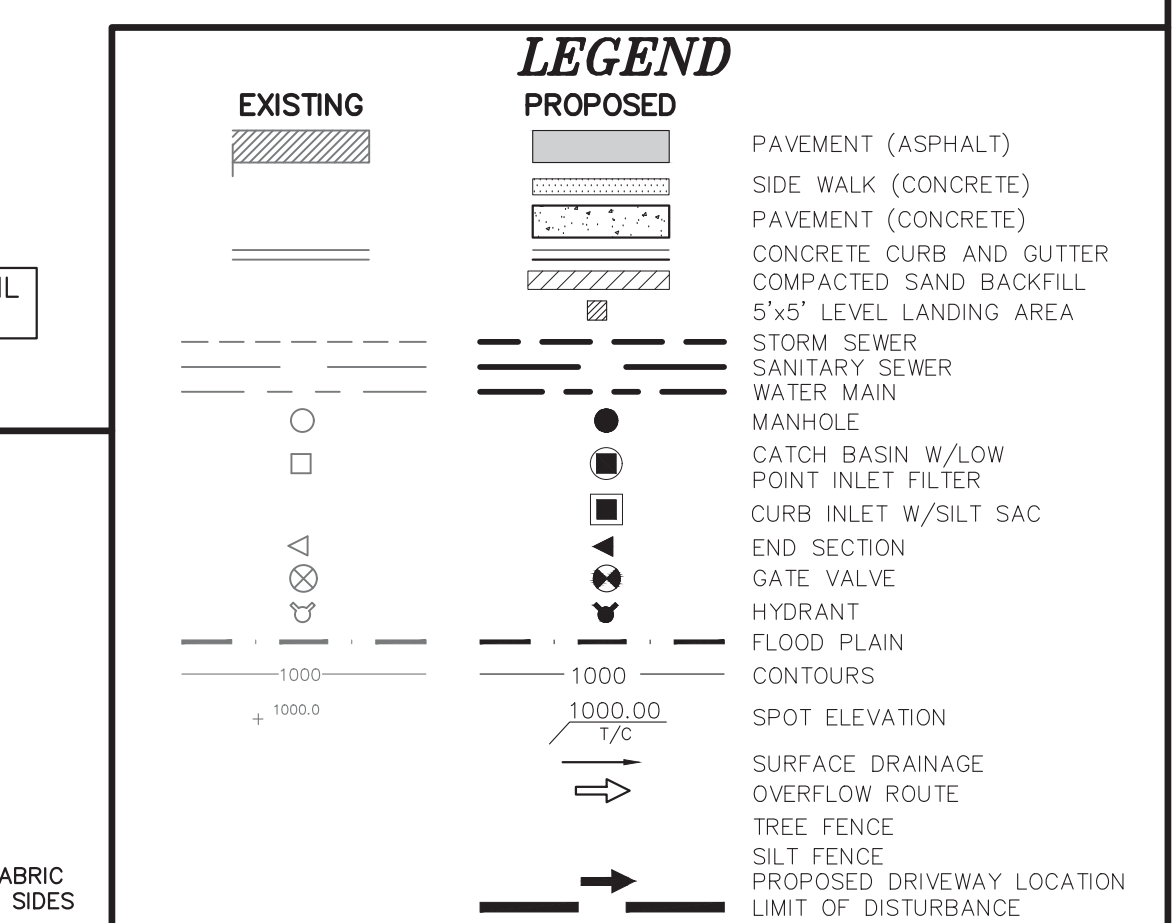
Calculate how high the water will rise above the Overflow Structure to pass the expected flow.  
 $h = 0.98 \text{ ft}$   
 Rim Overflow MH = **0.00** ft  
 Elevation of Water during Overflow Conditions = **0.98** ft  
 Elevation of Water during Overflow Condition is Less than the Freeboard Elevation, Therefore the Overflow MH is Adequately Sized.

**Required 100-Year Storm Detention Volume**

Storage Curve Factor  
 $R = 0.206 - (0.15) \ln(Q_{100}/Q_{100in})$   
 $R = 0.6189525$

100-Year Storm Volume In  
 $V_{100in} = 18,985 \text{ (C)(A)}$   
 $V_{100in} = 423431.95 \text{ C.F.}$

Required 100-Year Storm Storage Volume Above Outlet  
 $V_{100det} = (V_{100in})(R) - V_{cp}$  Credit  
 $V_{100det} = 262084.27 \text{ C.F.}$



**WESTBURY PHASE 2**  
**SECTION 4, TOWN 2 NORTH, RANGE 5 EAST**  
**GENOA TWP., LIVINGSTON COUNTY, MICHIGAN**

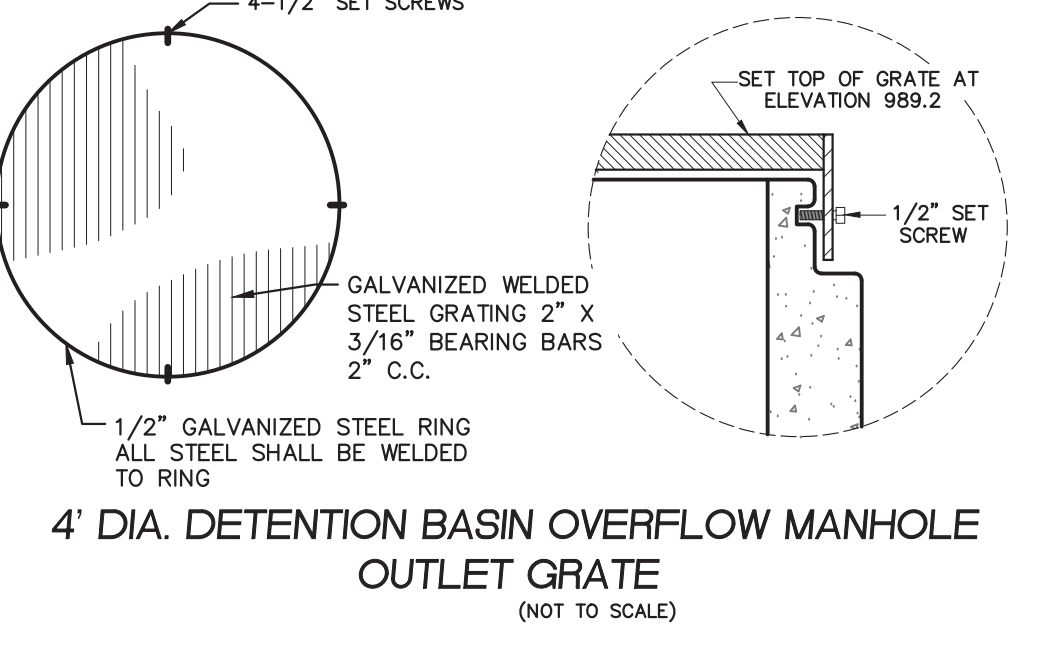
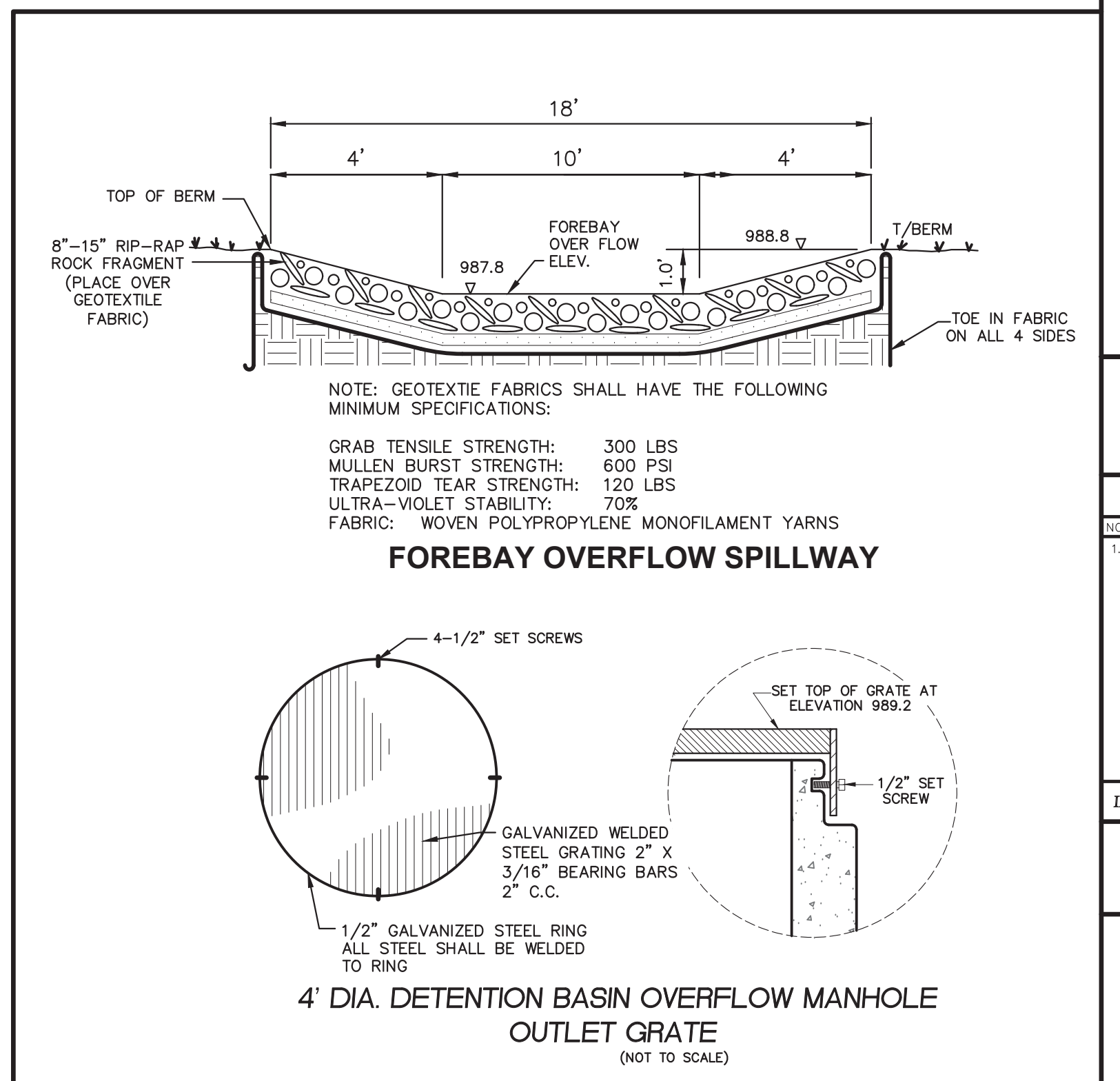
REVISIONS		UTILITY WARNING	
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DATE: 1-17-22 DESIGNED BY: A.A. JOB NUMBER: 21-030  
 CHECKED BY: B.E. DRAWING FILE: 21-030DB.dwg

**DETENTION BASIN 2 PLAN**

**SEIBER KEAST LEHNER INC.**  
 ENGINEERING | SURVEYING  
 39205 COUNTRY CLUB DR., SUITE C-8  
 FARMINGTON HILLS, MICHIGAN 48331  
 PHONE: 248.308.3331

**SHEET 16**

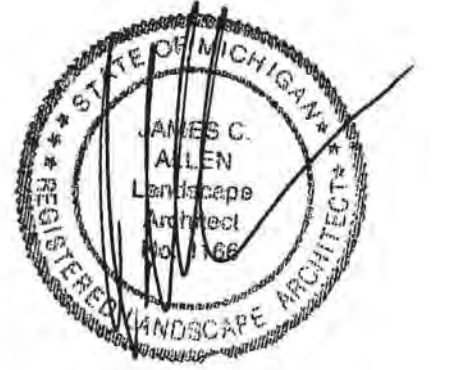








Seal: \_\_\_\_\_



Title:  
**Landscape Details**

Project:  
**Westbury II  
 Genoa Township, Michigan**

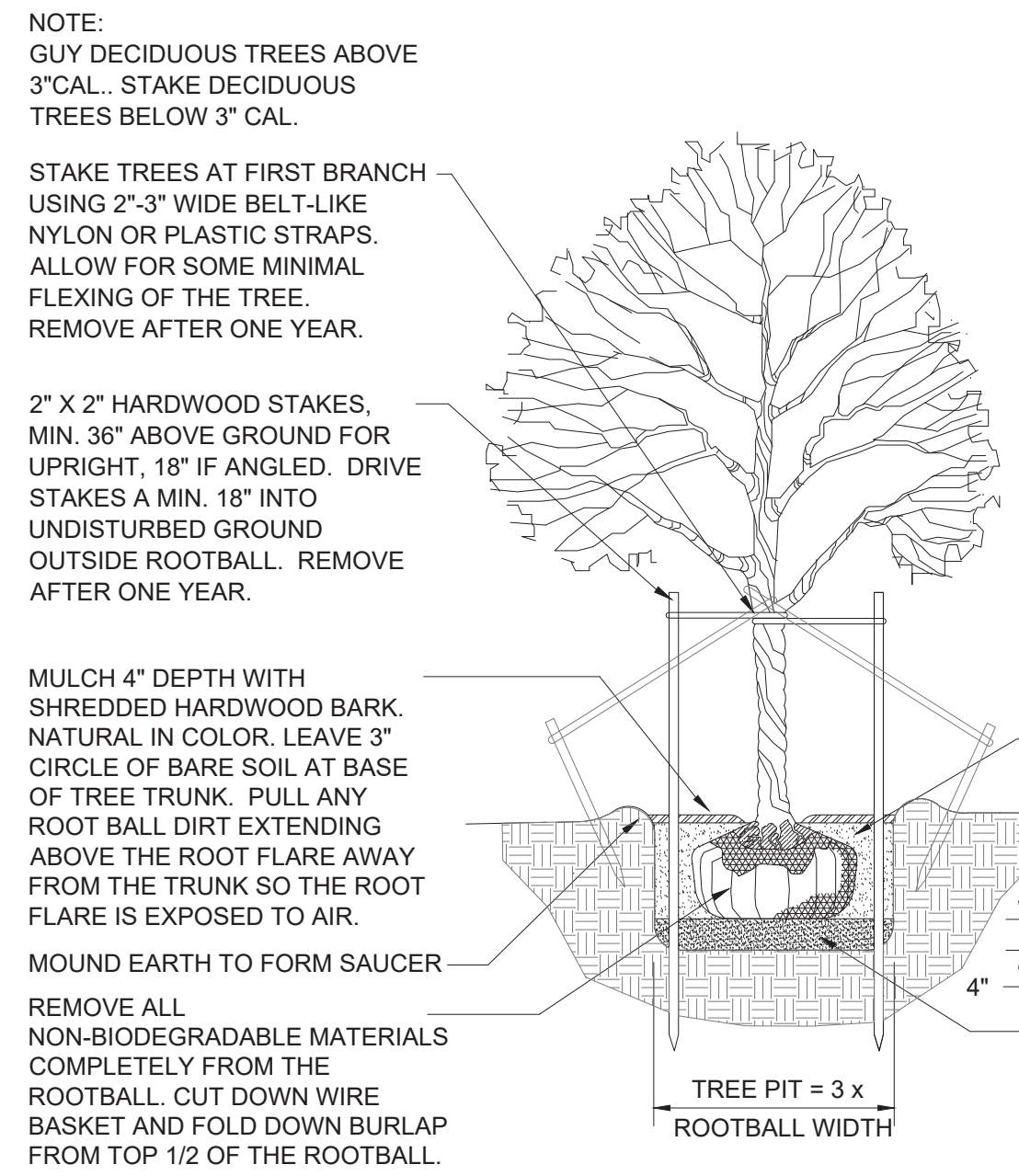
Prepared for:  
 Elevate Property Partners, LLC  
 128 North Center  
 Northville, Michigan 48167

Revision: \_\_\_\_\_ Issued: \_\_\_\_\_  
 Review January 18, 2022  
 Revised March 23, 2022

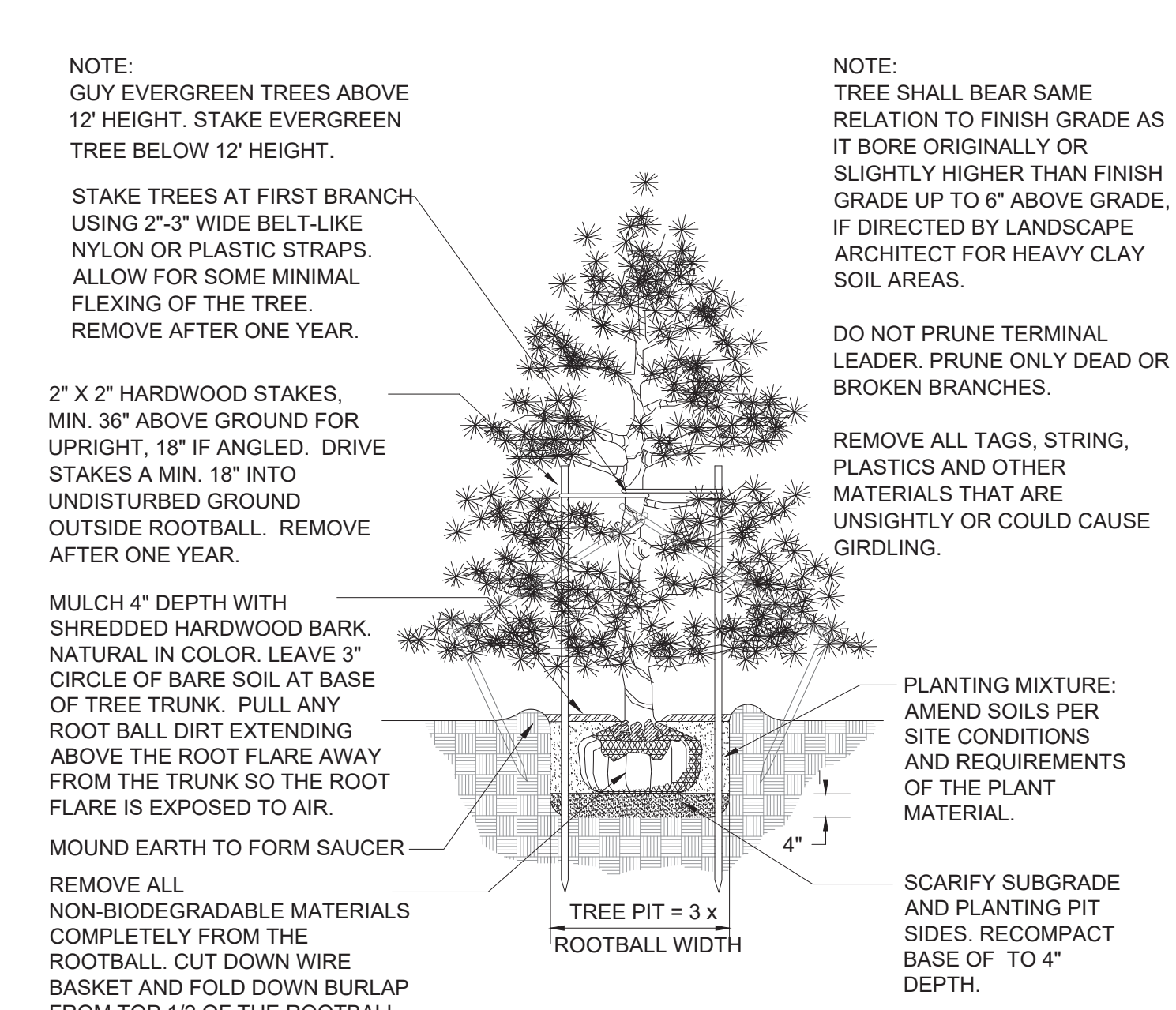
Job Number:  
 21-083

Drawn By: \_\_\_\_\_ Checked By: \_\_\_\_\_  
 jca jca

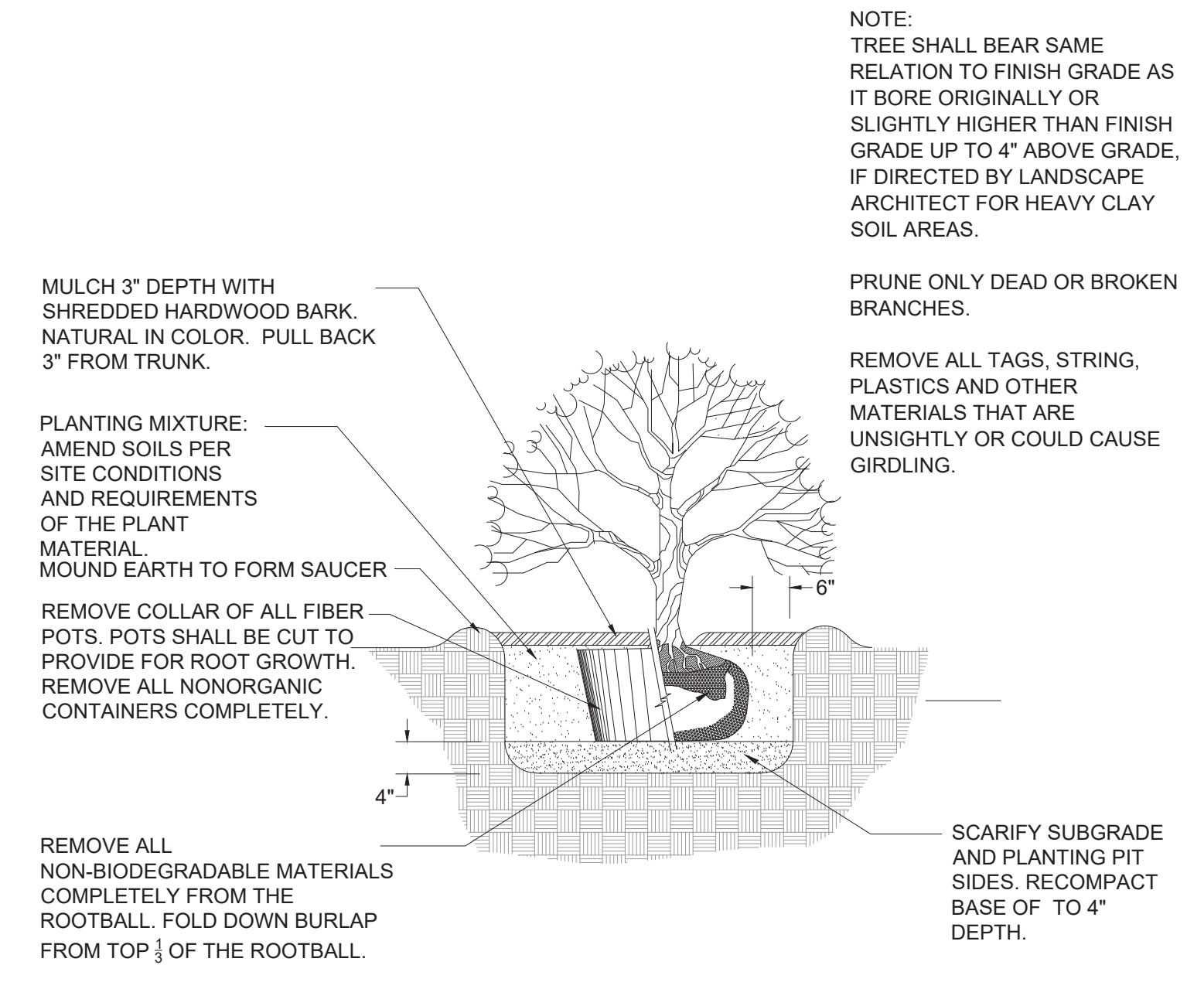
Sheet No. \_\_\_\_\_



**DECIDUOUS TREE PLANTING DETAIL**  
 Not to scale



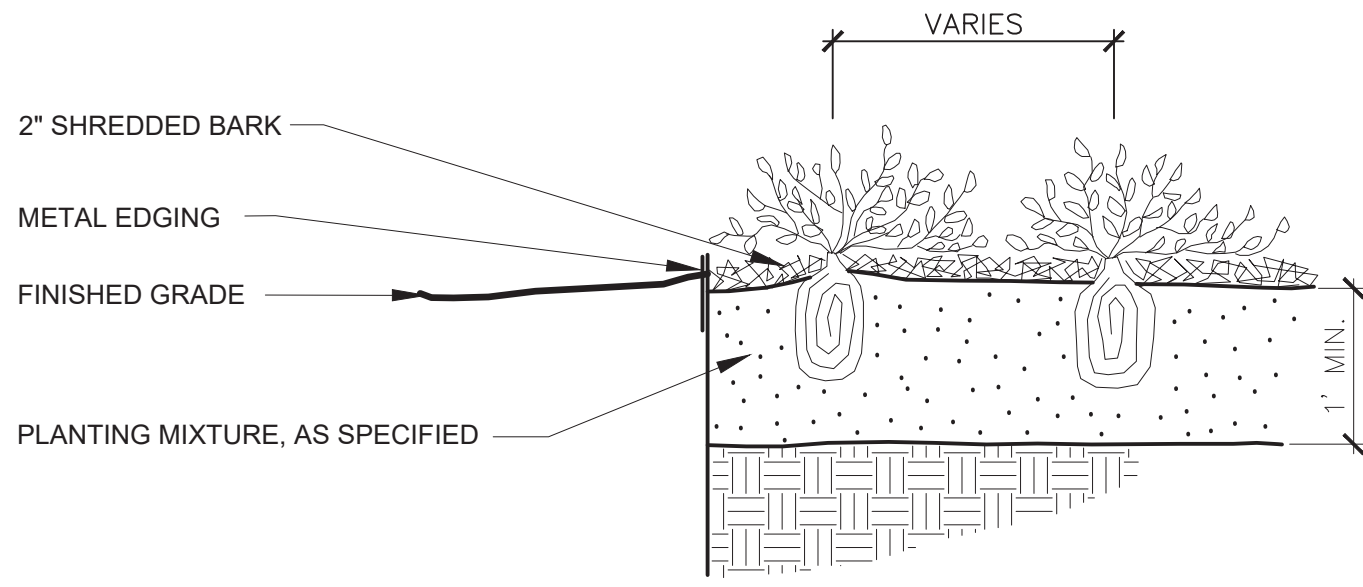
**EVERGREEN TREE PLANTING DETAIL**  
 Not to scale



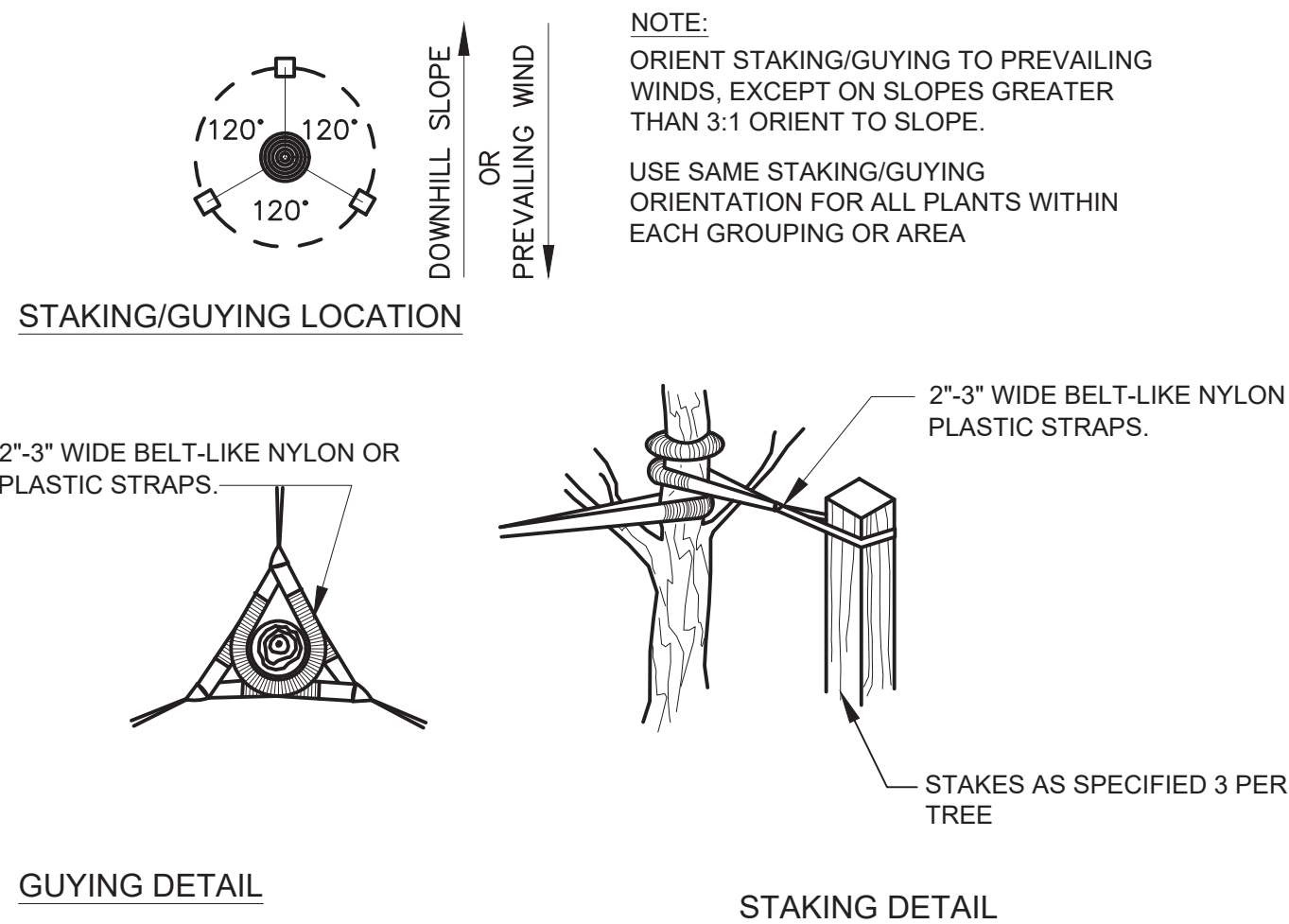
**SHRUB PLANTING DETAIL**  
 NOT TO SCALE

**LANDSCAPE NOTES**

- All plants shall be north Midwest American region grown, No. 1 grade plant materials, and shall be true to name, free from physical damage and wind burn.
- Plants shall be full, well-branched, and in healthy vigorous growing condition.
- Plants shall be watered before and after planting is complete.
- All trees must be staked, fertilized and mulched and shall be guaranteed to exhibit a normal growth cycle for at least two (2) full years following Township approval.
- All material shall conform to the guidelines established in the most recent edition of the American Standard for Nursery Stock.
- Provide clean backfill soil, using material stockpiled on site. Soil shall be screened and free of any debris, foreign material, and stone.
- "Agriform" tabs or similar slow-release fertilizer shall be added to the planting pits before being backfilled.
- Amended planting mix shall consist of 1/3 screened topsoil, 1/3 sand and 1/3 peat, mixed well and spread to the depth as indicated in planting details.
- All plantings shall be mulched per planting details located on this sheet.
- The Landscape Contractor shall be responsible for all work shown on the landscape drawings and specifications.
- No substitutions or changes of location, or plant types shall be made without the approval of the Landscape Architect.
- The Landscape Architect shall be notified in writing of any discrepancies between the plans and field conditions prior to installation.
- The Landscape Contractor shall be responsible for maintaining all plant material in a vertical condition throughout the guaranteed period.
- The Landscape Architect shall have the right, at any stage of the installation, to reject any work or material that does not meet the requirements of the plans and specifications, if requested by owner.
- Contractor shall be responsible for checking plant quantities to ensure quantities on drawings and plant list are the same. In the event of a discrepancy, the quantities on the plans shall prevail.
- The Landscape Contractor shall seed and mulch or sod (as indicated on plans) all areas disturbed during construction, throughout the contract limits.
- A pre-emergent weed control agent, "Preen" or equal, shall be applied uniformly on top of all mulching in all planting beds.
- All landscape areas shall be provided with an underground automatic sprinkler system.
- Sod shall be two year old "Baron/Cheridaphi" Kentucky Blue Grass grown in a sod nursery on loam soil.



**PERENNIAL PLANTING DETAIL**  
 Not to scale



**TREE STAKING DETAIL**  
 Not to scale





# WESTBURY - PHASE II

ELEVATE PROPERTY PARTNERS

GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

**CONSTRUCTION DATA**

---

**BUILDING TYPE 100, 200 & 300**  
**CODE: 2015 MICHIGAN BUILDING CODE**

---

USE GROUP: R-2  
 CONSTRUCTION CLASSIFICATION: 5-B  
 FIRE SUPPRESSION SYSTEM: NFPA 13R

MAXIMUM BLDG. HEIGHT: 2 STORIES  
 BASE ALLOWABLE AREA PER FLOOR: 1,000 SQ. FT.  
 OPEN PERIMETER AREA INCREASE: 15% = 5,250 SQ. FT.  
 TOTAL ALLOWABLE AREA: = 12,250 SQ. FT.

BUILDING TYPE 100 MAX. AREA: 1,299 SQ. FT.  
 (FIRST FLOOR AREA)

BUILDING TYPE 200 MAX. AREA: 8,402 SQ. FT.  
 (FIRST FLOOR AREA)

BUILDING TYPE 300 MAX AREA: 8,902 SQ. FT.  
 (FIRST FLOOR AREA)

TENANT SEPARATION: 1 HOUR

TENANT ATTIC SEPARATION: 1 HOUR

**SUMMARY**

**PROPOSED BUILDING UNIT MIX  
 PHASE 2**

NO. OF BLDG'S.	BLDG. STYLE	UNIT MIX
5	100 STYLE BUILDING	4-1 BR / 4-3BR
8	200 STYLE BUILDING	8-2 BR UNITS
4	300 STYLE BUILDING	8-3 BR UNITS
<b>TOTALS</b>		
17 BUILDINGS		134 UNITS

**PARTICIPANTS**

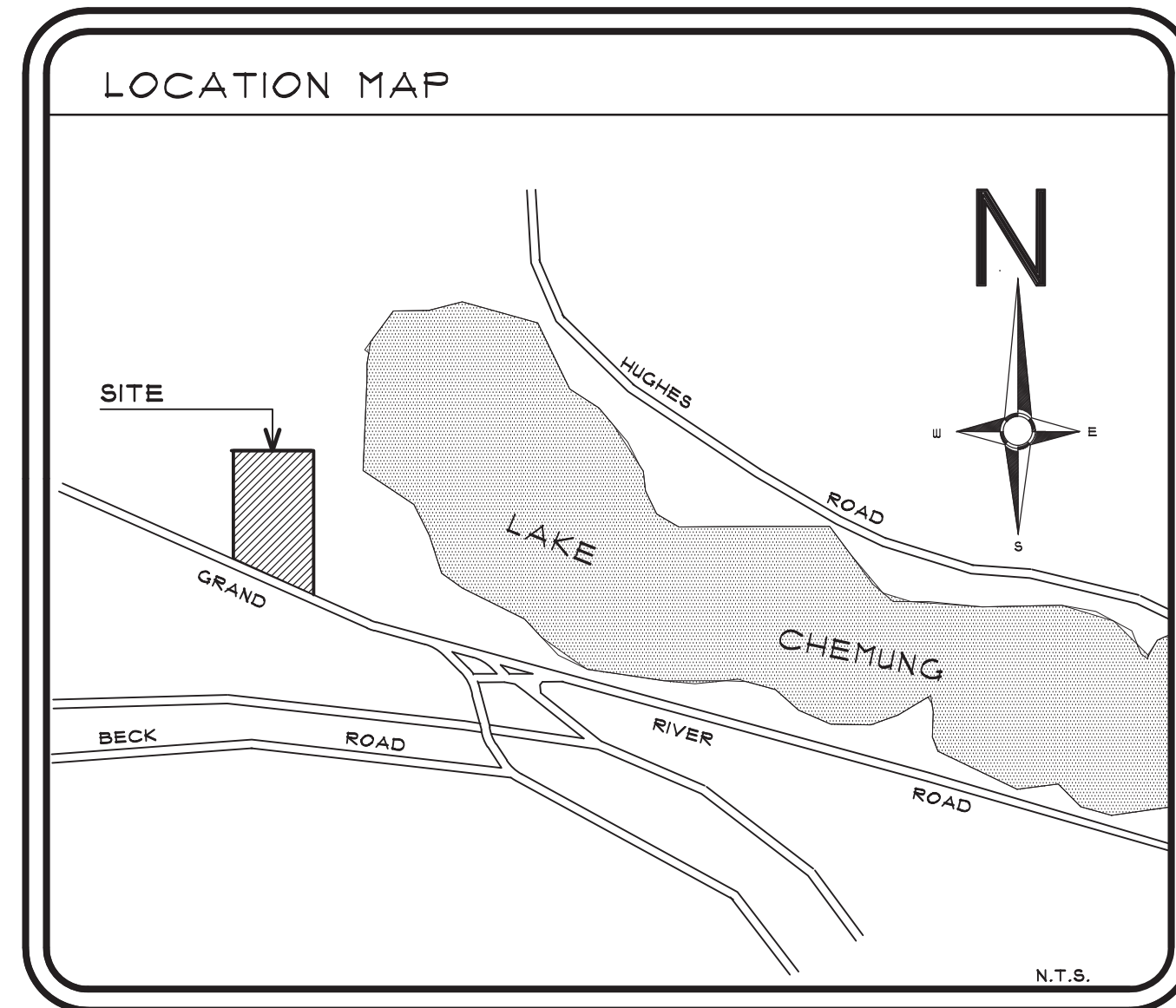
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 (248) 924 4431

**ARCHITECT**  
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 (248) 334 5000

**MECHANICAL / ELECTRICAL ENGINEER**

**CIVIL ENGINEER**  
 BOSS ENGINEERING  
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 WEST BLOOMFIELD, MI 48322  
 (248) 626-9480

**LANDSCAPE ARCHITECT**  
 BOSS ENGINEERING  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI 48843  
 (517) 544-4834



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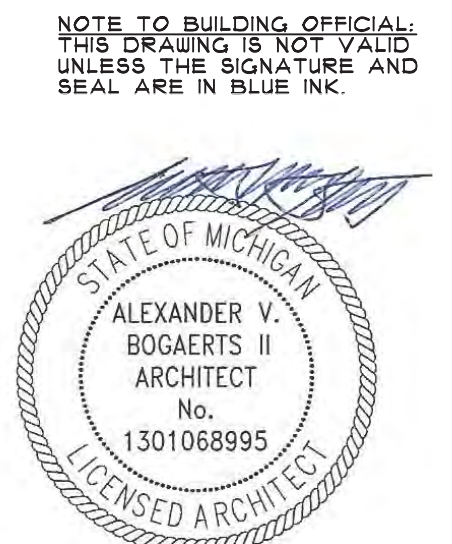
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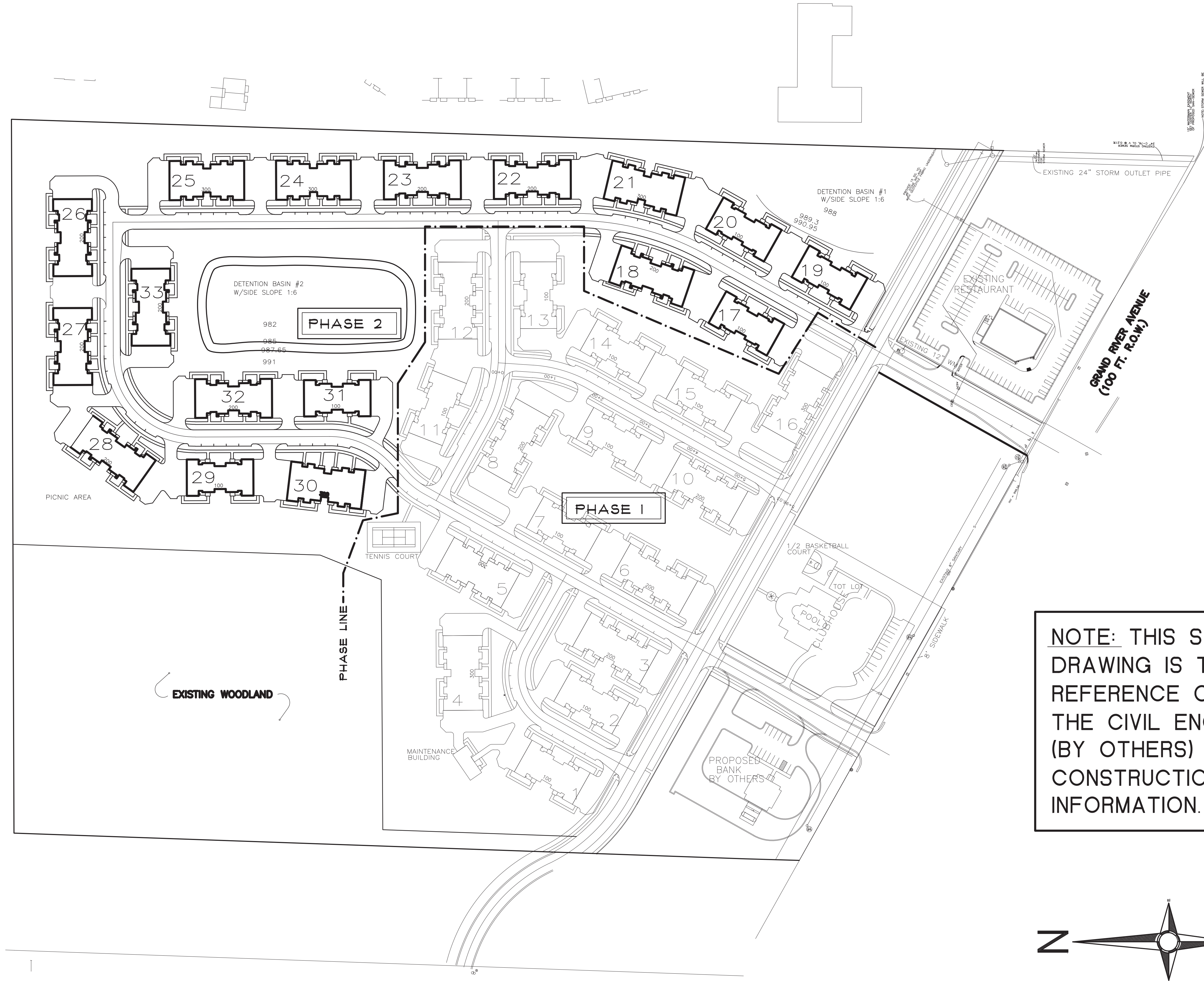
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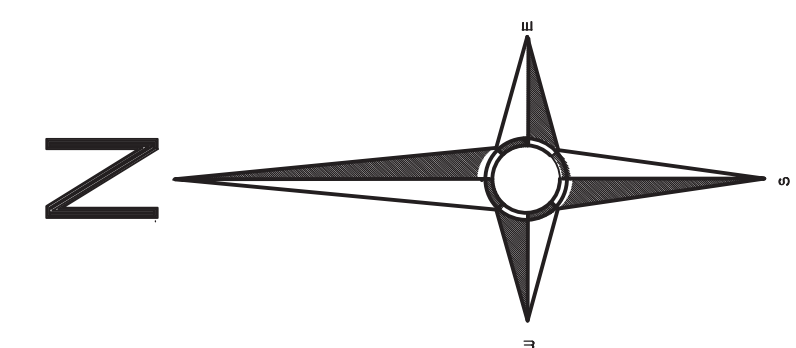


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**NOTE: THIS SITE LAYOUT DRAWING IS TO BE USED FOR REFERENCE ONLY. REFER TO THE CIVIL ENGINEERING DRAWINGS (BY OTHERS) FOR ALL SITE CONSTRUCTION & LAYOUT INFORMATION.**



**SITE PLAN**

N.T.S.

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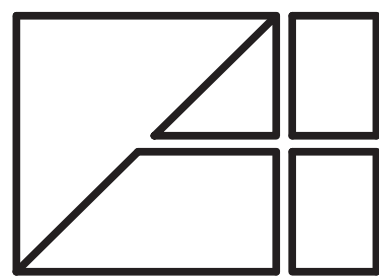
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FOUNDATION PLAN  
 BUILDING 100

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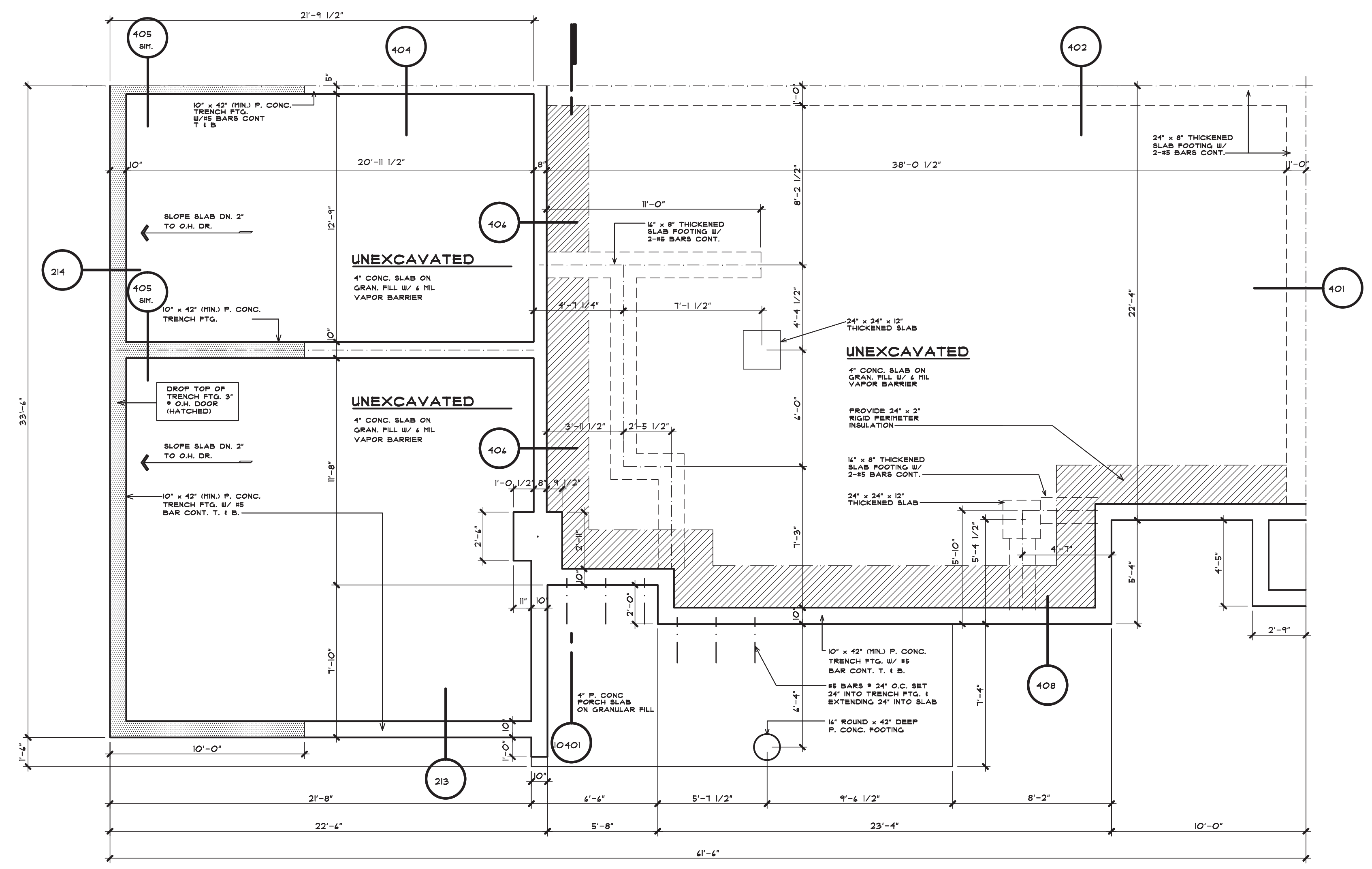
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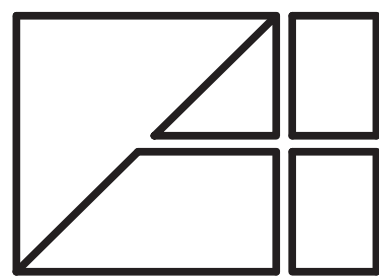
FOUNDATION PLAN - BUILDING TYPE 100

SCALE: 1/4" = 1'-0"

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FIRST FLOOR PLAN  
SECOND FLOOR PLAN  
BUILDING TYPE 100

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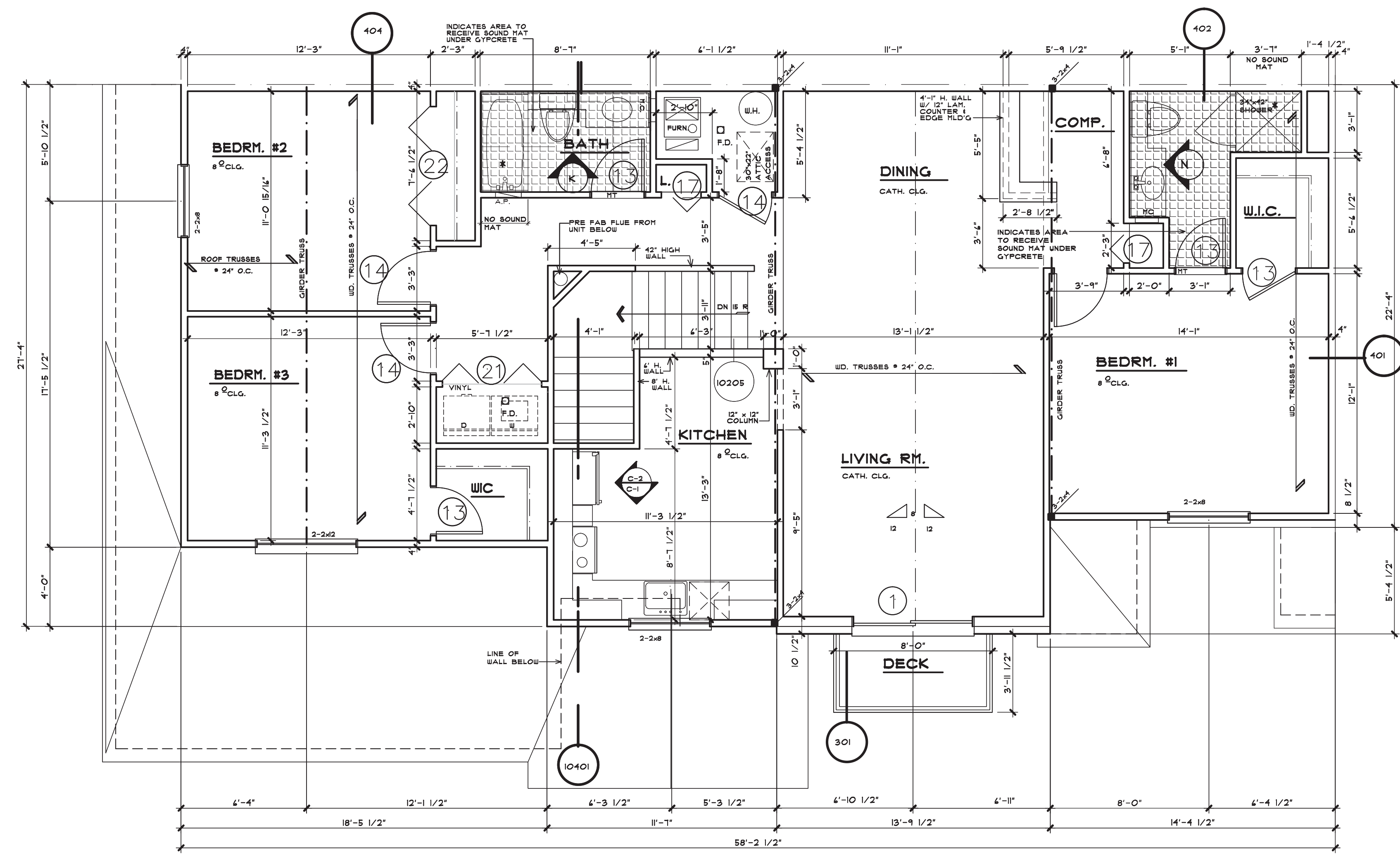
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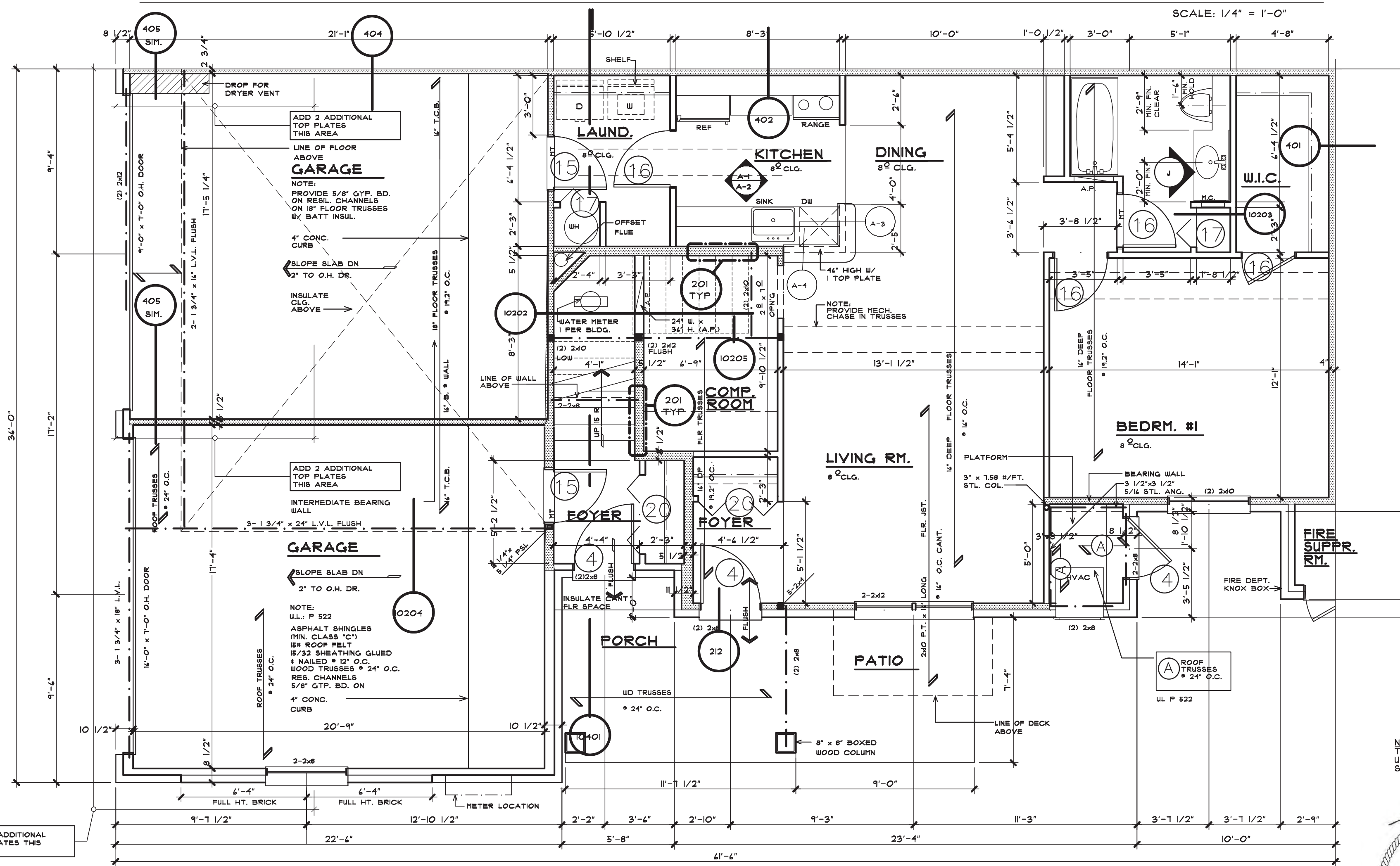
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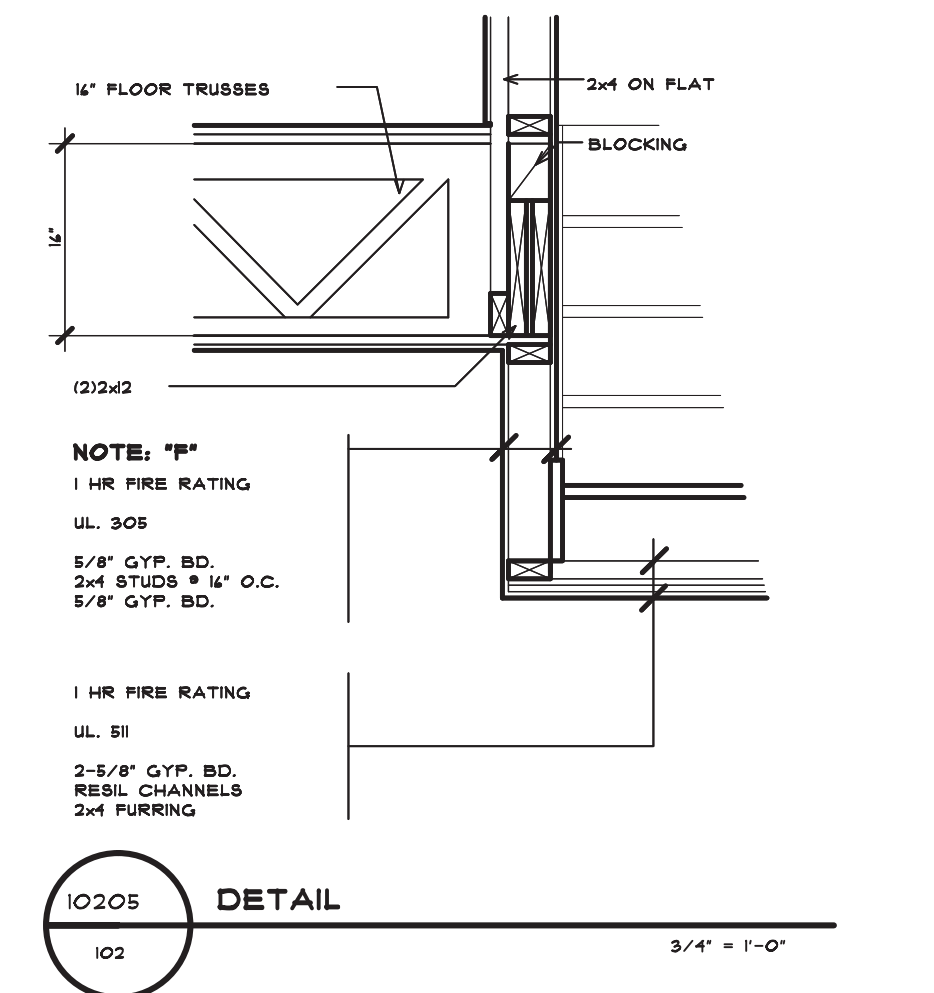
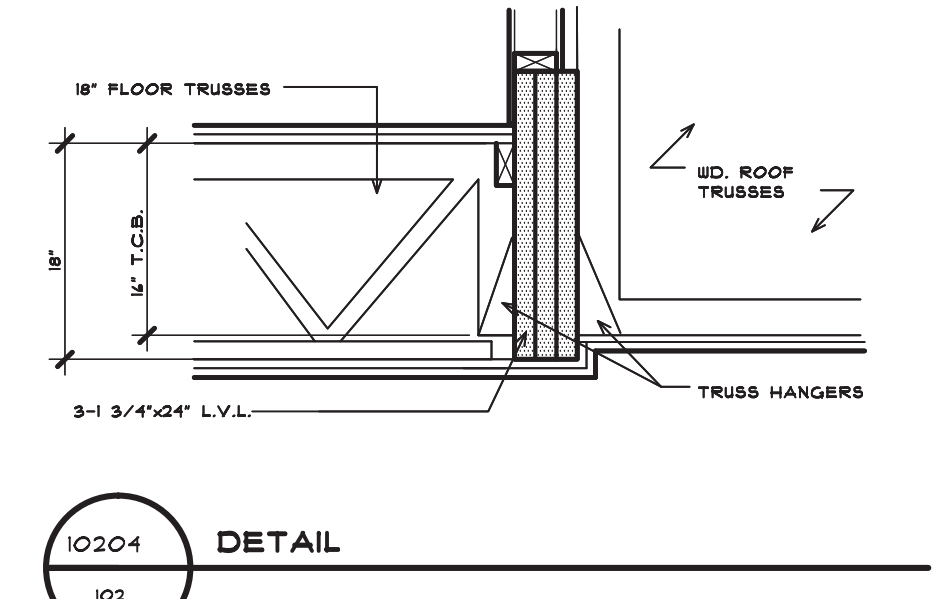
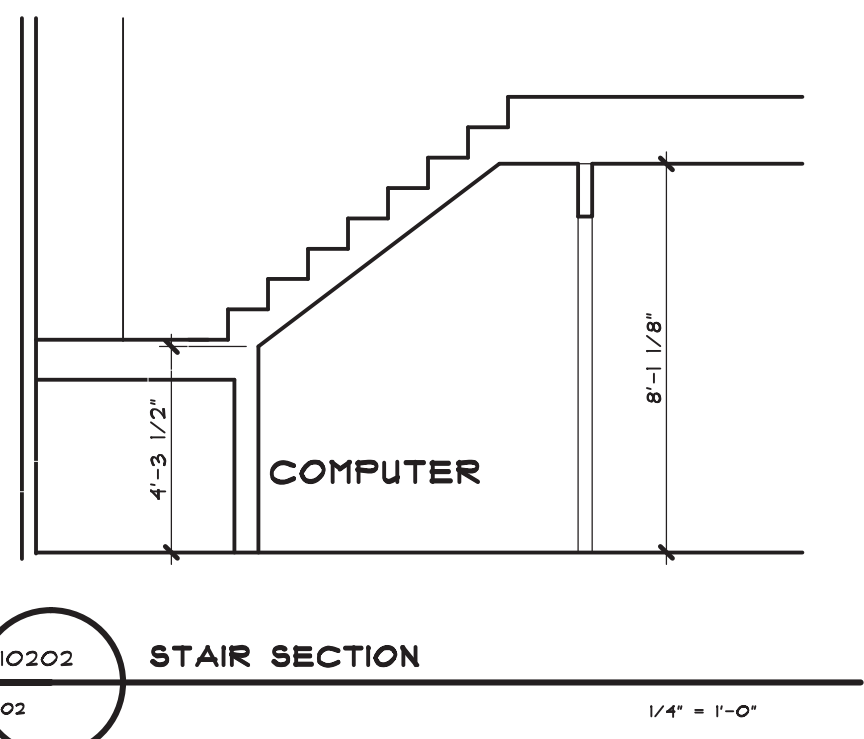
NOTE:  
PROVIDE 1/2" TYPE 'X'  
GYF. BD. BEHIND TUBS  
& SHOWERS.  
5/8" RATED GYP. BD.  
IF A RATED WALL.



SECOND FLOOR PLAN - BUILDING TYPE 100 - UNIT 102



FIRST FLOOR PLAN - BUILDING TYPE 100 - UNIT 101



SQUARE FOOTAGE UNIT 101	
1ST FLOOR	941 SQ. FT.
TOTAL	941 SQ. FT.

SQUARE FOOTAGE UNIT 102	
1ST FLOOR	52 SQ. FT.
2ND FLOOR	1421 SQ. FT.
TOTAL	1479 SQ. FT.

**STRUCTURAL NOTES:**

(1) 2x8 HEADERS TO BEAR ON (1) ONE JACK STUD UNLESS NOTED OTHERWISE.

(2) 2x10 LARGER HEADERS TO BEAR ON (2) TWO JACK STUDS UNLESS NOTED OTHERWISE.

ALL PRE-ENGINEERED HEADERS TO BEAR ON REQUIRED NUMBER OF STUDS TO MATCH BOTH OF HEADER MATERIAL OR ON (2) TWO JACK STUDS AT PARALLEL WALL CONDITION UNLESS NOTED OTHERWISE.

ALL PRE-ENGINEERED LUMBER HEADERS SHALL BE BUILT UP FROM THE NUMBER OF HEADERS INDICATED ON DRAWING. ALL MEMBERS SHALL BE SECURED WITH NAILS OR BOLTS AS SPECIFIED BY THE MANUFACTURER FOR SIZES INDICATED.

ALL GIRDER TRUSSES TO BEAR ON (2) TWO STUDS MINIMUM OR AS REQUIRED TO MATCH NUMBER OF TRUSS PLATES UNLESS NOTED OTHERWISE ON DRAWINGS.

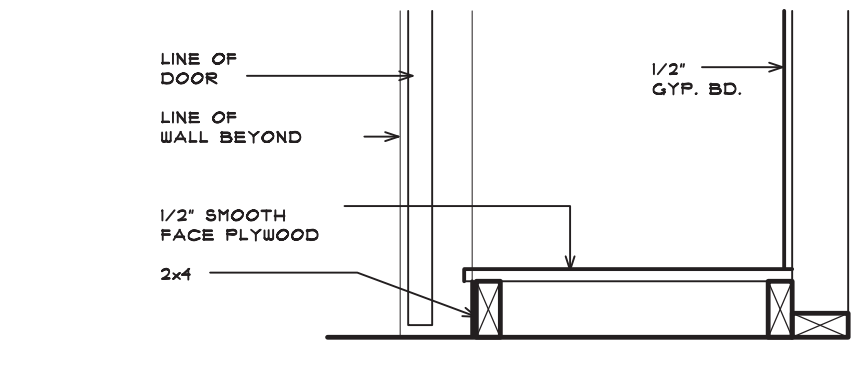
TRUSS FABRICATOR/CONTRACTOR TO PROVIDE ALL HANGERS W/ MODEL No. CLEARLY STAMPED. LAYOUT DRAWINGS CLEARLY INDICATING LOCATION OF VARIOUS HANGERS REQUIRED.

CARPENTER CONTRACTOR TO INSTALL NAIL SIZES & NUMBER REQ'D AS SPECIFIED FOR EACH TYPE OF HANGER.

PROVIDE SOLID BLOCKING WITHIN FLOOR, WALL AND OTHER VOID SPACES UNDER OR ALIGNED WITH HEADER AND GIRDER TRUSS BEARING CONDITIONS DOWN TO SOLID BEARING (SUCH AS FOUNDATION OR BEAM). SOLID BLOCKING SIZE SHALL NOT BE LESS THAN BEARING STUD SIZES SUPPORTING THE STRUCTURAL HEADERS AND GIRDER TRUSSES.

NOTE: "F"  
1 HR FIRE RATING  
UL 305  
5/8" GYP. BD.  
2x4 STUDS @ 16" O.C.  
5/8" GYP. BD.

1 HR FIRE RATING  
UL 51  
2-5/8" GYP. BD.  
REIN. CHANNELS  
2x4 PURRING



SECTION 10203  
1/4" = 1'-0"

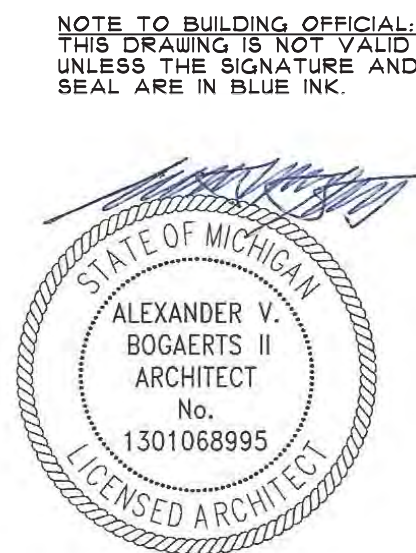
TAG	SIZE	TYPE	STYLE
1	6'-0"x8'-0"	SLIDING GLASS DOOR	
2	NOT USED		
3	NOT USED		
4	3'-0"x6'-8"	INSULATED STEEL ENTRY DOOR	STYLE - A
5	NOT USED		
6	NOT USED		
7	NOT USED		
8	NOT USED		
9	NOT USED		
10	NOT USED		
11	NOT USED		
12	2'-0"x6'-8"	BI-FOLD HOLLOW CORE	FLUSH STYLE - C
13	2'-4"x6'-8"	BI-FOLD HOLLOW CORE	FLUSH STYLE - C
14	2'-8"x6'-8"	BI-FOLD HOLLOW CORE	FLUSH STYLE - C
15	2'-8"x6'-8"	INSULATED STEEL FIRE DOOR	FLUSH STYLE - C
16	2'-10"x6'-8"	BI-FOLD HOLLOW CORE	FLUSH STYLE - C

TAG	SIZE	TYPE	STYLE
17	2'-0"x6'-8"	BI-FOLD HOLLOW CORE	FLUSH STYLE - D
18	2'-4"x6'-8"	BI-FOLD HOLLOW CORE	FLUSH STYLE - D
19	3'-0"x6'-8"	BI-FOLD HOLLOW CORE	FLUSH STYLE - D
20	4'-0"x6'-8"	BI-FOLD HOLLOW CORE	FLUSH STYLE - E
21	5'-0"x6'-8"	BI-FOLD HOLLOW CORE	FLUSH STYLE - E
22	1'-0"x6'-8"	BI-FOLD HOLLOW CORE	FLUSH STYLE - E
23	1'-4"x6'-8"	BI-FOLD HOLLOW CORE	FLUSH STYLE - C

NOTE:  
NON-COMBUSTIBLE HVAC & EXHAUST DUCTS LOCATED IN THE FLOOR TRUSS SPACE, WHICH DO NOT PENETRATE THE FLOOR OR A FIRE RESISTANCE RATED FLOOR/CEILING ASSEMBLY, BUT DO PENETRATE THE CEILING OF A FIRE RESISTANCE FLOOR/CEILING ASSEMBLY SHALL BE PROVIDED WITH AN APPROVED CEILING FIRE DAMPER AT THE CEILING PENETRATION. CEILING FIRE DAMPERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS LISTED IN A FIRE RESISTANCE RATED DESIGN OR SHALL BE LABELED TO FUNCTION AS A HEAT BARRIER FOR AIR-HANDLING OUTLET/INLET PENETRATIONS IN THE CEILING OF A FIRE RESISTANCE RATED ASSEMBLY. PENETRATIONS BY AN AIR DUCT THROUGH A FIRE RESISTANCE RATED FLOOR/CEILING ASSEMBLY WHICH CONNECT NOT MORE THAN TWO STORIES SHALL BE PROVIDED WITH A FIRE DAMPER THAT COMPLIES WITH U.L. RES INSTALLED AT THE FLOOR LINE. ALL FIRE DAMPERS SHALL BE ACCESSIBLE.

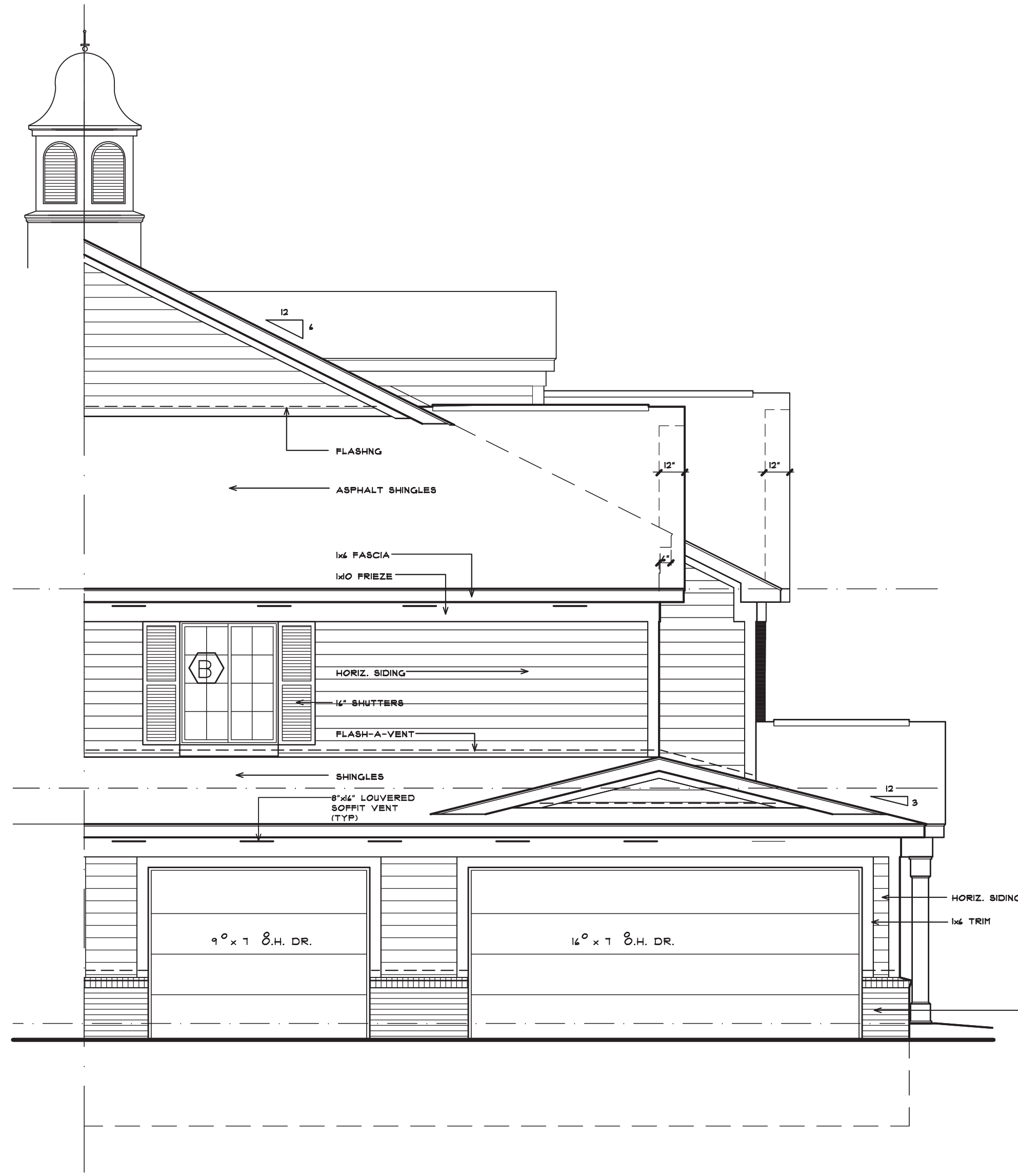
NOTE: PROVIDE 2x4 (MIN) CONT. STIFFENERS PERPENDICULAR TO TRUSSES @ MIN. 10'-0" O.C. UNLESS OTHERWISE RECOMMENDED BY TRUSS MANUFACTURER. ATTACH EACH TRUSS TO STIFFENER.

NOTE:  
ALL 2x4 WD. STUD IN NON BEARING INTERIOR PARTITIONS TO BE SPACED @ 24" O.C. PROVIDE ADDITIONAL STUDS AS NECESSARY FOR PROPER INSTALLATION OF MEDICINE CABINETS RETURN AIR GRILLES ECT. ALL KITCHEN WALLS INTENDED TO SUPPORT KITCHEN CABINETS TO HAVE STUDS SPACED A MAX. OF 14" O.C.



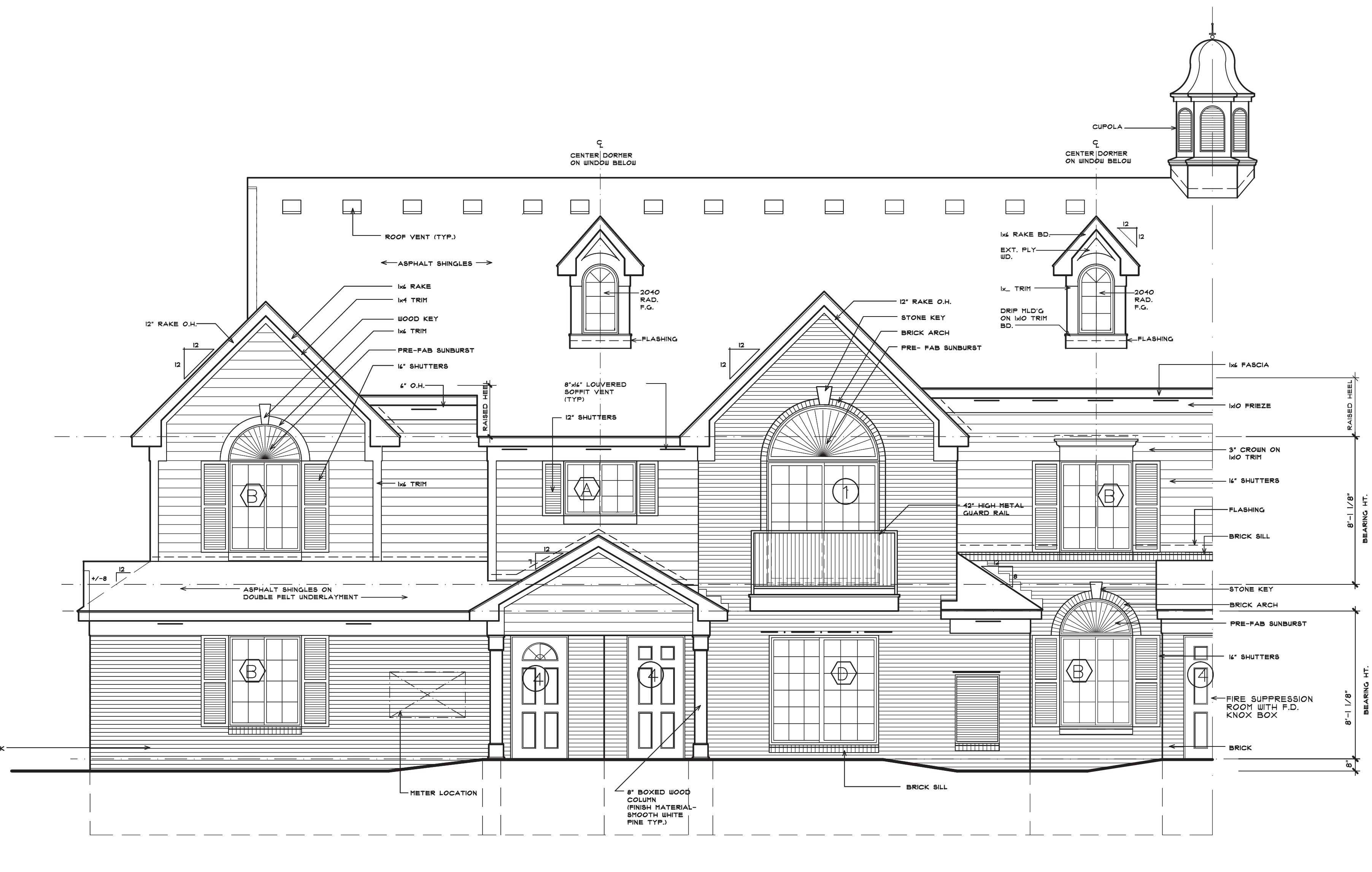
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LEFT SIDE ELEVATION BUILDING TYPE 100

SCALE: 1/4" = 1'-0"



FRONT ELEVATION BUILDING TYPE 100

SCALE: 1/4" = 1'-0"

WINDOW SCHEDULE		
TAG	SIZE	REMARKS
A	1030 SLIDER	
B	1050 SLIDER	EGRESS
C	8050 SLIDER	EGRESS
D	1010 SLIDER	EGRESS
E	1-2050 SINGLE HUNG	
F	3050 DOUBLE HUNG	EGRESS

DOOR SCHEDULE			
TAG	SIZE	TYPE	STYLE
1	4'-0"x4'-8"	SLIDING GLASS DOOR	
4	3'-0"x4'-8" EXTERIOR	INSULATED STEEL ENTRY DOOR	STYLE - A

UNLESS NOTED OTHERWISE - OVERHANG DIMENSIONS ARE 12" FROM FRAME WALL. RAKE DIMENSIONS ARE 8" FROM FRAME AT BRICK WALLS AND 4" FROM FRAME AT SIDING WALLS.

STEEL LINTEL SCHEDULE	
MAX. CLEAR SPAN	LINTEL SIZE
8'-0" OR LESS	3 1/2" x 3 1/2" x 5/16"
7'-0" OR LESS	4" x 3 1/2" x 5/16"
6'-0" OR LESS	5" x 3 1/2" x 5/16"
4'-0" OR LESS	5" x 3 1/2" x 3/8"
10'-0" OR LESS	6" x 3 1/2" x 3/8"

NOTE: THIS SCHEDULE APPLIES UNLESS NOTED OTHERWISE ON THE PLANS AND/OR ELEVATIONS.

**PROPOSED VENT AREA**

UNIT 102

VENT AREA RATIO 1:50

ATTIC AREA = 1510 SQ.FT. ( / 50)

VENT AREA = 10.06 SQ.FT. x 14 = 140.84 SQ.FT.

50% SOFFIT AND 50% RIDGE = 725 SQ.IN. EACH

CONTINUOUS RIDGE TYPE = 18 SQ.IN. PER FT. = 7 LIN.FT.

LOUVER AT RIDGE TYPE = 50 SQ.IN. EA. = 14 UNITS

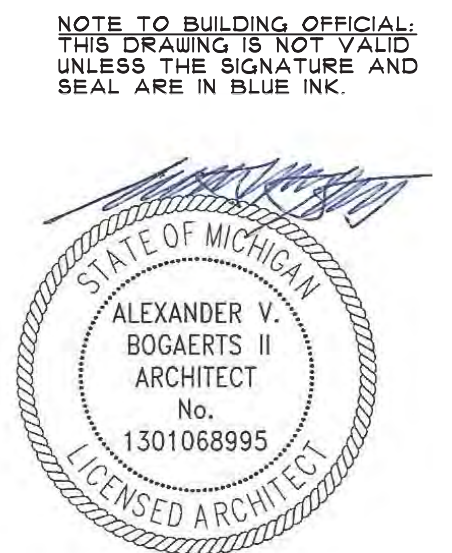
GABLE END TYPE (TOTAL) SQ.IN. = UNITS

TOTAL VENTING AT RIDGE = 826 SQ.IN.

CONTINUOUS SOFFIT TYPE = SQ.IN. PER FT. = LIN.FT.

LOUVER TYPE 8" X 16" = 54 SQ.IN. EA. = 15 UNITS

TOTAL VENTING AT SOFFIT = 810 SQ.IN.



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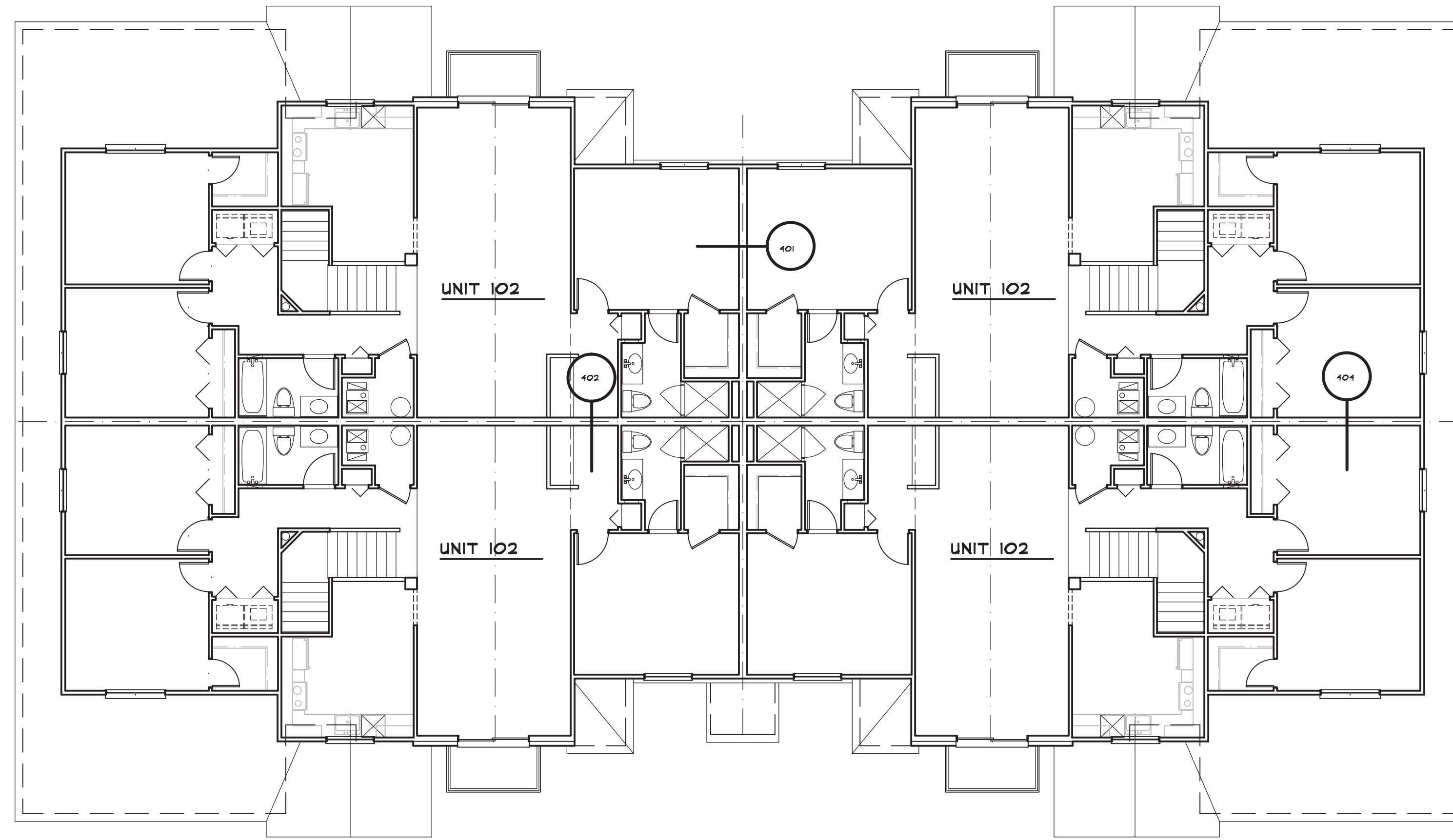
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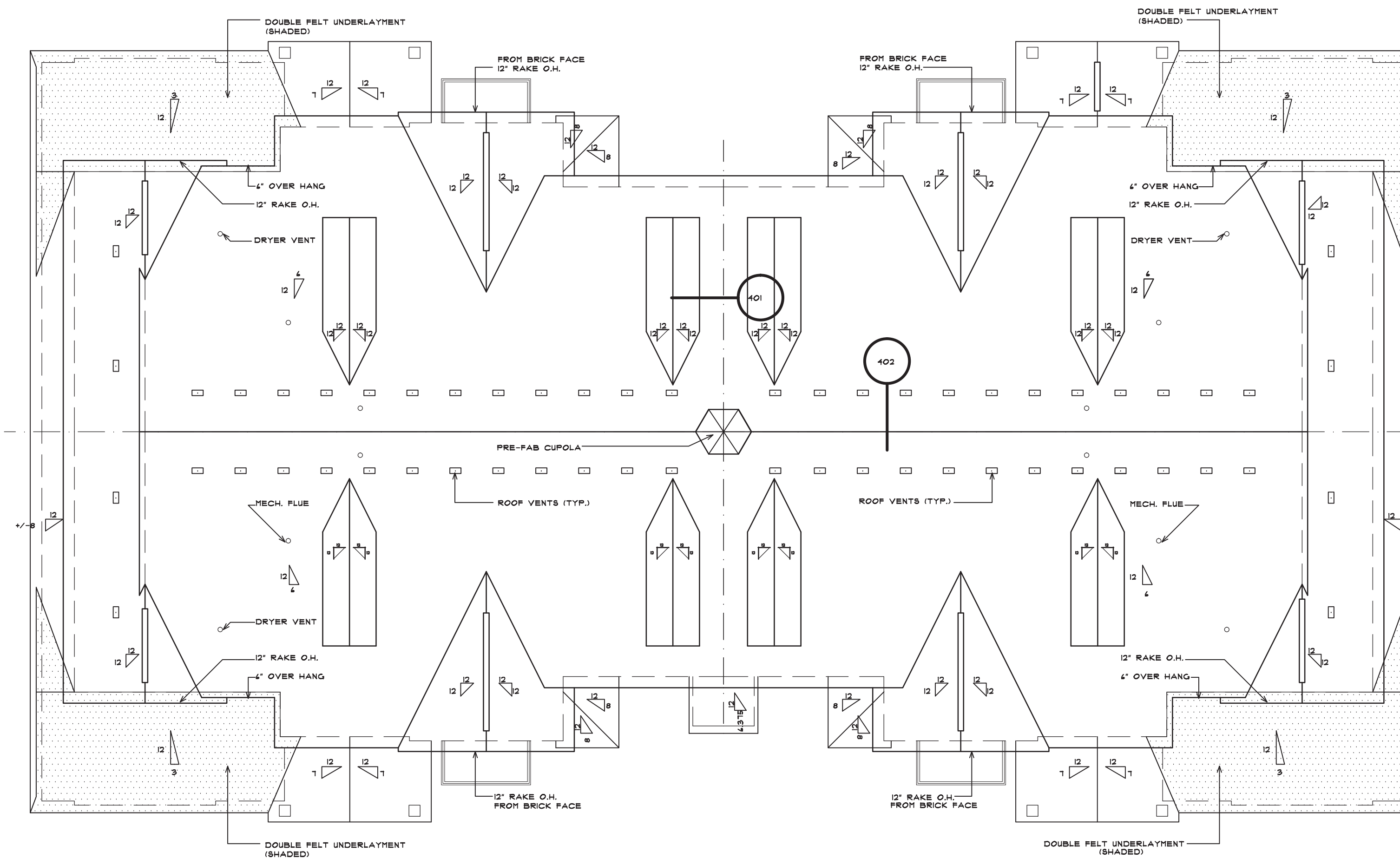




NOTE:  
FOR ADDITIONAL NOTES  
AND INFORMATION SEE  
1/4" SCALE PLANS.

SECOND FLOOR PLAN - BUILDING 100

SCALE: 1/8" = 1'-0"



ROOF PLAN - BUILDING 100

SCALE: 1/8" = 1'-0"

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**BUILDING 100**

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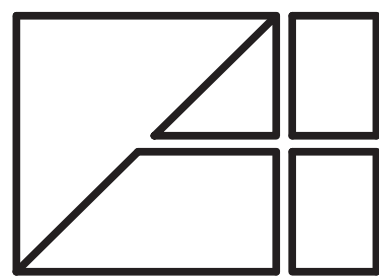
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SHEET TITLE  
 BUILDING ELEVATION  
 BUILDING 100

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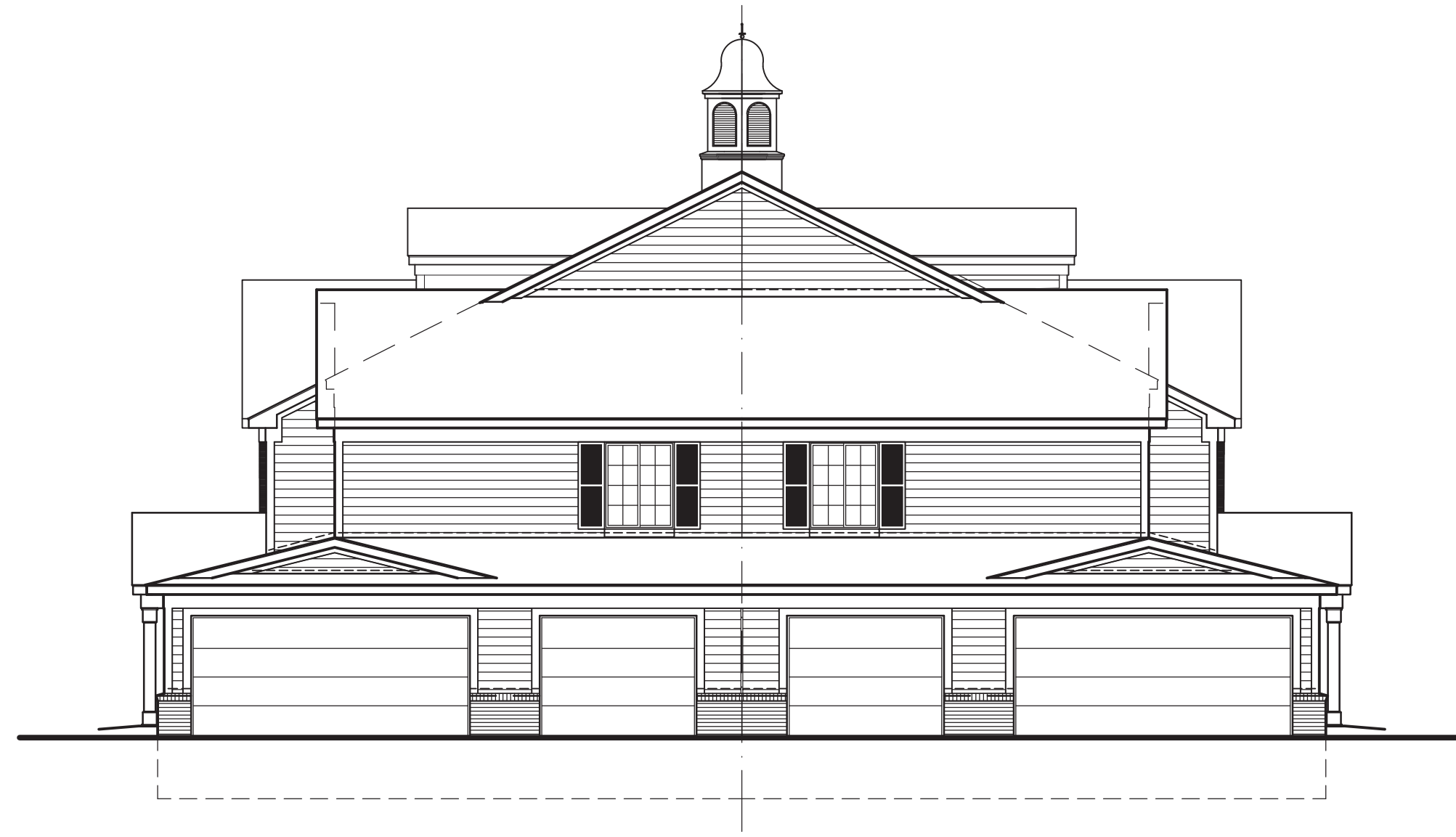
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LEFT SIDE ELEVATION - BUILDING TYPE 100

RIGHT SIDE ELEVATION - OPPOSITE SIMILAR

SCALE: 1/8" = 1'-0"



FRONT ELEVATION - BUILDING TYPE 100

REAR ELEVATION - OPPOSITE SIMILAR

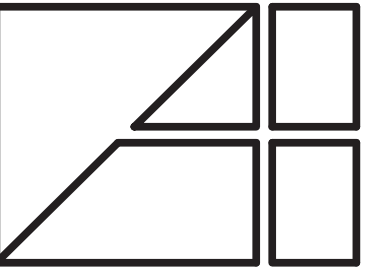
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NOTE:  
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 AND INFORMATION SEE  
 1/4" SCALE PLANS.

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 32 047875 1/4"=1'-0" 02 PLAN.dwg 2/22/2022 10:30 AM  
 32 047875 1/4"=1'-0" 02 PLAN.dwg 2/22/2022 10:30 AM



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FOUNDATION PLAN  
 BUILDING 200

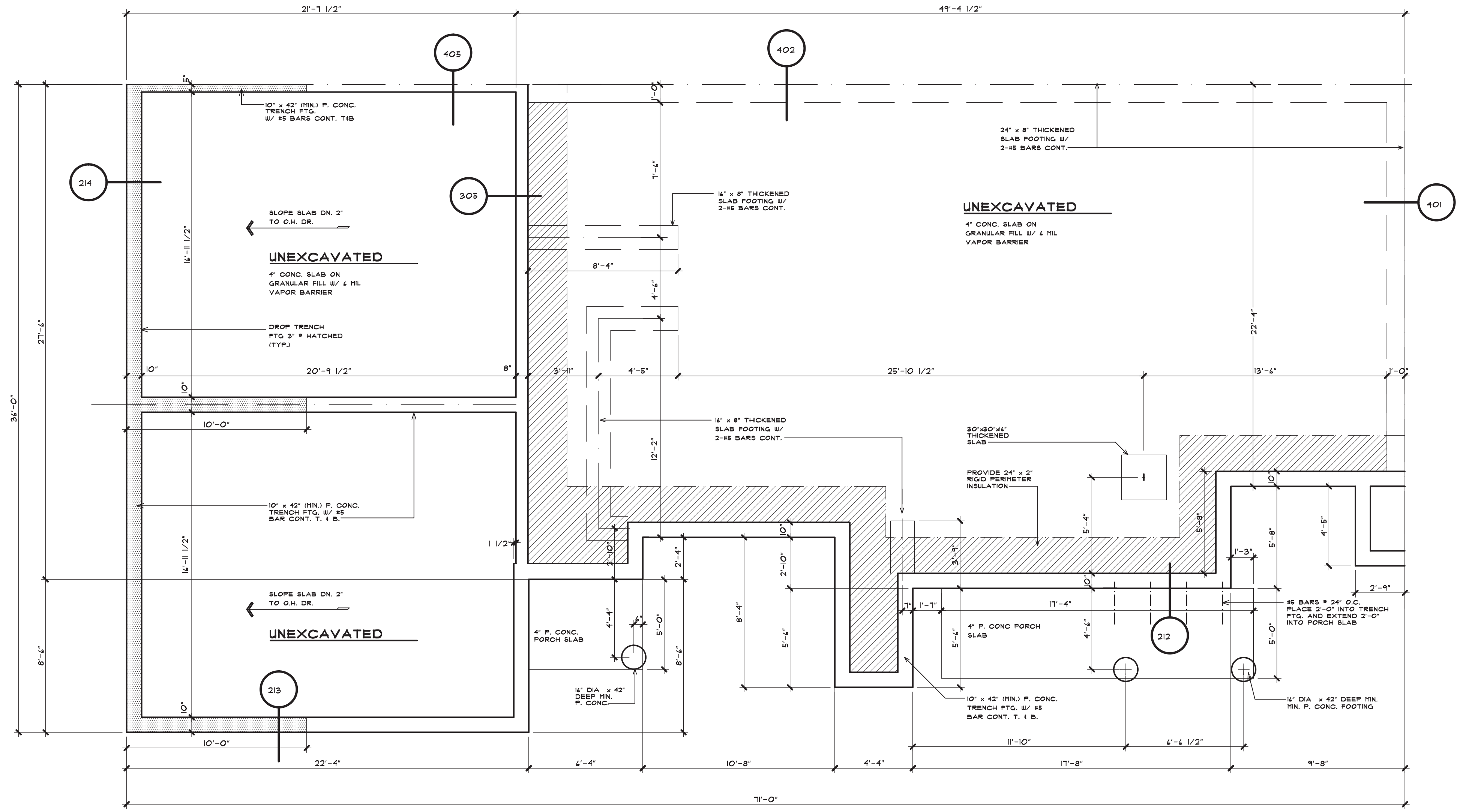
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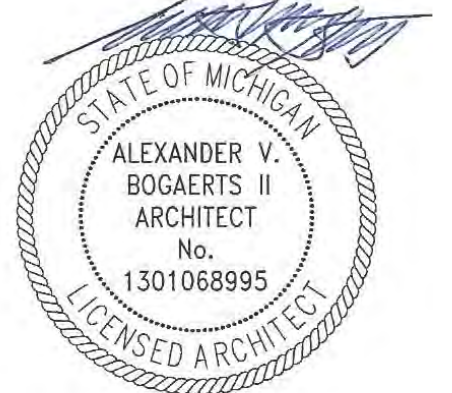
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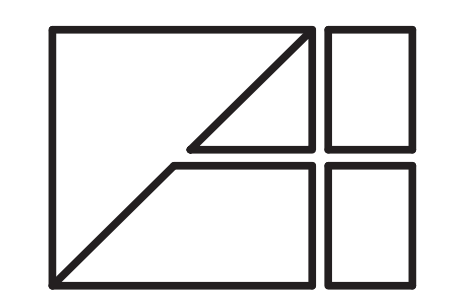
FOUNDATION PLAN - BUILDING TYPE 200

SCALE: 1/4" = 1'-0"

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**FIRST FLOOR PLAN**  
**SECOND FLOOR PLAN**  
**BUILDING TYPE 200**

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 202

**STRUCTURAL NOTES:**

(2) 2x8 HEADERS TO BEAR ON (1) ONE JACK STUD UNLESS NOTED OTHERWISE.  
 (2) 2x6 LARGER HEADERS TO BEAR ON (2) TWO JACK STUDS UNLESS NOTED OTHERWISE.

ALL PRE-ENGINEERED HEADERS TO BEAR ON REQUIRED NUMBER OF STUDS TO MATCH WIDTH OF HEADER MATERIAL OR ON (2) TWO JACK STUDS AT PARALLEL WALL CONDITION UNLESS NOTED OTHERWISE.

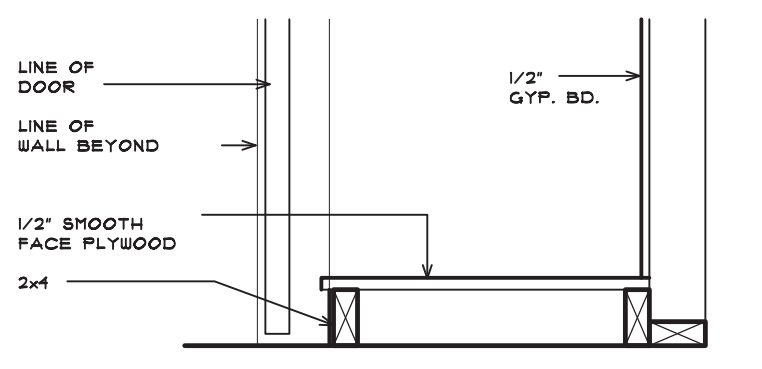
ALL PRE-ENGINEERED LUMBER HEADERS SHALL BE BUILT-UP FROM THE NUMBER OF HEADERS INDICATED ON DRAWINGS. ALL MEMBERS SHALL BE SECURED WITH NAILS OR BOLTS AS SPECIFIED BY THE MANUFACTURER FOR SIZES INDICATED.

ALL GIRDER TRUSSES TO BEAR ON (2) TWO STUDS MINIMUM OR AS REQUIRED TO MATCH NUMBER OF TRUSS PLS UNLESS NOTED OTHERWISE ON DRAWINGS.

TRUSS FABRICATOR/CONTRACTOR TO PROVIDE ALL HANGERS W/ MODEL No. CLEARLY STAMPED + LAYOUT DRAWINGS CLEARLY INDICATING LOCATION OF VARIOUS HANGERS REQUIRED.

CARPENTER CONTRACTOR TO INSTALL NAIL SIZES + NUMBER REQ'D. AS SPECIFIED FOR EACH TYPE OF HANGER.

PROVIDE SOLID BLOCKING WITHIN FLOOR, WALL AND OTHER VOID SPACES UNDER OR ALIGNED WITH HEADER AND GIRDER TRUSS BEARING CONDITIONS DOWN TO SOLID BEARING (SUCH AS FOUNDATION OR BEAM). SOLID BLOCKING SIZE SHALL NOT BE LESS THAN BEARING STUD SIZES SUPPORTING THE STRUCTURAL HEADERS AND GIRDER TRUSSES.



**NOTE:**  
 FIRE RATED WALLS ARE SHOWN SHADED.  
 AT 3 1/2" THK. SHADED WALLS WITHIN A UNIT OR GARAGE, PROVIDE 5/8" UL CLASS. GYP. BD. BOTH SIDES OF WALL. 1 HOUR FIRE RATED, UL USOS 1 USO4 PROVIDE FIREGLASS INSUL. W. WALLS BETWEEN GARAGE AND DWELLING UNIT.

**SQUARE FOOTAGE UNIT 201**

1ST FLOOR	1253 SQ FT
TOTAL	1253 SQ FT

**SQUARE FOOTAGE UNIT 202**

1ST FLOOR	102 SQ FT
2ND FLOOR	1238 SQ FT
TOTAL	1340 SQ FT

**DOOR SCHEDULE**

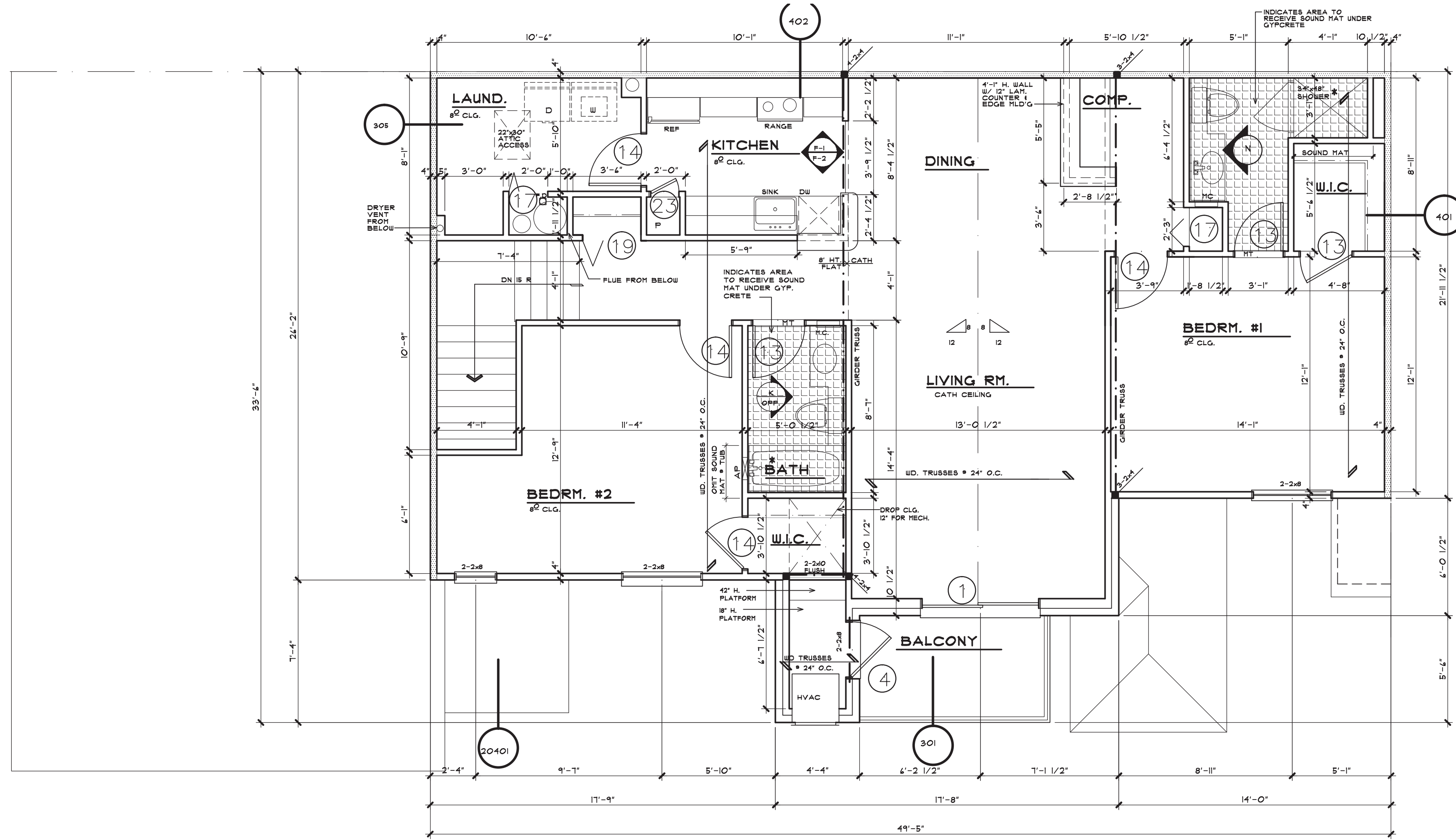
TAG	SIZE	TYPE	STYLE
1	4'-0"x6'-8"	SLIDING GLASS DOOR	
2	NOT USED		
3	NOT USED		
4	3'-0"x4'-8"	INSULATED STEEL ENTRY DOOR	STYLE - A
5	NOT USED		
6	NOT USED		
7	NOT USED		
8	NOT USED		
9	NOT USED		
10	NOT USED		
11	NOT USED		
12	2'-0"x4'-8"	SWING HOLLOW CORE	FLUSH STYLE - C
13	2'-4"x4'-8"	SWING HOLLOW CORE	FLUSH STYLE - C
14	2'-8"x4'-8"	SWING HOLLOW CORE	FLUSH STYLE - C
15	2'-8"x4'-8"	INSULATED STEEL FIRE DOOR	FLUSH STYLE - C
16	2'-10"x4'-8"	SWING HOLLOW CORE	STYLE - C

**DOOR SCHEDULE**

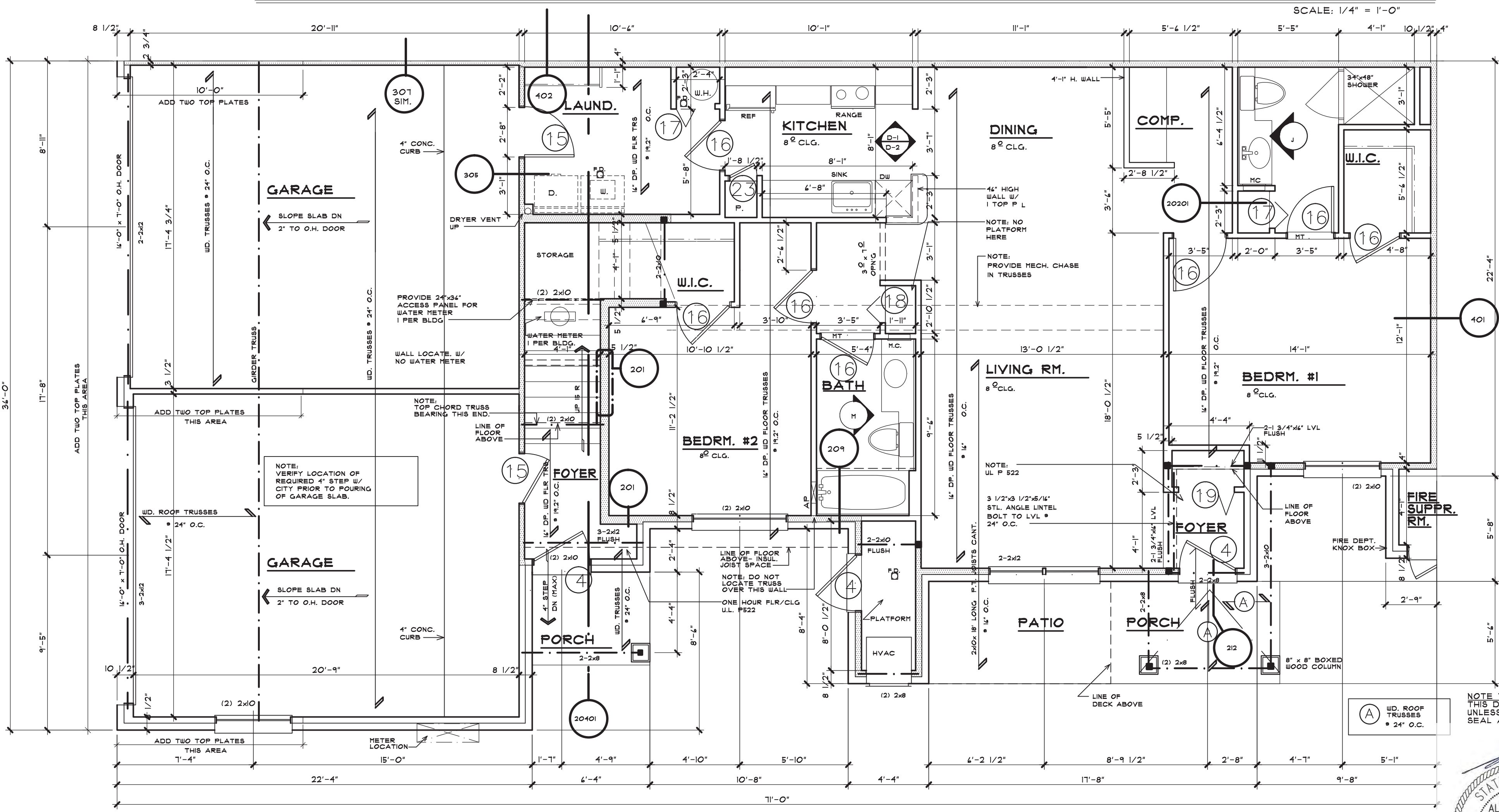
TAG	SIZE	TYPE	STYLE
17	2'-0"x4'-8"	BI-FOLD HOLLOW CORE	FLUSH STYLE - D
18	2'-4"x4'-8"	BI-FOLD HOLLOW CORE	FLUSH STYLE - D
19	3'-0"x4'-8"	BI-FOLD HOLLOW CORE	FLUSH STYLE - D
20	4'-0"x4'-8"	BI-FOLD HOLLOW CORE	FLUSH STYLE - E
21	5'-0"x4'-8"	BI-FOLD HOLLOW CORE	FLUSH STYLE - E
22	4'-0"x4'-8"	BI-FOLD HOLLOW CORE	FLUSH STYLE - E
23	1'-4"x4'-8"	SWING HOLLOW CORE	FLUSH STYLE - C

**NOTE:**  
 NON-COMBUSTIBLE HVAC + EXHAUST DUCTS LOCATED IN THE FLOOR TRUSS SPACE, WHICH DO NOT PENETRATE THE FLOOR OF A FIRE RESISTANCE RATED FLOOR/CEILING ASSEMBLY, BUT DO PENETRATE THE CEILING OF A FIRE RESISTANCE RATED FLOOR/CEILING ASSEMBLY SHALL BE PROVIDED WITH AN APPROVED CEILING FIRE DAMPER AT THE CEILING PENETRATION. CEILING FIRE DAMPERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS LISTED IN A FIRE RESISTANCE RATED DESIGN OR SHALL BE LABELED TO FUNCTION AS A HEAT BARRIER FOR AIR-HANDLING OUTLET/INLET PENETRATIONS IN THE CEILING OF A FIRE RESISTANCE RATED ASSEMBLY. PENETRATIONS BY AN AIR DUCT THROUGH A FIRE RESISTANCE RATED FLOOR/CEILING ASSEMBLY WHICH CONNECT NOT MORE THAN TWO STORIES SHALL BE PROVIDED WITH A FIRE DAMPER THAT COMPLIES WITH UL 855 INSTALLED AT THE FLOOR LINE. ALL FIRE DAMPERS SHALL BE ACCESSIBLE.

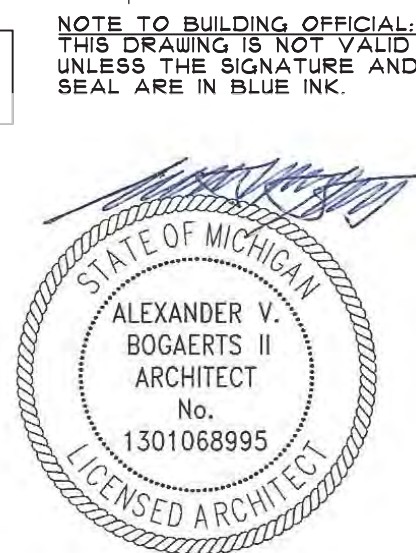
**NOTE:**  
 ALL 2x4 W.D. STUD IN NON BEARING INTERIOR PARTITIONS TO BE SPACED @ 24" O.C. PROVIDE ADDITIONAL STUDS AS NECESSARY FOR PROPER INSTALLATION OF MEDICINE CABINETS RETURN AIR GRILLES ECT. ALL KITCHEN WALLS INTENDED TO SUPPORT KITCHEN CABINETS TO HAVE STUDS SPACED A MAX. OF 16" O.C.



SECOND FLOOR PLAN - BUILDING TYPE 200 - UNIT 202

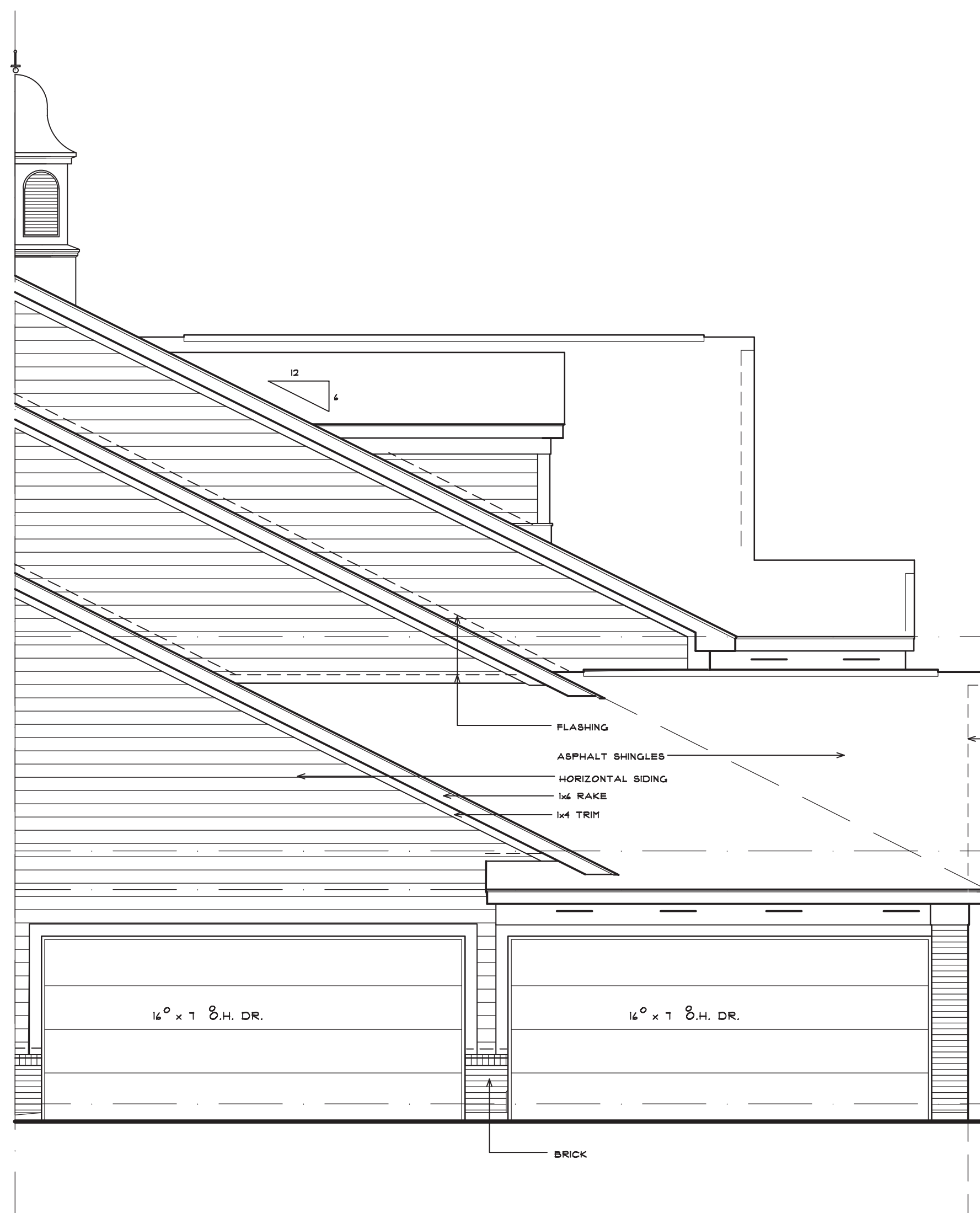


FIRST FLOOR PLAN - BUILDING TYPE 200 - UNIT 201



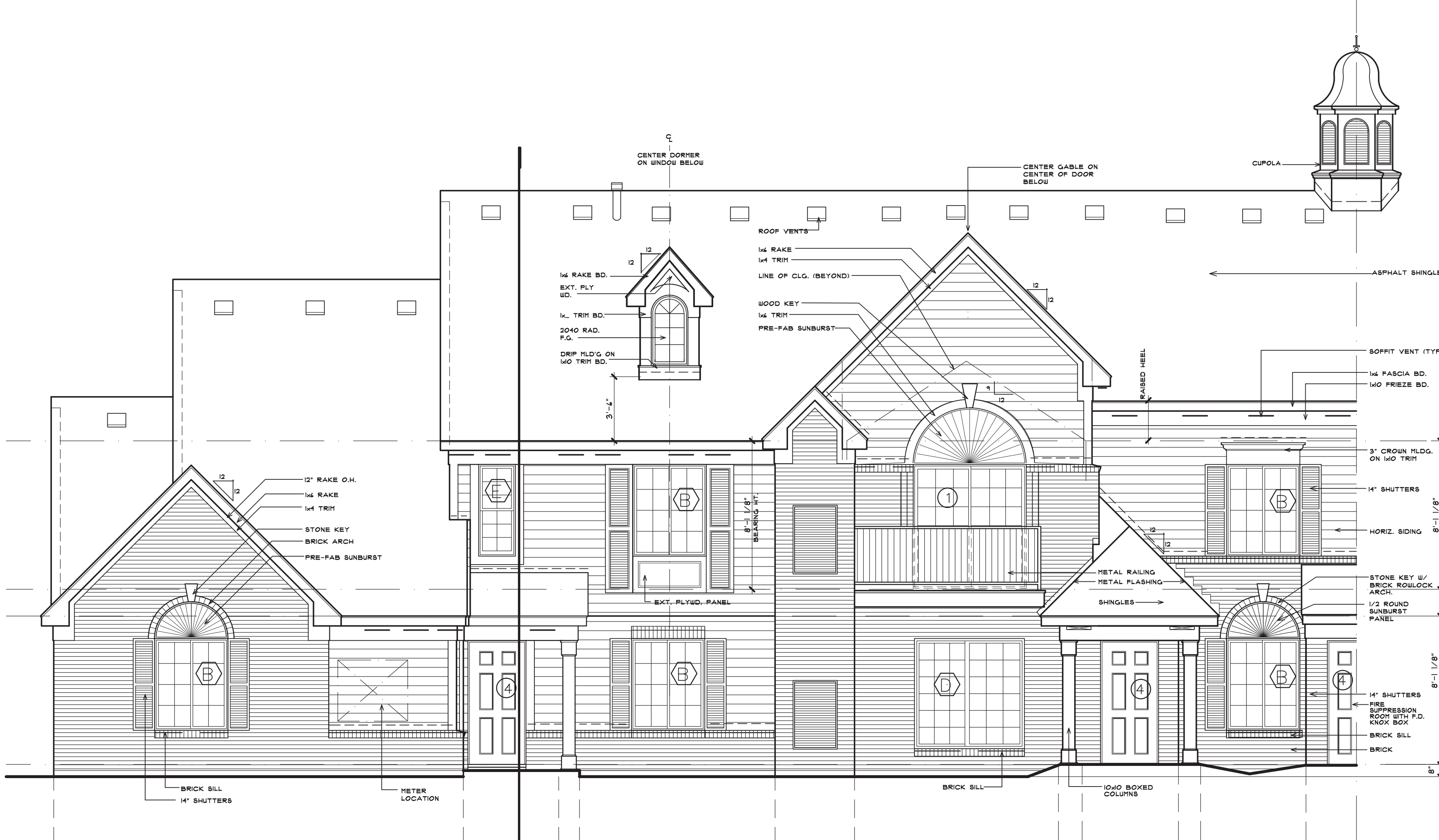
SCALE: 1/4" = 1'-0"





LEFT SIDE ELEVATION - BLDG. 200

SCALE: 1/4" = 1'-0"



FRONT ELEVATION - BUILDING TYPE 200

SCALE: 1/4" = 1'-0"

WINDOW SCHEDULE		
TAG	SIZE	REMARKS
A	4030 SLIDER	
B	4050 SLIDER	EGRESS
C	5050 SLIDER	EGRESS
D	4040 SLIDER	EGRESS
E	1-3050 SINGLE HUNG	
F	3050 DOUBLE HUNG	EGRESS

DOOR SCHEDULE			
TAG	SIZE	TYPE	STYLE
1	6'-0" x 6'-8"	SLIDING GLASS DOOR	
4	3'-0" x 6'-8" EXTERIOR	INSULATED STEEL ENTRY DOOR	STYLE - A

UNLESS NOTED OTHERWISE - OVERHANG DIMENSIONS ARE 12" FROM FRAME WALL. RAKE DIMENSIONS ARE 8" FROM FRAME AT BRICK WALLS AND 4" FROM FRAME AT SIDING WALLS.

STEEL LINTEL SCHEDULE	
MAX. CLEAR SPAN	LINTEL SIZE
8'-0" OR LESS	3 1/2" x 3 1/2" x 5/16"
7'-0" OR LESS	4" x 3 1/2" x 5/16"
8'-0" OR LESS	5" x 3 1/2" x 5/16"
8'-0" OR LESS	5" x 3 1/2" x 3/8"
10'-0" OR LESS	4" x 3 1/2" x 3/8"

NOTE: THIS SCHEDULE APPLIES UNLESS NOTED OTHERWISE ON THE PLANS AND/OR ELEVATIONS.

PROPOSED VENT AREA:		UNIT 202
VENT AREA RATIO 1:50		
ATTIC AREA=	1296 SQ.FT. ( /150)	
VENT AREA=	8.64 SQ.FT. x 44= 1245 SQ.IN.	
50% SOFFIT AND 50% RIDGE=	623 SQ.IN. EACH	
CONTINUOUS RIDGE TYPE=	18 SQ.IN. PER FT. = 24 LIN.FT.	
LOUVER AT RIDGE TYPE=	50 SQ.IN. EA. = 13 UNITS	
GABLE END TYPE (TOTAL)	SQ.IN. = UNITS	
TOTAL VENTING AT RIDGE=	1082 SQ.IN.	
CONTINUOUS SOFFIT TYPE=	SQ.IN. PER FT. = LIN.FT.	
LOUVER TYPE 8" x 16" =	54 SQ.IN. EA. = 12 UNITS	
TOTAL VENTING AT SOFFIT=	648 SQ.IN.	

PROPOSED VENT AREA:		GARAGES UNIT 201 + 202
VENT AREA RATIO 1:50		
ATTIC AREA=	184 SQ.FT. ( /150)	
VENT AREA=	5.23 SQ.FT. x 44= 153 SQ.IN.	
50% SOFFIT AND 50% RIDGE=	377 SQ.IN. EACH	
CONTINUOUS RIDGE TYPE=	18 SQ.IN. PER FT. = 21 LIN.FT.	
LOUVER AT RIDGE TYPE=	50 SQ.IN. EA. = 8 UNITS	
GABLE END TYPE (TOTAL)	SQ.IN. = UNITS	
TOTAL VENTING AT RIDGE=	378 SQ.IN.	
CONTINUOUS SOFFIT TYPE=	SQ.IN. PER FT. = LIN.FT.	
LOUVER TYPE 8" x 16" =	54 SQ.IN. EA. = 7 UNITS	
TOTAL VENTING AT SOFFIT=	378 SQ.IN.	

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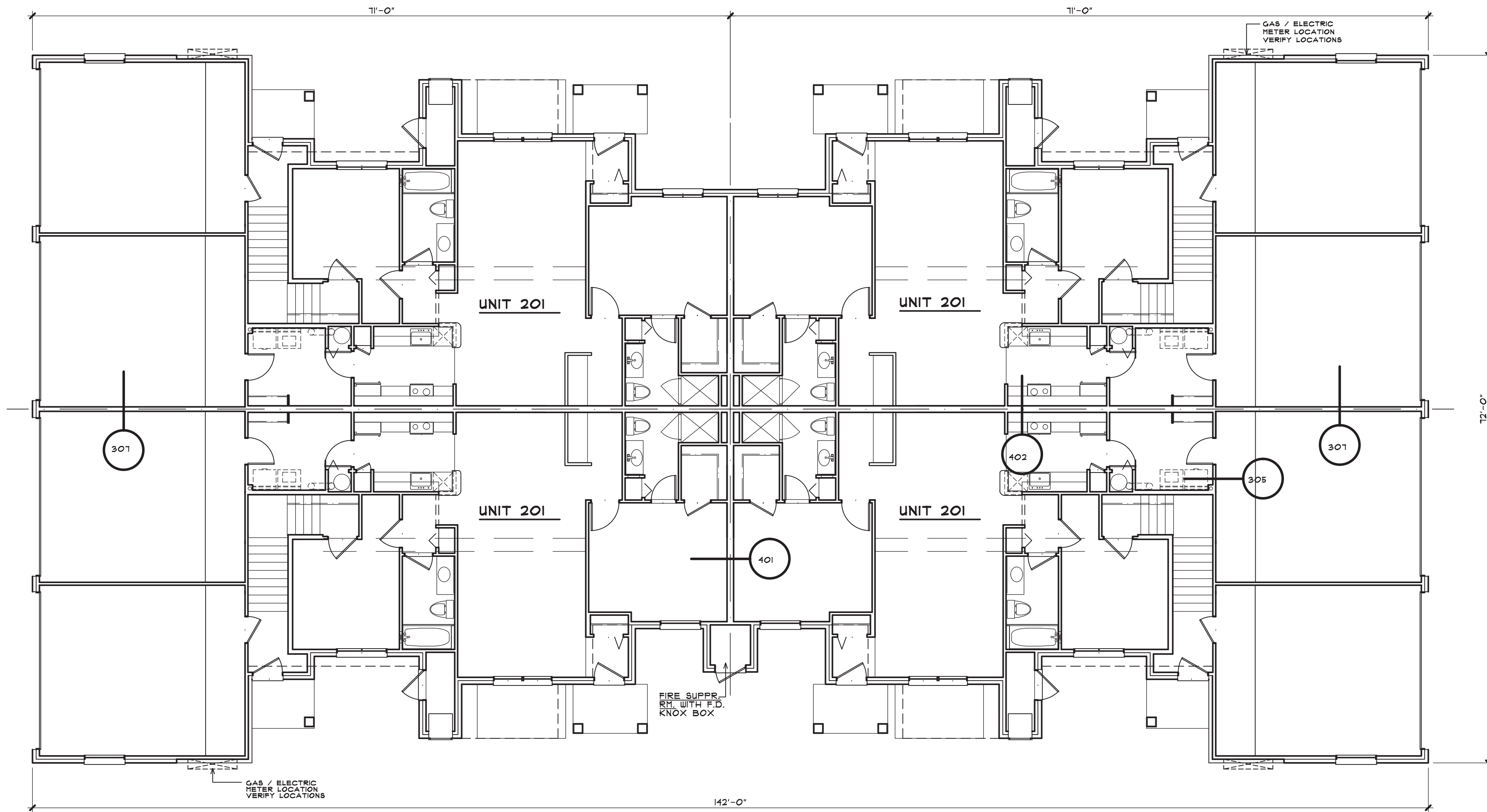
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 Bloomfield Hills, MI 48302  
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CLIENT/PROJECT:  
 WESTBURY II  
 ELEVATE PROP. PARTNERS  
 BUILDING 200  
 LIVINGSTON COUNTY, MICHIGAN

SHEET TITLE:  
 ELEVATION  
 BUILDING 200

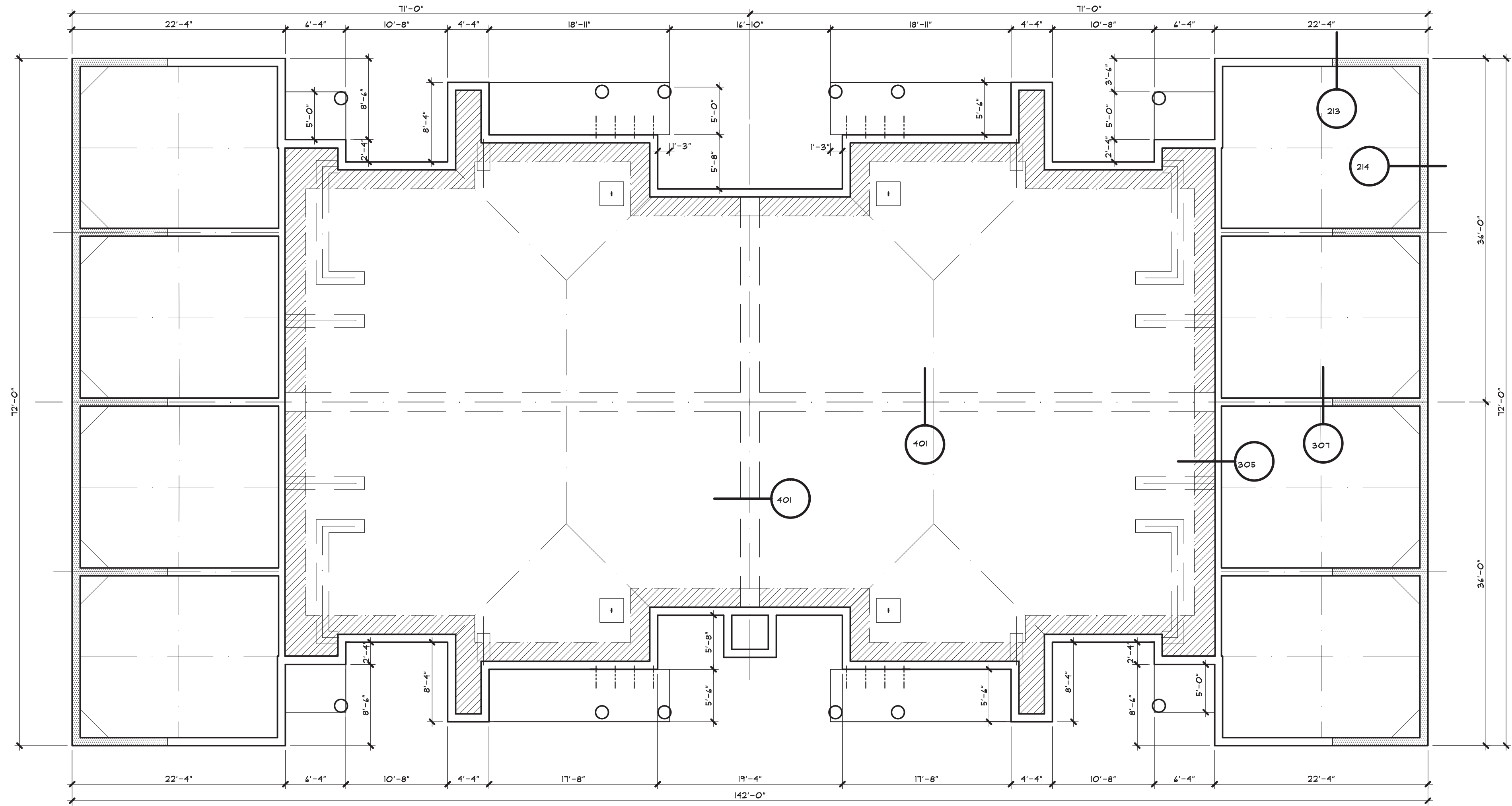
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 JOB NUMBER  
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 DATE  
 SHEET NUMBER  
 203  
 26





FIRST FLOOR PLAN - BUILDING 200

SCALE: 1/8" = 1'-0"



FOUNDATION PLAN - BUILDING 200

SCALE: 1/8" = 1'-0"

NOTE:  
FOR ADDITIONAL NOTES  
AND INFORMATION SEE  
1/4" SCALE PLANS.

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LIVINGSTON COUNTY, MICHIGAN

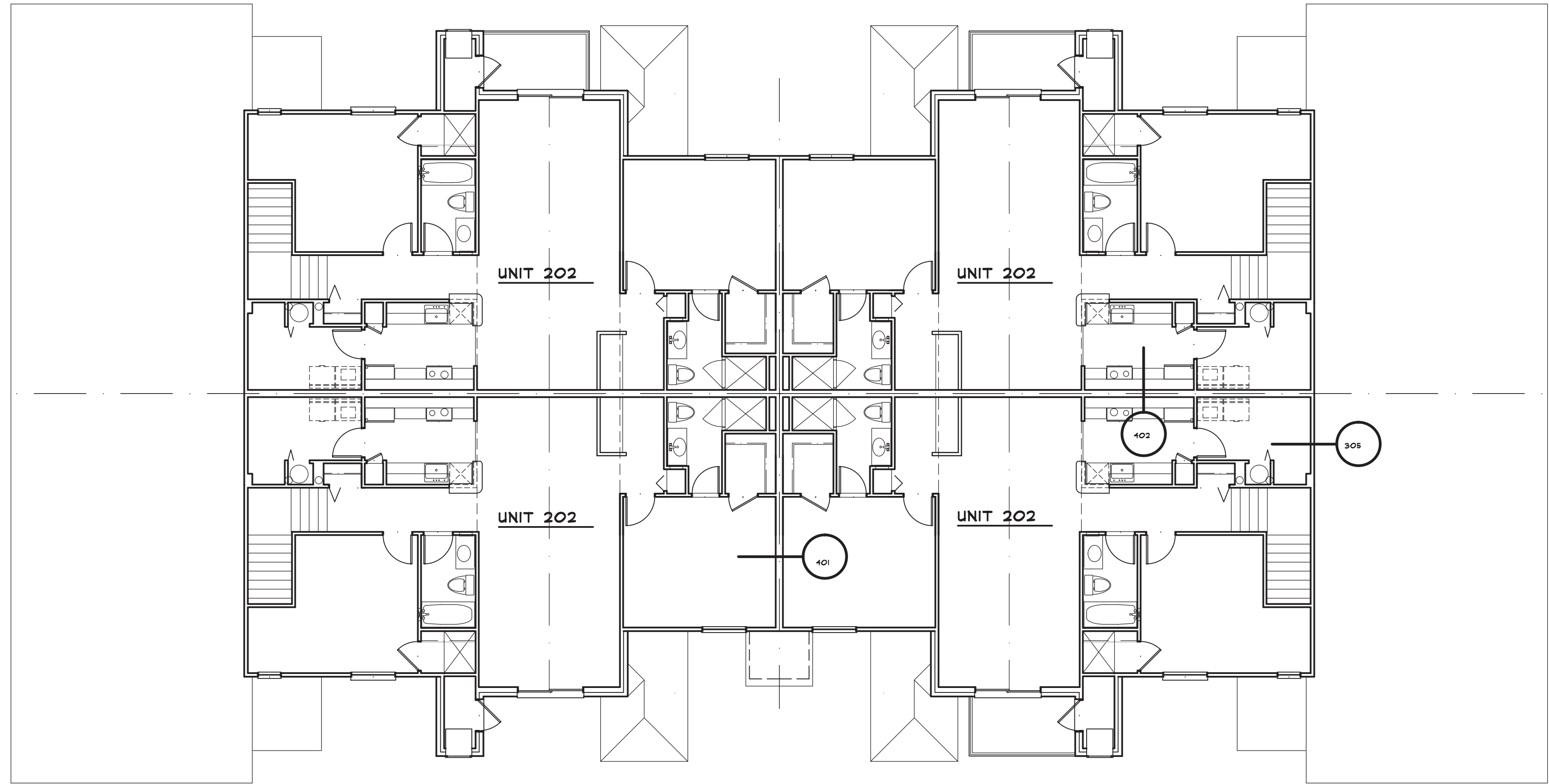
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BUILDING PLANS  
BUILDING 200

DATE: 02/22/2022

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REVISION R1  
02/22/2022

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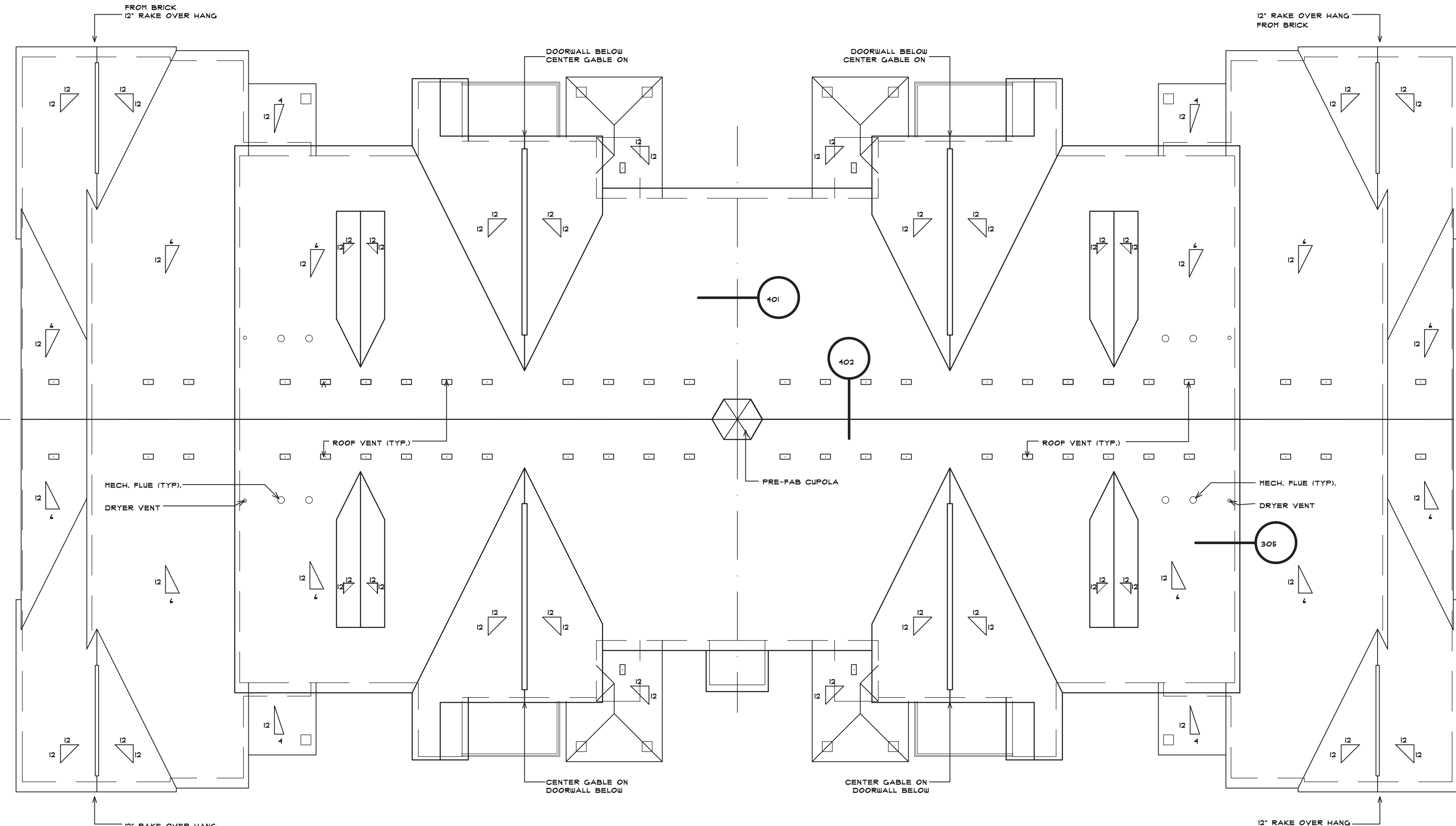
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NOTE:  
FOR ADDITIONAL NOTES  
AND INFORMATION SEE  
1/4" SCALE PLANS.

SECOND FLOOR PLAN - BUILDING 200

SCALE: 1/8" = 1'-0"



ROOF PLAN - BUILDING 200

SCALE: 1/8" = 1'-0"

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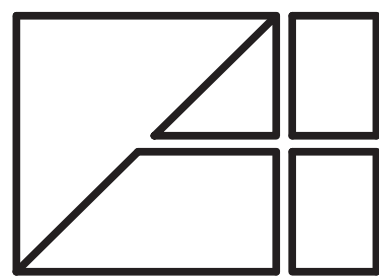
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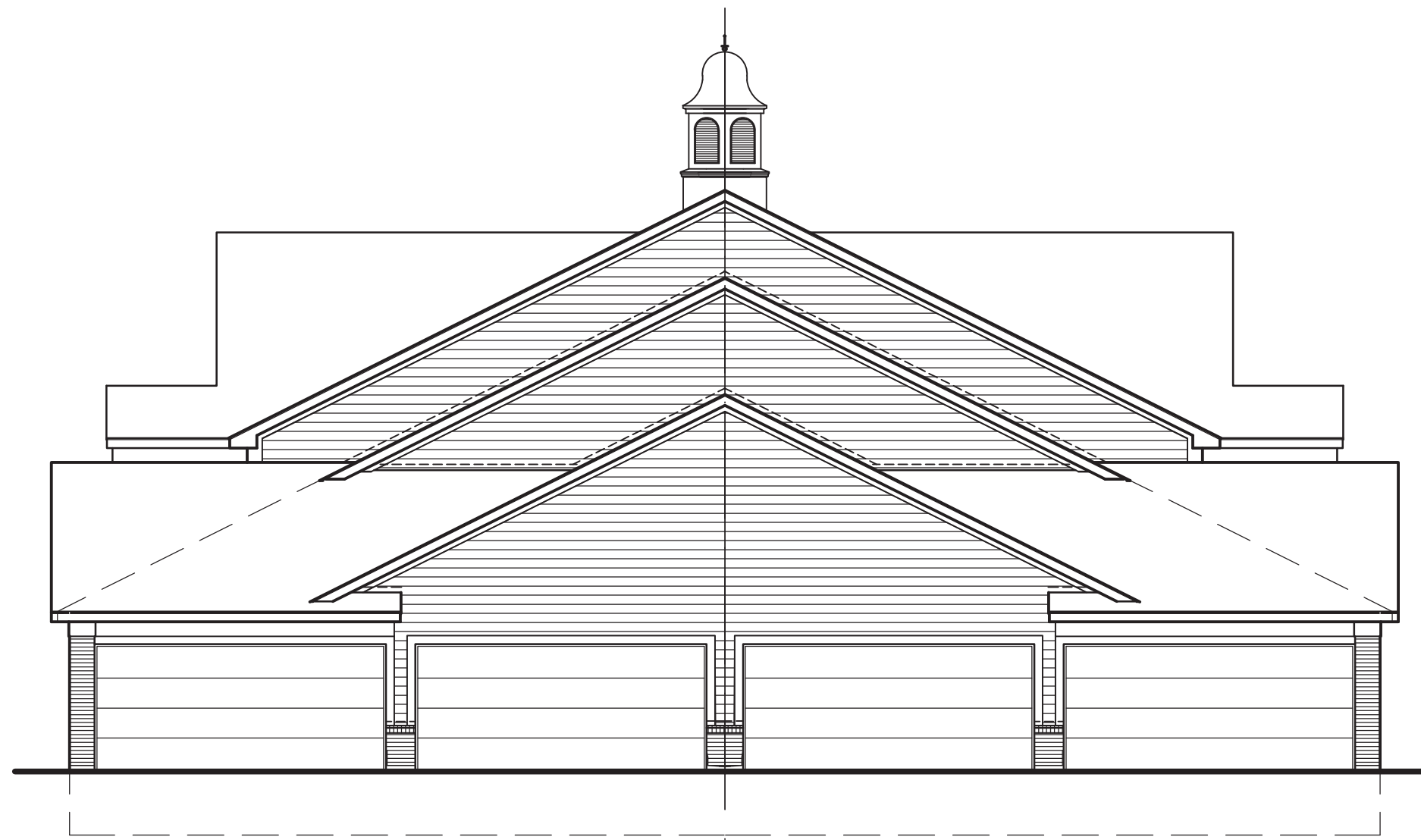
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LEFT SIDE ELEVATION BUILDING TYPE 200

RIGHT SIDE ELEVATION - OPPOSITE SIMILAR

SCALE: 1/8" = 1'-0"



FRONT ELEVATION BUILDING TYPE 200

REAR ELEVATION - OPPOSITE SIMILAR

SCALE: 1/8" = 1'-0"

FIRE SUPPR. RM.  
 WITH F.D. KNOX BOX

NOTE:  
 FOR ADDITIONAL NOTES  
 AND INFORMATION SEE  
 1/4" SCALE PLANS.

SHEET TITLE  
 BUILDING ELEVATION  
 BUILDING 200

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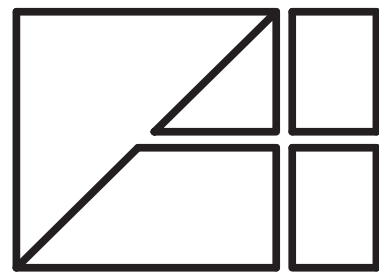
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FOUNDATION PLAN  
 BUILDING 300

WESTBURY II  
 ELEVATE PROP. PARTNERS  
 LIVINGSTON COUNTY, MICHIGAN

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SHEET NUMBER

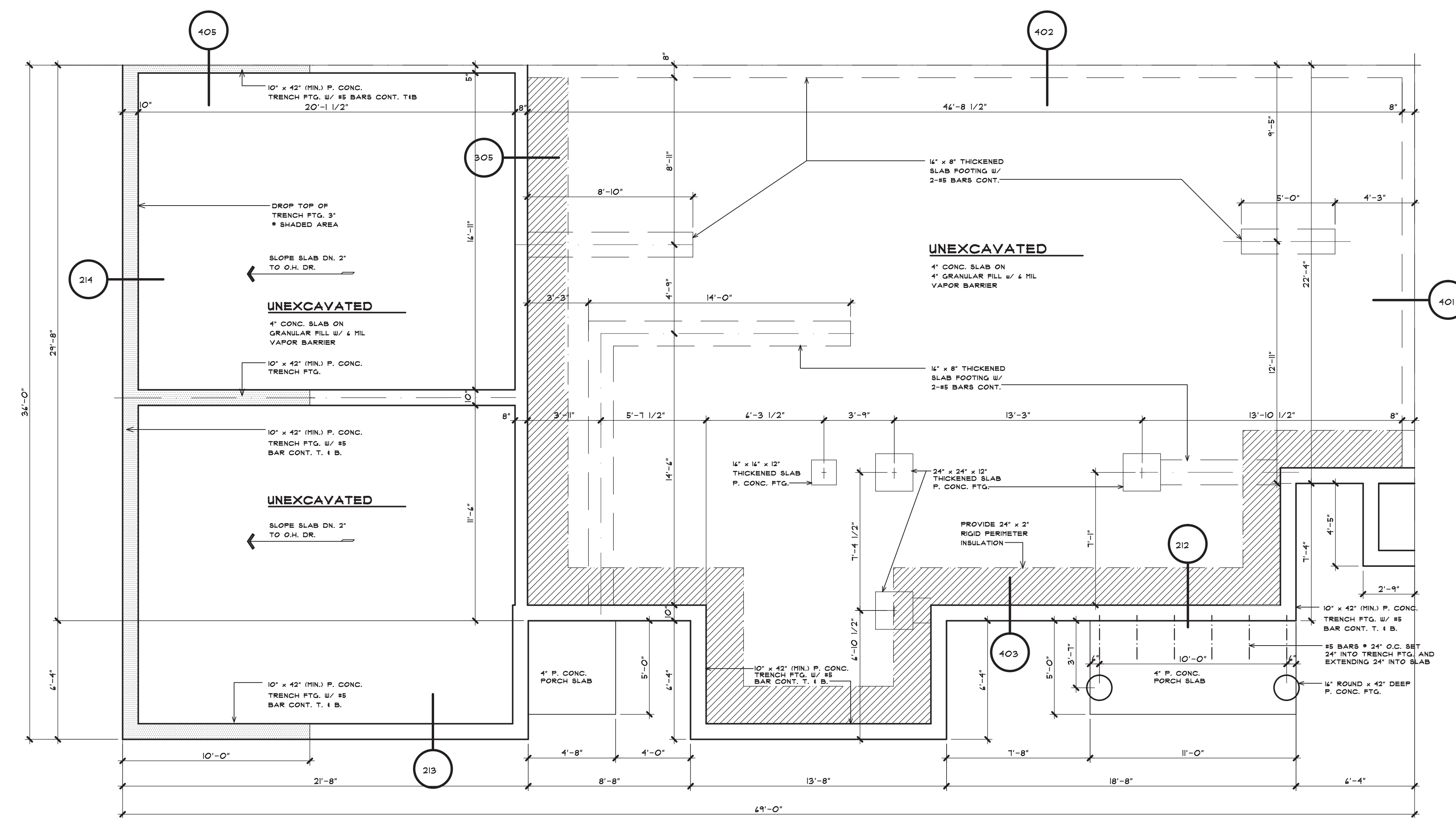
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**STRUCTURAL NOTES:**

- (2) 2# HEADERS TO BEAR ON (1) ONE JACK STUD UNLESS NOTED OTHERWISE.
- (2) 2#0 LARGER HEADERS TO BEAR ON (2) TWO JACK STUDS UNLESS NOTED OTHERWISE.
- ALL PRE-ENGINEERED HEADERS FRAMED PERPENDICULAR TO WALL LINE SHALL BEAR ON REQUIRED NUMBER OF STUDS TO MATCH WIDTH OF HEADER MATERIAL.
- ALL PRE-ENGINEERED HEADERS FRAMED PARALLEL TO WALL LINE SHALL BEAR ON A MINIMUM (2) TWO JACK STUDS UNLESS NOTED OTHERWISE.
- ALL PRE-ENGINEERED LUMBER HEADERS SHALL BE BUILT-UP FROM THE NUMBER OF HEADERS INDICATED ON DRAWINGS. ALL MEMBERS SHALL BE SECURED WITH NAILS OR BOLTS AS SPECIFIED BY THE MANUFACTURER FOR SIZES INDICATED.
- ALL GIRDER TRUSSES TO BEAR ON (2) TWO STUDS MINIMUM OR AS REQUIRED TO MATCH NUMBER OF TRUSS PLYS, WHICH EVER IS GREATER.
- TRUSS FABRICATOR/CONTRACTOR TO PROVIDE ALL HANGERS W/ MODEL No. CLEARLY STAMPED & LAYOUT DRAWINGS CLEARLY INDICATING LOCATION OF VARIOUS HANGERS REQUIRED.
- CARPENTER CONTRACTOR TO INSTALL NAIL SIZES & NUMBER REQ'D. AS SPECIFIED FOR EACH TYPE OF HANGER.
- LVL DESIGN VALUES FOR MODULUS OF ELASTICITY ( E ) SHALL BE 2,000,000 PSI ( 2.0 E )

**ELECTRICAL NOTES:**

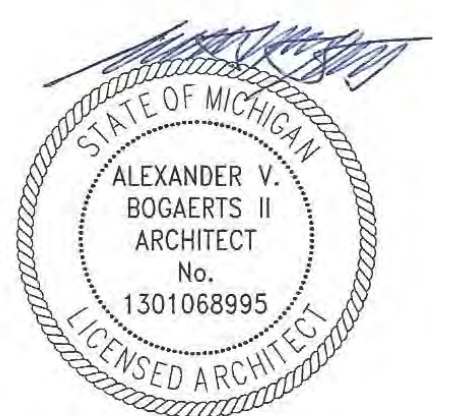
- ALL RECESSED LIGHT ARE TO BE (IC INSULATION CONTACT) RATED.
- ALL RECESSED FIXTURES ARE TO BE SEALED TO LIMIT AIR LEAKAGE BETWEEN CONDITIONED AND UNCONDITIONED SPACES
- PROVIDE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR ALL 125-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE RECEPTACLES INSTALLED IN GARAGES AND UNFINISHED BASEMENTS AREAS EXCEPT THOSE FOR FIRE OR BURGLAR ALARM SYSTEMS.
- A MINIMUM OF 15% OF ALL PERMANENTLY INSTALLED LIGHTING FIXTURES MUST USE CFL BULBS OR OTHER HIGH EFFICIENCY LAMPS
- ALL INTERIOR TREADS AND LANDINGS MUST BE ILLUMINATED WITH NOT LESS THAN 1 FOOT CANDLE.
- EXTERIOR STAIRWAYS SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE LOCATED AT THE TOP OF THE LANDING.



FOUNDATION PLAN - BUILDING TYPE 300

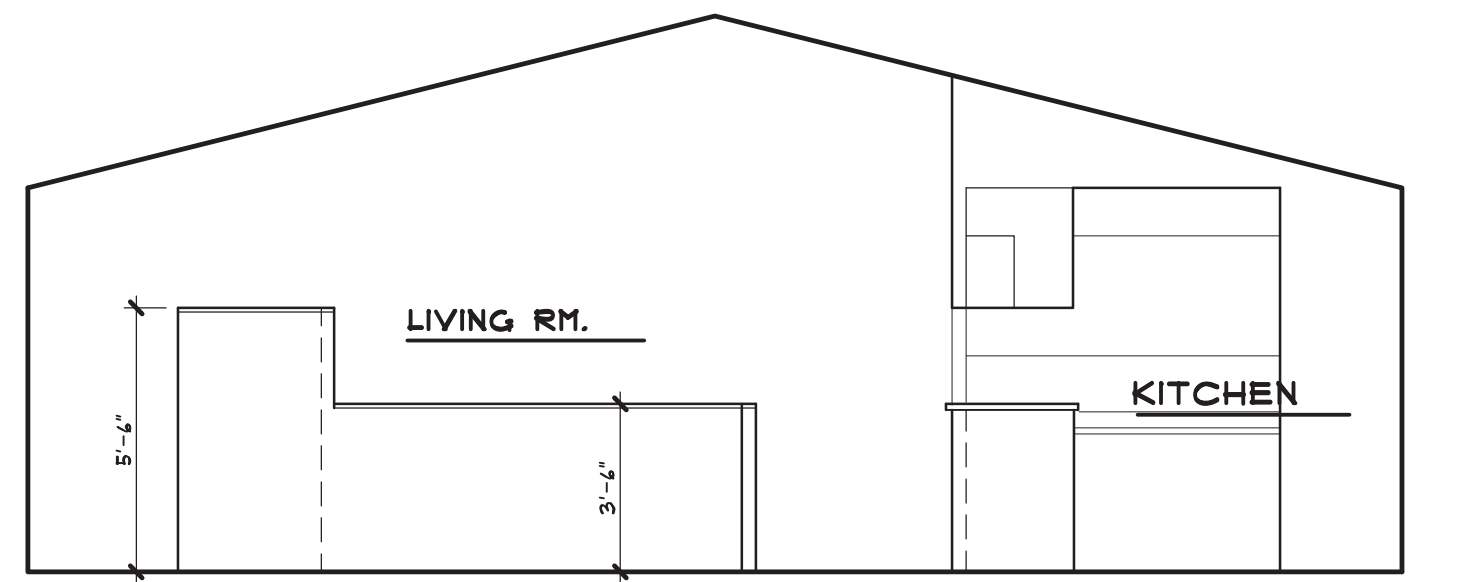
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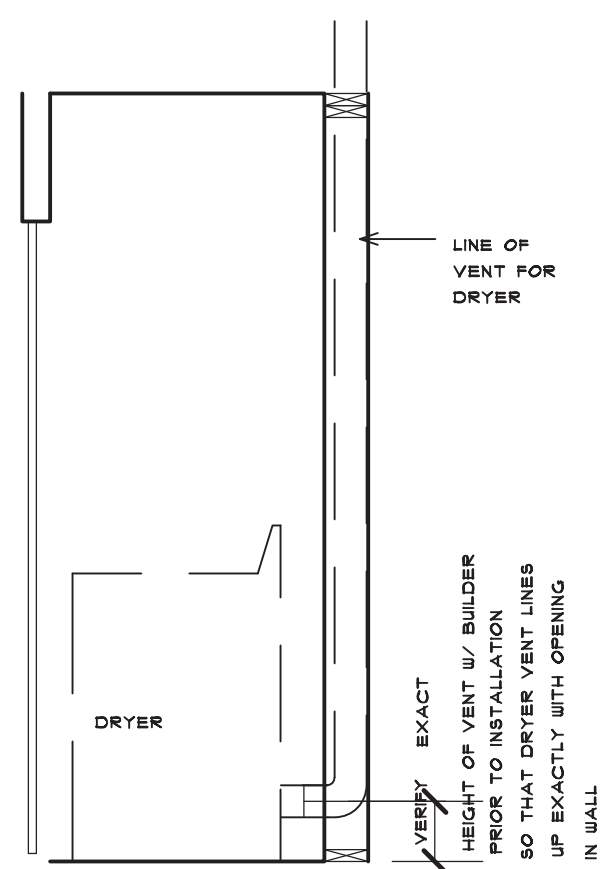


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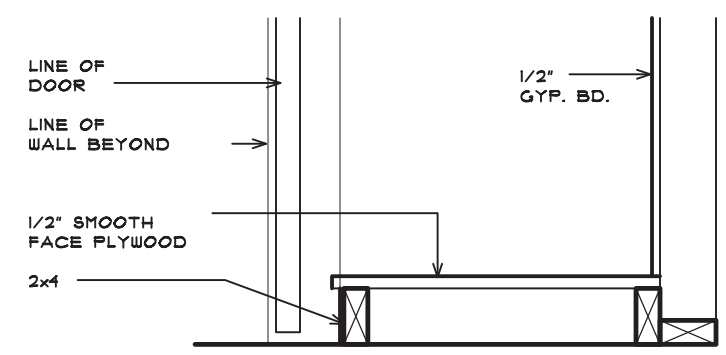




A INTERIOR ELEVATION



30201 DRYER VENT DETAIL



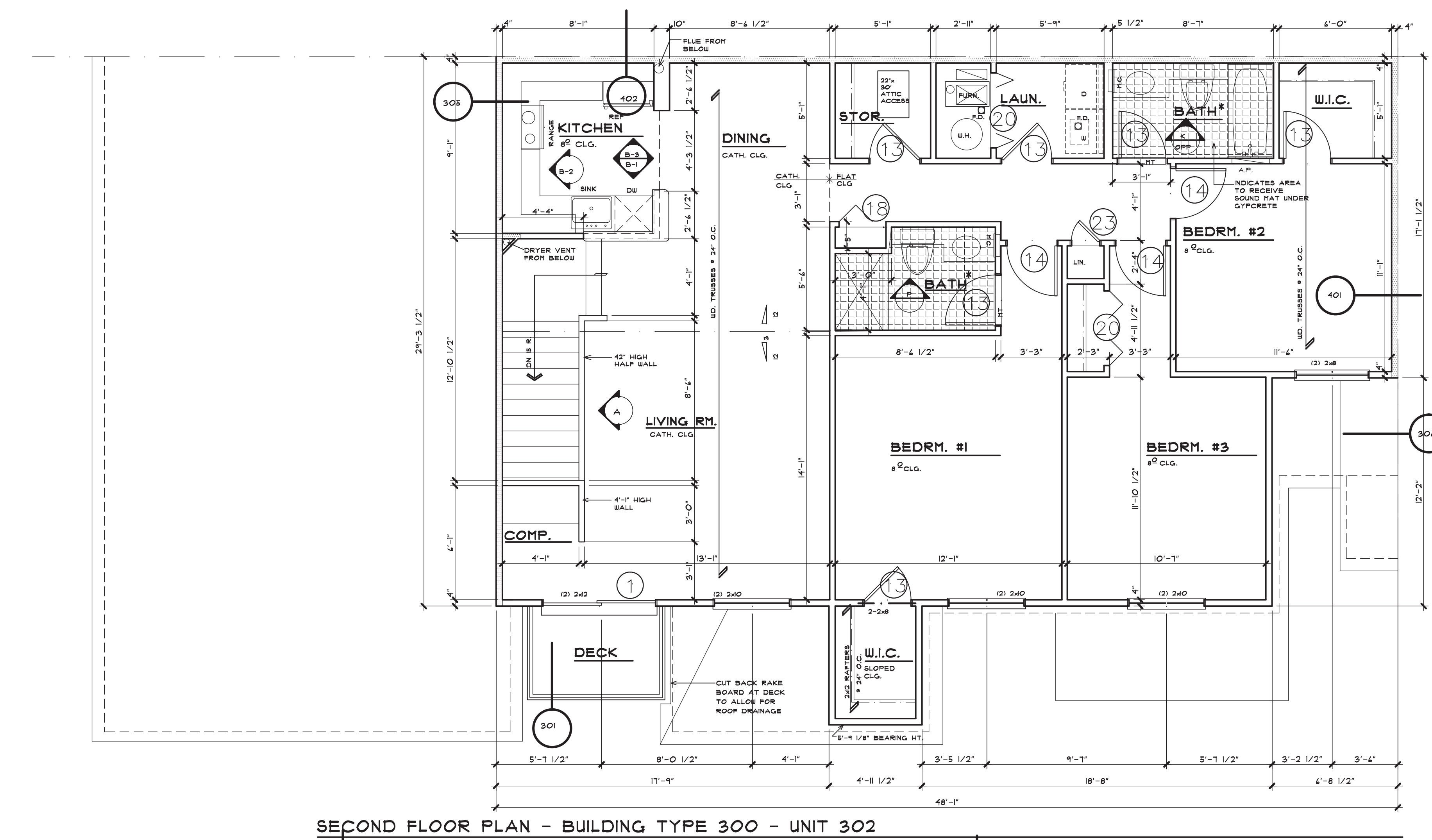
30102 SECTION (BASE OF LINEN CLOSET)

TAG	SIZE	TYPE	STYLE
1	4'-0"x6'-8"	SLIDING GLASS DOOR	
2	NOT USED	SLIDING GLASS DOOR	
3	NOT USED	SLIDING GLASS DOOR	
4	3'-0"x4'-8"	INSULATED STEEL ENTRY DOOR	STYLE - A
5	NOT USED		
6	NOT USED		
7	NOT USED		
8	NOT USED		
9	NOT USED		
10	NOT USED		
11	NOT USED		
12	2'-0"x4'-8"	BI-POLD HOLLOW CORE	FLUSH STYLE - C
13	2'-4"x4'-8"	BI-POLD HOLLOW CORE	FLUSH STYLE - C
14	2'-8"x4'-8"	BI-POLD HOLLOW CORE	FLUSH STYLE - C
15	2'-8"x4'-8"	INSULATED STEEL FIRE DOOR	FLUSH STYLE - C
16	2'-0"x4'-8"	BI-POLD HOLLOW CORE	FLUSH STYLE - C

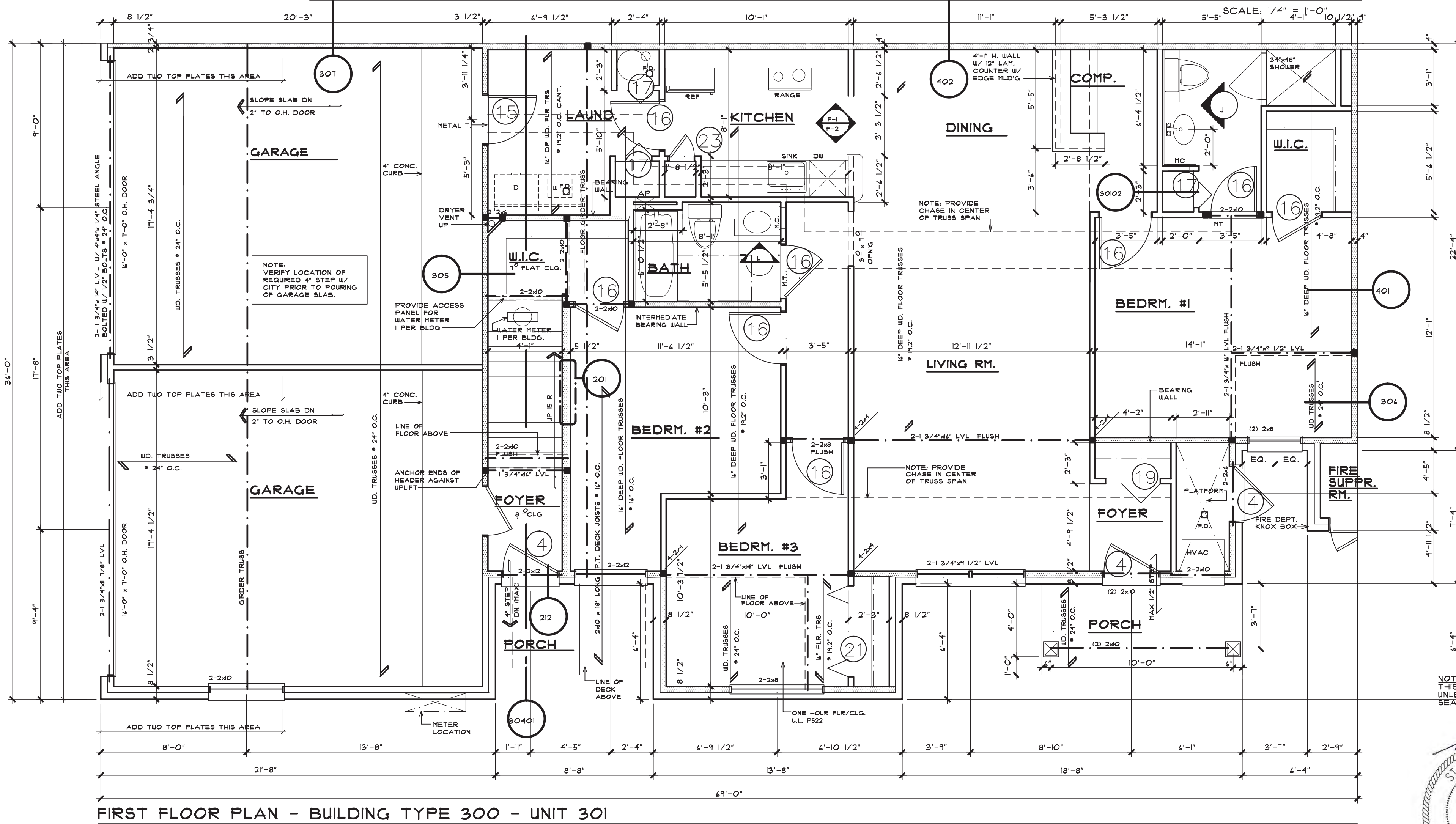
TAG	SIZE	TYPE	STYLE
17	2'-0"x4'-8"	BI-POLD HOLLOW CORE	FLUSH STYLE - D
18	2'-4"x4'-8"	BI-POLD HOLLOW CORE	FLUSH STYLE - D
19	3'-0"x4'-8"	BI-POLD HOLLOW CORE	FLUSH STYLE - D
20	4'-0"x4'-8"	BI-POLD HOLLOW CORE	FLUSH STYLE - E
21	5'-0"x4'-8"	BI-POLD HOLLOW CORE	FLUSH STYLE - E
22	4'-0"x4'-8"	BI-POLD HOLLOW CORE	FLUSH STYLE - E
23	1'-4"x4'-8"	SING HOLLOW CORE	FLUSH STYLE - C

NOTE:  
NON-COMBUSTIBLE HVAC & EXHAUST DUCTS LOCATED IN THE FLOOR TRUSS SPACE, WHICH DO NOT PENETRATE THE FLOOR OF A FIRE RESISTANCE RATED FLOOR/CEILING ASSEMBLY, BUT DO PENETRATE THE CEILING OF A FIRE RESISTANCE RATED FLOOR/CEILING ASSEMBLY, SHALL BE PROVIDED WITH AN APPROVED CEILING FIRE DAMPER AT THE CEILING PENETRATION. CEILING FIRE DAMPERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS LISTED IN A FIRE RESISTANCE RATED DESIGN OR SHALL BE LABELED TO FUNCTION AS A HEAT BARRIER FOR AIR HANDLING OUTLET/INLET PENETRATIONS IN THE CEILING OF A FIRE RESISTANCE RATED ASSEMBLY. PENETRATIONS BY AN AIR DUCT THROUGH A FIRE RESISTANCE RATED FLOOR/CEILING ASSEMBLY WHICH CONNECT NOT MORE THAN TWO STORIES SHALL BE PROVIDED WITH A FIRE DAMPER THAT COMPLIES WITH UL 555 INSTALLED AT THE FLOOR LINE. ALL FIRE DAMPERS SHALL BE ACCESSIBLE.

NOTE:  
ALL 2x4 W.D. STUD IN NON BEARING INTERIOR PARTITIONS TO BE SPACED @ 24" O.C. PROVIDE ADDITIONAL STUDS AS NECESSARY FOR PROPER INSTALLATION OF MEDICINE CABINETS RETURN AIR GRILLES ECT. ALL KITCHEN WALLS INTENDED TO SUPPORT KITCHEN CABINETS TO HAVE STUDS SPACED A MAX. OF 16" O.C.



SECOND FLOOR PLAN - BUILDING TYPE 300 - UNIT 302



FIRST FLOOR PLAN - BUILDING TYPE 300 - UNIT 301

\* NOTE:  
PROVIDE 1/2" TYPE 'X' GYP. BD. BEHIND TUBS & SHOWERS.  
5/8" RATED GYP. BD. IF A RATED WALL

NOTE TO BUILDING OFFICIAL:  
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FIRST FLOOR PLAN  
SECOND FLOOR PLAN  
BUILDING TYPE 300

WESTBURY II  
ELEVATE PROP. PARTNERS  
LIVINGSTON COUNTY, MICHIGAN

PRELIMINARY  
BIDS  
PERMITS  
CONSTRUCTION

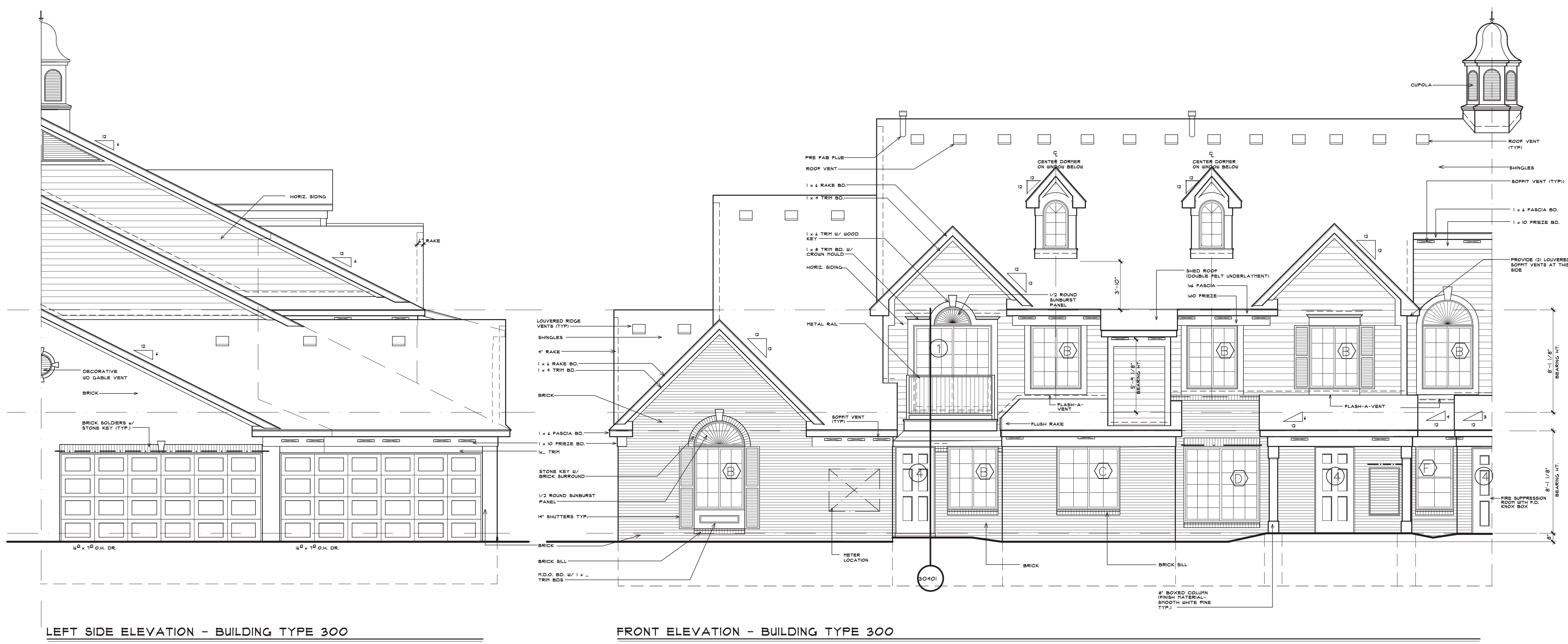
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JOB NUMBER  
2333  
DATE

SHEET NUMBER  
302





LEFT SIDE ELEVATION - BUILDING TYPE 300

FRONT ELEVATION - BUILDING TYPE 300

SCALE: 1/4" = 1'-0"

SCALE: 1/4" = 1'-0"

WINDOW SCHEDULE		
TAG	SIZE	REMARKS
A	4050 SLIDER	
B	4050 SLIDER	EGRESS
C	5050 SLIDER	EGRESS
D	4040 SLIDER	EGRESS
E	1-2050 SINGLE HUNG	
F	3050 DOUBLE HUNG	EGRESS

DOOR SCHEDULE			
TAG	SIZE	TYPE	STYLE
1	4'-0" x 8'	SLIDING GLASS DOOR	
4	3'-0" x 8'	INSULATED STEEL ENTRY DOOR	STYLE - A

UNLESS NOTED OTHERWISE - OVERHANG DIMENSIONS ARE 12" FROM FRAME WALL. RAKE DIMENSIONS ARE 8" FROM FRAME AT BRICK WALLS AND 4" FROM FRAME AT SIDING WALLS.

STEEL LINTEL SCHEDULE	
MAX CLEAR SPAN	LINTEL SIZE
8'-0" OR LESS	3 1/2" x 3 1/2" x 5/16"
7'-0" OR LESS	4" x 3 1/2" x 5/16"
8'-0" OR LESS	5" x 3 1/2" x 5/16"
7'-0" OR LESS	5" x 3 1/2" x 3/8"
10'-0" OR LESS	4" x 3 1/2" x 3/8"

NOTE: THIS SCHEDULE APPLIES UNLESS NOTED OTHERWISE ON THE PLANS AND/OR ELEVATIONS.

**PROPOSED VENT AREA:**

VENT AREA RATIO 1:50

ATTIC AREA = 1358 SQ.FT. ( /150)

VENT AREA = 9.05 SQ.FT. x 44 = 1304 SQ.IN.

50% SOFFIT AND 50% RIDGE = 452 SQ.IN. EACH

CONTINUOUS RIDGE TYPE = 18 SQ.IN. PER FT. = 6 LIN.FT.

LOUVER AT RIDGE TYPE = 50 SQ.IN. EA. = 13 UNITS

GABLE END TYPE (TOTAL) = \_\_\_\_\_ SQ.IN. = \_\_\_\_\_ UNITS

TOTAL VENTING AT RIDGE = 758 SQ.IN.

CONTINUOUS SOFFIT TYPE = \_\_\_\_\_ SQ.IN. PER FT. = \_\_\_\_\_ LIN.FT.

LOUVER TYPE 8" x 16" = 54 SQ.IN. EA. = 14 UNITS

TOTAL VENTING AT SOFFIT = 756 SQ.IN.

**PROPOSED VENT AREA:**

VENT AREA RATIO 1:50

ATTIC AREA = 1759 SQ.FT. ( /150)

VENT AREA = 5.06 SQ.FT. x 44 = 129 SQ.IN.

50% SOFFIT AND 50% RIDGE = 365 SQ.IN. EACH

CONTINUOUS RIDGE TYPE = 18 SQ.IN. PER FT. = 21 LIN.FT.

LOUVER AT RIDGE TYPE = 50 SQ.IN. EA. = 8 UNITS

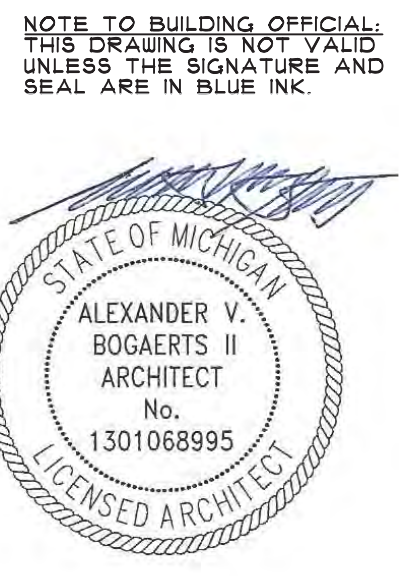
GABLE END TYPE (TOTAL) = \_\_\_\_\_ SQ.IN. = \_\_\_\_\_ UNITS

TOTAL VENTING AT RIDGE = 378 SQ.IN.

CONTINUOUS SOFFIT TYPE = \_\_\_\_\_ SQ.IN. PER FT. = \_\_\_\_\_ LIN.FT.

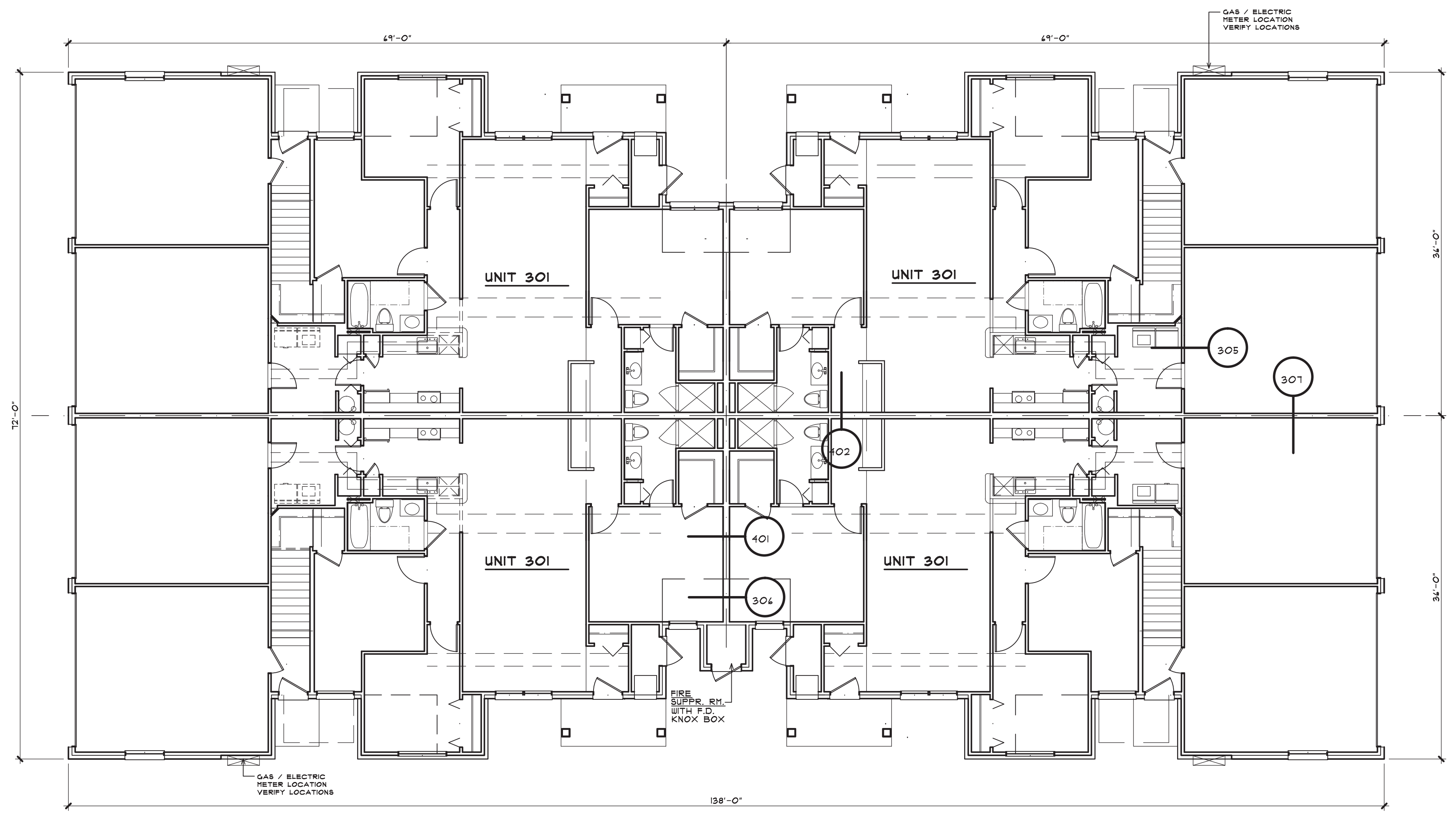
LOUVER TYPE 6" x 16" = 42 SQ.IN. EA. = 9 UNITS

TOTAL VENTING AT SOFFIT = 378 SQ.IN.

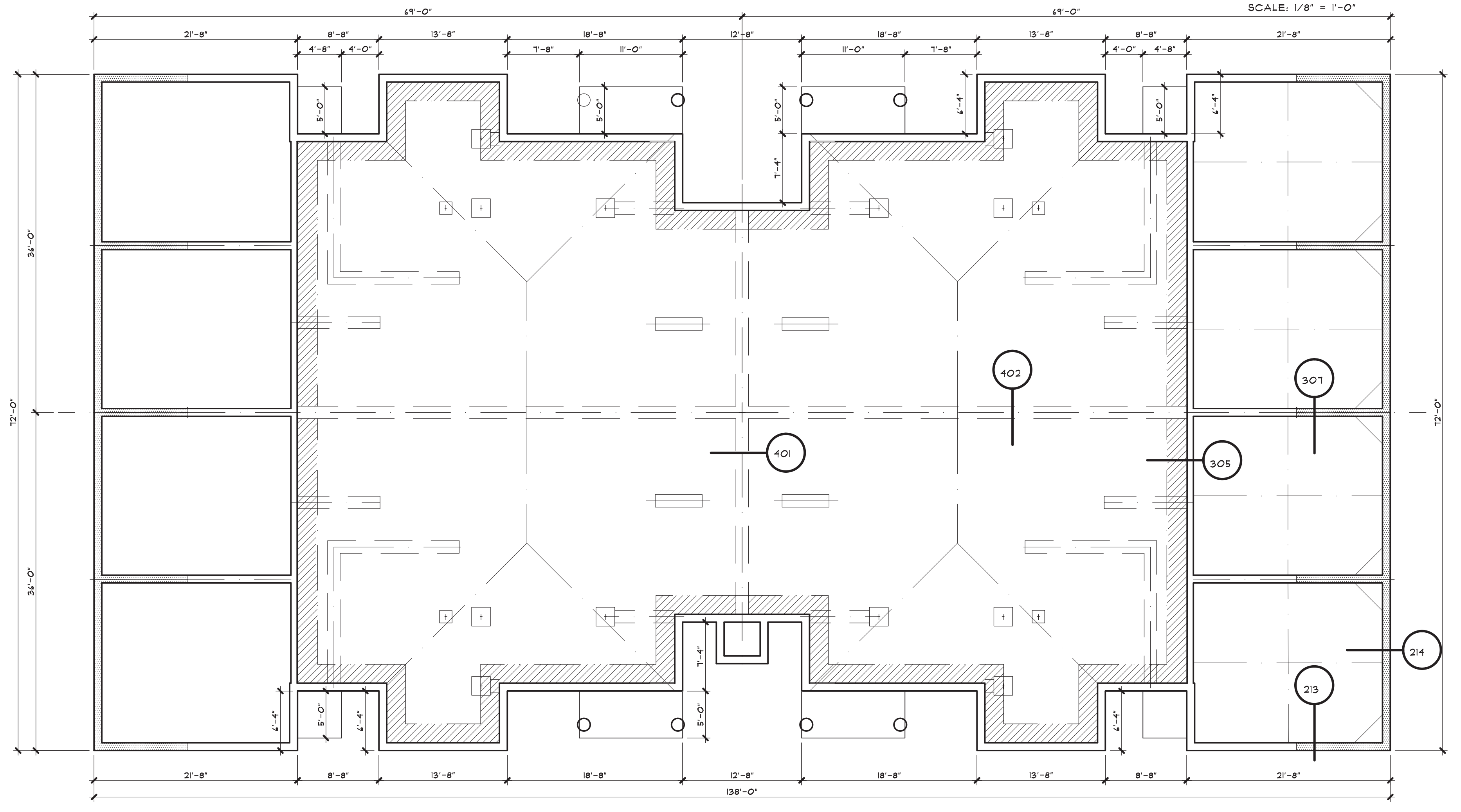


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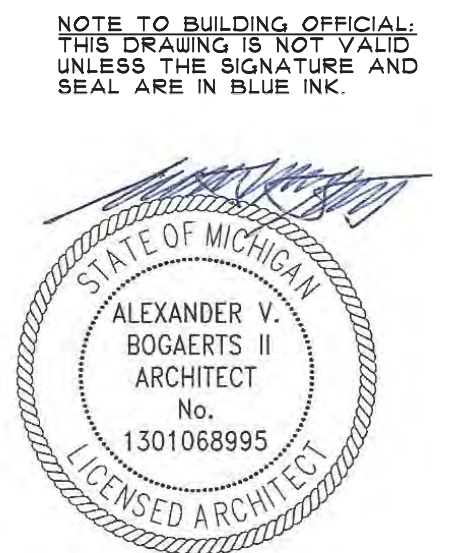


FIRST FLOOR PLAN - BUILDING 300



FOUNDATION PLAN - BUILDING 300

NOTE:  
FOR ADDITIONAL NOTES  
AND INFORMATION SEE  
1/4" SCALE PLANS.



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CLIENT/PROJECT: WESTBURY II ELEVATE PROP. PARTNERS LIVINGSTON COUNTY, MICHIGAN

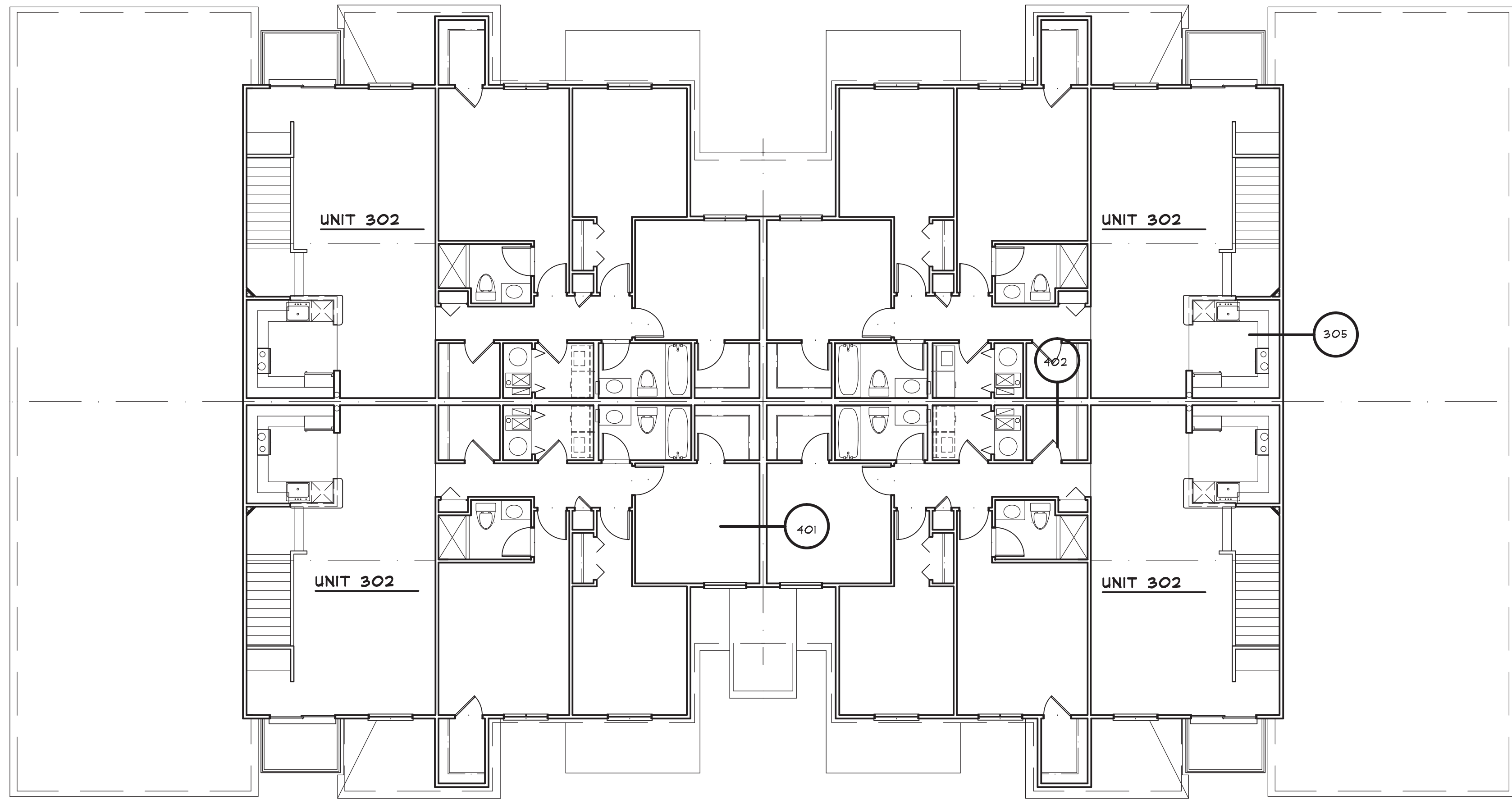
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REVISIONS:  
REVISION R1  
02/22/2022

LEGEND:  
 PRELIMINARY  
 BIDS  
 PERMITS  
 CONSTRUCTION

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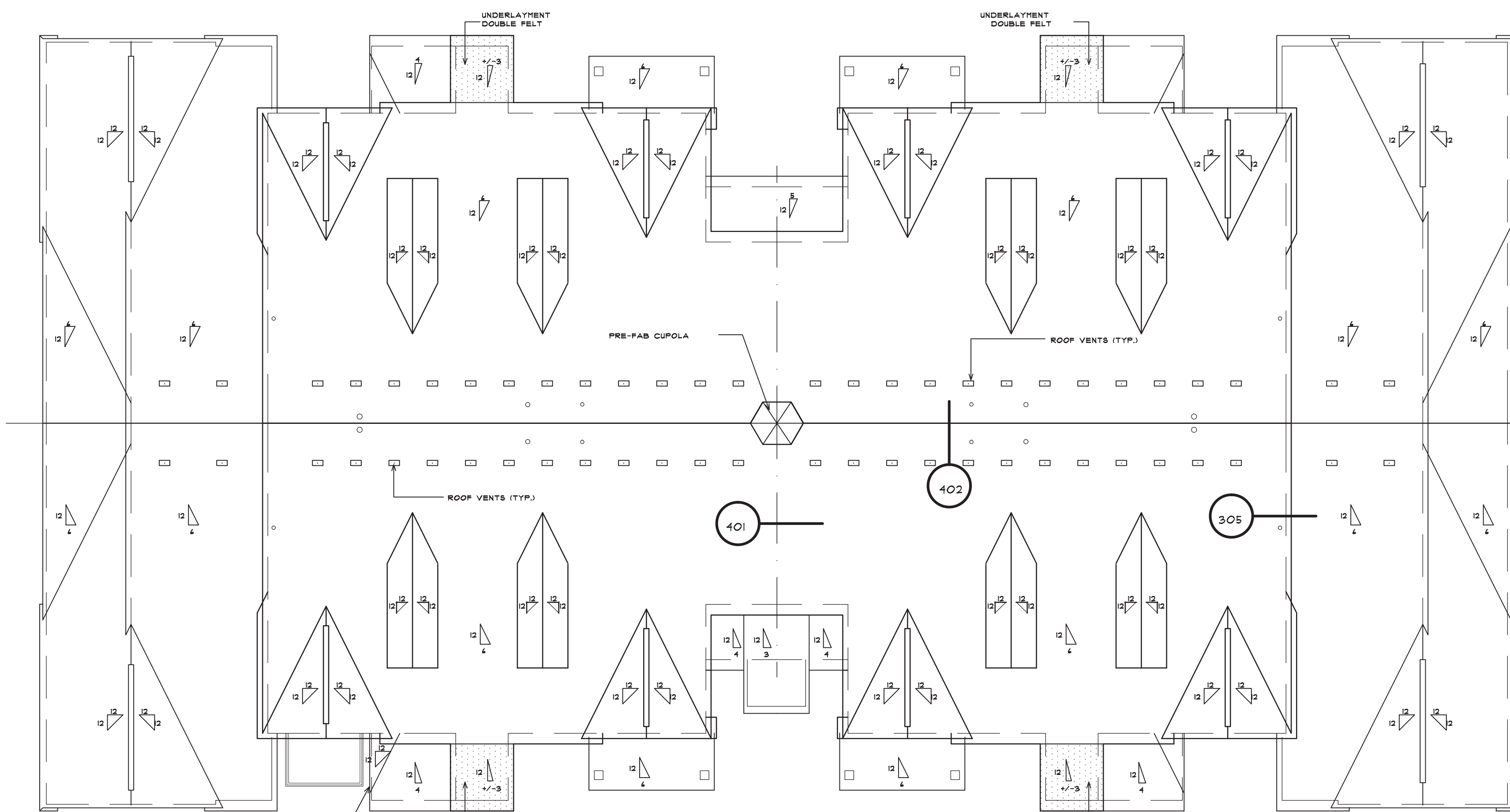
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 DATE: [ ]  
 SHEET NUMBER: 305



SECOND FLOOR PLAN - BUILDING 300

NOTE:  
FOR ADDITIONAL NOTES  
AND INFORMATION SEE  
1/4" SCALE PLANS.

SCALE: 1/8" = 1'-0"



ROOF PLAN - BUILDING 300

SCALE: 1/8" = 1'-0"

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SHEET TITLE  
**BUILDING PLANS**  
**BUILDING 300**

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CLIENT/PROJECT  
**WESTBURY II**  
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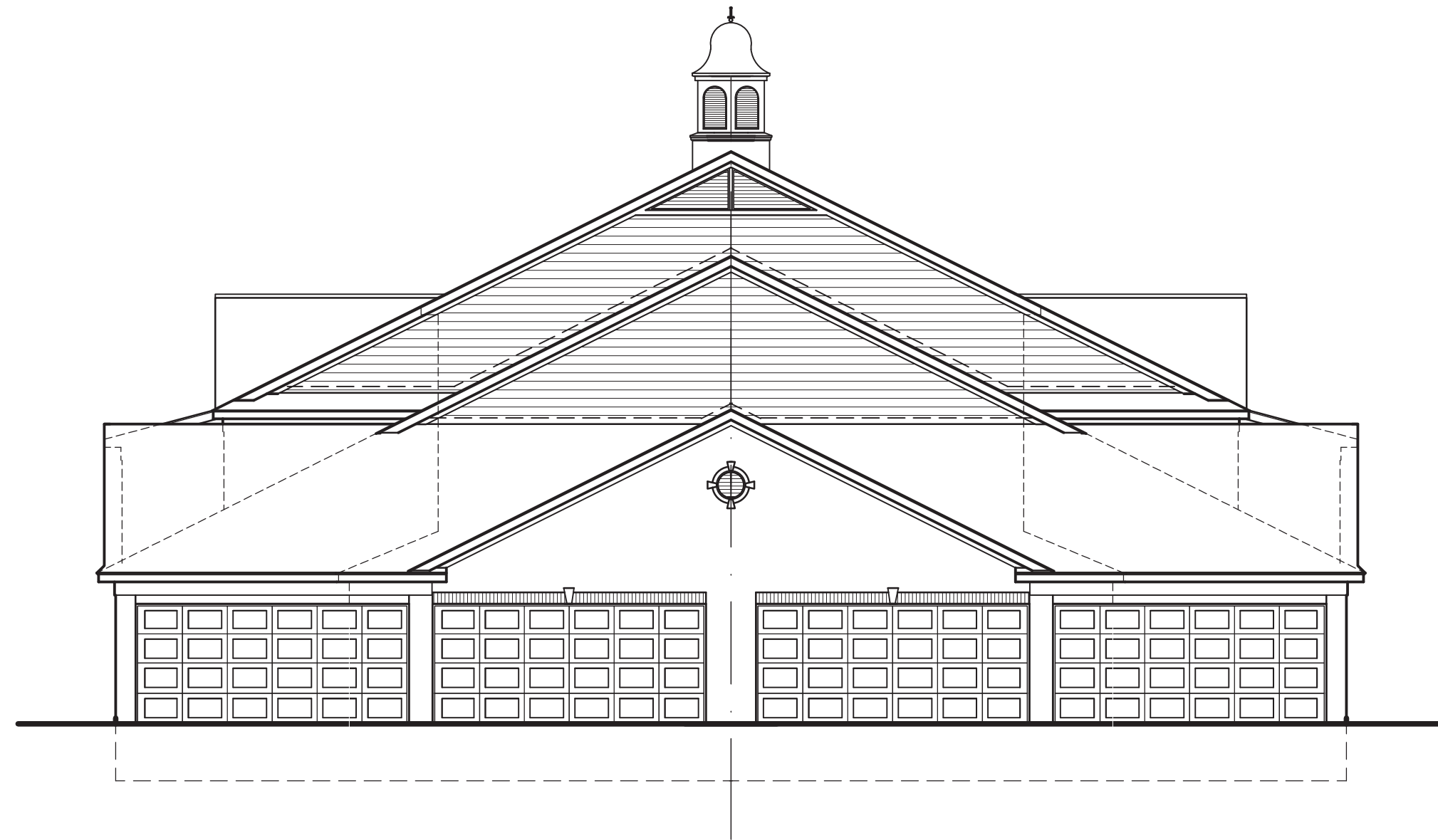
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 SHEET NUMBER  
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LEFT SIDE ELEVATION BUILDING TYPE 300

RIGHT SIDE ELEVATION - OPPOSITE SIMILAR

SCALE: 1/8" = 1'-0"



FRONT ELEVATION BUILDING TYPE 300

REAR ELEVATION - OPPOSITE SIMILAR

SCALE: 1/8" = 1'-0"

FIRE SUPPR. RM.  
WITH F.D. KNOX BOX

NOTE:  
FOR ADDITIONAL NOTES  
AND INFORMATION SEE  
1/4" SCALE PLANS.

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SHEET TITLE  
 BUILDING ELEVATION  
 BUILDING 300

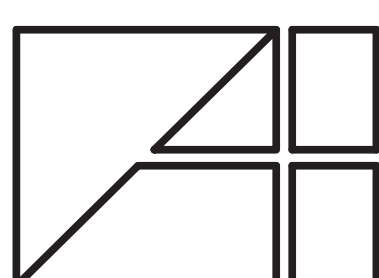
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Interior Design  
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SHEET TITLE  
 UNIT MATRIX

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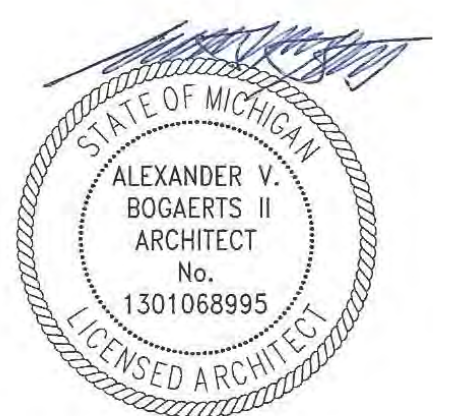
DATE

SHEET NUMBER

**N-1**  
 358

UNIT MATRIX															
BUILDING TYPE	UNIT TYPE	BUILDING NUMBER	UNIT DESCRIPTION	UNIT AREA (S.F.)	GARAGE SIZE (CARS)	TOTAL AREA PER UNIT TYPE (S.F.)	NUMBER OF BUILDINGS	UNITS PER BUILDING	NO. OF UNIT TYPES			TOTAL NUMBER OF UNITS	GARAGE AREA (S.F.)	TOTAL GARAGE AREA	GRAND TOTAL AREA (UNIT+GARAGE)
									1 BED	2 BED	3 BED				
100 PHASE II	101	17, 19, 20, 29, 31	1BR, 1 BTH RANCH LOWER	963	1	19,260	5	4	20			20	296	5,920	25,180
	102		3 BR, 2 BTH RANCH UPPER	1258	2	25,160		4			20	20	440	8,800	33,960
200 PHASE II	201	18, 22, 23, 26, 27, 28, 32, 33	2 BR, 2 BTH RANCH LOWER	1242	2	39,744	8	4		32		32	415	13,280	53,024
	202		2 BR, 2 BTH RANCH UPPER	1323	2	42,336		4		32		32	293	9,376	51,712
300 PHASE II	301	25, 30 21, 24,	3 BR, 2 BTH RANCH LOWER	1412	2	22,592	4	4			16	16	373	5,968	28,560
	302		3 BR, 2 BTH RANCH UPPER	1393	2	22,288		4			16	16	388	6,208	28,496
SUBTOTAL						171,380	17		20	64	52	136		49,552	220,932
									15%	47%	38%	100%			
GRAND TOTAL															220,932

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**GENOA CHARTER TOWNSHIP  
PLANNING COMMISSION  
SPECIAL MEETING / PUBLIC HEARING  
MARCH 28, 2022  
6:30 P.M.  
MINUTES**

CALL TO ORDER: Chairman Grajek called the special meeting of the Genoa Charter Township Planning Commission to order at 6:30 p.m. Present were Chris Grajek, Jim Mortensen, Eric Rauch, Jeff Dhaenens, and Tim Chouinard. Absent were Marianne McCreary and Glynis McBain. Also present was Kelly VanMarter, Community Development Director/Asst. Township Manager.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

APPROVAL OF AGENDA:

**Moved** by Commissioner Rauch, seconded by Commissioner Dhaenens, to approve the agenda as presented. **The motion carried unanimously.**

CALL TO THE PUBLIC:

The call to the public was made at 6:31 pm.

Ms. Melanie Johnson of 3990 Chilson would like this meeting to be on Zoom or recorded and given to the public.

Ms. Suzanne Kowalski of 5341 East Grand River asked about a special assessment tax in the Glen Echoes subdivision on Lake Chemung for lake upkeep. She asked if any other residents pay that tax since it is a public lake. She also noted that property owners on this lake are now required to remove their boat docks and will need to use the public launch, which is already very crowded. Chairman Grajek advised Ms. Kowalski to contact the Township during business hours to have these questions answered.

The call to the public was closed at 6:37 pm.

**OPEN PUBLIC HEARING #1:** Discussion of 2022 Master Plan update as presented by Giffels Webster.

Ms. Jill Bahm and Mr. Matt Wojciechowski of Giffels Webster we present.

Ms. Bahm provided an update of what steps have been done and what are the next steps regarding the Master Plan update, noting that the requested changes from the last meeting

have been incorporated into the current document draft. She would like to discuss the updated future land use descriptions, map, and redevelopment site chapters this evening.

The Commission, Ms. Bahm, and Mr. Wojciechowski discussed:

- Affordable housing
- Long-term natural features preservation, specifically with regard to residential redevelopment and how the lack of public utilities affects the waterways in residential lake communities
- Short-term residential rentals
- Walkability, including pedestrian crossings
- Less need for office space as more people are working from home and the infrastructure needs to support this
- The development of the Latson Road corridor
- Level of service relating to traffic and working with the Livingston County Road Commission and neighboring communities
- Car charging stations and their related infrastructure
- Solar panels
- Public transportation
- Focus on increasing the use of the township hall site to include additional activities, events, amenities, etc.
- Developing accessory uses for the health and wellness center that has developed on Grand River with the 2|42 Church, St. Joseph Woodland Center, the mental health center, and other medical offices
- Changes to the growth area boundary map to help with transitional areas
- Missing middle housing types and locations where they would be appropriate
- Properties along the Grand River corridor that would be appropriate for commercial redevelopment.
- Maintaining the groundwater and air quality in the township.

Ms. Bahm showed the proposed future land use map and reviewed the changes. Ms. VanMarter noted a specific parcel on Chilson Road at I-96 that could possibly be rezoned to high-density residential and fill the missing middle- or lower-income housing needs.

Changes to the Master Plan will be made based on the discussion this evening. Giffels Webster will return to the Planning Commission to discuss further.

The call to the public was made at 9:04 pm.

Ms. Christine Watson of 390 Natanna has attended some Genoa Township Planning Commission meetings and sees that the Commission is very concerned with keeping the greenspace and the character of the township and questions how an asphalt plant was approved.



Chairman Grajek noted that the approval was part of due process for the applicant. There was a lot of misunderstanding regarding what transpired at that meeting.

Ms. Melanie Johnson of 3990 Chilson had comments and concerns regarding the Master Plan discussion this evening.

Ms. Ms. Suzanne Kowalski of 5341 East Grand River asked if the zoning ordinance in the industrial zoning will be changed. In listening to the discussion this evening, she is excited for the proposed plan.

The call to the public was closed at 9:13 pm.

ADMINISTRATIVE BUSINESS:

**Staff Report**

Ms. VanMarter reiterated that due to the large number of applications she has received, there may need to be two meetings in April and/or May.

**Approval of the March 14, 2022 Planning Commission meeting minutes**

**Moved** by Commissioner Rauch, seconded by Commissioner Dhaenens, to approve the minutes of the March 14, 2022 Planning Commission Meeting as presented. **The motion carried unanimously.**

**Member Discussion**

There were no items to discuss this evening.

**Adjournment**

**Moved** by Commissioner Mortensen, seconded by Commissioner Rauch, to adjourn the meeting at 9:23 pm. **The motion carried unanimously.**

Respectfully Submitted,

Patty Thomas, Recording Secretary