

VIRTUAL MEETING

Due to Michigan Department of Health and Human Services requirements, this meeting will be virtual. The public may participate in the meeting/public hearing through Zoom access by computer and smart phone. A link will be posted at genoa.org. Please email info@genoa.org or call (810) 227-5225 if you have questions.

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION PUBLIC HEARING
FEBRUARY 8, 2021
6:30 P.M.
AGENDA**

CALL TO ORDER:

PLEDGE OF ALLEGIANCE:

INTRODUCTION OF MEMBERS: (Name and Location)

ELECTIONS OF OFFICERS:

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.)

OPEN PUBLIC HEARING # 1...Review of a special use application, environmental impact assessment and site plan for a proposed 6,090 sq. ft. church with accessory outdoor uses including Grotto and Stations of the Cross. The property in question is located at 3280 Chilson Road on the west side of Chilson Road, south of Crooked Lake Road. The request is petitioned by Catholic Healthcare International.

- A. Recommendation of Special Use Application
- B. Recommendation of Environmental Impact Assessment (1-20-21)
- C. Recommendation of Site Plan (1-20-21)

ADMINISTRATIVE BUSINESS:

- *Staff Report*
- *Annual Report*
- *Approval of November 9, 2020 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: Catholic Healthcare International, 2464 Taylor Rd, Suite 317, Wildwood, MO 63040
If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: Catholic Healthcare International, 2464 Taylor Rd, Suite 317, Wildwood, MO 63040

SITE ADDRESS: 3280 Chilson Road PARCEL #(s): 4711-20-100-020

APPLICANT PHONE: (636) 220-6550 OWNER PHONE: (636) 220-6550

OWNER EMAIL: C.H.I. Contact: Jere Palazzolo, jpalazzolo@chi-usa.com

LOCATION AND BRIEF DESCRIPTION OF SITE: West of Chilson Rd, approximately 1,800 ft south of Crooked Lake Rd. Site consists of approximately 40 acres of rolling topography.

The western(rear) portion of the site contains small wetlands and is wooded. The southeastern portion of the site is primarily open meadow with stands of trees mixed in.

BRIEF STATEMENT OF PROPOSED USE: Site to include a proposed church and associated drives and parking areas. The layout of the drives and church is such that it works with the existing topography to minimize earth disruption as well as meanders around trees to preserve as many as feasible and maintain the character of the site.

THE FOLLOWING BUILDINGS ARE PROPOSED: A 6,084 sqft church building.

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: Jere Palazzolo JERE PALAZZOLO

ADDRESS: 2464 TAYLOR RD, SUITE 317, WILDWOOD, MO 63040

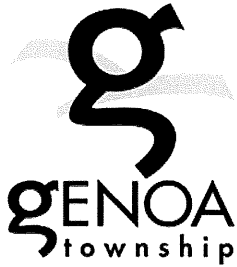
Contact Information - Review Letters and Correspondence shall be forwarded to the following:

1.) Scott Tousignant of Boss Engineering at 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: Jere Palazzo DATE: 12/9/20
PRINT NAME: JERE PALAZZOLO PHONE: 636-220-6550
ADDRESS: 2464 TAYLOR RD, SUITE 317, WILDBWOOD, MO 63040



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: Catholic Healthcare International, 2464 Taylor Road, Suite 317, Wildwood, MO 63040
Submit a letter of Authorization from Property Owner if application is signed by Acting Agent.

APPLICANT PHONE: (636) 220-6550 EMAIL: jpalazzolo@chi-usa.com

OWNER NAME & ADDRESS: Catholic Healthcare International, 2464 Taylor Road, Suite 317, Wildwood, MO 63040

SITE ADDRESS: 3280 Chilson Road PARCEL #(s): 4711-20-100-020

OWNER PHONE: (636) 220-6550 EMAIL: jpalazzolo@chi-usa.com

Location and brief description of site and surroundings:

Site located west of Chilson Road, approximately 1,800 feet south of Crooked Lake Road. Located on approximately 40 acres, surrounded by CE zoning to the north/south/west with RR zoning to the east across Chilson Road. The site contains rolling topography with wetlands and woodlands on the west side of the site and open area with stands of trees on the southeast side of the site (area of development).

Proposed Use:

6,084sft church building with associated drives and parking. The remainder of the site will be used for outdoor features, like an outdoor Stations of the Cross walkway, natural nature trail, and outdoor grotto sign.

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 purpose of the Country Estate Zoning is to retain the rural atmosphere while accommodating very low density development. The layout of this site is such that it is meant to work with the natural features of this site in order to preserve the atmosphere and surroundings. The proposed use for this site is low density with the largest traffic generating event filling an approximate 80 seat church.

- 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.

The only building being proposed is being placed setback significantly off of Chilson Road. The site drives are designed to match the existing topography as closely as possible to minimize earth disturbance. The drives meander around trees in order to preserve the sites natural beauty and thus maintain the appearance from Chilson Road.

- 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?

Emergency vehicle access is via a paved drive within the site with access off of Chilson Road. This building will be serviced by a well and septic field, as is consistent with adjacent parcels. This site has no impact on schools. The waste generated by this site is minimal and anticipated to be serviced by typical weekly waste streetside pickup. Stormwater management is located on-site.

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?

There will be a minimal increase in traffic for any church services held on site. The site and use highlights the natural beauty of the property so the intent is to have minimal lighting and noise generated by the use. No fumes, odors, smoke, vibration and other such nuisances will be generated by this site.

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: This site meets the minimum lot size req. as it is a 40 acre site. This site layout meets the 50' parking lot setback req.

7.02.02: N/A

8.02.02: N/A

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

BY: JERE PALAZZOLO

ADDRESS: 2464 TAYLOR RD, SUITE 317, WILDWOOD, MO 63040

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: Jere Palazzo DATE: 12/9/20
 PRINT NAME: JERE PALAZZOLO PHONE: 636-220-6550

February 2, 2021

Planning Commission
 Genoa Township
 2911 Dorr Road
 Brighton, Michigan 48116

Attention:	Kelly Van Marter, AICP Planning Director and Assistant Township Manager
Subject:	Catholic Healthcare International Church – Special Land Use and Site Plan Review #2
Location:	3280 Chilson Road – west side of Chilson Road, south of Crooked Lake Road
Zoning:	CE Country Estate District

Dear Commissioners:

At the Township’s request, we have reviewed the revised submittal from Catholic Healthcare International requesting special land use and site plan review/approval for a new church (site plan dated 1/20/21).

A. Summary

1. Special Land Use standards of Section 19.03:

- a. In order to find that the proposal is compatible with the Master Plan, the Township would need to determine that the proposal will not adversely impact natural features and agricultural uses in the surrounding area.
- b. The Commission may wish to seek input from the Township Engineer as it relates to northbound traffic and compatibility with the surrounding area.
- c. The bell tower may generate noise that impacts the surrounding rural residential uses. The Commission may wish to request decibel ratings, or a sound study to ensure compatibility.
- d. 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. Should a private school, child day care center, or other use be proposed in the future, it will be subject to the applicable review procedures and regulations outlined in the Zoning Ordinance.

3. Site Plan Review:

- a. We request the applicant present building material and color samples to the Commission.
- b. The parking lot must include curbing on all sides, as opposed to the bumper blocks proposed, unless the Commission determines they are necessary.
- c. The applicant requests that the Commission allow existing landscaping in lieu of additional plantings for the front yard greenbelt and parking lot.
- d. A sign permit will be required from the Township prior to installation of any signage.
- e. The Township may wish to have the applicant correct the existing fence encroachment as part of this project.

B. Proposal/Process

The proposal entails a 6,090 square foot church building, along with accessory outdoor uses in the form of a Grotto, Stations of the Cross, and a statue.

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

Procedurally, the Planning Commission is to review the special land use, site plan, and impact assessment, and provide a recommendation on each to the Township Board following a public hearing.



Aerial view of site and surroundings (looking north)

C. Special Land Use Review

Section 19.03 of the Zoning Ordinance identifies the review criteria for Special Land Uses, as follows:

- 1. Master Plan.** The Township Master Plan identifies the subject site, as well as the adjacent properties on the west side of Chilson Road, as Agriculture/Country Estate.

This category is intended for “agricultural use” or “single family residential on estate lots” (5-acre minimum). The Plan further states that such areas “have significant natural limitations such as wetlands or severe soil limitations” and that “these areas are not planned for sanitary sewer.”

The subject site possesses these characteristics (wetlands, no sanitary sewer), and is located within the Rural Reserve area of the growth management boundary. Such areas are to “be maintained at a relatively low intensity rural character of development that will not adversely impact natural features and agricultural uses.”

Since there is no reference to institutional uses under this category, in order to make a favorable finding under this criterion, the Township would need to determine that the proposal will not adversely impact natural features and agricultural uses in the surrounding area.

- 2. Compatibility.** The subject area includes single-family residences on relatively large lots, as well as active agricultural.

The perimeter of the site is buffered by existing vegetation that will be preserved, which will help to mitigate views from off-site.

Concerns under this criterion are generally related to traffic and noise generation.

Given the size of the church, a traffic impact study is not required, though the proposal does include a deceleration/acceleration lane for southbound traffic.

Our initial review letter also raised the question of potential congestion for northbound traffic due to the apparent lack of a left turn lane. In response, the applicant states that issues are not anticipated given the size of the church and the anticipated use of the site. The revised Impact Assessment also notes that anticipated mass times will generally be outside of peak hour traffic.

With that being said, the Commission may wish to seek further input from the Township Engineer as it relates to this aspect of the standard.

Additionally, the revised submittal indicates that the outdoor accessory uses (Grotto, Stations of the Cross, and statue) are intended for meditation and quiet reflection, and are not necessarily intended for large outdoor gatherings that could generate additional noise.

However, the applicant has confirmed that the bell tower in the building is functional, and will ring hourly from 9AM to 9PM, in addition to Mass and special events.

Given the rural residential nature of the surrounding area, a functioning bell tower may create noise that impacts surrounding uses. As such, the Commission may wish to request additional details, such as decibel ratings or a sound study.

- 3. Public Facilities and Services.** The site has vehicular access to/from Chilson Road, which is an arterial roadway. Per the submittal materials, the project will be served by private well and septic systems.

The Commission should consider any technical provided by the Township Engineer and Brighton Area Fire Authority with respect to this criterion.

- 4. Impacts.** Similar to the comments above, the applicant must demonstrate to the Township's satisfaction that traffic and noise generation will not adversely impact surrounding uses.
- 5. Mitigation.** Should additional concerns arise as part of the review process, the Township may require additional efforts/improvements to mitigate potential adverse impacts.

D. Use Requirements

Churches, temples, and similar places of worship are subject to the use requirements of Section 3.03.02(1), 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 subject site contains 40 acres of lot area, while a capacity of 95 persons is proposed. This standard is met.

- 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 complies with the maximum height allowed for the CE District (34'-11" to the top of the bell tower, 35' allowed in CE). This standard is met.

- 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.**

The two parking areas exceed minimum setback requirements, and the applicant proposes to retain existing landscaping and topography in lieu of providing a wall, fence, or berm.

Proposed buffering includes the additional spacing, as well as a combination of existing and proposed trees.

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 request does not include a private school or child day care center. As such, this standard is not applicable at this time.

However, should these (or other) uses be proposed in the future, the applicant will be subject to the applicable review procedures and regulations outlined in the Zoning Ordinance.

E. Site Plan Review

1. Dimensional Requirements. The proposal is well within the allowable dimensional standards of the CE District with respect to setbacks, building height, and lot coverage.

2. Building Materials and Design. The building elevation drawings identify the use of brick and limestone.

We request the applicant present material and color samples to the Commission for their consideration as part of this review (a photograph is included with the revised submittal).

3. Pedestrian Circulation. Public sidewalks/pathways are not required along this portion of Chilson Road (Section 12.05).

The project includes an internal sidewalk between the parking lot/drop-off lane and building (5' wide, concrete), as well as a pathway for the Stations of the Cross (5' wide, limestone).

4. Vehicular Circulation. Vehicular access is proposed via a new driveway to/from Chilson Road, which includes a deceleration/acceleration lane for southbound traffic.

Internally, the site includes both two-way and one-way traffic circulation. Proper drive aisle widths are provided throughout the site, and a fire truck turning movement is depicted (Sheet 4).

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

5. Parking. The proposed parking has been reviewed for compliance with the standards of Article 14, as follows:

	Required	Proposed	Comments
Parking Spaces Churches, temples, and similar places of worship (1 space for each 3 seats in the main unit of worship)	32	38	In compliance
Barrier Free Spaces	2	4	In compliance
Dimensions Spaces (75 to 90-degree) Drive aisle width (two-way) Drive aisle width (one-way)	9' x 18' 24' 15'	9' x 18' 26' 20'	In compliance
Construction	Looped striping Curbing on all sides	Looped striping Bumper blocks	Curbing must be provided, unless PC determines that bumper blocks are necessary. Applicant's rationale is related to drainage.

- 6. Landscaping.** The 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	20' width 14 canopy trees	50' width 6 canopy trees Existing trees	Applicant requests that PC allow existing to remain in lieu of additional plantings
Parking lot	4 canopy trees 380 SF landscaped area	4 canopy trees 0 SF landscaped area	Applicant requests that PC allow proposed layout w/out landscape islands

The plan also includes 5 evergreen trees, 6 ornamental trees, 107 shrubs, and 15 perennials planted around the building.

- 7. Waste Receptacle.** In lieu of a dedicated waste receptacle/enclosure, the applicant indicates that refuse and recycling removal will be done via typical residential curbside pickup.
- 8. Exterior Lighting.** The revised lighting plan identifies 11 driveway/parking lot light poles, 9 bollards, and 9 wall mounted fixtures.

Details note the use of LED fixtures, and a maximum mounting height of 20 feet (both of which comply with current standards).

The photometric readings are well within the intensity allowed on-site and along property lines.

- 9. Signs.** The site plan identifies a new monument sign on the north side of the proposed driveway. The required setback is provided, though no sign details are provided.

If the project is approved, the applicant should be aware that a sign permit from the Township is required prior to installation of any signage.

- 10. Accessory Structures.** The plan also includes several outdoor accessory components – Grotto, Stations of the Cross, and statue.

Details include a masonry structure in the Grotto, a 5-foot wide limestone pathway for the Stations of the Cross, and a statue near a large mature tree north of the parking area nearest Chilson Road.

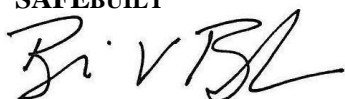
There is an existing fence along the south side lot line that appears to cross over the property line. The Township may wish to have this encroachment corrected as part of this project.

- 11. Impact Assessment.** The submittal includes a revised Impact Assessment dated January 20, 2021.

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.

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

Respectfully,
SAFE BUILT



Brian V. Borden, AICP
 Michigan Planning Manager



February 3, 2021

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

**Re: Catholic Healthcare International
Site Plan Review No. 2**

Dear Ms. Van Marter:

Tetra Tech conducted a second review of the proposed Catholic Healthcare International site plan last dated January 20, 2021. The plans and impact assessment were submitted by Boss Engineering on behalf of Catholic Healthcare International. The site is on a 40-acre parcel located on the southwest side of Chilson Road, approximately 1,500 feet south of Crooked Lake Road. The petitioner is proposing a 6,090 square foot church in the southeast corner of the property. The Petitioner is proposing parking lot, access drive, storm drainage, and well and septic improvements.

After reviewing the site and impact assessment we offer the following:

GENERAL NOTES

1. The Petitioner will need approval from the Livingston County Health Department for the proposed well and septic systems. This should be obtained and provided to the Township for their records.
2. Per the review letter dated January 22, 2021, from the Livingston County Road Commission, any future additions or changes to the site will require a traffic study and possibly improvements to the driveway approach or Chilson Road to accommodate increased traffic from the site.

SITE PLAN

1. The proposed parking lots and drive should include concrete curb and gutter in order to better control storm runoff and prevent parking outside of the parking lot.


DRAINAGE AND GRADING

1. The Petitioner is proposing two bioswales to collect additional runoff from the proposed improvements as a low impact development alternative. The bioswales are intended to mimic the site's original hydrology, due to the relatively small footprint of the proposed improvements. The Petitioner provided calculations to demonstrate that the proposed bioswales have enough storage volume to store the additional 100-year storm volume needed as a result of proposed improvements.

Ms. Kelly Van Marter
Re: Catholic Healthcare International
Site Plan Review No. 2
February 3, 2021
Page 2

We recommend the petitioner address the comments above to the satisfaction of the Township. Please call or email if you have any questions.

Sincerely,



Gary J. Markstrom, P.E.
Vice President



Shelby Scherdt
Project Engineer



BRIGHTON AREA FIRE AUTHORITY

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

January 28, 2021

Kelly VanMarter
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Catholic Healthcare International Church
3280 Chilson 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 January 5, 2021 and the drawings are dated December 18, 2020. The project is for a new Catholic Church on Chilson Rd. The building is proposed to be 6,084 square foot assembly occupancy. The building is provided with a single access drive from Chilson Rd. The plan review is based on the requirements of the International Fire Code (IFC) 2018 edition.

All previous comments appear to be addressed.

1. A 12,000-gallon fire cistern is proposed for the site and will be equipped with automatic fill and connected to service well.
2. Fire lane signage is provided as required.
3. Knox box is shown at the main entrance as required.
4. Address numbers will be provided on the building and the monument sign as required.

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

cc: Amy Ruthig amy@genoa.org

Livingston County Road Commission

3535 Grand Oaks Drive • Howell, Michigan 48843-8575
Telephone: (517) 546-4250 • Facsimile: (517) 546-9628
Internet Address: www.livingstonroads.org

January 22, 2021

Scott Tousignant, P.E.
Boss Engineering
3121 E. Grand River Ave
Howell, MI 48843

Re: Catholic Healthcare International, Genoa Township, Section 20
LCRC# C-20-11

Dear Mr. Tousignant:

I have completed the review of the plans for a commercial driveway approach off Chilson Road for a church, dated January 20, 2021, for the above-referenced project and have determined the plans to be in substantial compliance with our specifications.

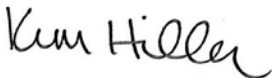
Before a commercial approach permit can be issued, the following items need to be completed.

1. A contractor needs to be selected and the selected contractor must submit a certificate of insurance to the LCRC with the following language: "The Board of Livingston County Road Commissioners, the Livingston County Road Commission, and their officers, agents, and employees are listed additional insured parties with respects to General Liability."
2. It will be stated on the permit that any future additions or changes in use of the site may require improvements to the approach and/or Chilson Road to accommodate the increase in traffic.

Commercial approach permits are valid for a six (6) month period. Please contact me when you are ready for the permit to be issued and allow for a minimum of two (2) business days for preparing the permit for signatures.

If you have any questions, please feel free to contact me.

Sincerely,



Kim Hiller, P.E.
Utilities and Permits Engineer

Cc: File

Amy Ruthig, Genoa Township (via email)
Ken Recker, Livingston County Drain Commissioner's Office (via email)

Re: Chilson Road Multi-Phase Development

Dear Board Members:

My name is Bill Galvin. My wife and I reside at 4037 Chilson Road. I do plan to attend this evening's meeting electronically. I will make a brief comment in that forum.

The purpose for my letter is the special site plan proposal on Chilson Road for a new land use. It is on the planning commission's next agenda. It may make its way to the trustees at a future date. I feel this is an important issue worthy of elevated attention. Therefore, I am using public comment this evening.

The proponent, who is from Missouri, has a vision plan that is larger in scope and scale than what is currently being proposed. Their vision is for a high impact use. In addition to a chapel, they plan to build a hospital, research facility, long term care home, and medical school on a 40 acre site. This area of the township appears to reserve zoning for CE and AG land uses. Presumably, this type of destination campus would require significant infrastructure and may stimulate commercial growth in an area that is not designated for it.

The current proposed chapel is phase one and might be viewed as a red herring for forthcoming projects at this site.

I have spoken with people in administration, the planning commission, and a few neighbors. My impression is that our broader community is mostly unaware of this vision plan for a multi-phase development of a campus on Chilson Road. My concern is the lack of community engagement and communication.

The current proposal is the first step towards a campus of substantial commercial scope. One distinction setting this apart is the business plan to create a destination hospital attracting patients and visitors on a global scale. This seems to be a project in need of improved information sharing and thoughtful consideration of Genoa Township's Master Plan.

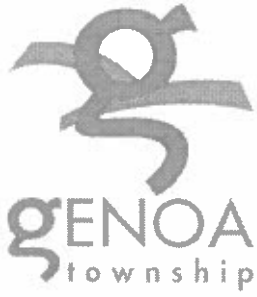
I hope to speak with neighbors on Chilson Road. The challenge is connecting and interacting safely and respectfully during this time of COVID social distancing. Tonight's electronic meeting exemplifies this challenge.

Regardless of COVID challenges, I think residents of Chilson Road need to be better informed of the current special site plan proposal which could result in a far-reaching campus with commercial uses in the near future.

I hope our trustees and administration and planning commissioners will take my comments as a call for practical engagement. I hope Genoa Township will approach this development comprehensively, rather than incrementally. I hope you will work to improve communication for everyone, especially the residents on Chilson Road who may be greatly affected.

Kind regards,

Bill Galvin



February 2, 2021

2911 Dorr Road
Brighton, MI 48116
810.227.5225
810.227.3420 fax
genoa.org

Mr. Bill Galvin
4037 Chilson Road
Howell, MI 48843

Dear Mr. Galvin:

I am writing in response to your recent email to the Township Board dated Feb. 1, 2021. I, too, am concerned about the future ramification of the proposal that is being considered by our Planning Commission on Feb. 8th. First the small chapel in Country Estate Zoning would need a special use permit and our Master Plan does not anticipate such a development within the Country Estate Zoning.

While it may be a nice addition to our community, the petitioner should be aware that the parcel does not include sewer and water service. Sewer and water access is a major concern for any development within our community

Should there be a larger scope to this development then what is before the Planning Commission the applicant should discuss this matter with our DPW director, Dr. Greg Tatara, before any further steps are taken. A future request for rezoning, whether approved or denied, may impact any future needs requests on behalf of the petitioner/developer. A commercial development on this parcel would hinder our endeavor to retain not only open spaces but the natural environment we are working so hard to retain.

Respectfully,

Paulette A. Skolarus, Clerk
Genoa Charter Township

Cc: Genoa Township Board
Genoa Township Planning Commission
Assistant Manager, Kelly VanMarter

SUPERVISOR

Bill Rogers

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

TRUSTEES

Jean W. Ledford
H. James Mortensen
Terry Croft
Diana Lowe

MANAGER

Michael C. Archinal

Project to replicate Padre Pio's 'Home for the Relief of Suffering' in Michigan



GABRIELLA PATTI

DEC 4, 2020 LOCAL

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Priests of the Diocese of Lansing celebrate Mass on Sept. 23 on the 40-acre site of the planned "Casa USA" project in Howell, which will include a replica of St. Padre Pio's famous "Home for the Relief of Suffering" hospital in Italy, as well as an adoration chapel, medical school and the Terri Schiavo Home for the Brain Injured in the spirit of the great Italian saint's devotion to the critically ill and dying. (Photos courtesy of Catholic Healthcare International)

Decades after he created the famed hospital for the ill and dying in Italy, St. Pio's hope of a worldwide health care network coming to life in Howell

HOWELL — On a 40-acre plot of land in Howell, in the Diocese of Lansing, stands the humble foundation for the establishment of a worldwide network of health care facilities that St. Pio of Pietrelcina set in motion nearly 70 years ago.

In 1956, the saint better known as Padre Pio founded "Casa Sollievo della Sofferenza," or the "Home for the Relief of Suffering," in San Giovanni Rotondo, Italy. The Casa is a world-renowned Catholic international research hospital serving the poor and destitute, and today houses up to 1,000 patients.

Of everything he did on earth, Padre Pio once said, this was the most important. It was his dream the project would one day expand and reach other parts of the world.

That day has now come.

Thanks to the vision, faithfulness and tenacity of several Catholic health care organizations, individuals and the patronage of Lansing Bishop Earl Boyea, the Howell project, known as “Casa USA,” seeks to duplicate St. Pio’s hospital complex for the first time outside of Italy, including an exact replica of the great Capuchin saint’s original friary church.

Though the idea has been in the hearts and minds of many for decades, the physical establishment of the campus began when Bishop Boyea donated a 40-acre plot of land for the cause.

While the land remains empty now with the exception of a small outdoor grotto with a mural dedicated to St. Pio, in the years ahead, it will hold not only a hospital, but an adoration chapel, a Catholic medical school and the “Terri Schiavo Home for the Brain Injured,” a rehab center for those with severe brain injuries.

Well before Bishop Boyea donated the land, Padre Pio’s vision took hold in the heart of one man who had become disillusioned by the state of Catholic medical care throughout the world.



Out of everything he did on earth, Padre Pio said the establishment of the Home for the Relief of Suffering was the most important. He always hoped that it would expand, grow and reach other parts of the world.

“The unfortunate thing is that over time, (some hospitals) lose the focus on the mission and vision that got them to where they were in the first place,” said Jere D. Palazzolo, director, chairman and president of Catholic Healthcare International, the Missouri-

based nonprofit sponsoring the ambitious project. “There was a lot of disillusionment when this was first going on, as hospitals changed to focusing on finances more than they did mission.”

Palazzolo, who also founded Marian Medical Services, began his own career as a hospital administrator. Over time, he witnessed health care facilities transition from being congregationally run to more corporate structures, leaving less room for the Catholic health care principles that prioritized patient care over profit.

“I always had in my heart that there must be a better way — a way to get back to our roots in faithful Catholic health care delivery,” Palazzolo told *Detroit Catholic*.



Lansing Bishop Earl Boyea, right, donated the 40 acres of land for the project and later took part in its dedication on Padre Pio's feast day, Sept. 23, 2020.

Somewhere along the way, Palazzolo discovered St. Pio and formed a devotion to him. As he spent time reading about the holy man and his legacy, he learned about the Home for the Relief of Suffering.

While the hospital treats bodily ailments, St. Pio's main focus was to see the “wretched and suffering Jesus” in each patient. The hospital would provide a dual healing ministry: both in physical, medicinal care, and in the spiritual.

“Padre Pio's whole focus was the redemptive value of suffering,” Palazzolo said. “You can't always make someone well, but you can help them relieve their suffering and find peace. My theory always has been that God is working on every single patient in a hospital as they are working on a crisis in their life. No one wants to be in a hospital; you have a problem if you are in a hospital. And ultimately, those things are God's way of talking to people.”

Palazzolo said St. Pio had a saying: “More people have lost their faith asking the question ‘Why?’ instead of ‘What?’”

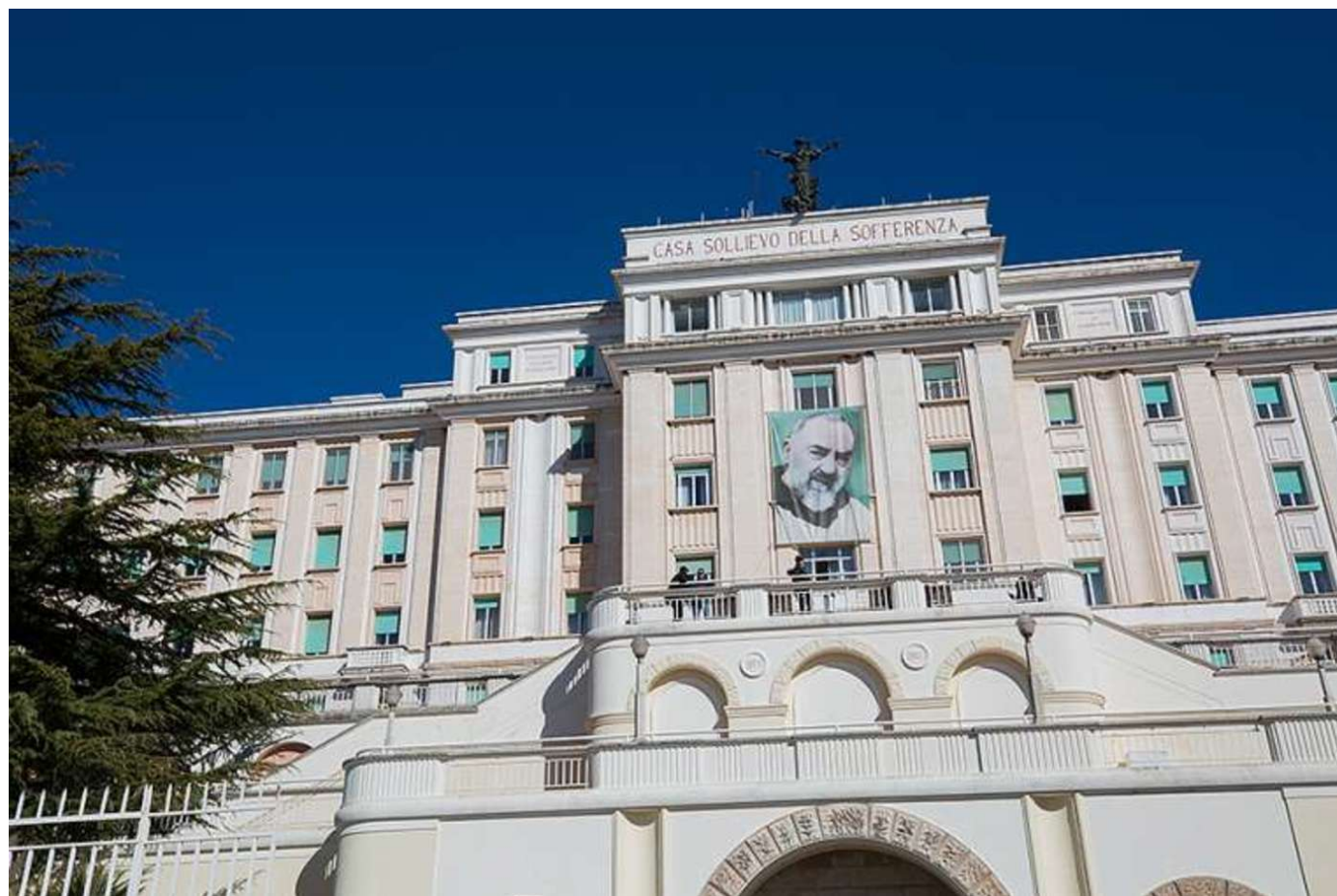
“Hospitals need to be aware of this question so when they deal with patients, they need to be considering, ‘What is God doing?’” Palazzolo said. “So, if you have a 500-bed hospital, you have an incubator of 500 patients whom God is working on in a very big

way.

“If all you do in pastoral care is basically sit down and pray with patients and give them Communion from time to time, that’s awesome, and they need that, but they also need someone to sit down and help them figure out what God is trying to say to them in their life.”

The more Palazzolo read, the more inspired he became, until one day he experienced a direct inspiration from Padre Pio himself.

Padre Pio simply directed Palazzolo: “It is time.”



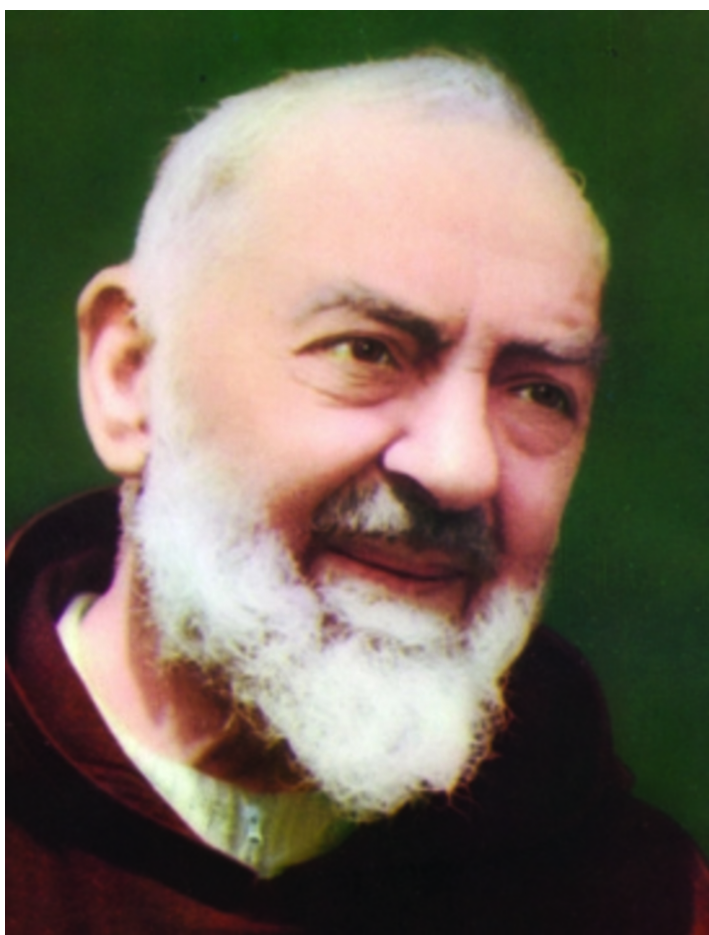
The Casa Sollievo della Sofferenza, founded by St. Pio of Pietrelcina, is pictured in San Giovanni Rotondo, Italy. Founded and run entirely according to Catholic morality and spirituality, it today houses up to 1,000 patients and is recognized as one of the leading medical research hospitals in the world. (Daniel Ibanez | CNA photo)

Palazzolo said a quote from Dr. Guglielmo Sangguinetti, St. Pio’s first director of implementation of the Casa back in 1950, further solidified his resolve:

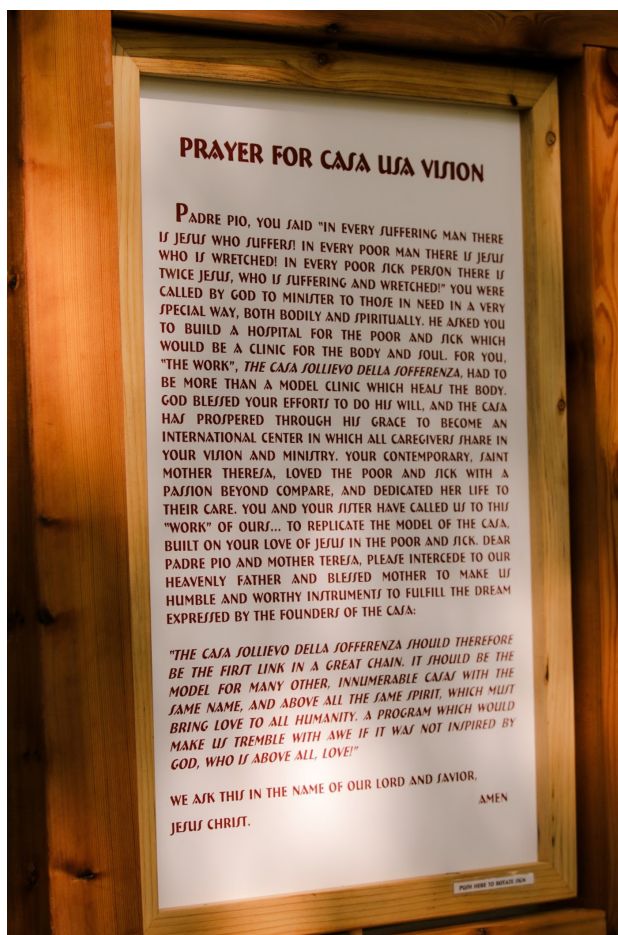
“The Casa Sollievo della Sofferenza should therefore be the first link in a great chain. It should be the model for many other, innumerable Casa’s with the same name and above all the same spirit, which must bring love to all of humanity,” Dr. Sangguinetti said, “a program which would make us tremble with awe if it was not inspired by God who is above all love!”

Palazzolo’s long discernment process began with prayer and the guidance of a spiritual director. His spiritual director assured him that if Padre Pio and the Holy Spirit were truly behind the idea, then it would come to fruition.

Palazzolo began by presenting his idea to the leadership at the original Casa in Italy in 2000, and by 2009, Catholic Healthcare International had signed a collaboration agreement with permissions from the Casa and the Vatican, which oversees the running of the hospital.



St. Padre Pio is pictured in an undated portrait. The great Italian saint, mystic and stigmatist cared deeply for those who were sick and in need of spiritual care. (CNS file photo)



St. Pio's focus was on the patient and not the financial bottom line of the hospital. The Casa USA project hopes to emulate Padre Pio's focus and vision.

Over the next 10 years, Palazzolo assembled a team of Catholic health care and Church leaders, including Mike O'Dea, founder, board president and emeritus executive director for the Troy-based Christ Medicus Foundation; Cardinal Raymond Burke; and Bobby Schindler, the brother of Terri Schiavo and president of the Terri Schiavo Life & Hope Network, in order to carry out St. Pio's vision.

"We want to prove to the Catholic Church in America and to the Catholic health care systems and everybody that you can indeed build a hospital for the right reasons, operate for the right reasons and have it work," Palazzolo said.

The Howell campus is a massive undertaking and will take years to complete, but Palazzolo and his team have it broken down into phases.

Before Padre Pio did anything, he insisted that the success of the Casa would be built on a foundation of prayer, Palazzolo said. In the 1950s, Padre Pio established a network of international prayer groups to support the development of the original Casa, and today, 3,500 such Padre Pio prayer groups exist worldwide.

As part of this network, Palazzolo and his team established three Padre Pio prayer groups in southern Michigan, as well as an international adoration program.

"We have almost 300 people around the world praying for an hour a week in front of the Eucharist for the work that we are doing," Palazzolo said.



The adoration chapel will be a replica of the Madonna della Grazie (Our Lady of Grace) chapel located in the friary in San Giovanni Rotondo, where Padre Pio lived most of his life as a Capuchin priest.

The first phase of the project — and the first physical structures to be erected — will be the spiritual components: an outdoor grotto, which was dedicated on the anniversary of Padre Pio’s death, Sept. 23, 2020; a statue that replicates the experience of Padre Pio receiving the stigmata (the visible wounds of Christ); and, eventually, an adoration chapel that will be a replica of the Madonna della Grazie (Our Lady of Grace) chapel in the Capuchin friary church of San Giovanni Rotondo, where Padre Pio lived most of his life.

The hope is to break ground on the adoration chapel on May 25, 2021, Padre Pio’s birthday, Palazzolo said.

Terri Schiavo Home for the Brain-Injured

The second phase will begin with the development of the Terri Schiavo Home for the Brain Injured. That project will proceed in collaboration with Trinity Health, beginning as a unit at a Trinity Health facility in Ann Arbor housing up to five patients at a time, with the hope that it will eventually reside on the Howell campus.

The center is being established with the backing of Schiavo’s brother, Bobby Schindler, who began advocating for the rights of people who are brain-injured following his family’s legal fight in 2000 to keep Schiavo alive and get her the rehabilitation therapies she needed. Schiavo was removed from a feeding tube and hydration in 2005 and passed away.

“My family has for a long time recognized the need to better serve people with brain injuries,” Schindler told *Detroit Catholic*. “Speaking with other families in similar situations, they are not given the time, rehabilitation and therapies they need to see if they can recover and the care they need to continue to recover.”



A banner of St. Pio of Pietrelcina with members of the Padre Pio prayer groups are pictured on Feb. 6, 2016, in front of the Vatican. Today, more than 3,500 Padre Pio prayer groups exist worldwide. (CNA file photo)

Michigan has seen its own battles in recent years, with several high-profile cases reaching the news involving patients on life support, including a [University of Detroit Jesuit student](#) who died in January after his family's legal fight reached federal court.

When Schindler was invited to participate in the Casa USA project, he jumped at the opportunity to establish such a facility in memory of his sister.

“We need to change the way we think and treat people with brain injuries, as there are these prejudices that exist,” Schindler said. “Much of the decision-making power is with administrators, insurance companies and physicians who are able to make decisions that are contrary to what the family might want for their loved one.”

Schindler cited advancements in therapies and treatments for those with brain injuries as a reason for hope for such families, while decrying the hasty decisions that might lead to a patient's removal from life support.

“You have a culture going in two different directions: on one hand, you see more and more money going into (studying) the mysteries of the brain, and at the same time we are making it easier to end their lives,” Schindler said.

School for the Relief of Suffering

In many ways, the Casa USA project will help bridge the gaps in research and physician care that Schindler has seen when it comes to patients like his sister with the establishment of a School for the Relief of Suffering Medical School.

While the campus one day will host both a hospital and medical school, the school first will be founded in collaboration with an existing, fully accredited medical school in order to take advantage of existing facilities, faculty and training, thereby fast-tracking its creation, Palazzolo said.

“We hope to be able to add into the medical school curriculum those components that will truly help physicians practice as Catholics in their communities, such as (Pope St. Paul VI's) *Humane Vitae*, (Pope St. John Paul II's) *Theology of the Body* and the theology

of life and suffering,” Palazzolo said.

The campus also plans to house a public policy institute as part of the medical school with the guidance of the Christ Medicus Foundation, leaders in developing legislation to protect Catholic ideals and morals in health care.

“We do need to have a Catholic public policy center that deals with health care,” O’Dea said. “We have really been lacking in that area in the Church. The Catholic Church was not really engaged as our religious liberty was being threatened. There still needs to be a lot more education from a Catholic point of view in public policy.”



Lansing Bishop Earl Boyea celebrates Mass on the site of the planned “Home for the Relief of Suffering” in Howell on Sept. 23. Bishop Boyea said the project already has sparked a renewed interest and devotion to St. Padre Pio in the Diocese of Lansing.

While the physical building of the school might be one of the last pieces to fall into place, its establishment is what most intrigued Bishop Boyea when he was first presented with the proposal.

“What intrigues me the most is actually building a Catholic medical school, where Catholic (students) who, at other schools, might have been feeling pressured into engaging in certain medical procedures that they would rather not, find that not to be the case here,” Bishop Boyea told *Detroit Catholic*.

While the timeline for phase three, which would involve the construction of the hospital and medical school, is not yet set, Bishop Boyea said he envisions the site of the Casa USA project becoming a place of pilgrimage, prayer and hope.

The implications of the building of Casa USA are huge and far-reaching, but that’s exactly the impact St. Pio wanted, Bishop Boyea said.

“I have already seen a large number of folks praying to Padre Pio,” said Bishop Boyea, whose diocese recently hosted a relic tour of the great Italian saint. “Already, devotion to him has increased because of this project, and there have been some Padre Pio groups that have been set up in the diocese. This has become a spiritual enrichment, and I think that is in itself is always a great blessing.

“Padre Pio is a great intercessor for healing,” Bishop Boyea said. “I think there is a lot of potential for people to find great blessings in this encounter with him and in this shrine to him.”

Casa USA

To learn more about the Casa USA project, which seeks to bring St. Padre Pio’s vision of a “Home for the Relief of Suffering” to the United States, visit the website for [Catholic Healthcare International](#).

Sagrada Família unveils ambitious building goal for 2021

BY [CATHOLIC NEWS AGENCY](#) FEB 3, 2021 [NATIONAL/WORLD](#)



Sagrada Família Basilica in Barcelona. (CNS via Flickr)

BARCELONA (CNA) — The construction team at the Sagrada Família Basilica in Barcelona has announced an ambitious building goal for 2021.

Workers will seek to complete the Tower of the Virgin Mary with the placement of a 12-pointed star before the end of the year, reported ACI Prensa, CNA’s Spanish-language news partner.

Once finished, the tower is destined to become the second tallest at the basilica designed by the visionary architect Antoni Gaudí, standing around 450 feet tall.

**IMPACT ASSESSMENT
FOR
SITE PLAN PETITION
"CATHOLIC HEALTHCARE INTERNATIONAL"
GENOA TOWNSHIP, LIVINGSTON COUNTY
MICHIGAN**

Prepared for:

**CATHOLIC HEALTHCARE INTERNATIONAL
2464 TAYLOR ROAD, SUITE 317
WILDWOOD, MISSOURI 63040
(636) 220-6550**

Prepared by:

**BOSS ENGINEERING COMPANY
3121 E. GRAND RIVER
HOWELL, MI 48843
(517) 546-4836**

December 18th , 2020

20-477 EIA

INTRODUCTION

The purpose of this Impact Assessment (IA) report is to show the effect that this proposed development may 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* guidelines in accordance with Section 18.07 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 :

Scott Tousignant, P.E. & Paul Grisdela, EIT

BOSS ENGINEERING COMPANY

Civil Engineers, Land Surveyors, Landscape Architects and Planners

3121 E. Grand River

Howell, MI 48843

(517) 546-4836

Prepared For :

Catholic Healthcare International

Jere Palozzolo

2464 Taylor Road, Suite 317

Wildwood, MO 63040

(636) 220-6550

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.

The 40.01-acre site is located on the west side of Chilson Road, just south of Crooked Lake Road. The subject property is currently empty of any buildings or structures. The western and northern portion of the property is wooded with meadow in the southeast & central portion of the site. There are wetlands along the western edge of the property. There are residential properties and farmland bordering the north and south property lines, as well as a railroad just off the western property line. The site is within the Country Estate zoning area.

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.

Resources utilized to study the natural features of the site included an on-site visit, aerial photos from Google Earth, a web soil survey prepared by the USDA, Wetlands Inventory Maps prepared by the MDEGLE as well as resources prepared by the Huron River Watershed Council and other Livingston County Natural resources agencies.

The eastern half of the site primarily slopes to a low point on the southeastern corner of the property. The western half of the site sheet flows to the wooded areas and wetland areas in the rear of the site. The soils on site consist of loam, loamy sands, sandy loams, and complex soils.

The Livingston County Drain Commissioner's "Procedures and Design Criteria for Stormwater Management Systems and Soil Erosion Sedimentation Control Program" was followed throughout the design process. The reading states preservation of the natural environment and use of vegetated swales as the first and third most preferred best management practices, respectively. Thus, careful consideration was taken to ensure a site with minimal earth disturbance and drainage patterns that followed the pre-developed site. As a result, only one notable tree will need to be removed on the site. Bioswales will be implemented on site to provide a natural filtration method of any additional runoff. The bioswales are located at a current low spot as well as on the downslope prior to the wetland on site. These locations allow the site to maintain its current drainage pattern.

D. Impact on storm water 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 County Soil Conservation Service.

The site will utilize two bioswales to control stormwater runoff. Proper sedimentation control devices such as tracking mats, silt fence, and seeding with mulch will be utilized during construction to control erosion and sedimentation. Additional topsoil will be stored next to the proposed church. Given the small building footprint and amount of proposed impervious area compared to the overall site area, there will be minimal impact on the storm runoff. In addition to sedimentation control devices being used, there will also be weekly inspections from a certified stormwater operator to ensure it is properly maintained and functioning throughout construction

E. Impact on surrounding land use: 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.

The site will see an increase in use regardless of the facility, due to it being a vacant site. Services at this church are expected to occur at a minimum of once a month, and primarily weekly. The proposed church is also set back approximately 620 feet off Chilson Road. There is currently a line of trees along the southern property. This will help to reduce any disturbances to the home adjacent to the southern property line. Although the church anticipates some services after dusk which will require lighting, the lighting will be off as often as possible to reduce and minimize any light pollution from this site. Refer to the lighting plan in the Site Plan package for proposed photometrics.

F. Impact on public facilities and services: Description of 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.

The proposed church contains seating for 80 visitors, with an additional 15 seats provided for church staff. Public schools will not be impacted by the church. The impact on police protection will be negligible. The Brighton Area Fire Authority's needs are being accommodated in the road layout of the site, allowing for adequate access to the building. It is important to note this facility will be near capacity for only a few hours on certain days of the week.

G. Impact on public utilities: Description of 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 service with sanitary sewer, calculations for pre- and post-development flows 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.

There will be no public water or sanitary sewer facilities on this site. A Well and septic system will be used for the church. There are no public water or sanitary sewer facilities within the area. Using the Livingston County Environmental Health Well & Septic Records, it may be seen that surrounding properties also contain septic systems. Soil characteristics obtained from the USDA Web Soil Survey show promising soil types for installation of a septic tank. Livingston County Health Department standards were followed in the sizing and isolation distance of the septic tank and well.

H. Storage or handling of any hazardous materials: 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.

There will be no hazardous materials used or disposed of on this 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.

The Institute of Transportation Engineers Trip Generation Manual 10th Edition Volume 2 Part 2 was used to calculate the number of trips generated by the proposed church. The scenario on sheet 187 using gross floor area and the peak hour on a Sunday produced 56 trips. The traffic counts section on Livingston County Road Commission's website was used to analyze Chilson Road annual average daily traffic. The most recent data shows Chilson Road has an AADT of 2,500 between E Coon Lake Road and Beck Road. Chilson Road did experience an annual growth of -26% in 2014 due to the I-96 ramp on Latson Road being constructed. Chilson Road had an AADT of 4,505 prior to the construction of the ramp. The increased traffic caused by the proposed church will have little overall impact, and Chilson Road has been shown to handle much larger AADT volumes in the past. It is important to note that the anticipated mass times for this site generally do not line up with peak hour traffic times.

J. 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.

A traffic study is not required for this site.

K. Special Provisions: General description of any deed restrictions, protective covenants, master deed or association bylaws.

L. A list of all sources shall be provided.

Genoa Township's *Submittal Requirements For Impact Assessment*

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

BUILDING MATERIALS SAMPLE

(SAMPLE BOARD TO BE SENT/DROPPED OFF AT TWP HALL)



SOUTHERN PROPERTY LINE AT FRONT PARKING LOT

(STANDING AT PARKING LOT LOOKING SOUTHERLY TO RESIDENTIAL)



SOUTHERN PROPERTY LINE AT CHURCH

(STANDING AT CHURCH LOCATION LOOKING SOUTHERLY TO RESIDENTIAL)



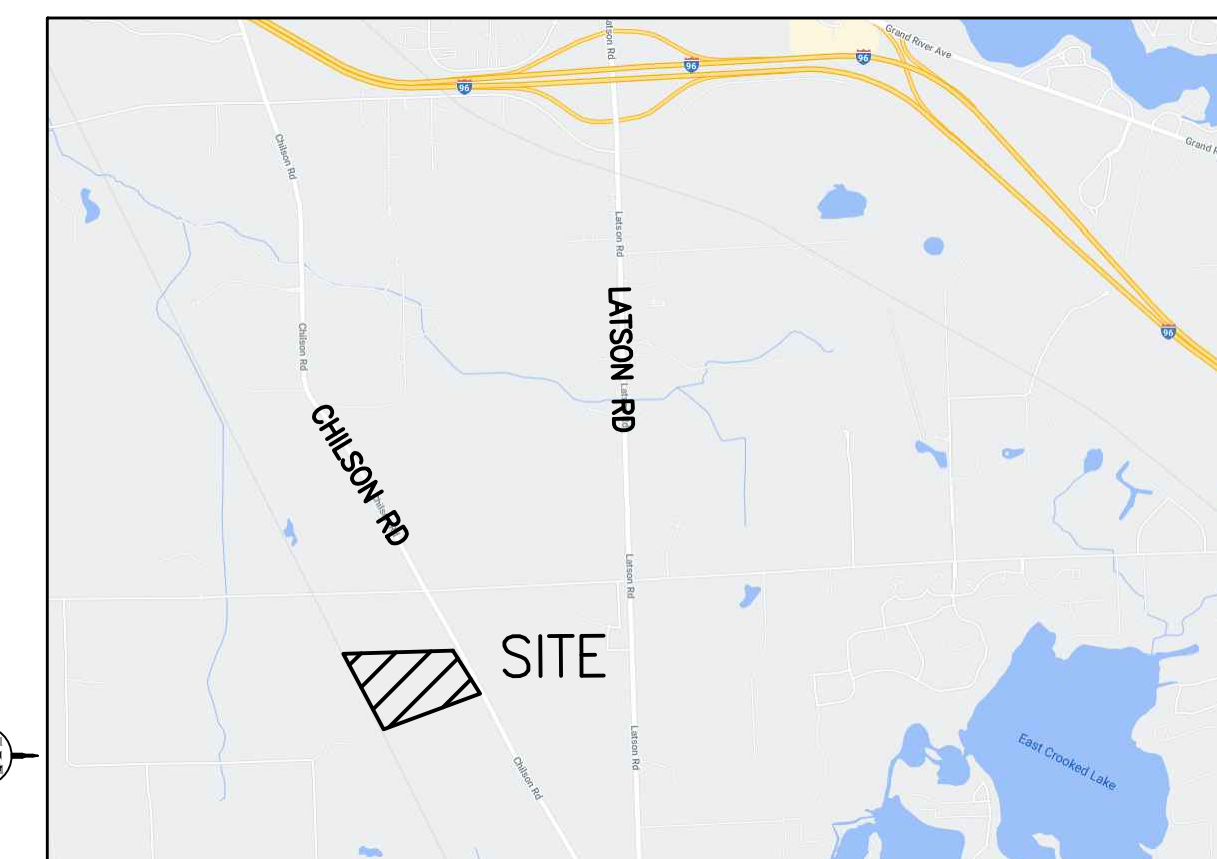
PROPERTY DESCRIPTION:

40 Acres Description:

A part of the Northeast 1/4, Northwest 1/4 and Southwest 1/4 of Section 20, T2N-R9E, Genoa Township, Livingston County, Michigan, described as follows: Commencing at the Center of said Section 20, said Point lying S 00 degrees 04'22" W along the North-South 1/4 line of said Section, 2616.14 feet; thence N 89 degrees 16'18" E, 623.77 feet to the centerline of Chilson Road; thence N 25 degrees 37'28" W along said centerline, 511.68 feet; thence continuing along said centerline, N 25 degrees 35'58" W, 409.12 feet to the Point of Beginning of the Parcel to be described; thence S 64 degrees 49'10" W, 581.00 feet; thence S 52 degrees 45'14" W, 1157.74 feet to the Easterly Line of the Ann Arbor Railroad; thence N 25 degrees 10'14" W along said line, 1566.05 feet; thence N 89 degrees 04'43" E, 1874.35 feet to said centerline; thence S 25 degrees 35'58" E along said centerline, 553.96 feet to the Point of Beginning, containing 40.01 acres more or less and subject to the rights of the Public over existing Chilson Road. Description subject to a stake Survey in the field.

Prepared By: Mathew A. Brady P.S. P.O. Box 400 Brighton, Michigan 48116

SITE PLAN FOR CATHOLIC HEALTHCARE INTERNATIONAL PART OF NE, NW, & SW 1/4, SECTION 20 GENOA TOWNSHIP, LIVINGSTON COUNTY, MI

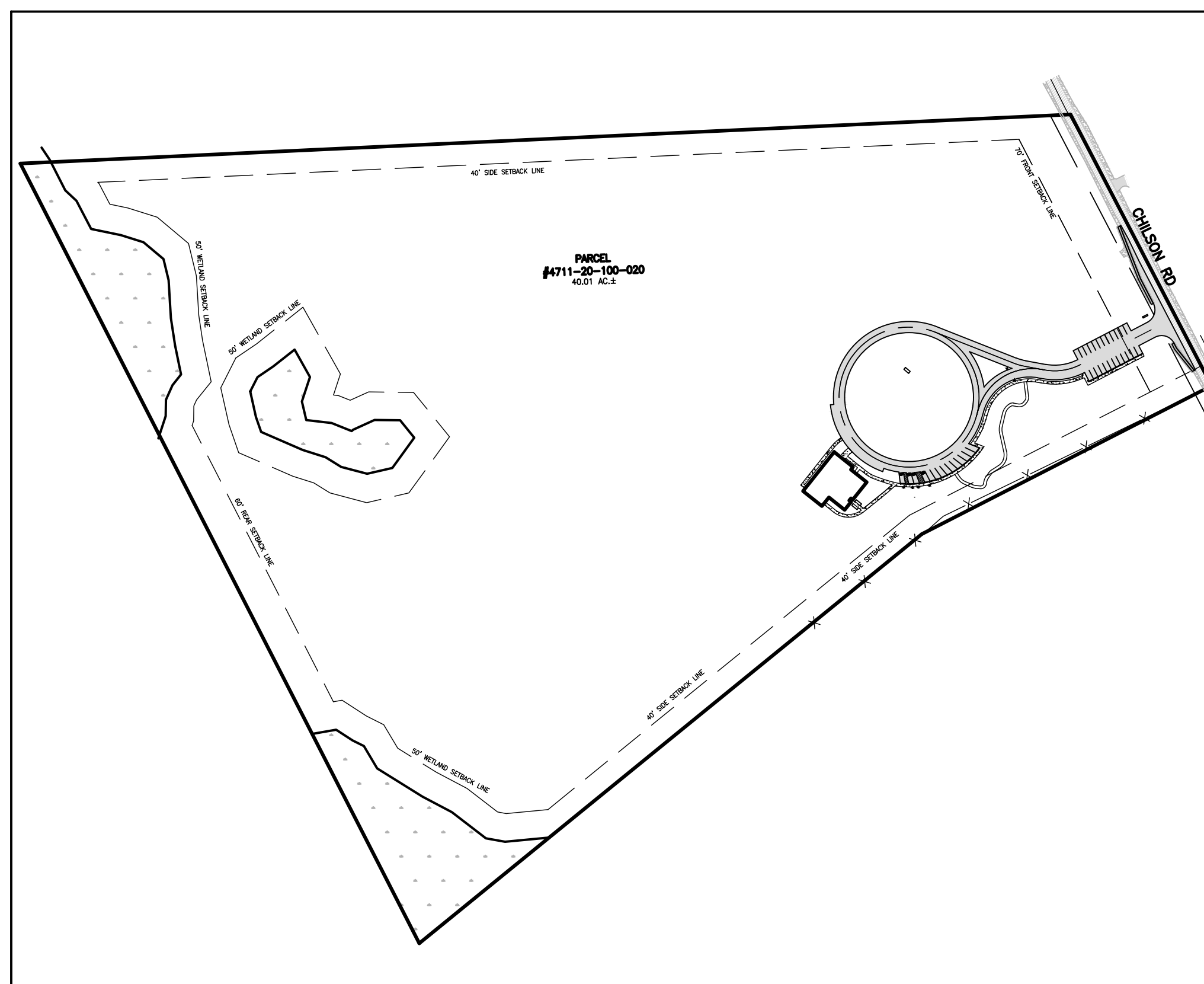


LOCATION MAP

NO SCALE

CONSTRUCTION NOTES

- THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING NOTES AND ANY WORK INVOLVED SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
1. THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.
 2. DO NOT SCALE THESE DRAWINGS AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
 3. A GRADING PERMIT FOR SOIL EROSION-SEDIMENTATION CONTROL SHALL BE OBTAINED FROM THE GOVERNING AGENCY PRIOR TO THE START OF CONSTRUCTION.
 4. IF DUST PROBLEM OCCURS DURING CONSTRUCTION, CONTROL WILL BE PROVIDED BY AN APPLICATION OF WATER, EITHER BY SPRINKLER OR TANK TRUCK.
 5. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH LOCAL MUNICIPAL STANDARDS AND SPECIFICATIONS.
 6. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED TOWNSHIP, COUNTY, AND STATE OF MICHIGAN PERMITS.
 7. PAVED SURFACES, WALKWAYS, SIGNS, LIGHTING AND OTHER STRUCTURES SHALL BE MAINTAINED IN A SAFE, ATTRACTIVE CONDITION AS ORIGINALLY DESIGNED AND CONSTRUCTED.
 8. ALL BARRIER-FREE FEATURES SHALL BE CONSTRUCTED TO MEET ALL LOCAL, STATE AND A.D.A. REQUIREMENTS.
 9. ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE DESIGN ENGINEER PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS AND DIMENSIONS SHOWN HEREON BEFORE BEGINNING CONSTRUCTION.
 10. THE CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND RIGHTS-OF-WAY, PUBLIC OR PRIVATE, PRIOR TO THE START OF CONSTRUCTION.
 11. THE CONTRACTOR SHALL COORDINATE WITH ALL OWNERS TO DETERMINE THE LOCATION OF EXISTING LANDSCAPING, IRRIGATION LINES & PRIVATE UTILITY LINES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING LANDSCAPING, IRRIGATION LINES, AND PRIVATE UTILITY LINES.
 12. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT.
 13. THE CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
 14. THE CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES.
 15. THE CONTRACTOR SHALL CALL MISS DIG A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
 16. ALL EXCAVATION UNDER OR WITHIN 3 FEET OF PUBLIC PAVEMENT, EXISTING OR PROPOSED SHALL BE BACKFILLED AND COMPACTED WITH SAND (MDOT CLASS II).
 17. ALL PAVEMENT REPLACEMENT AND OTHER WORKS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWNSHIP, INCLUDING THE LATEST MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
 18. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES.
 19. NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR ANY DELAY OR INCONVENIENCE DUE TO THE MATERIAL SHORTAGES OR RESPONSIBLE DELAYS DUE TO THE OPERATIONS OF SUCH OTHER PARTIES DOING WORK INDICATED OR SHOWN ON THE PLANS OR IN THE SPECIFICATION OR FOR ANY REASONABLE DELAYS IN CONSTRUCTION DUE TO THE ENCOUNTERING OR EXISTING UTILITIES THAT MAY OR MAY NOT BE SHOWN ON THE PLANS.
 20. DURING THE CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL NOT PERFORM WORK BY PRIVATE AGREEMENT WITH PROPERTY OWNERS ADJACENT TO THE PROJECT.
 21. IF WORK EXTENDS BEYOND NOVEMBER 15, NO COMPENSATION WILL BE DUE TO THE CONTRACTOR FOR ANY WINTER PROTECTION MEASURES THAT MAY BE REQUIRED BY THE ENGINEER.
 22. NO TREES ARE TO BE REMOVED UNTIL MARKED IN THE FIELD BY THE ENGINEER.
 23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROPERTY BEYOND THE CONSTRUCTION LIMITS INCLUDING BUT NOT LIMITED TO EXISTING FENCE, LAWN, TREES AND SHRUBBERY.
 24. ALL AREAS DISTURBED BY THE CONTRACTOR BEYOND THE NORMAL CONSTRUCTION LIMITS OF THE PROJECT SHALL BE SODDED OR SEEDED AS SPECIFIED OR DIRECTED BY THE ENGINEER.
 25. ALL ROOTS, STUMPS AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED AND THE HOLE BACKFILLED WITH SUITABLE MATERIAL. WHERE GRADE CORRECTION IS REQUIRED, THE SUBGRADE SHALL BE CUT TO CONFORM TO THE CROSS-SECTION AS SHOWN IN THE PLANS.
 26. TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SIGNS AND TRAFFIC CONTROL DEVICES. FLAG PERSONS SHALL BE PROVIDED BY THE CONTRACTOR IF DETERMINED NECESSARY BY THE ENGINEER. ALL SIGNS SHALL CONFORM TO THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AT NO COST TO THE TOWNSHIP. NO WORK SHALL BE DONE UNLESS THE APPROPRIATE TRAFFIC CONTROL DEVICES ARE IN PLACE.
 27. ALL DEMOLISHED MATERIALS AND SOIL SPOILS SHALL BE REMOVED FROM THE SITE AT NO ADDITIONAL COST, AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
 28. AFTER REMOVAL OF TOPSOIL, THE SUBGRADE SHALL BE COMPACTED TO 95% OF ITS UNIT WEIGHT.
 29. ALL GRADING IN THE PLANS SHALL BE DONE AS PART OF THIS CONTRACT. ALL DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SUBGRADE PRIOR TO COMPACTING.
 30. NO SEEDING SHALL BE DONE AFTER OCTOBER 15 WITHOUT APPROVAL OF THE ENGINEER.
 31. ANY EXISTING APPURTENANCES SUCH AS MANHOLES, GATE VALVES, ETC. SHALL BE ADJUSTED TO THE PROPOSED GRADE AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
 32. SOIL EROSION MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION HAS BEEN RE-ESTABLISHED.
 33. ALL PERMANENT SIGNS AND PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF THE MICHIGAN MUTCD MANUAL AND SHALL BE INCIDENTAL TO THE CONTRACT.



OVERALL SITE MAP

NO SCALE

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	NATURAL FEATURES PLAN
3	EXISTING CONDITIONS & DEMOLITION PLAN
4	SITE PLAN
5	GRADING & SOIL EROSION CONTROL PLAN
6	DRAINAGE PLAN & BIOSWALE CALCULATIONS
7	LANDSCAPE PLAN
DRAWINGS BY OTHERS	
1	GASSER BUSH ASSOCIATES -- LIGHTING PHOTOMETRIC PLAN
1	SWANSON DESIGN STUDIOS -- ARCHITECTURAL CHAPEL/OFFICE PLAN
2	FRONT EXTERIOR ELEVATIONS
3	BACK EXTERIOR ELEVATIONS
A1	GROTTO DETAIL PLAN

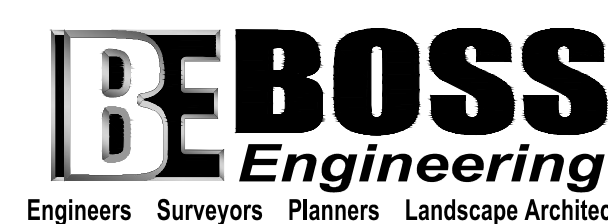
INDEMNIFICATION STATEMENT

THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.

PREPARED FOR:

CATHOLIC HEALTHCARE INTERNATIONAL
2464 TAYLOR ROAD SUITE 317
WILDWOOD, MO 63040
CONTACT: JERE PALAZZOLO
PHONE: 636-220-6550

PREPARED BY:



3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
517.546.4836 FAX 517.548.1670

FOR SITE PLAN APPROVAL ONLY!
NOT FOR CONSTRUCTION

						1
NO	BY	CK	REVISION	DATE	JOB NO:	20-477
						ISSUE DATE: 12/18/20

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'-'F'. ALTHOUGH THE TOTAL SITE IS MEASURED AT 46.89 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.

WETLAND "A"

AN ESTIMATED 1.24 ACRE "FRESHWATER EMERGENT WETLAND" AS DESCRIBED BY THE NATIONAL WETLANDS INVENTORY. CONTIGUOUS OFF-SITE AND IS PART OF A MUCH LARGER WETLAND WHICH QUALIFIES IT AS A REGULATED WETLAND. THE DOMINANT PLANT SPECIES ARE RED OSIER DOGWOOD, GRAY DOGWOOD, SENSITIVE FERN, AND REED CANARY GRASS. THIS WETLAND BORDERS THE RAILROAD CORRIDOR AT THE WEST PROPERTY LINE. A DRAINAGE CHANNEL RUNS PARALLEL TO THE RAILROAD TRACKS AND WETLAND 'A' IS A COLLECTOR BASIN OF THE DRAINAGE CHANNEL.

WETLAND "B"

AN ESTIMATED 1.05 ACRE "FRESHWATER EMERGENT WETLAND" THAT IS COMPOSED OF COMPOSED OF HYDRIC CARLISLE MUCK SOILS. THIS WETLAND ALSO CONTIGUOUS OFF SITE TO THE NORTH AND IS A REGULATED WETLAND AS IT HAS A HYDRIC CONNECTION TO WETLAND A VIA DRAINAGE DITCH. THE DOMINANT PLANT SPECIES ARE GRAY DOGWOOD, SENSITIVE FERN, AND REED CANARY GRASS.

WETLAND "C"

AN ESTIMATED 0.59 ACRE "LOWLAND HARDWOOD" WETLAND, ACCORDING TO THE EGLE WETLAND MAP VIEWER. THIS WETLAND IS DOMINATED BY REED CANARY GRASS WITH A FEW BUTTON BUSH SHRUBS SCATTERED THROUGHOUT.

ZONE "A"

ZONE "A" IS A STAND OF HEALTHY AND MATURE WHITE PINE TREES THAT AVERAGE APPROXIMATELY 20' AT DIAMETER BREST HEIGHT IN SIZE. THE TREES ARE PLANTED ON AVERAGE 10'-15' APART FROM ONE ANOTHER.

ZONE "B"

ZONE "B" IS APPROXIMATELY 8.4 ACRES IN SIZE AND IS MOSTLY OPEN SPACE AND MANAGED LAWN AREAS WITH MINIMAL SLOPES. THE SOILS CONSIST MOSTLY OF BOYER OSHTOMO SANDY LOAMS. THERE ARE FEW TREES IN THIS ZONE, THOUGH A GROTTO OF MATURE AND MOSTLY HEALTHY BOX ELDER TREES IS LOCATED IN THE CENTER OF THE SITE THAT WILL BE PROTECTED.

ZONE "C"

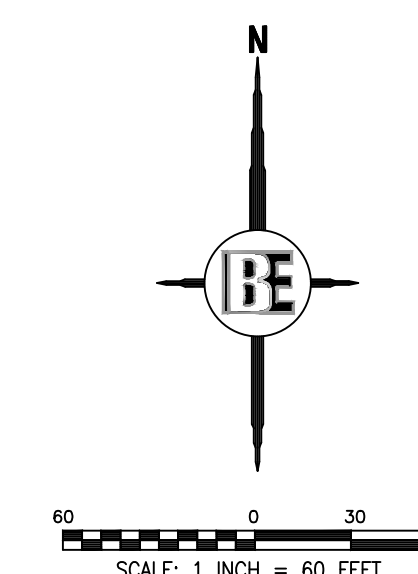
ZONE "C" IS APPROXIMATELY 9.7 ACRES IN SIZE. THE TREES CONSIST OF MATURE RED OAK, BLACK CHERRY, BLACK WALNUT, AND SHAGBARK HICKORY RANGING FROM 10'-20' AT DIAMETER BREST HEIGHT. THE UNDERSTORY IS RELATIVELY OPEN WITH SOME BLACK RASPBERRY BRAMBLES AND MULTIFLORA ROSES OCCUPYING THE OPEN SPACES. THERE ARE HICKORY AND OAK SAPLINGS SPREAD THROUGHOUT INDICATING A HEALTHY FUTURE FOR SUCCESSION. SOILS ARE WASHNETAW SILT LOAMS AND BOYER OSHTOMO SAND LOAMS WITH MINIMAL SLOPES.

ZONE "D"

ZONE "D" IS APPROXIMATELY 2.72 ACRES IN SIZE AND IS WHAT APPEARS TO BE MOUNDED EARTH LIKELY FROM MASS GRADING EFFORTS THAT WERE EXECUTED MANY YEARS AGO. THE AREA IS MOSTLY OPEN SPACE WITH 3:1 SLOPES LEADING TO THE TOP. PLANT SPECIES INCLUDE GOLDEN ROD, VARIOUS ASTERS, AND SEVERAL EASTERN RED CEDAR TREES. THERE ARE SEVERAL CRABAPPLE TREES PLANTED THROUGHOUT.

ZONE "E"

ZONE "E" IS APPROXIMATELY 18 ACRES IN SIZE WITH MATURE BLACK CHERRY, RED OAK, SHAGBARK HICKORY RANGING FROM 12'-20' AT DIAMETER BREST HEIGHT. THERE ARE SEVERAL LANDMARK TREES THAT INCLUDE RED OAK AND BLACK CHERRY. THE UNDERSTORY INCLUDES BRAMBLE, POKEWEEED, HONEYSUCKLE, A FEW HICKORY AND OAK SAPLINGS, AND AN OCCASIONAL CELESTRIS VINE. THERE IS ALSO A STAND OF AMERICAN ELM TREES. THERE IS A GENTLE SLOPE TO THE LAND THAT DRAINS STORMWATER TO THE WEST. IN THE NORTHEAST, THERE APPEARS TO BE A REMNANT OF AN OLD BUILDING FOUNDATION THAT HAS BEEN DEMOLISHED AND SET INTO A PILE OF RUBBLE ATOP A SMALL HILL.



LEGEND

PROPOSED (PR)	EXISTING (EX)	DESCRIPTION
000	+922.08	CONTOUR
T/C	FF	FINISHED FLOOR ELEVATION
XXXXXX	FG	FINISHED GRADE ELEVATION
	T/A	TOP OF ASPHALT
	T/W	TOP OF WALK
	F/A	FLOW LINE
	T/P	TOP OF PIPE
B/P	B/P	BOTTOM OF PIPE
INV	RM	RIM ELEVATION
INV	IN	INLET STRUCTURE
IN	CB	CATCHBASIN STRUCTURE
CB	RY	REARWARD STRUCTURE
RY	ES	END-SECTION
ES	OV	GATEVALVE STRUCTURE
OV	HY	HYDRANT
HY	UP	UTILITY POLE
UP	SS	SANITARY SEWER
SS	SL	SANITARY LEAD
SL	FM	FORCE MAIN
FM	PS	PRESSURE SEWER
PS	ST	STORM SEWER
ST	WM	WATER MAIN
WM	WL	WATER LEAD
WL	FD	FIBER OPTIC
FD	OH	OVERHEAD WIRE
OH	C	CABLE
C	E	ELECTRIC
E	G	GAS
G	T	TELEPHONE
T	X	FENCE
X	L	SILT FENCE
L	W	WETLAND BOUNDARY
W	GL	LIMITS OF GRADING/CLEARING
GL	M	MANHOLE
M	I	INLET / CATCHBASIN
I	FS	FLARED END-SECTION
FS	GV	GATE VALVE
GV	H	HYDRANT
H	U	UTILITY POLE
U	S	SIGN
S	NF	NOT FIELD VERIFIED TO BE REMOVED
NF		SANITARY SEWER LABEL
		STORM SEWER LABEL
		WATER MAIN LABEL
		SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)
		CONCRETE
		ASPHALT
		MODIFIED CURB



- GENERAL SURVEY NOTES:**
- BEARINGS ARE BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, RECORDED BEARINGS WERE ESTABLISHED FROM LIVINGSTON ENGINEERING SURVEY JOB NO. 19208, AS RECORDED IN 20195-0113, LIVINGSTON COUNTY RECORDS.
 - 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.
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 - ALLOW THREE WORKING DAYS BEFORE YOU DIG, CALL MISS DIG TOLL FREE 1-800-482-7171.

- SITE BENCHMARKS (NAVD83 DATUM):**
- BM #200 = BOSS NAIL/TAG S/S 24" OAK TREE. ELEV.=959.08
 - BM #201 = BOSS NAIL/TAG S/S P-POLE CENTER OF SITE. ELEV.=958.47

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BA	Boyer-Oshtemo loamy sands, 2 to 6 percent slopes	3.2	8.0%
BB	Boyer-Oshtemo loamy sands, 2 to 6 percent slopes	7.9	21.2%
BC	Boyer-Oshtemo loamy sands, 0 to 2 percent slopes	2.1	5.0%
Cc	Carlisle muck, 0 to 2 percent slopes	1.0	3.0%
FB	Fin-Boyer complex, 2 to 6 percent slopes	5.9	15.9%
FG	Fin-Boyer complex, 12 to 18 percent slopes	0.9	2.3%
GS	Gifford sandy loam, 0 to 2 percent slopes, gravelly subsoil	2.3	6.2%
MoA	Waukesha loam, 0 to 2 percent slopes	7.0	18.0%
MoB	Waukesha loam, 2 to 6 percent slopes	3.7	9.9%
MoC	Waukesha loam, 6 to 12 percent slopes	0.7	1.8%
Wt	Washnetaw silt loam	3.2	8.0%
Totals for Area of Interest		37.3	100.0%

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

CATHOLIC HEALTHCARE INTERNATIONAL
2464 TAYLOR ROAD, SUITE 317
WILLOWOOD, MO 63090
314-922-2136

NATURAL FEATURES PLAN

PROJECT	PREPARED FOR	TITLE	DATE
CATHOLIC HEALTHCARE INTERNATIONAL	CATHOLIC HEALTHCARE INTERNATIONAL	NATURAL FEATURES PLAN	

DESIGNED BY:	DATE
JH	

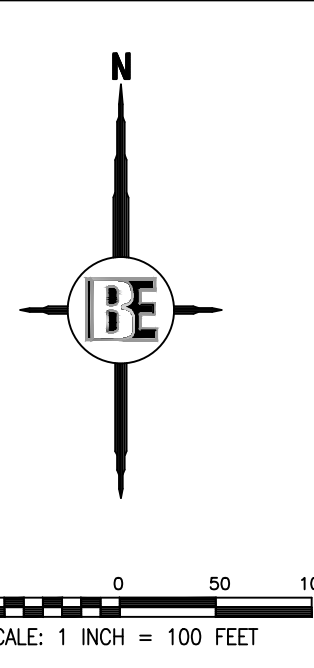
DRAWN BY:	DATE
JH	

CHECKED BY:	DATE

SCALE:	DATE:
1" = 100'	12-18-20

JOB NO.:	DATE:
20-477	12-18-20

SHEET NO.:	DATE:
2	



LEGEND

PROPOSED (PR)	EXISTING (EX)	
T/C	+900	CONTOUR
XXX.XX	+922.08	SPOT ELEVATION
FF	FF	FINISHED FLOOR ELEVATION
T/A	T/A	FINISHED GRADE ELEVATION
T/C	T/C	TOP OF ASPHALT
T/W	T/W	TOP OF CURB / CONCRETE
F/L	F/L	TOP OF WALK
T/P	T/P	FLOW LINE
B/P	B/P	TOP OF PIPE
RIM	RIM	BOTTOM OF PIPE
INV	INV	RIM ELEVATION
MH	MH	INVERT ELEVATION
IN	IN	MANHOLE STRUCTURE
CB	CB	INLET STRUCTURE
RY	RY	CATCHBASIN STRUCTURE
ES	ES	REARYARD STRUCTURE
OV	OV	END-SECTION
HY	HY	GATEVALVE STRUCTURE
UP	UP	HYDRANT
SN	SN	UTILITY POLE
SL	SL	SANITARY SEWER
FM	FM	SANITARY LEAD
PS	PS	FORCE MAIN
ST	ST	PRESSURE SEWER
WM	WM	STORM SEWER
WL	WL	WATER MAIN
FO	FO	WATER LEAD
OH	OH	FIBER OPTIC
C	C	OVERHEAD WIRE
E	E	CABLE
T	T	ELECTRIC
X	X	GAS
L	L	TELEPHONE
F	F	FENCE
S	S	SILT FENCE
W	W	WETLAND BOUNDARY
L	L	LIMITS OF GRADING/CLEARING
IN	IN	MANHOLE
IN	IN	INLET / CATCHBASIN
FL	FL	FLARED END-SECTION
HY	HY	GATE VALVE
UP	UP	HYDRANT
UP	UP	UTILITY POLE
UP	UP	SIGN
UP	UP	NOT FIELD VERIFIED TO BE REMOVED
SL	SL	SANITARY SEWER LABEL
ST	ST	STORM SEWER LABEL
WM	WM	WATER MAIN LABEL
SO	SO	SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)
CON	CON	CONCRETE
ASP	ASP	ASPHALT
MOD	MOD	MODIFIED CURB
SOB	SOB	SOIL BOUNDARY



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Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BIA	Boyer-Orlando loamy sands, 0 to 2 percent slopes	3.2	8.5%
BIB	Boyer-Orlando loamy sands, 2 to 6 percent slopes	7.0	21.2%
BIC	Boyer-Orlando loamy sands, 6 to 12 percent slopes	2.1	5.6%
Cc	Carters muck, 0 to 2 percent slopes	1.5	3.9%
FrB	Fair-Boyer complex, 2 to 6 percent slopes	5.9	15.9%
FrD	Fair-Boyer complex, 12 to 18 percent slopes	0.9	2.3%
Gd	Gifford sandy loam, 0 to 2 percent slopes, gravelly subsoil	2.3	6.2%
MAA	Wauvee loam, 0 to 2 percent slopes	7.0	18.8%
MAb	Wauvee loam, 2 to 6 percent slopes	3.7	9.9%
MAc	Wauvee loam, 6 to 12 percent slopes	0.7	1.8%
WA	Wauvee silt loam	3.2	8.5%
Totals for Area of Interest		37.3	100.0%

BEBOSS Engineering
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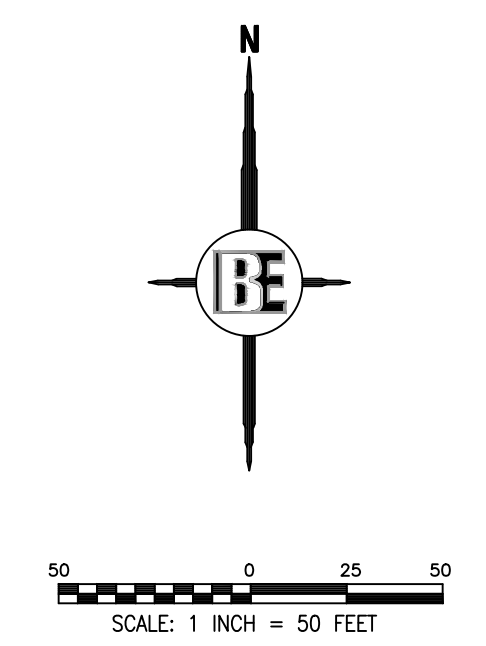
PROJECT: CATHOLIC HEALTHCARE INTERNATIONAL
 PREPARED FOR: CATHOLIC HEALTHCARE INTERNATIONAL
 2464 TAYLOR ROAD, SUITE 317
 WILLOWOOD, MO 63140
 314-932-2136

TITLE: EXISTING CONDITIONS & DEMOLITION PLAN

NO.	DATE	REVISION PER	BY
1			ST

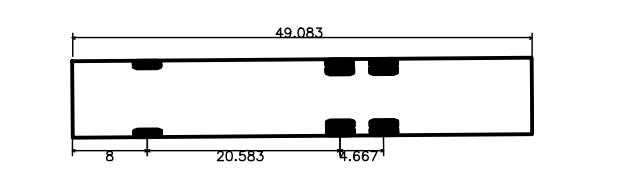
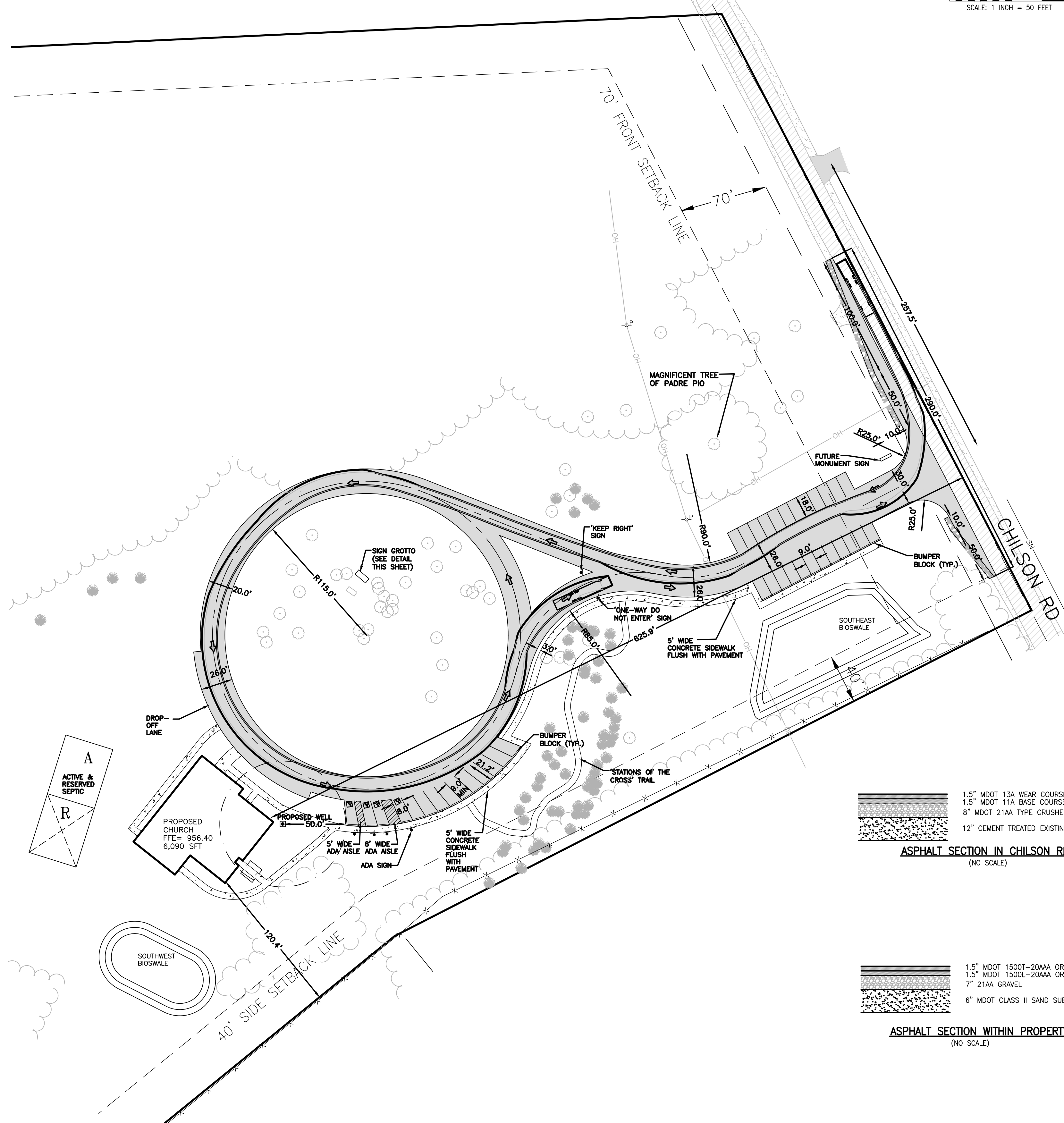
DESIGNED BY: ST
 DRAWN BY: PG
 CHECKED BY:
 SCALE: 1" = 100'
 JOB NO: 20-477
 DATE: 12-18-20
 SHEET NO. **3**

LEGEND		
PROPOSED (PR)	EXISTING (EX)	
---	---	CONTOUR
---	---	SPOT ELEVATION
FF	FF	FINISHED FLOOR ELEVATION
FG	FG	FINISHED GRADE ELEVATION
T/A	T/A	TOP OF ASPHALT
T/C	T/C	TOP OF CURB / CONCRETE
T/W	T/W	TOP OF WALK
F/L	F/L	FLOW LINE
T/P	T/P	TOP OF PIPE
B/P	B/P	BOTTOM OF PIPE
RM	RM	RIM ELEVATION
INV	INV	INVERT ELEVATION
MH	MH	MANHOLE STRUCTURE
IN	IN	INLET STRUCTURE
CB	CB	CATCHBASIN STRUCTURE
RY	RY	REARWARD STRUCTURE
ES	ES	END-SECTION
OV	OV	GATEVALVE STRUCTURE
HY	HY	HYDRANT
UP	UP	UTILITY POLE
SN	SN	SANITARY SEWER
SL	SL	SANITARY LEAD
FM	FM	FORCE MAIN
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WM	WM	WATER MAIN
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H	H	FLARED END-SECTION
U	U	HYDRANT
S	S	UTILITY POLE
N	N	NOT FIELD VERIFIED
TBR	TBR	TO BE REMOVED
STR	STR	SANITARY SEWER LABEL
CS	CS	STORM SEWER LABEL
WM	WM	WATER MAIN LABEL
SO	SO	SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)
CON	CON	CONCRETE
ASP	ASP	ASPHALT
MC	MC	MODIFIED CURB
WI	WI	WELL ISOLATION



THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS MADE FOR THE ACCURACY OF THE LOCATION AND ELEVATION OF EXISTING UTILITIES. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE FOUND. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.

BEFORE ANY WORK BEGINS, CALL MISS DIG 1-800-488-7471

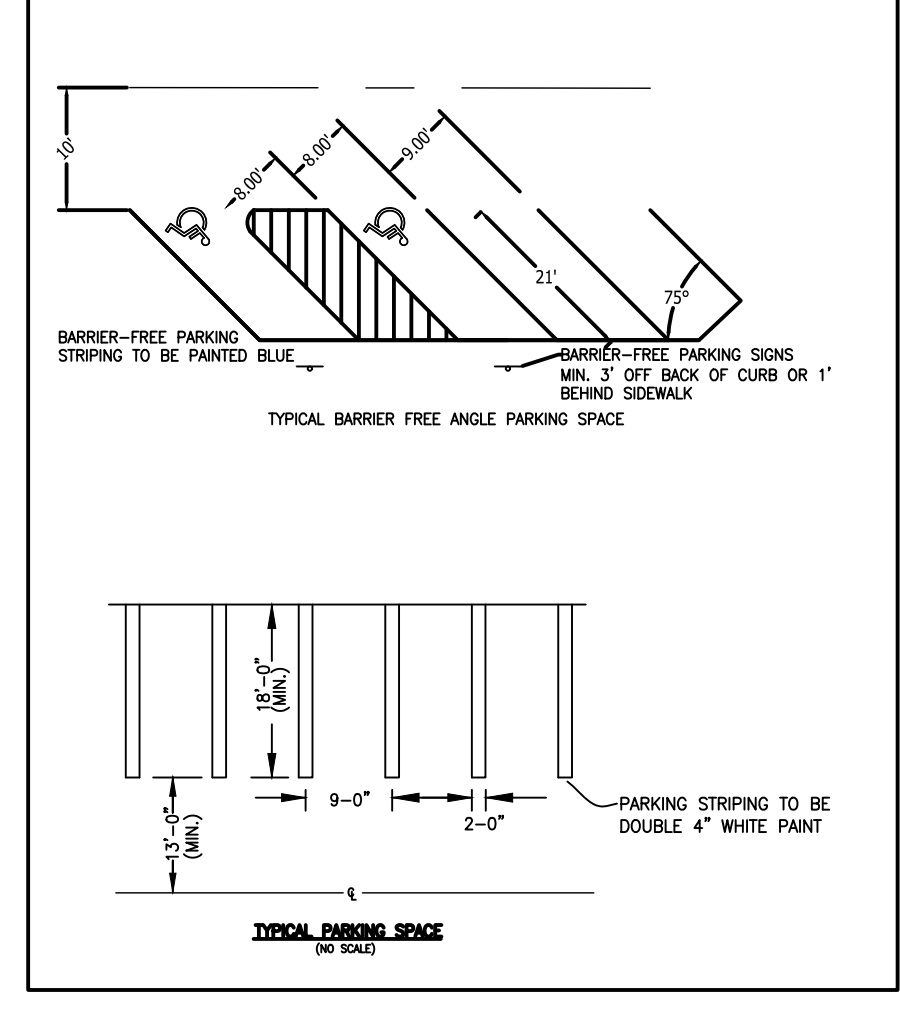
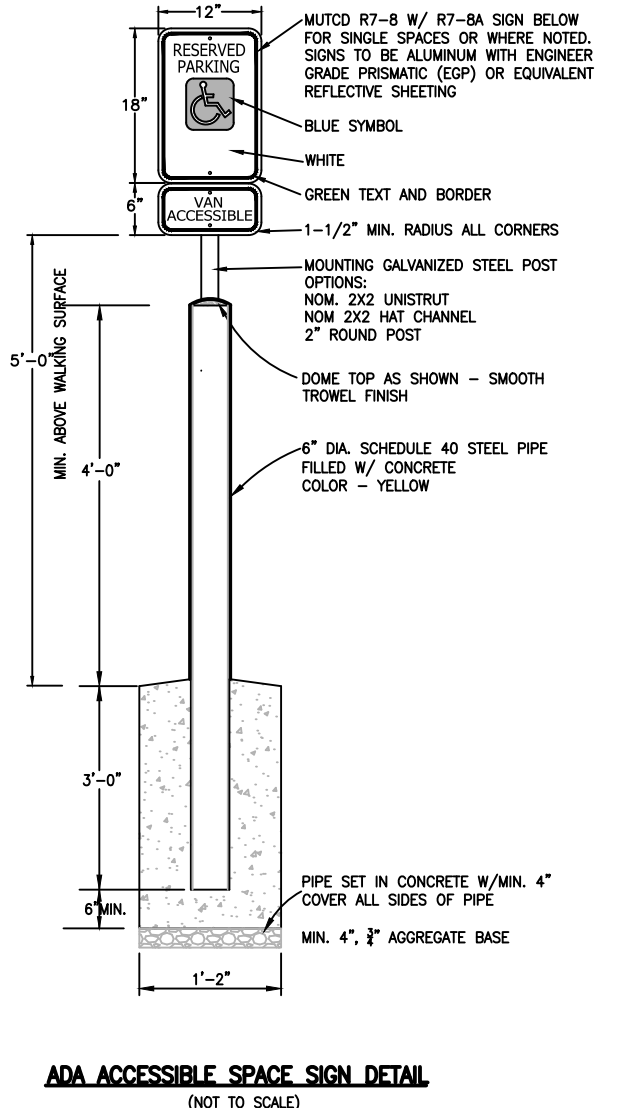
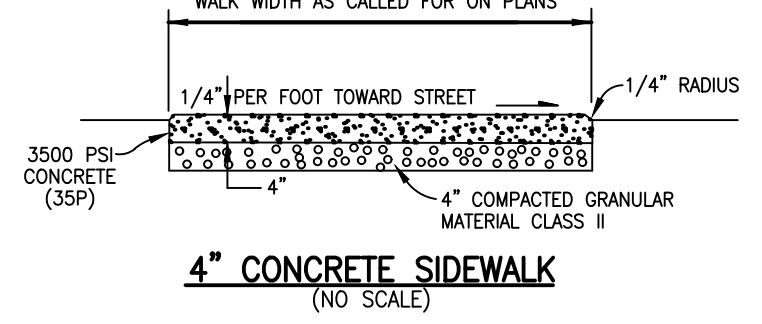
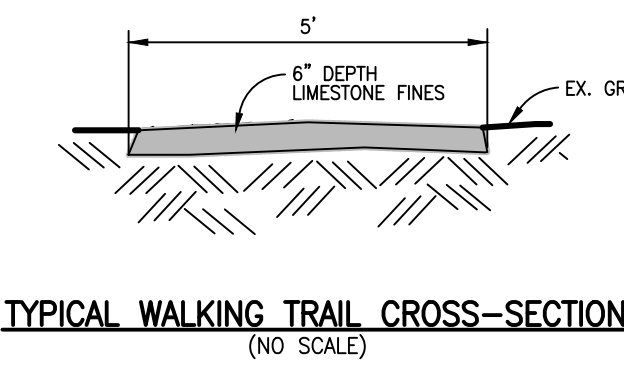
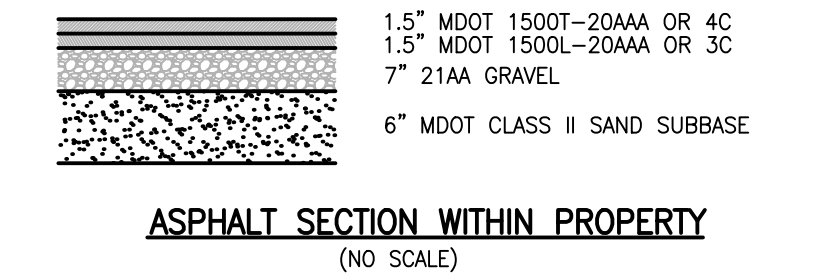
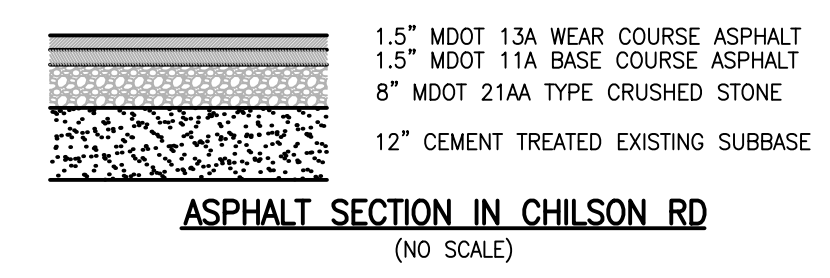


Brighton Area Fire Authority	49.083ft
Overall Length	6.167ft
Overall Width	7.500ft
Min Body Ground Clearance	0.750ft
Track Width	6.167ft
Lock-to-lock time	5.00s
Max Steering Angle (Virtual)	45.00°

PARKING SPACES REQUIRED:
1 SPACE PER 3 SEATS
95 SEATS / 3 = 31.6 = 32 SPACES

39 PARKING SPACES PROVIDED

CURRENT ZONING: CE (COUNTRY ESTATE)
MINIMUM SETBACK REQUIREMENTS:
FRONT = 75 FEET
SIDES = 40 FEET
REAR = 60 FEET
ORDINARY HIGH WATER MARK = 50 FEET
MINIMUM LOT AREA = 5 AC ±
MINIMUM LOT WIDTH = 220 FEET
MAXIMUM LOT COVERAGE = NA
MAXIMUM BUILDING HT. = 35 FEET OR (2) STORIES



BEBOSS
Engineering

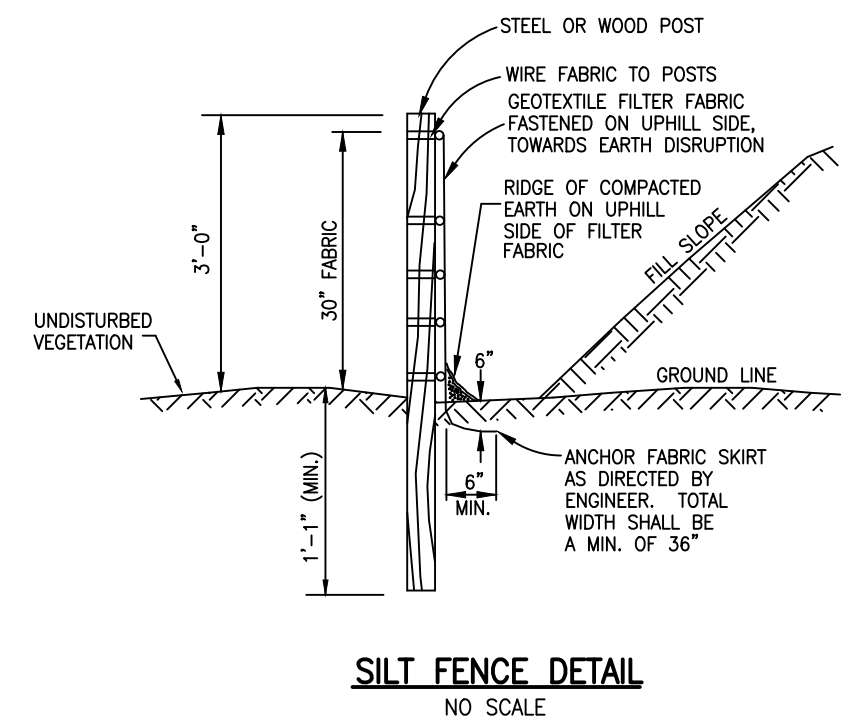
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
517.546.4836 FAX 517.548.1670

PROJECT: CATHOLIC HEALTHCARE INTERNATIONAL
PREPARED FOR: CATHOLIC HEALTHCARE INTERNATIONAL
2464 TAYLOR ROAD, SUITE 317
WILLOWOOD, IN 46090
314-922-2136

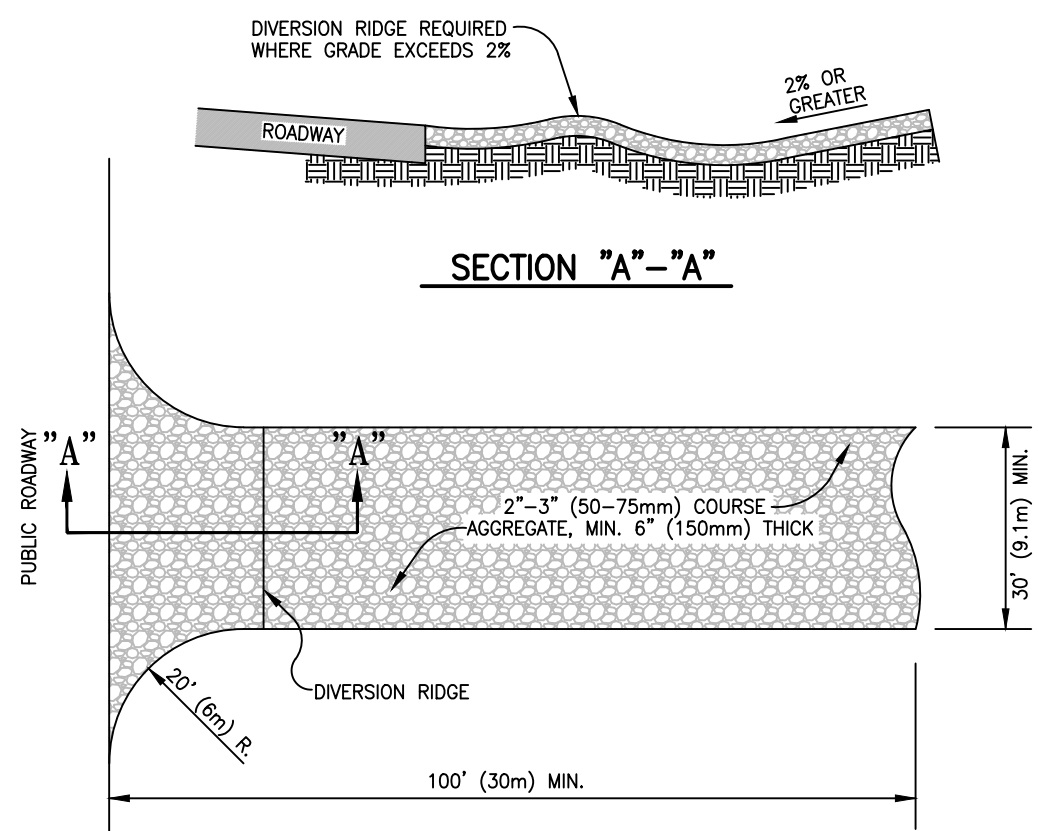
TITLE: SITE PLAN

REVISION	PER	DATE

DESIGNED BY: ST
DRAWN BY: PG
CHECKED BY:
SCALE: 1" = 50'
JOB NO: 20-477
DATE: 12-18-20
SHEET NO. 4



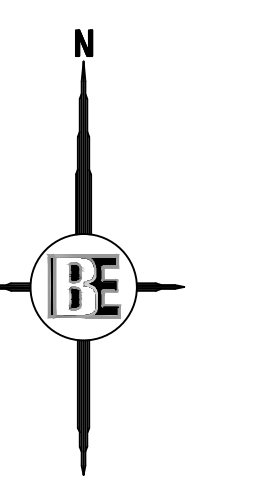
SILT FENCE DETAIL
NO SCALE



TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT
NO SCALE

SOIL EROSION CONTROL MEASURES	
1	STRIPPING & STOCKPILING TOPSOIL TOPSOIL MAY BE STOCKPILED ABOVE BORROW AREAS TO ACT AS A DIVERSION SLOPES SHOULD BE TEMPORARILY SLOPED
6	SEEDING WITH WHEAT AND/OR WINTER RYE FACILITATES ESTABLISHMENT OF VEGETATION COVER EFFECTIVE FOR BARRIERS WITH LOW VELOCITY EARLY PLANTING IN SMALL QUANTITIES BY INEXPERIENCED PERSONNEL SHOULD INCLUDE COVERED TOPSOIL (S)
14	AGGREGATE COVER STABILIZES SOIL SURFACE, THIS MINIMUM FROZEN PERMANENT CONSTRUCTION TRAFFIC IN HARSH WEATHER MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS
54	USES GEOTEXTILE FABRIC AND POST OR POLES. EASY TO CONSTRUCT AND LOCAL AS NECESSARY. (SEE DETAIL THIS SHEET)

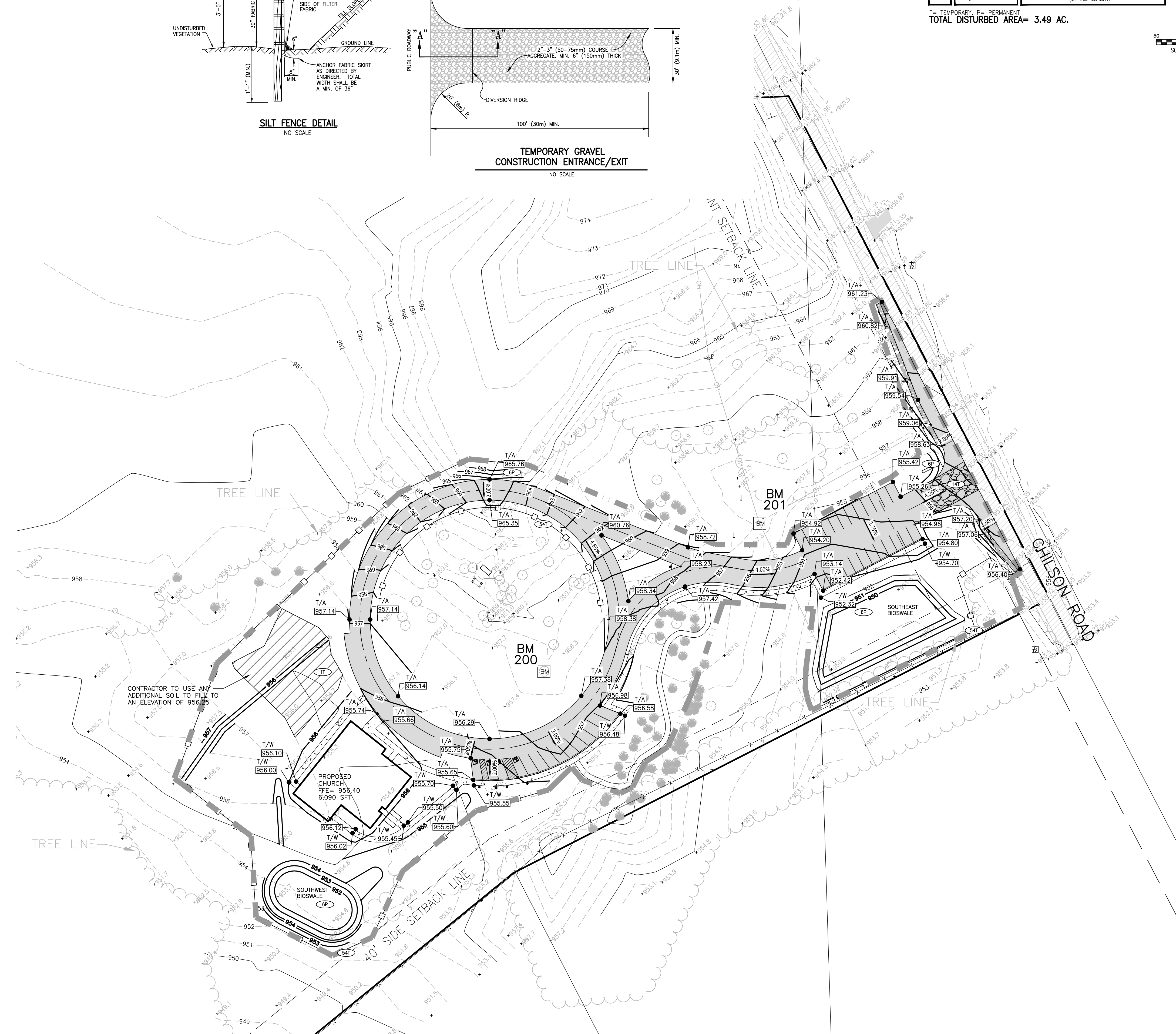
T= TEMPORARY P= PERMANENT
TOTAL DISTURBED AREA = 3.49 AC.



PROPOSED (PR)	EXISTING (EX)	LEGEND
900 T/C XXXX.XX	+ 922.08	CONTOUR
FF	FF	SPOT ELEVATION
T/A	T/A	FINISHED FLOOR ELEVATION
T/C	T/C	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	RIM ELEVATION
MH	MH	INVERT ELEVATION
IN	IN	MANHOLE STRUCTURE
CB	CB	INLET STRUCTURE
RY	RY	CATCHBASIN STRUCTURE
ES	ES	REARWARD STRUCTURE
OV	OV	END-SECTION
HY	HY	GATE/VALVE STRUCTURE
UP	UP	HYDRANT
SL	SL	UTILITY POLE
FM	FM	SANITARY SEWER
PS	PS	SANITARY LEAD
ST	ST	FORCE MAIN
WM	WM	PRESSURE SEWER
WL	WL	STORM SEWER
FO	FO	WATER MAIN
OH	OH	FIBER OPTIC
C	C	OVERHEAD WIRE
G	G	CABLE
T	T	ELECTRIC
X	X	GAS
L	L	TELEPHONE
F	F	FENCE
S	S	SILT FENCE
W	W	WETLAND BOUNDARY
W	W	LIMITS OF GRADING/CLEARING
M	M	MANHOLE
I	I	INLET / CATCHBASIN
F	F	FLARED END-SECTION
G	G	GATE VALVE
H	H	HYDRANT
U	U	UTILITY POLE
S	S	SIGN
N	N	NOT FIELD VERIFIED
TBR	TBR	TO BE REMOVED
SR	SR	SANITARY SEWER LABEL
ST	ST	STORM SEWER LABEL
WM	WM	WATER MAIN LABEL
SO	SO	SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)
CON	CON	CONCRETE
ASP	ASP	ASPHALT
MCD	MCD	MODIFIED CURB
FLL	FLL	FILL AREA

SURFACE WATER & COUNTY DRAINS
WETLAND - WETLANDS LOCATED ON SITE AND ON ADJACENT PROPERTIES PER EGLE WETLANDS MAP VIEWER. (APPROX. 825 LF FROM SITE DISTURBANCE)
LAKES - APPROXIMATELY 1.43 MILES SE TO WEST CROOKED LAKE
STREAMS - APPROXIMATELY 900 FT S TO THE STREAM WHICH LEADS TO COUNTY DRAIN NO. 1
DRAINS - APPROXIMATELY 150 FT SW TO LCDC DRAIN NO. 1
PONDS - 350 FT EAST AT 3275 CHILSON RD

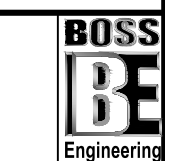
SITE BENCHMARKS (NAVD88 DATUM):
-BM #200 = BOSS NAIL/TAG S/S 24" OAK TREE. ELEV.=959.08
-BM #201 = BOSS NAIL/TAG S/S P-POLE CENTER OF SITE. ELEV.=958.47



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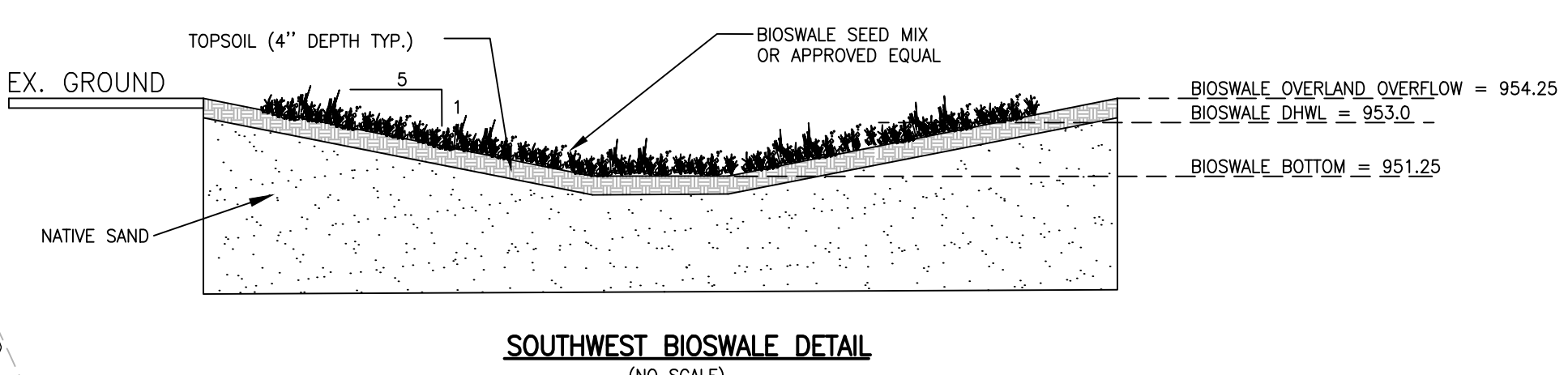
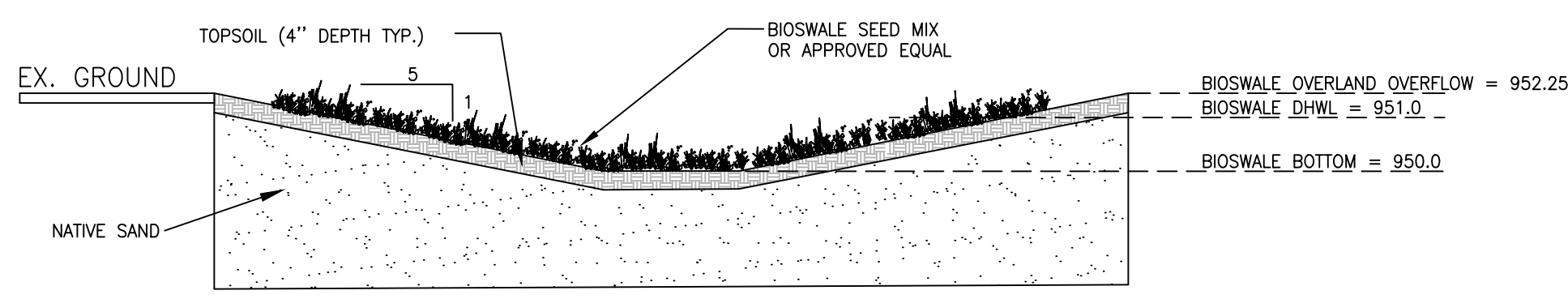
PROJECT	CATHOLIC HEALTHCARE INTERNATIONAL
PREPARED FOR	CATHOLIC HEALTHCARE INTERNATIONAL 2464 TAYLOR ROAD, SUITE 317 WILLOWOOD, MO 63090 314-922-2136
TITLE	GRADING & SOIL EROSION CONTROL PLAN

DESIGNED BY:	ST	DATE
DRAWN BY:	PG	
CHECKED BY:		
SCALE:	1" = 50'	
JOB NO:	20-477	
DATE:	12-18-20	
SHEET NO.	5	





DRAINAGE AREA	STAGE	AREA (AC)	COMPOUND C
SOUTHEAST	PRE-DEVELOPMENT	5.45	0.22
	POST-DEVELOPMENT	5.45	0.3
SOUTHWEST	PRE-DEVELOPMENT	2.13	0.2
	POST-DEVELOPMENT	2.13	0.34



STORM WATER NARRATIVE

PRE-DEVELOPMENT DRAINAGE:
THE EXISTING SITE PRIMARILY DRAINS TO A LOW POINT ON THE SOUTHEAST CORNER OF THE SITE ADJACENT TO CHILSON ROAD. APPROXIMATELY 650 FEET WEST OF THE EASTERN PROPERTY LINE THE SITE SHEET FLOWS TOWARDS THE WETLANDS ALONG THE WESTERN PROPERTY LINE.

POST-DEVELOPMENT DRAINAGE:
THE LIVINGSTON COUNTY STORM CALCULATIONS WERE USED TO DETERMINE THE DIFFERENTIAL STORM WATER RUNOFF IN PRE-DEVELOPMENT AND POST-DEVELOPMENT CONDITIONS. LIVINGSTON COUNTY DRAIN COMMISSIONER'S "PROCEDURES AND DESIGN CRITERIA FOR STORMWATER MANAGEMENT SYSTEMS..." STATES PRESERVATION OF THE NATURAL ENVIRONMENT AND USE OF VEGETATED SWALES AS THE FIRST AND THIRD MOST PREFERRED BEST MANAGEMENT PRACTICES, RESPECTIVELY. FOLLOWING THIS IDEOLOGY, TWO BIOSWALES WILL BE UTILIZED ON THE SITE TO PROVIDE EFFECTIVE STORMWATER FILTRATION WHILE PRESERVING THE NATURAL ENVIRONMENT AND DRAINAGE PATTERN. A BIOSWALE WILL BE IMPLEMENTED IN THE EXISTING LOW SPOT ON THE SITE TO COLLECT EXCESS RUNOFF FROM THE ADDITIONAL IMPERVIOUS SURFACE. THE BIOSWALE WILL BE A SHALLOW DEPRESSION IN THE GROUND THAT CAN STORE UP TO 2.0 FEET OF WATER WHILE PROMOTING INFILTRATION INTO THE GROUND TO REDUCE RUNOFF. THE EXISTING SOILS AT THE LOCATION OF THE BIOSWALE ARE SANDY SOILS IN HYDROLOGICAL GROUP 'B' WITH INFILTRATION RATES OF APPROXIMATELY 0.6 TO 2.0 IN/HR PER THE NRCS WEB SOIL SURVEY. IN THE UNLIKELY EVENT THAT THE BIOSWALE OVERFLOWS, EXISTING OVERFLOW PATTERNS WILL BE FOLLOWED. WITH THE ADDITIONAL STORAGE OF THE BIOSWALE SUPPORTING OVER TWO TIMES THE AMOUNT OF INCREASED RUNOFF WHEN INCLUDING FREEBOARD, ANY EVENT RESULTING IN AN OVERFLOW WILL BE EXTREMELY RARE.

AN ADDITIONAL BIOSWALE WILL BE IMPLEMENTED JUST SOUTHWEST OF THE PROPOSED CHURCH TO CONTAIN THE RUNOFF FROM THE DRIVE, PROPOSED CHURCH, AND THE SIDEWALK. THE EXISTING SOILS AT THE LOCATION OF THE BIOSWALE ARE SANDY SOILS IN HYDROLOGICAL GROUP 'B' WITH INFILTRATION RATES OF APPROXIMATELY 0.6 TO 2.0 IN/HR PER THE NRCS WEB SOIL SURVEY. SHOULD THE BIOSWALE OVERFLOW, THE EXISTING OVERFLOW ROUTE WILL BE FOLLOWED. CURRENTLY, EXISTING RUNOFF FLOWS WESTERLY TOWARD THE WOODED AREAS.

MIMICKING EXISTING DRAINAGE PATTERNS AND IMPLEMENTING A BIOSWALE ARE BOTH STORM WATER BMP'S. THE BIOSWALE WILL PROVIDE TREATMENT VIA THE VEGETATION ABOVE GROUND AS WELL AS TREATMENT VIA FILTRATION THROUGH THE GROUND. THE SITE WAS DESIGNED TO PRESERVE THE NATURAL ENVIRONMENT AS BEST AS POSSIBLE, WHICH IS THE MOST PREFERRED BMP. AS A RESULT, ONLY ONE NOTABLE TREE WILL NEED TO BE REMOVED.

LEGEND

PROPOSED (PR)	EXISTING (EX)	CONTOUR
900	922.08	SPOT ELEVATION
T/C		FINISHED FLOOR ELEVATION
XXXXXX		TOP OF ASPHALT
FF		TOP OF CURB / CONCRETE
FG		TOP OF WALK
T/A		FLOW LINE
T/W		TOP OF PIPE
F/L		RIM ELEVATION
T/P		INVERT ELEVATION
B/P		MANHOLE STRUCTURE
RM		INLET STRUCTURE
INV		CATCHBASIN STRUCTURE
MH		REARYARD STRUCTURE
IN		END-SECTION
CB		GATEVALVE STRUCTURE
RY		HYDRANT
ES		UTILITY POLE
OV		SANITARY SEWER
HY		SANITARY LEAD
UP		FORCE MAIN
SN		PRESSURE SEWER
SL		STORM SEWER
FM		WATER MAIN
PS		FIBER OPTIC
ST		OVERHEAD WIRE
WM		CABLE
WL		ELECTRIC
IN		GAS
OH		PHONE
C		FENCE
C		WETLAND BOUNDARY
T		LIMITS OF GRADING/CLEARING
X		MANHOLE
L		INLET / CATCHBASIN
L		FLARED END-SECTION
L		GATE VALVE
L		HYDRANT
L		UTILITY POLE
L		SIGN
L		NOT FIELD VERIFIED
L		SANITARY SEWER LABEL
L		STORM SEWER LABEL
L		WATER MAIN LABEL
L		SOIL EROSION CONTROL MEASURE
L		(P=PERMANENT, T=TEMPORARY)
L		CONCRETE
L		ASPHALT
L		MODIFIED CURB

LIVINGSTON COUNTY RUNOFF CALCULATIONS FOR THE SOUTHWEST BIOSWALE

PRE-DEVELOPMENT DRAINAGE AREA					
AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS			
2.13	0.2	0.43			
0.00	0.7	0.00			
0.00	0.9	0.00			
COMPOUND C: 0.20					
TOTAL DRAINAGE AREA: 2.13 ACRES					
K1 = AvC (Design Constant) 0.426					
Qa = MAX ALLOW OUTFLOW (0.10 CFS / ACRE) 0.213 CFS					
DURATION MINUTES	DURATION SECONDS	INTENSITY (IN/HR)	INFLOW VOLUME (IN RUNOFF HA*G)	OUTFLOW DURATION x Qa	STORAGE VOLUME (INFLOW - OUTFLOW)
5	300	9.17	2750	1172	64
10	600	7.86	4714	2008	1800
15	900	6.88	6188	2636	192
20	1200	6.11	7333	3124	256
30	1800	5.00	9000	383	3451
60	3600	3.24	11647	4862	767
90	5400	2.39	12913	5501	1150
120	7200	1.90	13655	5817	1534
180	10800	1.34	14488	6172	2300
PRE-DEVELOPMENT REQUIRED 100 YEAR VOLUME = 4351 CF					
POST-DEVELOPMENT DRAINAGE AREA					
AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS			
1.71	0.2	0.34			
0.00	0.7	0.00			
0.42	0.9	0.38			
COMPOUND C: 0.34					
TOTAL DRAINAGE AREA: 2.13 ACRES					
K1 = AvC (Design Constant) 0.7242					
Qa = MAX ALLOW OUTFLOW (0.10 CFS / ACRE) 0.213 CFS					
DURATION MINUTES	DURATION SECONDS	INTENSITY (IN/HR)	INFLOW VOLUME (IN RUNOFF HA*G)	OUTFLOW DURATION x Qa	STORAGE VOLUME (INFLOW - OUTFLOW)
5	300	9.17	2750	1992	64
10	600	7.86	4714	3414	128
15	900	6.88	6188	4481	192
20	1200	6.11	7333	5311	256
30	1800	5.00	9000	6518	383
60	3600	3.24	11647	8435	767
90	5400	2.39	12913	9352	1150
120	7200	1.90	13655	9889	1534
180	10800	1.34	14488	10492	2300
POST-DEVELOPMENT REQUIRED 100 YEAR VOLUME = 8355 CF					
RUNOFF VOLUME INCREASE= 4005 CF					
BIOSWALE STORAGE PROVIDED					
ELEV. (FT)	AREA (FT ²)	DEPTH (FT)	VOLUME (FT ³)	TOTAL VOLUME (FT ³)	FREEBOARD ELEVATION
954	5028	1	4,406	8,658	
953	3784	1	3,241	4,252	DESIGN HIGHWATER ELEVATION
952	2897	0.75	1,011	1,011	
951.25					

LIVINGSTON COUNTY RUNOFF CALCULATIONS FOR THE SOUTHEAST BIOSWALE

PRE-DEVELOPMENT DRAINAGE AREA					
AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS			
5.32	0.2	1.06			
0.00	0.7	0.00			
0.13	0.9	0.12			
COMPOUND C: 0.22					
TOTAL DRAINAGE AREA: 5.45 ACRES					
K1 = AvC (Design Constant) 1.199					
Qa = MAX ALLOW OUTFLOW (0.10 CFS / ACRE) 0.545 CFS					
DURATION MINUTES	DURATION SECONDS	INTENSITY (IN/HR)	INFLOW VOLUME (IN RUNOFF HA*G)	OUTFLOW DURATION x Qa	STORAGE VOLUME (INFLOW - OUTFLOW)
5	300	9.17	2750	3297	164
10	600	7.86	4714	5652	327
15	900	6.88	6188	7419	491
20	1200	6.11	7333	8793	654
30	1800	5.00	9000	10791	981
60	3600	3.24	11647	13965	12003
90	5400	2.39	12913	15483	2943
120	7200	1.90	13655	16373	3924
180	10800	1.34	14488	17371	5886
PRE-DEVELOPMENT REQUIRED 100 YEAR VOLUME = 12540 CF					
POST-DEVELOPMENT DRAINAGE AREA					
AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS			
4.88	0.2	0.94			
0.00	0.7	0.00			
0.77	0.9	0.69			
COMPOUND C: 0.30					
TOTAL DRAINAGE AREA: 5.45 ACRES					
K1 = AvC (Design Constant) 1.635					
Qa = MAX ALLOW OUTFLOW (0.10 CFS / ACRE) 0.545 CFS					
DURATION MINUTES	DURATION SECONDS	INTENSITY (IN/HR)	INFLOW VOLUME (IN RUNOFF HA*G)	OUTFLOW DURATION x Qa	STORAGE VOLUME (INFLOW - OUTFLOW)
5	300	9.17	2750	4496	164
10	600	7.86	4714	7708	327
15	900	6.88	6188	10117	491
20	1200	6.11	7333	11990	654
30	1800	5.00	9000	14715	981
60	3600	3.24	11647	19043	1962
90	5400	2.39	12913	21113	2943
120	7200	1.90	13655	22326	3924
180	10800	1.34	14488	23688	5886
POST-DEVELOPMENT REQUIRED 100 YEAR VOLUME = 18402 CF					
RUNOFF VOLUME INCREASE= 5862 CF					
BIOSWALE STORAGE PROVIDED					
ELEV. (FT)	AREA (FT ²)	DEPTH (FT)	VOLUME (FT ³)	TOTAL VOLUME (FT ³)	FREEBOARD ELEVATION
952	8983	1	7,938	14,069	FREEBOARD ELEVATION
951	6983	1	6,131	6,131	DESIGN HIGHWATER ELEVATION
950	5279	0	0	0	

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PROJECT: CATHOLIC HEALTHCARE INTERNATIONAL
PREPARED FOR: CATHOLIC HEALTHCARE INTERNATIONAL
2464 TAYLOR ROAD, SUITE 317 WILLOWOOD, IN 46094 314-922-2136

TITLE: DRAINAGE PLAN & BIOSWALE CALCULATIONS

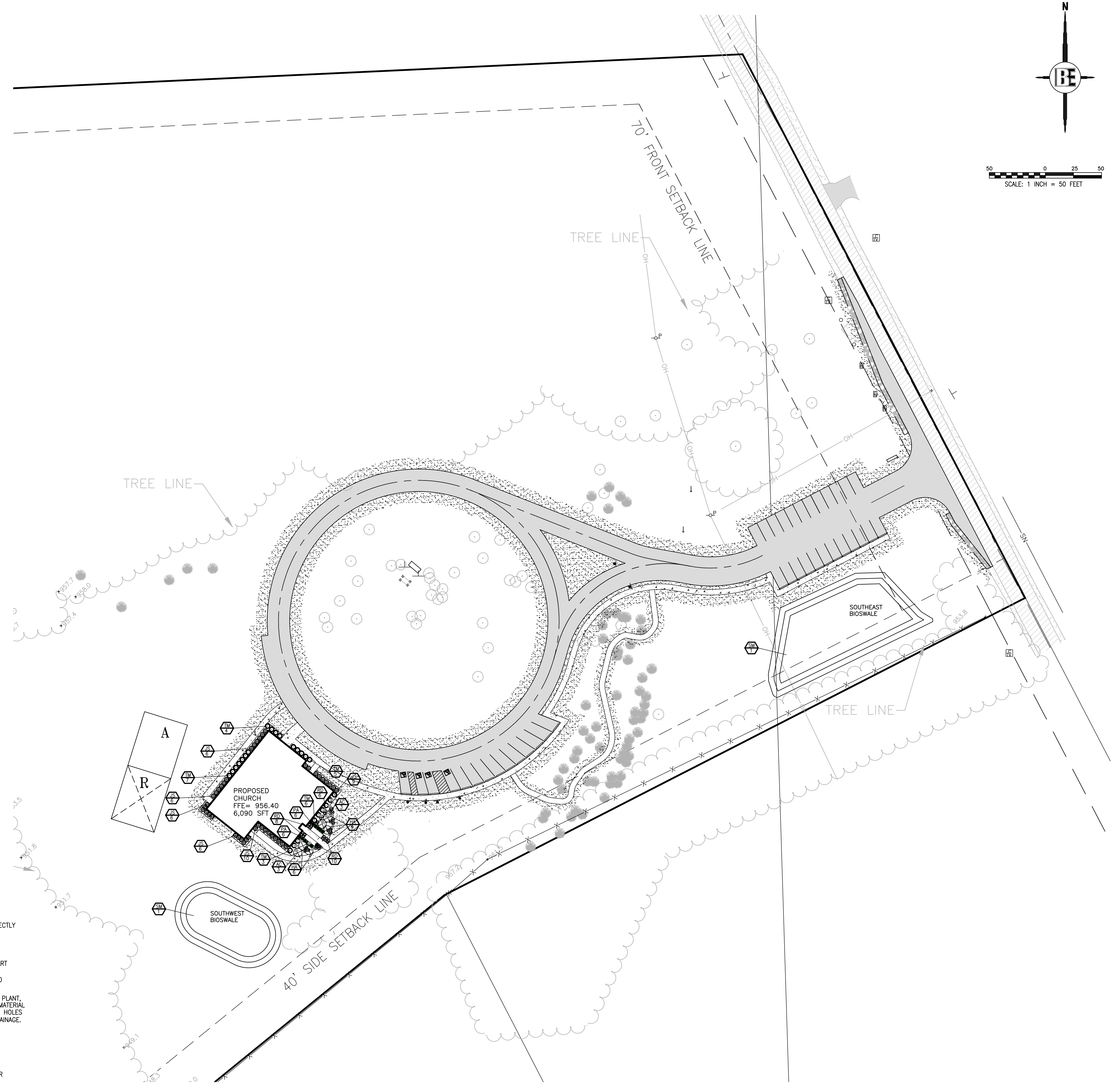
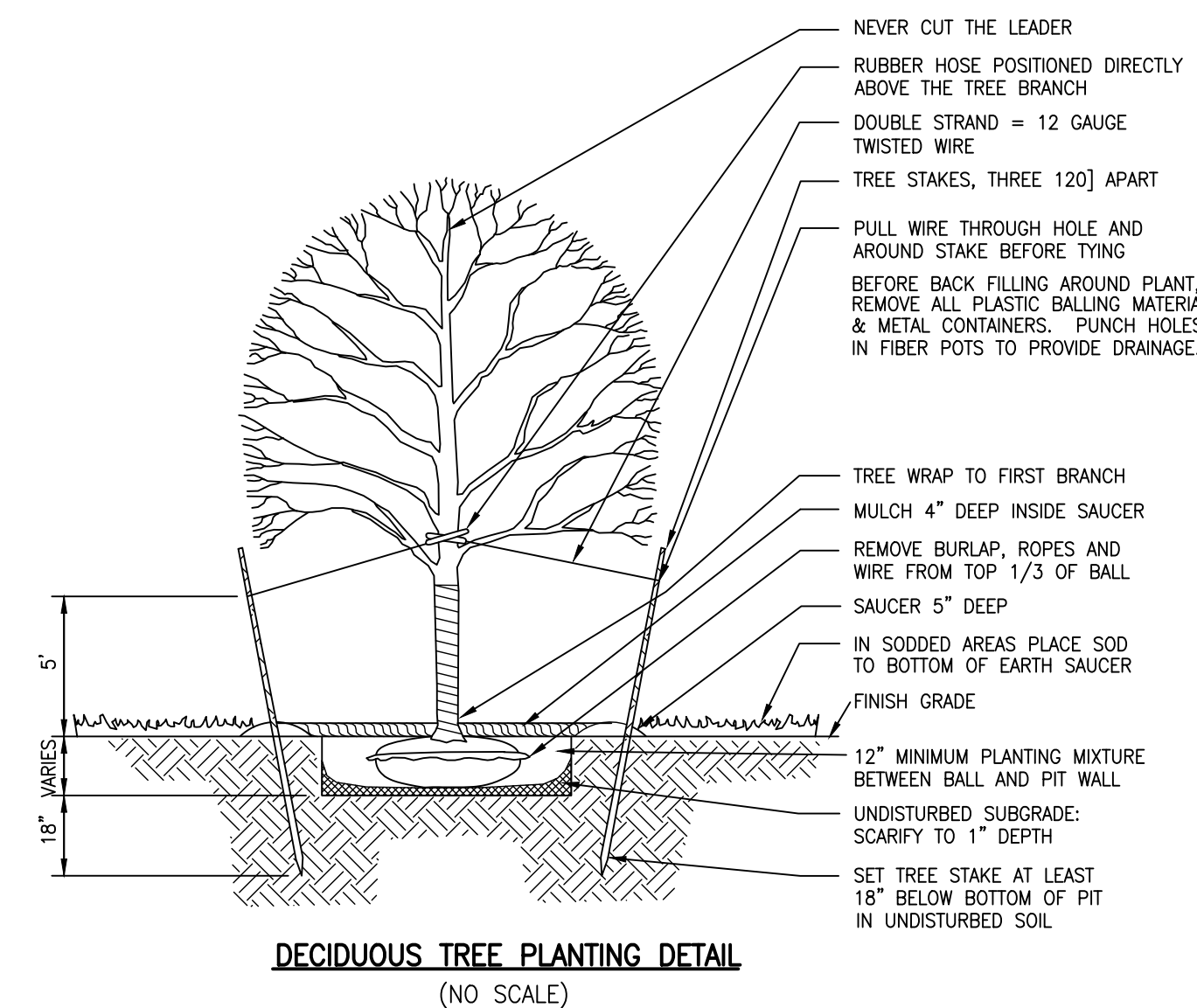
NO.	DATE	REVISION PER	BY

DESIGNED BY: ST
DRAWN BY: PG
CHECKED BY:
SCALE: 1" = 50'
JOB NO: 20-477
DATE: 12-18-20
SHEET NO. 6

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GENERAL LANDSCAPE SPECIFICATIONS:

- ALL PLANT MATERIAL SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE GOVERNING MUNICIPALITY. ALL STOCK SHALL BE NURSERY GROWN, CONFORMING TO ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK", AND IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICE. STOCK SHALL EXHIBIT NORMAL GROWTH HABIT AND BE FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN-SCALD, INJURIES, ABRASIONS, OR DISFIGUREMENT. ALL PLANT MATERIAL SHALL BE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT.
 - ALL PLANT MATERIALS SHALL BE BALLED AND BURLAPPED OR CONTAINER STOCK. NO BARE ROOT STOCK IS PERMITTED. ALL PLANT BALLS SHALL BE FIRM, INTACT, AND SECURELY WRAPPED AND BOUND.
 - ALL PLANT BED MATERIALS SHALL BE EXCAVATED OF ALL BUILDING MATERIALS, OTHER EXTRANEOUS OBJECTS, AND POOR SOILS TO A MINIMUM DEPTH OF 12-INCHES AND BACKFILLED TO GRADE WITH SPECIFIED PLANTING MIX (SEE BELOW).
 - PLANTING MIXTURE SHALL CONSIST OF 5 PARTS TOPSOIL FROM ON-SITE (AS APPROVED), 4 PARTS COARSE SAND, 1 PART SPHAGNUM PEAT MOSS (OR APPROVED COMPOST), AND 5 LBS OF SUPERPHOSPHATE FERTILIZER PER CU. YD. OF MIX. INGREDIENTS SHALL BE THOROUGHLY BLENDED FOR UNIFORM CONSISTENCY.
 - ALL PLANT BEDS AND INDIVIDUAL PLANTS, NOT OTHERWISE NOTED SHALL BE MULCHED WITH A 4-INCH LAYER OF SHREDDED BARK MULCH. EDGE OF MULCH BEDS AS SHOWN. DECIDUOUS TREES IN LAWN AREAS SHALL RECEIVE A 6-7" DIAMETER CIRCLE OF MULCH AND CONIFER TREES 8-11" (PLANTED CROWN OF TREE) UNLESS OTHERWISE NOTED.
 - LANDSCAPE STONE SHALL BE INSTALLED WHERE NOTED OR INDICATED (HATCHED). STONE SHALL BE 3/4"-1-1/4" WASHED RIVER GRAVEL OR AS SELECTED AND SHALL BE INSTALLED TO A MINIMUM DEPTH OF 3-INCHES.
 - ALL LANDSCAPE BEDS, UNLESS OTHERWISE NOTED SHALL BE INSTALLED OVER WEED BARRIER FABRIC - WATER PERMEABLE FABRIC OF NON-WOVEN POLYPROPYLENE OR POLYESTER FABRIC. FABRIC SHALL BE OF SUITABLE THICKNESS FOR APPLICATION.
 - 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 OF 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 SPECIFICATIONS.
 - EDGING SHALL BE PROVIDED FOR ALL LANDSCAPE BEDS NOT ADJACENT TO CONCRETE PAVEMENT. EDGING SHALL BE BLACK ALUMINUM EDGING, 3/16-INCH X 4-INCH. 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 BLUE GRASSES AND ONE FESCUE. IT SHALL HAVE A UNIFORM THICKNESS OF 3/4-INCH AT TIME OF PLANTING, AND CUT IN UNIFORM STRIPS NOT LESS THAN 10-INCHES BY 18-INCHES. SOD SHALL BE KEPT MOIST AND LAID 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. ALL SODDED AREAS THAT BROWN-OUT OR HAVE NOT FIRMLY KNITTED TO THE SOIL BASE WITHIN A PERIOD OF 1 MONTH SHALL BE REPLACED BY THE CONTRACTOR, AT NO COST TO THE OWNER.
- 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.
- SEE 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%
 PENNINE PERENNIAL RYE 20%
- THE ABOVE SEED MIXTURE SHALL BE SOWN AT A RATE OF 250 LBS PER ACRE. PRIOR TO SEEDING, THE TOPSOIL SHALL BE FERTILIZED WITH A COMMERCIAL FERTILIZER WITH A 10-0-10 ANALYSIS:
 10% NITROGEN - MIN 25% FROM A UREA FORMALDEHYDE SOURCE
 0% PHOSPHATE
 10% POTASH - SOURCE POTASSIUM SULFATE OR POTASSIUM NITRATE
- THE FIRST FERTILIZER APPLICATION SHALL BE AT A RATE OF 10 LBS PER 1000 SQ FT OF BULK FERTILIZER.
- 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 RE-SEEDED AND SUCH RE-SEEDED SHALL CONTINUE UNTIL A DENSE LAWN IS ESTABLISHED. DAMAGE TO SEEDED AREAS RESULTING FROM EROSION SHALL BE REPAIRED BY THE CONTRACTOR.
- ALL AREAS OF THE SITE SCHEDULED FOR SEEDING OR SODDING SHALL FIRST RECEIVE A 6-INCH LAYER OF CLEAN, FRAGILE TOPSOIL. THE SOIL SHALL BE DISCED AND SHALL BE GRADED IN CONFORMANCE WITH THE GRADING PLAN.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES AND TO INFORM THE LANDSCAPE ARCHITECT OF ANY CONFLICTS PRIOR TO COMMENCING LANDSCAPING.



LEGEND

PROPOSED (PR)	EXISTING (EX)	
000	900	CONTOUR
T/C	XXX.XX	SPOT ELEVATION
FF	FF	FINISHED FLOOR ELEVATION
T/A	T/A	FINISHED GRADE ELEVATION
T/W	T/W	TOP OF ASPHALT
F/A	F/A	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
OV	OV	REAR YARD STRUCTURE
HY	HY	END-SECTION
UP	UP	GATE/VALVE STRUCTURE
SN	SN	HYDRANT
SL	SL	UTILITY POLE
FM	FM	SANITARY SEWER
PS	PS	SANITARY LEAD
ST	ST	FORCE MAIN
WM	WM	PRESSURE SEWER
WL	WL	STORM SEWER
FO	FO	WATER MAIN
OH	OH	WATER LEAD
C	C	FIBER OPTIC
E	E	OVERHEAD WIRE
G	G	CABLE
T	T	ELECTRIC
X	X	GAS
□	□	TELEPHONE
○	○	FENCE
○	○	SILT FENCE
○	○	WETLAND BOUNDARY
○	○	LIMITS OF GRADING/CLEARING
○	○	MANHOLE
○	○	INLET / CATCHBASIN
○	○	FLARED END-SECTION
○	○	GATE VALVE
○	○	HYDRANT
○	○	UTILITY POLE
○	○	TO BE REMOVED
○	○	SIGN
○	○	NOT FIELD VERIFIED
○	○	TO BE REMOVED
○	○	SANITARY SEWER LABEL
○	○	STORM SEWER LABEL
○	○	WATER MAIN LABEL
○	○	SOIL EROSION CONTROL MEASURE
○	○	(P=PERMANENT, T=TEMPORARY)
○	○	CONCRETE
○	○	ASPHALT
○	○	MODIFIED CURB

LANDSCAPE LEGEND

○	EXISTING DECIDUOUS TREE	○	PROPOSED DECIDUOUS TREE
○	EXISTING EVERGREEN TREE	○	PROPOSED ORNAMENTAL TREE
○	PROPOSED CONIFER TREE	○	PROPOSED DECIDUOUS SHRUB
○	PROPOSED CONIFER SHRUB	○	PROPOSED ORNAMENTAL GRASS
○	PROPOSED PERENNIAL FORB	○	PROPOSED TREE PROTECTION
○	PROPOSED LANDSCAPE BOULDER		

LANDSCAPE REQUIREMENTS:

GREENBELT REQUIREMENTS ALONG CHILSON ROAD:
 AS EXISTING VEGETATION AND TOPOGRAPHY ALONG CHILSON ROAD PROVIDES ADEQUATE SCREENING FROM THE PROPOSED CONSTRUCTION, A VARIANCE IS REQUESTED TO RELIEVE THE APPLICANT OF ADDING ADDITIONAL VEGETATION AND BERMS.

PARKING LOT SCREENING:
 AS EXISTING VEGETATION AND TOPOGRAPHY PROVIDES ADEQUATE SCREENING FROM THE NEIGHBORING PROPERTIES TO THE NORTH AND SOUTH, A VARIANCE IS REQUESTED TO RELIEVE THE APPLICANT OF ADDING ADDITIONAL VEGETATION, WALLS, AND/OR BERMS.

PLANT LIST

KEY	QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	REMARK
TREES					
AG	6	Amelanchier x grandiflora	Autumn Brilliance Serviceberry 1.5" cal.	B&B	Multi
SHRUBS					
HA	15	Hydrangea arborescens	'Annabelle' Hydrangea	#3 cont.	
JS	43	Juniperus scopulorum	'Skyrocket' Juniper	#5 cont.	
RD	24	Rosa 'Double Knockout'	'Double Knockout' Rose	#3 cont.	
TM	28	Taxus x media 'Moon'	'Moon' Upright Yew	18"	B - B
PERENNIALS					
PA	12	Pennisetum alopecuroides	Fountain Grass	#3 cont.	

BIOSWALE PLANTING PLAN

THE BIOSWALE BASIN SHALL BE SEED. CONTRACTOR TO ADHERE TO THE "CARDNO NATIVE PLANT NURSERY INSTALLATION AND MAINTENANCE GUIDELINES" FOR PURPOSES OF INSTALLING AND MAINTAINING THE PLANTING AREA.

KEY	QUAN.	MIX NAME	SIZE
SM	14,000 SF COVERAGE	STORMWATER MIX	SEED

RETENTION BASIN SEED MIXES

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

CATHOLIC HEALTHCARE INTERNATIONAL
 2464 TAYLOR ROAD, SUITE 317
 WILLOWOOD, MO 63090
 314-922-2136

LANDSCAPE PLAN

DESIGNED BY:	DATE
JH	
DRAWN BY:	DATE
JH	
CHECKED BY:	DATE
JH	
SCALE:	DATE
1" = 50'	12-18-20
JOB NO:	DATE
20-477	12-18-20
SHEET NO.	DATE
7	

REVISION PER

NO.	BY	DATE
1	JH	

DESIGNED BY: JH
 DRAWN BY: JH
 CHECKED BY: JH
 SCALE: 1" = 50'
 JOB NO: 20-477
 DATE: 12-18-20
 SHEET NO. 7

D-Series Size 0 LED Area Luminaire

Specifications

Length: 26" (660mm)
Width: 13" (330mm)
Height: 3" (76mm)
Weight: 1.5 lbs (0.7kg)

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 400W metal halide with typical energy savings of 70% and expected service life of over 100,000 hours.

EXAMPLE: DSK0 LED P6 40K T3M MVOLT SPA HLTARZ PIRHIN DDX00

Code	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage	Mounting Height
DSK0	A	4	Lithonia Lighting	DSK0 LED P5 30K T4M MVOLT	DSK0 LED P5 30K T4M MVOLT	LED	1	10613	0.9	89	20'-0"
PIR1	B	8	Lithonia Lighting	DSK0 LED P5 30K T5W MVOLT	DSK0 LED P5 30K T5W MVOLT	LED	1	11183	0.9	89	20'-0"
PIR2	C	8	BEGA	77 164 + K3	77 164 + K3	LED	1	3371	0.9	36	12'-0"
PIR3	D	7	BEGA	33 505 + K3	33 505 + K3	LED	1	290	0.9	7.8	8'-0"

Pole top luminaires with symmetric light distribution

Typ: BEGA Product: Project: Option: Modified:

Application: This LED will illuminate luminaire has light output on two sides. Thick-walled crystal glass characteristic the design of this construction luminaire. Arranged horizontally in a group, this is a great design element for a host of lighting applications.

Material: Luminaire housing constructed of die-cast marine grade, copper free 60/30 zinc-coated aluminum alloy. High temperature silicone gasket. Crystal glass, frosted white. Mechanically fastened stainless steel fasteners.

Notes: Mount to North American Standards, suitable for wet locations. Protection class IP64 (NEMA 4).

Electrical: Operating voltage: 120-277VAC
LED module voltage: 24VDC
Power: 6.5W
Color rendering index: 90
Luminaire lifetime: 100,000 hours (L70)
Luminaire at 10°C: 254,000 h L70
LED color temperature: 4000K - Product number: K4
3000K - Product number: K20
3000K - Product number: K27

LED wall luminaire - light output on two sides

Typ: BEGA Product: Project: Modified:

Application: This LED wall luminaire has light output on two sides. Thick-walled crystal glass characteristic the design of this construction luminaire. Arranged horizontally in a group, this is a great design element for a host of lighting applications.

Material: Luminaire housing constructed of die-cast marine grade, copper free 60/30 zinc-coated aluminum alloy. High temperature silicone gasket. Crystal glass, frosted white. Mechanically fastened stainless steel fasteners.

Notes: Mount to North American Standards, suitable for wet locations. Protection class IP64 (NEMA 4).

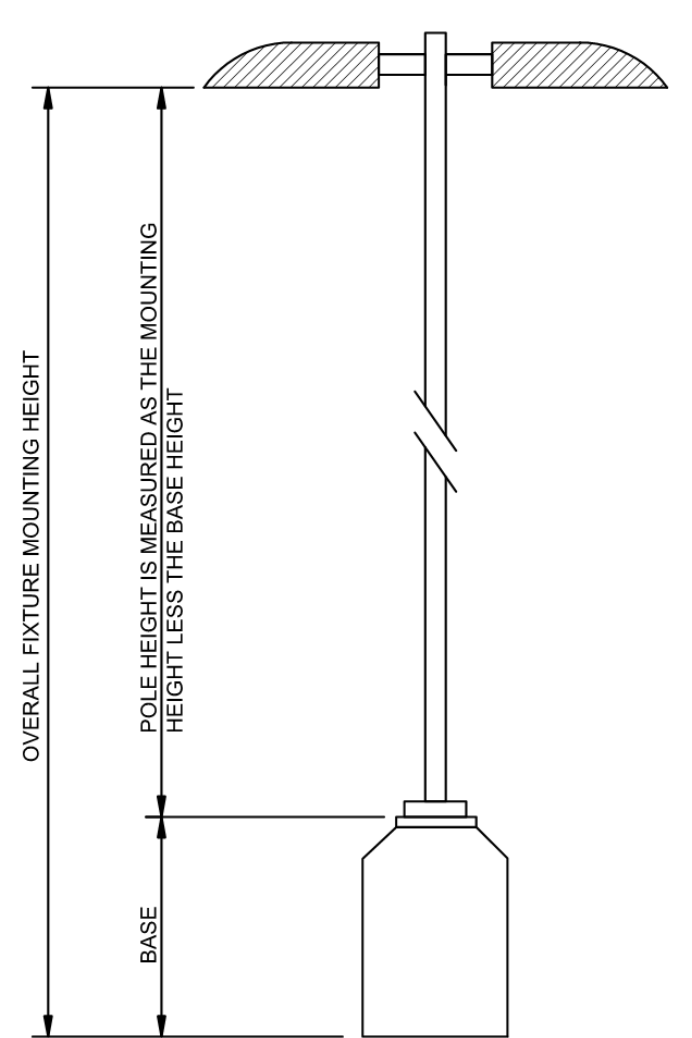
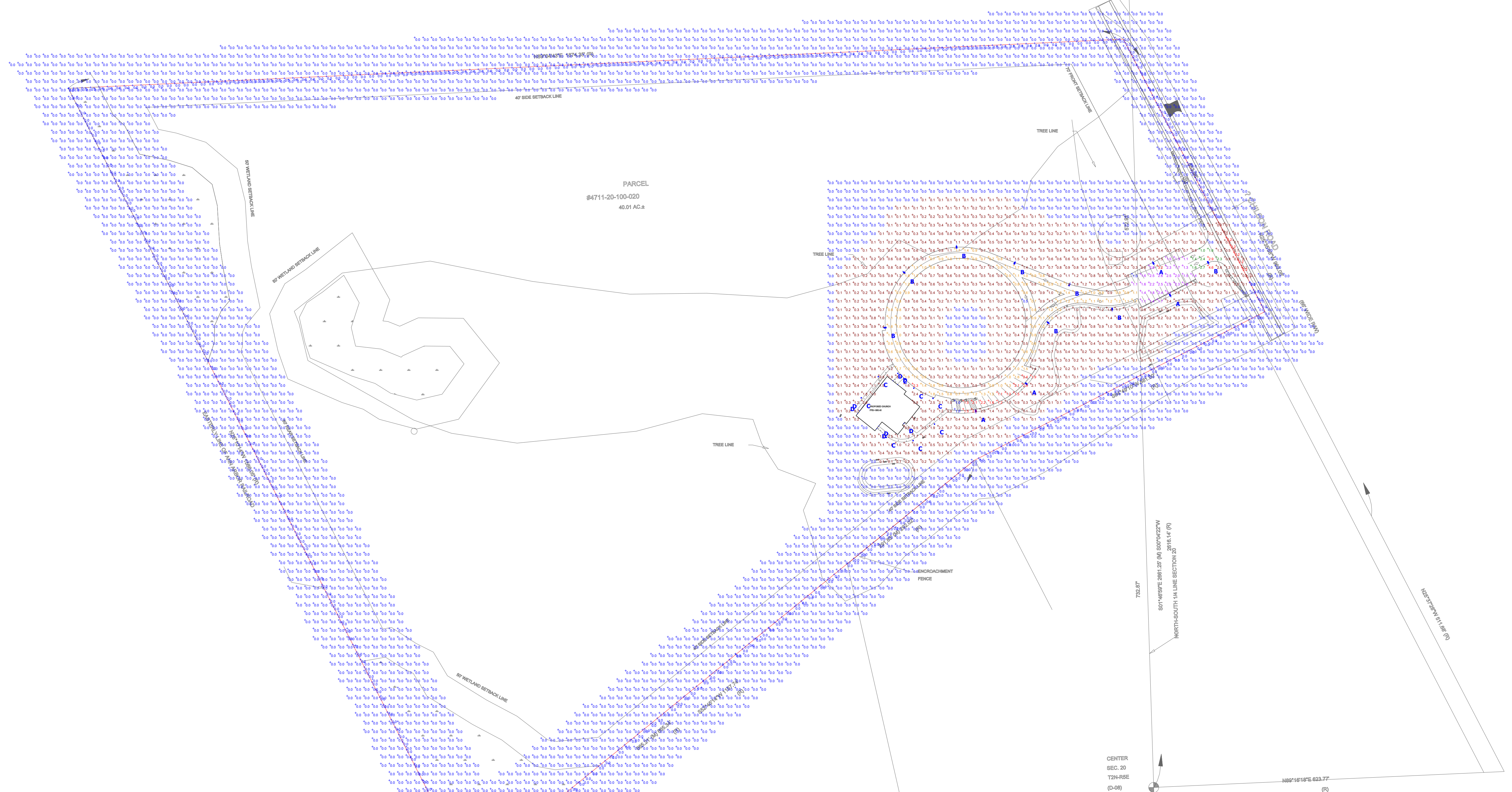
Electrical: Operating voltage: 120-277VAC
LED module voltage: 24VDC
Power: 6.5W
Color rendering index: 90
Luminaire lifetime: 100,000 hours (L70)
Luminaire at 10°C: 254,000 h L70
LED color temperature: 4000K - Product number: K4
3000K - Product number: K20
3000K - Product number: K27

Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage	Mounting Height
A	A	4	Lithonia Lighting	DSK0 LED P5 30K T4M MVOLT	DSK0 LED P5 30K T4M MVOLT	LED	1	10613	0.9	89	20'-0"
B	B	8	Lithonia Lighting	DSK0 LED P5 30K T5W MVOLT	DSK0 LED P5 30K T5W MVOLT	LED	1	11183	0.9	89	20'-0"
C	C	8	BEGA	77 164 + K3	77 164 + K3	LED	1	3371	0.9	36	12'-0"
D	D	7	BEGA	33 505 + K3	33 505 + K3	LED	1	290	0.9	7.8	8'-0"

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
ENTRANCE	+	1.8 fc	2.9 fc	0.6 fc	4.8:1	3.0:1	0.6:1
OVERALL	+	0.1 fc	4.6 fc	0.0 fc	N/A	N/A	0.0:1
PARKING LOT	+	1.9 fc	3.2 fc	1.0 fc	3.2:1	1.9:1	0.6:1
PROPERTY LINE	+	0.0 fc	0.2 fc	0.0 fc	N/A	N/A	0.0:1
ROUNDBOUT	+	1.1 fc	2.3 fc	0.5 fc	4.6:1	2.2:1	0.5:1
ROUNDBOUT PARKING	+	1.7 fc	2.9 fc	1.0 fc	2.9:1	1.7:1	0.6:1



Plan View
Scale - 1" = 100ft

- General Note**
- SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
 - CALCULATIONS ARE SHOWN IN FOOT CANDLES AT: 0' - 0"

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 GASSER BUSH AT ASG@GASSERBUSH.COM OR 734-266-6705.

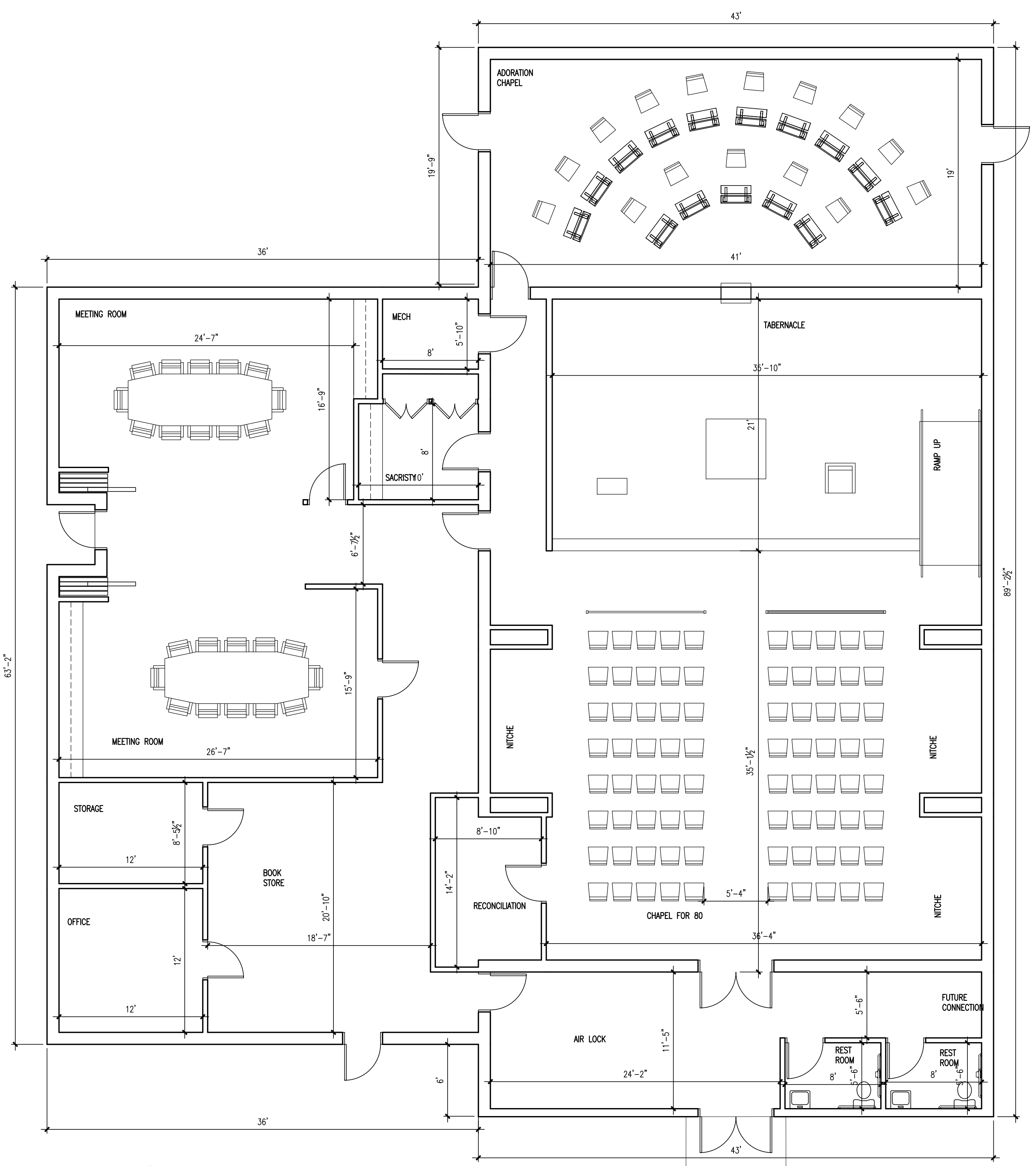
Drawing Note
THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

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

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

Alternates Note
THE USE OF FIXTURE ALTERNATES MUST BE RESUBMITTED TO THE CITY FOR APPROVAL.

R Q P N M L K J H G F E D C B A




FLOOR PLAN
 3/16"=1'-0"

**PAX
 ET
 BONUM**

REVISIONS	
11	
10	
9	

CHAPEL/ OFFICE PLAN

SWANSON DESIGN STUDIOS

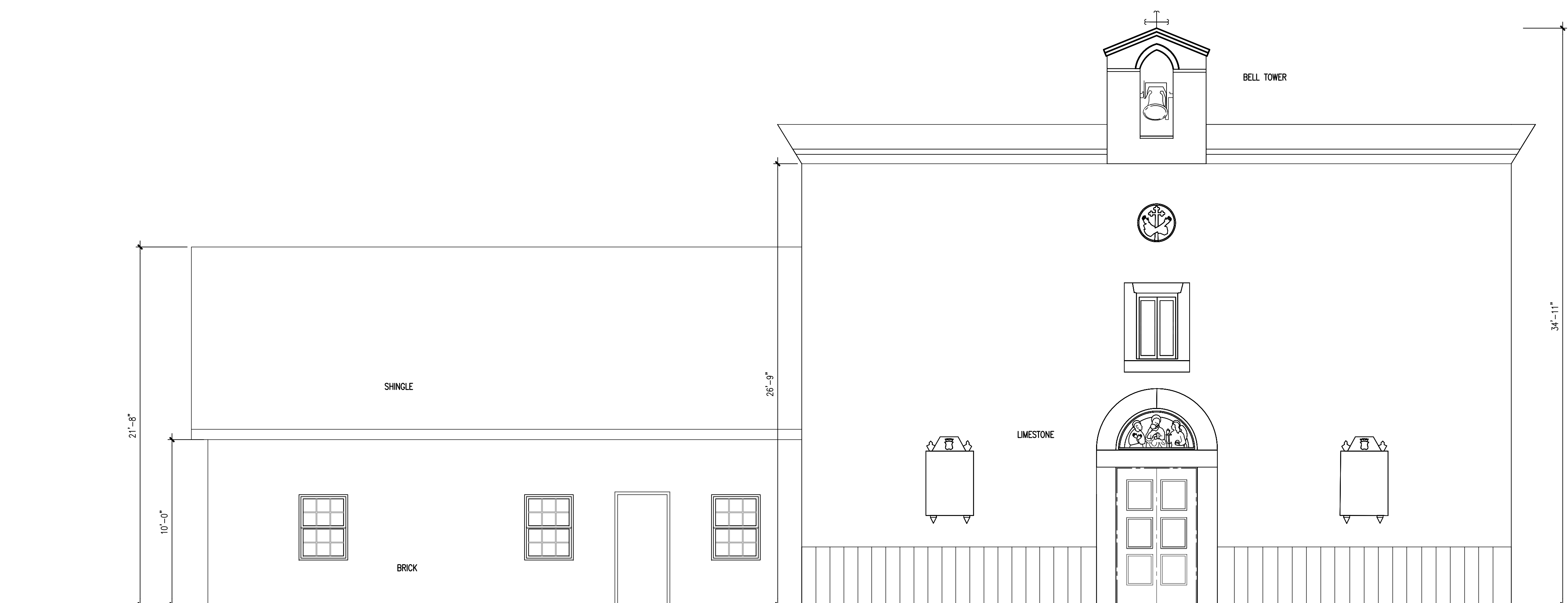
329 E. CESAR E. CHAVEZ AVE.
 LANSING, MICHIGAN 48906
 WWW.SWANSONDESIGN.COM
 PH. (517) 482-9039
 FAX (517) 482-9290

PADRE PIO
 3280 CHILSON ROAD
 HOWELL, MICHIGAN

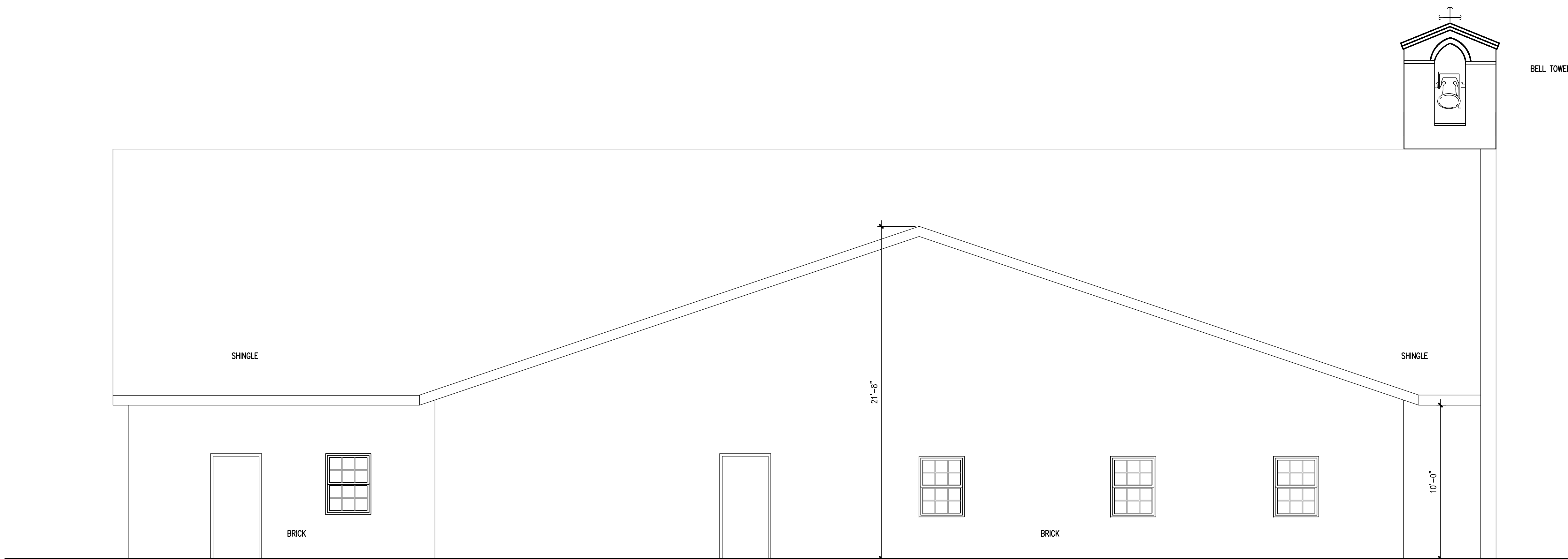
DATE:
 12/16/2020
 JOB NUMBER:
 2020.010
 SHEET NUMBER:
 1

R Q P N M L K J H G F E D C B A

R Q P N M L K J H G F E D C B A



FRONT ELEVATION
1/4"=1'-0"



SIDE ELEVATION
1/4"=1'-0"

REVISIONS	
11	
10	
9	
8	
7	
6	
5	
4	
3	
2	
1	

CHAPEL
EXTERIOR ELEVATIONS

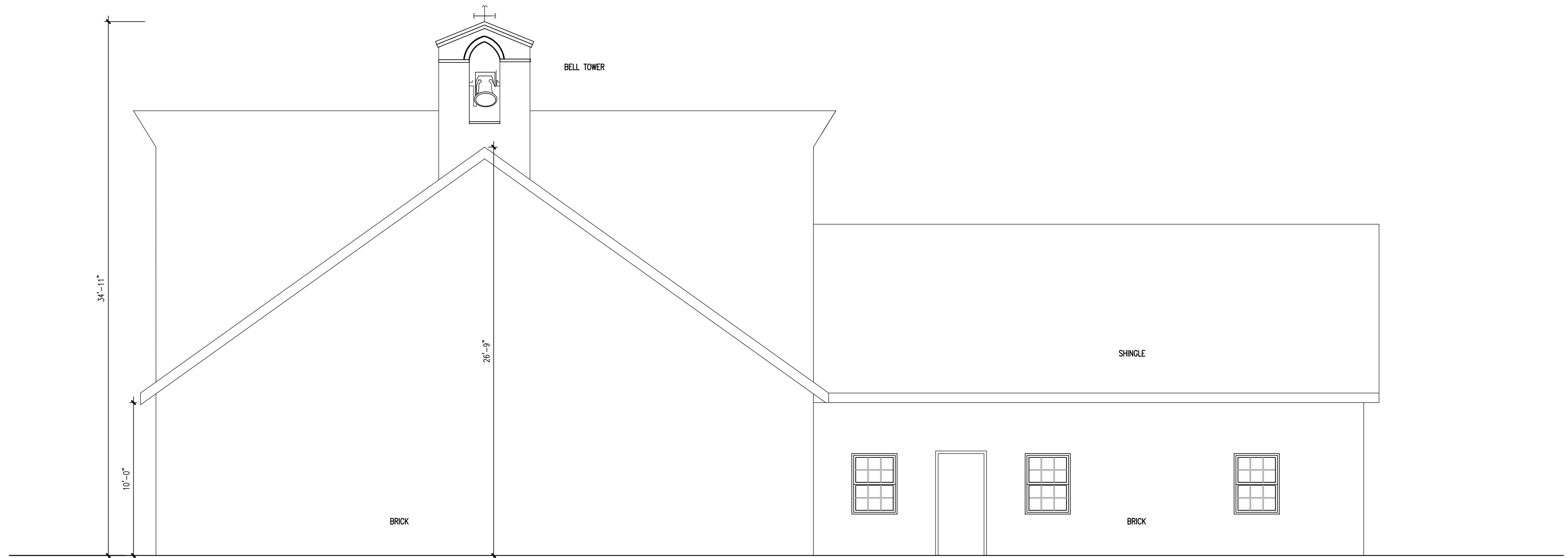
SWANSON DESIGN STUDIOS
329 E. CESAR E. CHAVEZ AVE.
LANSING, MICHIGAN 48906
WWW.SWANSONDESIGN.COM
PH. (517) 482-9039
FAX (517) 482-9290

ARCHITECTURE
DESIGN
INTERIOR
ARCHITECTURE

DATE:
12/16/2020
JOB NUMBER:
2020.010
SHEET NUMBER:

R Q P N M L K J H G F E D C B A

R Q P N M L K J H G F E D C B A



REAR ELEVATION
1/4"=1'-0"



SIDE ELEVATION
1/4"=1'-0"

REVISIONS

CHAPEL
EXTERIOR ELEVATIONS
PADRE PIO CHAPEL
3280 CHILSON ROAD
HOWELL, MICHIGAN

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329 E. CESAR E. CHAVEZ AVE.
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DATE:
12/16/2020
JOB NUMBER:
2020.010
SHEET NUMBER:
1

R Q P N M L K J H G F E D C B A

R Q P N M L K J H G F E D C B A

- STRUCTURAL NOTES:
GENERAL:
- DO NOT SCALE THESE DRAWINGS, USE DIMENSIONS INDICATED. IN THE EVENT OF A CONFLICT IN DIMENSIONS, NOTIFY ARCHITECT BEFORE PROCEEDING.
 - CROSS CHECK ALL DIMENSIONS AND ELEVATIONS INDICATED BETWEEN ARCHITECTURAL AND STRUCTURAL DRAWINGS. FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS AT EXISTING CONSTRUCTION. REPORT DISCREPANCIES TO ARCHITECT/ENGINEER FOR CLARIFICATION PRIOR TO STARTING CONSTRUCTION OR ORDERING MATERIALS.
 - CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODE REQUIREMENTS.
 - BUILDING CODE - MICHIGAN BUILDING CODE 2015.
 - DESIGN LIVE LOADS:

SNOW: GROUND SNOW, PG = 30PSF
IMPORTANCE FACTOR = 1 = 1.0
THERMAL FACTOR CT = 1.1
EXPOSURE FACTOR, CE = 1.0
FLAT ROOF SNOW, PF = 23.1 PSF

WIND-BASIC WIND SPEED, V = 105 MPH
IMPORTANCE FACTOR, I = 1.0
EXPOSURE CATEGORY...B
INTERNAL PRESSURE COEFFICIENT ... +/- 0.18

SEISMIC: SEISMIC IMPORTANCE FACTOR, I = 1.0
OCCUPANCY CATEGORY ... II
MAPPED SPECTRAL RESPONSE ACCELERATIONS = S_s = .102
S₁ = .043
SITE CLASS...D
SPECTRAL RESPONSE COEFFICIENTS, SDS = 0.109
SD1 = 0.068
SEISMIC DESIGN CATEGORY: A

- DEFERRED SUBMITTALS: PORTIONS OF THE DESIGN HAVE BEEN DEFERRED AND WILL BE DESIGNED BY PRODUCT MANUFACTURERS. DEFERRED SUBMITTALS INCLUDE:

- FOUNDATIONS:
- FOUNDATIONS SHALL BEAR ON SOILS HAVING A MINIMUM ALLOWABLE BEARING PRESSURE OF 1500 PSF FOR SPREAD FOOTINGS AND 1500 PSF FOR WALL FOOTINGS.
 - FOOTINGS SHALL BEAR ON UNDISTURBED SOIL AT ELEVATIONS SHOWN ON THE DRAWINGS. IF OVER-EXCAVATION IS REQUIRED, COMPACTED FILL SHALL BE PLACED PER SPECIFICATIONS UP TO BEARING ELEVATION. TESTING OF SOILS SHALL BE ACCORDING TO SPECIFICATIONS PRIOR TO PLACEMENT OF FOOTINGS.
 - COORDINATE ELECTRICAL SERVICE GROUNDING REQUIREMENTS TO FOUNDATION REINFORCING WITH ELECTRICIAN.

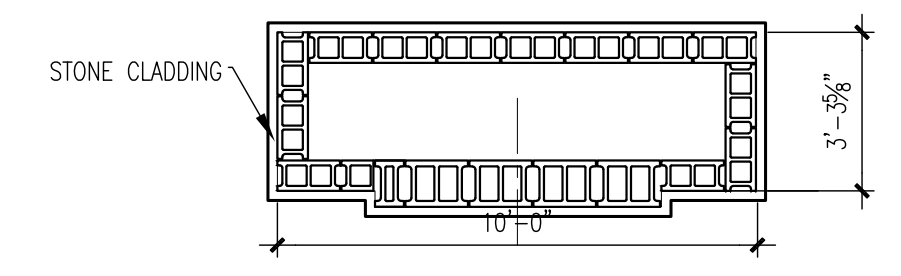
- CONCRETE:
- ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) DOCUMENTS REFERENCED IN SPECIFICATIONS.

MATERIAL PROPERTIES:

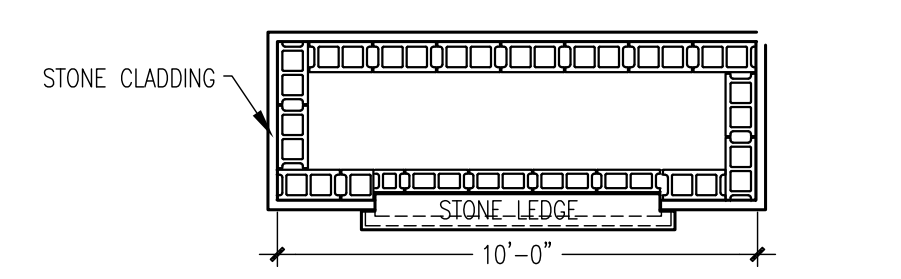
LOCATION	F'C PSI 28_DAYS	AIR CONTENT	MAX. SLUMP
WALL FOOTINGS, GRADE BEAMS	3000	NO TEST	4" MAX.
FOUNDATION WALLS			
RETAINING WALLS	4000	6% + 1%	4" MAX.
SPREAD FOOTINGS	3000	NO TEST	4" MAX.
BASEMENT WALLS	4000	NO TEST	4" MAX.
SIDEWALKS, DRIVES, AND ALL CONCRETE EXPOSED TO WEATHER	4000	6% + 1%	4" MAX.
INTERIOR SLABS-ON-GRADE	3500	NO TEST	4" MAX.
SUPPORTED SLABS	4000	NO TEST	4" MAX.
REINFORCING STEEL	FY, PSI	ASTM	
COLUMN TIES, STIRRUPS	60,000	A-615	
ALL OTHER BARS	60,000	A-615	
WELDED WIRE FABRIC	65,000	A-185	

- ALL CONCRETE SHALL BE CURED FOR A MINIMUM OF 7 DAYS. IF FORMS ARE REMOVED BEFORE THE END OF CURING PERIOD, COAT SURFACES WITH LIQUID CURING COMPOUND.
- ALL CONCRETE SLABS-ON-GRADE SHALL BE REINFORCED WITH 6" X 6" W1.4 X W1.4 WELDED WIRE FABRIC OR CONTRACTOR MAY SUPPLY FIBER REINFORCED CONCRETE IN AREAS SCHEDULED TO RECEIVE FLOOR COVERINGS AT DOSAGE RATES ACCORDING TO SPECIFICATIONS. IF FIBER REINFORCING IS USED, CONTROL JOINT SPACING SHALL NOT EXCEED 12'-0" IN ANY DIRECTION.

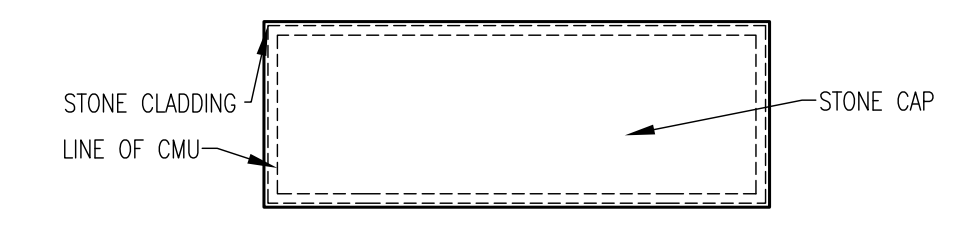
- MASONRY
- MATERIAL PROPERTIES: MASONRY COMPRESSIVE STRENGTH f_m = 2,000 PSI (PER UNIT STRENGTH METHOD)
CONCRETE MASONRY UNITS: ASTM C90, 2,000 PSI COMPRESSIVE STRENGTH, NORMAL WEIGHT, TYPE I MOISTURE CONTROLLED UNITS.
MORTAR: (TYPE S) ASTM C270
GROUT: 2,000 PSI @ 28 DAYS ASTM C476
 - ALL CONCRETE MASONRY UNIT WALL SHALL BE REINFORCED WITH HORIZONTAL JOINTS REINFORCEMENT EVERY SECOND COURSE FOR RUNNING BOND WALLS AND EVERY COURSE FOR STACK BOND WALLS.
 - PROVIDE THE FOLLOWING TENSION LAP SPLICES FOR ALL BARS UNLESS OTHERWISE NOTED: #3=12", #4=16", #5=24", #6= 42", #7= 60"



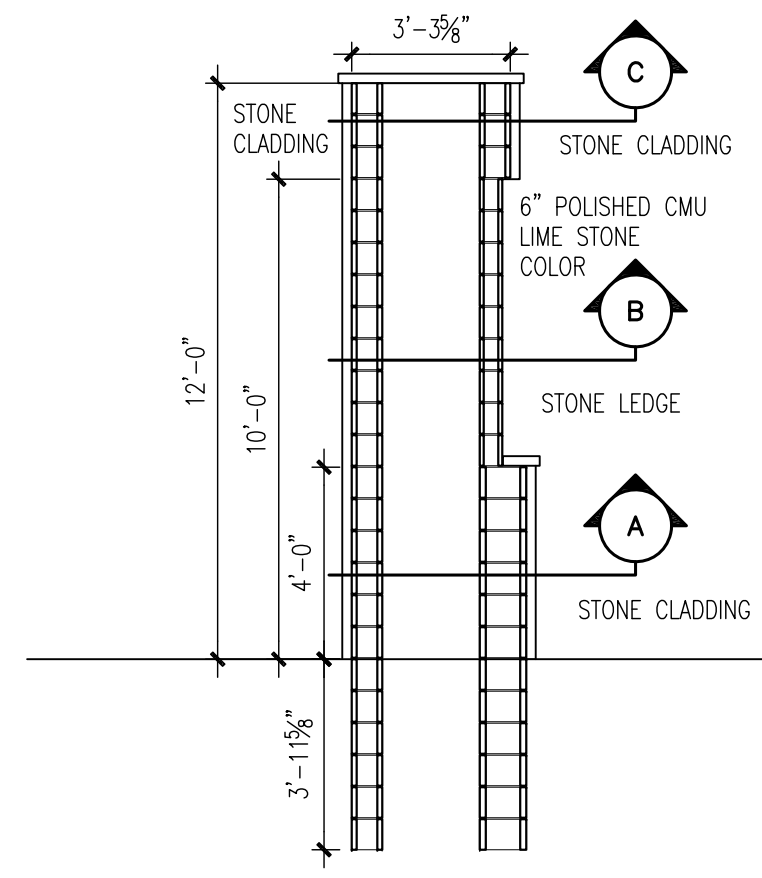
A FLOOR PLAN
1/4"=1'-0"



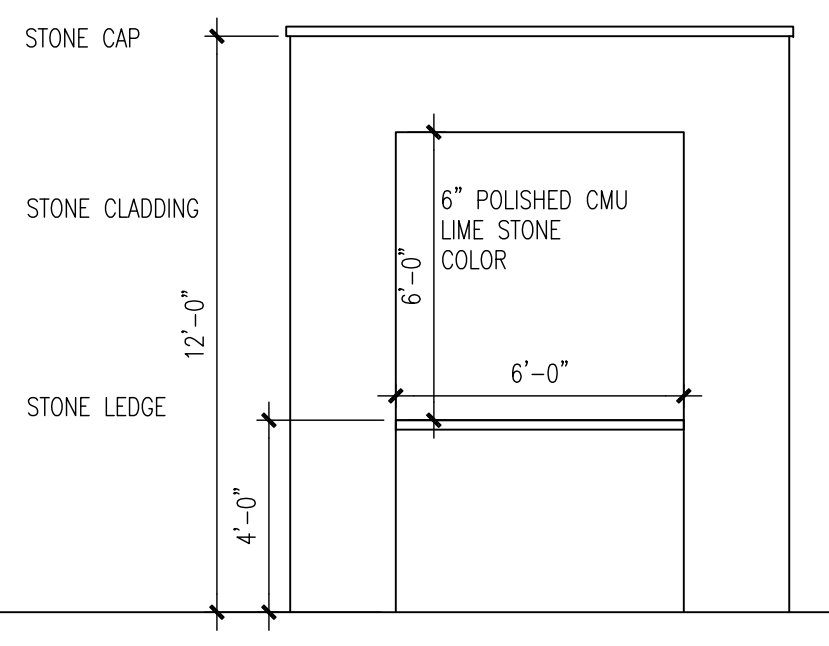
B FLOOR PLAN
1/4"=1'-0"



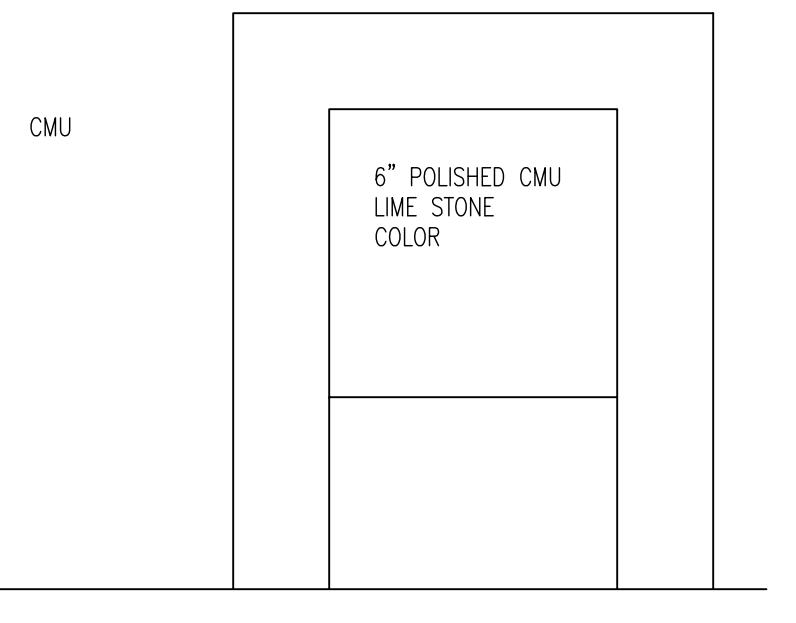
C FLOOR PLAN
1/4"=1'-0"



H1 SECTION
1/4"=1'-0"



D1 FRONT ELEVATION
1/4"=1'-0" WITH STONE



B1 FRONT ELEVATION
1/4"=1'-0" CMU STRUCTURE

REVISIONS

NO.	DESCRIPTION

PLAN, ELEVATION, DETAILS
STRUCTURAL NOTES

PADRE PIO
3280 CHILSON ROAD
HOWELL, MICHIGAN

SWANSON DESIGN STUDIOS
ARCHITECTURE
DESIGN
INTERIOR
ARCHITECTURE

328 E. CESAR E. CHAVEZ AVE.
LANSING, MICHIGAN 48906
WWW.SWANSONDESIGN.COM
PH: (517) 482-9039
FAX: (517) 482-9290

DATE:
7/28/2020
JOB NUMBER:
2020.010
SHEET NUMBER:
A1

R Q P N M L K J H G F E D C B A

2020 Planning Commission Annual Report

Meeting Date	Case #	Project Name	Review Type	Action/Recommendation
Jan. 13		**CANCELLED**		
Feb. 10	19-15	Home Depot Outdoor Storage	Site Plan/Special Use	Approved
March 9	20-01	Premier PUD Rezoning	Prelim PUD/Rezoning	Approved
	20-03	St. Joes Hospital PUD	Rezoning/Prelim PUD	Approved
	20-04	Integrative Veterinary Services	Sketch Plan/Special Use	Approved
	20-05	Work Skills Adult Group Home	Sketch Plan/Special Use	Approved
April 13		**CANCELLED**		
May 11		**CANCELLED**		
June 3	20-02	Bible Baptist Church Rezoning	Rezoning	Approved
June 11		Versa (S.Latson) PUD Rezoning	Rezoning/Prelim PUD	Approved
July 13		**CANCELLED**		
August 10		Art. 16 Sign Ordinance Update	Ordinance Update	Approved
September 14	20-07	Partland Site Improvements	Site Plan	Approved
	20-08	The Prophet Elijah Retreat Center	Site Plan/Special Use	Tabled
	20-10	Dewitt Radiator Addition	Renew previous Approval	Approved
October 14	20-12	Emerald Development Rezoning	Rezoning OSD to HDR	Denied
	20-13	UPS Parking Lot Improvements	Site Plan	Tabled
November 9	20-08	The Prophet Elijah Retreat Center	Site Plan/Special Use	Tabled
	20-13	UPS Parking Lot Improvements	Site Plan	Approved
	20-11	Premier PUD Final – Indoor Storage	Site Plan	Approved
December 14		**CANCELLED**		

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION
PUBLIC HEARING
NOVEMBER 9, 2020
6:30 P.M.
MINUTES**

CALL TO ORDER: Vice Chairman Rauch called the meeting of the Genoa Charter Township Planning Commission to order at 6:30 p.m. Present were Marianne McCreary, Eric Rauch, Jim Mortensen, Jeff Dhaenens, and Jill Rickard. Absent were Chris Grajek and Glynis McBain. Also present were Kelly VanMarter, Community Development Director/Assistant Township Manager, Gary Markstrom of Tetra Tech, and Brian Borden of SafeBuilt Studio. There were 25 audience members present.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

APPROVAL OF AGENDA:

Moved by Commissioner Dhaenens, seconded by Commissioner Mortensen, to approve the agenda as presented. **The motion carried unanimously.**

DECLARATION OF CONFLICT OF INTEREST:

No Commissioners declared a conflict of interest.

CALL TO THE PUBLIC: The call to the public was made at 6:32 pm with no response.

OPEN PUBLIC HEARING # 1...Review of a special use application, environmental impact assessment and site plan for a proposed 28,851 sq. ft. addition for a retreat center which will include overnight stays located at 1391 Kellogg, southwest corner of Kellogg and McClements Roads. The request is petitioned by the Chaldean Catholic Church of the U.S.A.

- A. Recommendation of Special Use Application
- B. Recommendation of Environmental Impact Assessment (10-19-2020)
- C. Recommendation of Site Plan (10-19-2020)

Ms. Eavan Yaldo, the architect for the project, Mr. Mike Hickey Executive Director of the Camp, and Sammy Herfy the property caretaker, and Vincent Jarbow, CFO for the applicant, were present.

Ms. Yaldo stated there was one site plan issue outstanding when they were before the Planning Commission last time. They have revised their drawings to show that they are now proposing to pave a portion of the parking lot adjacent to the access drive. With that change, they believe they have addressed all of the concerns from the engineer, planner, and Brighton Area Fire Department.

The other item is the Special Land Use. She noted there were concerns from the Planning Commission and the public. The Diocese has been very diligent in making sure they are doing

Genoa Township Planning Commission

November 9, 2020

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the right things in the community so they addressed those concerns. They spent the time to address them. When the drawings were resubmitted, a letter was provided to the Township. They have also provided letters from the Livingston County Sheriff, local parishes, neighbors who have had contact with the camp, and others who have used the property for retreats.

They know a lot of the concerns that had been raised by the neighbors have been prior to the last few years, and Sheriff Mike Murphy noted that a lot has changed in that time. In order to be good neighbors, they have attempted to and spoken to neighbors who were at the meeting last time and discuss their concerns. They are working toward getting to a peaceful, quiet setting to be used for people to unwind and relax.

Mr. Hickey joined the committee two years ago to change the way in which the camp was being utilized as well as rebranding it. Many youth camps, family camps, and church groups over the last few years have been using the camp. She reiterated that they are moving forward to have a center that is peaceful and quiet so people can enjoy the activities that are available in the camp. They are sensitive to the neighbors.

Vice Chairman Rauch asked the applicant if there were any changes since the last time they were before the Planning Commission. Ms. Yaldo stated that there are no major changes in the Environmental Impact Assessment, but they have added signage with contact information, etc. so that if anyone has a concern, they can reach out to the diocese.

She read the letter that was provided by Bishop Francis Kalabat.

Mr. Borden reviewed his letter dated November 4, 2020.

1. He is of the opinion that the special land use standards of Section 19.03 are generally met.
2. The Commission may require detention pond landscaping (7 trees and 70 shrubs).
3. The Planning Commission may allow the use of rough sawn cedar for the waste receptacle enclosure instead of masonry.
4. The Planning Commission may require submission of a photometric plan per Section 12.03.07.
5. If approval is granted, the applicant must obtain a sign permit from the Township prior to installation.

Mr. Markstrom noted that they have proposed to pave the portion of the parking lot as he recommended previously.

Vice Chairman Rauch noted that Rick Boisevert, the Brighton Area Fire Authority Fire Marshal has no further comments regarding the proposal.

The call to the public was made at 6:53 pm.

Mike Berean of 1273 Euler Road provided documents to the Planning Commission. This location is not the right place for their plan and idea. This zoning is not appropriate for for-rent, for profit events. The camp has not moved in a new direction in four years. It is owned by a

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religious corporation and they want to expand the services. They are tax exempt, pay no taxes, and do not contribute anything to the Township.

In 2019 the noise from one of their events ruined their granddaughter's birthday party. He can hear the noise from the events at his house in the summer with the windows closed. One half mile of the camp property's fence is broken down and has been that way for four years. There is a sign laying on the side of Euler Road from a group who used the camp on September 29th. There have been so many noise complaints that the Township fined the applicant. They are not allowed to have concerts; they have violated DEQ requirements, increased traffic, increased light pollution, and increased noise pollution. They do not maintain their property. All of this negatively affects their property values. He was told by a realtor that homeowners in the surrounding area now have to list their properties as being close to a nuisance property. This proposal would allow for commercial signage in their rural neighborhood. They are planning to use the property to the maximum capacity.

Mr. James Drouillard of 6781 Felice owns 300 feet adjacent to the camp. He spoke to his neighbors and learned that no one supported the Special Land Use and 22 people were opposed to it. He submitted a signed list to the Planning Commission. The home next to his was converted to an assisted living business and the traffic has increased. He is concerned about the traffic that would be increased due to this Special Land Use. He opposes it.

Mr. Patrick Spence of 1838 Euler Road has lived in his home for 30 years and since the property was acquired by the Diocese, he noticed that protected trees were removed. He does not believe they respect the property. They allow motorized boats on the lake. This is not a church; it is a club. It is a commercial business.

Mr. Joseph Saliba of 1829 Kellogg Road agrees with the items that Mr. Berean discussed. He wants a Township representative's contact information to be provided to him so he can call them when there are issues.

Ms. Patricia Kopicko of 6843 Felice Drive has lived in her home for 25 years. The noise nuisance has been very common for the past 10 years. There was a concert scheduled for August of 2020 with a national singer. Her husband has provided the Township with noise readings three times in 2019. A commercial building should not be in this neighborhood and she will be able to see it from her back deck. The State Police and Livingston County Sheriff will not address the noise complaints. She has minutes from meetings dating back to 2009 stating that the noise will be addressed, there will not be concerts, etc. and these activities have continued. The camp is being used currently by children and it is being used as it was intended. A 28,000-square-foot building is not needed for that.

Ms. Lynn Drouillard of 6781 Felice stated that if the retreat is able to be built, their home values will be decreased. It will be difficult to sell their homes with this type of building in a rural residential neighborhood.

Ms. Ann Olivieri of 1200 Kellogg Road stated that the building will be seen by residents on Felice Road. The roads surrounding the camp are dirt. She can hear the noise in her home with her windows closed. She has to raise her voice on her deck because of the noise. Law

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enforcement cannot enforce the noise ordinance. The complaints to law enforcement have gone down because the neighbors stopped calling. If the capacity increases, it will increase the issues that affect the residents. The impact of traffic, noise, and lighting will negatively affect the residents in the area.

Mr. Robert Kopicko of 6843 Felice stated his property is going to be affected the most as he will be sitting between the parking lot and the building. His property is 15 feet below the property where the building is being proposed. It will appear to be a four-story building to him. There will be lights in 40 rooms. There will be no trees; there will be no buffer. There have been no issues corrected in the past two years. They still have the same issues for the past five years. He does not want this building in his backyard.

Ms. Dori Berean of 1273 Euler Road asked the Planning Commission why proposals are brought to the Township and why the public is invited to comment. Ms. VanMarter stated that the diocese is building a facility that, due to the size, initiates the process for review of the project so it provides an opportunity to take the information from the neighbors and review that against the zoning ordinance and the rules and regulations of the Township.

She asked what the Master Plan is for this property. Ms. VanMarter stated it is Large Lot Residential, which is two acre minimum.

Ms. Berean stated she has not seen any changes over the past five years and noted that they already have a Special Land Use. She hopes the Planning Commission will listen to the neighbors' concerns.

Ms. Alexandra Gray bought property on Kellogg Road two years ago to build their dream house. They liked their property because it was rural. They were aware of the camp and the concerts a few times a year. She does not believe this is the right place for this proposal. Her new neighbors have told her about the noise issues from the camp.

Mr. Michael Baker of 1780 Euler Road lives eight houses south of the camp. He has lived there for 20 years. He does not want more traffic, dust or noise. He is against this proposal.

Mr. Collin Copis of 1054 Kellogg is against this proposal.

Mr. George Mears of 1790 Euler stated the applicant does not contribute to the community.

Ms. Kay Baker of 1780 Euler Road has lived there for 29 years. The traffic has increased from the new park, there is more dust, and she is against adding more traffic to this area and losing the country atmosphere.

Vice Chairman Rauch advised a letter was received from David Shirk & Karen Reames of 1160 Kellogg Road who are against the proposal.

He noted that nine letters of support were received by the Township. They were from the following:

- The Knights of Columbus; Howell, MI
- Livingston County Sheriff Mike Murphy
- Marian High School's Campus Minister; Bloomfield Hills, MI

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- St. John Catholic Church; Howell, MI
- Dennis and Cinnamon Walle of 1655 Kellogg Road
- Micky Dingman of 607 N. Hacker Road, Howell
- St. Patrick Catholic Parish; Brighton, MI
- Detroit Catholic Central High School
- Mr. Jeff DiMeglio of 1750 Argentine; Howell, MI

The call to the public was closed at 7:51 pm.

Commissioner Rickard is concerned with the noise and questioned why outdoor concerts are allowed. Mr. Hickey stated that in 2019 they had events that were previously scheduled so they allowed them. The concert that was scheduled to be held in August was to be for one hour in the middle of the day. There have been approximately 50 groups this year and two reunions. The issues raised by the neighbors were from the past.

She asked if the Planning Commission could put a condition on the noise on the approval. Ms. VanMarter stated "yes". She also would like to require the plantings around the detention pond that were noted in Mr. Borden's letter. Ms. Yaldo noted it is a very wooded area, which is why they did not believe the additional plantings were necessary. Commissioner Rickard asked if there could be anything added to shield the neighbors from the harshness of the building and the parking lot. Ms. Yaldo stated the closest portion of the building from the property line is 300 feet. There will be no new lighting in the parking lot, except just near the building entrance where the parking spaces are added.

Vice Chairman Rauch advised the applicant that he respects and values what they do. He does not believe that this project has changed since it was before the Planning Commission previously. He suggested the Environmental Impact Assessment be updated with more detailed items, such as an operation schedule, detailed property maintenance schedule, sound impact minimization measures to be implemented, outdoor PA's or concerts should not be allowed, a photometric plan should be submitted, and a traffic impact study should be provided.

Commissioner McCreary believes there is too much uncertainty and not enough definition of what is being proposed. Who are the intended users and what are the intended uses?. She agrees with Vice Chairman Rauch that more details are needed.

Commissioner Dhaenens agrees that details and proof should be provided by the applicant that will show what has occurred over the past two years, how it has changed, and what is expected in the future.

Ms. Yaldo stated that retreat centers are generally put in these types of areas because they are rural and they are quiet. This is not a banquet center or a hotel. People need a place to congregate, sleep, and eat when they are at a retreat, which is why the building is needed. She noted the building is not as tall as the maximum allowable height in this zoning district. She will provide an operations plan and a plan of what the center will be going forward and in the future.

Commissioner Rickard asked why the property has not been maintained, such as the broken fence and the trash. Mr. Hickey stated there is an area that needs to be repaired. He does not

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believe it's true that there is trash around the camp. She also would like information added such as, what will be the use of the lake, will there be utilized watercraft, etc. Mr. Hickey stated the lake is used for canoes, kayaks and swimming.

Vice Chairman Rauch reopened the call to the public at 8:18 pm.

Mr. Joseph Saliba, 1829 Kellogg Road is concerned about the proposed new detention pond. He is concerned that water will flow onto the neighbors' properties and into the lake. Vice Chairman Rauch explained the reason and process of a detention pond.

Mr. Berean asked why there are three pontoons on the lake. The fence that they put up hindered the wild life from traveling. He asked what the camp was used for last weekend. There were guards in fatigues with berets, but they were not armed. Mr. Hickey stated there were two camp groups last weekend. It was a Christian Boot Camp. He asked if the property has been delineated for wetlands. Ms. VanMarter said that she has seen a wetland delineation plan. He asked that if the roads need maintenance or if they get paved, would the diocese pay.

The call to the public was closed at 8:23 p.m.

Moved by Commissioner Mortensen, seconded by Commissioner Dhaenens, to table the proposal for a Special Land Use, Site Plan, and Environmental Impact Assessment for Prophet Elijah Retreat Center to allow the applicant to address concerns presented and discussed during tonight's meeting. **The motion carried unanimously.**

OPEN PUBLIC HEARING # 2...Review of a site plan and environmental impact assessment for a proposed parking lot at 1183 Fendt Drive to be used in conjunction with the existing UPS Facility on the west side of Fendt Drive. The request is petitioned by Hugo Ceron, SME.

- A. Recommendation of Environmental Impact Assessment (9-2-2020)
- B. Disposition of Site Plan (9-24-2020)

Mr. Hugo Ceron of SME and Mr. Adam Marchwinski of UPS Buildings & Systems Engineering were present. Mr. Ceron apologized he was not available at last month's meeting. He stated they are proposing to pave the parking lot so that it will be compliant with the Township ordinance. They will provide curb and gutter, a retention pond, and lighting and landscaping improvements. They are requesting to waive the interior island requirements to maximize the amount of parking spaces, noting his site is at the end of a road in an industrial park.

Mr. Marchwinski stated that he has spoken with the real estate department at UPS and they do not want to tie the two properties together with regard to a sale, as recommended by the Township. Ms. VanMarter spoke to a representative from UPS who understands the Township's goal and they would be willing to put an easement in place and then provide an agreement that if the property with the building was sold, then changes would need to be made to the lot with only the parking lot to meet Township ordinance, unless it is associated with the lot across the street..

Commissioner Mortensen would like the Township Attorney to determine which avenue would be best to protect the Township. All Commissioners agree.

Mr. Borden reviewed his letter dated October 6.

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1. He agrees with the decision to have the Township Attorney review the issue regarding the two lots just discussed.
2. The applicant will need to obtain a variance from the ZBA to exceed the 300-foot spacing between the nearest parking space and public building entrance per Section 14.02.03 of the zoning ordinance.
3. The landscape plan is deficient in parking lot landscaping. The applicant requests that the Planning Commission waive these requirements, per Section 12.02.13.4.
4. If signage is proposed in the future, a sign permit must be obtained from the Township prior to installation.

Mr. Markstrom reviewed his letter dated October 5, 2020.

1. The Petitioner is proposing a closed pipe type underground detention basin comprised of four 48-inch diameter pipes to provide 5,329 cubic feet of storage. A Storm water Management System Maintenance Plan is included and details the cost and responsibility of maintaining the proposed storm system. The provided maintenance schedules include maintenance and inspection of the detention basin inlet, but not the outlet and emergency outlets. These components should be included in the schedules to make sure they remain clear of debris.
2. The proposed underground detention basin is designed to capture additional flow that will be generated from the parking lot being improved from gravel to asphalt, not to capture all onsite drainage. The Petitioner provided an email from Mitch Dempsey of the Livingston County Drain Commission permitting this basis of design.
3. The Petitioner reduced their outlet pipe size to 6 inches to create a restricted outflow. The 6-inch pipe will restrict outflow to 0.561 cfs, which meets the 0.2 cfs per acre maximum. 4. The Petitioner added an overflow outlet to the underground detention basin at catch basin 2. The emergency outlet is currently proposed as a 6-inch pipe. This appears to be undersized when reviewing the calculations for the pipes tributary to the detention system. The petitioner should size the outlet so that the combination of the outlet pipe (6 inch) and overflow pipe will accommodate the same amount of flow that is being calculated for the pipe between catch basins 3 and 2. This will limit the potential for the collection system to back up and overflow over the curb and thereby cause erosion of the parking lot embankment. 5. The plans include 10-foot-deep soil borings. The Genoa Township Engineering Standards require that soil borings shall be provided to a depth of 20 feet below the bottom of the proposed detention basin and the documented high level of the groundwater should be provided.
4. The Petitioner is proposing to relocate the existing fire hydrant at the end of Fendt Drive to accommodate one of the two proposed access drives to the parking lot. More detail needs to be provided on how this hydrant will be relocated. The relocation of the hydrant should be achieved by shutting off the existing hydrant isolation valve, removing the existing hydrant, installing any necessary fittings to get to the proposed location, and then installing a new isolation valve and the hydrant. The existing isolation valve can then be opened and buried with the operator removed. This method will not require the water main on Fendt Drive to be shut down. If the hydrant is relocated as it is currently

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shown, the water main will need to be shut down and the hydrant will need to be reinstalled using MHOG's terminal hydrant detail.

Mr. Rick Boisevert, the Brighton Area Fire Authority Fire Marshal, advised that all of his concerns have been met by the applicant.

Commissioners Dhaenens, Mortensen, and Rauch agreed to waive the landscaping in the middle of the parking lot. Commissioners Rickard and McCreary would like to have the landscape islands installed.

The call to the public was made at 8:56 pm with no response.

Moved by Commissioner Mortensen, seconded by Commissioner Dhaenens, to recommend to the Township Board approval of the Environmental Impact Assessment dated September 2, 2020 for the UPS Howell parking lot at 1183 Fendt Drive, subject to a recordable agreement being prepared by the petitioner and approved by the Township Attorney tying the parking lot to the UPS facility across the road in a way to prevent the parking lot ultimately becoming standalone if either property is sold separately. **The motion carried unanimously.**

Moved by Commissioner Mortensen, seconded by Commissioner Dhaenens, to approve the Site Plan dated September 24, 2020 for the UPS Howell parking lot at 1183 Fendt Drive, subject to the following:

- Approval of a variance from the Township ZBA to exceed the 300-foot spacing between the nearest parking space and the building entrance.
- A recordable agreement being prepared by the petitioner and the Township Attorney tying the parking lot to the UPS facility across the road in a way to prevent the parking lot ultimately becoming standalone if either property is sold separately.
- The Planning Commission agrees to waive the requirements of Section 12.02.13.4 for landscaping inasmuch as it is a secluded parking lot in an industrial area.
- All requirements of the Township Engineer October 5, 2020 letter shall be met.

The motion carried unanimously.

OPEN PUBLIC HEARING # 3...Review of a final PUD site plan and environmental impact assessment for the "Premier Genoa Planned Unit Development" phase 1 involving a 37,275 sq. ft. climate controlled indoor storage building and related site improvements. The site is located at 4525 and 4433 E. Grand River at the northwest corner of Grand River Ave. and Lawson Drive. The request is petitioned by BMH Realty, LLC.

- A. Recommendation of Impact Assessment (9-28-2020)
- B. Recommendation of Final PUD Site Plan (9-28-2020)

Mr. Wayne Perry of Desine, Inc. was present to represent the applicant. The PUD was approved by the Township Board and they are now seeking approval of Phase. The proposal is exactly the same as what was proposed during the PUD plan presentation.

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Phases II and III of the PUD, which are the retail building and the drive thru restaurant near the west of the site will be graded and landscaped with grass in their entirety to match the PUD plan.

Mr. Borden reviewed his letter dated October 19, 2020

1. The overall site plan layout for Phase 1 – buildings, circulation, and parking – is consistent with the approved Conceptual PUD Site Plan.
2. The proposed building elevations and materials are consistent with the approved Conceptual PUD Site Plan.
3. Sheet A-6, which includes building material calculations, was not included in the materials submitted to our office and should be provided.
4. The Heximer PUD requires sidewalks along road frontages. Given the proposal for off-site storm water management, a sidewalk along the north side of White Horse is required.
5. Parking spaces must include looped striping.
6. He suggests the applicant replace the gas station canopy lighting with LED fixtures that reduce the illumination levels.
7. Based on our review, there is an inconsistency in the quantity of two types of shrub plantings.
8. The applicant should be aware that a sign permit will be required from the Township prior to the installation of any new signage.

Mr. Perry would like this sidewalk installed when the property is fully developed. It would be a sidewalk from nowhere to nowhere. All Commissioners agree with Mr. Perry.

With regard to the gas station, Mr. Vince DeAngelis of BMH Reality stated that they are not the owner of the gas station. Sunoco is a national brand. He is not sure if this would be possible. Vice Chairman Rauch asked the petitioner to provide details of the proposed building upgrades for the gas station. Mr. Dan Borstein of SVI Properties reviewed the changes and provided proposed building samples, which will be the same as the storage building. All commissioners agree that the lights should be changed per Mr. Borden's suggestion.

Mr. Markstrom stated that all of his concerns have been addressed.

The Fire Marshal's letter dated October 13, 2020 noted there is a discrepancy in the impact assessment related to the Impact on Public Facilities and Services. It refers to the addition of a single fire hydrant to meet fire protection capabilities to be located along Whitehorse Drive and there are actually three fire hydrants being added to the project, one at the East and the West side of the property in addition to the one specified in the assessment.

The call to the public was made at 9:28 pm with no response

Moved by Commissioner Mortensen, seconded by Commissioner McCreary, to recommend to the Township Board approval of the Environmental Impact Assessment dated September 28, 2020 for BMH Premier Genoa at 4525 and 4433 E Grand River Avenue. **The motion carried unanimously.**

Moved by Commissioner Mortensen, seconded by Commissioner Rickard, to recommend to the Township Board approval of the final PUD Site Plan for the BMH Premier Genoa at 4525 and 4433 E Grand River, subject to the following:

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- The building materials and samples presented this evening are acceptable and will become Township property.
- A sidewalk will be required on the north side of White Horse Drive and will be permissible to be postponed, but a bond shall be provided to the Township in a form and amount acceptable to Township staff.
- Parking spaces must include looped striping.
- The canopy lighting on the existing gas station shall be brought into compliance with current ordinance standards.

The motion carried unanimously.

ADMINISTRATIVE BUSINESS

Staff Report

Ms. VanMarter stated there are no cases scheduled for the December meeting.

There was a discussion of possibly moving the meetings to Zoom format due to the increased COVID-19 cases in the county.

Approval of the October 13, 2020 Planning Commission meeting minutes

Needed changes were noted.

Moved by Commissioner McCreary, seconded by Commissioner Dhaenens, to approve the minutes of the October 13, 2020 Planning Commission Meeting as amended. **The motion carried unanimously.**

Member Discussion

Commissioner Dhaenens would like the Planning Commission to seriously consider charging stations in the Township.

Adjournment

Moved by Commissioner Mortensen, seconded by Commissioner McCreary, to adjourn the meeting at 9:40 pm. **The motion carried unanimously.**

Respectfully Submitted,

Patty Thomas, Recording Secretary